Crucial **craftsmanship**

Annual Report 2020

STEDIN GROEP

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Crucial craftsmanship

Translation Dutch annual report

This report is a translation of the Dutch annual report 2020 of Stedin Groep. In the event of any discrepancy, the Dutch version will prevail.

Annual summary for 2020

1st quarter

9 January – Stedin's renovated regional office in Delft is reopened. Following a renovation that lasted two years, the building is future-ready, with a modern climate control system, full wall insulation, HR++ double-glazing, LED lighting, charging points for electric cars and a solar roof. The office now has an Energy Label 'A' rating.

31 January – Grid managers Stedin, Enexis, Liander and KPN NetwerkNL sign an agreement to work together in order to avoid excavation damage while laying the fibre-optic network. Excavation damage is the cause of 13.5% of outages in Stedin's service area.

14 February – Stedin and Enduris present the Heat Transition Opening Bid to municipalities in their service area. The information provided by this service supports municipalities in choosing a future-proof heat supply for each individual district.

9 March – Stedin and Oasen begin with the first combined rerouting of water and gas pipelines as well as data and electricity cables for the widening of the A27 motorway between Houten and Hooipolder. This simultaneous approach minimises disruption to the environment and saves costs.

15 March – The Netherlands enters its first full lockdown. As a company in a critically important sector, we have an important responsibility: maintaining the energy supply. Since energy is fundamental to society and the economy, our work continues as far as possible. Naturally, we ensure compliance at all times with government measures and guidelines of the National Institute for Public Health and the Environment (RIVM).

2nd quarter

April – Stedin will purchase thousands of items of SF6-free switchgear in the coming years. SF6 is an insulation medium that is harmful if released into the atmosphere. Stedin needs a lot of new switchgear for expanding its electricity grids and is committed to doing so in the most sustainable way possible.

13 May – The Climate Agreement on Industry Infrastructure Task Force presents its report on the energy infrastructure for making industry more sustainable. This challenging task will require substantial investments and clear commitments. The development of Energy Strategies Clusters (CES) is one of the recommendations adopted by the Minister of Economic Affairs and Climate Policy.

May – Grid manager Stedin is faced with substantial investments in the energy grid due to the energy transition. Stedin consequently expects that it will need an additional €750 million to €1 billion in equity over the coming years for

these investments. Stedin relies on its shareholders to provide most of the necessary funding.

3rd quarter

1 July – Stedin is audited by Lloyd's Register for certification for level 4 of the Safety Culture Ladder. This means that Stedin has a proactive safety culture.

10 July – Despite the challenges accompanying the COVID-19 outbreak, Stedin's in-house training school awarded 162 senior secondary vocational education diplomas. The diplomas were handed out during a 'drive-in presentation ceremony'.

18 August – Short-circuiting occurs during maintenance work in a 25kV station at De Constant Rebecqueplein in The Hague. This results in 33,000 customers in the centre and the west of the city being left without power for more than 8 hours. Stedin does everything possible to prevent failures in the grid.

7 September – Enduris gives advance notification of structural congestion. Solar roofs and wind farms on Schouwen-Duiveland and Tholen jointly produce more electricity than is taken up in the area. As a result, Enduris is unable to provide any capacity guarantee for large new solar and wind farms on Tholen and Schouwen-Duiveland until an additional connection to TenneT's national high-voltage grid is available.

28 September – The province of Zeeland becomes the first RES region in the Netherlands to adopt the Regional Energy Strategy 1.0. Enduris and several other stakeholders contributed to this.

4th quarter

10 October – Reinforcing the electricity grid in the Port of Rotterdam can be done more cheaply and efficiently. This outcome emerged from a study by the Port of Rotterdam Authority, Stedin and TenneT into the implications of the energy transition. Demand for energy, including green energy, from the industry in Rotterdam is set to increase significantly in the coming decades.

7 December – Evides Waterbedrijf and DNWG Infra have undertaken joint activities below ground in Zeeland for more than 10 years. This successful cooperation is further reflected and deepened with the signing of an open-ended cooperation agreement, providing a formal framework for effective cooperation below ground and minimising inconvenience to customers and the environment.

11 December – In Uithoorn, hydrogen is carried through the current gas grid to provide temporary heating to 14 specially prepared houses that are due for demolition. This technology is still in its infancy worldwide and is being applied for the first time in the Netherlands by Stedin.

December – Grid managers TenneT, Stedin and Liander jointly expand the electricity grid in Zuidplaspolder in the province of South Holland. Demand for electricity in this area has increased significantly in recent years. The electricity grid is slowly reaching the limit of its capacity as a result. To solve the current electricity grid capacity shortage in this region and meet the growing demand for electricity, the grid managers are building a new high-voltage station alongside the A12 motorway – N219 expressway near Zevenhuizen in the municipality of Zuidplas. The station is scheduled for completion by the end of 2024.

Crucial craftsmanship

In 2020, the term 'vital professions' was more topical than ever. It refers to the work that is key to keeping society in motion, to the essential jobs in critical sectors. Every day, we work on the critical infrastructure. This is infrastructure that is crucial for the functioning of our country. We perform crucial craftsmanship that is decisive for the well-being of others. This craftsmanship is highlighted in this Annual Report.

The Board of Management of Stedin Group. From left to right: Marc van der Linden, Danny Benima and David Peters.

Foreword

There can be no denying that 2020 was the year of COVID-19. From the outset in March, we had a crisis management organisation lined up. In no time, we arranged for thousands of people to work from home, we adjusted to the 1.5-metre social distancing rule and we adopted a new protocol titled '*anderswerkentijdenscorona*' (working differently during the coronavirus crisis). Some activities, such as installing smart meters, had to be temporarily suspended, and several of our employees were assigned to other duties on a temporary basis. At the same time, all vital work continued to be carried out as normal. We are proud of how quickly we took action, enabling us to seamlessly absorb the abrupt transition to the intelligent lockdown. We remained focused on the safety needs of our customers, employees and suppliers. The corona pandemic showed the importance of being well prepared for any crises. This exceptional situation also demonstrated once again that our work is of vital importance – for society, for businesses and for residents. It goes without saying that we do everything possible to prevent outages. A power outage such as the one in August that left 33,000 households and businesses in The Hague without power for 8 hours is deeply regrettable and viewed by us as a low point.

There was much more to 2020, of course. The energy transition remains a major theme. The growing number of charging points and solar panels, among other things, in our service area are also clear evidence that the transition is gathering pace. Ensuring sufficient grid capacity and voltage quality are a priority for us. Our objective for the future is to maintain supply security in the face of the rising demand for energy. During 2020, great attention was therefore also paid to long-term financing. In dialogue with our shareholders, we are making steps to jointly address the issue of how the energy transition should be funded in the Netherlands. We are also in talks with the Ministry of Economic Affairs and Climate Policy and the Netherlands Authority for Consumers & Markets (ACM) about legislation and regulations and how to ensure they are tailored to the current situation. Of course, we also continuously review our own expenditure and how to curb it. In 2020, we succeeded once again in increasing our efficiency. The energy transition will remain a central theme in the coming years. We strongly believe that this is a collective endeavour. We are therefore proud that our area surveys allow us to make a significant contribution to the Regional Energy Strategy (RES). Together, we examine how best to shape the energy transition from one region to the next, enabling us to reach optimum solutions. A milestone in 2020 was our decision to join C-ARM, the shared platform of all grid managers to provide for the uniform delivery of measurement data to market parties. We also vastly improved safety performance in 2020 – something we aim to continue in the coming year.

Crucial craftsmanship

The theme of this Annual Report is 'crucial craftsmanship'. This stands for a vital sector but also for the professional work that is essential to provide everyone with energy – both now and in the future. This includes our engineers, IT, knowledge of energy and customer experience. No matter how digital we become, our work requires the human touch and is a true profession.

We hope for a revaluation of professional work – for the work we do in the sector. As an organisation, we have always had a special fondness for our In-house Training School. This is where we train school leavers and young immigrants to the Netherlands: young people who are starting to build a life for themselves and are willing to seize the opportunities Stedin can offer them. It is a meeting place for young and old. As such, it is more than just a vocational school – it is where we equip young people to build a life. That is crucial craftsmanship. In 2020, we awarded a diploma to the 1,500th student of the In-house Training School. That gives us great satisfaction.

In 2021, we will continue our efforts to become even more customer friendly and to further support the energy transition. This will also be the year in which we say goodbye to Marc van der Linden. He will be leaving us to embrace a new, as yet unknown adventure. Judith Koole stepped down as COO, although she will remain with Stedin Group for at least another year. We would like to thank her for her contributions, in particular in the field of customer satisfaction.

We hope that Stedin will continue to become 'our' company in 2021. By that, we mean that it should belong not just to 'us Stedin workers', but to all of us: residents in our service area, shareholders, businesses and public authorities. Only together can we remain vital.

Board of Management

Marc van der Linden (CEO)
Danny Benima (CFO)
David Peters (CTO)

About us

Profile

More than 2.2 million private and business customers rely on Stedin Group for their energy supply, day and night. We are proud that our grids have a supply reliability of 99.9951%.

Stedin Group in the energy supply chain

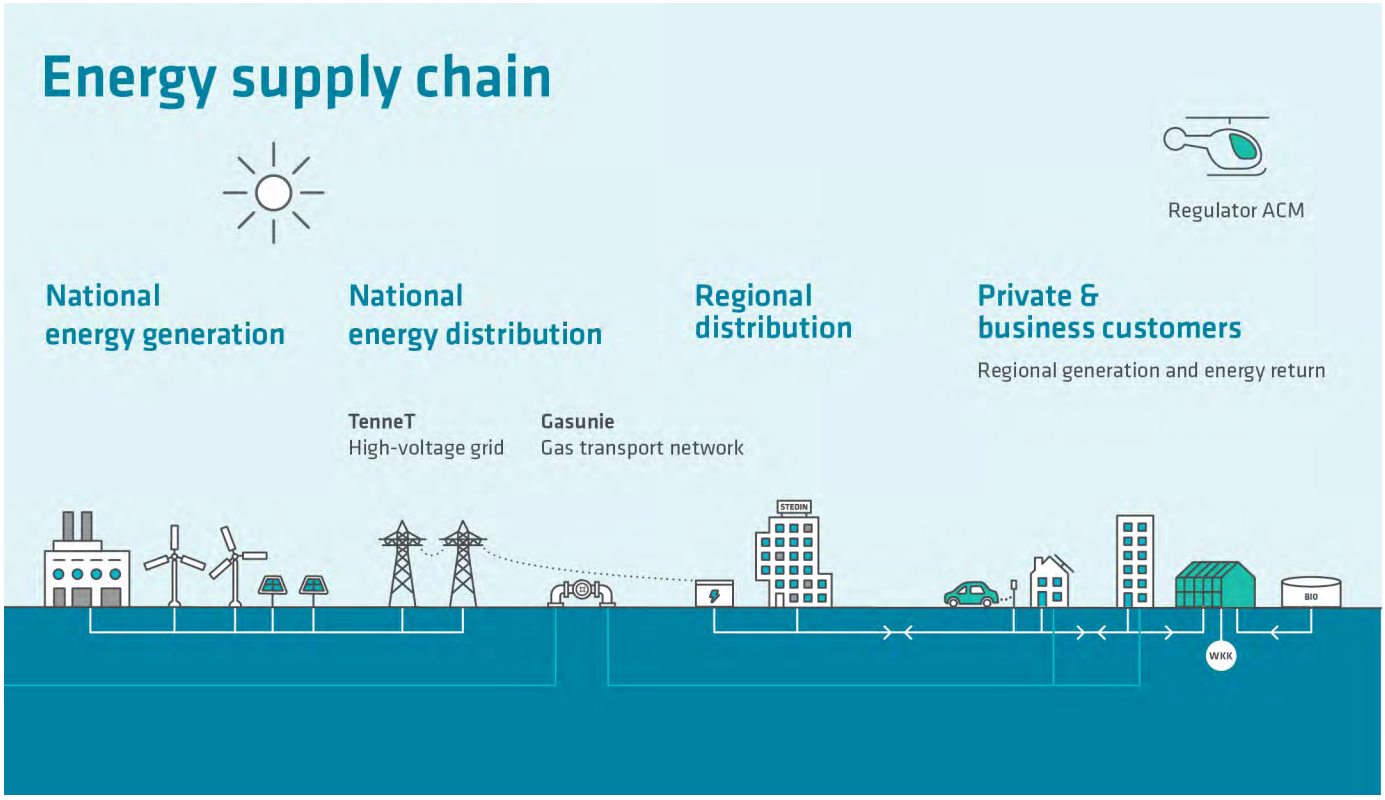
The electricity and gas grids are a key link in the energy system. Stedin and Enduris, the grid managers within Stedin Group, are responsible for the regional distribution of electricity and gas. We work with other parties forming part of the energy supply chain: the producers of gas and electricity, TenneT and Gasunie with their responsibility for the national distribution of electricity and gas, our suppliers, the other regional grid managers and the organisations that monitor the reliability, affordability, safety and sustainability of our energy supply.

Our customers are also increasingly generating sustainable energy themselves, which they return to our grid. This means we are all part of a far-reaching societal shift to a clean economy based on renewable sources.

Stedin Group operates and has its registered office in the Netherlands. We carry out regulated activities as a grid manager, and we also perform a number of non-regulated activities closely related to the energy infrastructure as a group. Our head office is located at Blaak 8, 3011 TA in Rotterdam.

Our service area

We manage and maintain the energy grids in a large part of the Randstad conurbation as well as the provinces of Utrecht and Zeeland. Our service area is home to roughly 5.5 million people and covers 3 of the 4 largest cities in the Netherlands, the Port of Rotterdam and the Port of Zeeland, as well as large industrial and glasshouse horticulture regions. Parts of the provinces of North Holland and Friesland also fall within our service area.



Stedin Group's activities

Stedin Group focuses on all activities relating to constructing, managing and maintaining energy grids. We also facilitate the energy market.

Grid management

Stedin and Enduris are the independent grid managers within Stedin Group. They operate alongside five other regional grid managers in a regulated market. Each regional grid manager is a monopolist in its area of operations. Regulation means that the work performed by grid managers is provided for in Dutch law and that the rates that they may charge for this work are set by the Netherlands Authority for Consumers and Markets (ACM). The regulation model encourages grid managers to achieve maximum performance in terms of efficiency and quality by using a benchmark comparison.

Stedin

As a grid manager, Stedin ensures a safe, reliable and affordable energy supply for its more than 2 million customers. Stedin has 4,280 employees. This figure includes 3,652 internal employees (male: 3,018; female: 634) and 628 external employees (male: 491; female: 137).

Enduris

Within DNWG Group (Enduris and DNWG Infra), grid manager Enduris manages the energy network for around 200,000 households and businesses in the province of Zeeland. DNWG Group has a total workforce of 699. This figure includes 619 internal employees (male: 513; female: 106) and 80 external employees (male: 57; female 23). DNWG Group will remain a separate part of Stedin Group until the end of 2021, at which point it will be integrated into Stedin Group.

Facilitating the energy market

Facilitating the free energy market is part of our societal role as a grid manager and independent partner of market parties. Among other things, this means that our electricity and gas grids should be accessible under identical terms and conditions to all energy suppliers. Grid managers are responsible for administering the energy system. We ensure robust and transparent marketfacilitating processes at a socially responsible price level. This means that we provide information to stakeholders on how energy is supplied and used. Customers benefit from the ease of switching to a different energy supplier, the insight into their energy consumption and how easy it is to return energy to the grid.

Measurement data are used for allocating the amount of energy transmitted per market party. This enables energy suppliers to bill their customers, which in turn allows Stedin to charge its customers for their grid use.

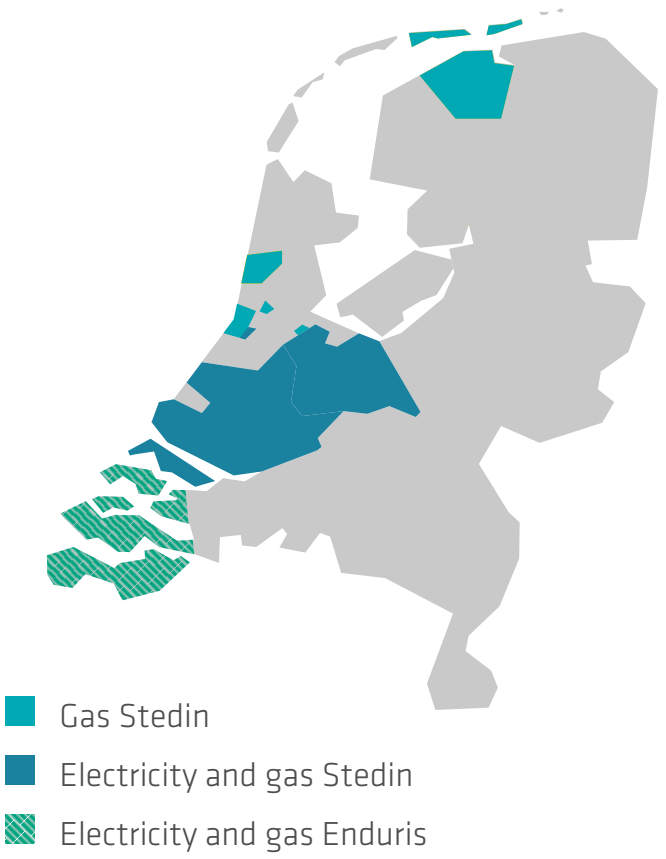
Non-regulated activities

Review of the portfolio

Our focus is on good grid management and excellent service, which is why we are cautious about non-regulated activities. We only perform these activities if:

- the activity demonstrably adds value for efficient grid management;
- there is a gap in the market;
- Stedin Group is uniquely positioned for this activity.

The economic attractiveness and feasibility of an activity as well as its priority over other activities will determine whether we will include or retain it in our portfolio. Stedin Group evaluated its non-regulated activities in 2018. This resulted in a reorganisation of the portfolio, leading to the disposal in 2018 and 2019 of the commercial activities of Joulz Energy Solutions and Joulz Diensten. A further step was taken in 2020 with the sale of the extra-high-pressure gas grids of the ZEBRA joint venture, leaving ZEBRA with no further significant activities.



The non-regulated activities account for 3.6% of revenue (2019: 5.1%).

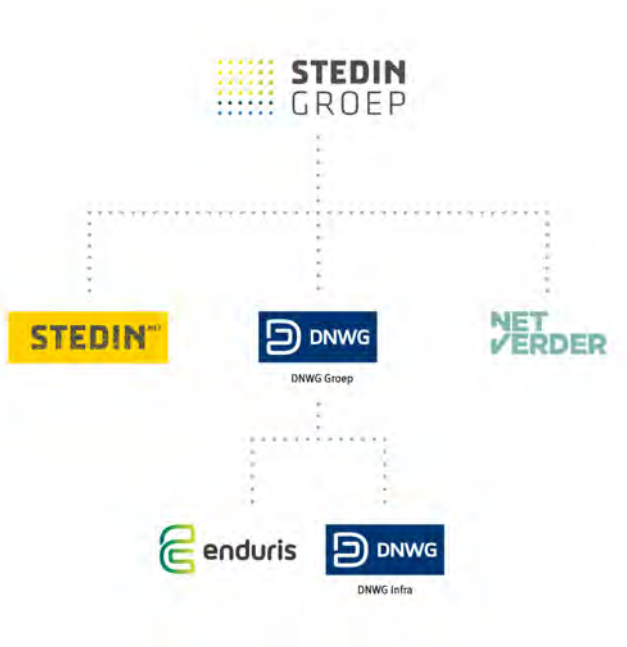
Energy Transition (Progress) Act applicable in full from 1 January 2020

The Energy Transition (Progress) Act (Wet Voortgang Energietransitie, Wet VET) came into force on 1 July 2018. The Act aims to facilitate the progress of the energy transition. An important part of the Act is clarifying and more sharply defining the tasks that grid managers and grid operators (such as Stedin Group) may carry out.

With the transitional period for certain provisions in the Act expiring, the Energy Transition (Progress) Act entered fully into force on 1 January 2020. Stedin Group's focus on good grid management and caution in respect of non-regulated activities is in line with the aim of the Act.

NetVerder

By law, regulated activities for gas and electricity may not be carried out under the same banner as other energy infrastructures (such as steam, biogas, CO_2 and heat). These activities were consequently transferred in 2019 to a separate brand within Stedin Group: NetVerder. NetVerder promotes the energy transition by supporting the development, construction and maintenance of energy infrastructures for heat, steam and biogas. NetVerder also focuses on the independent transport and distribution of other new energy sources and carriers. NetVerder is an independent part of Stedin Group. NetVerder has six employees. This figure includes 5 internal employees (male: 5; female: 0), and 1 external employee (male: 1; female: 0).



DNWG Infra

Within DNWG Group, DNWG Infra is the service provider that builds and maintains the electricity and gas grids in the province of Zeeland, on behalf of Enduris. In addition, DNWG Infra maintains and manages the grids entrusted to it by other grid managers (e.g. Evides Waterbedrijf, Stedin and TenneT) and by industrial customers. DNWG Infra also supplies services in the area of metering technology in Zeeland and elsewhere and is an approved party responsible for metering.

Joint ventures

We form joint ventures with other parties for specific activities.

Utility Connect

Utility Connect B.V. is a joint venture with network group Alliander. The company operates its own wireless telecommunications network, which is used to read out measurement data provided by smart meters and to communicate with smart grid applications. This network allows us to shorten or prevent energy supply disruptions.

TensZ

TensZ B.V. is the joint organisation of TenneT and Stedin for managing and maintaining high-voltage grids. Each party holds a 50% share.

TeslaN

TeslaN B.V. is the joint service provider for the management and maintenance of the high-voltage grids of TenneT and Enduris. Each party holds a 50% share.

ZEBRA

ZEBRA Gasnetwerk B.V. manages and operates a high-pressure gas transport pipeline. This pipeline is used to transport high-calorific gas that is taken in from the gas distribution network of Fluxys in the import station in Sas van Gent. The gas is transported to connected high-volume consumers.

On 19 December 2019, an asset sale and purchase agreement was signed between Enduris B.V., Enexis Netbeheer B.V., Zebra Activa B.V., Entrade Pipe B.V. and Gasunie Transport

Services B.V. Among other things, the transaction provided for the transfer of the assets of the extra-high-pressure gas grids to Gasunie Transport Services B.V. in 2020.

Stichting Zeeuwse Publieke Belangen (Zeeland Public Interest Foundation)

Stichting Zeeuwse Publieke Belangen is a unique alliance between the province of Zeeland, the municipalities of Zeeland and Stedin Group. The foundation was established to safeguard the arrangements concerning the sale of DNWG/Enduris to Stedin Group in areas including employment, energy supply and the energy transition. The foundation makes a budget available to promote the energy transition in Zeeland. An overview of the initiatives can be found on the foundation's website.

Terminology

'We', 'the company', 'the network group', 'Stedin Group' or similar terms or expressions are used in this report to refer to Stedin Holding N.V. and its subsidiaries (including Stedin Netbeheer B.V., NetVerder B.V. and DNWG Groep N.V.). The term 'Stedin' refers to Stedin Netbeheer B.V. and its subsidiaries. 'DNWG' or 'DNWG Group' refers to DNWG Groep N.V. and its subsidiaries, including Enduris B.V. and DNWG Infra B.V.

Samen Sterker – Stedin and DNWG to become a single organisation in 2022

Stedin and DNWG will merge on 1 January 2022. From that date, they will jointly carry out staff services and grid management activities under a single name: Stedin. The name 'Enduris' will cease to exist from that date. The operational organisation will continue to be structured on a regional basis. The Samen Sterker (Stronger Together) programme is assisting both parties in transitioning to a single organisation.

Steps undertaken in 2020.

In 2020, a detailed analysis was made of departments that are responsible for grid management activities and the operational organisation. We also launched integration themes in relation to HR, Regulatory and Legal Affairs, ICT and Communication. Questions that arise in this context are what effect the integration will have on employment terms and conditions and how we intend to ensure that all contracts and proprietary assets will transfer seamlessly to Stedin. Stedin's systems form the basis for all aspects of the integration, and we naturally assure the quality of services to customers in Zeeland.

A survey among employees of DNWG showed that there is sufficient support for the integration. It is natural for employees to want to know where they stand. Mobility interviews and information sessions about employment terms and conditions were therefore held to address any issues. In terms of the synergy benefits, there are some departments, such as ICT, where, for various reasons, the implementation measures will continue after 1 January 2022. It remains our ambition to grasp most of the synergy opportunities before this date and to designate alternatives, where necessary.

Synergy

The integration should generate financial gains in excess of €100 million over a period of 8 to 10 years. The total financial benefit in 2019 and 2020 in this regard was €10.2 million. We achieve these synergy gains by:

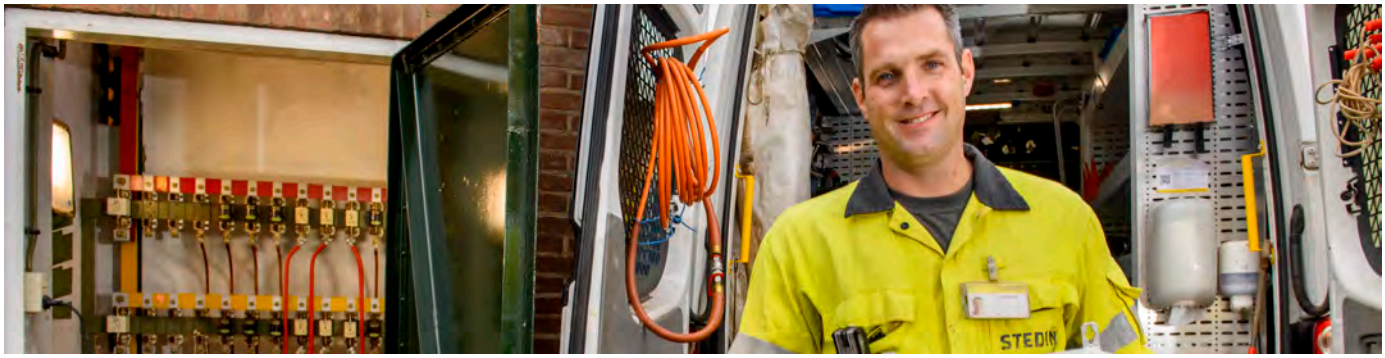
- reducing operational expenses by modifying working methods and processes, for example by further developing multidisciplinary ways of working;
- ensuring the transfer to Stedin by DNWG of the work previously outsourced to Liander in connection with the reading of smart meters. This results in yearly savings;
- combining procurement processes. This also involves timely alignment of specifications to enable the joint conclusion of new contracts;
- no longer carrying out the same support activities separately but rather jointly and simultaneously for both Stedin and DNWG. We achieve this by making the organisation fit for the future, with care and great attention for mobility and natural wastage. In 2020, this concerned 25.6 FTEs (total up to and including 2020: 37.9 FTEs).

Integration: 1 January 2022

The implementation of the organisation model from 1 January 2022 is a gradual process. It will be accompanied by a transfer of DNWG employees to Stedin Group, with all their rights and obligations. To facilitate this process, a staff transfer protocol has been drawn up that ensures equivalent and uniform employment terms and conditions for all current and future Stedin employees from 1 January 2022. As part of a careful integration process, we are focused on the mobility of colleagues and on safeguarding jobs as far as possible.

Multidisciplinary work

In Zeeland, we have coordinated activities below ground with partners for approximately 15 years. DNWG Infra, for example, carries out work below ground for water company Evides. DNWG's integration into Stedin Group means that it is no longer possible to extend the present contracts and working arrangements. Stedin Group is keen to further develop multidisciplinary ways of working in Zeeland and the rest of its area of operations. The current services agreement (between Evides as the client, on the one hand, and DNWG as the contactor, on the other) was replaced with effect from 1 January 2021 by a cooperation agreement, under which both partners work together on an equal footing. This agreement was signed on 7 December 2020.



Crucial craftsmanship: Raymond Kloos

Raymond Kloos is a service & maintenance engineer. What does 'crucial craftsmanship' mean for him? 'An employer that gives you confidence: you are professionally competent, you've got the PPE, you can do it.'

>What makes your work of vital importance? In other words, why is your work important for society?
'Connections occasionally break, due to wear and tear or excavation activities. It's my job to remedy the failure as quickly and effectively as possible. I also carry out maintenance on medium-voltage switchgear. My work is important, because society simply does not function without electricity. People are used to power being available 24/7, so when an outage means they cannot use their vacuum cleaner, or the oxygen pump for their saltwater aquarium has stopped working, I can't tell you how pleased they are to see me!'

>How do you recognise a professional in your field?
'In-depth knowledge is absolutely essential. Alongside a solutions-driven mindset, knowledge of the area and a professional approach, I think it is important that you know your own limitations. Don't be afraid to ask and keep asking questions; know your weaknesses. For example, you may know a lot about low-voltage or medium-voltage grids but next to nothing about digitalisation. If you can admit to having doubts, then you are a true professional in my book. Our job can be dangerous; we are stronger together.'

>What has working been like for you during the lockdown? What was different from normal?
'Our department is vitally important, and failures always have to be fixed, so my work continued as usual. Providing our children aged 8 and 11 with home-schooling was a challenge. I was given extra days off to help out with their education. I was also the first Stedin employee to enter the home of someone who had been infected with the coronavirus. I was on the emergency repair shift and got a call at 11 o'clock one evening. My first thought was: I'm not going! But my boss said: you are professionally competent, you've got the PPE, you can do it. I soon regretted wearing a warm jumper under the full PPE kit, though. Obviously I couldn't take it off, but it was okay in the end.

>How do you ensure that you remain fit and healthy yourself?
'I use the vitality scheme provided by Stedin, and I work out in the gym two or three times a week. I also train my son's football team twice weekly. I enjoy having the chance to coach them, and my son loves the fact that I run the team. At 1.95 metres tall and weighing 120 kilos, you could say I'm a big guy. My new year's resolution for 2021 is to pay more attention to what I eat.

>What gives you the most satisfaction in your work? In other words, how does your work help you maintain vitality?
'We are a close-knit team of 30 professionals with whom you can discuss whatever is on your mind. Stedin is generally very concerned with the well-being of its employees. We look after each other, making sure that we take timely breaks on warm or cold days and that there is enough variety in our work. It is nice to have that kind of support. And I get plenty of fresh air in my job, which I love.'

Key figures and ratios for 2020

Improved grid management

2020 2019

Investments
In millions of euros
€620
€646

Average downtime
Electricity (in minutes)
26 20
Gas (in seconds)
26 87

Customer satisfaction
Due to the introduction in 2020 of a new measurement method, the figures from 2019 and previous years are not comparable.
74%

Supply reliability
In %
99.9951
99.9962

Facilitating the energy transition

2020 2019

Electric driving
Growth in number of low-use connections
1,912 1,237

Smart meter
Number of offers
178,077
317,987
Smart meters installed in %
89.2 81.9

Number of newly built homes that are natural gas-free
92%
80%

Growth capacity of solar panels
Change from 2019 in the provinces of South Holland and Utrecht
48% 53%

Sustainable business operations

2020 2019

Safety LTIR
Number of lost-time injuries with absenteeism per million hours worked
0.40 2.19

Safety RIF
Number of recordable incidents per 200,000 hours worked
0.70 1.00

Employee satisfaction
Engagement
8.0 7.5
Commitment
8.1 7.8

One Planet CO_2 emissions
Business operations in tonnes (2019 excl. network losses gas/2020 incl. network losses gas)
53,258
12,966

Financial results

2020 2019

Net revenue and other income
In millions of euros
€1,229
€1,234

Solvency
43.0%
44.9%

Balance sheet total
In millions of euros
€7,572
€7,289

FFO/Net debt ratio
12.0%
12.3%

Stedin Group's ratios

	Unit	2020	2019	2018	2017
Financial figures (derived from our financial statements)					
Net revenue and other income	€ million	1,229	1,234	1,286	1,194
Investments in property, plant and equipment	€ million	620	646	607	494
Balance sheet total	€ million	7,572	7,289	6,991	6,551
Result after income tax	€ million	42	325	118	423
Solvency	%	43.0*	44.9	43.3	43.3
Operational ratios					
High-use electricity connections	number	19,379	18,912	22,692	21,786
Low-use electricity connections	number	2,303,313	2,283,563	2,263,009	2,256,608
Quantity of electricity transported	GWh	20,171	21,100**	21,330	21,893
Length of electricity cables	km	56,854	56,140	55,604	55,191
Length of electricity cables laid	km	852	1,034	806	611
High-use gas connections	number	9,556	9,633	10,761	10,852
Low-use gas connections	number	2,111,265	2,111,038	2,104,174	2,108,397
Quantity of gas distributed	million m^3	4,365	4,651	4,852	4,865
Length of gas pipelines	km	28,206	28,216	28,190	28,137
Length of gas pipelines laid	km	197	221	250	210
Medium-voltage failures resulting in disruption	number	523	519	433	390
Personnel					
Employees (internal) at year-end	number	4,276	4,346	4,470	4,488
Employees (external) at year-end	number	709	804	1,059	1,004
FTEs (internal) at year-end	number	4,127	4,213	4,339	4,365
FTEs (external) at year-end	number	607	700	791	750
Absence through sickness	%	4.2	4.8	5.0	5.2
Male employees	%	83	83	83	83
Female employees	%	17	17	17	17
Safety					
Lost Time Injury Rate (LTIR)	ratio	0.40	2.19	3.00	4.88
Recordable Incident Frequency (RIF)	ratio	0.70	1.00	1.00	1.29
Outages and interruptions in electricity supply					
Average duration of interruption MV/LV (CAIDI)	minutes	112	82	76	88
Interruption frequency MV/LV (SAIFI)	number	0.231	0.245	0.223	0.188
Annual average downtime MV/LV (SAIDI)	minutes	26	20	17	16
Annual average downtime HV/MV/LV (SAIDI)	minutes	26.7	21.0	18.3	16.6
Outages and interruptions in gas supply					
Average duration of interruption (CAIDI)	minutes	75	270	122	78
Interruption frequency (SAIFI)	number	0.006	0.005	0.0094	0.0086
Annual average downtime (SAIDI)	seconds	26	87	69	40

* Equity plus profit or loss for the period less expected dividend distributions for the current financial year divided by the balance sheet total, adjusted for the expected dividend distribution, connection contributions received and free cash and cash equivalents.

** In 2019, 621 GWh was incorrectly included for Enduris. This should be 1.764 GWh

	2020	2019	2018	2017
Information on total number of employees				
Number of employees of Stedin Group	4,276	4,346	4,470	4,488
Number of employees at Stedin	3,652	3,672	3,665	3,185
Number of employees at NetVerder	5	5	-	-
Number of employees at Joulz Diensten	-	-	153	-
Number of employees at Joulz (incl. Joulz Diensten)	-	-	-	648
Number of employees at DNWG	619	669	652	655
Number of employees on a full-time contract				
Male employees	3319	3,403	3,517	3,539
Female employees	363	357	385	396
Number of employees on a part-time contract				
Male employees	217	200	184	173
Female employees	377	386	384	380
Number of employees on a permanent contract				
Male employees	3,323	3,402	3,457	3,425
Female employees	667	679	701	669
Number of employees on a temporary contract				
Male employees	213	201	244	287
Female employees	73	64	68	107
CLA/Non-CLA				
CLA	4,092	4,158	4,282	4,268
Non-CLA	184	188	188	220
Diversity of boards and employees				
Younger than 25	76 (2%)	66 (2%)	59 (1%)	59 (1%)
Between 25 and 34	908 (21%)	843 (19%)	872 (20%)	933 (21%)
Between 35 and 44	1.060 (25%)	1.056 (24%)	1.060 (24%)	1.000 (22%)
Between 45 and 54	908 (21%)	923 (21%)	1.005 (22%)	1.058 (24%)
55 and older	1.324 (31%)	1.458 (34%)	1.474 (33%)	1.438 (32%)
Number of women in management positions	64	60	64	58
Number of men in management positions	224	224	231	235

Crucial craftsmanship: Collin Goedegebure

Collin Goedegebure is a technician/supervisor at DNWG. What does 'crucial craftsmanship' mean for him? 'We also keep an eye on each other; it is not nice to see a colleague who is overworked.'

>What makes your work of vital importance? In other words, why is your work important for the organisation and society?
'As a technician/supervisor, I carry out maintenance and inspections on high-voltage installations together with my team. We remedy failures, draw up work plans and exercise safety oversight. Most of the time, we do this in Zeeland, but we have also started doing so closer to Rotterdam recently. It is a very wide and varied job. If we don't do our job, the likelihood of failures increases significantly. And that's when the lights go out.'

>How do you recognise a professional in your field?
'We are immediately recognisable by the company vehicles and our work clothing, of course. That way, you can easily recognise a skilled professional. The real stars for me are my colleagues who have been in the job for years and who, 9 times out of 10, have the answer to your question. We also refer to them here as "our walking encyclopaedias".'

>What has working been like for you during the lockdown? What was different from normal and how did that affect you?
'I have been busy every single day. We now work in smaller groups, and I do all the administration and paperwork from home. Other than that, I haven't really noticed any difference, although it's been quite a different story in my personal life. Football was suspended, the gym was closed and I couldn't go out for a meal with my girlfriend – I could do none of these things. My holiday in the sun in Tenerife was also cancelled. The Veluwe national park was also nice, don't get me wrong, but it was still a shame.'

>How do you ensure that you remain fit and healthy yourself?
'I make sure I get enough exercise and eat a varied diet. A healthy work-life balance is important to me. You should leave your work at work and take regular leave. We also keep an eye on each other; it is not nice to see a colleague who is overworked.'

>What gives you the most satisfaction in your work? In other words, how does your work help you maintain vitality?
'I enjoy my work very much, as it is extremely varied and there is a good atmosphere. I travel around a lot, I have good tools to work with, the supervision is excellent and there are plenty of opportunities for advancement. One day, I do the administration and paperwork; the next day, I am rectifying a fault and spending time outside. It's an ideal combination.'

Strategy

As a grid manager of gas and electricity grids, we are responsible for providing a critical infrastructure. With just under 5,000 colleagues, we face the task of making the energy supply, and hence the entire energy system, more sustainable. The transition to renewable sources raises new questions and challenges. It also gives rise to solutions. That calls for ingenuity and craftsmanship from us. As long as we work together, this is achievable.

Mission, vision and strategy

Working together to create an environment filled with new energy. That is our mission. We believe that we can make the energy transition possible by focusing on our core tasks for grid management, both now and in the future, and delivering an excellent service for our customers. We have identified three strategic spearheads: improved grid management, facilitating the energy transition and sustainable business operations.

We are working day and night on a future-proof grid. We are investing in the infrastructure that is needed to connect solar and wind farms as well as to transmit the electricity that is generated; to heat districts when they switch to a heat grid or a supply with (hybrid) heat pumps; and to enable the increasing numbers of electric cars to charge or discharge their batteries. We are investing in making our electricity grid smarter to give us greater insight into the energy flowing through the grid and to help us rectify faults more quickly. This insight also improves our capacity to predict and manage, so we can make optimal use of the capacity of the electricity grid and so the voltage quality is maintained. Making it smarter also means using the existing infrastructure differently – for instance, by using the gas grids for sustainable gases such as hydrogen. This process will help to ensure that the transition remains affordable.

It is our ambition to be the most customer-focused, operationally efficient and sustainable grid manager by 2025. By that time, customers will be able to choose the timing of connection themselves and transact with us effortlessly, we will manage new heat and electricity grids, roads will only need to be dug up once, because we will coordinate our activities with the water companies, and our gas grid will be given a new lease of life with hydrogen and green gas.

Strategic challenges

Our strategic challenges remain unchanged compared to the previous year: to improve the quality of our services, to retain our financial health going forward and to cope with the combination of an increasing volume of work and increasing scarcity in the labour market.

Improving the quality of services

We are already doing well in many aspects, but we should still improve. Alongside appreciation of the work we do and the high reliability of our grids, there is also criticism, and we need to be honest about that. We continuously monitor where we can make improvements. One example is the time it takes to establish new connections to our grids. Communication regarding schedules or changes concerning connections also needs to be improved. We can work faster as well as more efficiently for our customers by organising our services more intelligently.

The energy transition and high energy demand have an impact on our services. Anyone wanting to construct new facilities or set up a connection is free to do so, even if the available capacity of the grid is limited at that spot. It is essential to look and plan ahead together in order to ensure that sufficient grid capacity remains available. At the same time, there is a growing realisation that not everything is possible: choices need to be made. For this reason, we engage with customers and other local and regional parties. We hold extensive discussions and prioritise the customer more than ever. Our engagement enables us to make our products and services more finely tuned to customers' wishes. We furthermore endeavour, as far as possible, to craft a smart and digital approach to work. Our active involvement in the Regional Energy Strategies and the Regional Agenda on the Charging Infrastructure Network enables us to anticipate where our investments should be made. This provides a sound basis for further improving the quality of our services and facilitating the energy transition.

Retaining financial health going forward

The energy transition is a major challenge for the Netherlands, with abundant dynamism. Decisions are constantly being made: at the regional level by municipalities in discussions on the Regional Energy Strategies, at the national level by the government and at the international level as well, as shown in the decision of the European Commission to cut net greenhouse gas emissions by at least 55% by 2030. Our investment programme is updated at regular intervals in the light of all the latest insights. This has resulted in us committing to invest approximately €7 billion between 2020 and 2030 to facilitate the energy transition in our service area. This is an increase on previous forecasts. The precise investments made in the future will depend on the choices that are made, customer demand and the speed with which the energy transition advances. The question we therefore need to answer is how to remain financially healthy against this background.

'Increasing demand for investments in the network is not matched by similar increases in our income.'

The present regulatory model takes insufficient account of the changing environment in which grid managers operate and does not provide for a reduced payback period of investments. This situation places a heavy demand on our financial position. Currently, finances are too constrained to allow all the investments to be made that are necessary for the energy transition from a social perspective.

Capital requirement

Continuing social acceptance is crucial in the drive to achieve the energy transition. This is only possible if we are transparent about the costs and benefits of the transition and we remain in dialogue with one another about how we intend to shoulder the burden as a society. In addition to the loans we raise, Stedin Group expects that it will need an additional €750 million to €1 billion in equity in the years until 2030 to keep the societal costs at an affordable level. The grid manager's total capital requirement depends on the speed of the energy transition, the future regulatory regime and the level of rates. The money is intended, among other things, for reinforcing and reconfiguring our grids as well as for building new infrastructure. This can only be achieved together with all our stakeholders. The following is a summary of what we are doing to retain our financial health in the long term:

1. **More efficient working practices to save costs**
   We begin by analysing everything that we could be doing, and that is within our control, to be effective and efficient. For instance, we critically examine our investments and their timing, and in 2018, we launched a five-year efficiency programme aimed at reducing our operating expenses by €150 million. Of this figure, €109 million had been achieved by the end of 2020. In 2020, we reviewed the efficiency programme and raised our ambition to €180 million. In addition, the programme was extended to expire in 2025 instead of 2022, driven in particular by our success in achieving the savings to date. In 2021, we will consider which additional steps we can take until the end of the forthcoming regulation framework in 2026. Although we retain a sharp focus on continuous efficiency improvements, this will not be sufficient to finance all the investments necessary for the energy transition.
2. **Dialogue with the ACM about regulation**
   We are in close consultation with the regulator ACM about modifying the regulatory regime used for the next regulation period (which will commence in 2022). Grid managers are seeking sufficient financial scope within the regulation framework to permit all the necessary investments. This is too limited at present, in particular as the financial scope for the coming period is largely based on the situation in recent years. Briefly put, the current regulatory regime is based on the situation prior to the energy transition and not on the challenges of tomorrow. The aim is to ensure that Stedin Group's income more closely matches its costs. This is a joint undertaking with the other regional grid managers.
3. **Strengthening our equity capital base**
   We are exploring opportunities for expanding our financial scope for investments in the energy system by asking for equity capital contributions from the current shareholders or possibly other parties (new public shareholders, including municipalities and provinces, as well as central government). Strengthening our equity capital base will allow us to maintain a healthy credit rating, which is seen as an indication of reliability on the financial markets, so that the cost of lending for investments does not become unnecessarily expensive. In 2020, we held intensive discussions with our shareholders about our long-term financing and a potential contribution in the short and long term.
4. **Exploring potential solutions together**
   The grid managers are working together to provide greater financial scope for investments. In this way, the grid managers are bringing together relevant stakeholders to jointly explore new potential solutions. These may include capital injections, subsidies from public authorities or legislative and regulatory amendments for the next regulation period. The stakeholders concerned are the Ministry of Economic Affairs and Climate Policy and the Ministry of Finance, the regulator ACM and the interest groups the Association of Netherlands Municipalities (VNG) and the Association of Provincial Authorities (IPO) (as representatives of shareholders who also have regional control over the energy transition).

And what if we do not succeed in strengthening our financial position? In that event, we could end up in a scenario where we are unable to make the necessary investments to achieve the desired progress with the energy transition. Or a scenario in which we need to borrow more, resulting in a lower rating and higher interest charges, which may also potentially have an impact on the level of necessary investments we can

make. Neither scenario is desirable, in our opinion. The policy choices we make today provide the basis for fulfilling our role in the energy transition in several years' time. It is important to do this together and from a financially healthy perspective.

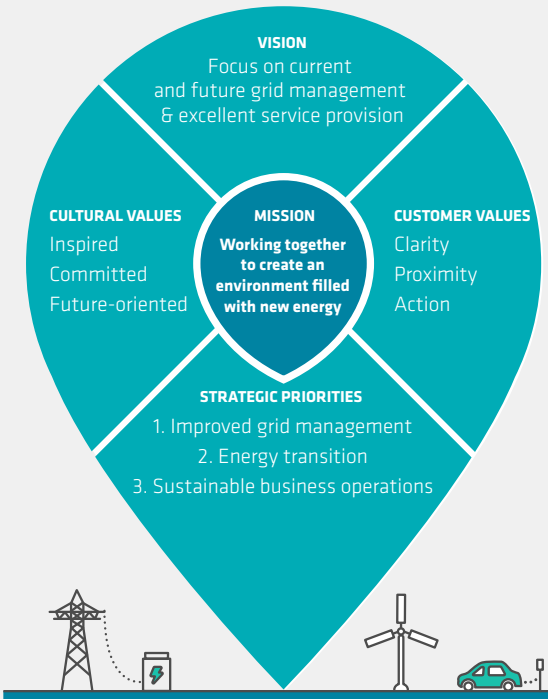
Workload is increasing, scarcity in the labour market

The energy transition is in full swing, and this has implications for Stedin. It means a sharp rise in the number of new connections and grid reinforcements. We are closely involved in various partnerships where choices are made and have to analyse the different scenarios, including the impact they have on our grids. The energy transition also requires grid managers to play a greater role in making data accessible, and substantial input is needed from Stedin in the debate on energy policy, market regulation of heat and hydrogen, for example, and financing the energy transition. This challenge has an impact on how we should shape our workforce.

In order to have a clear understanding of the current and necessary future capacity and competences, we set up a system of strategic personnel planning in 2019. We made good use of the first insights this yielded in 2020. Thanks to the fine work being done by our in-house training school, we know that we have enough junior fitters. At the same time, there is a growing shortage in trained intermediate and more specialised technical roles and in the area of IT. These insights have enabled us to refine our planning to permit greater differentiation in terms of current and future colleagues and to concentrate on recruitment and internal advancement.

Working together to create an environment filled with new energy

More than 2.2 million customers rely on us. Day and night. Because energy is indispensable in the world in which we live. The energy transition will require major adjustments to the energy grid, or rather our energy system. New technologies can help, as can good collaboration between all the people and organisations involved in our energy supply. If we really roll up our sleeves together with a lot of energy, we will succeed. The availability of energy in our environment will then be just as much a matter of course in future as it is today.



Our three strategic priorities

We are working vigorously on improved grid management by continually improving our performance on our core tasks.

- Reliable grids
- Affordable and efficient services
- High-quality products and services

We intend to facilitate the energy transition through innovation and by collaborating closely with partners.

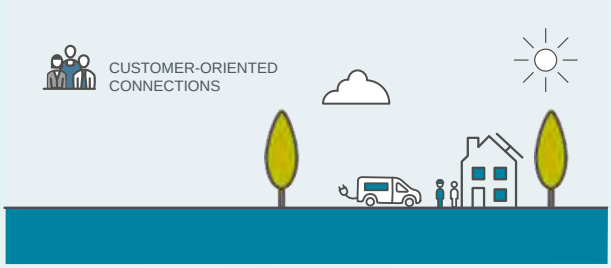
- Future-proof grids
- Making grid information available
- Accelerating through cooperation

As ambassadors for the energy transition, we are aiming for sustainable business operations:

- Safe working conditions
- Professionally competent employees now and in the future
- Positive environmental impact (One Planet)
- Financial health

Strategic initiatives

Within our strategic spearheads 'Improved grid management' and 'Facilitating the energy transition', we are focusing on four change projects that will contribute significantly to delivering our strategy. They are: Customer-oriented connections, Multidisciplinary collaboration, Sustainable energy transition and System operator.



1. Customer-oriented connections; on time and tailor-made at the lowest societal costs

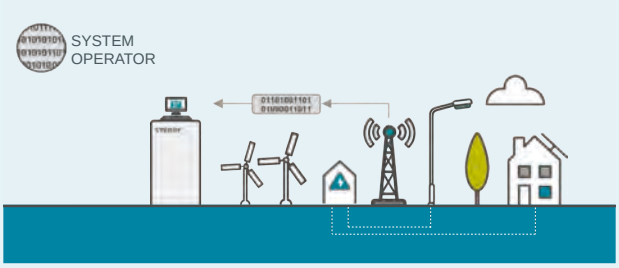
By implementing digitalisation as much as possible, among other things, we aim for improved lead times of connections by the end of 2022: we intend to connect 80% of our customers within four weeks, if the customer wishes. We are also aiming for a customer satisfaction score of 80% and a 40% increase in productivity. The result will be that satisfied customers receive a tailor-made service on time and at the lowest possible societal costs.

2. Multidisciplinary; efficiency and customer satisfaction go hand in hand

A multidisciplinary way of working is aimed at developing cooperation with other parties, such as the drinking water companies in our service area. As we all work below ground, a multidisciplinary approach to working enables us to carry out our work more efficiently, achieve savings, make better use of scarce personnel and reduce inconvenience for local residents.

3. Sustainable energy transition; ready for the future

To achieve the goals of the climate agreement, we are preparing, as a grid manager, for a future with a new energy system. The sustainable energy transition strategic initiative is aimed at embedding the new working practices in the Stedin organisation. This enables us to predict grid capacity and create future scenarios. We are also engaged in close dialogue with stakeholders.



4. System operator; overseeing and directing the energy system

Within this initiative, we are expanding our role as a manager of physical grids with the management of digital data flows. We are exchanging increasing amounts of data with customers, municipalities, market parties and other grid managers on a range of topics, such as available grid capacity. This expanding role in overseeing and directing the energy system means we are becoming a system operator.

Interview with Jeroen Grond, director of Safety and crisis team chair (SST)

'The greatest risk? That 30% of staff might not be able to come to work.'

It has been a hectic period for Stedin Group's crisis team: for months on end, it put in long days to ensure the organisation could cope effectively with all the challenges of COVID-19. 'Stedin plays an important role in keeping the critical infrastructure in the Netherlands functioning.'

'I can still remember it clearly', says Jeroen Grond, director of Safety, on behalf of the crisis team. 'It was a Saturday evening in mid-February when our colleagues at Enexis raised the alarm internally. The first coronavirus cases had been recorded in the province of North Brabant, and the situation did not look good. This was the trigger for us at Stedin to start working on our coronavirus contingency plans.' The greatest risk? 'That 30% of staff might not be able to come to work, with all the accompanying adverse effects on our services. We quickly scaled up the crisis organisation to level 3. This is the second-highest level in the crisis plan, which we had never previously had to activate at Stedin. In practical terms, it meant that a crisis team was formed that assumed overall control, whilst the regular crisis organisation continued as before, to deal with failures, for example. The confidence that the Board of Management immediately placed in us was and remains immense.'

Even before Prime Minister Mark Rutte gave his first COVID-19 press conference, Stedin was already well advanced in its preparations. This is important, given Stedin's responsibility for critical infrastructure. It was quickly decided, for example, not to carry out any work nearby hospitals, to avoid any risk of failures or power outages affecting them. Maintaining supply security, ensuring the safety of our workers and continuity were priority considerations in every discussion. Jeroen recounts, 'We kept asking: how well prepared are we? Where can we spot potential issues? And how do we distinguish an incident from a problem?' The team was able to resolve essential issues even before the press conference took place. 'For example, we "only" had 1,000 VPN connections. That would have been plenty under normal circumstances, but now the entire company had to work from home. IT doubled this number in the space of a single weekend and then quickly ramped up to 4,000 connections. That is quite an accomplishment.' In addition, a dashboard was immediately set up as well as a project team, to monitor information and facilitate quick decision-making.

The first 24 hours

Thanks to the preparations, the first 24 hours passed by without much incident. 'We are responsible for critical infrastructure, so we are by nature crisis managers. It is part and parcel of who we are. We involved the works council and made clear communication a priority. It is impossible to overstate how important this is. If people understand why they need to do something, they are more likely to support difficult measures. We explained what behaviours we needed to adopt, which work had priority and what could wait, and we issued regular updates. There was a great sense of solidarity, and everyone helped out. It was very quickly decided across the industry to temporarily suspend all work involving smart meters. The in-house training school also closed its doors, and our control room teams were spread over two locations, as a precaution. 'A whole apparatus swung into action. Fitters who would normally install the smart meters brought keyboards, screens, computer mouses and chairs to colleagues working from home. At the office, everything was rearranged in line with the 1.5-metre social distancing rules – notwithstanding the rule that people should work from home if possible. Field staff were issued with coronavirus kits, including PPE to be worn when entering customers' homes. In the beginning, we met seven times a week, although we gradually scaled this back.'

Tough decisions

As you would expect, every crisis situation is accompanied by some tough decision-making. 'Personal situations are the most difficult. Take the example of an employee with 40 years' service who is denied a proper farewell. I find this really difficult, but it's just not possible in the present circumstances.' Another painful episode was when a colleague's wife died of the coronavirus. 'Just terrible. His fellow workers lined the route of the funeral procession with Stedin vans, to pay their last respects. The sense of solidarity is incredible at times like this.'

During the coronavirus period, there was a continuous flow of new areas for attention. 'These mainly related to additional assistance for employees: confidential counsellors, an HR coronavirus helpdesk, leadership training. As colleagues, we also got together to donate EUR 19,500 to the food bank.' Financially, the coronavirus has had an adverse impact, with production losses.' Still, there are also some bright spots: 'The unselfish cooperation, with everyone pulling together and lending a hand. The interest of Stedin as a whole is more important than the interest of any individual department.'

Developments within society and the energy market

Various developments affect Stedin Group. Below, we describe the principal influences that play a part in our strategic choices and business operations.

Risk of problems with grid capacity and voltage quality

Energy supply and demand have become far less predictable. In particular, the growth of decentralised, sustainable power generation facilities, such as solar farms, continues apace. The speed of these developments means that we are approaching the limits of what the grids in the Netherlands can handle. There is a risk of problems with our transmission capacity and voltage quality, and these problems are already cropping up in some places. A lot of solar roofs and wind farms have been constructed in Schouwen-Duiveland and Tholen in Zeeland, for example. These produce more electricity than is taken up in the area. The challenge for us, as a grid manager, is to provide solutions to these issues.

By 1 October 2020, each RES region had submitted its draft RES. It was found that the total ambitions far exceeded the national target of 35 TWh large-scale onshore renewable energy generation capacities, with a total nationwide in excess of 50 TWh. It is good to see that there is so much drive to meet the climate targets. Many regions also focus heavily on using roof areas for the installation of solar panels. The impact analyses that were carried out show that major grid expansions are needed to facilitate the regions' plans.

Climate Agreement

Through the Climate Agreement, we are seeking to implement the international goal of limiting global warming to no more than 2 degrees. For the Netherlands, endorsement of the 2-degrees goal means that emissions of greenhouse gases must have been reduced by at least 49% by 2030 compared with 1990. The European Union tightened up this target in 2020, replacing the 49% emissions cut with a 55% reduction in greenhouse gas emissions. As a result, we need to engage in renewed discussions with stakeholders about how we will jointly meet these new, more ambitious targets.

Natural Gas-free Districts Programme

On 22 October 2020, Minister of the Interior and Kingdom Relations Kajsa Ollongren announced the names of the municipalities in the Netherlands that qualify for a government grant in the second tranche under the Natural Gas-free Districts Programme. In Stedin's service area, this include districts in the municipalities of Goeree-Overflakkee, Rotterdam and Pijnacker-Nootdorp. In partnership with these municipalities and local residents, Stedin will gain experience and further the process of achieving a gas-free built environment by 2050, one step at a time. The projects from the first tranche are still underway, and we are continuing our hard work in relation to them. We also help municipalities and other parties in making the transition by sharing our knowledge about relevant topics. We are continuously increasing our knowledge in relation to the energy transition and calculations in respect of potential options and scenarios in the future. In 2020, for example, we published various papers to stimulate discussion about the heat transition, the role of hydrogen in the future energy system in the built environment and sustainable gases.

Industry

The Industry Climate Agreement Infrastructure Task Force (TIKI) examined what type of infrastructure industry needs to meet the commitments in the Climate Agreement and what input and options the grid managers require to make this possible. A significant number of their recommendations have now been adopted by the Minister of Economic Affairs and Climate Policy. One such recommendation is the creation of Energy Strategies Clusters (CES). Stedin will be actively involved in the CES for Rotterdam Moerdijk, as will Enduris in the CES for Zeeland (Terneuzen and the surrounding area).

Energy legislation

To implement the climate agreement, existing energy legislation needs to be amended to ensure sufficient provision is made for new roles and tasks in the energy system of the future. In addition, new EU legislation must also be implemented into Dutch domestic legislation.

> 'Speed is of the essence in this regard. The energy transition is now at a critical stage, and 2021 will be a significant year in terms of legislation. '

The results of the elections for the Lower House of the Dutch parliament in 2021 will also play a role in this regard.

The Ministry of Economic Affairs and Climate Policy is drafting an Energy Act 1.0 for this new legislation (including the merger of the Electricity Act (Elektriciteitswet) and the

Gas Act (Gaswet). Informal consultation was carried out regarding the relevant policy choices in this regard to gain a feeling for the positions of the various stakeholders. Netbeheer Nederland, through the action team in which Stedin participates, gave an informal response to a draft of this Outline Policy Memorandum for the Energy Act 1.0, as well as a formal response to the final outline policies. We are broadly satisfied in substantive terms with how the Ministry of Economic Affairs and Climate Policy intends to implement fundamental choices and the way in which a large number of implicit working practices will be formalised. A further impact analysis of the Energy Act 1.0 is certainly necessary, as this piece of legislation impacts to a greater or lesser extent on virtually all the processes undertaken by the grid operator.

Market regulation of heat grids

Collective heating supply (heat grid) is a key element of the energy transition. In the service area of Stedin Group especially, large-scale heat grids are a realistic vision for the future. Stedin foresees an increasing convergence of the critical infrastructures for electricity, gas and heat in the long term which makes the construction and management of heat grids logical tasks for a network group as well. A public party such as Stedin Group is often a logical party for municipalities and provinces, given its considerable experience with infrastructures and comparable public and other interests. Our knowledge and experience as a public party means that we can provide the necessary added value. This also ensures that any contribution, be it project-related or otherwise, from public funds remains within the public domain.

Heat grids are primarily provided for in the Heating Supply Act (Warmtewet). A new version of this Act (now known as the Collective Heat Supply Act (Wet Collectieve Warmtevoorziening, WCW)) was circulated for consultation in mid-2020 and is still undergoing drafting. A potential role for grid operators is under constant discussion in the national debate on scaling up the heat supply. A combination of the new Heating Supply Act and EU regulations would seem to render a role for grid operators in heat virtually impossible in practice, in spite of the fact that several municipalities openly advocate a far greater role for grid operators. Furthermore, Eric Wiebes, Minister of Economic Affairs and Climate Policy, already confirmed in a letter to the House of Representatives his intention not to exclude any parties for the heating market and to examine how the grid operators can best fulfil their role. In our opinion, this is consistent with the more general wish for greater room for manoeuvre in relation to energy carriers such as heat and hydrogen, as also previously pledged in the Energy Transition (Progress) Act. Robust and up-to-date legislation in the short term is essential to enable us to carry out our core tasks, both now and in the future.

Within Stedin Group, NetVerder is currently responsible for realising our strategic ambition in this regard: to develop heat projects with the aim of gaining experience in the market for heat. You can read more about this topic in the section on Non-regulated activities.

Socioeconomic developments: COVID-19

COVID-19 has significant negative consequences from a macroeconomic and socioeconomic perspective, and this in turn has a direct impact on the speed of the energy transition. Dutch companies are increasingly putting off necessary sustainable investments. Jobs are also under threat. This is affecting people's financial stability and therefore influences the debate on the affordability of and support for the energy transition.

New technologies

Developments in the field of solar energy and electric cars are advancing rapidly. These trends call for additional investments in our electricity grids. At the same time, new technologies as well as the installation of roughly 22,000 smart grid terminals in the energy grid also enable us to track the energy flowing through the grid in real time and improve our grid management even further. The future lies in making our grids smarter and implementing an integrated energy system. Our System Operator strategic initiative helps us to determine how to gain maximum benefit from an integrated approach. This enables us to make optimum use of the energy grid according to the energy requirements in a particular area. You can read more about our innovations in the section on Facilitating the energy transition.

Reducing environmental impact

Care for and attention to a valuable natural environment have increased in recent years. The focus is directed not just at the climate but also at people's immediate living environment. Stedin Group is therefore investing in reducing the environmental impact of its business operations – for example, by electrifying its vehicle fleet and preventing environmental as well as health risks by increasing employees' knowledge and understanding of hazardous materials through environmental workshops. You can read more about this topic in the section on One Planet.

Crucial craftsmanship: Sanne de Boer

Sanne de Boer is a senior analyst in the energy transition. What does 'crucial craftsmanship' mean for her? Real craftsmanship means being able to explain the consequences of choices that are made. The energy transition is just not that simple, after all.'

>What makes your work of vital importance? In other words, why is your work important for society?

'I work as part of a team of four people analysing the energy transition, and in particular the heat transition in the built environment. The leading question is: what will we use instead of natural gas? Solutions differ from one district to the next. My job within the team is to disseminate knowledge. This is of such importance to me that I self-published a book this year, "The energy transition explained". I'm delighted that 1,200 Stedin employees have asked for a copy. I wrote the book to explain concepts that are used, such as the difference between kW and kWh, in plain language. It also bugged me that the media make so many errors, such as referring to a water pump when it is actually a heat pump. They are totally different things. I don't think my work is directly of vital importance to society. Unlike fitters, who are absolutely essential. But I do contribute to making our energy infrastructure future-proof. My work has relevance in the long term.'

>How do you recognise a professional in your field?

'A true professional can clearly explain, in plain and balanced language, the interests and tensions involved in the energy transition. The system as a whole is complex. Take the current discussion about biomass, for example. Opponents believe it shouldn't even be considered. Its advocates believe it is a necessary option. A true professional can explain the consequences of choices in terms of the cost, space and speed of the transition. It is just not that simple.'

>What has working been like for you during the lockdown? What was different from normal?

'After the Prime Minister's first press conference, I felt anxious. I live alone, and I wasn't keen at all on working from home. I even phoned my boss to ask whether I could come in to the office. But I have completely changed my mind; now, I wouldn't want to work any other way. I work far more effectively from home. It's difficult not to be distracted by the clamour in an office environment. My daily commute is normally 2.5 hours, but now I can stay in bed an hour longer. I love it! And I like the fact that we start the work day with a half-hour casual meeting to touch base with the team.'

>How do you ensure that you remain fit and healthy yourself?

'The daily ops remote meetings with my colleagues really help to maintain focus on my work. I also exercise three times a week, including one skateboarding session. I have a healthy diet and make sure I eat something every two to three hours. I also stay active throughout the work day by going for short walks.'

>What gives you the most satisfaction in your work? How does your work help you maintain vitality?

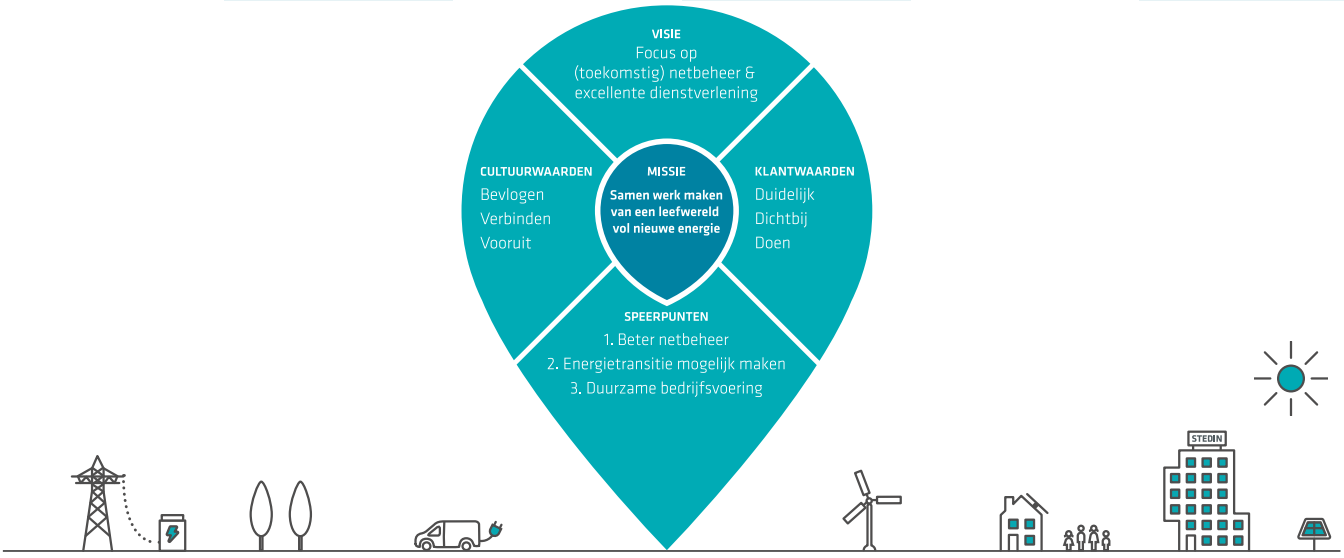
'I am really happy to be part of this team. I also enjoy doing work that, in my view, is useful for society. I could never be a tobacconist, for example. That has no added value for me. The idea of doing purposeful work is what motivates me each and every work day.'

Value creation and measuring impact

Stedin Group's value creation model is based on the six capitals of the <IR> model. Stedin Group's actions have a positive as well as a negative impact on society. For each capital, we show our key input topics and output results. We also highlight our value for society.

INPUT

1. Financial, economic	2. Infrastructure	3. Customers and service provision	4. Social, relational	5. Employees and intellectual capital	6. Climate, nature and environment
• net book value of grids: €6,967 million; • group equity: €2,891 million; • interest-bearing debt: €3,183 million; • regulated tasks; • financial policy.	• 56,854 km of electricity cables; • 28,206 km of gas mains; • 4,443,513 connections; • 38,811 stations; • investments in the grids: €620 million.	• shareholders: 44 municipalities; • 2.2 million customers; • contractors and suppliers; • partners; • government authorities.	• talks with stakeholders about materiality; • 10 environmental managers and 23 area directors.	• 4,276 employees; • specific knowledge and expertise; • training and education.	• Paris Climate Agreement; • purchasing of materials • vehicle fleet fuel consumption: 2,827,746 litres; • energy consumption of buildings: 589,164 m3 of gas; 6,496,094 kWh of electricity; • heat: 6.99 TJ.



OUTPUT

• net profit: €42 million; • operating profit: €129 million; • solvency: 43.0%.	• smart meters offered: 178,077; • quantity of electricity (20,171 GWh) and gas (4,365 million m^3) transmitted; • average downtime of 26 minutes for electricity and 26 seconds for gas; • supply reliability: 99.9951%.	• customer satisfaction; • payments to suppliers; • data available; • collaborative ventures with partners; • memberships,	• externally reviewed materiality assessment; • 23 Green Deals; • involved in nine Regional Energy Strategies; • implementation of stakeholder value; • good and attractive employer and crucial partner in discussion on energy transition.	• salary payment; • 4.2% absence through sickness; • gender ratio male 83%/female 17%; • employees under the Participation Act (Participatiewet): 66.9 FTEs; • employment; • income tax deducted at source; • employment practices; • our contribution towards an inclusive society.	• total CO_2 emissions (scope 1, 2 and 3): 229 Ktonnes; • recycling of materials; • making the built environment more sustainable; • making industry more sustainable; • 100% compensation of CO_2 footprint electricity network losses by GoOs results in approximately 500 Ktonnes of CO_2 compensation.

Positive and negative impact on society

The table below provides qualitative as well quantitative insight into the added value of our social impact on stakeholders. The six capitals in the centre of the table represent the baseline. The increased value due to the benefits of what we do for society is shown above the baseline, and our decreased value consisting of the costs as well as any inconvenience associated with what we do is shown below the baseline. The information under the category 'Financial, economic' is in line with the IFRS figures from the 2020 financial statements and is quantitative. Our qualitative indication of all unquantified impact offers insight into the relative scope of our social impact on society. We explain the six capitals and the way in which they cause capital value to increase or decrease in an overview on the following pages. Through our impact, we contribute to the UN Sustainable Development Goals.

IMPACT

Amounts in million euro's
quantified in euro's
not quantified in euro's

Increase of capital value

1. Financial, economic	2. Infrastructure	3. Customers and service provision	4. Social, relational	5. Employees and intellectual capital	6. Climate, nature and the environment
(+) Income tax € 60 million		(+) Value of energy transmission for business customers € 260 - 320 million	(+) Value of change of reputation of Stedin Group	(+) Change in the value of intangible assets	
(+) Dividends, repayments and interest € 1.244 million		(+) Contribution of gas distribution to consu-consumers' well-being € 2.000 - 2.400 million	(+) Contribution to improved institutions and regulations	(+) Value of more and improved data	
(+) Payments to employees € 409 million	(+) Digital security	(+) Contribution of electricity transmission to consumers' well-being (including returning energy to the electricity network € 2.000 - 2.400 million	(+) Contribution to social cohesion in neighbourhoods	(+) Technological development	
(+) Payments to suppliers € 906 million	(+) External change in the value of assets		(+) Contribution to social cohesion in the Netherlands	(+) Development of new markt models and open platforms	
				(+) Effects on well-being from having work € 40 - 50 million	
				(+) Employee development	
(-) Recieved capital, received repayments, and interest € 1.182 million	(-) Value of goods purchased by business customers	(-) Value of goods purchased for gas distribution € 800 - 1.000 million	(-) Digital security: breaches of privacy	(-) Local safety incidents	(-) Ecological damage caused by waste € 9 - 11 million
(-) Third-party payments € 105 million	(-) Economic change in the value of traditional assets (internal)	(-) Value of goods purchased for electricity transmission € 1.100 - 1.300 million		(-) Work-related absenteeism and employee accidents € 0,05 - 0,1 million	(-) Ecological costs of purchasing materials € 0,1 - 0,15 million
(-) Other revenue € 13 million				(-) Economic value of work € 35 - 45 million	(-) Contribution to climate change caused by 229 Ktonnes CO_2 emissions (this is 22 Ktonnes less compared to 2019) € 80 - 100 million
(-) Change in cash reserves € 11 million					(-) Other enviromental impacts
(-) Financial expenses customers (business) € 292 million					
(-) Financial expenses customers (households) € 833 million					

Decrease of capital value

Result of impact measurement

Concept	Increase of capital value	Decrease of capital value
Financial, economic		
Incoming and outgoing cash flows have a positive as well as a negative impact on society (SDG 7, 8, 11).	Payments to suppliers and employees, tax paid, negative cash flows, dividends, interest and repayments are considered to be capital that is invested in society, for a total of € 2,619 million.	Capital raised for the financing of activities, third-party payments, other revenue as well as financial expenses for both business and private customers are considered to be capital that is withdrawn from society.
Infrastructure		
This category involves our regulated assets and is quantified in the IFRS financial statements (SDG 9).	By investing in digital security, Stedin minimises undesirable data exchanges. As a result, the online security of society improves.	If raised capital is invested in our material assets, the value of these assets increases. This value increase represents capital withdrawn from society.
	The value of our assets changes – for example, due to the expected positive impact of smart meters. This value change also applies to society.	The products and services intended for our infrastructure, which Stedin receives from suppliers, increase in value as a result. These products and services cannot be invested in society.
Customer and service provision		
Our standard business operations and their design affect the daily lives of our customers (SDG 7, 9, 11, 12).	The availability of energy contributes to the welfare and well-being of private as well as business customers. In this respect, Stedin creates value for society. Stedin creates between € 4,260 and € 5,220 million of value for society.	The products and services intended for the facilitation of gas distribution as well as electricity transmission, which Stedin receives from suppliers, increase in value as a result. These products and services cannot be invested in society. Stedin withdraws between €1.900 and €2.300 million in value from society.
Social, relational		
Our social capital is defined by how the public values Stedin and our activities.	Improving the reputation of Stedin Group increases customer satisfaction, reduces recruitment costs and creates new opportunities for cooperation. This increases our potential to create long-term value for society.	Leaking privacy-sensitive data has a negative social impact and results in loss of value.
Employees and intellectual capital		
Stedin affects the well-being of its employees both positively and negatively. We also create capital by investing in knowledge development (SDG 8, 11).	Having a job positively affects the well-being of the relevant employee. As an employer, we contribute between €40 and €50 million to the well-being of our employees, and hence to society.	Work-related absenteeism and accidents reduce the well-being of the people involved, as do safety incidents. We cause these situations as an employer and consequently decrease well-being in society. The resulting value is up to €1 million.
	Stedin actively invests in knowledge development for future grid management. This approach raises the value of our immaterial assets, creates new market models/platforms and improves/increases data processing. Its application creates value for us and for society.	All employees devote time to their job. The total value of this time is between €35 and €45 million. Since this time cannot be spent elsewhere, we withdraw its value from society as an employer.
Climate, nature and environment		
Our normal business operations affect the climate, nature and the environment (SDG 12, 13).		In 2020, our normal business operations emitted 229 Ktonnes of CO2, which has a negative impact on the climate, nature, the environment and hence society.
		As we are unable to recycle 100% of the materials used, the resulting waste causes ecological damage.

Sustainable Development Goals

Stedin Group contributes to attaining several of the goals defined by the United Nations in order to end poverty, inequality and climate change by 2030: the Sustainable Development Goals. Below, we describe our efforts to contribute to achieving the goals on which we have an impact.

SDG	Description	Application to Stedin and subtargets of the SDGs	Strategic spearhead
7 BETAALBARE EN DUURZAME ENERGIE	Energy is essential for almost all major challenges and opportunities in today's world.	Via our grids, we offer our customers renewable and non-renewable energy to live, work and do business (SDG 7.2). Jointly with our stakeholders, we work on innovations that are necessary for a future-proof grid, ensuring that it remains affordable and reliable (SDG 7.1).	Improved grid management Facilitating the energy transition
8 EERLIJK WERK EN ECONOMISCHE GROEI	Our employees are the heart of our organisation. They ensure a reliable energy supply each and every day. We provide a safe working environment with plenty of opportunities for development.	Stedin is committed to ensuring equal opportunities, long-term employability and a workforce that reflects today's society. We promote an inclusive society – for instance, by offering young people with a disability and residence permit holders a trainee post (SDG 8.5). In executing our purchasing policy, we take our responsibility in the area of human rights, ethical conduct and employment rights. The safety of our employees and the local community is our top priority (SDG 8.8).	Professionally competent employees One Planet Thinking Integrity Safety & security
9 INDUSTRIE, INNOVATIE EN INFRASTRUCTUUR	Investments in infrastructure are crucial to make sustainable development possible.	Stedin Group works on facilitating the energy transition and fulfils a facilitating role for the sustainable development of the industrial cluster in the Port of Rotterdam, for instance (SDG 9.1).	Facilitating the energy transition Improved grid management
11 DUURZAME STEDEN EN GEMEENSCHAPPEN	The cities and communities of the future must offer opportunities to everyone through innovation and progress, including access to basic facilities such as energy.	Stedin Group helps ensure pleasant and sustainable urban environments by building and maintaining networks (SDG 11.6). Stedin Group is committed to the goals in the Climate Agreement and works towards them with its stakeholders (SDG 11.1; SDG 11.2).	Facilitating the energy transition One Planet Thinking
12 VERANTWOORDE CONSUMPTIE EN PRODUCTIE	Sustainable consumption and production mean promoting saving raw materials and energy, sustainable infrastructure, appropriate working conditions and a higher quality of life for everyone.	Stedin Group devises and implements solutions to reduce its own energy consumption and to improve the sustainability of our grid (SDG 12.2). These solutions include intelligently balancing supply and demand and combating wastage (SDG 12.4; SDG 12.5).	One Planet Thinking Professionally competent employees now and in the future Inclusive society
13 KLIMAATACTIE	Climate change affects all countries on all continents. Without intervention, the temperature on earth is likely to rise by more than 3 degrees Celsius this century.	Stedin Group conforms to the international climate objective. Through sustainable innovations, Stedin Group contributes to technologies and systems that combat climate change (SDG 13.1).	One Planet Thinking Facilitating the energy transition

Improved grid management | Facilitating the energy transition | Sustainable business operations

Stakeholders and materiality

The challenges associated with the energy transition are not restricted to Stedin. As our stakeholders face similar challenges, it is important to maintain good contact with them, so as to share ideas and reach solutions together.

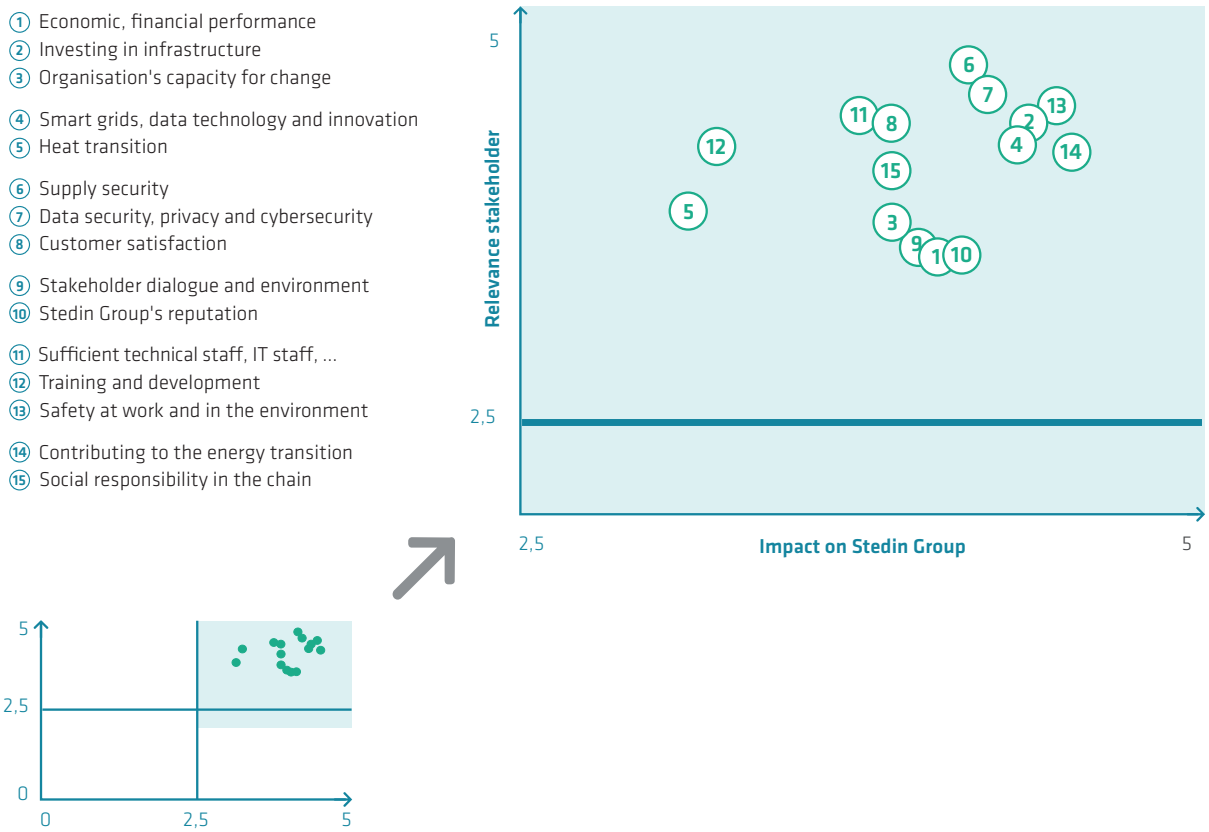
In this light, we ask them each year to provide input on Stedin's material topics: the topics that are essential for achieving our mission and strategy and are directly related to our control framework and risk management. Our materiality matrix shows how important these topics are to us and to our stakeholders.

We used the following steps to arrive at the choice of material topics and to determine the materiality matrix for 2020:

1. The material topics were reviewed and ranked by the Board of Management in 2020. This approach resulted in the retention of the 15 material topics. Also, the importance of public support for the energy transition was highlighted specifically in relation to the material topic 'Contributing to the energy transition'. In addition to making the annual selection of topics, the Board of Management is responsible for management and control in relation to them. This takes place by means of reports on the adopted KPIs, each issued at their own frequency (monthly, quarterly and half-yearly).
2. The Supervisory Board also reviewed and ranked the material topics in 2020. Their ranking was discussed at the Supervisory Board meeting held on 9 December 2020, after which the Board of Management and the Supervisory Board agreed on a joint ranking of the material topics.
3. In a written survey, we asked representatives of our stakeholder groups to determine what impact each of the 15 material topics has on their business operations. They were also invited to add new material topics. In this way, they determine which topics we should definitely highlight in our annual report. We defined the following stakeholder groups:
   - internal: the members of the Works Council and the Makers of the Future (our trainees);
   - external: business customers, private customers, shareholders, local environment/communities, government and regulators, suppliers, the energy supply chain, NGOs, investors and rating agencies and partners. A total of 346 stakeholders indicated the impact of each topic.
4. The result of the steps referred to above is reflected in the materiality matrix. In the Connectivity table, we show how the material topics correlate to our strategy, risks, KPIs and objectives.

We focus more closely on our stakeholders in the section 'Interaction with our environment'

Materiality matrix



Connectivity, KPIs and targets

This section focuses on the connections between our strategy, the 15 numbered material topics, risks and opportunities as well as KPIs and targets. We group them according to the six capitals from our value creation model.

Financial, economic ① ② ③

Material topic
① Economic, financial performance

Strategic spearhead

Why is this topic relevant?
Stedin Group has a public task. We treat our social capital prudently and intelligently. A financially healthy Stedin Group has the necessary strength to facilitate the energy transition.

Connection to risks (R) and opportunities (O)
R: Uncertainties concerning long-term financing, Increased likelihood of surge to replace obsolete assets

KPI	Target for 2020	Implementation in 2020	Target for 2021	Where can you read more about this topic?
FFO/Net debt ratio	≥ 12%	12%	≥ 12%	Results: • Financial results; • Improved grid management. Governance: • Risk management.
Solvency	40%	43%	40%	
Efficiency/controllable saving (Capex and Opex)*	€26 million	€26 million	€25 million	

* 'Capex' refers to the Capital Expenditures, the costs related to developing and supplying our products and services. 'Opex' refers to the Operating Expenditures, the operational costs to enable our business operations.

Material topic
② Investing in infrastructure

Strategic spearhead

Why is this topic relevant?
In our view, it is important that the energy transition is achieved at the lowest societal costs. We measure the investments against the objective of ensuring that the Netherlands is climate-neutral by 2050.

Connection to risks (R) and opportunities (O)
R: Uncertainties concerning long-term financing, Insufficient connection and transmission capacity, Increased likelihood of surge to replace obsolete assets

KPI	Target for 2020	Implementation in 2020	Target for 2021	Where can you read more about this topic?
Investments in future-proof energy infrastructure	€669 million	€620 million	€687 million	Stedin Group's Strategy Results: • Improved grid management; • Facilitating the energy transition; Governance: • Risk management.
completion rate of smart meter installations.	≥ 80% of offers	89.2% of offers	≥ 80% of offers	
Number of smart meter offers	Smart meter offered among 100% of population	Offered among 95.6% of the population	Smart meter offered among 100% of population	

Improved grid management | Facilitating the energy transition | Sustainable business operations

Material topic

③ Organisation's capacity for change

Strategic spearhead

Why is this topic relevant?

The environment in which we operate calls for flexibility, an agile organisation, and continual development of our talent and professional expertise, which calls for leadership.

Connection to risks (R) and opportunities (O)

R: Agility of the organisation

KPI	Target for 2020	Implementation in 2020	Target for 2021	Where can you read more about this topic?
Leadership programme:				Results: • Professionally competent employees
• Competences in leadership profile elaborated in a four-point scale for desirable behaviour	100%	100%	n/a	
• The programme's reach in this regard	50%	0% **	n/a	
• Managers reached with two kick-forward sessions	75%	74%	n/a	
Employee motivation*:				
• Employees' confidence in chosen strategy and policy			7.5	
• Extent to which the purpose of my work is clear			8.0	
• Commitment			7.7	

* As of 2021, we report on a new set of KPIs regarding capacity for change. These KPIs concern questions, related to capacity for change, in the employee satisfaction survey that is carried out each year.

** In connection with COVID-19 and the launch of a renewed leadership profile in 2021, the leadership programme has been moved to 2021.

Infrastructure ④ ⑤

Material topic

④ Smart grids, data technology and innovation

Strategic spearhead

Why is this topic relevant?

We require smart grids in order to balance energy supply and demand. We deploy data technology for this purpose. By means of innovations, we contribute to the energy transition.

Connection to risks (R) and opportunities (O)

R: IT landscape insufficiently prepared for the future
O: Disruptive technologies, Building a future-proof IT landscape

KPI	Target for 2020	Implementation in 2020	Target for 2021*	Where can you read more about this topic?
Availability of smart meter data	97%	97.2%	97%	Results: • Facilitating the energy transition.

* New KPI and target in 2021

Improved grid management | Facilitating the energy transition | Sustainable business operations

Material topic
⑤ Heat transition

Strategic spearhead

Why is this topic relevant?
The heat transition in the built environment and the necessary storage and energy infrastructure entail an increase in work. Increased coordination and consultation with stakeholders, including municipalities, is also needed.

Connection to risks (R) and opportunities (O)
R: Uncertainties concerning changes in laws and regulations

KPI	Target for 2020	Implementation in 2020	Target for 2021	Where can you read more about this topic?
Actively involved in 100% of the Regional Energy Strategies (RES) in our coverage area *100% Insight into progress in respect of heat transition among 80% of municipalities *The plans of the 10 largest municipalities, as set out in their Transition Vision for Heat, are in line with Stedin's capital expenditure projection.	100%	100%	100% 100% 100%	Stedin Group's Strategy Results: • Facilitating the energy transition;

* New KPI and target in 2021

Customers and service provision ⑥ ⑦ ⑧

Material topic
⑥ Supply security

Strategic spearhead

Why is this topic relevant?
We aim to improve supply security by taking initiatives aimed at reducing downtime and preventing interruptions.

Connection to risks (R) and opportunities (O)
R: Cyberattack, Increased likelihood of surge to replace obsolete assets

KPI	Target for 2020	Implementation in 2020	Target for 2021	Where can you read more about this topic?
Annual average downtime MV/LV (SAIDI) in minutes	≤ 17	26	≤ 17	Results: • Improved grid management. Governance: • Risk management.

Improved grid management Facilitating the energy transition Sustainable business operations

Material topic

⑦ Data security, privacy and cybersecurity

Strategic spearhead

Why is this topic relevant?

Security is essential for the continuity of our activities and those of our customers. We are working on integral security that connects different areas of expertise. Privacy involves the careful processing of personal data of our employees, customers and other commercial relations.

Connection to risks (R) and opportunities (O)

R: Cyberattack
O: Building a future-proof IT landscape

KPI	Target for 2020	Implementation in 2020	Target for 2021	Where can you read more about this topic?
Data breaches are reported to the Dutch Data Protection Authority within 72 hours.	100%	100%	100%	Results: • Safety and security. Governance: • Integrity; • Risk management.
We always respond to any request by a data subject to exercise their data protection rights within four weeks.	100%	100%	100%	

Material topic

⑧ Customer satisfaction

Strategic spearhead

Why is this topic relevant?

As we want to be a reliable partner for customers, the quality of our service provision and the satisfaction of our customers are important.

Connection to risks (R) and opportunities (O)

R: Insufficient connection and transmission capacity
O: Provide stakeholders and customers with more self-services

KPI	Target for 2020	Implementation in 2020	Target for 2021	Where can you read more about this topic?
Customer satisfaction (CES)*				Results: • Improved grid management;
• Satisfaction	≥ 68%	74%	75%	
• Dissatisfaction	≤ 19%	16%	15%	
satisfied customers (DNWG).	7.5	7.6	7.5**	
Completion time for connections within 18 weeks or on date preferred by customer	≥ 84%	84.6%	≥ 90%	

* As of 1 January 2020, Stedin uses a new method to measure customer satisfaction: the Customer Effort Score (CES). This method allows us to measure the customer's satisfaction with our services on a 5-point scale.

** As of 2021, DNWG also reports on Customer satisfaction, with the same targets as apply to Stedin.

Improved grid management Facilitating the energy transition Sustainable business operations

Social, relational ⑨ ⑩

Material topic
⑨ Stakeholder dialogue and environment

Strategic spearhead

Why is this topic relevant?
As an organisation with a public role, Stedin Group is firmly rooted in society. Dialogue with our stakeholders is essential to achieving sound coordination and enabling us to fulfil our core tasks in terms of grid management and facilitating the energy transition.

Connection to risks (R) and opportunities (O)
R: Uncertainties concerning changes in laws and regulations, Insufficient connection and transmission capacity
O: Strategic supplier relationships, Provide stakeholders and customers with more self-services

KPI	Target for 2020	Implementation in 2020	Target for 2021	Where can you read more about this topic?
Actively involved in 100% of the Regional Energy Strategies in our coverage area	100%	100%	100%	Results: • Facilitating the energy transition. Strategy: • Stakeholders and materiality; • Interaction with our environment.
*Actively involved in drawing up the Transition Vision for Heat			100%	

* New KPI and target for 2021

Material topic
⑩ Stedin Group's reputation

Strategic spearhead

Why is this topic relevant?
Because we are an important link in the energy transition as a grid manager, an increasing number of organisations, administrators and citizens are forming an opinion about our role as well as our services. We play a crucial role in ensuring the functioning of the Netherlands's critical infrastructure. This means that Stedin Group's image and reputation are critically important.

Connection to risks (R) and opportunities (O)
R: Cyberattack, Agility of the organisation, Impact of incidents, Loss of communication network
O: Provide stakeholders and customers with more self-services

KPI	Target for 2020	Implementation in 2020	Target for 2021	Where can you read more about this topic?
Weighted average for Stedin's reputation:	Scale of 1 to 5	Scale of 1 to 5	Scale of 1 to 5	Governance: • Risk management; • Integrity.
• consumers	3.3	3.3	3.3***
• business	3.5	3.6	3.5 *

* The reputation survey will be further developed in 2021. There is a possibility that the targets for reputation will be modified during 2021 and that the result for 2021 will not be directly comparable with the result for 2020.

Improved grid management | Facilitating the energy transition | Sustainable business operations

Employees and intellectual capital ⑪ ⑫ ⑬

Material topic
⑪ Sufficient technical staff, IT staff

Strategic spearhead

Why is this topic relevant?
Scarcity in the labour market and ageing within Stedin Group make it necessary to train existing or new staff ourselves. We invest in strategic personnel planning, have an in-house training school and seek staff in unconventional places.

Connection to risks (R) and opportunities (O)
R: Unavailability of enough people with the required technical and other competences

Material topic
⑫ Training and development

Strategic spearhead

Why is this topic relevant?
The changes in the energy landscape are far-reaching and proceed rapidly. Our employees need to be and remain professionally competent so as to contribute to our mission. We promote a culture in which learning can take place continually and at any time.

Connection to risks (R) and opportunities (O)
R: Unavailability of enough people with the required technical and other competences

KPI	Target for 2020	Implementation in 2020	Target for 2021	Where can you read more about this topic?
Inspired and committed employees (on a scale of 1 to 10)	Inspired 7.5 Committed 7.7	Inspired 8.0 Committed 8.1	Inspired 7.5 Committed 7.7	Results: • Professionally competent employees; • One Planet Thinking. Governance: • Risk management.
Number of work placements	> 1% of workforce	2.9% (126 interns)	> 1% of workforce	

Material topic
⑬ Safety at work and in the environment

Strategic spearhead

Why is this topic relevant?
Working on the energy infrastructure involves numerous risks, which is why safety remains a priority and why Stedin Group invests in knowledge, professional competence, safety measures and a good safety culture. This way, we ensure the safety of our customers, employees, contractors and hired staff.

Connection to risks (R) and opportunities (O)
R: Impact of accidents

KPI	Target for 2020	Implementation in 2020	Target for 2021	Where can you read more about this topic?
Lost Time Injury Rate (LTIR)	≤ 1.95	0.40	≤ 1.95	Results: • Safety and security. Governance: • Risk management.
Recordable Incident Frequency (RIF)	≤ 0.90	0.70	≤ 0.90	

Improved grid management | Facilitating the energy transition | Sustainable business operations

Climate, nature and the environment (14) (15)

Material topic

(14) Contributing to the energy transition

Strategic spearhead

Why is this topic relevant?

We facilitate the energy transition by listening to the wishes and interests of citizens, through innovation and by cooperating with partners. We also ensure that our grids are and continue to be suitable for transmitting energy during the energy transition. We assist stakeholders by providing network information. Stedin Group also wants to improve sustainability as much as possible.

Connection to risks (R) and opportunities (O)

R: Loss of communication network, Insufficient connection and transmission capacity
O: Provide stakeholders and customers with more self-services

KPI	Target for 2020	Implementation in 2020	Target for 2021	Where can you read more about this topic?
Completion rate of smart meter installations	≥ 80% of offers	89.2% of offers	≥ 80% of offers	Results: • Facilitating the energy transition; • One Planet Thinking. Governance: • Risk management.
CO_2 emissions in One Planet business operations	-9%	+311%	-9%	
Compensation of electricity network losses	100%	100%	100%	
Actively involved in 100% of the Regional Energy Strategies in our coverage area	100%	100%	100%	
*A grid impact assessment has been conducted for each RES and draft RES in our service area.			100%	

* New KPI and target for 2021

Material topic

(15) Social responsibility in the supply chain

Strategic spearhead

Why is this topic relevant?

Stedin Group wants to improve the sustainability of its supply chain as much as possible. To this end, we are in continuous dialogue with our suppliers on topics such as child labour, human rights, corruption, use of sustainable materials, origin of raw materials, circularity and the greening of network losses.

Connection to risks (R) and opportunities (O)

O: Strategic supplier relationships

KPI	Target for 2020	Implementation in 2020	Target for 2021	Where can you read more about this topic?
Circular purchasing: • Material passport available during tendering process for primary assets	100%	100%	100%	Results: • One Planet Thinking. Governance: • Integrity.
• Purchasing volume of primary assets made transparent via material passports	100%	96.5%	100%	
• *Circularity of purchasing of primary assets			38%	

* New KPI and target for 2021

Our headoffice in Rotterdam

Results

Together with our partners, we ensure the provision of a vital network. In this section, we describe the results in relation to our three strategic spearheads: Improved grid management, Facilitating the energy transition and Sustainable business operations. In 2020, the COVID-19 crisis naturally had an impact on our results.

1. Improved grid management

Craftsmanship also means endeavouring always to want to improve. This also applies to the reliability of our grids, our efficiency and the quality of our products and services.

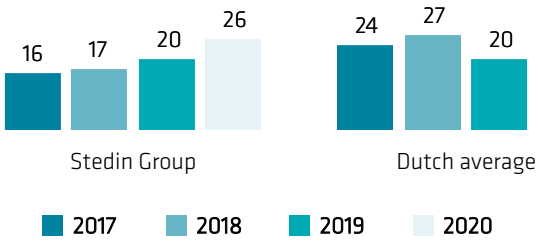
Reliability of our grids

In spite of COVID-19, work in our failure response procedure largely continued in 2020. With safety as a high priority and undertaking a proactive approach, our professionals set to work outdoors and in homes, sometimes at customers with confirmed or suspected COVID-19. Our fitters are provided with additional personal protective equipment (PPE) for these situations, thereby guaranteeing the health and safety of fitters as well as customers.

On average, customers were not supplied with electricity for 25.73 minutes in 2020 – a deterioration compared with 2019, and almost 9 minutes more than the target. The deterioration is due almost entirely to a complex and lengthy failure in The Hague in August 2020. Without this failure, customers would have been without electricity for an average of 19.12 minutes.

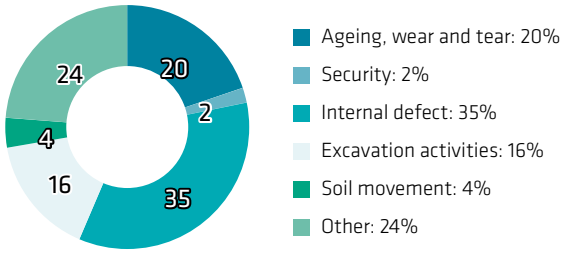
The average downtime for gas was 26.4 seconds. Our target was 30 seconds. This is a significant improvement compared with 2019.

Annual average downtime for electricity (in minutes)

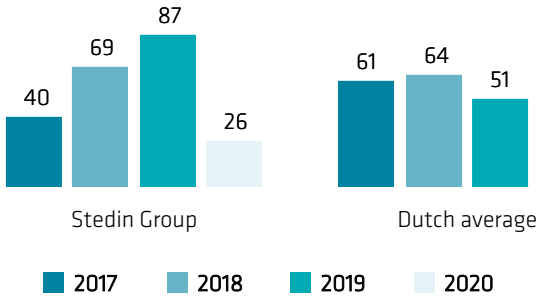


The average downtime for electricity and gas in the Netherlands will be made known after the date of publication of this annual report. We will publish these Dutch averages on our website as soon as the figures are known.

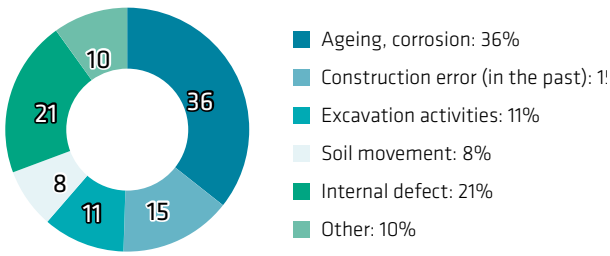
Causes of downtime for electricity (in per cent)



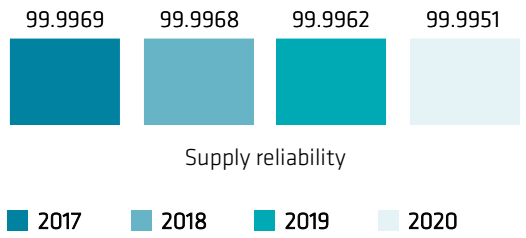
Annual average downtime for gas (in seconds)



Causes of downtime for gas (in per cent)



Supply reliability (in per cent)



Failures – their causes and what we do to prevent them

It is our objective to use the materials in our electricity and gas grids as long as possible in order to keep the societal costs for the energy supply at a minimum. It goes without saying that safety and reliability are the highest priority at all times. In this section, we discuss the causes of failures in 2020, highlighting those that had the severest impact. We also explain what we do, through maintenance and replacement, by way of effective and smart failure prevention.

A service engineer at the home of a customer with COVID-19

Ageing grids

Our policy of risk-based replacement, whereby we utilise the technical service life of assets and only replace what is absolutely necessary, means that the average age of the Stedin grid is increasing. Despite having had relatively few failures in recent years, Stedin nonetheless recorded increased downtime this year due to an exceptional incident. Our aim of maintaining the safety and quality of the existing grids means we need to continually invest. Not just by replacing parts of the energy infrastructure, but also by making them smarter. That way, we can use the data that this generates to determine our replacement capital expenditure even more accurately. In 2020, for example, Stedin installed 1,600 Smart Grid Terminals in 800 stations.

Excavation activities

Disruptions are often caused by excavation activities. The volume of excavation activities has increased for several years, rising by 13.5% in 2020 (2019: 11%). This increase also leads to more excavation damage, resulting in a higher incidence of related disruptions. The growth in excavation activities is partly attributable to increased construction work in our coverage area. Roughly a quarter of excavation damage was the result of work to lay fibre-optic cables.

The 'CROW 500' guideline, which was drawn up in order to prevent avoidable excavation damage, continues to be poorly observed. The Ministry of Economic Affairs and Climate Policy and the regulator Radiocommunications Agency Netherlands have given the parties concerned until 1 January 2022 to comply with the guidelines. The Cable and Pipeline Consultative Body (Kabel en Leiding Overleg), of which all the grid managers are members, has launched a programme to ensure this is achieved.

The 'Dig safe' campaign, which we launched in 2019 together with the other grid mangers, was continued in 2020. The campaign had a positive effect, with the number of recorded instances of excavation damage among consumers decreasing by more than 10% in the spring. In addition, Liander, Stedin and Enexis signed an agreement with KPN NetwerkNL in 2020 to work together in order to avoid cable damage during excavation work for the fibre-optic network.

Power outage with significant impact in 2020

A power outage in The Hague in August left 37,000 customers without power. Short-circuiting occurred in the main distribution station at De Constant Rebecqueplein, caused by a defective power supply bushing in the ceiling between the second and third floors. The short-circuiting

triggered the automatic protection device in the station, disconnecting the power in the entire station. The area affected covered the centre and the west of the city. This took place in the morning. Power was restored to a small number of customers in the centre in the afternoon by switching over to other parts of the grid. The remaining work to restore power had to be undertaken by employees in the main distribution station itself. Because of thick smoke, they were unable to enter the building until after the fire service had ventilated it and given the all clear. Once inside, they quickly established that the high-voltage rail was damaged. In the interest of safety, it was decided not to reconnect the power until the rail had first been thoroughly cleaned and measured. Around 6:30 p.m., the rail passed the final inspection and was taken back into operation. Power was restored to the final customers around 7:00 p.m. All the customers affected who were without power for more than four hours are entitled to compensation from us for the outage. The compensation package amounts to roughly €1.6 million.

Maintenance and replacement

Smart, risk-based maintenance

In 2020, we moved data-driven, risk-based maintenance onto a new plane. This involves us using data to pinpoint where maintenance is really needed, where it is not essential and which assets need replacing. In addition to quality improvements, this yields significant annual grid-related savings while also improving safety. More information is also available for less effort. In addition, the results of the various models are easier to visualise in our geographic information system. This system ensures that the data are widely accessible across Stedin.

Accelerated replacement of grey cast iron pipes

Following a gas explosion in The Hague in 2019, the State Supervision of Mines (SodM) carried out an investigation and made several recommendations. The State Supervision of Mines called for an acceleration of the existing remediation programme for grey cast iron gas pipes and asbestos cement by the grid managers. Stedin has brought forward the deadline for the accelerated replacement of its grey cast iron gas pipes from 2030 to 2028. A total of 150 km of grey cast iron pipes were due to be replaced in 2020. Due to the impact of the COVID-19 crisis, the replacement schedule was not met and only 139 km of pipes were replaced. The shortfall will be made up in 2021 and has no impact on the deadline that has been set. All grey cast iron pipes will now also be inspected yearly end-to-end for possible leaks.

Using data for maintenance:

- We have approximately 11,600 smart switch systems in our grids. We carry out risk-based maintenance using data obtained from analyses. In addition to improving the effectiveness of maintenance procedures, this has also resulted in annual cost savings of 12%.
- The medium-voltage grid includes 23,000 connections, consisting of 15,550 km of cable and 96,000 connectors between cables and pipes. Whereas the condition of these assets used to be assessed on the basis of a limited number of indicators, such as age, this is now done on the basis of just 10 indicators, including local environmental conditions. As a result, we only need to replace 140 km of cable each year instead of 200 km. The next step is to determine whether the connections are actually in bad condition. To do this, we carry out measurements for the leading 250 potentially poorest connections. In this way, we can detect hotspots that really need replacing. As a result, we will need to replace 40 to 65 km of cable instead of the 140 km previously planned.
- Stedin and Liander have jointly further developed the model for the replacement of gas pipelines. The leading causes of failures are excavation damage and ageing in combination with environmental conditions. We successfully developed a model at asset level for predicting the likelihood and risk of gas pipeline failure. This model provides important input for risk assessment and hence for maintenance and investment planning.

The coronavirus crisis enables accelerated replacement of cast iron gas mains in Rotterdam

Digging up the street to replace 130 metres of cast iron gas mains at Stadhuisplein in Rotterdam is no easy task between hordes of shoppers and outdoor seating areas that would normally be busy. But in this case, the coronavirus crisis gave us an opportunity.

The municipality of Rotterdam gave approval for the work to go ahead, and the owners of the hospitality venues also enthusiastically helped to clear the terraces. The work in Rotterdam has now been completed.

Replacement of mini-terminal boxes

Each year, we analyse failure trends. This can lead to adjustments in maintenance policy and/or other choices for investments in our grids. Our people then work with our analysts to find a practical solution. An example is the replacement of 'mini-terminal boxes' ('dwergeindsluitingen'), a specific type of terminal box that is widely used in the Delfland area. They use grease as an insulation medium, which can cause short-circuiting if it leaks. It was observed in the field that this caused a relatively high number of failures, prompting calls to examine suitable alternatives. Repeated failures highlighted the need to prioritise this issue. We are now in the process of replacing 135 terminal boxes. This should result in fewer failures in medium-voltage installations, which can cause serious damage.

Increasingly smarter deployment of service engineers

Our service engineers do more than just remedy failures; they also carry out maintenance on our energy grids. Smarter planning enables us to increasingly deploy our fitters for the construction and replacement of parts of our grid, alongside their maintenance activities. This work, which is carried out to a high technical standard, allows us to maintain and develop the qualities of our technicians, which in turn is useful when dealing with failures.

High-voltage projects

Stedin is involved in a large number of projects related to high voltage. More solar farms have been connected and high-voltage stations modified to transport the energy that is generated from decentralised locations. We have also begun the necessary preparations for the connection enabling CO2 reduction through storage beneath the North Sea (Porthos), for example. Another large project is the reconstruction of a dyke strengthening programme in Krimpenerwaard. In order to ensure the interests of the water authority, Oasen, Stedin and the municipality remain closely aligned, we have entered into a cooperation agreement. In 2020, significant progress was made for environmental management and the preparation of the call for tenders.

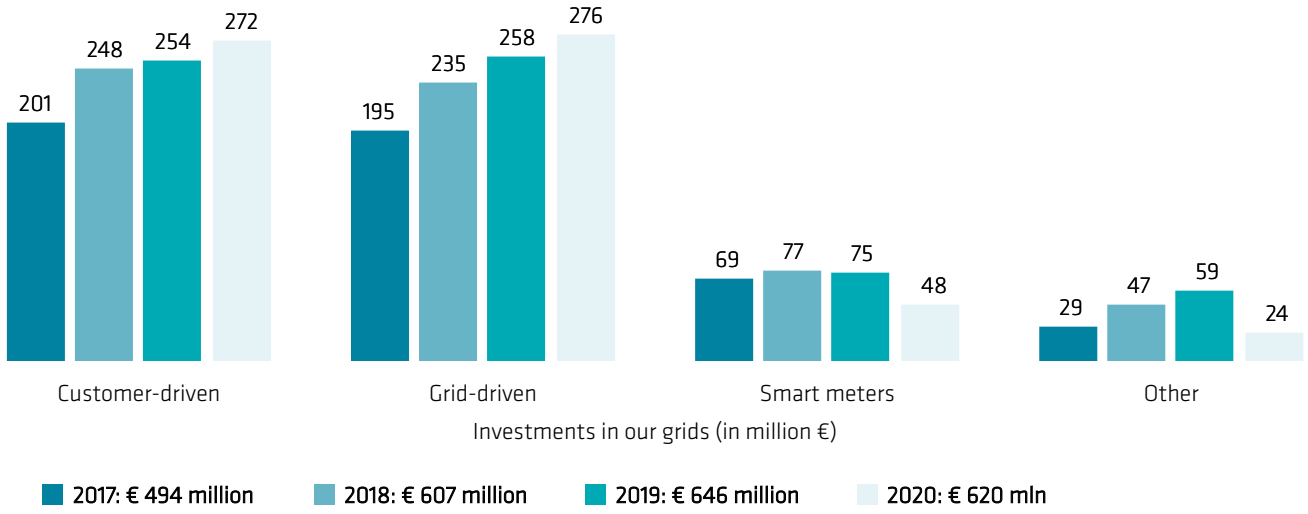
High voltage on Energy Island

Middelharnis, or 'Energy Island', as it is also known, is a major hub for renewable energy generation. The capacity of the wind farms there is projected to be roughly 225 MW at the start of 2022. There are also several large-scale and small-scale solar farms, with a capacity of approximately 200 MW.

In order to cope with these vast amounts of electricity, Stedin began work on a major expansion of the high-voltage station in Middelharnis in 2010. Four large transformers and four new 50 kV switching installations have been constructed in phases. Two 150 kV connections have also been laid to the Rotterdam port area. These two additional connections are needed in case of an overcapacity of electricity generation on sunny and windy days. This overcapacity of electricity will then be routed to the Rotterdam port area. Such overcapacity of electricity generation is easily reached, when one considers that the power consumption of Middelharnis itself (on days without any sun or wind) is a maximum of 35 MW.

The penultimate phase of this investment in the grid will be completed in 2021. The last phase will be completed by mid-2023.

Investments in our grids



Our investment levels have increased year on year since 2017. In 2020, we invested a total of €620 million, of which €613 million was invested in our regulated grids. Total investments were consequently €26 million lower than in 2019, at 93% of what was planned for 2020. Growth slowing down in 2020 was largely attributable to the coronavirus crisis. This had a negative impact on the planned grid-driven investments as well as our investments in smart meters.

'Stedin has invested €620 million in customer-driven and grid-driven activities, smart meters as well as other activities.'

As part of the five-year efficiency programme, we were able, by improving our work efficiency and making our investments more risk-based, among other things, to achieve a saving of more than €10 million as well as €3 million in one-off savings in 2020.

Customer-driven investments

Customer-driven investments in 2020 amounted to €272 million: €12 million higher than budgeted and €18 million more than in 2019. These are the investments we make at the request of customers. Investments remained high in all areas, such as the high volume of new home buildings, the growth in the field of improved sustainability (charging point connections, solar farms, etc.) and the increase in terms of public authority-driven reconstructions. It is our expectation that the customer-driven investments will remain substantial in the coming years, increasingly driven by the pace of the energy transition. At the same time, COVID-19 has led to increased social and economic uncertainty. This trend, taken as a whole, makes planning and adjusting investments more challenging and even more important than in the past.

Grid-driven investments

Our grid-driven investments in 2020 were €276 million. This is €39 million less than budgeted and €18 million more than in 2019. The planned grid investments were hit by delay as a result of the COVID-19 crisis. Grid-driven investments are the investments that are made to guarantee and improve the capacity and quality of the existing grid.

Regarding gas replacements, more than 21,968 primary gas connections (target: 23,000), 97 NEN 1059 control stations (target: 117) and over 139 kilometres of cast iron pipelines (target: 150 km of pipelines) were nonetheless replaced.

We partly attained our target as regards electricity replacements through the replacement of 76 COQ/MIPAK stations (target: 86). Remediation work at customers' homes was delayed due to COVID-19. In addition, we decided proactively to put off investments in the light of evolving customer demand, which is not expected to have an impact on our network for the time being.

Smart meters

Our investments in smart meters in 2020 were €48 million, which is €19 million less than budgeted. Smart meters was where we saw the most direct impact from COVID-19, due to

the decision to suspend work at customers' homes early on in the crisis. The long-term target for 80% of all households to have a smart meter by the end of 2020 was nonetheless achieved in part of our service area. It is expected that we will have installed smart meters in more than 80% of homes across our entire service area by the first half of 2021. You can read more about this topic in 'High-quality products and services'.

Other assets

The other investments in 2020 were €24 million, which is a reduction of €35 million compared with 2019. This difference is attributable to the substantial investment in our property at Nijverheidsweg in Utrecht in 2019 in accordance with our strategic real estate plan. Limited additional investments in the construction of the Stedin Telecom Network were also made in 2020.

Investment plan

All of the grid managers prepared an investment plan for the first time in 2020. The investment plan is intended to replace the Quality and Capacity Documents, which were previously drawn up every two years for the Netherlands Authority for Consumers and Markets (ACM). The Investment Plan 2022-2022 sets out the expansion and replacement capital expenditure planned for the electricity and gas grids. The investment plan details how we will ensure sufficient capacity for the distribution of electricity and gas in the next three years and how these distribution services will be provided safely. The plan was made available for consultation for four weeks, to give the opportunity for comments on the proposed investments. The consultation took place as follows:

- The plan was published on the website with the possibility to submit opinions.
- Dialogue took place with five municipalities (Rotterdam, The Hague, Utrecht, Dordrecht and Zoetermeer).
- The remaining municipalities were actively informed about the publication of the investment plan.
- Dialogue took place with national stakeholders under the umbrella of Netbeheer Nederland to provide further information on the purpose of the investment plans. This was undertaken with VEMW (the centre of expertise and organisation representing the interests of commercial users of energy and water in the Netherlands), the Association of Provincial Authorities (IPO), the Association of Netherlands Municipalities (VNG), Holland Solar, the Netherlands WindEnergy Association (NWEA) and the NVDE Netherlands sustainable energy association, for example.
- The 2020-2022 Investment Plan was incorporated in the Regional Energy Strategy for Zeeland (principal stakeholders).
- Selected customers of Enduris were also contacted.

In total, eight opinions were submitted to Stedin and four to Enduris. The submitted opinions from the consultation and our response to them were added to the investment plan. The plan was also submitted to the Netherlands Authority for Consumers and Markets (ACM). Following assessment by the ACM, the final investment plan was adopted and published on 1 October 2020.

As not all the regional energy transition plans were available for the 2020-2022 investment plan in Stedin's service area, recognised regional and national available sources, such as calculations of the effects by the PBL Netherlands Environmental Assessment Agency, applications under the Sustainable Energy Generation Incentive (SDE+) scheme and public and private property developments, were used for the investment plan.

Future-proof energy supply for Utrecht Science Park

Utrecht Science Park is the largest science park in the Netherlands and houses hospitals, universities of applied sciences, Utrecht University and various research institutions. It accommodates more than 27,00 staff members and 51,000 students. The science park is attracting an increasing number of centres of expertise, such as the Netherlands National Institute for Public Health and the Environment (RIVM). As this development is accompanied by a rising demand for energy, Stedin laid a third 50 kV connection to Utrecht Science Park in 2020. A third transformer will be added in 2021 to expand the energy supply capacity. Once the work is completed, the science park will be assured of a reliable energy supply and sufficient capacity.

Main investment results

The investments in the working area of Stedin and Enduris that stood out the most in 2020 were made for grid reinforcement or with the aim of facilitating maximum utilisation of grid capacity. Further information on these investments can be found in the section on 'Facilitating the energy transition'. The three projects concerned are advance investment in a main distribution station in Borsele, Station Europoort in Rotterdam and the expansion of five transformer stations in Zoetermeer.

To ensure continuing support in society for the substantial task inherent in the energy transition, the grid managers face the major challenge of becoming increasingly transparent

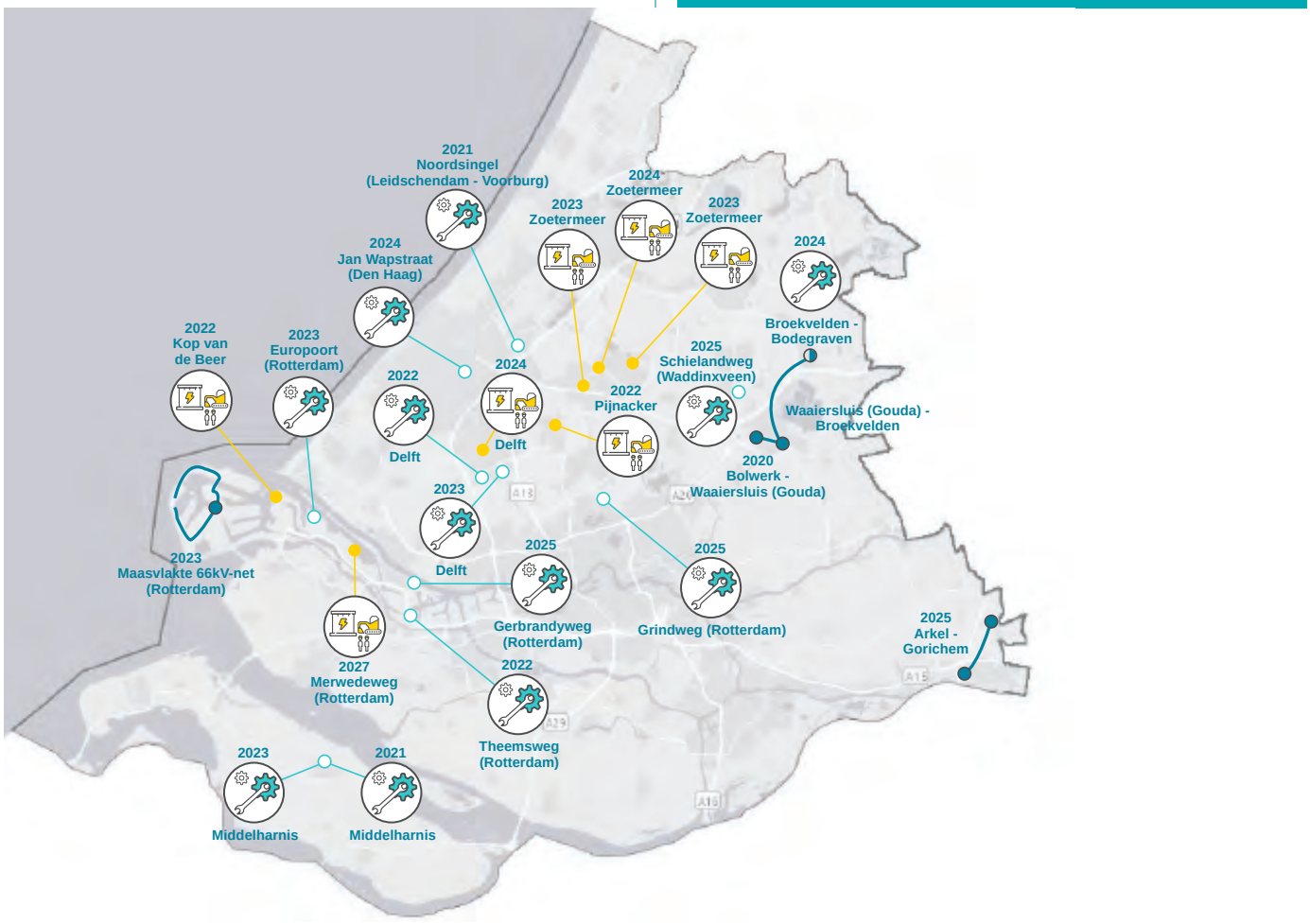
and of constructing future electricity stations or carrying out grid reinforcements. The maps on the following pages for the provinces of Utrecht, Zeeland and South Holland show the planned investments in electricity for stations and connections (>25 kV) that will be undertaken or commenced in the period 2020-2022. The expected year of completion is indicated for each project. The maps are focused on grid expansion.

Planned investments in electricity for stations and connections (>25 kV) undertaken or commenced in 2020-2022.

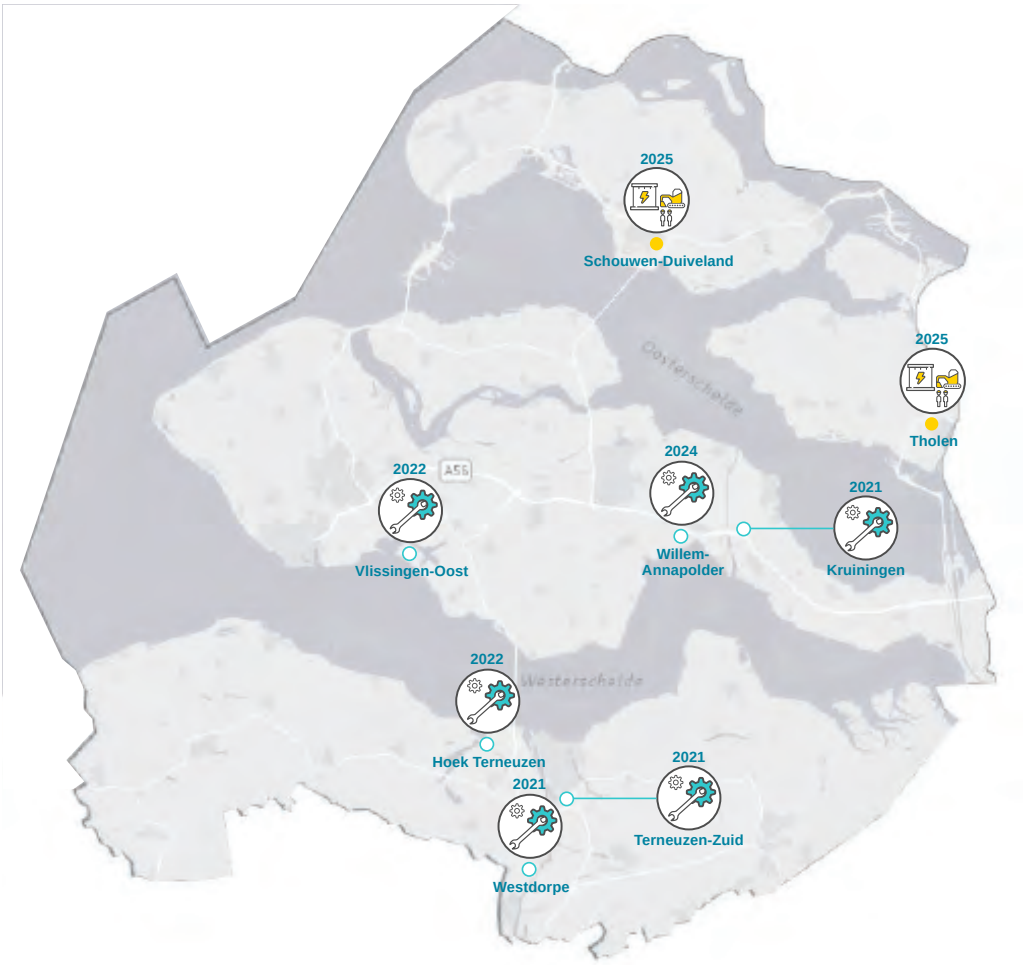
What is the average cost of a station in terms of money, time and space?

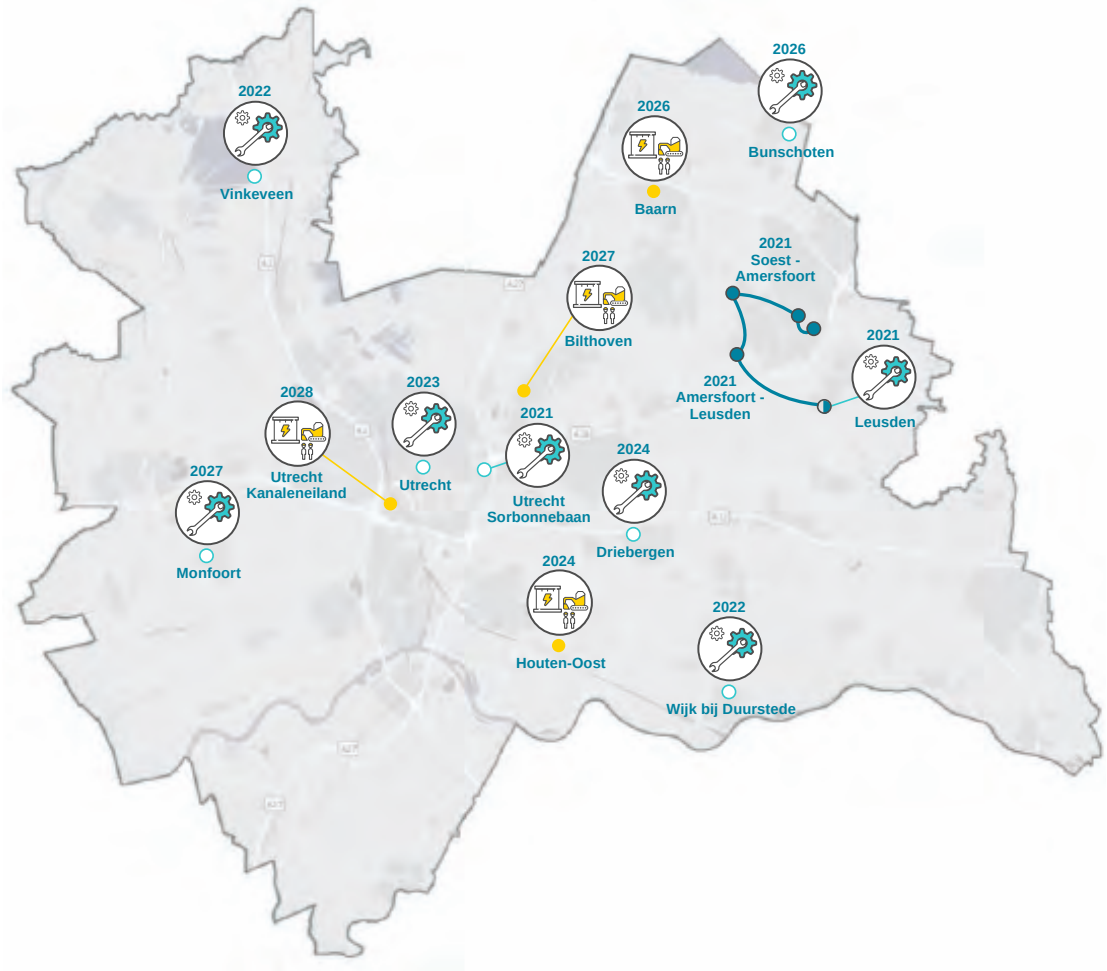
A station covers between 200 and 10,000 m2. It takes between 2.5 and 5 years to construct a station, at a cost of €1.5 million to €10 million, excluding land purchase costs. Installing the connection takes between 6 months and 3 years, at a rough estimate, and costs €100 to €1,000 per metre.

Stedin will invest €784 million in expanding the electricity grid in the period 2020-2022. Enduris will invest €86.9 million. Expansion capital expenditure accounts for 41-48% of the total investments that will be made. In 2021, we will invest €15,549,000 in the province of South Holland and €25,440,000 in the province of Utrecht in capacity expansions, which will be technically ready in the same year. This excludes DNWG, Telecom, NetVerder and other Stedin investments.



New station | New reinforced connection | Expansion


2025
Schouwen-Duiveland
2025
Tholen
2022
Vlissingen-Oost
2024
Willem-Annapolder
2021
Kruiningen
2022
Hoek Terneuzen
2021
Terneuzen-Zuid
2021
Westdorpe


2022
Vinkeveen
2026
Baarn
2026
Bunschoten
2027
Bilthoven
2021
Soest - Amersfoort
2021
Amersfoort - Leusden
2021
Leusden
2028
Utrecht Kanaleneiland
2023
Utrecht
2021
Utrecht Sorbonnebaan
2024
Driebergen
2027
Monfoort
2024
Houten-Oost
2022
Wijk bij Duurstede

Affordable and efficient services

We are focused on ensuring efficient business operations, in which smart and digital are the norm. Efficiency means cost savings, but also shorter lead times, less inconvenience for local residents and increased customer satisfaction. Below, we give a number of examples that illustrate the benefits of our focus.

Efficiency

In 2018, we launched our five-year efficiency programme, which aims to realise permanent savings of €150 million on our total expenditure compared to 2017 levels. You can read more about this topic in the section on Financial results. The efficiency results are achieved through a variety of measures, and in particular through our four strategic initiatives.

Centralisation of support activities

In 2020, we set up the Business Support Services (BSS) department in a move that developed our financial shared service centre into a multifunctional shared service centre based in Delft. Administrative and support tasks for the organisation are intelligently combined in this new department, resulting in quality and efficiency improvements. In 2020, 74 staff members who perform support activities, consisting of financial administrative and support HR tasks, as well as management support, moved to the BSS. There is also a Data team, which focuses on managing and improving master and other data, and an Operational Excellence team, which brings together LEAN/Six Sigma and RPA (Robotics Process Automation) expertise, among other things. A total of 23 RPA bots, which take over repetitive tasks from employees, are now live, freeing up staff to spend more time on higher-end tasks. The BSS will eventually reduce costs by 25-30% for its share in the organisation.

Accelerated pipeline replacement: nine bottlenecks fixed

We are accelerating the replacement of our grey cast iron pipelines in our service area. In 2020, this involved 44 projects in Rotterdam. It was possible to easily plan and execute 35 of these in cooperation with Evides. In nine cases, however, significant challenges had to be overcome. The agreements we made in close cooperation with the municipality of Rotterdam on various control measures meant that we were able to fix these nine bottlenecks and carry out the work in one go together with Evides. The control measures in this case were a prohibition on digging and a prohibition on heavy vehicles.

This approach enabled us to reduce disruption to the surrounding area. Combining projects also saves Stedin as well as the municipality lots of money. The simultaneous work on these projects by Evides and Stedin enabled us to realise societal cost savings of €2 million to €2.5 million.

First-time divergence in Bergschenhoek

Stedin has diverged from the standard connection method* for the first time for Wayland Energy in Bergschenhoek. The customer wanted a high-capacity connection for combined heat and power systems and a geothermal energy source. According to the standard connection method, we should connect the customer to the nearest station, which in this case is a medium-voltage station 2.1 kilometres away. However, this station has reached maximum capacity and would therefore need to be modified. This would have resulted in high costs for the customer as well as Stedin and a long lead time.

The solution was nearby, in the shape of a 23 kV ring installed just one metre out from the customer's building. This ring was laid for connecting customers up to a certain capacity, before the standard connection methods even existed. As there is sufficient capacity on this ring, we decided to connect the customer to it. This results in substantial savings for the customer as well as Stedin: the savings for the customer are €460,000, and Stedin's expenditure is €130,000 instead of €1.6 million.

* There is a legal standard connection method for customers, depending on the capacity of the connection. Grid managers have recently been allowed to diverge from this connection method, subject to strict conditions. This creates opportunities for us to provide a connection more quickly and at lower cost.

Affordable energy by facilitating the energy market

Facilitating the energy market is part of our societal role. Among other things, this means that our electricity and gas grids should be accessible under identical terms and conditions to all energy suppliers. The resulting competition guarantees very competitive energy prices, which benefits consumers and contributes to ensuring that the energy supply remains affordable.

Development of market facilitation

The energy transition is causing a rapid succession of changes in the area of market facilitation. The (data) infrastructure for market facilitation requires investments in the coming years, for example in the field of services. The market is demanding greater insight into and access to processes and data: in addition to volume, place and time of consumption (or generation) will increasingly determine the value and price of energy. This is giving rise to different demands and requirements.

Market data and energy balance

The processes underlying market facilitation, such as transmission revenue and management of network losses, are becoming increasingly automated. Data analysis helps us to manage these processes.

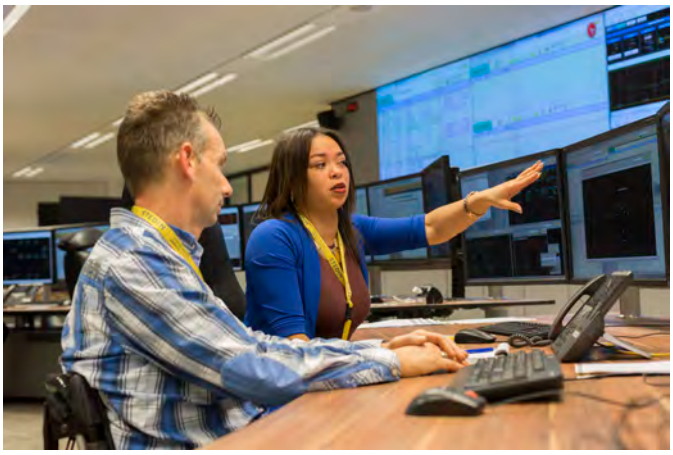
'As a result, network losses have decreased by approximately 7%, more than 50 GWh, over the past three years.'

Cooperation in the sector

Developments in the field of market facilitation are increasingly taking place at the sectoral level: the energy transition is leading us to adjust and expand our services (exchange of energy data). We work closely with the other grid managers within Netbeheer Nederland and with the other regulated market roles as part of NEDU (a Dutch energy sector platform). We are also in dialogue with new entrants to the energy sector.

Set of agreements on data sharing

The energy transition will require us to share more data with more market parties. In 2019, the grid managers reached consensus with all the stakeholders in the energy sector on a set of agreements for sharing energy data. The agreements were elaborated in 2020. The grid managers will be responsible for managing the set of agreements. Modifications to the set of agreements will be made via a market-facilitating forum in which all the stakeholders from the energy sector participate. The set of agreements is expected to become effective in mid-2021.



All grid managers join C-ARM

C-ARM is the platform that allows us to gather and combine the measurement data from all the regional grid managers in the Netherlands. From this central platform, we can make such measurement data available to market parties, including energy suppliers and parties responsible for metering. This results in enhanced customer satisfaction and convenience for the market parties due to the uniform and transparent way in which all the grid managers operate. In 2020, Stedin and the other regional grid managers successfully joined the C-ARM platform. This is an important step towards achieving our ambition: that market parties should experience us virtually at the national level as a single grid manager.

High-quality products and services

How can we improve the quality of our products and services even further? This is a question that we work hard to answer every day, with each other as well as with our customers. That is how we maintain the vitality of our services.

New measurement method; customer satisfaction

On 1 January 2020, Stedin introduced a new method to measure customer satisfaction: the Customer Effort Score (CES). As we want our customers' experience of transacting with Stedin to be effortless, we ask them to rate the ease or difficulty of their experience. We continuously measure customer satisfaction as regards connections, smart meters and failures.

We view the contact our customers have with Stedin employees as an essential part of this experience. After all, they make the difference. To understand what they appreciate, on the one hand, and to gather input for continuous improvement, on the other, we ask customers how enthusiastic they are about this contact. It is in open feedback in particular that customers share valuable ideas. The new measurement method means that it is not possible to compare the figures for 2019 and earlier years with those for 2020.

Customer convenience overall

Customer convenience in 2020 exceeded our ambition: 74% of customers report experiencing ease or considerable ease. The target for 2020 was at least 68%. In particular, customers are positive about smart meter installation and about our approach to remedying failures. Customers have a very positive opinion about our fitters.

In terms of lack of ease, 16% of customers report high-effort or very high-effort service experiences. The target for 2020 was no more than 19%. Although this means that the target was reached, the result is not yet in line with our ambition: we want to be below 10%. The main cause driving this score is information provision. A large proportion of customers feel that they are not kept sufficiently updated about progress/status and any changes affecting previously made agreements.

Customer convenience overall		low effort (target: 68%)	high effort (target: 19%)
	2020	74%	16%

Contact with customers during the COVID-19 pandemic

Since the onset of the COVID-19 pandemic, our fitters have worked according to the 'Samen veilig doorwerken' (continue working safely together) protocol introduced by the government for the construction and engineering sector. Under this protocol, various strict conditions are placed on working in order to safeguard the safety of all the persons concerned. Since April 2020, we have asked customers several additional questions on this aspect to closely monitor their experience.

Generally speaking, there is high appreciation for these additional measures. More than 90% of customers state that they are well informed about the measures, and 98% report having a safe feeling when visited.

Customer satisfaction at DNWG

Customer satisfaction at DNWG was the same in 2018 and 2019, scoring an average of 7.8. In 2020, this figure was 7.6. We contact consumers and small business customers with requests for low-use connections a number of times to make substantive arrangements and match up expectations. This focused attention is appreciated by customers, resulting in a consistently high score. We plan to implement this approach among the project developers DCO and corporate/industrial customers as well. This calls for good coordination in the chain, with a corresponding dashboard. We made extra efforts in this regard in 2020.

In the second half of 2020, DNWG began converting its customer satisfaction survey into measurement of the customer effort score. This has now been implemented for the failure response procedure, and the DNWG customer effort score on this aspect is 84%: low or very low effort. From 2021, both Stedin Group and DNWG will report on the same KPIs for customer satisfaction using the CES metric.

Comprehensive customer profile

In 2020, we took the first steps with the 'comprehensive customer profile', which ensures that all relevant customer information is readily available in one place. It gives a complete, 360-degree picture and provides all customer-facing employees with direct access to the right information during contacts with business customers and consumers alike. As employees no longer need to search across different systems for past queries and requests, orders, letters and telephone call records, we can ensure a personal experience

for every customer contact moment. It also guarantees increased speed, ease and transparency, which in turn helps us to be more efficient.

In 2020, we implemented the comprehensive customer profile for several departments, including Key Account Management, contractless parcels and non-contracted consumption.

Customer convenience for connections

It was agreed that the customer convenience for connections should be at least 44% for 2020 as a whole. The current average figure is 50%. This more positive score is largely due to increased customer contact and reduced lead times.

Customer convenience for connections	low effort (target: 44%)	high effort (target: 40%)
2020	50%	35%

Fast connection times therefore lead to a considerably improved customer effort score. Consequently, we are actively discussing with our partners how lead times can be shortened, for example by speeding up the process to obtain the necessary permits.

In 2020, we took steps to ensure that changes to connections for low-use consumers are implemented within four weeks. Acting through the product teams, we implemented a series of process optimisations and put in place reporting in 2020. This enabled us to establish that we met 50% of the requests within four weeks for the product 'Downgrading' and 37% of requests for the product 'Reinforcement' in 2020. This approach will be developed further, and it is our expectation that, in 2021, we will meet 55% of requests relating to downgrading and reinforcement within four weeks.

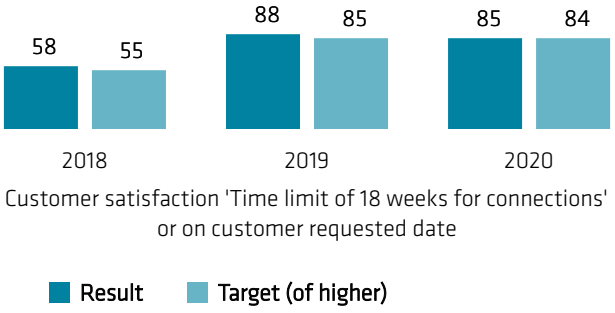
In order to ensure better information for customers, we will implement improvements in our order track & trace procedures in 2021. We will also make it possible for customers themselves to schedule an appointment for certain simple work. We will also measure convenience as regards the contact with municipalities, public authorities and COMBI contractors in terms of purchasing products in this way in 2021.

Time limit of 18 weeks for connections

For 2020, it was our ambition to complete 84% of our work within 18 weeks or on the date preferred by the customer. In particular, the abrupt suspension of work during the first COVID-19 wave meant that we were unable to achieve our target for 2020. Work was initially suspended for several weeks in mid-March 2020. Work to be performed outdoors was the first to be recommenced, with due regard for the COVID-19 measures and using additional means of communication and work instructions. We were able to make up the backlog for 90% of the work. The work that needed to be carried out at customers' homes or in small spaces in teams of two was affected by delays the most.

In 2020, we carried out or met 43,030 projects/customer requests, of which 84.6% within the period specified.

It remains our ambition in 2021 to progress toward the target previously set. In this light, we maintain dialogue with parties in our environment, to accelerate the granting of permits, for instance. We also invest in dialogue with customers to enable us to determine the impact on our grids in the planning phase.



Customer satisfaction 'Time limit of 18 weeks for connections' or on customer requested date

Customer convenience for smart meters

Our customers continue to be convenient with the offer and installation of smart meters. We received a high customer effort score from 88% of customers, with 4% of customers reporting that they had experienced a 'high effort' service interaction. These are good figures, and it is noticeable that the customer scores were higher after the start-up and the changed planning method than before.

Customers tell us that they really value having control over the scheduling of visits by fitters. If, for whatever reason, the appointment is not convenient, they can easily rearrange it themselves, even on the day before the scheduled visit.

Customers often highlight the friendliness and politeness of our fitters during the visit. They are also very satisfied with

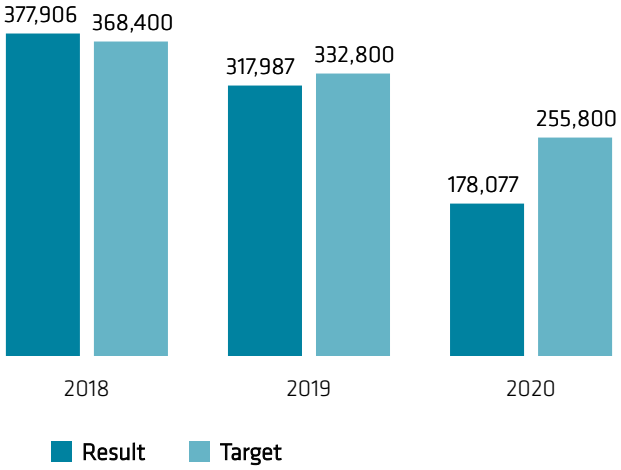
the speed of meter replacement. The explanation of the steps to be undertaken and how the meter works generally receives a positive review. At the same time, this is given as a recommendation to fitters who gave no explanation of how the meter works. Fitters are also occasionally late for an appointment or may even fail to turn up at all. In open feedback, customers point out that there is insufficient communication in this regard from Stedin. This would suggest that they generally do not mind if an appointment is cancelled, provided that they are told in good time.

Customer convenience smart meters		low effort (target: 84%)	high effort (target: 6%)
	2020	88%	4%

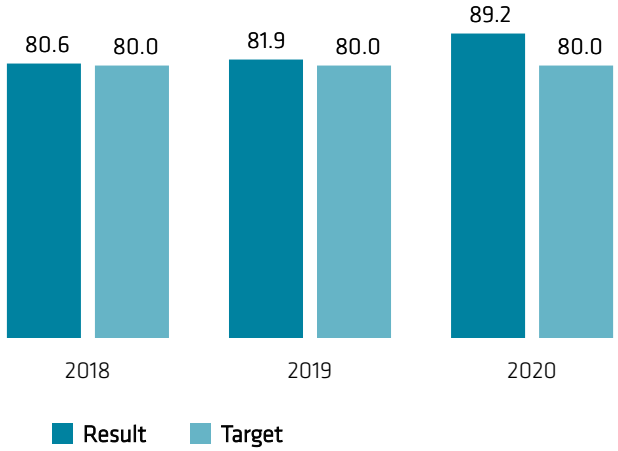
Offering smart meter installation to our customers was suspended for a long time in 2020 due to the COVID-19 outbreak. We were forced to stop this work on 16 March. Smart meter installation was recommenced in June, following a successful and carefully executed pilot in May. During the period when work was suspended, part of the temporary workforce was also scaled back. We decided not to scale up again later in the year, as the expiry of the large-scale roll-out of smart meters at the end of 2020 made it unnecessary to build this capacity up again. We replaced 158,758 meters in 2020. While this is less than we had planned, we will nonetheless complete the large-scale connection of smart meters in early 2021.

Completion rate of smart meter installations

Number of offers



Completion rate (in per cent)



Transition to the mandate from the Ministry of Economic Affairs and Climate Policy

In 2021, we will start on the additional mandate from the Ministry of Economic Affairs and Climate Policy. The Ministry is preparing a bill that will provide for the phasing out of the netting scheme. This will require low-use consumers to have a meter that can separately measure the amount of electricity supplied and the electricity returned to the grid. This can be a smart meter, or alternatively a digital meter that is not capable of being read remotely. From 2021, and for a period of two years, grid managers will repeat the offer of a suitable meter capable of separately measuring consumption and feed-in to everyone who does not yet have one. The bill will make acceptance of the smart meter obligatory and is expected to be passed in the course of 2021. The aim is additionally to increase the number of smart meter installations in order to facilitate the energy transition.

The transition to the Ministry's mandate entails a downsizing of our smart meter organisation. Over a period of 18 months, we went from 696 FTEs to 376 FTEs at the end of 2020, including a reduction of 164 FTEs in our temporary workforce. The professionals employed by Stedin can easily be re-assigned elsewhere in the organisation, as we are experiencing an increase in other orders, such as reinforcement of customer connections for a charging point, for example. The number of orders to disconnect homes from the gas grid is also increasing each year. Many employees show interest in another position within Stedin, which makes any major restructuring unnecessary. By the end of 2020, 120 employees had switched jobs within Stedin in this way.

Improved operational planning helps fitters

In 2020, we implemented a series of improvements that are intended to help our fitters in their work. Fitters are given the space, where possible, to carry out other work as well between visiting customers. An example is taking manual readings of meters. They can also fix problems in meter cupboards if they have time on their hands, for example when a customer visit has been cancelled.

Customer convenience with regard to failures

Our customers continue to be convenient with the level of service provision in case of failures: 83% gave a high customer effort score, corresponding to a low-effort experience, while 9% reported experiencing a 'high effort' service interaction. We therefore achieved our targets of at least 75% for low customer effort and no more than 10% for high customer effort. The high scores in the second quarter stand out in particular: customers greatly appreciate the fact that the service engineers continued visits to homes in spite of COVID-19.

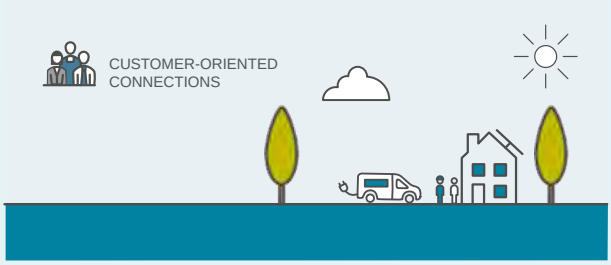
Our customers are also positive about their contact with Stedin's Fault Desk. They are appreciative of the tips about what to do and rate the quick response of the fitters as a positive experience. However, customers also report that it is not always clear in advance that they may be billed (for call-out charges).

Customers are very satisfied in particular with the work the fitters do. The fitter really makes a difference. The fitters' speed of response is singled out for appreciation. In addition, our fitters are often viewed as knowledgeable, competent and friendly.

Customer convenience with disturbance		low effort (target: 75%)	high effort (target: 10%)
	2020	82%	9%

Strategic initiatives

Within our strategic spearheads 'Improved grid management' and 'Facilitating the energy transition', we are focusing on four change projects that contribute significantly to realising our strategy. The strategic initiatives are 'Customer-oriented connections', 'Multidisciplinary collaboration', 'Sustainable energy transition' and 'System operator'. In this section, we discuss our results in relation to these projects in 2020.



On time and tailor-made

Customer-oriented connections enable us to provide customers with a tailor-made service on time and at the lowest possible societal costs. In pursuit of this, we are increasing cooperation indoors as well as outdoors, undertaking far-reaching digitalisation, organising our operations around the customers' requirements and contributing to making the Netherlands more sustainable together.

Our efforts at optimisation and digitalisation are complicated by the fact that we are changing while our regular work continues. We to this together with customers, IT and employees. Unexpected events such as the COVID-19 outbreak caused employees to shift their focus, adversely affecting the improvement that could be achieved. The target for 2020 was to save €2.9 million; at the end of 2020, we had achieved savings of €2.4 million. The improvements achieved by development teams are greater transparency in terms of process and data. This enables us to focus more effectively on our own process and that of the contractor, allowing us to identify more quickly how we can reduce cost.

Efficiency and customer satisfaction go hand in hand

By efficiently planning work below ground together, for the replacement of gas and water pipelines, for example, we were able to reduce costs by approximately 6% compared with 'solo' projects. To this end, we are concluding covenants with an increasing number of municipalities. An example is Rotterdam, where we jointly plan and execute our projects with the municipality and water company Evides. In 2020, 35 of all projects were carried out in this way. This coordinated approach will enable us to save between €2 million and €2.5 million for the public purse in the coming two years within the 'Rotterdam Covenant'

By law, Stedin employees are prohibited from carrying out work for third parties. A complex legal construction is needed to diverge from this rule. Together with the drinking water companies, we are engaging with political leaders and ministries to seek ways of making a multidisciplinary working approach possible. In consultation with our regulators, we are trying to find ways to eliminate duplication in the chain in the interest of society, without complex and costly constructions. We expect that this will yield results within two years.

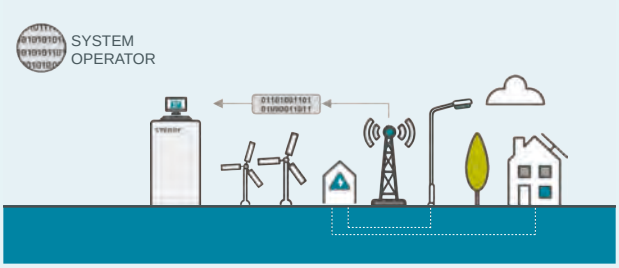
Multidisciplinary collaboration has been a common feature of our working approach for several years in Zeeland and regularly attracts participation by media parties. An example is a project in a district in Oost-Souburg. Here, the contractor has started replacing the sewers and all the road surfaces. DNWG Infra has commissioned the replacement of all the distribution gas pipelines and water mains as well as the medium and low-voltage cables. In the interim period, almost all the home connections for gas, water and electricity will be replaced in a combined programme. For the multidisciplinary working approach in Zeeland, the services agreement (in which water company Evides was the client and DNWG the contractor) was replaced with effect from 1 January 2021 by a cooperation agreement, under which both partners work together on an equal footing. This agreement was signed on 7 December 2020.

Ready for the future

As in previous years, we once again struck up an extensive dialogue with provinces, municipalities and market parties about our collective endeavour in the energy transition in 2020. Our product and proposition managers, a new team within Stedin, developed a set of suitable products and services for sustainable generation, mobility and the heat transition for this purpose.

We aim to influence long-term planning in the Regional Energy Strategies, the National Agenda on the Charging Infrastructure Network and Transition Visions for Heat among municipalities. We are also in active discussions with customers about short-term plans, and we ensure that we can meet customer requirements at the lowest possible cost.

We aim to make well-considered choices and to offer our customers realistic expectations in terms of what is and what is not possible and the timescale for implementing projects. In this light, we are seeking to improve our demand forecasting ability. From 2020, a newly formed Market Intelligence team provides insight into customer requirements and demand and offers future scenarios for correct decision-making. The result is an investment portfolio that is up to date and customer driven and is more in line with current and future developments.



Overseeing and directing the energy system

Stedin launched the 'System Operator' strategic initiative in early 2020. Within this initiative, we are expanding our role as a manager of physical grids with the management of digital data flows. We are exchanging more and more data with customers, municipalities, market parties and other grid managers on a range of topics, such as available grid capacity and the best place for a charging square or solar farm. We make important choices together. Where capacity problems arise, we make agreements with major customers, such as commercial growers, for example, on flexible electricity consumption or generation and feed-in. Alongside our role as a grid manager, we therefore increasingly oversee and direct the energy system – hence the name 'system operator'. As a system operator, we ensure that we predict, plan and control the consumption and feed-in of electricity in a smart and digital manner.

2020 was a year of putting foundations in place, such as preparing necessary upgrades of our core systems GIS (geographic information system: location and characteristics of our assets, network topology) and SCADA (monitoring and management of the energy systems by our Network Operations Centre). A uniform chain was also developed for the installation, management and reading of tens of thousands of sensors and other smart assets in an identical manner. Moreover, we are now able to calculate the impact of energy transition scenarios on our electricity grid. This is done based on an up-to-date representation of our network. The calculations subsequently enable us to determine where to invest in our grids. In 2020, we also carried out pilots for market-driven congestion management in Zuidplaspolder and Bleiswijk. As a result, we can now make better use of the capacity of the electricity grid in that area.

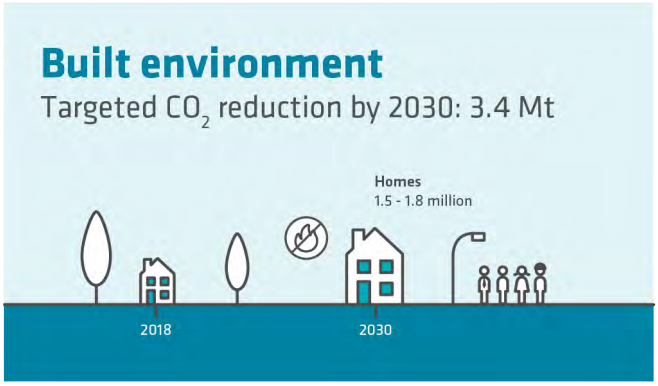
2. Facilitating the energy transition

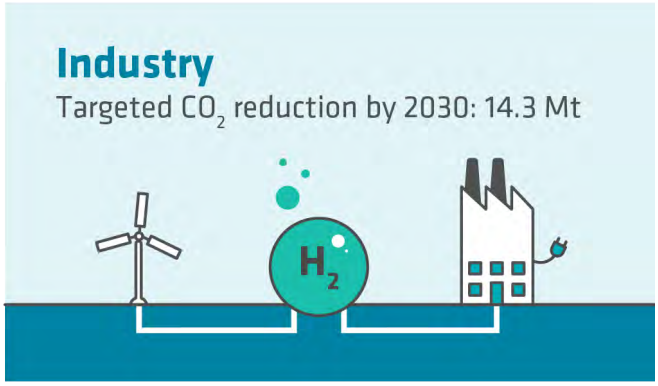
The energy transition demands that we oversee the entire energy system. We have made enormous strides toward making our grids smarter, for example, and entering into dialogue with our stakeholders. At the same time, there is still much to do. Crucial craftsmanship will be essential to achieving our targets.

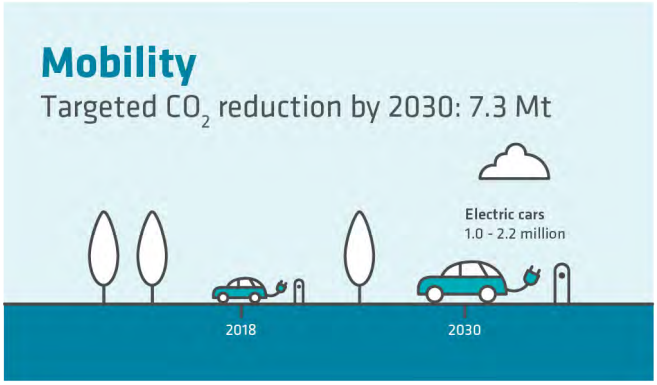
Five climate platforms

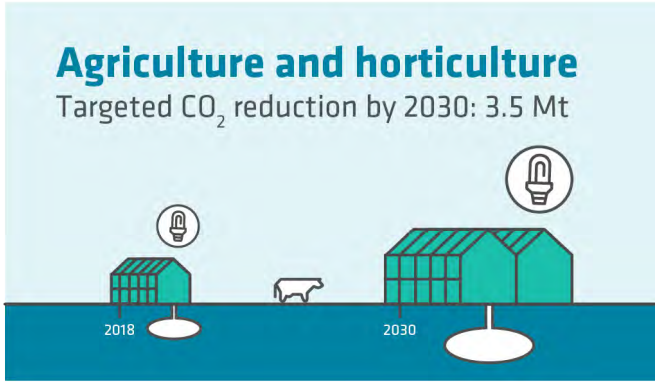
In this section, we look at the themes highlighted in the Climate Agreement: Built Environment, Industry, Mobility, Agriculture and Electricity.

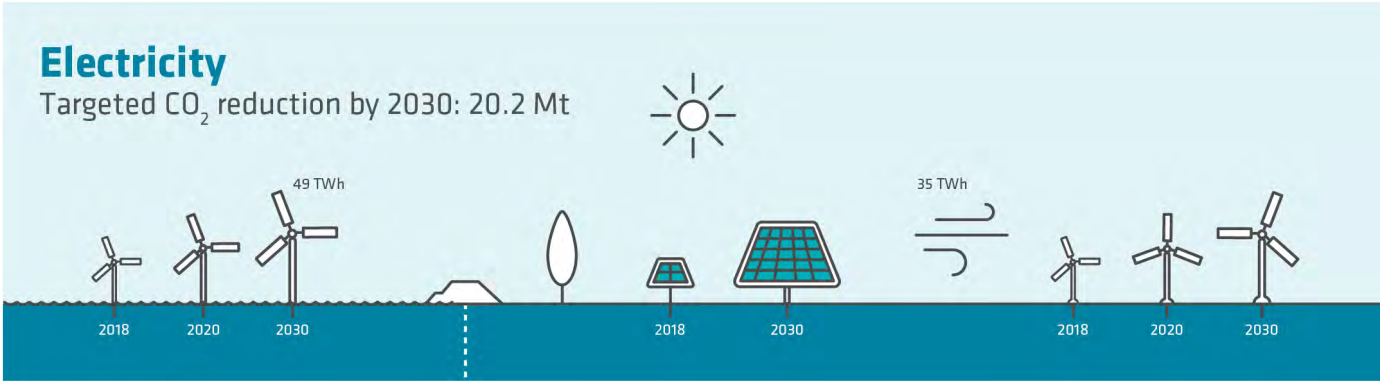
Climate Agreement objectives CO_2 reduction by 2030











Built Environment

Improving the sustainability of the built environment is a complex puzzle that not only offers technical challenges but is also a social transition. By contributing to test beds for natural gas-free districts, catalyst projects among housing associations and residents' initiatives, Stedin is actively involved as a knowledge and cooperation partner.

Alternatives for existing buildings

All local authorities in the Netherlands must provide a Transition Vision for Heat by the end of 2021. They shape the direction of the approach that local authorities choose to achieve a carbon-free built environment. Our area directors and account managers support municipalities with a range of tools for filling in the roadmap.

The heat transition is a transition of many small steps, which together make a big impact. The Stedin Opening Bid, for example, helps municipalities decide how to take these first steps by identifying alternatives to natural gas for each area. A random survey among municipalities in the Stedin area shows that 75% of them are familiar with the results from the Opening Bid.

Stedin has also developed Opportunity Maps to provide insight into the available grid capacity. This information gives municipalities quick insight into whether their intended plans are likely to succeed. When a municipality identifies a district as promising, it is made more sustainable by means of collective and individual transition pathways.

Where it is still too early to take major steps, we work on making homes 'natural gas-free ready'. Insulation and hybrid heat pumps are valuable steps toward reducing CO_2.

Removing natural gas connections

Joint approach for Jan Evertsenplaats (block of flats) renovation project in Zwijndrecht.

Stedin is working with housing association Vestia on this project in Zwijndrecht, which includes more than 200 homes, spread across a 12-storey high-rise block and a lower 4-storey block. Vestia is renovating the homes and is giving the residents the choice to switch from using gas to cook to using electricity (induction). Residents who make the switch are provided with an induction cooktop by Vestia. Stedin removes the gas pipelines and reinforces the electrical system, if needed. Roughly 50% of the residents so far have registered a willingness to switch from gas to electric cooking. As a result, connections criss-crossing the block of flats will need to be retained, and it is likely that not a single vertical pipe (riser) can be removed. This is a highly undesirable situation for Stedin, as the complete infrastructure remains in place and will need to be maintained. In addition, risers run through parcels that no longer have any connection, so there is no gas present according to our systems. This is a new situation for Stedin, but one that will undoubtedly become increasingly common in the future. In the coming year, we will improve our approach and the related process and ensure that our systems can record this information and residents' registration. We are also examining what possibilities there are to convince more residents to make a certain choice for safety reasons. After all, we cannot remove the entire gas grid, down to the street level, until the last customer decides to switch from gas.

The total number of gas connections that were removed to enhance sustainability in 2020 is 4,448 within the service area of Stedin and DNWG. The figures for December 2020 have been extrapolated, as they were not yet confirmed at the time this annual report was definitively adopted.

Pipe puller

For many customers who want to permanently disconnect from the gas grid, removing their own connection to the main grid is disruptive, as it involves digging up their garden to take out the gas pipeline. To meet their concerns, we are carrying out a pilot with a 'pipe puller'. The aim is to limit digging on private land to a hole in the outer wall and a hole at the plot boundary, through which we can extract the pipeline without having to dig a trench. The test results are increasingly encouraging, and we expect to have the 'pipe puller' operational in early 2021. The main added value of the pilot is less inconvenience for customers. The potential impact of this working method on our cost price will become clear in 2021.

Test beds for Natural Gas-free Districts

The government is promoting moves to enhance the sustainability of the built environment through various grants and subsidies. In the first round of the Natural Gas-free Districts Programme, 7 of the 27 test beds are located in the Stedin area; in the second round, 3 (Goeree-Overflakkee, Rotterdam and Pijnacker-Nootdorp) of the 19 test beds are in Stedin's service area. Each district is characterised by its own dynamics and planning phase. In the 'Stad aan het Haringvliet' test bed, for example, we are learning how to use hydrogen as an alternative to natural gas. Other test beds are teaching us about the impact of heat grids on the existing infrastructure.

Housing associations driving the energy transition

The housing association sector has been designated as a catalyst of the energy transition in the Climate Agreement. We saw a 29% growth in the number of enhanced sustainability initiatives among housing associations in 2020. This is due, on the one hand, to the substantially increased number of projects being realised and, on the other, to Stedin improving insight into these processes as well. In absolute numbers, fewer projects are being undertaken by housing associations than there are neighbourhood-specific programmes by municipalities. However, the former are being implemented more quickly. In autumn 2020, Stedin joined with the Association of Netherlands Municipalities (VNG) and housing association Aedes to organise knowledge sessions with the aim of learning from one another's experiences.

Natural gas-free new housing developments

In 2020, 92% of the connections requested for new homes in our service area were natural gas-free. The national figure for 2020 was 87%.

Heat grids

Stedin Group seeks to accelerate the energy transition by actively exploring how to improve the sustainability of the heat supply in the built environment within its service area. In addition to electrification, collective sustainable heating is an alternative to make the built environment natural gas-free. NetVerder B.V. (which operates in the 'non-regulated' segment) therefore continued developing a portfolio of projects focused on collective heat systems in the past year driven by the public interest. You can read more about this topic in the section on Non-regulated activities.

Collectives desk

Stedin's Collectives Desk answers questions that energy collectives may have on subsidy schemes, feed-in connections and meters. In 2020, Stedin connected 20 projects of energy collectives, with feed-in connections for returning energy to the grid. (2019: 31).

Induction Cooking Peak Reduction

In a block of flats in the Overvecht-Noord district of Utrecht, Stedin is assessing the impact of cooking using electricity on the electricity grid and the potential scope for mitigating this impact by means of battery storage. It is expected that more than 4,000 homes in the district will switch from using gas for cooking to induction cooking in the coming years. If the pilot is successful, it may be possible to avoid or delay investment in the electricity grid until a time when more work needs to be carried out below ground.

The pilot project involving the installation of a battery, fitted with various measuring instruments, in a block of flats belonging to housing association Mitros, began in September 2020. It may be possible to use the battery to lower peak-load power of the lift as well, for example. Flattening the peaks in energy consumption may consequently also result in lower standing charges for Mitros, due to the lower connection capacity.

If the pilot is successful, we will decide whether we can scale up this approach to include other blocks of flats. Individual batteries operate in the district as a single large, smart and decentralised battery system. If the costs and benefits of the battery yield a positive business case, this may remove the need to make additional investments in the electricity grid.

Heat transition and hydrogen

Our gas network is of great social and economic value. Heating homes with sustainable gases and hydrogen may offer an alternative in the future, alongside fully electric and heat grids. In this way, we can give our gas network a new lease of life. To render hydrogen useable as a viable alternative, it is important, therefore, that we gain knowledge and experience with hydrogen (and how to transport it) now. We are doing this in various projects, including in Uithoorn, Rotterdam Rozenburg and The Green Village in Delft.

The knowledge and experience that we gain in these projects will be used to help ensure that Stad aan 't Haringvliet can make the switch from natural gas to hydrogen via Stedin's existing natural gas grid in 2025. This switch can be made if there is sufficient support among residents, provided that it is safe and affordable. In 2020, a declaration of intent jointly signed by Stedin was presented to residents. The cooperating parties have made progress in terms of technical understanding (what will the overall hydrogen system look like) and organisation. Under the leadership of the municipality, an application was submitted for the Natural Gas-free Districts Programme. This resulted in €5.6 million being allocated.

In December 2020, 14 houses in Uithoorn that are scheduled for demolition were specially prepared for temporary heating using hydrogen. This is a technology that is still in its infancy worldwide and is now being applied for the first time in the Netherlands by Stedin. The conversion from natural gas to hydrogen consists of several steps, which include inspection of existing gas pipelines and connections both at the street level and in the houses and heating the houses using special hydrogen central heating boilers. This teaches us what exactly a conversion from natural gas to hydrogen entails for us as a grid manager and for the parties with whom we work.

The pilot with hydrogen boilers was continued in Rozenburg. The hydrogen production unit was updated, and inspections are being carried out to assess whether the pipes in Stedin's existing gas grid are clean enough on the inside for hydrogen distribution. The preparations for experimenting with hydrogen in The Green Village in Delft have been completed, paving the way for the first projects to be carried out in 2021.

In 2020, Stedin started researching hydrogen quality and odorisation (adding a specific odour, so that hydrogen becomes identifiable by its smell, just like natural gas), among other things. A hydrogen lead group was formed within Stedin, and hydrogen is a topic of discussion across the organisation. Together with the national government, Stedin has taken several important steps as regards regulation.

Within Netbeheer Nederland, Stedin is working with other grid managers in the field of hydrogen as well. Experiences are exchanged and research is conducted jointly. An example is our participation in the HyDelta research programme, which focuses on removing barriers that are impeding the scaling-up of hydrogen projects.

Mission H2

Stedin Group supports 'Mission H2' as part of efforts to establish the Netherlands as a 'hydrogen pioneer'. Within Mission H2, seven leading companies in the energy chain are combining forces to promote hydrogen as an important and sustainable energy carrier for the near and more distant future. Stedin Group aims to make the Netherlands familiar with the benefits of hydrogen and show how it can be used as an alternative to natural gas for heating homes, while retaining the current gas grid. The seven partners are Gasunie, Shell Nederland, Remeha, Stedin Group, Toyota, Port of Amsterdam and Groningen Seaports. One of the activities to raise awareness for hydrogen is Mission H2's partnership in TeamNL in the run-up to and during the Olympic and Paralympic Games in Tokyo, which will now be held in 2021. We have translated this external cooperative venture internally into the 'We've struck gold' campaign.

Windsurfer Kiran Badloe from TeamNL talking to Stedin CEO Marc van der Linden at the Green Village hydrogen project in Delft.

Making industry more sustainable

The Rotterdam Port Industry Complex is the most energy-intensive region in the Netherlands: the Port of Rotterdam is currently a major emitter of CO_2. To achieve the climate goals for industry, the necessary new and modified energy infrastructure must be in place in good time. The residual heat produced can potentially be used for the urban areas around the port, such as the city of Rotterdam.

Cooperation and organisation

In 2020, progress was made at an organisational level in particular toward improved cooperation between the stakeholders concerned in making industry more sustainable. The 'Rotterdam Port Industry Complex Infrastructure' Working Group proved to be effective in placing barriers to infrastructure development on the agenda. The participants in the consultative body are the Port of Rotterdam Authority, Stedin, Deltalinqs, TenneT, Gasunie, the Province of South Holland, the Municipality of Rotterdam and the Institute for Sustainable Process Technology (ISPT).

Progress was also made at the national level toward creating an overview and instruments that lead to improved coordination between industry and grid operators.

Industry Climate Agreement Infrastructure Task Force (TIKI)

The Industry Climate Agreement Infrastructure Task Force (TIKI) was established by Eric Wiebes, the Minister of Economic Affairs and Climate Policy, to identify the challenges in creating the infrastructure needed for enhancing sustainability. The Task Force consists of chair Carolien Gehrels (Arcadis), Marc van der Linden (Stedin Group) and Hans Grünfeld (VEMW). The Task Force was instructed to identify and list bottlenecks, conditions and potential solutions for creating the necessary infrastructure. The total investment costs for public infrastructure (including the national hydrogen backbone) until 2030 are estimated to be €40 billion to €50 billion. This excludes private investments by industry that are needed to implement projects and local infrastructure.

Energy Strategy Cluster & Data Safe House

A key recommendation by the Task Force, which was adopted by the minister, is the development of an Energy Strategies Cluster (CES). Within the CESs, the industrial parties and grid operators work together to coordinate the projects with infrastructure development, and vice versa. Stedin is collaborating in the Rotterdam Port Industry Complex on further defining and elaborating a CES for 2021. The CES will be continuously updated and refined in 2022 and beyond.

A key condition for a good CES is reliable technical and planning data on the industrial projects to be developed. As the exchange of relevant data between industrial enterprises and grid operators is often complicated by competition rules and sensitivity to competition, the Task Force has proposed a safe house in which data about proposed investments by industry and grid operators can be exchanged in a safe and confidential environment.

In 2020, Deltalinqs, the Port of Rotterdam Authority and Stedin launched a pilot for developing such a data safe house. In this pilot, we work with three to five companies on choices regarding technical design (ICT technology and security choices) and the governance structure of the safe house. The pilot is intended to provide insight into the applicability of such a safe house with the aim of improving predictability and planning certainty with regard to infra-structural needs. The first insights are expected in Q2 2021.

Project Gridmaster: developing adaptive investment strategies

This project aims to develop a set of interfaced models and methods that enable us to explore the many uncertainties within the transition of the industry. We also seek to gain better insight into 1) possible transition pathways, 2) the necessary infrastructure and 3) the possible investment strategies. This model enables parties to cope with the many uncertainties in the development of electricity, hydrogen and natural gas grids and the various investments they entail. The parties signed the cooperation agreement in 2020 and initiated the project at the end of 2020. Participating parties are Stedin, TenneT, Gasunie, the Port of Rotterdam Authority, the Province of South Holland, the Municipality of Rotterdam, SmartPort, TU Delft, Siemens, Quintel and the Netherlands Organisation for Applied Scientific Research.

Energy Mix Study project

In the Energy Mix project, we identify the potential changes affecting the energy and raw material systems of roughly 30 companies in the Rotterdam Port Industry Cluster. We do this in cooperation with the companies. Based on interviews, we compile the current energy and raw materials profile of each production and consumption unit. The experts then determine the potential sustainable alternatives for each unit and translate them into transition pathways. Ultimately, this creates an overall picture for the area. In 2020, phase 2 of the project was carried out by the Netherlands Organisation for Applied Scientific Research and Deltalinqs on behalf of Stedin and the Port of Rotterdam Authority. In this phase, 42 companies were approached and 31 confirmed their participation in the study. Data have meanwhile been gathered for 22 companies, and an analysis has been carried out for 12 companies. This analysis leads to a 'business as usual' (BAU) transition pathway and three transition pathways yet to be followed for the industry in the Rotterdam Port Industry Cluster: BAU and CCS (carbon capture and storage), BAU and hydrogen and BAU and electrification. A substantial increase (up to four to five times as much) in demand for electricity is foreseen in all four scenarios.

The second half of 2020 saw the start of phase 3, in which the remaining companies were analysed. Gasunie entered the group of commissioning parties for this phase.

System study in South Holland

In 2020, a system study was carried out into the energy structures in the province of South Holland in various scenarios. The study is in line with the national infrastructure review II3050, which is being carried out within the framework of Netbeheer Nederland.

The energy grid in this energy-intensive province needs to be expanded with new distribution substations and electricity cables. It is striking that most bottlenecks in this province are caused by electricity usage, unlike many other provinces, where bottlenecks are attributable to sustainable energy generation.

The study was carried out in close cooperation with the Province of South Holland, the RES coordination teams, the three regional grid managers (Liander, Westland and Stedin) and the two national grid managers (TenneT and Gasunie) by a consortium of CE Delft, Quintel and the Netherlands Organisation for Applied Scientific Research. The joint implementation of the study with multiple stakeholders across sectors (built environment, mobility, industry, agriculture) and for various energy carriers (electricity, gas, including natural gas, biogas, hydrogen, heat and CO_2) appears to offer a template for future integrated studies.

Mobility

Electric transport continued to advance in the Netherlands in 2020, although at a different pace than expected due to the COVID-19 pandemic. While total sales of cars in 2020 were lower, the share of electric cars grew. In September 2020, for example, 20.9% of the cars sold were electric vehicles.

Stedin's low-voltage grids offer sufficient capacity for the largest part of the day to provide for the charging needs of all these electric vehicles until at least 2030. However, this relies on the adoption of smart charging. The need for smart charging (see box below) in the built environment has been made transparent through simulations. If smart charging becomes the standard in the built environment, we can put off or even entirely avoid expanding the capacity of approximately 800 low-voltage grids and/or transformers. This not only brings financial benefits, it also reduces disruption and inconvenience for municipalities and citizens. In addition, customers do not need to wait for a charging point to be installed.

The expectation for 2025 and 2030 as regards the number of electric vehicles remains unchanged. The expectation is that, by 2025, 1 million electric vehicles (cars, lorries and buses) will be in use in the Netherlands, and around 2 million by 2030.

Smart Solar Charging

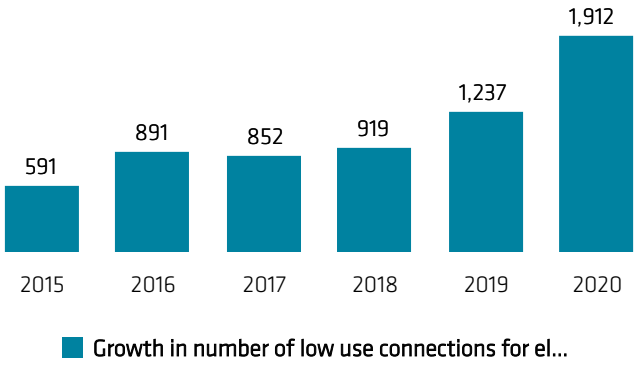
In Utrecht and the surrounding region, we are working on a sustainable energy system at the district level: as part of the Stedin innovation project 'Smart Solar Charging', we store locally generated solar energy in shared and other cars using a smart, dynamic fast-charging and storage system (Vehicle2Grid). The car then becomes part of the energy system. This process creates flexible storage capacity that helps reduce peaks on the electricity grid. The locally generated energy is released to the district at a later time, when the demand and price are both high. This system is also known as 'bidirectional'. In 2020, we installed 623 charging points that are suitable for this technology (2019: 177)**.** This is unique in the world. In addition, we are applying the lessons learnt, including the technical insights, we have gained in other tenders, such as in the province of South Holland.

Growth in the number of connections for charging infrastructure in our service area

In 2020, Stedin agreed in cooperation with other grid managers on a new way of reporting the number of connections for charging infrastructure. One or more charging points can be installed behind a single connection for charging infrastructure. While we do not have the data behind the connection (the number of charging points), we do have information on the number of connections themselves.

Number of connections for low-use consumers for charging infrastructure

The number of connections for low-use consumers (kV) for charging infrastructure increased in 2020 by 1,912 (2019: 1,237). This is an increase of almost 55%.



National Agenda on the Charging Infrastructure Network

The National Agenda on the Charging Infrastructure Network lends visibility to the challenge that we face: to install 1.8 million charging points by 2030. The National Agenda focuses on a regional approach, with each Cooperation Region being required to draw up and implement a Regional Plan for Charging Infrastructure. Stedin is an important partner in drawing up the regional plans in our coverage area: the roll-out of the charging infrastructure has a major impact on our grids and implementation capacity.

> 'After all, Stedin must take account of a balanced load of the energy network.'

The National Agenda specifically includes a passage on the roll-out of private charging infrastructure. This point follows

the basic principle that unambiguous agreements need to be made on precisely how semi-public and private charging infrastructures (for instance, on business parks and in multi-storey car parks) contribute to the public charging requirement. By the end of 2020, a Regional Plan for Charging Infrastructure had been drawn up for each region, including the three regions in our coverage area. In mid-2021, municipalities will deliver their visions and installation policy.

Recharge your batteries in Zeeland

Tourism is a key part of the economy in Zeeland. Though the slogan 'Recharge your batteries in Zeeland', the Province of Zeeland and municipalities in the province are emphasising the local needs for charging points. Grid manager Enduris reviews the zoning plan maps in relation to the available grid capacity. Coordination at an early stage guarantees that expectations on all sides are realistic and facilitates cooperation between the parties to ensure that drivers, including those from other countries, of electric cars are not disappointed.

ElaadNL

Together with the other Dutch grid operators, Stedin and Enduris are affiliated organisations of ElaadNL, the knowledge and innovation centre in the field of smart charging infrastructure for electric cars in the Netherlands.

Much still needs to be done to ensure safe and easy charging for large numbers of electric vehicles. In ElaadNL's test lab, electric cars are being tested, among other things to examine the effects of charging on the stability of voltage in the grid, for example. The conversion of the grid's alternating current into direct current for the car's battery can lead to harmonic and supraharmonic distortions when charging. Poor power quality can interfere with other devices and cause them to wear out faster.

In 2020, ElaadNL took the lead in drawing up the National Agenda and its further elaboration. ElaadNL provides the specifications for tenders in various municipalities and provinces, and in doing so prevents local differences from arising. In 2020, ElaadNL extensively tested every charging point marketed in the country for quality to ensure that it can be safely installed in the Stedin, Alliander and Enexis grids. The standards and protocols that are essential for smart charging were further improved, in relation to Vehicle2Grid and cybersecurity, for example. Based on potential future scenarios, ElaadNL estimates what lies ahead, in the field of electric goods transport, for example. This enables grid managers to take this into account in their planning and investment strategies. Alongside goods transport, electric inland shipping and buses were additional areas of focus.

Cybersecurity is a further crucial aspect of a safe charging infrastructure. The large amounts of power involved in the combined charging of all those cars and the connectivity of charging points (connected to the Internet and controllable) make effective cybersecurity essential. In order to maintain the reliability of our grid, all the parties involved (such as the supplier of the charging point and the grid manager) take anti-hacking measures.

Getting closer to zero-emission bus transport

Urban and district transport policy stipulates that bus companies must have switched to zero-emission buses by 2030. At the start of 2020, approximately 770 electric buses were operating in our coverage area out of a total of 5,236 vehicles.

The number of electric buses in public transport at the end of 2020 was more than 1,300, roughly 25% of the total. The growth in the number of electric buses within Stedin's service area was modest in 2020. Rotterdam, among others, saw an increase of 50 electric buses. The expectation remains that three quarters of all the buses in public transport will be electric by 2025.

Agriculture and land use

The agricultural sector plays a crucial role in the energy transition, since it has the space to produce renewable energy in sufficient quantities. Commercial growers are often innovative entrepreneurs that can provide the momentum for a number of developments. The greatest challenge lies in matching sustainable energy production and demand at the local level.

Public-Private Partnership on energy and agriculture

Stedin is participating in the Public-Private Partnership (PPP) on energy and agriculture with participants from Wageningen University Research, LTO Noord, Alliander, the Netherlands Organisation for Applied Scientific Research, Petawatts and Windunie.

Many farmers are becoming more sustainable by installing solar panels on their buildings. Approximately 90% of the electricity generated in this way is fed into the electricity grid, which may require Stedin to reinforce its grids. In the PPP, we examine whether it is possible to increase farmers' consumption of the electricity they generate themselves, as part of efforts to further enhance sustainability in agriculture.

The report titled 'Maximum renewable production without grid reinforcement' was published in 2020. This report examines the electricity consumption of farmers and considers which part of this can be flexibly met when the solar panels are supplying electricity.

> 'The aim is to boost farmers' share in the consumption of the solar energy they generate in order to avoid the need for grid reinforcement.'

The study shows that an average farmer, through smart matching of consumption, can install an additional 260 solar panels without having to reinforce the connection.

For 2021, a pilot will be developed in the 'Hoekse Waard' with two alternative potential solutions: creating green hydrogen for hydrogen-powered tractors for diesel-free agriculture in partnership with a group of farmers and using thermal storage across multiple seasons for post-harvest cooling. The pilot will include 39 farms around Klaaswaal.

Commercial growers deliver flexibility

In Zuidplaspolder, commercial growers are helping to unburden the electricity grid. In 2020, Stedin entered into contracts with AgroEnergy and Tenergy, who are in contact with commercial growers in Zuidplaspolder.

> 'As soon as Stedin becomes aware of an impending substantial peak in electricity consumption, commercial growers have agreed, with Tenergy and AgroEnergy, to turn off their lighting or activate their combined heat and power system.'

Growers who are willing to do this are compensated for their flexibility.

Together with three commercial growers, AgroEnergy and Tenergy can 'move' a total of five megawatts of electricity in Zuidplaspolder. This roughly equates to the capacity needed to supply 5,000 households (comparable with the town of Moordrecht) with power. Stedin, AgroEnergy and Tenergy are currently making preparations for implementing this initiative.

In addition, Stedin registered the first group of more than 10 commercial growers on the grid operators platform GOPACS in 2020. In this way, they, together with other participants, are increasing the availability of flexibility in the market. Flexibility crucially depends on the presence of enough participants with flexible demand for or production of electricity. You can read more about flexibility here.

Crucial craftsmanship: Frederique Ankone

Frederique Ankone is a project coordinator at Meters & Connections Complex. What does 'crucial craftsmanship' mean for her? 'During the lockdown, we carried on with work that could be done from a laptop; the fitters, by contrast, were stopped in their tracks. It was difficult to stay motivated: what are we doing it all for?'

>What makes your work of vital importance? In other words, why is your work important for the organisation and society?
'Together with a colleague, I am in charge of directing work to replace obsolete electrical connections. I am responsible for the region of The Hague. When we began the smart meters project, we came across jute wiring, main junction boxes with asbestos cords and Weber boxes. These are often located in old staircase-accessed flats. We decided to start up a project to replace them all, as the meter replacements could no longer be done safely or carried the risk of causing outages. Lots of things need to be arranged, from soil surveys to temporary road closures. My work is of vital importance for ensuring the safety of electrical connections.'

>How do you recognise a professional in your field?
'To me, being a professional is not so much about knowledge as about drive, about wanting to realise your full potential and always looking to learn more. To me, that is a valuable attribute and a foundation for achieving a great deal. I am pleased to work with lots of colleagues with a strong drive.'

>What has working been like for you during the lockdown? What was different from normal and how did that affect you?
'It was pretty hectic when the first lockdown began. For a while, we had to suspend our project. We carried on doing preparatory work from home, but it was difficult to stay motivated: what are we doing it all for? Our goal is normally to carry out the work. When we got the all-clear to start again in July, I noticed that customer contact was easier than expected; there was very little hassle and people kept their distance. I do a lot of work from home, and that's fine, although I do miss my colleagues' input and the conversations at the coffee machine.'

>How do you ensure that you remain fit and healthy yourself?
'In January, I joined in with the programme run by our colleague Irving Aarnoutse, who was training to become a fitness coach at the time. We used to exercise together once a week, and now we have online sessions twice a week instead. There are 18 of us, all colleagues from work, and we improvise where necessary, with bottles of water as weights, for example. I also make an effort to keep up the lunchtime walk. As for my mental health, I'm glad to have lovely people around me.'

>What gives you the most satisfaction in your work? In other words, how does your work help you maintain vitality?
'I very much enjoy working around motivated colleagues. Together, we achieve good solutions. I also get enjoyment out of constantly improving processes. At the moment, I am working on an improved planning system that will make my colleagues' work easier. That gives me personal satisfaction.'

Electricity

In 2020, flexibility and congestion management were established as important building blocks for implementing the Climate Agreement. The rapid emergence of renewable energy sources has led to bottlenecks in the electricity grids at various places within the Netherlands. The growth in the capacity of solar panels in the provinces of Utrecht and South Holland, for example, increased by 48% in 2020 compared with 2019.

Future-proof grids

Energy supply and demand have become far less predictable. The growth of decentralised, sustainable power generation facilities, such as solar farms, in particular, is very fast – so fast, in fact, that there is a risk of problems with our transmission capacity and voltage quality. A lot of solar roofs and wind farms have been constructed in Schouwen-Duiveland and Tholen in Zeeland, for example. These produce more electricity than is taken up in the area. We are looking for efficient solutions to maintain the vitality of our network.

Master Plan 2050

To understand how demand for energy will develop, we need to have a clear picture of the necessary energy infrastructure in the short, medium and long term.

'Together with stakeholders, we are shaping grid planning through our involvement in the Regional Energy Strategies, the National Agenda on the Charging Infrastructure Network and the Transition Visions for Heat.'

The Master plan 2050 provides a framework for the development of overarching plans that give us insight into the required investments in Stedin's transmission and distribution networks in the longer term. In this way, we aim to prevent divestment and be ready for the transition. The spatial integration of the infrastructure is key to success. In the city of Utrecht alone, 65,000 m^2 of space below ground will be required until 2050. By making this transparent, we can reach agreements at the municipal and provincial level about space. This transparency contributes to social consensus, faster implementation and lower societal costs and investments. The master plans for the Rotterdam Port Area, Amersfoort, The Hague, Zoetermeer and Utrecht/Nieuwegein have already been delivered. We are still working on the other areas.

In 2018, the Netherlands Authority for Consumers and Markets (ACM) tightened the safety rules for newly constructed low-voltage grids. The ACM intends to make these safety rules applicable to the existing grids as well. This means that they will need to be monitored. Grids that do not comply with the safety rules will require modification. One solution is to disable the connections between two low-voltage grids. This has a positive effect on the energy flowing through the grids and short circuit currents. As a result, disconnected low-voltage grids comply more easily with the safely rules than when they are connected. An added advantage is that the disconnected low-voltage grids are also more easily adapted for the energy transition.

Investing in the Borsele main distribution station

To prepare to meet growing demand among customers, Enduris has invested in substantially expanding the grid capacity in the Borsele Main Distribution Station. This ensures we avoid congestion.

Due to its location in the Vlissingen-Oost port area, the Borsele Main Distribution Station is a pivotal hub in the grid for Zeeland. This is a spot where the development of the port area goes hand in hand with the development of large-scale sustainable energy. In Borsele, a new voltage level of 20 kV (in addition to the existing 10 kV and 50 kV levels) was introduced in the main distribution station with brand-new 20 kV switchgear. The first customer connection to this switchgear was completed in March 2020. In April 2020, a second tender was signed for a very large rooftop solar project.

Terms frequently used in this section:

- **Grid capacity and transmission capacity** are synonyms and refer to space on the grid.
- **Shortage of transmission capacity** refers to national and regional electricity grid capacity shortage due to the growth in large-scale solar farms and the increasing electricity demand in the Netherlands.
- **Congestion** occurs when a network has insufficient capacity to transmit all the electricity that is generated and purchased.
- **Congestion management** uses price mechanisms and market forces to manage energy supply and demand. We refer to this as **flexibility**.
- **Voltage quality** means that the voltage on a connection to the electricity grid must be of a certain quality. Good voltage quality is important for ensuring the continued reliable operation of equipment.

Shortage of transmission capacity

To make optimum use of the grid, we need to align plans as closely as possible with the available capacity and make maximum use of our current energy infrastructure. Grid managers work together on solutions with this aim. You can read more about this in the factsheet produced by Netbeheer Nederland 'Samen vernieuwen' (renewing together). Below, we detail a selection of our projects.

Dispensing with the failure reserve

The failure reserve is also referred to as the 'rush-hour lane' or N-1 or N-2 redundancy. Thanks to the failure reserve, the grid has a supply security of 99.99%. The failure reserve enables us to avoid or limit the duration of a service interruption in large areas due to a failure. It also allows us to carry out maintenance on our grids without having to interrupt supply to customers. The growth in sustainable energy generation makes grid reinforcement necessary, but this takes considerable time. For our 150 kV main distribution stations, legislation and regulations currently do not allow us to use the failure reserve to accelerate the connection of sustainably generated energy.

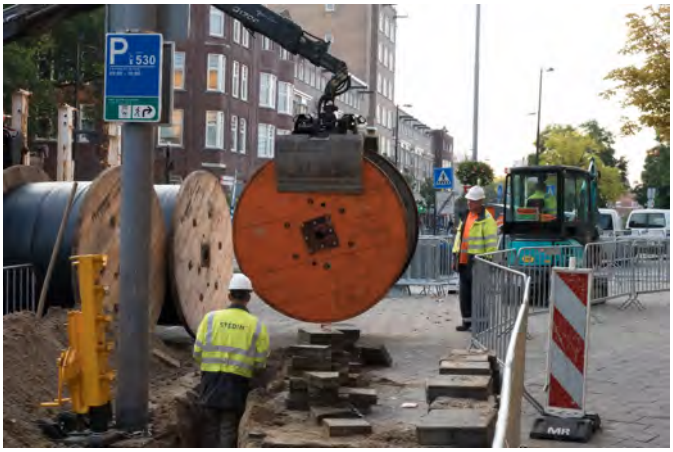
Many solar and wind projects do not require connection to the maximum capacity. By using the existing failure reserve in the grid, however, we would be able to connect them. In case of a failure or during maintenance work, the output of the solar or wind-energy installation is temporarily curtailed or disconnected without compromising the security of supply to other grid users.

Dispensing with the failure reserve involves more than a mere technical adjustment. We need the cooperation of the customers in the area who return energy to the grid. There needs to be an understanding of what N-1 means as well as what rights and obligations exist, and the grid manager and customers feeding power into the grid need to increase their cooperation.

Europoort station – Dispensing with the failure reserve (N-1)

Transmission capacity in the Europoort station in the industrial and port area of the same name has almost reached its limit. Here, we have opted to dispense with the failure reserve to facilitate timely connection of the planned and future solar and wind farms. Continuous monitoring of the available grid capacity and actual energy generation is essential. In case of reduced available grid capacity, this will allow us to notify a restriction to customers, thereby curtailing the amount of energy returned to the grid. Customers are given a control box for this purpose. This box sends a signal to the customer's installation, temporarily limiting the energy returned from the solar or wind connection.

It is expected that this solution will be implemented for the Europoort station in the third quarter of 2021.



Cable pooling

Cable pooling, which is permitted by law from July 2020, enables a cable to accommodate power generated from both and wind and solar on a single connection. This is important, in view of the limited utilisation of the total capacity of a connection in the case of generation plants for solar (12%) and wind (28%). After all, the wind does not always blow and the sun does not shine constantly. The connection must nevertheless be able to cope with periods of peak load. Cable pooling enables us to curtail the output of the solar or wind farm at peak times, when the capacity of the connection is not sufficient. This limits the amount of energy that is lost.

As a result, we can increase the capacity utilisation of a connection to 39%, fewer connections are needed and we can absorb more generating capacity on the grid. In 2020, we set out these possibilities in further detail at Stedin, and we are working to ensure they are implemented. An initial application is currently under consideration from the owner of a wind farm who wants to expand the existing connection with a solar farm and then market the two separately.

Station of the future

The energy transition is causing us to expand substantially more stations as well as build new ones. It is imperative that we design and build these stations smarter. Fortunately, this is possible. How? By further standardising stations. While this is not always possible for entire stations, it is possible for the modules we use to put them together. Smart stacking of the modules, just like Lego, ensures that we retain enough flexibility to integrate the stations into the surroundings. In 2020, we created an environment for managing these standards, an improvement process was put in place and the modules were made available for the most common station type. In the coming year, we will develop the modules for the remaining types of stations. There are plans to build five such modular stations in Zoetermeer.

Efficient station design through standardisation in Zoetermeer

The main requirements and location-specific features of five locations in Zoetermeer were analysed. This analysis forms the basis for a preliminary design for the Zoetermeer 4 station. The station is being built to provide the 'De Entreé' housing project with electricity. The preliminary design for Zoetermeer 4 pays attention to the extent to which it also meets the location-specific characteristics of the remaining locations.

The advantages of a uniform design are not confined merely to the design phase. We expect to see benefits during construction as well, and we are considering issuing tenders for the stations in clusters. In this way, we at Stedin can learn with our chain partners from the first round of construction and immediately apply the lessons learnt.

Flexibility

Congestion in our grids is becoming more frequent as a result of the energy transition. This is creating an increasing need for flexibility, either as a temporary measure until a grid reinforcement has been carried out or as a definitive measure. Flexibility offers new business and other opportunities for new and existing customers and a solution for making better use of the existing electricity grid and ensuring it remains affordable. The System Operator strategic initiative provides a framework for deploying flexibility.

Using the present and future electricity grid as efficiently as possible is crucial to flexible operations. We do this, among other things, by involving and deploying end consumers, municipalities and housing associations in a flexible energy system. This gives us a firmer grip on the number of peaks resulting from the energy transition, with the objective of reducing 30-40% of these peaks. In 2020, flexible capacity on demand was utilised 16 times in the Zuidplaspolder pilot and GOPACS, for 20 Megawatt in total.

Examples of flexibility projects are GOPACS, Zuidplaspolder and the test beds in Hoog Dalem and Bleiswijk.

Grid operators platform GOPACS successfully launched

GOPACS is a joint initiative of the regional and national grid managers that is intended to solve congestion issues, local and otherwise. The solution is based on local flexibility markets, with participating parties indicating at what price they are willing to consume more or less electricity or return it to the electricity grid. As soon as there is a risk of congestion on the grid, the grid manager appeals for flexibility. Flexibility crucially depends on the presence of enough participants with flexible demand for or production of electricity. In 2020, the first group of 27 customers were registered on the grid operators platform GOPACS. In this way, they, together with other participants, are increasing the availability of flexibility in the market.

In cooperation with an aggregator, we simulated a congestion situation in the Bleiswijk grid area in which we actually called up flexibility via GOPACS for an area in Zoetermeer. This fundamentally demonstrated our capability to utilise flexibility from the market with the GOPACS platform.

Expansion of electricity grid in Zuidplaspolder

Demand for electricity in Zuidplaspolder has increased significantly in recent years. To ensure that we can continue

to supply new businesses and new housing developments in this area with electricity in the future, we are expanding the capacity of the grid. To facilitate this, grid managers TenneT, Stedin and Liander are building a new high-voltage station alongside the A12 motorway – N219 expressway near Zevenhuizen in the municipality of Zuidplas. The construction of the new Zuidplaspolder high-voltage station is a major undertaking, the preparations for which began two years ago. The zoning plans need to be amended to permit the construction and installation of the cable connections. This requires the involvement of the municipalities of Zuidplas, Waddinxveen and Lansingerland. Once this process is completed, the preparatory work can commence in mid-2022.

LEF: Local, Energy and Flexible

The LEF concept involves a local energy system in which local residents and businesses smartly combine their own power generation and consumption. This drives down costs for themselves as well as the entire system. Test beds have been set up in Hoog Dalem (Gorinchem) and Greenparc (Bleiswijk). In 2020, the participants in the residential district of Hoog Dalem were challenged to actively reduce the peaks in the grid, for example by making smart use of their heat pumps or induction cooktops at times forecast in advance. At the end of 2020, three 12 kW batteries were installed at the participants in preparation for the launch of automated energy trading in early 2021. As much locally generated green energy as possible now remains in the district, and the peaks in our grid are reduced as a result.

Stedin is a member of Energy Web, which has established a blockchain specifically for the energy sector. We are applying this technology in the test bed being conducted in Hoog Dalem.

Stedin is working with the businesses participating in the Greenparc Bleiswijk pilot and Eindhoven University of Technology to develop a future-proof rates system for heavy-use connections. This system provides for more efficient use of available capacity in the local grid. We are also researching whether sustainable investments by customers in smart charging squares or battery storage, for example, can be better rewarded by applying this conceptual rates system. This pilot will go live in the second quarter of 2021.

Stedin is also providing support and know-how for customers' initiatives resulting in the creation of 'local energy communities', including the 'Groene Mient' (The Hague) and 'Eemnes Energie' projects.

Reinforcement

Reinforcement of the electricity grid entails lengthy lead times. As it takes roughly two years to replace a medium-voltage station, new solar farms often face a long wait before they can be connected.

Grid capacity problems on Schouwen-Duiveland and Tholen electricity grid

Grid manager Enduris expects that the limit for returning energy by large, new solar roofs and wind farms to the grid of Schouwen-Duiveland and Tholen will be reached in the foreseeable future. The solution for Schouwen-Duiveland and Tholen is to create an additional connection to TenneT's national high-voltage grid. This is a time-consuming undertaking, which takes roughly 7 to 10 years to complete on average. TenneT and Enduris have already spent two and a half years making the necessary preparations. The public consultation to determine the location for the station will begin in the first quarter of 2021. The station will not be completed until the end of 2025 at the earliest.

Notification of structural congestion

As temporary solutions will not remedy the problem, Enduris has formally given advance notification of 'structural congestion'. This means that Enduris will be unable to provide any capacity guarantee for large, new solar and wind farms on Tholen and Schouwen-Duiveland until the new connection is provided. This has no implications for consumers' new and existing solar panels, as there is still sufficient capacity for them on the electricity grid.

The RES for Zeeland sets out that the electricity grid on Schouwen-Duiveland and Tholen will soon reach its maximum capacity. There are therefore no consequences for the RES for Zeeland for the time being.

Generation

Regional Energy Strategies

The commitments in the Climate Agreement relating to electricity and the built environment require each region to develop a Regional Energy Strategy, or RES. In 2020, the 14 RES regions in which Stedin and Enduris are involved developed these plans further in collaboration with the provincial and municipal authorities and water authorities, among others. The regions face the complex challenge of making suitable choices in terms of ambition, support, space utilisation and infrastructure, among other things.

Services provided to RES regions

Stedin actively participates in working groups in RES regions, contributing knowledge of the structure of the grid and the most suitable places in the present grid for facilitating additional energy generation from renewable sources. Together with the regions, the ambition is further specified, backed up by grid impact assessments that have been carried out for all the regions. In this context, we determine the impact of the proposed scenario in terms of the required space, the time needed to carry out the grid expansions and the necessary investments in that regard.

Draft RES

By 1 October 2020, each RES region had submitted its draft RES. The total ambitions far exceeded the national target of 35 TWh large-scale onshore renewable energy generation capacities, with a total nationwide in excess of 50 TWh. It is good to see that there is so much drive to meet the climate targets. Many regions also focus heavily on using roof areas for the installation of solar panels.

Toward the RES 1.0 and beyond

The RES 1.0 should be ready by July 2021. The plans are being tightened up and made concrete at the regional level, in preparation for their submission to municipal councils. The next step is to draw up implementation plans and provide them with a solid legal basis in accordance with the Environmental and Planning Act (Omgevingswet). It is envisaged that these steps will enable permits to be issued in 2025.

Potential for tension

The impact analyses that were carried out show that major grid expansions are needed to facilitate the regions' plans. Expanding and reinforcing our electricity grids can take several years. This is due to studies that need to be carried out into the available space and purchasing and permit procedures, for example, as well as work that needs to be undertaken to involve local stakeholders in the process. The understandable desire among municipalities and regions is for investments in the grids to be made early in the planning phase so that, once the plans have been finalised, work can immediately forge ahead. Investing too early carries risks for Stedin. Plans can still change at a later phase. For example, planned wind turbines may be rejected after a participation process. Or a different energy solution or other area may be chosen. In that case, it is possible that the investment was not necessary or was not appropriate in that particular area. In addition, this may mean that a different investment, which does prove to be necessary, cannot be made as a result, or cannot be made in a timely manner. If network calculations show that our grid needs expanding, we try to get a concrete and certain picture. Once we have such a picture, we include the plans of a municipality or province in our investment portfolio.

Staying on course together

Linking municipalities' portfolio of projects to Stedin's investment calendar enables us to make the right investments in a timely manner. It also allows us to make the energy transition predictable and something we can plan for. It is important, therefore, that we stay on the agreed course together, even if that course offers more room for manoeuvre in the long term than in the short term.

RES for Zeeland from draft RES to RES 1.0

The RES for Zeeland, the Zeeland Energy Agreement, is the first regional energy strategy to make the step up from draft to a 1.0 version. All 15 stakeholders – the 13 municipalities in Zeeland, the province and the water authority – have agreed to the draft RES. RES 1.0 was formally presented to the PBL Netherlands Environmental Assessment Agency at the RES for Zeeland Stakeholder Event held on 29 October 2020.

The growth of sustainable energy generation in the province of Zeeland is steadily advancing. More than 500 MW in wind energy and 260 MW in solar energy installations have already been built in Zeeland. They supply roughly 5.5 PJ of sustainably generated electricity (1 PJ is enough to power approximately 15,000 households for one year). That is roughly 50% of the total target set out in the RES for Zeeland. To meet the remaining 50%, a further 160 MW of wind and 740 MW of solar energy capacity will be built until 2030.

Making network information available

Digitalisation and data management

To advance the energy transition in an affordable manner, Stedin needs to have digital insight into everything that happens in its grid. With this insight, it can make optimal use of the present grid and make data-driven investments to facilitate future developments. This requires our IT and OT infrastructure (OT infrastructure comprises the smart sensors in our network that detect whether the voltage is correct and reliable, for example) to be flexible, affordable and safe. In addition, all the information needs to be gathered and accessed in a way that enables the correct decisions to be made.

In 2020, the second version of the Stedin data lake was taken into use. Data lake 2.0 is a work environment for the data science team, as well as the new 'business intelligence' environment for all of Stedin, in which reports and dashboards are available. This lays the foundation for increasing amounts of data to be made easily available to staff. The migration to a cloud environment has been completed, ensuring that we can work more safely, efficiently and effectively. We have also finished implementing our data warehouse, in which data are placed in context and made readable so that they can be used by data analysts and data engineers.

Data science

The data science team completed several successful cases again in 2020. For example, the team demonstrated that we can detect the presence of hemp farms in the data from more than 2,000 smart grid terminals that have been installed in the grid. Work was also undertaken to develop models to provide short-term load projections for the electricity grid. These models are important for experimenting with the flexible consumption, generation or feeding in of electricity.

Models were also produced with which operational processes can be more efficiently supported. Processes that benefit from this include the assessment of photographs during the customer request intake phase, for example, as well as the planning of service engineer work schedules and efficiently creating a detailed design of an electricity grid for a district. These models will be taken into use in 2021.

Data governance

Data owners and stewards have been appointed across all of Stedin. The domains for which they are responsible have been defined and published. Data can now be more easily found within Stedin, which is a precondition for extracting more value from them. In cooperation with several departments, structured data quality measurements were set up to improve data reliability.

Next-generation assets

Next-generation smart sensors are being introduced in the grids to ensure continual and up-to-date insight into grid loads and the freely available capacity. Smart sensors enable us to carry out remote grid measurements and, depending on the specific sensor, perform remote switching or enable autonomous switching.

Medium-voltage stations

We are making medium-voltage stations smarter by installing Smart Grid Terminals (SGTs). The SGTs generate data, which we safely make accessible to make them available for use. Among other things, we collect data on the power that is being transmitted. The SGTs also assume the switching function for public lighting.

Distribution automation

Up-to-date insight into the quality and capacity of the distribution network is a key enabling criterion for our role as a system operator. In this light, policy for distribution automation (DA) was developed in 2020 in which this is elaborated. In mid-2021, we will switch to using a new smart sensor, the DA box. The installation rate of these types of smart assets will increase in the coming years. At the same time, work will be undertaken on implementing a read-out chain. This chain is a further development of the smart meter chain, in which optimum use is made of the lessons learnt from the smart meter chain. The data from smart sensors and meters provides us with up-to-date insight into the status of the grids and enables us to calculate the effects of future scenarios. This enables more efficient and effective management of our grids.

Low-voltage grid

Energy generation from renewable sources is accompanied by high variability in generation and consumption. This underlines the importance of also making the low-voltage grid (LV grid) smarter, to provide us with data on and insight into the situation at a part of the LV grid. DA light enables us to undertake rapid modification of our LV grid. Actual implementation will begin in 2021.

New algorithm for retaining voltage quality

In addition to a strong increase in energy feed-in, the energy transition is also giving rise to a significant increase in the fluctuation of supply and demand in the low-voltage network. As a result, the classic algorithm used by grid managers, which assumes predictable consumption and zero generation, is no longer adequate. Without additional up-to-date insight into the LV grid, this development will lead to decreased voltage quality and hence increased customer complaints. In case of disruption to energy feed-in, it may even lead to financial loss for customers. The insight provided by smart meters enables the grid manager to implement appropriate measures in a planned, timely and efficient manner. Without this insight, we can merely react in case of incidents and complaints, and we are then forced to resolve the issues, which may already be urgent, with sub-optimal measures at unnecessarily high cost. In 2020, several cases were developed and implemented that increase this insight into our current grid situation and also improve the ability to rapidly resolve and effectively remedy low voltage failures. As a result, we were able, among other things, to implement measures to prevent failures affecting customers and disconnect the output of solar panels before the problems could arise and affect the customer.

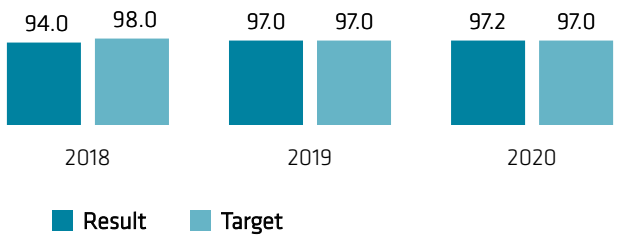
Telecom

Since October 2018, Stedin has been phasing in the use of a new fibre-optic network (Stedin Telecom Network) across Stedin's entire area. This modern telecommunications network establishes a data link between all the automation systems in transmission stations and the larger medium-voltage distribution stations in Stedin's area. This will improve our insight into the functioning of the energy grid. This network has now been implemented in The Hague and parts of Rotterdam, Dordrecht and Utrecht. The aim is to have completed full service implementation across Stedin's entire area by 2022.

Using available network information for the energy transition

The energy transition requires us to be able to conduct rapid assessment of our grids. This is referred to as 'quantifying grids'. The next step is a digital model of the grid that includes switching statuses and measurement data. This provides greater insight into business operations and grid planning. We also need to assess future grid designs in the context of the Regional Energy Strategies (RES). We use the solution for quantifying grids for this purpose. The insights gained into the challenges posed by the RES enable us to implement timely and targeted reinforcement measures.

Availability of smart meter data (in per cent)



Ensuring the safe, reliable and efficient availability of smart meter data is becoming increasingly important for facilitating market processes. Market parties seek optimum insight into their customers' consumption patterns and volumes so they can optimally predict their energy requirements and are expected to increasingly offer flexible tariffs to their customers. This will result in an increased number of smart meter read-outs. Legislation on a 24-month data storage requirement is also leading to a substantial increase in the number of smart meter read-outs. Guaranteeing the short and longer-term availability of connectivity for accessing and reading out smart meters is an important precondition. For this reason, Stedin uses the CDMA telecommunications network. In 2020, investments were made that make it possible to extend the service life of the CDMA telecommunications network until 2034. In 2021, we will install LTE meters at the locations that lack CDMA telecommunications network coverage. The negotiations with telecom providers on using the GPRS network are continuing, in cooperation with other grid managers.

Agreement between grid managers and solar energy sector

Solar energy companies are asking grid managers to connect their large PV projects at no more than 70% of their peak capacity in future. This is set out in a new agreement between Holland Solar and Netbeheer Nederland. The Dutch grid managers were closely involved in concluding this agreement.

The agreement provides a framework for the solar energy sector to work with the grid managers in relieving the burden on the electricity grid. Connecting PV systems with a heavy-use connection at just 70% of their peak capacity will enable more projects to be realised.

Crucial craftsmanship: Rashied Imambaks

Rashied Imambaks is a data engineer. What does 'crucial craftsmanship' mean for him? 'We often write the manual for our work as we go along. That keeps the work interesting.'

>What makes your work of vital importance? In other words, why is your work important for the organisation and society?
'The key question in my work is always: how do I get data from A to B? In my work, A is a source file and B is Data Lake, our system in which all the data come together. Data Lake is a sort of supermarket, a one-stop convenience store bringing together all the things previously available from different sources. We ensure that all the data are neatly laid out, so our analysts can quickly and easily pick out what they need. That way, they can more easily pinpoint bottlenecks from the data taken from smart meters, for example. This enables us to make smarter investments and savings.'

>How do you recognise a professional in your field?
'As we work in a relatively new field, the problems we encounter are also new. A good data engineer is inquisitive, focused and able to think out of the box. Our team comprises people from lots of different backgrounds, including an archaeologist. My own background is in hydraulic engineering.'

>What has working been like for you during the lockdown? What was different from normal and how did that affect you?
'Much of my work is computer-based, so I didn't have much difficulty switching to working from home. It took some getting used to not having any colleagues around me, but it has been a smooth transition. I did go into the office for a few days during the summer heatwave, however, when it got too hot at home.'

>How do you ensure that you remain fit and healthy yourself?
'I usually go to the gym, so my fitness levels dropped when it had to close during the first lockdown. But I have started exercising again since. I am reasonably careful about what I eat, although I will admit to cheating a few days a week – that's when I can eat what I want. That is also good for my mental health.'

>What gives you the most satisfaction in your work? In other words, how does your work help you maintain vitality?
'In my field, you need to constantly innovate, and I enjoy that challenge. We often write the manual for our work as we go along. Sometimes, we have to move data across six systems to another system. Then you have to test whether everything has gone as planned, since each step and each interface is different from the last one. You learn something new from each test. That is what makes this work interesting.'

3. Sustainable business operations

Craftsmanship is always at the forefront when we talk about sustainable business operations. We work to ensure safe conditions for our customers, employees and environment; professionally competent and vital employees are crucial to creating a strong company into the future. And with our One Planet approach, we work to have a positive environmental impact.

Safety and security

Safety, reliability and sustainability are of paramount importance for us, as our activities to construct and maintain the energy grids involve certain risks. A key element in carrying out our work safely is consideration for everyone involved: our own employees and externally hired staff, employees of supply chain partners, contractors and subcontractors and, of course, the customers and the environment. Close cooperation across the entire chain is essential to achieving a safe result. Therefore, crucial craftsmanship also means safe, sustainable and reliable working practices.

Craftsmanship

Sound craftsmanship, based on the right training and experience, is a precondition for carrying out our work. Compliance with safety regulations and guidelines requires constant attention. We therefore make sure that our employees receive safety training, which they repeat at regular intervals. Our employees have the correct personal protective equipment and high-quality tools, which are also checked and approved annually during the equipment audit.

Attitude and conduct

We understand that sound craftsmanship is important not just for safety and quality but also for the right attitude and conduct. We therefore paid ample attention to these matters in 2020, by providing our employees with regular training for the VCA, BEI and VIAG safety programmes. In September and October, we held our biannual 'E-days', which are intended for all electricians. The programme addressed everyday events and safe business operations, looking not just at hard safety rules but also in particular at the 'soft' aspects of safety, focused on human behaviour. In 2021, we will organise the 'G-days' for gas fitters.

Golden Safety Shoes presentation

The Stedin Golden Safety Shoes are presented each year as a sign of appreciation for people within Stedin Group who have demonstrated safety performance over a long period and/or in an exceptional manner. The way in which they have done so is an example to the organisation. The presentation of this award is a sign of appreciation for the person or persons in question as well as a means of promoting commitment to safety and raising safety awareness.

The Golden Safety Shoes were presented to David Henriquez, Ares Oosthoek, Peter Stam and Richard van Zuijdam.

Safety in the supply chain

Our supply chain partners also play an important role with regard to safety. Attitude and conduct linked to quality and safety are key priorities. In 2020, we carried out 2,814 workplace audits. We also make audit visits. We make our reports available in a portal so that our contractors can directly access our findings. During our quarterly visits to contractors to discuss the results, we examine their management systems and instructions framework, assessed

in accordance with the BEI and VIAG. We examine and discuss incidents and workplace accidents. Safety issues and policy are on the agenda of an annual executive review as well.

Each year, we present the Stedin Safety Award to the supply chain partner with the best safety and quality performance in the previous year. We presented the Stedin Safety Award on 14 October, in full compliance with COVID-19 restrictions, to BAM Infra Energie & Water West B.V.

Preventing workplace accidents

We do everything we can to prevent workplace accidents and place great importance on a safe and healthy working environment and minimising risks to achieve this. We define workplace or occupational accidents as lost-time incidents, which require alternative work or medical treatment. In 2020, we achieved our target of remaining below 34 accidents. We eventually recorded 26 such accidents.

Type of accidents for Stedin Group	2017	2018	2019	2020
Number of fatal accidents	0	0	0	0
Number of lost-time injuries (lost-time > 1 day, LTI)	37	24	17	3
Number of accidents entailing alternative work (RWC)	5	8	11	15
Number of accidents without lost time requiring medical treatment (MTC)	7	8	11	8
Total	49	40	39	26

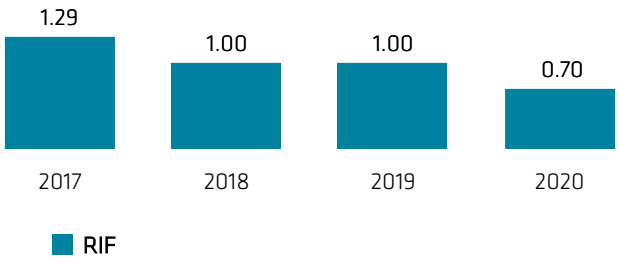
We monitor our safety performance on the basis of two ratios: RIF and LTIR.

RIF = Recordable Incident Frequency – the number of lost-time workplace incidents, incidents entailing alternative work or incidents requiring medical treatment per 200,000 hours worked;

LTIR = Lost Time Injury Rate – the number of lost-time workplace incidents per million hours worked.

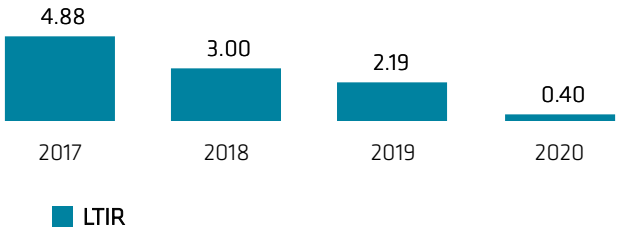
RIF

The recorded RIF in mid-2020 was 0.70, while the target was a maximum of 0.90.



LTIR

The recorded LTIR in mid-2020 was 0.40, while the target was a maximum of 1.95.



The coronavirus crisis has had a slightly positive effect on the safety ratios, with lower traffic volume and temporarily reduced work levels being contributory factors in this regard. Partly in this light, we intend to maintain the targets from 2020 for 2021.

Looking at the causes of the workplace accidents, we see that most are directly related to work, such as contact with electrical voltage or cuts and burns. Many others are attributable to falls and stumbling.

The significant level of traffic movements accompanying the roll-out of smart meters resulted in a large number of traffic accidents, often with no more than bodywork damage, but sometimes also causing personal injury. In early 2020, all the fitters received training with the aim of increasing traffic awareness. This training was a factor, together with the reduced level of traffic movements due to the coronavirus, that led to a substantial reduction in the number of traffic-related accidents.

Lost-time workplace incidents

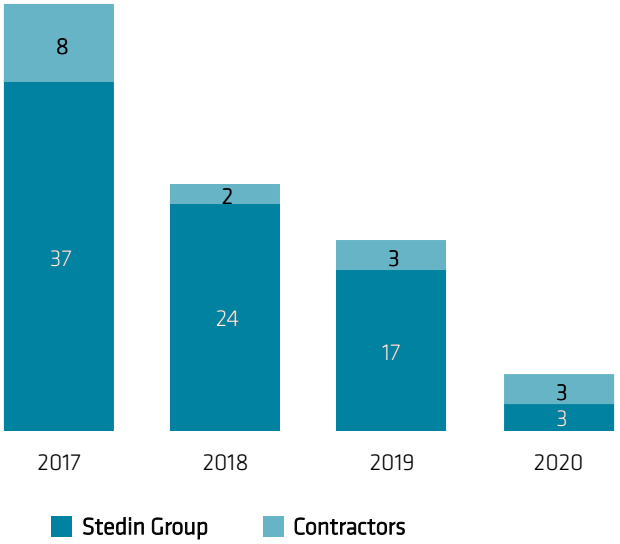
The following two charts show the causes of lost-time injuries, including their share in the LTIR.

Cause of accidents	2017	2018	2019	2020
At work	23	20	17	14
Falling, stumbling, slipping	16	9	11	11
Participation in traffic	10	11	11	1
Total number of accidents	49	40	39	26

Cause of LTIR	2017	2018	2019	2020
At work	1.71	1.25	0.77	0.13
Falling, stumbling, slipping	1.98	1.00	0.52	0.27
Participation in traffic	1.19	0.75	0.90	0.00
Total LTIR	4.88	3.00	2.19	0.40

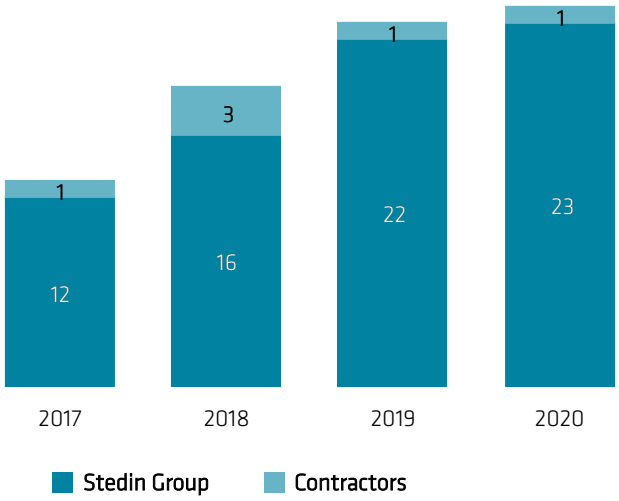
Lost-time workplace incidents, including contractors

The following chart shows the number of lost-time *workplace* incidents for Stedin Group and its contractors. The last three years show a downward trend. We believe that this trend can also be attributed to our efforts of raising safety awareness, not just in our organisation but also among our supply chain partners. In addition, we have provided temporary alternative work.



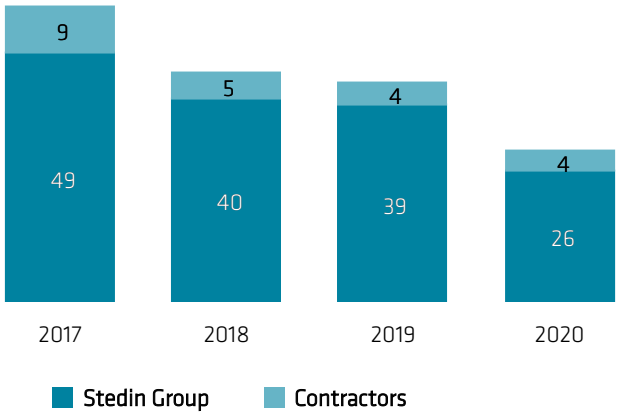
Workplace incidents without lost time

The following chart shows the number of workplace incidents *without* lost time for Stedin Group and its contractors. The employee in question continues to work and there is no sickness absence.



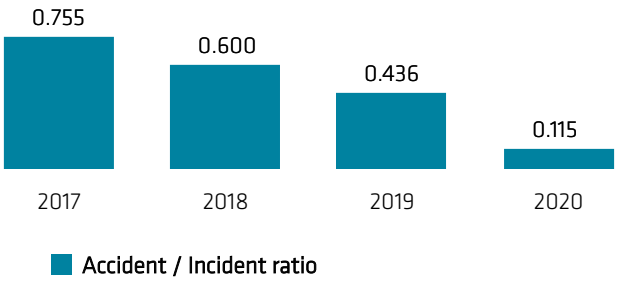
Total number of workplace incidents

The following chart shows the *total number of workplace incidents* as the sum of the number of *lost-time workplace incidents* and *incidents* without lost time for Stedin Group as well as its contractors.



Accident/incident ratio

The following chart shows the *accident/ incident ratio* for Stedin Group, which is the ratio between the number of lost-time *injuries* and the *number of workplace incidents*. The last four years show a downward trend.



Safety awareness

The entire Stedin Netbeheer organisation obtained certification for level 4 of the Safety Culture Ladder in the third quarter of 2020 via an external audit. This standard assesses safety awareness (attitude, behaviour and culture) and includes a total of five levels. A few years ago, in order to raise this safety awareness on a lasting basis, we began employing a multi-year safety programme HRO (High Reliability Organisation).

HRO has five key features:

- I think ahead.
- I am not afraid to ask and keep asking questions.
- I am prepared for the unexpected.
- I focus on solutions.
- I am open to the expertise of colleagues.

In 2020, we started with the final phase of HRO: after 'Raising Awareness' and 'Updating Knowledge', we are now focusing on 'Embedding Routines'. The associated activities are aimed at maintaining awareness and further improving mastery of updated knowledge. The focus is on continuous and individual learning.

Health and environment

Complying with the full range of environmental requirements and applying the correct environmental regulations in the various situations is not easy. In 2020, we began the development of a database that will act as a roadmap for the executing departments. We intend to use this database for training our employees and giving them a tool to help them in recognising, preventing and correcting environmental issues.

We also respond to legislation and regulations on hazardous substances or pollutants, such as asbestos, for example, which present risks to health in addition to the environment.

Crisis management organisation

In 2020, the Stedin crisis management organisation faced the greatest challenge to date: the coronavirus crisis. This is the ultimate test, a crisis unlike any we have ever known, which affects everyone and is lasting for an exceptionally long time.

This situation has proved that the approach we took with the updated Crisis Management Plan (CMP) is the correct one. We will incorporate the lessons learnt from the coronavirus crisis in an update to the CMP in 2021. Good information management within the crisis management organisation is crucial, especially now.

We are making good progress. Information coordinators have been trained, the information-driven way of working for crisis management – the grid-centric working concept – is being tested and the official GO-live moment is planned for early 2021.

Energy transition

Enhancing the sustainability of energy systems and the increasing impact of alternative energy sources, such as wind as well as solar energy, biogas and hydrogen, are giving rise to new challenges, including from the perspective of safety. This requires the timely creation of safety regulations, for example. These safety regulations are being developed using the experience we gain from carrying out work at our test locations.

Security

In 2020, we faced a series of burglaries and thefts from business vehicles and premises. This prompted us to take extensive preventive measures to secure our assets. Fraud and increasing aggression, threats and violence toward our employees required considerable attention, and we are working closely with the police and security firms to combat them.

Fraud and safety

Preventing energy theft and reducing network losses are important aspects of ensuring the safety of the grid. Fraud causes 17% of Stedin's total network losses. We are focusing, among other things, on detecting illegal energy consumption through provisional connections or meter manipulation. This can lead to extremely dangerous situations, such as fire or gas explosions. We are working with the police, local authorities, housing associations, the fire service and drinking water companies to identify fraud.

The total number of fraud cases in 2020 was 1,023. In 423 of these cases, hemp cultivation was involved, giving rise to associated losses in 2020 of €2,016,744 (2019: €2,877,874). Total detected network losses were 25,000 MWh for electricity and 800,000 m^3 for gas. Although no home visits or planned actions could be undertaken for several months due to the COVID-19 crisis, we nonetheless initiated more than 800 fraud cases.

Together with our data office, we successfully completed a project aimed at pro-actively detecting fraud involving our medium voltage assets. As a result, we are now able to detect fraud at an early stage and on a greater scale.

Cybersecurity

Large-scale digitalisation of the electricity grid as a result of the energy transition is accompanied by increased cybersecurity risks. Outside our company, new or current vulnerabilities in the field of cybersecurity are already being exploited by malicious parties, occasionally leading to significant loss or damage. This fact is acknowledged in laws and regulations. As a result, Stedin has been designated a 'vital service provider' pursuant to the Network and Information Systems Security Act (Wet beveiliging netwerk en informatiesystemen), under the supervision of Radiocommunications Agency Netherlands.

Cybersecurity is addressed at the strategic as well as the tactical/operational level within Stedin. Stedin applies internationally recognised standards in order to reduce its vulnerabilities to outside threats, with a focus on prevention, timely detection and the resulting actions. As Stedin bases its cybersecurity on the tried and tested Deming cycle for continuous quality improvement, we arrange to be regularly tested by external specialised parties.

In the field of cybersecurity, Stedin works closely with other organisations in the private and public sector, including the Cyber Security Council (of which our CEO Marc van der Linden is a member), the Vital Infrastructure Committee of VNO/NCW, industry association Netbeheer Nederland and the National Cyber Security Centre. We share information with these organisations on threats and measures, and we also collaborate with them to develop standards and provide mutual support in case of an actual threat.

Certification

In 2020, Stedin Group demonstrably complied with the standards and guidelines in the field of safety, quality management, asset management, environmental management and working conditions.

Stedin Group certificates

Stedin Netbeheer	Enduris	DNWG Infra
ISO 9001	ISO 9001	ISO 9001
NTA 8120	NTA 8120	ISO 14001
ISO 55001	ISO 55001	CKB
VCA**	ISO 27001	VCA**
Veiligheidsladder, trede 4		Veiligheidsladder, trede 3, HT
ISO 27001, Hoogspanning		ISO 27001, Multimedia
		ISO 27001, TUMS

Crucial craftsmanship: Fitsum Fesseha

Fitsum Fesseha is a fitter in the Gouda-Nieuwerkerk-Rotterdam region. What does 'crucial craftsmanship' mean for him? 'Working just makes me very happy'.

Why is your work of vital importance?
'Society simply does not function without power. Lots of things stop working if electricity cuts out. Power is important to everyone. As a child, I used to play with cables all the time, and now I'm replacing meters. I am pleased that my hobby from back then has now become my profession.'

How do you recognise a professional in your field?
'A skilled professional is someone who always comes home safely. They can also come up with creative solutions for problems and continue to develop. It is also very important to communicate clearly with customers. Customers need to understand what is going on and what needs to happen. I have just started my training, and I hope to continue learning and developing as much as I can in the coming years.'

What was working during the lockdown like for you?
'I ended up spending three months at home. My work is always carried out in people's homes, so I couldn't do my job. I didn't like being at home. My work makes me happy, and lazing around is not my thing. Every morning, I would wake up early. I used the opportunity to improve my Dutch language skills. I originally come from Eritrea, and I would really like to learn to speak Dutch perfectly. When we were allowed to go back to work, I felt uneasy. You want to be certain that everything is safe, for customers as well as yourself. There is also less contact, which is a shame – visiting people in their homes is a chance to practice my Dutch proficiency. Now, people stay in their living room, and there is less opportunity for a chat.'

How do you maintain your vitality?
'My work keeps me healthy. It involves plenty of movement, and I enjoy it. In addition, I often go for walks in the evening. A healthy diet also comes natural to me, so that's no problem.'

How does your work preserve your vitality?
'I really enjoy the contact with customers. People notice that I don't come from the Netherlands, and that generates plenty of interesting conversations. I learn a lot from what they explain about their jobs. I also love chatting to my colleagues. Even though we work alone, we still talk to each other regularly and they help me out. I have the job I want, and I look forward to going to work every morning.'

Vital employees in a changing environment

We are building the future of Stedin. The vitality of our colleagues is very important in this endeavour: crucial craftsmanship is our goal. This is done on the basis of several key pillars: leadership, learning & development, inclusiveness and agile adaptability in accordance with Stedin and its environment. This enables us to exercise control and to have the right people with the right skills at the right place. We increasingly do this on the basis of data and in cooperation with the entire Stedin organisation.

Vitality

Long-term employability

In terms of vitality and long-term employability, the COVID-19 crisis meant that 2020 was a very different year than we had expected. The focus was immediately on the vitality of our field staff and on our office staff working from home. Intensive and careful support arrangements were made for both groups.

'We look back on a year in which, given the exceptional circumstances, we can be proud of how we achieved this together. '

Field staff received plenty of guidance around the issue of personal safety, in terms of conduct as well as equipment. Staff working from home were provided with various means of support from the moment the instruction was issued to 'work from home if possible'. Everyone working from home was provided with the means to set up a good workplace, with an office chair, a monitor and headphones, for example. All the necessities were delivered to employees' homes at Stedin's expense. New resources, including courses, training programmes and materials, were also offered to support colleagues in establishing a new structure and maintaining their vitality in the new situation. In addition to the measures that were an essential response to the COVID-19 crisis, we also invested in long-term employability.

More proactive and individual guidance was offered in relation to performance and cases of absence, for example, and we were able to resolve these issues more quickly. For 260 colleagues, individual programmes were set up to provide tailored solutions: guidance in transitioning to another role within Stedin, improvement within the present situation or support in moving to a suitable workplace outside Stedin. This approach pays off, gives insight and yields truly sustainable solutions for employees and Stedin alike.

In 2020, as part of the new arrangements under the collective labour agreement, the Sustainable Employability budget of 500 euros per employee was widely highlighted in the organisation. This generated a positive response. There were 710 employees who used the Sustainable Employability budget for personal vitality initiatives.

Employee motivation

Each year, we carry out an employee motivation survey to provide insight into the degree of commitment and engagement among our Stedin colleagues. The survey yields detailed information on employees' perceptions of us at the team level. In the active follow-up after the survey, we initiate good dialogue, mutually and in teams, based on the insights and data.

Stedin applies two KPIs: commitment and engagement. In 2020, Stedin scored higher on both KPIs than in the preceding years as well as in relation to the set target. Against the background of COVID-19, this is a positive signal; the high degree of commitment and engagement is clearly being maintained in these unusual circumstances.

Commitment / Engagement	Target for 2020	2017	2018	2019	2020
Commitment	7.5	7.4	7.5	7.5	8.0
Engagement	7.7	7.7	7.8	7.8	8.1

Sickness absence

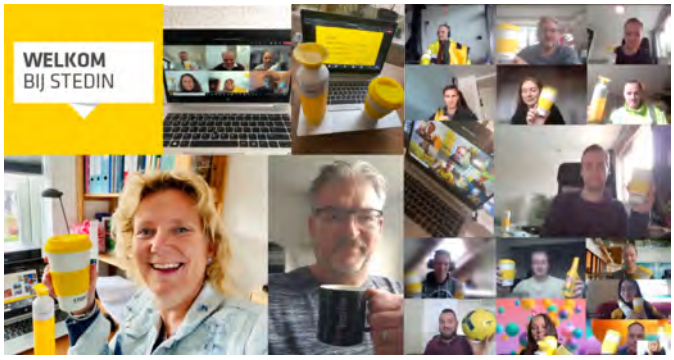
Recorded sickness absence was, on average, lower in 2020 than in previous years. This reduction in sickness absence is the result of combined efforts in support of a proactive and broad approach to employability. Sickness absence for the year as a whole was 4.2%.

Sickness absence	2017	2018	2019	2020
Average sickness absence in the industry and energy sector (second quarter of 2020)	4.6%	4.5%	4.9%	5.0%
Sickness absence within Stedin Group	5.2%	5.0%	4.8%	4.2%
Reporting frequency	1.0	1.1	1.1	0.9

Work-Life balance

The results of our Motivation Meter show a high degree of employee satisfaction with the flexibility in working hours. Stedin Group offers flexible working arrangements:

- The Collective Labour Agreement for Grid Operators (CAO NWb), which applies to Stedin, includes normal working hours from 7 a.m. to 9 p.m., Monday to Friday. Employees who do not work according to a schedule or who do not have fixed working hours can arrange their own working hours in consultation with their manager (even varying them daily). In accordance with the Collective Labour Agreement for Grid Operators, employees can purchase additional hours of leave on top of their statutory minimum entitlement from their monthly Benefit Budget.
- The Flexible Working Act (Wet flexibel werken) allows employees to increase or reduce their contractual working hours and to adjust their working hours and workplace. This Act naturally applies to Stedin's employees as well. A Vitality Scheme was also introduced.
- In consultation with the manager, and provided that a position is suitable, an employee may work on a flexible basis – for instance, choosing to work from home. Our employees can find further information on our Intranet. In connection with the COVID-19 pandemic, everyone able to work from home now does so. Employees have been provided with the facilities to make this possible.



The introduction mornings for new employees were organised as virtual events this year.

Care leave and special leave

Stedin does not provide on-site or other childcare. Employees who use childcare receive a payment from the central government and choose their own childcare provider. If someone dear to an employee becomes sick or in the event of an unforeseen, urgent situation requiring immediate action (e.g. picking up a sick child from school), employees are legally entitled to paid special leave (emergency leave or short-term leave of absence).

Moreover, employees are legally entitled to unpaid special leave (parental leave) for children aged up to 8 for 26 times their number of weekly working hours. Stedin pays employees 70% of their statutory minimum wage during their parental leave. Employees can take long-term care leave, during which time they receive 70% of their salary.

Leadership

It goes without saying that leadership is essential to guide the Stedin organisation through these turbulent times. At the same time, we have high ambitions when it comes to Stedin's role in the energy transition. Against this background, we therefore decided this year to conduct an in-depth review of our existing leadership profile, in close cooperation with various managers and a delegation from the Works Council. Our aim is to accelerate as an organisation and gain a clearer understanding of what we require in terms of leadership behaviour. The review also provides us with a clear picture of where we stand. In the leadership profile, we formulate aspects of helpful and unhelpful behaviour for achieving our ambitions for the future. In the coming year, all our managers will undergo a 360-degree appraisal in the light of this profile, and we will define a range of necessary resources for leadership development.

In addition, the following resources for leadership development are provided:

- *Strategy kick-start and two kick-forward days*. These days allow all our managers to acquire knowledge about strategic developments and translate them to their own teams. These sessions were arranged entirely online in 2020. The two online sessions were attended by 245 and 220 managers, respectively. They gave the online sessions a score of 7.9.
- *'Toekomstmakers' (Makers of the Future) Traineeship*, which is a two-year traineeship programme for talented new employees with the aim of training them to become 'leaders of the future'. The third class of seven new 'Makers of the Future' started in 2020. The first class has already successfully taken up permanent positions within Stedin.
- *Process Improvement (PI) programme*. We appoint a new group of PI leaders every two years. During this period, they work on improving processes, while being trained as 'black belts' in the Lean method.
- *Basic Cohesive Leadership*: an eight-month programme for new managers.
- *Horizon*: a 10-month executive programme**.** The aim of this programme is to support the development of our strategic executives and to achieve our mission of 'working together to create an environment filled with new energy'.

Learning & Development

We use various tools to support the continuous training and development of our employees. We offer a range of easily accessible options for all employees. We also encourage everyone, through the discussions between managers and employees, to undertake continuous training in their field and to invest in their personal development.

In 2020, 2,321 training programmes were followed. Total investment in training programmes in 2020 was €3,873,069: this averages at €1,096 per employee. These figures are for Stedin, including NetVerder and excluding DNWG, and also cover all the technical training programmes offered by our in-house training school.

In-house training school

By training people ourselves, we ensure that we maintain a substantial influx and internal advancement of new technically trained colleagues, even in these years where there is a shortage of technical staff. The in-house training school is a special part of Stedin. Many people have been able to acquire a stable position in society in recent years thanks to the in-house training school. Within the in-house training school, we also specifically invest in people with limited access to the labour market through special classes for residence permit holders and candidates under the Participation Act, among other things.

The in-house training school recorded approximately 34,000 applications in 2020 for technical training, safety training such as BEI and VIAG, and in-house safety training. Approximately 162 pupils were trained as junior fitters and obtained their senior secondary vocational education (MBO) diplomas in 2020.

Inhouse training school	2017	2018	2019	2020
Trained as fitters	279	300	350	361
Number of training programmes followed	33,509	27,411	30,000	34,000
Number of MBO diplomas awarded	89	73	169	162
Technology & Safety training budget (in € million)	€ 8.2	€ 10.0	€ 11.0	€ 8.8
People coming from other professions trained as smart meter fitters	88	82	51	0

Demand for specialised training programmes is set to change in the coming years. The focus in the past two years on training junior fitters who could set to work on replacing smart meters will make way for equipping personnel to become professionally competent fitters. Our aim is to create a pool of broadly deployable fitters who have the necessary knowledge and experience to be deployed across multiple operational units and to offer broader training to the current employees by actively focusing on training aimed at internal advancement.

In line with this development, we conducted a review of the positioning of the in-house training school in 2020. The work done by the in-house training school is essential for ensuring a continuous influx and the internal advancement of technical staff. It is our ambition to increase cooperation, within the supply chain as well as the sector as a whole, to make wider and more efficient use of our training capacity.

In-house training school during the intelligent lockdown

COVID-19 had a significant impact on the work of the in-house training school. The focus shifted to digital teaching and learning techniques as well as self-study. An all-out effort was also made to ensure that everyone could complete the practical portion of their training before the end of the 2019-2020 school year. All the study delays incurred due to the COVID-19 pandemic were made up in their entirety by the end of October 2020.

In consultation with Netbeheer Nederland, the persons responsible for the system granted dispensation for the safe working practices certification of employees (BEI and VIAG designations), which is mandatory for all grid managers. This backlog has now also been cleared.

In spite of these challenges, the in-house training school awarded no fewer than 162 MBO diplomas in 2020. As COVID-19 made the traditional diploma award ceremony impossible, a drive-in award ceremony was arranged instead. The site of the in-house training school was transformed into a 'drive-in cinema'. From the safety of the company vans and cars, the successful students watched a video before receiving their MBO diploma. In the video, the instructors, trainee supervisors, colleagues and Said Kasmi, Rotterdam alderman responsible for education, culture and tourism, congratulated the students on their achievement.

Various projects were carried out in the in-house training school in 2020 which we are proud to highlight:

- digitalisation of the learning opportunities within the switching centre and the apprenticeship programme (BBL);
- a personalised training plan within the apprenticeship programme (BBL) designed to enable students to graduate in spite of the COVID-19 pandemic;
- further development of teaching materials for the group of 16-year-olds, providing students with a more intensive and focused understanding of Stedin and its context;
- close cooperation with DNWG, delivering customisation in terms of the training programmes;
- further development of the in-house training school focused on the future in cooperation with grid managers and supply chain partners, among others. In particular, outsourcing, new construction, innovation and cost-efficiency were examined, providing a clear basis for further steps to be taken in 2021.

At work in the in-house training school

Inclusive society

Contributing to an inclusive society is an element of our One Planet strategy. Stedin Group is committed to working for equal opportunities and long-term employability for all. We want our workforce to reflect today's society, feel welcome and be treated equally, regardless of age, sex, religious beliefs, sexual orientation, background, level of education or disability. Stedin prohibits and does not tolerate discrimination. To this end, Stedin enforces its code of conduct and behavioural guidelines, which lay down the standards and values that we have agreed with one another. The basic principle is that we respect and value each other, with the understanding that everyone is equal.

The code of conduct and behavioural guidelines (including non-discrimination) are also the starting point for HR processes, such as recruitment, selection, promotion, remuneration and training. HR information is generally accessible and can be viewed by all Stedin employees on our Intranet. If an employee is uncertain about the application of any policy, they can obtain further information and assistance from an HR professional. If an employee disagrees with a decision, they can lodge an objection. Objections can also be filed with the Security & Integrity reporting centre. Click the link to read more about our integrity policy.

With respect to an 'inclusive society', we focus on three areas: a diverse workforce, working together to ensure everyone's continued participation and corporate social responsibility. The table on this page shows the KPIs for 2020 and the corresponding results. Further information on help for households to achieve energy savings is given in the section on 'Interaction with our environment'.

In 2020, work was undertaken with the aim of further framing policy around the issues of diversity and inclusiveness. To this end, an awareness-raising session was held with the top 20, and ambitions were formulated in the annual plan for 2021. In 2021, we will carry out a baseline measurement: quantitatively, to establish the actual composition of our workforce, and qualitatively, to assess

Inclusive society	Target for 2018	Realisation in 2018	Target for 2019	Realisation in 2019	Target for 2020	Realisation in 2020
Work placement posts for young people (in % of workforce)	>1%	100.0%	>1%	100.0%	>1%	100.0%
Filling of jobs under Participation Act	84.5	18.0%	90.2	48.0%	97.3	68.7%
Influx of residence permit holders in work-study programmes for fitters	10	100.0%	9	90.0%	9	11.1%
Help for households to achieve energy savings (via Energy Bank Rotterdam)	100%	10.0%	100%	54.0%	100%	30.0%

how inclusive our organisation is. We will then formulate targets for 2030 and draw up a roadmap for achieving them, with a focus on increasing support, and we will continue to carry out the activities per sub-theme that will help to advance this process.

Diverse workforce

We recognise and acknowledge all the target groups and have specific policy in place where necessary. Stedin's employees are entitled to freedom of association, and various target groups have exercised this right. This is explained in more detail below.

Young people: 22% of our workforce consists of young people and adults aged below 35. We encourage the influx of people from this group by providing BBL traineeships and a programme for 16-year-olds at our in-house training school, offering work placement posts (in 2020, and in spite of COVID-19, we were able to place 126 interns) as well as campus recruitment (third class of 'makers of the future'). In addition, many young, inspired employees are members of 'Jong Stedin Groep' (700 members), our young professionals network that focuses on mutual connection and building a successful organisation.

Number of work placement posts	2017	2018	2019	2020
Target for 2020 > 1% of workforce (achieved: 2,9%)	96*	109	122	126

* Excl. DNWG

Male/female ratio: Only 17% of our employees are women. The percentage of women in each job level is as follows:

- strategic executives: 35.5%;
- tactical executives and senior professionals: 19.3%;
- other job categories: approx. 16%.

Events are organised within Stedin Group by F-EMPOWER, a network that actively focuses on empowering female employees.

LHBT: while Stedin has no specific policy in this area, employees began organising so-called 'rainbow drinks receptions' in 2020. These gatherings are aimed, among other things, at helping to make employees feel more at ease about discussing their personal situation at work, even if it differs from that of their colleagues.

Limited access to the labour market: we make an extra effort to assist people who need a helping hand, so that they can find and hold on to work. In 2020, the focus was on people with an occupational disability (in accordance with the Participation Act) and residence permit holders.

Participation Act

Stedin Group is committed to implementing the jobs agreement under the Participation Act. The target for 2024 is to create 141 jobs under the Participation Act since it came into force in 2015.

The Service Team Operations was established in 2019. In this team, young people with an occupational disability (a jobs agreement indication issued by the Employee Insurance Agency (UWV) or the municipality) are trained as assistant

Golden Social Safety Shoes

To more clearly show appreciation for the aspect of social safety and to give this topic an additional impulse, Golden Social Safety Shoes were awarded in 2020. The Golden Shoes are awarded in recognition of employees who highlight the importance of a topic or incident within the broad field of social safety. The jury consists of the confidential advisers, the chair of the Works Council and the Compliance Officer.

In 2020, the Golden Social Safety Shoe was awarded to Anneroos Renaud and Laurens Ohlenroth for initiating drinks get-togethers that focus on people's everyday life. They wanted to create a space where colleagues could feel free to talk about their everyday life, in particular where it differs from that of most other colleagues. The jury believes that this initiative contributes to the feeling of 'being free to be who you are', creates openness and awareness of this topic and contributes to the social culture within Stedin.

fitters. Many of these youngsters come to us from employment-oriented education. In order to work as an assistant fitter for Stedin, they need to obtain several safety certificates. We adapted the training material to present a practical focus for this group, and we gave the work supervisors a role in passing the knowledge on to them. The results are promising, with a high success rate and a low drop-out rate. At the end of 2019, 17 people with an occupational disability worked for the Service Team Operations; by the end of 2020, this figure had been expanded to 37 trainee fitters. Several of them have already joined a regular operational team within Stedin. The plan is to grow the Service Team Operations to 49 trainees in 2021, which would represent more than 61 jobs under the Participation Act (one job under the Participation Act equates to 25.5 hours a week). We are actively seeking to attract more women to technology and engineering and to this training programme in particular. A group of seven women will join the Service Team Operations in January 2021.

We created jobs for people with an occupational disability elsewhere in our organisation as well, but the number is still less than anticipated. The main reason for this disappointing outcome is the coronavirus crisis and the restriction on providing close support and assistance to people in practice. We also had to let several candidates go. The growth of the Service Team Operations ensured that, on balance, 2020 showed an upward trend.

KPIs for Participation Act - Employees with an occupational disability	2017	2018	2019	2020
Target	12.3	84.5	90.2	97.3
Actual vacancies at year-end 2020	8.0	2.0	10.0	9.0
Filled as at 31 December 2020	8.1	19.0	43.4	66.9
Started but left	6.4	1.0	8.0	10.0

Residence permit holders in training & as fitters

In 2020, nine residence permit holders, who started on their work-study programme at Stedin in 2018, obtained their diploma. This is a wonderful achievement, as it means that they succeeded in completing their entire training within the normal two-year period. All nine candidates have been taken on as fitters at Stedin and receive language support, where needed.

The second group of residence permit holders, which started on the preliminary programme at Stedin in 2019, is now in the training programme in order to qualify as first maintenance technicians for low and medium voltage (level 3) at our in-house training school. Of the eight candidates who started on the programme, six have been offered a work-study position. The coronavirus crisis called a halt to this group's training and fieldwork, as a result of which they have fallen behind with their studies.

There was no influx of a new group of residence permit holders in a work-study programme at Stedin in 2020. We sought collaboration instead with the UAF (foundation for refugee students) to offer a place elsewhere in Stedin, in the form of a work placement or entry-level position, for example. This resulted in one work placement position in 2020. This brings the total number of residence permit holders that Stedin has taken on since 2018 to 20, of whom 17 still work at Stedin.

Employment

Digitalisation is changing the world around us, and with it our work as well. This has an impact on the roles and competencies that we need now and in the future. Some types of job will disappear altogether, while others will be redefined. Within various initiatives, we are providing for timely development of our people to embrace different ways of working, thereby ensuring employment. To this end, a mobility office was set up in 2020 to provide guidance and assistance in the process of finding a suitable new job. This is useful when someone is ready to make their next career step or may be necessary because a department is undergoing such change that employees need to look for a different, suitable job within Stedin. As part of concrete restructuring measures at the Market department due to digitalisation, we are currently providing close support and assistance to eight colleagues whose position has become redundant. We are fully committed to providing work-to-work guidance, inside as well as outside Stedin. If our focus on training and internal mobility does not produce the required results, we employ the safety net under our sectoral collective labour agreement to provide colleagues with work-to-work guidance outside Stedin.

As the environment in which we operate changes, our focus at Stedin is nonetheless on retaining jobs. By using data to continuously improve our ability to look ahead, we are able to choose proactively whether we can fill a vacancy with a colleague or whether we should take on an external worker on a temporary or permanent basis. Faced with the need to do more work with fewer people at many places in our organisation, we have to make efficiency gains. To avoid major restructuring, we provide instruments proactively to

get a grip on our headcount and prioritise internal advancement over influx.

Flexible use of temporary agency workers is limited as far as possible, depending on the type of work. A conscious decision may be made to use the temporary workforce in order to fulfil a need for temporary, irregular work. This situation may apply to temporary projects, to temporary support (e.g. maternity leave replacement) when specific expertise is momentarily required and to competencies that are very scarce (e.g. specialised IT staff). When using temporary contracts, we ensure that we comply with the applicable rules regarding their number and duration.

The percentage of external compared to internal employees in 2019 was 15.6%. In 2020, this figure was 14.2%. This ratio was affected by the impact of the coronavirus crisis on the workload.

Agility in a changing environment

The environment around us is changing at an ever-accelerating pace, and Stedin needs to adapt optimally to these changes. Some of the main developments we are seeing are the changing requirements in terms of knowledge and expertise. Against this background, we are focusing on people development in order to facilitate the internal advancement of colleagues. To gain more insight into the development of our personnel, a Strategic Personnel Plan was set up in 2019 and 2020.

In 2020, we made use of the first insights. Thanks to the tremendous efforts of our in-house training school in recent years, we know that we have enough junior fitters. At the same time, there is a growing shortage in trained intermediate and more specialised technical roles, and in particular in the area of ICT. These insights have enabled us to plan to permit greater differentiation in terms of current and future colleagues and to concentrate on recruitment and internal advancement.

In 2020, we invested in an entirely new salary & personnel administration system. This is an important step in our ambition to increase work efficiency, make processes simpler and more transparent and improve ease of use for all Stedin employees.

Stronger together

In 2020, we took a major step in the process of further integration with our subsidiary DNWG. We are providing HR support to the integration process by, among other things, making a toolkit available for all managers, by agreeing a transfer protocol for terms and conditions of employment with the trade unions and by opening up the Stedin mobility office for our DNWG colleagues as well. This will enable us to carefully facilitate the process of integrating all DNWG colleagues into the Stedin organisation in 2021. You can read more about 'Stronger together' in the section on 'Stedin Group's Activities'.

Works Council

In accordance with the Works Councils Act (Wet op de ondernemingsraden, WOR), Stedin has a Works Council. Consultation between the executive committee of the Works Council and the CEO of Stedin Group takes place on a fortnightly basis. Consultation with all the members of the Works Council takes place roughly six times a year. The Works Council, the Board of Management and the Supervisory Board additionally conduct tripartite consultations, and the chair of the Works Council takes part in the Strategic Coalition. As the Works Council comprises several different committees, it is well informed of the issues and developments in the organisation.

In 2020, Stedin was nominated for the '3D trophy' for its open, professional and constructive consultation framework encompassing the Board of Management, the Works Council and the Supervisory Board. The jury was impressed by the effective and accessible consultation structure of the 'triumvirate' of the Board of Management, the Works Council and the Supervisory Board within Stedin Group. We are therefore proud of this excellent cooperation and are convinced that this can play a key role in accelerating the developments in the organisation.

The photograph of the members of the Works Council was taken before the onset of the coronavirus pandemic. Top row from left to right: Marcel Steinz, Jorian Gauw, Aart van Mouwrik, Wendy Sinnema, Nicole Monteiro, Adri de Bruijne, Harrie Martens, Yeffrey van der Ven. Bottom row from left to right: Jack Steijger, Rik Bakker, Alco de Lange, Theo Nieuwburg, Arjan van Voorden, Ineke Kuijpers, Leo van den Ende and Bertus Schouten. Richard Buijtenhek and Mohamed Talhaoui are missing from the photograph.

Interview with Alco de Lange – chair of Stedin Group Works Council

'We have a shared interest, which is to ensure that employees can do their work well in a supportive environment.'

As chair of the Works Council, Alco de Lange worked hard with his team in 2020 on the challenges posed by the coronavirus pandemic and the integration of DNWG. What is he most proud of? 'That we safeguarded information and insights in a "Works Council dashboard", making them easily retrievable for successive Works Councils as well. We also agreed a set of processes with HR, about how requests for advice should be submitted, for example. We may not immediately agree on substance, but at least we agree on process.'

The role of company opponent is not one that fits well with the Works Council of Stedin. If anything, the opposite is true. According to Alco, 'we have a shared interest, which is to ensure that employees who want to contribute can do their work well in a supportive environment. There may be occasions when employees are set in opposition to the organisation or feel that they are. In such cases, it is good to have an employee collective with influence where they can share their concerns. We articulate the voices that can easily evade the Supervisory Board and Board of Management.' At the same time, Alco is mindful of Stedin's long-term interest, since that is also in the interest of employees. 'We are not against restructuring as such. Take the Market department, for example, where jobs are being eliminated due to automation. Our gut instinct may be that we must hold on to all these people, but we also understand that this is unrealistic. That is why we decided to set up an internal mobility desk, to see what is possible.'

Alco believes this is also where crucial craftsmanship comes in. 'Digitalisation is making specialised skills and craftsmanship increasingly important. One of the dilemmas we face is how much to outsource. We strongly favour keeping crucial work inside the organisation; outsourcing might appear cheaper at times, but it also makes us more vulnerable as an organisation. That underlines the importance of maintaining vitality. In this light, we are also pressing for more extensive options and the use of a sustainable employability budget.'

As part of the ongoing professionalisation of the Works Council, all the steps in decision-making processes and all the underlying documents were made transparent. 'That way, you can focus on substance without having to worry about who is allowed to say what about which topics. That builds trust.'

Themes in 2020

In terms of substance, two themes stood out in the past year: COVID-19 and long-term financing. 'When it comes to that, we completely share the view that additional capital is needed, and it is vital that we first take a critical look at our own finances. We also make sure that the savings programme is correctly applied. We need to ensure that we maintain performance thresholds, or we risk lowering our customer service standards. We pick up these signals and share them.'

And then there is COVID-19. 'With a core group of the Works Council, we are involved in safety issues and working practices in these exceptional times,' says Alco. 'Thanks to structural and direct coordination with the crisis team and the director of Safety, we were able to discuss and solve multiple bottlenecks. We now see that we came through the coronavirus crisis in the spring in a stable fashion and without many real tensions. That is something to be proud of. As the Works Council, we believe it is very important to keep our finger on the pulse. We pushed for a survey to be conducted amongst all employees, for example, to assess where there were needs. While many people were satisfied, some also expressed criticism, about office chairs, the costs associated with working from home or mental stress. We share ideas on future policy, such as whether homeworking, for all or some of the working week, should also be an option after the coronavirus crisis has ended.

The Works Council consists of 17 members, 3 of whom come from DNWG. This shows that the integration of DNWG and Stedin is already taking shape within the Works Council. 'We are already looking at working together more closely and intensively in other parts of the business as well. Vacancies are an example of this, where we already include DNWG. Works Council elections would normally be held in 2021. 'After asking the employees whether they had any objection, and in consultation with trade unions and management, we decided to postpone them for a year. On 1 January 2022, DNWG (Enduris) will cease to exist, leaving us with a single Works Council. This could lead to a Works Council without any DNWG representation. That didn't seem like a good idea. Most Works Council members will remain in place until the integration is completed, so that we retain the current Works Council composition during integration.

One Planet Thinking

We are making progress towards climate-neutral business operations in 2030. We are committed to facilitating the energy transition while also enhancing the sustainability of our business operations. In this way, we are building a future-proof society. We formulated our One Planet strategy to reduce our environmental impact.

We concentrate our efforts on those areas in which our impact is greatest: CO_2 and particulate matter emissions, use of raw materials and an inclusive society. The steps that Stedin Group is taking as part of its commitment to working for equal opportunities and long-term employability for all are described in the section on Vital employees in a changing environment.

In 2020, we additionally explored the potential for leveraging our activities to provide stimulus for the restoration of biodiversity in our service area. You can read more about this at the end of this section.

One Planet KPIs

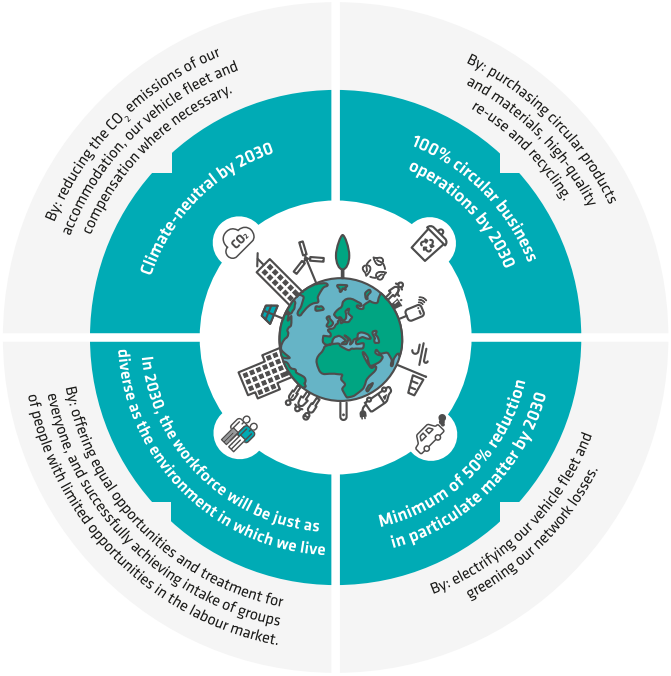
Stedin Group manages its One Planet strategy through key performance indicators (KPIs). The table below shows the KPIs for 2020 and the corresponding results.

CO2 and particulate matter emissions		2018	2019	2020
Compensation of network losses electricity	Target	100%	100%	100%
	Realisation	100%	100%	100%
Reduction of One Planet CO2 emissions (base year 2018)	Target	-14%	-9%	-18%
	Realisation	-2%	-13%	246%

Raw materials		2018	2019	2020
Purchasing volume of primary assets transparent via raw materials passport	Target	n/a	18.0%	100%
	Realisation	n/a	63.7%	96.5%

Science Based Targets

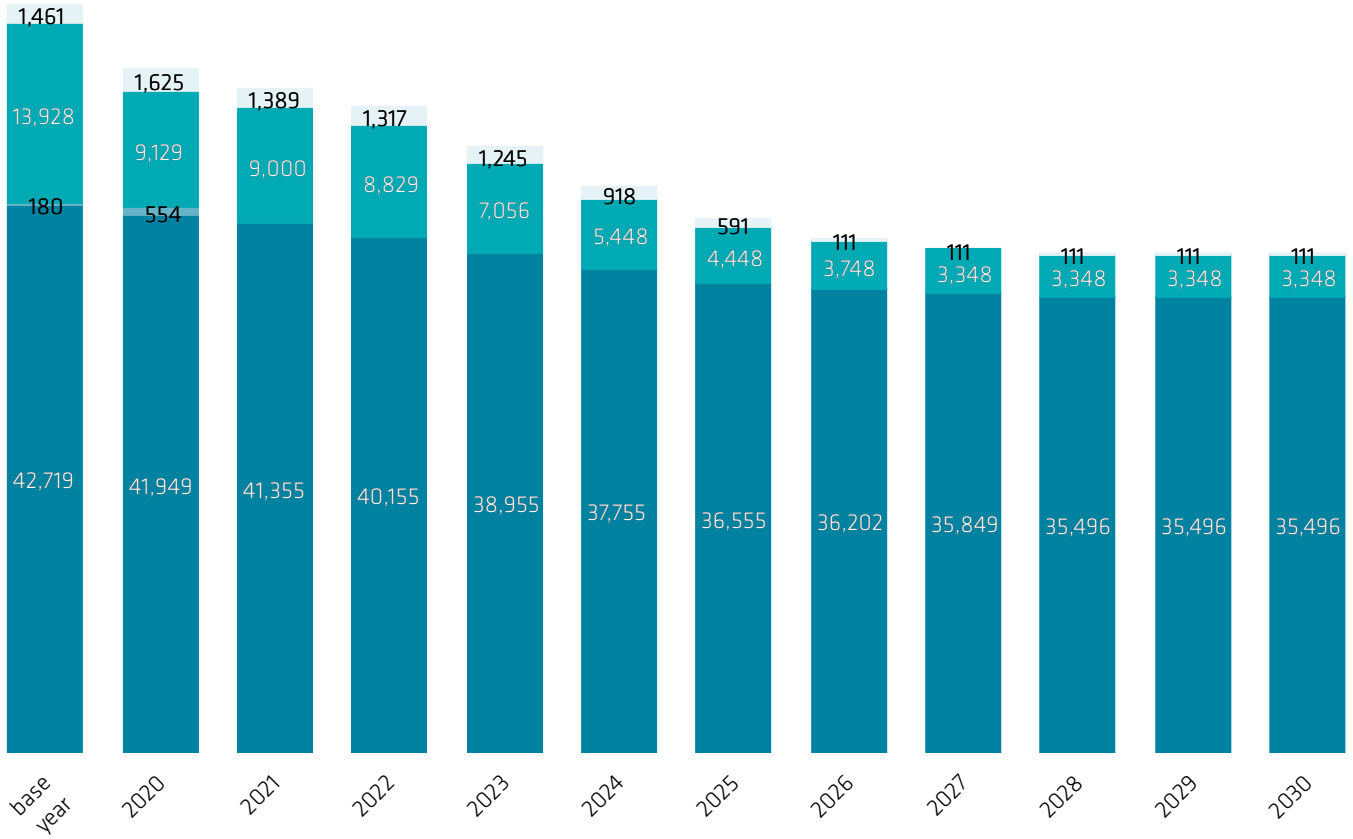
In 2019, we established on the basis of an analysis carried out by the Navigant (now renamed: Guidehouse) consultancy that, in the light of our performance and planned measures, we are operating within the Science Based Targets (SBTs).



These targets are based on the goal of keeping global warming to 'Well below 2°C' in 2050 defined by the Intergovernmental Panel on Climate Change (IPCC). This goal is translated into the maximum CO_2 emissions per sector (agriculture, industry, energy, etc.) and then into the maximum CO_2 emissions per company. In the case of Stedin, this means that we need to achieve a 30% reduction in CO_2 by 2030 relative to 2018 levels. Based on the current measures, we are projected to achieve a 33% reduction in 2030. While this is more ambitious than the Paris Climate Agreement objectives, it is still not enough to achieve our own One Planet goals. These calculations do not yet take into account the measures implemented to make the energy mix in the Netherlands greener.

To achieve the SBTs, we are working on further reduction measures to avoid, reduce, green and, where necessary, compensate the CO_2 emissions from our gas network losses. We are also advancing the electrification of the larger company vans.

The chart on the following page shows the projected results from our efforts in 2030 with regard to mobility, accommodation as well as leakage loss & network losses. These efforts will result in a 33% reduction relative to the base year, thereby enabling us to achieve the Paris Climate Agreement objectives. In this section, we explain the steps we are taking along this route.



Reduction yearly emissions in tonnes CO2 based on current and planned measures

Leakage loss & network losses G | Network losses E | Mobility | Accomodation

CO2 and particulate matter emissions

Climate-neutral business operations by 2030 translates to net zero carbon emissions from our accommodation, mobility and network losses. Reduction pathways have been defined with measures that ensure the reduction and greening of emissions in the period up to 2030. Following the allocation of responsibility for network losses from gas distribution with effect from 1 January 2020, the three large grid managers became jointly responsible for purchasing gas for gas network losses and leakage loss as well as the reporting of the related CO_2 emissions. It is our ambition to green 40% of gas network losses over a period of seven years from 2020. It may be possible to compensate the remaining 60% through the purchase of certificates; the precise details in this regard are for each individual grid manager to decide. For this reason, we have included the CO_2 emissions from our gas network losses in the CO_2 emissions from Stedin Group's business operations in 2020 in their entirety. This is the first time we have done so.

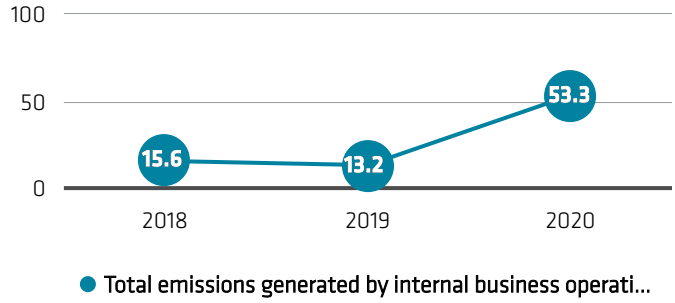
CO_2 emissions generated by One Planet business operations at Stedin Group

In 2020, Stedin Group's One Planet business operations generated 53,258 tonnes (53.3 Ktonnes) of CO_2 emissions (2019: 13.2 Ktonnes). Consequently, we did not achieve our reduction target. This increase was caused entirely by the addition of the statutory responsibility newly allocated to the grid managers to purchase gas to compensate for gas network losses and leakage loss. Stedin Group did not yet use options for greening or compensation of gas network losses in 2020. We are developing a strategy to reduce the CO_2 emissions from gas network losses in an acceptable manner.

CO_2 emissions generated by our business operations are divided into four main categories:

1. consumption of energy and CO_2 equivalents in our accommodation;
2. consumption of energy and CO_2 equivalents in our mobility, which includes our car use, commuting and business travel;
3. CO_2 emissions arising from the amount of electricity that Stedin purchases for its business operations. The largest contribution

comes from our network losses. This is energy that is lost during electricity transmission, which we must then purchase;
4. CO_2 emissions arising from the volume of gas that Stedin purchases for its business operations. This is energy that is lost during gas distribution, which we must then purchase as of 1 January 2020.

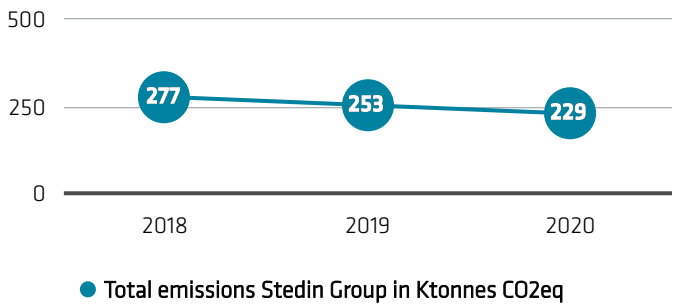


The reporting on CO_2 emissions in the chart above for 2017, 2018 and 2019 is based on main categories 1, 2 and 3. In 2020, category 4 was added to this list. Without category 4, Stedin Group's CO_2 emissions in 2020 would have been 11,308 tonnes (11,3 Ktonnes), which would have represented a further decrease in line with previous years. The comparative figures for 2019 and 2018 have been adjusted for emission factors (source: www.co2emissiefactoren.nl) where applicable.

Total CO_2 emissions by Stedin Group

The CO_2 emissions generated by Stedin Group in 2020 totalled 229 Ktonnes (2019: 253 Ktonnes).

Besides the CO_2 emissions of our business operations (53.3 Ktonnes), that figure also includes the emissions from generator units (2.5 Ktonnes), our electricity grid (1.0 Ktonnes), purchasing and investments (170.1 Ktonnes) and upstream emissions of purchased fuels, electricity and heat (2.1 Ktonnes). We provide a detailed overview of the CO_2emissions by Stedin Group in the table at the end of this section. The comparative figures for 2019 and 2018 have been adjusted for inflation, exchange rates and emission factors (source: www.co2emissiefactoren.nl) where applicable.



Reduction of emissions due to network losses and leakage loss

Network losses and leakage loss arising from the transmission of electricity and distribution of gas account for 18.6% of our CO_2 emissions. Stedin is committed to reducing the network losses as quickly as possible. Where possible, we commit to greening as compensation for CO_2eq emissions from network losses that we cannot reduce.

In 2020, various projects were undertaken with the aim of reducing or greening network losses. We installed solar panels on the roofs of Enduris's main distribution stations, for example, challenged suppliers in the course of various purchasing processes to deliver components with the lowest possible energy losses and examined measures for curbing network losses further. An example of action taken to reduce network losses is the replacement of our grey cast iron gas mains. This is done for safety reasons but has the additional benefit of preventing network losses, leading to lower CO_2 emissions.

Compensation of network losses

Each year, Stedin Group compensates 100% of the CO_2 emissions arising from the electricity that we purchase for our electricity network losses. At the moment, we do so by purchasing Guarantees of Origin (GoO). In the longer term, Stedin Group wishes to make the network losses more sustainable by entering into Power Purchase Agreements (PPA). This process involves us purchasing green electricity directly from a sustainable source such as a wind or solar farm. With effect from 2021, we will purchase electricity for 40% of our network losses under such a PPA. This figure should be over 80% by around 2030.

	Transport of electricity	Grid losses	Percentage
2016	20.270 GWh	1.020 GWh	5.03%
2017	21.893 GWh	1.052 GWh	4.80%
2018	21.330 GWh	1.076 GWh	5.05%
2019	21.100 GWh	1.069 GWh	5.06%
2020	20.171 GWh	953 GWh	4.50%

Solar panels on assets of Enduris and DNWG

In the final months of 2020, approximately 2,000 solar panels were installed on 11 high-voltage distribution stations belonging to Enduris. The panels will generate 550 MWh of sustainable energy per year for Enduris and will be used to keep its electrical plant and systems operational. The solar panels will cut the total energy consumption of Enduris's high-voltage stations by 35%. This in turn will reduce our CO_2 footprint by 80 Ktonnes of CO_2. The panels were only installed on high-voltage stations with ample available capacity for the foreseeable future, so that Enduris does not get in the way of other local initiatives for sustainable energy generation.

One Planet procurement policy

We take responsibility for our chain emissions, such as the emissions that occur at our contractors or that arise during the production as well as the transport of the components and assets that we purchase. We take the CO_2 footprint as well as other One Planet issues such as material usage and social working conditions into consideration in our purchasing processes. They form the basis for selecting suppliers. You can read more about this matter in the section on chain responsibility.

Assessing the environmental impact of purchased assets

To deepen our understanding of the impact of our purchased assets and allow us to assess the sustainability performance of suppliers, we teamed up with the other grid managers and CE Delft to develop an Asset Tool. This tool makes it possible to calculate the environmental impact for transformers, cables, pipelines, conductors, stations and switchgear. It also enables us to include the outcomes as an integral factor in sustainability weighting in the tendering process. The tool provides us with better insight into our impact in the chain and enables us to advance improvements in cooperation with suppliers and the sector.

Particulate matter

Although particulate matter is one of the four main topics of our One Planet strategy, it does not feature as a separate KPI. The reason is that particulate matter emissions are largely linked to our network losses and our mobility. By raising the sustainability of network losses through Power Purchase Agreements and electrifying our vehicle fleet, we will attain our 50% reduction target.

Reduction of CO_2 and particulate matter emissions via our mobility

At Stedin Group, mobility is divided into three categories: car use, commuting and business travel. We have a phased approach to making our mobility more sustainable based on the three As of avoiding, adjusting and augmenting the sustainability of what remains.

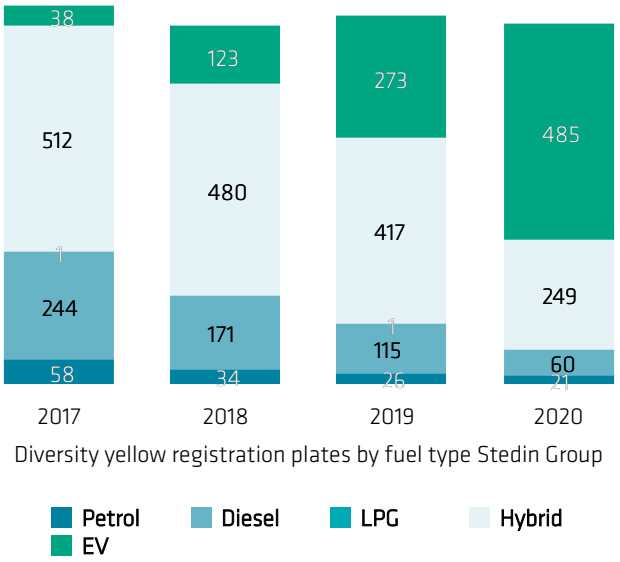
Making car mobility more sustainable

Together with the province of Zeeland, Stedin Group has one of the larger commercial vehicle fleets in the western Netherlands. In 2020, we had 815 lease cars and 1,356 commercial vehicles. Stedin no longer operates one of the 25 largest vehicle fleets. That is good news, since reduction makes the biggest contribution to enhancing the sustainability of our commercial vehicle fleet. Stedin Group aims to achieve zero carbon emissions for our entire business mobility by 2030, accompanied by a 50% reduction of particulate matter emissions. Since early 2018, vehicles with yellow registration plates may only be replaced with a zero-emission alternative. From January 2019, this also applies to lease cars.

The replacement plan is not only driven by our own ambitions: many towns and cities are planning to create zero-emission zones in the near future. This accelerates the need for a transition to a zero-emission vehicle fleet. In 2020, to provide for the charging needs of these vehicles, we studied whether it is possible to combine the construction and conversion of low, medium and high-voltage stations with the roll-out of charging infrastructure. We will continue this study in 2021 and will examine whether we can combine this charging infrastructure with local energy generation, through solar panels on the stations' roofs, for example.

Yellow registration plates by fuel type

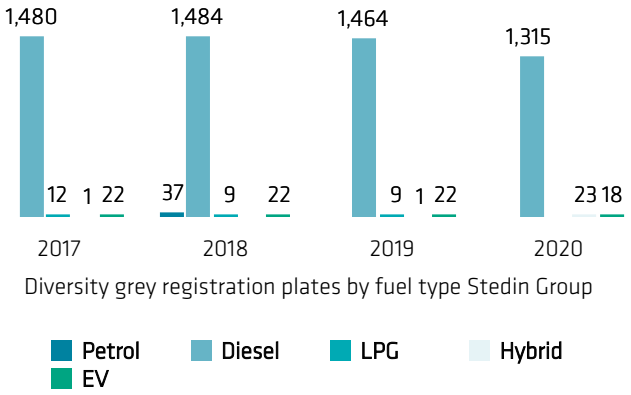
Electrification of our lease cars (yellow registration plates) is proceeding according to schedule. By the end of 2020, 485 of the 815 vehicles were electric.



Diversity yellow registration plates by fuel type Stedin Group

Commercially registered vehicles by fuel type

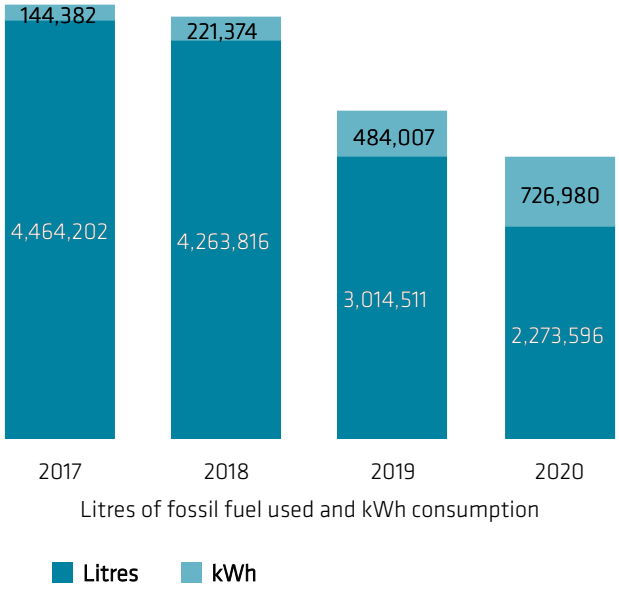
The pace of making our vehicle fleet more sustainable depends on the supply of alternatives to carbon-emitting vehicles. This supply continues to lag behind in the case of company vans in particular. These vehicles are heavier and also travel more kilometres. At the moment, there are no electric alternatives on the market for this category of vehicle. In 2021, we will carry out several pilot projects involving electric and hydrogen-powered vans. We will also explore organisational changes that can facilitate efforts to improve the sustainability of this category. A replacement plan has been developed for large, medium and small commercially registered company vans.



Diversity grey registration plates by fuel type Stedin Group

Litres of fuel used and kWh consumption

We have seen a decrease in the use of fossil fuels and an increase in electric charging. In 2020, we used 804,191 litres less fossil fuels (petrol, diesel, LPG) for our commercial and lease vehicles than in 2019. Electric charging of our commercial and lease vehicles increased by 1,638,072 kWh compared to the previous year.



Litres of fossil fuel used and kWh consumption

Commuting

Employees who have a free season ticket for public transport can travel by public transport for business as well as private purposes. In 2020, few employees used public transport in connection with the COVID-19 pandemic. We are also encouraging other sustainable alternatives at the same time, such as private lease arrangements for electric cars and a bicycle scheme. Business travel is undertaken by rail as much as possible. CO_2 emissions from air travel will be compensated in the future.

Stedin Group participates in initiatives stemming from the Climate Agreement for more sustainable business mobility. We also participate in the LowCarDiet initiative.

Impact of COVID-19 on One Planet

The coronavirus pandemic has had an impact on the sustainability performance of our business operations. This is clearly reflected in mobility. Since March 2020, business travel by air has been eliminated from our carbon accounting. Business travel by car, commuting and movements in our operational context have also fallen significantly. Entirely in line with our sustainable mobility vision, we aim to avoid co-workers replacing travel by public transport at this point with private vehicles, which are often a less sustainable form of transport. Working from home has become the norm, and we are examining how to encourage bicycle use once the crisis is over (including for longer distances).

While accommodation is also impacted by the pandemic, the effects will not become apparent for some time. Even with lower staffing numbers, our buildings still require heating and lighting. The long-term effect is related to the potentially changed role of the office as workspace once the crisis has ended if homeworking remains, at least partly, the norm.

Accommodation

Stedin takes a conscious approach to its real estate. This means that we implement sustainability measures when undertaking renovation, during use as well as in relation to mobility, for example. We green the CO_2 emissions from our buildings that we are unable to avoid or reduce by entering into green energy contracts with our suppliers.

In 2019 and 2020, we disposed of six locations in total. We make existing locations more sustainable wherever possible. Solar panels were installed on the roof of our office at Blaak in Rotterdam and our location in Utrecht in 2020. We also concluded a sustainable energy contract for all our locations in 2020, thereby reducing our CO_2 emissions. A renewed energy management system at our Utrecht location gives us detailed insight into our internal energy consumption and enables us, for example, to adjust the climate control system to boost energy efficiency.

More sustainable office facilities and services

Our facilities partners, such as cleaning, catering and coffee contractors, contribute to our One Planet strategy, from healthy food options and cradle2cradle cleaning trolleys to plastic reduction. In 2020, we invested in two composters to reduce organic waste by 85%. In this way, we are converting our waste stream into fertile compost and reducing waste transport and processing.

Stedin bags made of old grey fitters jackets in a sheltered workshop

Renovation of Anthony Fokkerstraat location

In 2020, the tendering procedure for the renovation of DNWG's head office at Anthony Fokkerstraat in Goes, Zeeland, was completed. Considerable attention was focused on sustainability, in terms of use of materials as well as energy and emissions, during the tender process.

The tender specified strict requirements as regards insulation, re-use of materials, measures to facilitate a green vehicle fleet and reduced energy consumption, for example. Energy label A is the starting point. In Zeeland, we are targeting the highest achievable goal, which is to meet all our energy requirements from our own sources. The aim is to close at least two other locations once the renovation of the building at Anthony Fokkerstraat is completed.

Use of raw materials

We aim to maximise circularity both from a sustainability perspective and for business reasons. We purchase products with as much recycled raw material content as possible, challenge suppliers to deliver products that facilitate maximum recycling after the useful life has expired and work with our waste processors to ensure the highest-grade recycling. Examples include the Fair Meter and circular cables. We have agreements in place with service providers for the responsible treatment of residue streams; they collect and process these streams for us.

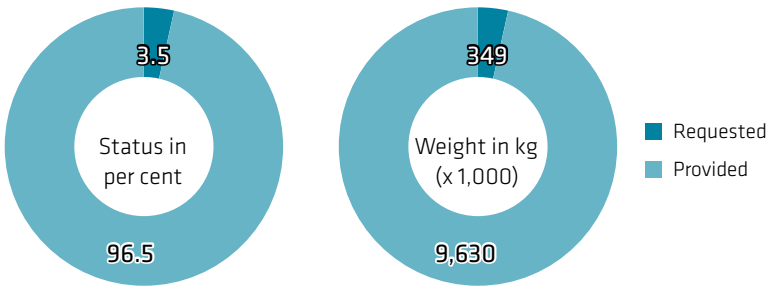
KPI for circular purchasing and the raw materials passport

As from 2019, we request suppliers to fill in a raw materials passport in tendering procedures for all our primary assets. This serves to ascertain the raw and other materials of which the product consists, how much recycled material it contains and the extent to which it can be recycled after its useful life.

In 2020, the 151 raw materials passports we requested from 17 suppliers mean that we made a passport request for 100% of our primary assets and obtained data on 96.5% of our primary assets. As the target for 2020 was 100%, including the assets of DNWG, we have consequently not yet met our target. The reason for this shortfall is that not all the assets ordered in 2020 will actually be taken up in 2021. Requesting a raw materials passport for these assets has been given lower priority than requesting raw materials passports for assets that will be used in 2021. The last raw materials passports from 2020 will be located as quickly as possible.

As we now have insight into 100% of our primary assets through the raw materials passports, we will focus on increasing the degree of circularity of our assets. We do this by analysing the data from the raw materials passports and by working with suppliers to explore options for increasing the circularity of assets. This can be achieved by using more recycled raw materials, for example, or by ensuring a higher recyclable percentage for an asset (high-grade recycling) after its useful life has expired. This shift in focus also means that the KPI will be changed in 2021 to '% circularity of purchasing of primary assets'. Based on our current understanding, we appear to be on course to achieve a circularity percentage of 34.7%. Our target for 2021 is 38%.

Status of request for raw materials passport based on total ordered weight (in kg x 1,000).



Focus on use of raw materials throughout the entire chain

To achieve a circular mode of operating, we also need to focus on reducing the use of raw materials in the organisation and extending the useful life of assets through re-use, among other things, and by finding high-quality and high-value applications for assets and raw materials after their useful life.

Stedin is targeting the development in 2021 of several programmes that will result in increased performance in the entire system from purchase to re-use and recycling. Circular thinking in this context leads not only to a more sustainable result but also an improved financial result.

Waste (in kg)

The table below shows the amount of waste from Stedin Netbeheer.

Waste	2017	2018	2019	2020
Total waste by type	6,400,386	8,588,912	9,576,136	8,885,295
Total waste disposal recycled	5,831,399	7,755,969	8,623,144	7,710,474
Total waste disposal non-recycled	568,987	832,943	952,992	1,174,821
% waste non-recycled	9%	10%	10%	13%
Total asbestos	487,730	771,930	718,550	756,645
% share asbestos in non-recycled	86%	93%	75%	64%

Phasing out 'SF_6' in switchgear

SF_6 is used as an insulation medium in our high and medium-voltage switchgear. The gas ensures that electrical arcs formed during switching are quickly extinguished. This property allows the switchgear to remain relatively compact, which is useful when switchgear needs to be installed in a station with confined space. SF_6 has a major disadvantage, however, because an SF_6 molecule has a CO_2 equivalent that is 23,000 times greater than a CO_2 molecule. As a consequence, SF_6 is harmful if released into the atmosphere. While most switchgear is leak-proof, a limited quantity of SF_6 is emitted each year. In 2020, Stedin added 5.84 kg SF_6 (2019: 7.57 kg).

Stedin will purchase thousands of items of SF6-free switchgear in the coming years. Stedin needs lots of new switchgear for expanding its electricity grids and is committed to doing so in the most sustainable way possible.

One Planet governance

The Board of Management (BoM) is responsible for the ambitions and objectives that have been formulated for Stedin Group. In 2016, the BoM approved ambitions that provide direction for Stedin Group's sustainability policy towards becoming a climate-neutral organisation by 2030. The strategy and results were also discussed with the Supervisory Board in 2020.

KPIs have been formulated for the main impact categories – CO_2 emissions, use of raw materials, particulate matter emissions and inclusive society – for the business units that have an influence on them. Results on the KPIs are reported to the BoM and the directors of the business units concerned every quarter. A quarterly analysis is also carried out of strategic risks and opportunities, which includes the topic of sustainability. The strategic risk 'excessive environmental impact' is not included in the Risk Management section, as this risk is managed within the defined risk tolerance.

Risks for Stedin associated with climate change and mitigation measures

We realise that there are business risks related to the effects of climate change, such as storms, floods and wildfires. The 'Task Force on Climate related Financial Disclosures' of the Financial Stability Board is one of the initiatives providing transparency guidelines in relation to these risks. In line with the recommendations of the Task Force, Stedin joined the 'Climate Adaption Coalition' in 2020. It is Stedin's ambition to continue working with the Coalition and to study the effects of climate change for our company in 2021.

Success of the loans for private solar panels scheme (PV Privéregeling)

In 2020, Stedin once again made interest-free loans available to its employees, under the work-related expenses scheme, to enable them to purchase solar panels. In total, 147 Stedin and 60 DNWG colleagues received a loan under this scheme. This facility helps to cut 200,000 kg in CO_2 emissions each year.

Sustainability rating

Rating agency ISS ESG gave us a 'B' rating for sustainability in 2020. This prime rating sets us apart as one of the top performers in our sector.

Allocation and impact report for green bonds

Stedin Group issued green bonds for the first time in its history in 2019. A green bond enables money to be raised for environmentally friendly projects. Green bonds are similar to traditional bonds in terms of the way they work. Their pricing is the same, and they are traded in the regular manner on the stock market.

Stedin Group has put together a selection of green projects for which it has issued a bond loan. We invest the money raised in sustainable refurbishment of our office buildings, in rolling out smart meters and in our grid. This latter category covers connections of large wind and solar farms as well as investments that facilitate a greater input of sustainable energy. Bonds were issued for a total amount of 500 million euros. You can read more about how the money raised through green bonds is used in the allocation and impact report.

Stedin Group will continue to explore opportunities for green financing into the future, based on the Green Finance Framework, which is available on our website.

Groene Netten coalition

Groene Netten is a coalition of the eight largest infrastructure operators in the Netherlands: Alliander, Enexis, Gasunie, KPN, ProRail, Rijkswaterstaat, Stedin and TenneT. Together, we account for no less than five per cent of all the energy consumed in the Netherlands. We realise that this enables us to have a tremendous impact, which is why we have set ourselves a goal: to work together to accelerate the transition to the new, sustainable economy. We do this by collaborating on various concrete projects within four core themes: climate, circularity, biodiversity and measuring impact. Against this background, we are developing long-life cables, for example, and we are working towards 100% sustainable energy and lowering CO_2 emissions.

In 2020, all the parties undertook an 'Impact Journey', during which the first steps were taken towards adopting socio-economic financial statements and focusing on broad prosperity. The working group also implemented transparency in the raw materials passport, and a major project was launched to examine the feasibility of joint internal carbon pricing.

New theme: biodiversity

Biodiversity restoration is a relatively new topic on the sustainability agendas; the UN has proclaimed 2021 the year of biodiversity. In 2020, the Groene Netten coalition adopted biodiversity as a new theme; there is a unique opportunity to create a national ecological infrastructure by linking the multiple Groene Netten locations and sites. Stedin's area together with the land of other Groene Netten parties can play a part in ecological recovery in the Netherlands. In 2020, this prompted the development, together with Dutch Butterfly Conservation, of a new ecological main infrastructure, which sets out that Groene Netten parties jointly manage 922 square kilometres of land and water – more than the Veluwe national park and a quarter of the land-based nature in the Netherlands. This is spread across an infrastructure network covering 802,500 kilometres.

In 2020, the strategy was developed that Stedin intends to follow as regards this new topic, the first projects were identified and a start was made with 'no-regrets' measures. The programme will be further developed by Stedin and Groene Netten in 2021, and we will launch three major projects across the country.

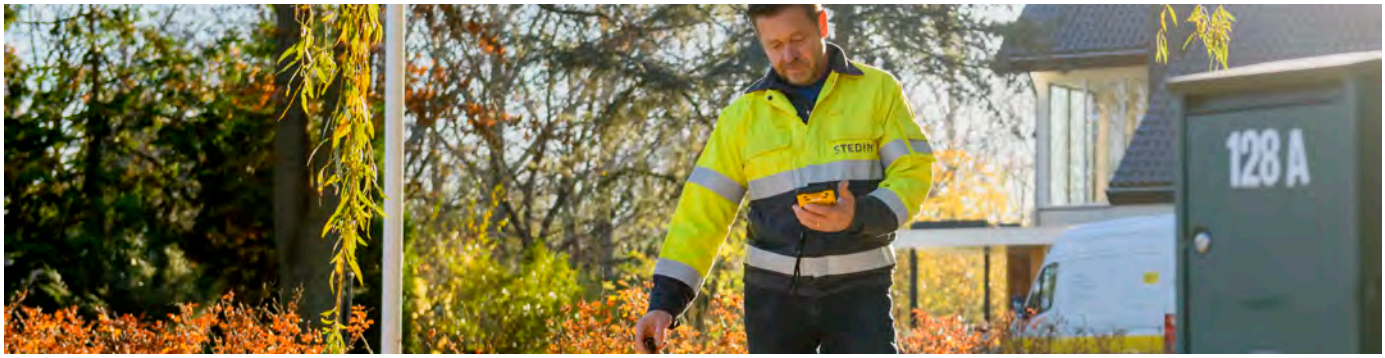
Detailed information on CO_2 emissions by Stedin Group

The comparative figures for 2019 and 2018 have been adjusted for emission factors (source: www.co2emissiefactoren.nl) where applicable. The energy intensity ratio is the energy consumption (in GJ) divided by annual revenue (in million €). The GHG emission intensity ratio is the total greenhouse gas emissions including greening (in tonnes CO_{2eq} divided by annual revenue (in million €).

Transport	Unit	2018	2019	2020
Transport of electricity	GWh	21,330	21,100	20,171
Transport of gas	million m3	4,852	4,651	4,365

Energy intensity ratio	Unit	2018	2019	2020
Energy consumption	GJ	233,927	182,168	157936
Annual revenue	€ million	€ 1,268	€ 1,234	€ 1,228
Energy intensity ratio	GJ/€ million	184.5	147.6	128.6

GHG emission intensity ratio				
Scope 1	Unit	2018	2019	2020
Gas consumption of buildings	tonnes CO2eq	635	454	458
Leakage loss of natural gas grid	tonnes CO2eq	42,719	42,181	41,949
Lease & company cars	tonnes CO2eq	10,193	8,856	7,311
Total	**tonnes CO2eq**	**53,547**	**51,491**	**49,718**
Scope 2	Unit	2018	2019	2020
Electricity/heat consumption of buildings	tonnes CO2eq	826	238	1,168
Electricity grid losses	tonnes CO2eq	432,364	433,167	386,264
Total	**tonnes CO2eq**	**433,190**	**433,405**	**387,432**
Scope 3	Unit	2018	2019	2020
Commuting, business trips, flights	tonnes CO2eq	3,735	3,419	1,818
Total	**tonnes CO2eq**	**3,735**	**3,419**	**1,818**
Total	Unit	2018	2019	2020
Total footprint	tonnes CO2eq	490,472	488,315	438,968
Greening	tonnes CO2eq	-432,364	-433,167	-386,264
Total including greening	**tonnes CO2eq**	**58,108**	**55,148**	**52,704**
Annual revenue	€ million	€ 1,286	€ 1,234	€ 1,228
GHG emission intensity ratio	tonnes CO2eq/ million €	45.2	44.7	42.9



Crucial craftsmanship: Dave de Wit

Dave de Wit is a gas-free specialist. What does 'crucial craftsmanship' mean for him? 'Ensuring a healthy mind in a healthy body.'

>What makes your work of vital importance? In other words, why is your work important for society?
'My work focuses on the safety of gas grids, and together with my team, I remove gas pipelines that are no longer in use. This can be because customers have switched to another energy source, for example. These types of pipe remain pressurised, which can give rise to dangerous situations They need to be removed. Many customers are fine with that, but they are not so happy when they hear that this involves digging up their garden. We are currently developing a pipe puller, which will enable us to extract the pipe without having to dig a trench and with minimal damage to the garden, other than a hole in the outer wall. We are now conducting a pilot project. Customer response has been very positive so far.'

>How do you recognise a professional in your field?
'A strong sense of safety and customer experience is a key priority. Creativity within the framework of safety is also important. We come across countless different situations in our work, from gas meters behind sofas to ones installed in small sheds next to houses. If you have a solution for all these types of situation, that makes you a true professional '.

>What has working been like for you during the lockdown? What was different from normal?
I have worked for Stedin for more than 40 years, and I'm just not used to working from home. It does save a lot of travel time, though. Quite often, I'd be stuck in traffic from where I live. That is one thing I definitely don't miss. I do miss my colleagues – communicating on a little screen is not the same. Keeping your distance when working on the pipes outside also takes some getting used to. Sometimes, you come across something you want to show someone, and then you find yourselves standing too close together before you realise it. That is why we've agreed to keep each other on our toes.'

>How do you ensure that you remain fit and healthy yourself?
'I work out for half an hour every morning on the spin bike, which has a TV screen, in my garden shed. We also have a large dog who needs taking out for long walks three times a day. My wife and I take turns doing this. I have always done a lot to keep fit, and then, suddenly and unexpectedly, I had a heart attack two years ago. It was touch and go; the ambulance arrived just in time. That's a sign that something is not right in your body. I took it as a warning signal and a prompt to make extra sure to get enough exercise, at work and when at home.

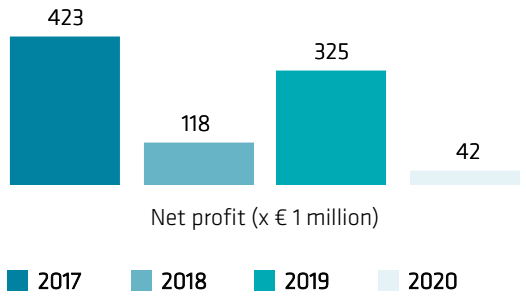
>What gives you the most satisfaction in your work? How does your work help you maintain vitality?
'Pioneering, trying to solve things, making the transition from policy to practice – these are the things that give me satisfaction. The pipe pulling project also includes several young fitters from the in-house training school. Innovation projects like this provide them with a great learning ground, and we learn from them as well. They're not yet stuck in a certain way of thinking, which helps them come up with good ideas. That is great to see.'

4. Financial results

Stedin Group achieved a net profit of €42 million in 2020. The earnings are in line with our expectations.

Financial results over 2020

After deducting taxes, Stedin Group's net profit before profit appropriation was €42 million (2019: €325 million). Earnings had therefore fallen by €283 million compared with 2019. The 2019 earnings included €251 million related to the sale of Joulz Diensten. Adjusted for this non-recurring effect, earnings in 2020 decreased by €32 million compared with 2019. A total of some €6 million of that decrease was related to COVID-19. Thus, in the period of COVID-19, we saw lower revenue from high-use customers, higher costs for absence of own staff due to illness and quarantine measures if they experienced symptoms of illness, partly offset by lower costs of contracted work, and a lower level of activity.



The coronavirus crisis therefore certainly had negative financial consequences for Stedin Group, even if they were limited. TenneT's higher transmission costs also pushed down the result. Further implementation of efficiency measures and lower energy costs for network losses helped to shore up the profit.

The lower level of activity due to COVID-19 was partly offset by scaling back slightly on external staff and through the broader deployment of our fitters. Despite COVID-19, we made substantial investments in a future-proof grid: €620 million (2019: €646 million).

Working effectively and efficiently

As part of our strategic spearhead 'Sustainable business operations', it is important to ensure and retain our financial health. A continual focus on working effectively and efficiently is one of the pillars within 'Financially healthy'. We are not only looking to achieve savings on operating expenses. We also critically review whether investments are really necessary, thus ensuring that Stedin remains a reliable and flexible partner in the energy transition.

In 2018, a five-year efficiency programme was launched with the aim of continually reducing our expenditure by approximately €150 million compared with the 2017 level. At the end of 2020, we had realised €109 million of this. We are therefore well on track to achieve the total level of savings of €150 million by the end of 2022. As we have so far been readily able to achieve the savings, we decided this year to further increase the 2025 target for structural savings on our expenditure compared with the level of 2017 to €180 million. In 2021, we will review whether further possibilities for savings exist.

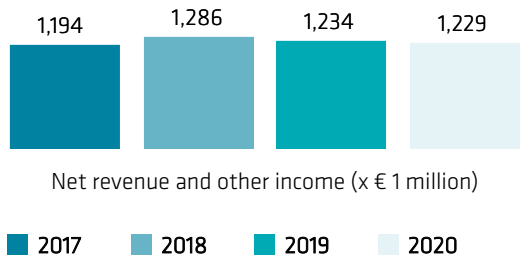
We are realising a large part of the efficiency improvement this year through the results on our strategic initiatives, under which we work more intelligently, make greater use of digitalisation and collaborate more in chains with customers, suppliers and utilities. We are also seeing positive results in our efficiency from the phased integration of DNWG in Stedin Group. We are on track with this as well. You can read more about this topic in the section on Improved grid management.

We are continually working more efficiently, but the volume of our work is also increasing. This resulted in an increase in costs in absolute terms, compared with 2019.

In 2021, we will initiate a programme to organise our failure response procedure more efficiently. We aim to achieve our efficiency objectives through these and other initiatives.

Total net revenue and other income

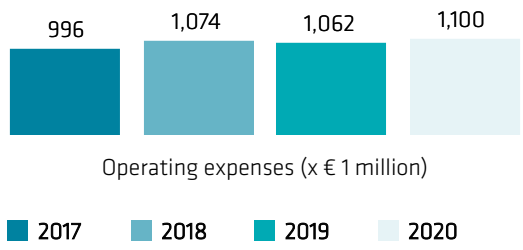
Net revenue and other income for 2020 amounted to €1,229 million. This is € 5 million less than in 2019. Regulated revenue from high-use customers decreased compared with 2019 due to a decrease in peak capacity and peak volumes, mainly as a result of COVID-19. In addition, net revenue and other income for 2019 had included four months of revenue (€16 million) of the sold Joulz Diensten. This decrease in net revenue and other income was partly offset by higher regulated revenue from low-use customers due to increased rates and higher non-regulated revenue.



In the metering domain, the rates are set by following the decision on rates (tariefbesluit) of the Netherlands Authority for Consumers and Markets (ACM). The rates also included a reduction to compensate for the surplus profitability achieved in prior years.

Operating expenses

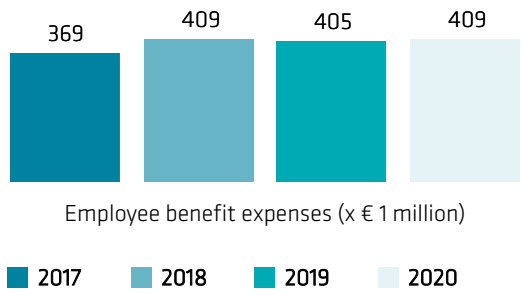
Our operating expenses rose by €38 million (3.6%) in 2020 to €1,100 million). This was mainly attributable to higher transmission costs, partly offset by lower other expenses.



The transmission costs charged by TenneT amounted to €165 million and were the reason for a €40 million increase in operating expenses compared with 2019. This increase was partly offset by lower energy costs for network losses.

Personnel expenses

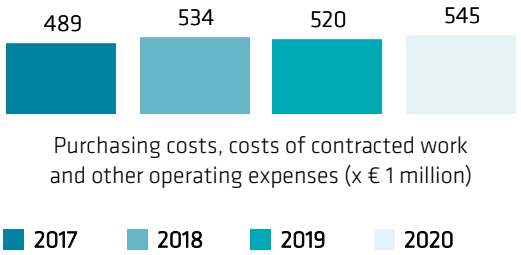
Personnel expenses amounted to €409 million in 2020 (2019: €405 million).



The increase of the personnel expenses was driven by a wage increase under the Collective Labour Agreement, an increase of the accrual for leave days and higher costs per FTE temporally hired externally. Also, lower costs for temporary hiring were allocated to the assets in 2020. This was partly offset by a decrease of the costs amounting to €5 million that related to Joulz Diensten in 2019, and the average number of FTEs (both own personnel and temporary external staff) decreased compared with 2019.

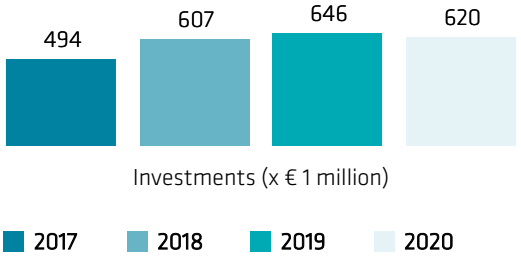
Purchase costs, costs of contracted work and other operating expenses

Purchase costs, costs of contracted work and other operating expenses increased by €25 million (5.0%) in 2020 to €545 million. This increase was mainly attributable to the rising transmission costs of TenneT and an increase in the costs for ICT and EDSN. This was partly offset by lower costs for network losses and lower other expenses, partly due to savings that were achieved. Moreover, the costs of Joulz Diensten are no longer included.



Investments

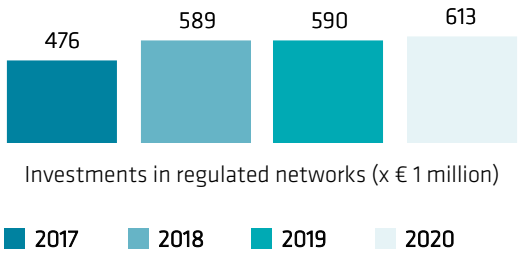
Investments in property, plant and equipment and intangible assets in 2020 amounted to €620 million, a decrease of 4.0% (2019: €646 million).



Due to the coronavirus crisis, the volume of work we were able to perform at customers decreased. This impacted our grid-driven investments and the roll-out of smart meters. Due to the second wave of the pandemic in the autumn and

winter and the associated strict measures, we were unable to compensate in the second half of 2020 for the decrease of the first half of the year. The large majority of the investments that were planned for 2020 but were not carried have been deferred to 2021. This increases the operational challenge for 2021 and subsequent years.

Investments in regulated networks increased from €590 million in 2019 to €613 million in 2020. This was mainly attributable to an increase in customer-driven investments (including further growth in investments to improve sustainability) and an increase in grid-driven investments. In the Strategy section, we describe what we are doing to remain financially healthy,given this increasing level of investment.

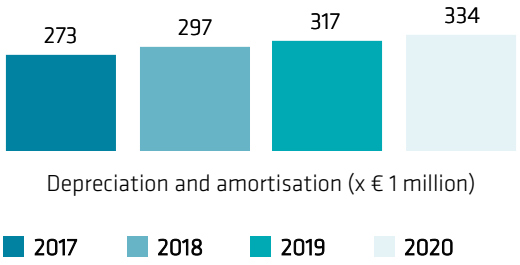


The nature of the investments is described in more detail in the section on Improved grid management.

Hours worked by own and externally hired staff that are allocated directly to own investment projects are deducted from the operating expenses. Compared with the preceding financial year, the costs of capitalised own production of our own staff increased by €8 million (4%) to €188 million, owing to increased investments in our grid.

Depreciation and amortisation

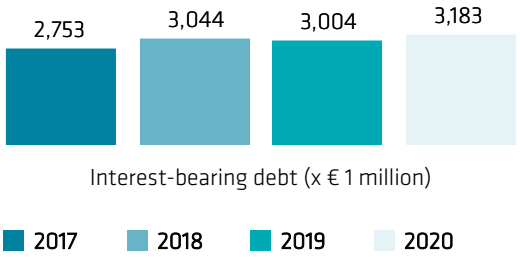
Depreciation charges and impairments of non-current assets amounted to €334million, an increase of € 17 million (5.4%) compared with the previous year. This increase resulted from the growing balance of property, plant and equipment and a shortening of the useful life of part of the smart metres.



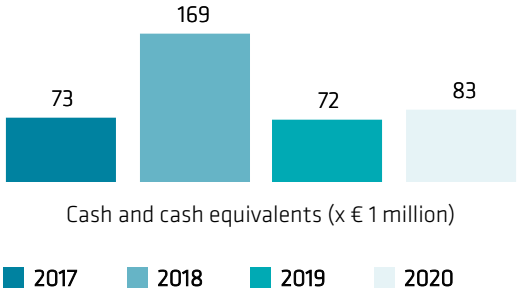
Financing, financial income and expenses, and liquidity

Our net financial expenses decreased by €11 million compared with 2019, to €56 million. This decrease related mainly to interest expenses on long-term external loans. The difference is due to lower interest expenses due to the refinancing in 2019 at a lower interest rate.

No existing loans were repaid during 2020, and no refinancing took place. There was negative cash flow, however, which led to an increased financing requirement. This was met during the year by borrowing in the money market for short periods. On balance, interest-bearing debt increased by €179 million to €3,183 million as at 31 December 2020 (2019: €3,004 million).

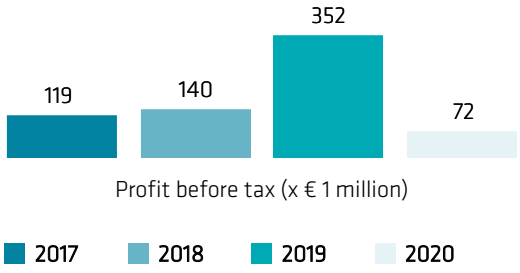


Cash and cash equivalents amounted to €83 million at 31 December 2020 (year-end 2019: €72 million).



Income tax

Profit before income tax was €72 million for 2020 (2019: €352 million).



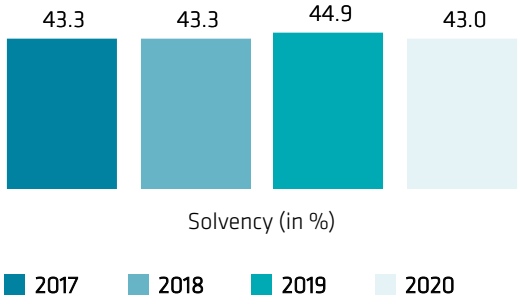
The tax expense rose by €3 million in 2020 to €30 million. The effective tax rate (as a percentage of profit before income tax from continuing operations) in 2020 was 40.9% (2019: 7.7%).

In December 2020, the Upper House of Dutch Parliament approved the bill that includes an increase of the corporate income tax rate from 21.7% to 25% from 2021. The reduction of the tax rate that had previously been announced was thus revoked. As a consequence of the increase in the tax rate, deferred tax assets and liabilities will in future be realised at 25% instead of 21.7%.

The measurement of the deferred tax assets and liabilities as at 31 December 2020 at this higher rate results in a negative effect of €11 million on the tax expense in 2020.

Solvency and credit rating

Solvency at year-end 2020 was 43.0% (year-end 2019: 44.9%).



Stedin Group's policy is aimed at maintaining minimum long-term solvency of 40%. Stedin Group's goal is to retain its long-term A- credit rating with a stable outlook according to Standard & Poor's (S&P). Consequently, there is an adequate buffer for continued compliance with the minimum credit rating requirement pursuant to the Network Operators Financial Management Decree (Besluit Financieel Beheer Netbeheerders) (a minimum rating of BBB/Baa2). S&P reconfirmed the A- credit rating with a stable outlook on 2 September 2020.

5. Non-regulated activities

NetVerder

NetVerder continued its progress on the development of collective heating in 2020. In various projects, we are developing open heat grids to which as many users as possible will be connected over time. Everyone has access to our heat grids under the same conditions – affordable and reliable. Our projects portfolio now encompasses Stedin's entire service area. The first projects are expected to be operational within a few years. The project Open Warmtenet Delft (Delft Open Heat Grid, OWD) is closest to completion. More information on the market regulation of heat grids is available in the section on Strategy.

Sustainable heating in Delft

In Delft, NetVerder is collaborating with the housing associations Woonbron, Vestia, Vidomes and DUWO as well as with the municipality of Delft to create a heating network. Work progressed in 2019 on developing the preliminary design of the heating grid, and Engie was selected as the first supplier. The municipal council of Delft intends to decide before the end of 2020 whether to co-invest in a future-proof scenario. This means that, in addition to connecting the 5,000 homes of the housing associations as previously intended, the grid is already being prepared for a further 10,000 homes in the supply area in the Voorhof and Buitenhof residential districts. In doing so, we will also pave the way for several suppliers to supply heat to potential customers in the area, as we make the grid 'open'. Future-proofing the design of an open heat grid also necessitates the introduction of a second source besides the planned geothermal energy source. Together with the municipality, NetVerder is engaged in talks with Warmtelinq (Gasunie) to coordinate the future supply scenario.

The expected carbon savings will be some 4.5 tonnes per year at the start of the project.

The deployment of sustainable energy sources such as residual heat, geothermal energy and low-temperature sources (outside air, water) is continually growing in importance. We work for and with municipalities, project developers, housing associations and residents with the aim of enhancing the sustainability of the built environment. While our focus is on the infrastructure, we consider the entire energy system, as well as the affordability of the various routes and their supply security. We recognise the public interest and work in line with the basic principles: openness, transparency and decisiveness.

In the WarmingUP collective, a national 3-year cooperation programme, we are working with 38 participants on developing usable knowledge to make collective heating systems reliable, sustainable and affordable. This knowledge continually increases our ability to make responsible choices for the long term.

In 2020, NetVerder took steps towards the further implementation of a professional and reliable organisation that operates energy infrastructures. With a view to sustainable business operations, our risk and controls are fully in place as designed and operational. The risks of this business unit are periodically updated. Safety is also the first priority within NetVerder. Stedin Group's safety standards also apply to NetVerder. There are workplace inspections, we hold each other accountable on safety conduct, where necessary, and reporting concerns is also part of our safety policy.

The existing assets performed in line with expectations in 2020, without operational failures.

Rotterdam Botlek Steam Network

In 2020, NetVerder continued to safely and reliably perform the distribution of steam and condensate via the steam network in Rotterdam Botlek. Steam producers AVR (via two sources of steam) and Cabot sustainably supply steam to the customer Emerald Kalama Chemical. In 2020, 251,433 tonnes of steam were distributed using the Rotterdam Botlek Steam Network (2019: 223,000 tonnes). The plans to significantly expand the steam network are still in place. NetVerder continues to be engaged in extensive talks with the Port of Rotterdam Authority, local authorities and other parties in the Botlek area to execute this project jointly.

Borculo biogas network

Since 2017, NetVerder has handled the distribution of biogas from Groot Zevert Vergisting in Beltrum to Friesland Campina in Borculo. In 2020, almost 7 million m^3 of biogas was transmitted into our gas grid without problems via this 5.4 km transmission pipeline (2019: 1.5 million m^3). As a result, substantial volumes of natural gas are saved at the production location of Friesland Campina.

DNWG Infra

High-voltage technology, new build HVS Terneuzen-Zuid

The High-voltage technology division is constructing a new 10 kV main distribution station commissioned by Enduris. A new hall is being built at HVS Terneuzen-Zuid, in which a new 10 kV facility will be placed at the end of 2020. Preparations are also under way to place an additional transformer in 2021. This will be an existing transformer, which will come from HVS Kruiningen. The entire facility will be tested and completed at the end of 2021.

DNWG Warmte – Ouverture

DNWG Warmte B.V. (DNWG Warmte) is part of DNWG and was established in order to facilitate heat projects. For example, heat and cold are supplied to the Ouverture district of Goes in this way.

DNWG Meetdiensten

DNWG Meetdiensten has developed a number of attributes to aid customers in the energy transition. For example, consumption reports and financial reports can be easily generated for several business establishments. These reports comply with the Netherlands Enterprise Agency guidelines for energy management systems. A contract for metering services and energy monitoring has been signed with Aldi Holding that covers all its locations in the Netherlands. We will support Aldi in achieving its sustainability ambitions. A multi-year contract has been concluded with the municipality of Eindhoven for metering services for gas, water and electricity.

Cooperation between DNWG Infra and Evides Waterbedrijf

On 1 January 2021, the service provision agreement between DNWG Infra and Evides for multidisciplinary subsoil operations expired. Therefore, Stedin Group and Evides signed a cooperation agreement on 7 December 2020. Under this agreement, DNWG Infra and Evides cooperate on a reciprocal basis. This means that both parties contribute work and are jointly responsible for its execution. This cooperation will be gradually expanded in the years ahead and is part of the Multidisciplinary strategic initiative.

Certification

The follow-up visits by means of external audits for the certifications for ISO 9001, VCA **, Certification Scheme for Cable Infrastructure and Pipe-Laying Companies (Certificatieregeling Kabelinfrastructuur and Buizenlegbedrijven, CKB) and ISO 27001 for multimedia and TUMS went well. Recertification took place in the context of ISO 14001, for which DNWG received a new certificate. DNWG Infra is also an approved heat metering company, in addition to being an ODA (independent service provider) and EMV (approved party responsible for metering) for gas and electricity metering systems.

What have we learnt

This was a momentous year with many unexpected events, but above all, 2020 was a year in which we learnt a great deal on the way to realising our strategy.

Improved grid management

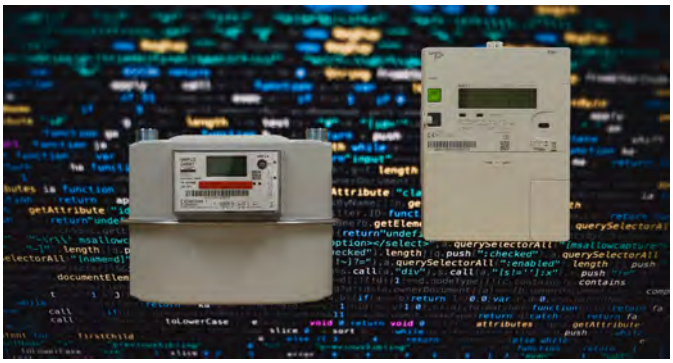
We are continually examining how we can further improve our service provision. Initiatives such as 'Customer-oriented connections' and 'Multidisciplinary' exemplify how we are seeking to make grid management better, easier, cheaper and smarter. Achieving this sometimes requires us to dare to look at a supply chain in an entirely and fundamentally different way. The new strategic initiative Efficient Failure Response Procedure constitutes an example of this. We are keenly aware that the aforementioned initiatives embody major changes and that it takes time to live through the idea, to absorb the change and to actually implement it. Consistent control and coordination with the internal and external stakeholders we involve are highly important.

Facilitating the energy transition

We are ceaselessly growing our knowledge of how Stedin can contribute to the energy transition. Data are becoming increasingly important in a dynamic energy system that encompasses numerous parties. We learnt in the past year that we can still take a significant step forwards in the quality of our data, enabling us to reliably quantify our grids and produce better forecasts. The strategic initiatives 'System Operator' and 'Sustainable energy transition' focus on improving data and forecasts so that we will ultimately have greater control over the energy system. Data can be understood in multiple ways in this regard. On the one hand, this concerns data in our systems, such as the capacity of a particular transformer or a good configuration of a transformer in our system. The current situation at our customers and stakeholders is another important source of data for our forecasts. In 2020, we saw municipalities focusing mainly on the Regional Energy Strategy, and we expect their focus to shift in 2021 to the Heating Transition Vision. We have seen that community development aids us hugely in learning and deploying these lessons. At the same time, we are seeing that making residential districts more sustainable remains a difficult issue, with major successes taking a long time to materialise.

Sustainable business operations

2020 was a momentous year, especially due to COVID-19. Agility has proved to be a major strength in this context. We have learnt how well we can cooperate on a shared goal with all stakeholders as a single team. Work was carried out swiftly, flexibly and highly confidently during this crisis. This also immediately offers an opportunity with regard to other issues. How can we deploy these strengths on other complex issues such as, for instance, the energy transition or digitalisation? We are seeing that the energy transition requires us to move more flexibly with developments and our customers' requirements. With the annual planning cycle that we have at present, we are insufficiently able to accommodate the dynamism of the energy transition and tailor the deployment of our people to this. That is why we are developing a quarterly process that enables us to deal more flexibly with changes and to more effectively deploy our employees.



Focus areas in 2021

The energy transition, the finances and the challenges in the area of capacity management compel us to focus. We are therefore committed in 2021 to following through on our three strategic spearheads; within them, we focus on the strategic initiatives.

Improved grid management

We remain fully committed in 2021 to 'affordable and efficient service provision' and 'high quality of our products and services'. We focus specifically on the lead time of connections and the downtime for electricity. To that end, we will further streamline and digitalise our processes and chains. We will do this in our strategic initiatives 'Customer-oriented connections' and 'Efficient failure response procedure'. Based on the strategic initiative 'Multidisciplinary', we will take a next step in developing the connection chain as the coordinating organisation, and we will be working more intensively and with several water companies. We look at the materials that we use and how we can utilise these more efficiently. We will also professionalise our project management and our control over it, enabling us to better deliver on the investment challenge in 2021.

Facilitating the energy transition

In 2021, we will continue to invest significantly in future-proofing our grids. The predictability of our investments and coordination of the energy system are important factors in this regard. How? Through more insight and better forecasts. We are working on this insight in our strategic initiatives 'Sustainable Energy Transition' and 'System Operator'. We are engaging in dialogue with municipalities and provinces that coordinate the regional energy transition and are sourcing customer demand from here. Improved insight and better forecasts also better enable us to predict demand for grid capacity and on that basis produce future scenarios to aid correct decision-making. We also continue to work on new ways of using our existing gas and electricity infrastructure. We examine, formulate views and carry out pilot studies in the field of sustainable gasses, steam and water projects. In this light, we are seeking to improve our demand forecasting ability. From 2020, a newly formed Market Intelligence team provides insight into customer requirements and demand and offers future scenarios for correct decision-making. Result: our investment portfolio is up to date, customer-driven and better aligned with current and future developments.

Sustainable business operations

The investments are increasing, while revenues are also growing but lag behind. Therefore, we will continue to focus on efficiency in our processes. At the same time, we will continually ask ourselves whether each investment or expenditure is necessary. In 2021, we will take the next steps within the efficiency programme of €180 million and will continue to examine whether there is additional potential for savings. Focusing on our internal organisation is not enough, however. Accordingly, the topic of long-term financing will also be on the agenda in 2021. We are continuing the dialogue with our shareholders on possible solutions and are open to any new shareholders. We are also continuing the dialogue with the Netherlands Authority for Consumers and Markets (ACM) and the Ministry of Economic Affairs and Climate Policy on how the energy transition can be financed. We will also continue working in 2021 on the gradual integration of DNWG within Stedin Group. The implementation plans of the departments and integration themes based on 'Stronger together' will continue. At the same time, the continuity of the business operations needs to be safeguarded. Lastly, one of the ways in which we are working on further enhancing the sustainability of our business operations is by focusing on reduction of CO_2 emissions, circular purchasing of our primary assets and compensation of network losses.

Crucial craftsmanship: Nicole Onrust

Nicole Onrust is a senior allocation and reconciliation analyst. What does the theme of vital professional work mean to her? 'My work keeps the lights on in the Netherlands.'

>What makes your work of vital importance? In other words, why is your work important for the organisation and society?
'For many people, what I do is quite abstract. To put is simply, as a household, you pay monthly advances to your energy supplier. The price you pay is based on estimates. Once a year, the meter readings are passed on and you receive a final settlement. My job is to check whether those consumption figures and invoices are correct, are complete and have been paid on time in the Stedin grid. So as far as the importance of my job is concerned, my job allows suppliers to purchase effectively, which keeps the lights on in the Netherlands.'

>How do you recognise a professional in your field?
'I can easily pick out the people who could do my job properly: they're a little nerdy, analytical and like sniffing around in data. The real top performers know all market processes, can calculate these at the drop of a pin and know the laws and regulations by heart.'

>What has working been like for you during the lockdown? What was different from normal and how did that affect you?
'Not being able to go to the office is quite annoying for me. I have a coordinating role, which is a lot more difficult if you can't just quickly drop into someone's office. I am also part of a team of people from other grid managers in which we work on the basis of the scrum method. It is a lot more difficult to liaise if you're not physically in the same room. But I have found a way that works for me, and though I like being in the office, working from home is not so bad either. Every working day, we have a stand-up meeting in which we talk to each other. That helps.'

>How do you ensure that you remain fit and healthy yourself?
'I am in a boot camp workout club where I exercise three times a week. During lockdown, I performed exercises in the back garden with weights I had bought for myself. I would run around my house with small blocks, and I could see the neighbours thinking: what on earth is she doing? I have also started on the Sonja Bakker diet, and I crochet to empty my mind: blankets, shawls. But you can't order anything from me! It takes a huge amount of time. Finally, I deliberately opted to work for three days a week. That way, I can combine being a vital colleague with being a vital woman and a vital mother.'

>What gives you the most satisfaction in your work? In other words, how does your work help you maintain vitality?
'What I really enjoy most is resolving difficult puzzles together with my colleagues and looking how, for instance, we can put sector agreements into practice. I also like bringing everyone together. There are quite a few men in my discipline, so I tell myself, 'Let's get all these alpha males to agree with each other. I love it when that works out.'

Governance

In this section, we describe the governance roles within Stedin Group. The Dutch Corporate Governance Code is an important document for Stedin, regulating matters such as the relationship between management and supervision. In view of Stedin Group's societal role, it was decided to apply the Dutch Corporate Governance Code voluntarily, where possible.

Corporate Governance

Stedin Group

Stedin Group is the name of the group comprising Stedin Netbeheer B.V., DNWG Groep N.V. and NetVerder B.V., among others. Stedin Holding N.V. heads the group structure and is, directly or indirectly, the director under the articles of association of all its subsidiaries. Stedin Holding N.V. is a two-tier board company and applies the full two-tier board structure, consisting of a Board of Management and a Supervisory Board. The Board of Management manages Stedin Group; the Supervisory Board exercises supervision. Both boards act independently of each other.

The grid managers Stedin and Enduris act on a non-discriminatory basis, meaning that they do not favour one particular party over another.

The Corporate Governance Code and Stedin Group

Stedin Group sets great store by good corporate governance. Stedin Group naturally complies with the governance requirements arising for the grid operator from the Electricity Act and the Gas Act. The Dutch Corporate Governance Code (CGC) was drawn up for listed companies. Stedin Group is therefore not obliged to comply with it, as its shares are held by 44 Dutch municipalities. Stedin Group nonetheless decided in 2018 to apply the CGC voluntarily, where possible. In doing so, we are emphasising our responsibility for the social aspects of doing business in the public domain.

The CGC is based on the 'comply or explain' principle. We therefore explain which principles in the CGC are not (or cannot be) applicable to Stedin Group. The principal departures from the CGC are connected with the fact that Stedin Group is not listed. Our shares are held by local and regional authorities, while a large part of our business activities are regulated. We are subject to supervision by the Netherlands Authority for Consumers and Markets (ACM), and we pursue a long-term strategy. Furthermore, the remuneration structure of the members of the Board of Management and the Supervisory Board of Stedin Group is regulated by the Senior Executives in the Public and Semi-Public Sector (Standards for Remuneration) Act (Wet normering topinkomens, WNT).

The CGC is applied at the level of Stedin Group.

Departures from the CGC

- *Provision 2.1.9 Independence of the chairman of the Supervisory Board*: the previous chair of the Supervisory Board, Pieter Trienekens, had served as acting director of Stedin Netbeheer B.V. for two years. In view of his expertise, Stedin Group and its shareholders saw no impediment with regard to his position as chair of the Supervisory Board. With Doede Vierstra as the new chair from 1 February 2020, the deviation from Provision 2.1.9 of the CGC has ceased in this respect.
- *Provision 2.2.1 Maximum appointment and reappointment periods – management board members:* members of the Board of Management are appointed as director under the articles of association by the Supervisory Board for a maximum term of four years. They can be reappointed for successive maximum terms of four years. Such reappointments are not limited within Stedin Group. This longer term helps Stedin Group to ensure the continuity of the Board of Management.
- *Provision 2.2.2 Appointment of supervisory board members*: Within Stedin Group, Supervisory Board members are appointed for a term of four years and can be reappointed for a maximum of two additional four-year terms. These longer periods of appointment and reappointment help to ensure the continuity of the Supervisory Board.
- *Provision 2.2.3 Publication of press release upon early retirement of supervisory board members*: issuing a press release as standard practice does not serve a public interest. The Board of Management does so if required by circumstances. It goes without saying that Stedin Group informs its stakeholders about any early retirements.
- *Provision 2.3.2 Establishment of committees:* a combined Selection, Remuneration and Appointments Committee has been established within Stedin Group for practical reasons.
- *Provision 4.2.3 Meetings and presentations*: the shares of Stedin Holding are not listed; they are held by 44 municipalities. However, Stedin Group has issued bonds that are listed on the stock exchanges of Luxembourg and Amsterdam. Once a year, after the publication of its full-year results, Stedin Group organises a call for its investors. This call is publicly announced in advance to the investors. After the meeting, the presentations are posted on Stedin Group's website.

We depart from the provisions referred to below because the two-tier board structure applies and because the shares of Stedin Group are held by 44 Dutch municipalities and are therefore not listed, because the governance structure of Stedin Group is different (two-tier and not one-tier).

- 2.1.3 Executive committee
- 2.8.2–2.8.3 Takeover bid
- 3.1.3 Remuneration – executive committee
- 3.3.2–3.3.3 Remuneration of supervisory board members in shares and share ownership of supervisory board members 4.2.3–4.2.4 and 4.2.6 Analysts' meetings and anti-takeover measures
- 4.3.3 Cancelling the binding nature of a nomination or dismissal
- 4.3.4 Voting right on financing preference shares
- 4.3.5 Publication of institutional investors' voting policy
- 4.3.6 Report on the implementation of institutional investors' voting policy
- 4.4 Issuing depositary receipts for shares
- 5 One-tier board structure

Internal risk management and control systems

The Board of Management monitors the operation of the internal risk management and control systems. Each year, it performs a systematic assessment of the design and operation of the systems. This monitoring covers all material control measures relating to strategic, operational, compliance and reporting risks. This is described in detail in the Risk management section and in the In-control statement.

Governance roles

Board of Management

Stedin Group's Board of Management is responsible for the performance of Stedin Group and all subsidiaries within the group structure. Thus, the Board of Management determines the long-term strategy and the company's operational as well as financial objectives and designates the preconditions for delivering the strategy. In performing its duties, the Board of Management carefully weighs all interests, including those of customers, shareholders, employees, providers of capital and society in general. The Board of Management has defined customer and cultural values that contribute to a culture directed at long-term value creation.

An allocation of duties has been agreed within the Board of Management, which does not detract from the collective responsibility of the Board of Management as a whole. The Board of Management allocates the tasks within the Board of Management (and may change them if necessary), subject to approval by the Supervisory Board. Both the Board of Management as a whole and its individual members are authorised to represent the company. The internal *Governance and Authority Manual* sets out the procedure for obtaining mandates to represent Stedin Group and its subsidiaries externally. It also includes, for instance, threshold amounts for the performance of legal acts and other acts on behalf of Stedin.

Terms of reference of Board of Management

In addition to legal requirements and the articles of association, the Board of Management is also bound by the terms of reference of the Board of Management. These terms of reference complement those requirements and include the division of duties, responsibilities and procedures of the Board of Management. The terms of reference adhere to the principles and best practices of the Dutch Corporate Governance Code, insofar as they are applied by Stedin Group. The most recent version of the terms of reference of the Board of Management, of 24 November 2020, has been posted on the website of Stedin Group. The same applies to the terms of reference of the Supervisory Board and its committees.

Appointment and dismissal

Members of the Board of Management are appointed as director under the articles of association by the Supervisory Board for a maximum term of four years. They can be reappointed for successive maximum terms of four years. The Supervisory Board is authorised to suspend or dismiss members of the Board of Management.

Strategy Management Team

Apart from the members of the Board of Management, the members of the Strategy Management Team (MT) also include the Asset Management, HR, Strategy and Corporate Affairs directors. The Strategy MT advises the Board of Management on monitoring and delivering the organisation's strategic objectives. Unlike the Board of Management, the Strategy MT is not a decision-making body itself. A favourable opinion issued by the Strategy MT will, as a rule, be endorsed by a decision of the Board of Management.

Strategic Coalition

In addition, there is a Strategic Coalition, in which more than 20 directors, managers and members of a Works Council delegation take part, aside from the members of the Strategy MT. To develop the strategy and its implementation, they meet several times a year in sessions of one or two days. The business-and-control cycle and the annual planning cycle were recurring items on the agenda in these meetings in 2020. In addition, various strategic topics

were considered in greater depth. The Strategic Coalition consists of 10 women and 15 men.

Composition

In 2020, the Board of Management consisted of four members: a Chief Executive Officer (CEO), a Chief Operating Officer (COO), a Chief Financial Officer (CFO) and a Chief Transition Officer (CTO).

The Board of Management consists of three male members and one female member (COO). This means that women make up 25% of the Board of Management. The target percentage for the composition of the Board of Management is a minimum of 30% women and a minimum of 30% men.

The COO was absent for a large part of 2020. In that period, her duties were taken care of by the other members of the Board of Management and an interim director of Operations.

Supervisory Board

Stedin Holding N.V.'s Supervisory Board advises the Board of Management and exercises supervision on the policy of the Board of Management as well as the general performance of the company and its subsidiaries. The Supervisory Board also acts as employer of the Board of Management. Accordingly, the Supervisory Board appoints members of the Board of Management and can suspend or dismiss members of the Board of Management (in consultation with the General Meeting of Shareholders). The Supervisory Board of Stedin Holding N.V. is also the Supervisory Board of the grid managers within the group, i.e. of Stedin Netbeheer B.V. and of Enduris B.V. This fact is also stated in the articles of association of both grid managers (and those of Stedin Holding).

Upon taking office, the Supervisory Board drew up terms of reference for its functioning. These apply in addition to the legal requirements and the requirements under the articles of association. The terms of reference include provisions on the Supervisory Board's composition, committees, duties and powers, meetings and decision-making.

The Supervisory Board has two permanent committees, composed as follows as of September 2020:

- a combined Selection, Remuneration and Appointments Committee (SRA Committee). This consists of Hanne Buis and Dick van Well. Hanne Buis succeeded Dick van Well as chair in September 2020;
- an Audit Committee, consisting of Theo Eysink, Annie Krist and Dick van Well. Theo Eysink is the chair.

The committees have their own meetings in preparation for the full Supervisory Board meetings. The committees report verbally in the Supervisory Board meetings and/or present their draft or adopted minutes. The recommendations of the committees form the basis for decision-making in the meetings of the Supervisory Board. The Audit Committee and the SRA Committee each have separate terms of reference, setting out provisions on their functioning. The terms of reference can be consulted on the Stedin Group website.

The members of the Supervisory Board are appointed by the General Meeting of Shareholders, after being nominated by the Supervisory Board. There is an adopted profile for the size and composition of the Supervisory Board. In connection with nominations and appointments, we take account of the nature of the company, its activities and the desired expertise and background of the Supervisory Board members.

Supervisory Board members are appointed for a term of four years and can be reappointed for a maximum of two additional four-year terms. The Supervisory Board can suspend members of the Supervisory Board. The Netherlands Enterprise Court at the Amsterdam Court of Appeal can dismiss Supervisory Board members. The General Meeting of Shareholders can withdraw its trust in the full Supervisory Board or in individual Supervisory Board members.

The members of the Supervisory Board retire periodically in accordance with the retirement schedule that it has drawn up in order to avoid, as much as possible, too many Supervisory Board members retiring simultaneously. The retirement schedule as shown in the Report of the Supervisory Board applies with effect from 30 September 2020.

Composition

The Supervisory Board temporarily consisted of six members from September 2020, two of whom were women; before September 2020 and from February 2021, the Supervisory Board consisted and consists of five members, and the ratio of men to women is 3:2. With this ratio of men to women, the Supervisory Board complies with the diversity requirement. In addition, a variety of age categories are represented in the Supervisory Board. In recent years, the search for new Supervisory Board members deliberately targeted greater diversity in terms of gender, partly by expressly designating this in the profile in advance and by communicating this aim to the recruitment and selection

agency. Lastly, diversity in terms of composition is also included in the annual evaluation of the Board of Management and the Supervisory Board.

Internal audit function

Internal audit consists of a team of independently operating internal auditors. Internal Audit supports the organisation by providing insight, advice and supplementary assurance on the extent of risk management.

Internal Audit is part of the CEO's responsibilities and has direct access to the Audit Committee of the Supervisory Board as well as to the external auditor. The Internal Audit manager attends the meetings of the Audit Committee. The Audit Committee supervises the IA function and advises the Supervisory Board on its performance.

Each year, Internal Audit draws up an annual audit plan that is based on a risk analysis and interviews with senior management as well as the Board of Management. It also incorporates the input of the Audit Committee and the external auditor. Internal Audit submits the annual audit plan for approval to the Board of Management and then to the Supervisory Board.

Internal Audit reports to the Board of Management on audit-related topics, such as key findings on the effectiveness of the internal controls, follow-up of recommendations and realisation of the annualaudit plan, and reports the main features to the Audit Committee of the Supervisory Board. Internal Audit also informs the external auditor about this matter.

The external auditor

The external auditor is nominated by the Supervisory Board and appointed by the General Meeting of Shareholders (AGM). Deloitte Accountants B.V. is the external auditor of Stedin Group. The external auditor attends all meetings of the Audit Committee. The external auditor in any case attends the part of the meetings of the Supervisory Board in which the report of the external auditor on the audit of the financial statements is discussed and a resolution concerning the approval of the financial statements is adopted. The external auditor also annually attends the Annual General Meeting in which the financial statements are adopted. The auditor can be questioned there by the AGM about their report on the true and fair view provided by the financial statements.

Integrity

A safe working environment as well as ethical behaviour among employers and employees are important to Stedin Group, with a business culture in which our employees and all our stakeholders can build and rely on our core standards and values.

Code of conduct and guidelines for conduct

Those standards and values and rules determined by law are laid down in Stedin Group's Code of Conduct. This sets out how we treat each other and external parties such as customers, shareholders, regulators and other contacts of Stedin Group. DNWG Group applies its own DNWG Code of Conduct, which is based in full on Stedin's Code of Conduct.

Topics that are addressed in the Code of Conduct include health and safety, conflicts of interest, how to treat confidential and other information and company property and unacceptable behaviour. Unacceptable behaviour includes matters such as fraud and theft, bribery and other forms of corruption, abuse of power, intimidation and harassment and discrimination in any form whatsoever. These forms of unacceptable behaviour are not tolerated. The code of conduct and guidelines for conduct (including non-discrimination) are also one of the starting points for HR processes, such as recruitment, selection, promotion, remuneration and training Also see the section on 'Professionally competent employees'.

Our code of conduct is not a case of take it or leave it. All our permanent employees, hired staff and interns are expected to endorse, know and comply with the contents of the Code of Conduct and to accept their responsibility to protect Stedin Group's reputation. All employees sign the employee regulations and a non-disclosure agreement. Our supervisors play a vital role in promoting an ethical business culture. After all, integrity starts with setting a good example. Stimulating ethical behaviour is included in the Stedin leadership training and programmes. This involves giving and receiving trust, being clear and transparent in what you do and ask for and knowing the effect of your conduct as supervisor on others.

Any failure by an employee to comply with the code of conduct can have serious consequences for Stedin Group. In the event of a suspected violation of the code of conduct, a detailed investigation will be initiated and a meeting will be held with the employee in question. The nature and severity of the violation will determine which measures (disciplinary or otherwise) we will take, which may include instant dismissal.

Within Stedin, we also work with a number of guidelines associated with the code of conduct for specific topics such as competition, tendering, disclosure and private investments. These detailed guidelines are available for employees on the intranet and are regularly brought to their attention.

The Board of Management supervises compliance with the code of conduct of Stedin Group. The compliance officer monitors the effectiveness of the code of conduct and the numbers and nature of any incidents. The compliance officer also reports on this to the Board of Management every quarter. The Board of Management informs the Supervisory Board (Audit Committee) every six months.

In 2020, three awareness sessions were held on risks and learning points. Due to COVID-19 and the resulting need to work from home a lot, we held fewer sessions than planned. We did request attention in 2020 for integrity and compliance via the general means of communication (four times in 2020).

Reporting Facilities

Stedin Group has an 'Integrity & security' reporting facility. Any report of an integrity incident will always reach the Compliance Officer of Stedin Group, who will then investigate it. Integrity incidents are handled on the basis of the Guideline for Integrity Incidents and Abuses. There is also an 'Information security' reporting facility. Reports to this reporting facility are handled by the Information Security department.

In 2020, 275 reports on possible breaches of the code of conduct were received within Stedin Group at the Integrity & security reporting facility. All reports are always investigated. To date, 76 reports have been designated as involving an integrity element. Within that total, three comprised a discriminating element within the meaning of the article on discrimination in our code of conduct.

Confidential advisers

Employees can also contact one of the organisation's confidential advisers. As in 2019, there were three confidential advisers at Stedin in 2020. DNWG has two confidential advisers. Confidential advisers have an obligation of confidentiality and never act on their own

initiative or without the approval of the employee concerned. A confidential adviser receives a fee for this work.

External report

If an employee believes that an abuse within the company has not been addressed or has not been addressed adequately in accordance with the internal whistleblower procedure, and if the abuse concerned is relevant to society in general, the employee can opt to report it to the external House for Whistleblowers. The whistleblower procedure is part of the Guideline for Integrity Incidents and Abuses.

Prevention of market abuse

Stedin Group is not a listed company but does have a listing for bonds in Amsterdam and in Luxembourg. As a consequence, Stedin has laid down a guideline on inside information and the possession of and transactions in securities in its 'Stedin Group Disclosure Policy' and in the 'Guideline on private investments'. This guideline builds on our Code of Conduct.

Within Stedin Group, we use an insiders list of persons who have access to price-sensitive information. Sharing inside information and insider trading in bonds of Stedin Group is prohibited for Stedin's employees. This 'Guideline on private investments' also applies to the members of the Board of Management and the Supervisory Board. They are required to comply with all rules concerning disclosure and insider trading applicable thereto pursuant to laws or stock exchange regulations. This also follows from the Corporate Governance Code that Stedin complies with. All employees require the prior approval of the Board of Management to engage in private investments in financial instruments of Stedin Group. Any suspicion of abuse of price-sensitive information is immediately reported to the Compliance Officer. The Compliance Officer reports periodically to the Board of Management and also to the Audit Committee of the Supervisory Board; any cases of abuse of price-sensitive information can also be included in those reports. With its approach, Stedin Group complies with the European Market Abuse Regulation. There were no cases of abuse of price-sensitive information in 2020. In the event of abuse of inside information, the Disclosure Committee will decide whether or not a press release is required to be published on the incident. This will depend on the seriousness of the breach and on laws and regulations.

Privacy

The demand for and processing of data as well as advancing automation will develop further in the years ahead and impact how personal data are treated. Treating personal data with due care in line with the General Data Protection Regulation is important to us at Stedin Group. The treatment of personal data is part of our Code of conduct. Stedin is not yet fully compliant in a number of areas, including the implementation of the retention periods and testing that makes use of personal data. Both processes will therefore be given the greatest priority in 2021. In addition, awareness within Stedin remains a continual point for attention.

There are privacy coordinators for each department. The Privacy Office is active as an adviser and provides support to the organisation. Lastly, the Data Protection Officer has an independent role and performs the monitoring function as an internal supervisor.

To maintain awareness of the treatment of personal data among our employees, a mandatory privacy e-learning module was rolled out for all employees in July 2020. In 2020, 90% completed the e-learning module.

There were 42 reports of data breaches in 2020 (2019: 57). Four reports were submitted to the Dutch Data Protection Authority (2019: 3).

Supply chainresponsibility

Stedin bears its social responsibility for sustainability in the supply chain by actively focusing on the One Planet ambitions regarding CO_2emissions, raw materials, particulate matter emissions, biodiversity and an inclusive society. Stedin bears this responsibility both in its tendering procedures and in its collaboration with suppliers to strive for a sustainable supply chain. With a purchasing volume of €800 million in 2020, Stedin Group has a significant impact on this.

In tenders, Stedin stimulates suppliers to seek sustainable solutions. An example is provided by the tender for MV switchgear, in which subsidies were applied and utilised to reward suppliers for sustainable tendering. This resulted in SF6-free MV switchgear, decreasing the CO_2impact. All suppliers are also expected to sign the Stedin Supplier Code of Conduct. By signing this Code of Conduct, they commit to the basic principles concerning human rights, working conditions, fair and honest business practices (including the prevention of fraud and corruption), safety and integrity and to our One Planet goals. Our Code of Conduct is based on the OECD (Organisation for Economic Cooperation and Development) guidelines, the Universal Declaration of Human Rights and the labour standards and working

conditions drawn up by the International Labour Organization (ILO).

In addition, Stedin Group monitors potential sustainability risks in the supply chain. Stedin Group prepared a Potential Risk Analysis in 2019 on the basis of MVO Nederland's 'CSR Risk Checker'. This is based, in turn, on the OECD guidelines. These guidelines relate to fair and honest business practices, human rights & ethics, labour laws and the environment. In 2020, this Potential Risk Analysis was carried out at 40 suppliers, which entailed €97.5 million (12%) of the purchasing volume being analysed for potential risks, with a special focus on the material products that were purchased. The results of the Potential Risk Analysis determine the decision-making on whether tighter tendering procedures are required and whether self-assessments or external audits need to be performed at a supplier.

If it becomes clear in preparing a tendering procedure or renewing a contract that there are high potential risks, we critically review the selection and award criteria. The invitation for tenders for workwear illustrates this, for example. In this tendering procedure, we place extra emphasis, based on the analysis of potential risks, on preventing violations of human rights and pollution in the production process.

If the Potential Risk Analysis identifies a high potential risk for the product type and the country of production, the supplier may have to carry out a self-assessment. The self-assessment serves to verify whether potential risks also constitute actual risks and whether suppliers comply with the code of conduct; it can also serve to obtain input for a possible audit or improvement plan.

In the self-assessment, suppliers are queried about human rights, integrity and the One Planet goals. Suppliers are also asked whether they have identified risks regarding the topics of safety, an inclusive work environment, corruption, ethics, transparent business operations, climategoals and emissions and circularity Suppliers are requested to provide up-to-date policy documents, goals, ISO standards and other supporting documents to demonstrate how they bear their responsibility in this connection.

We have requested the self-assessment from three suppliers, and it has been filled in and returned to us by two of them so far. Our initial findings based on this are that the suppliers concerned are happy to cooperate and that they treat CSR with due awareness but that we have to further tighten up our questions, especially by clarifying definitions and the purpose of the questions. We expect that this will help us to obtain greater insight into risks and potential risks and to safeguard against them.

If it is clear from a self-assessment that a follow-through in greater depth is required for the replies given, it may be necessary to perform an external audit at a supplier. The purpose of the audit is to formulate joint improvement plans to reduce the greatest risks concerning sustainability, human rights and integrity. In 2020, it was not necessary to perform an audit at any of our suppliers. In 2021, we aim to further increase the number of self-assessments and to perform a first audit on that basis.

Biographical details of members of the Board of Management of Stedin Group

Mr M.W.M. (Marc) van der Linden

Chair/CEO

Marc van der Linden (b. 1972) was appointed chair of the Board of Management with effect from 1 February 2017. Prior to that, he had been a member of the Board of Management of Eneco Holding N.V. since December 2012. He joined Eneco in 1997 and held various positions as director of Eneco Energy Projects, director of Eneco Installation Companies and director of Eneco Wind. Previously, Marc worked at Van Gansewinkel Group. He studied Economics at Tilburg University. Marc van der Linden's term of office will expire with effect from 1 February 2021. Marc will remain as CEO until 1 July 2021 at the latest.

Areas of responsibility: Strategy, Corporate Affairs, HR, Communication, Internal Audit, VGMK (Safety, Health, Environment and Quality).

Other positions: Chair of Netbeheer Nederland (until the end of September 2020), member of Cyber Security Board Netherlands, member of the Economic Board for South Holland and member of the Industry Climate Agreement Infrastructure Task Force (until the end of May 2020).

Mr D. (Danny) Benima

Member/CFO (from 1 January 2019)

Danny Benima (b. 1978) is the CFO and a member of the Board of Management of Stedin Group with effect from 1 January 2019. Prior to that date, he worked at Arcadis as CFO for Southern Europe. In the past years, he has held various financial positions at Arcadis and Stork. Danny studied International Management (HES Amsterdam) and Business Administration with Financial Management as specialisation (Nyenrode). Danny is a registered controller (Dutch:f 'registercontroller', Tilburg University).

Areas of responsibility: Control & Risk, Finance & Accounting, Supply Chain, Treasury and Business Support Services.

Other positions: board member of Utility Connect, member of the Supervisory Board of EDSN (from February 2021), member of the Advisory Board of Stichting Hartekind (from May 2020), board member of NEDU (from 20 January 2021).

Ms J.A.M. (Judith) Koole

Member/COO

Judith Koole (b. 1969) was appointed member of the Board of Management with effect from 1 February 2017. Prior to that, she was Customer and Market director at Stedin Netbeheer B.V. She joined Stedin in 2012 and has held positions as Programme Coordination manager and manager of ReVisie (integration of Stedin/Joulz). Previously, she worked at Delta and at SITA (SUEZ) in line management positions with final accountability. She studied French and Business Administration at Radboud University Nijmegen. Judith Koole's term of office as a member of the Board of Management will expire on 1 February 2021. She has stated that she does not wish to extend this term of office and has stepped down as a member of the Board of Management at Stedin Group. She will continue at Stedin for a considerable time.

Areas of responsibility: Malfunctions & Maintenance, Construction & Replacement, Meter Cabinet & Connection, Customer, High Voltage.

Other positions: member of the Supervisory Board of N.V. Westerscheldetunnel.

Mr D. (David) Peters

Member/CTO

David Peters (b. 1980) was appointed as a member of the Board of Management as Chief Transition Officer with effect from 1 January 2018. Since May 2015, he held the position of Strategy director at Stedin and was responsible for strategy and innovation. Until May 2015, he worked at Boston Consulting Group in the Netherlands as well as abroad on strategy and organisation issues, especially in the energy sector. He was a member of the National Think Tank in 2006. He studied Applied Physics at Eindhoven University of Technology and Applied Ethics at KU Leuven.

Areas of responsibility: Data Office, Change Office, Asset Management, Innovation, Market, NetVerder, DNWG, IT.

Other positions: board member of Stichting Zeeuwse Publieke Belangen, chair of the Supervisory Board of USEF, board member of ElaadNL, board member of EDSO.

All members of the Board of Management of Stedin Group have Dutch nationality.

Biographical details of members of the Supervisory Board

Mr P.E.G. (Pieter) Trienekens (chair and member of the Supervisory Board until 1 February 2020)

Pieter Trienekens (b. 1950) was acting managing director at Stedin Netbeheer B.V. from 2014 to 2017. From 1986 to 2011, he worked at Nederlandse Gasunie, holding various positions including that of member of the Management Board. His previous positions included that of policy advisor at the Ministry of Economic Affairs. He chairs the Supervisory Board of Cuculus GMbH in Ilmenau, Germany and is a member of the Supervisory Board of DNV GL Energy in Arnhem.

Mr D.G. (Doede) Vierstra (chair of the Supervisory Board from 1 February 2020)

Doede Vierstra (b. 1958) is a director on behalf of the Netherlands Enterprise Court at the Amsterdam Court of Appeal and chair of the Investment Committee of the Friesland Clean Energy Fund (FSFE). In the past, he was chair of the WENB. He is therefore familiar with the challenges that Stedin Group faces in connection with the energy transition. He acquired his ample experience with public stakeholders, including public shareholders, in his work as CFO of Nuon as well as in other positions.

Ms H.L. (Hanne) Buis, LLM

Hanne Buis (b. 1976) has been a member of the Board of Management of Schiphol Group, as Chief Projects & Assets Officer, since June 2020. Before this, she was managing director of Lelystad Airport, which is part of Royal Schiphol Group. Before joining Lelystad Airport, she held various positions at Amsterdam Airport Schiphol, where she managed complex operational processes. She is a member of the Supervisory Board of the Netherlands Bach Society.

Mr T.W. (Theo) Eysink RA

Theo Eysink (b. 1966) started his career at Arthur Andersen, after which he worked in financial positions at KLM Catering, Spuigroep and Electrabel between 1996 and 2006. From 2006 to 2010, he was VP Finance at Bombardier Transportation Holding, before being appointed CFO at Stork Technical Services. In 2012, he became EVP Corporate Control at KPN, and in 2018, he was appointed CFO of the Business Market division of KPN. Mr Eysink is a member of the Supervisory Board of Vesteda Investment Management B.V.

Mr A.P.G. (Arco) Groothedde

Arco Groothedde (b. 1964) was CEO at Translink Systems, the company behind the public transport card, until mid-2020. Before that, he served in executive positions at the Land Registry Office and the National Vehicle and Driving License Registration Authority (RDW). Currently, he is an independent consultant and a member of the Supervisory Board at DSW Zorgverzekeringen.

Ms A.J. (Annie) Krist

Annie Krist (b. 1960) commenced her career at N.V. Nederlandse Gasunie in 1987. In the late 1990s, she was member of the Gasunie team that was responsible for the commercial, technical and IT modifications resulting from the deregulation of the gas market. In 2005, she joined the management team of Gasunie Transport Services. From 2008 to 2011, she was director for Strategy and Participations. On 1 July 2011, she was appointed managing director. From 1 May 2016 to 1 April 2017, Annie was a member of the Executive Board and CEO of Gasunie Transport Services. She was appointed CEO of GasTerra in 2017.

Mr D. (Dick) van Well

Dick van Well (b. 1948) served as a member of the Supervisory Board of Stedin Netbeheer B.V. from 2012 to 2017. From 1998 to October 2010, he chaired the Management Board of construction company Dura Vermeer, where he had worked since 1973 and had held various positions. His other positions include that of member of the Supervisory Board of Dura Vermeer Groep N.V. and of APG Groep N.V. Mr Van Well is also a director of the Stichting Continuïteit Feijenoord (Feijenoord Continuity Foundation).

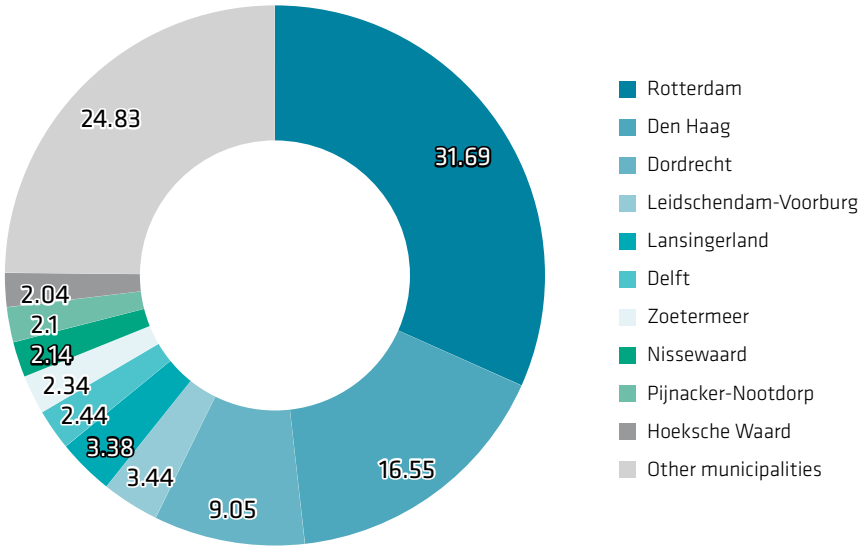
All members of the Supervisory Board of Stedin Group have Dutch nationality.

Shareholders

Together with our customers, shareholders and partners, we strive to foster sustainability in our social environment. With the support of our shareholders (44 Dutch municipalities in 2020), we are delivering on the sustainable course that we have charted.

Stedin Holding N.V.'s authorised share capital is divided into 20 million ordinary shares. No preference shares have been issued. Each share entitles its holder to one vote. No depositary receipts for shares have been issued. Nor are there any usufructuaries or pledgees of shares with voting rights. The shareholders covenant and the terms of reference of the shareholders' committee are available on www.stedingroup.com.

Municipalities holding more than 2% of the shares



Municipalities holding less than 2% of the shares

Aalsmeer
Achtkarspelen
Alblasserdam
Albrandswaard
Ameland
Amstelveen
Barendrecht
Bloemendaal
Brielle
Capelle aan den IJssel
Castricum
Goeree-Overflakkee
Gorinchem
Haarlemmermeer
Hardinxveld-Giessendam
Heemstede
Hellevoetsluis
Hendrik Ido Ambacht
Krimpen aan den IJssel
Krimpenerwaard
Molenlanden
Noardeast-Fryslân
Papendrecht
Ridderkerk
Rijswijk
Schiedam
Schiermonnikoog
Sliedrecht
Uithoorn
Vijfheerenlanden
Westbetuwe
Westvoorne
Zandvoort
Zwijndrecht

Crucial craftsmanship: Frank Krug

Frank Krug is a specialist in outages. What does 'crucial craftsmanship' mean for him? 'Don't just blame the fitter or the components. You need to be curious and investigate why an error was made.'

>What makes your work of vital importance? In other words, why is your work important for the organisation and society?
'In the case of major failures and incidents, I investigate the cause. For instance, I investigated the 2 major incidents in the last 18 months in The Hague. What happened and what can we learn from this? Do we want to change certain processes? I work a lot with various organisations, such as the State Supervision of Mines. Through my work, we can prevent new failures. Both my colleagues at Stedin and society benefit from this!'

>How do you recognise a professional in your field?
'You have to be investigative, curiosity needs to be part of your nature. Always think beyond what you see, with an open mind and a helicopter view. The real professionals in my discipline always exclude options, instead of thinking in terms of limitations. Rather than just blaming the fitter, they examine why an error was made. That is how you get results. I also derive inspiration from people from other organisations, like specialists of the fire brigade. I can learn from them as well.'

>What has working been like for you during the lockdown? What was different from normal and how did that affect you? What was the contact with customers like?
'To be honest, I occasionally get a bit fed up with the whole situation. I miss the personal connections. In the office, you could just walk over, make eye contact. You hear and see a lot that you then need to respond to. All of that is missing now. I sometimes feel the contact with colleagues is something of a surrogate for that reason. Of course, there are advantages as well. For instance, I regularly have meetings at the KIWA research institute in Apeldoorn. You would spend almost a full day on a meeting of two hours. Now, without the travel time, a two-hour meeting really only takes two hours. I aim to stick to my old regular routine. I start work at the same time and take a walk during my lunch break, just as I did at the office.'

>How do you ensure that you remain fit and healthy yourself?
'Last August, I turned 62, and I make use of the Vitality Scheme. It's pretty generous, you know. It's good to take things a little easier. I'm not exactly 20 years old any more. In this way, I am slowly moving towards my retirement. Every Saturday, I work as a volunteer on a small tugboat from 1958 that is moored here in Maassluis. We are completely refurbishing the boat, which is called "Tonijn" (Tuna). Some say, "If you buy a boat, you'll be working yourself into the ground to get it to float". That might be true, but it's also a lot of fun.'

>What gives you the most satisfaction in your work? In other words, how does your work help you maintain vitality?
'I get the most satisfaction from finding the cause of an incident or failure. The process of analysing. What happened, *exactly?* And if we can then introduce changes, for instance in behaviour, and you can really induce people to change the way they do things, that is what gives me real satisfaction.'

Risk management

Managing risks and opportunities in order to achieve strategic objectives is an important line responsibility. The risks and opportunities are therefore an integral part of the annual planning cycle. In 2020, these became even more specific in all departmental plans. This approach helps Stedin Group purposefully deal with uncertainties (risks and opportunities) in attaining its objectives.

Risk governance

In developing and executing Stedin Group's strategy, the Board of Management devotes extensive attention to the risks and opportunities associated with that strategy.

The Board of Management has final responsibility for the execution of risk management, together with the management of the various business units. They are supported by support departments specialising in functional areas, such as Corporate Risk Management; Safety, Health, Environment & Quality (VGMK); Business Continuity Management; Security Office; Corporate Affairs and Compliance & Integrity. In addition, the Asset Management line department is tasked with preparing proposals for replacement investments based on a risk analysis. We apply the ISO-NTA 8120 (ISO 55000) standard for this. The operational asset risks are identified in the Electricity and Gas Investment Plan. The investment plan for the years 2020-2022 is available on www.stedin.net. Internal Audit performs audits and reports on the results to the Board of Management as well as the Supervisory Board's Audit Committee. From 2020, the topic of Risk is a fixed item of the agenda of the Audit Committee of the Supervisory Board twice a year. The new risk management policy now also applies to DNWG, as does the risk governance. A detailed description of risk governance is available on www.stedingroup.com.

Risk management process

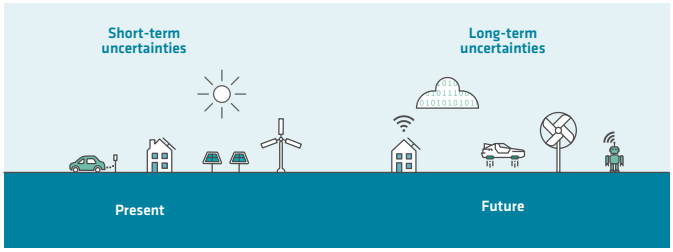
Stedin Group's Enterprise Risk Management (ERM) framework covers both long-term and short-term uncertainties. For the most part, this ERM framework has been translated into an In Control Framework (ICF). This ICF consists of the risk categories Operational, Fraud, Business Continuity, Compliance/Privacy and Information Security. The risks and the corresponding risk management with regard to the financial statements (ICoFR; In Control over Financial Reporting) are also part of the overall ICF. We based the design of this framework on the COSO-ERM framework and the ISO 31000 standard. The risk management process is a permanent part of the annual standard business planning and control cycle.

Long-term uncertainties

Looking at the long term, there are both risks and opportunities that constitute uncertainties in delivering the long-term strategy. We update and report on the developments of these uncertainties once every quarter. These long-term uncertainties also serve as input for the selection of strategic initiatives, are part of the financial-strategic forecasts and are incorporated in the annual planning process. In this way, the long-term uncertainties are addressed as much as possible in the planning.

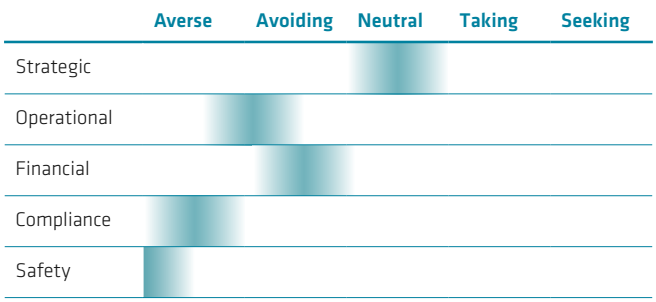
Short-term uncertainties

Risks and opportunities as well as the associated controls with regard to short-term uncertainties are identified. The short-term uncertainties and controls are linked to the business objectives and departmental objectives included in the departmental plans for 2021. We review and update these at least once a year. We report on developments in these risks and the effectiveness of the controls applied to the Board of Management via monthly business unit reviews. The departmental management periodically reviews by means of self-assessment whether the controls are effective, in connection with the 'Jointly in Control process'. We also define potential improvements and actions. Every quarter, we discuss the outcomes of these self-assessments with the operational management; twice a year, the management of each business unit reports to the Board of Management in a Letter of Representation. In that Letter, they report on risks, external reporting and integrity. These statements are one of the inputs that form the basis for the In-control statement of the Board of Management.



Risk tolerance

We have to incur a certain degree of risk in order to achieve our organisational objectives. Given the public and regulated nature of Stedin Group, the general risk tolerance tends predominantly toward risk aversion and avoidance. The extent to which we are prepared to be exposed to risks (the risk tolerance) differs for each risk category:



With regard to both risks and opportunities, Stedin Group is continually seeking a balance between its role in society, the available financial and other resources and the environment. In 2020, we focused more extensively on further mitigating the risks incurred.

- **Strategic – Neutral**: Stedin Group is prepared to take moderate risks to achieve its mission, vision and strategic objectives.
- **Operational** – **Avoiding**: Stedin Group is risk averse in connection with risks concerning supply security. In this light, Stedin Group seeks a balance between supply security and social and other affordability.
- **Financial – Avoiding**: Stedin Group is a capital-intensive enterprise. In order to ensure that our service provision to customers remains both reliable and affordable, we aim for an A category rating from Standard & Poor's. We do not accept any risks that may endanger that rating. The reliability of our financial reporting is one of the preconditions for retaining this rating.
- **Compliance – Averse**: we perform a regulated task in the energy world. We therefore seek to comply with all applicable laws and regulations.
- **Safety – Averse**: the electricity and gas infrastructure is potentially dangerous (and can pose a threat to lives). We have the lowest possible risk tolerance in connection with the safety of our employees and our environment.

Developments in 2020

Risk awareness

Following the implementation of the new risk management application in 2019, it was optimised in the past year. The organisation's use of this application enables us to monitor risks consistently. In combination with the collaboration with the appropriate riskspecialists in the organisation, this contributes considerably to the understanding of the risk awareness within Stedin Group. A first risk culture scan was carried out in December 2020. This provides input for follow-up steps to further optimise our risk culture in 2021.

Risk framework for financial reporting and financial risks

Following the series of improvements in 2019 of important elements, the risk framework for financial reporting (ICoFR) was fully taken into use this year. This has tightened the grip on the risks that may lead to material misstatements in the financial statements. We periodically monitor our reporting risks and consistently record our control procedures that we perform with regard to financial reporting. These procedures give rise to improvement plans that have in part already been implemented and in part are yet to be implemented. Full implementation of the recovery plans will lead to more manifest and efficient control of business operations. In periodic consultations, we discuss the outcomes and findings of the control procedures and whether our risk framework requires adjustments. These consultations are collaborations between the individual departments and the Corporate Risk Management department. Based on its role, Internal Audit performs independent audits of the quality of the control procedures performed and reports on these to the responsible executives and to the Board of Management. Besides the financial reporting risks, work was also carried out on managing other financial risks. This was done via deep dives on financial risks such as credit, currency and interest rate risks. The outcomes of these deep dives led to fine-tuning of the existing policy.

Risks and uncertainties that had a major impact in 2020

A number of risks occurred in 2020 that had a major impact on operations within Stedin Group:

- **COVID-19:** the worldwide COVID-19 outbreak was an unexpected event in 2020. As a company in a critically important sector, Stedin is responsible for optimally ensuring energy supply. Protocols have been drawn up to make it possible to continue working, especially for the operational activities, in a responsible manner. Nonetheless, COVID-19 has impacted various activities and objectives of Stedin Group. For example, the large-scale roll-out of smart meters (GSA) suffered delays, as some activities were temporarily suspended. The work procedure has now been adapted to the coronavirus policy. The original GSA objectives for 2020 have been modified, as part of which we aim to work smarter as much as possible in the present work package and to have no more than 40,000 offers outstanding at the end of the GSA. Moreover, we will have to invest less if customer demand falls. It is still uncertain at present whether all assignments can be carried out in full and/or on time. The risk concerning shortages of materials had already applied for some time. With the accelerated implementation and utilisation of dashboarding for critical materials, we acted on time to prevent larger shortages of materials due to COVID-19.
- **Reaching maximum connection and transmission capacity of Enduris:** as the grids were not reinforced in time, we will shortly reach the maximum connection capacity and transmission capacity in part of the grid area of Enduris. An advance warning has been issued for this. This means that the reinforcement of the grids needs to be accelerated in order to meet future customer-driven and grid-driven demand.
- **Major incidents:** a large-scale power outage occurred in a Stedin grid area (The Hague) in August during maintenance activities. This left 37,000 customers without electricity. Owing to the scale and duration of the outage, its financial impact was significant. In Spaarndam, a private customer connected a central heating installation themselves. The water mains were connected to the gas mains and 7,000 litres of water flowed into Stedin's mains grid. While working to remove the water from the gas mains, gas pressure plummeted in large parts of Spaarndam.
- **Gas grid Project:** the current gas grid is of great social and economic value. We are examining how we can also use the Stedin gas grid for the transmission of other sustainable gases. In Uithoorn, we are working with parties including the municipality, a housing association and suppliers of central heating installations to gain experience with hydrogen. A pilot project was started here in which a residential block was temporarily prepared for hydrogen-based heating. This is the first experience of the conversion.
- **Recall of smart meters of the L&G brand:** the smart meters used by Stedin include smart meters from consortium L&G. At the start of this year, a number of gas meters were rejected and exchanged as a precautionary measure after a leaky meter had been found. The impact for the organisation proved to be minimal, because the population affected remained limited. The financial loss was recovered from the supplier of the meters. The leak was reported to the State Supervision of Mines, and L&G immediately took mitigating measures that completely exclude the possibility of any recurrence of the issue.

Risks and uncertainties that had a major impact in 2019: 2020 update

A number of risks occurred in 2019 that had a major impact on Stedin's operations: These developed as follows in 2020:

- **Nitrogen issue:** while the huge challenge concerning the nitrogen deposits is undiminished, the prohibition of construction projects without prospects has been revoked. Instead of this prohibition, additional requirements are now applied whose feasibility must be examined in advance. This increases the lead time and costs of projects. If additional requirements cannot be met, the nitrogen emissions can be offset by purchasing emission rights.
- **Asbestos in fitter's sealant:** Following the detection of asbestos in sealant connections at the end of 2019, Stedin started, jointly with other grid managers, to develop and validate a safe way for working on or removing sealant connections. This has led to safe alternative working methods for the most frequently occurring situations. Safe work procedures for working on and removing riser pipes continue to be investigated. In carrying out preparatory activities, alertness to situations involving the possible presence of asbestos is part of standard practice. At locations at which asbestos might be present, an onsite inspection is always carried out first to determine whether asbestos might be present in the sealant connection and whether the correct preventive measures and work methods can be applied.
- **Impact of increased TenneT rates in 2020:** the talks on this topic with the Netherlands Authority for Consumers and Markets (ACM) continued in 2020. This led to an adjustment in the method to calculate the compensation for these costs. This will become effective as of 1 January 2021 and lead to improved matching between costs and revenues for all regional grid managers.
- **Accelerated replacement of grey cast iron pipes**: a start was made in 2019 on accelerating the replacement of grey cast iron pipes. The regular remediation programme was therefore scaled up. A total of 139 km was replaced in 2020. This will be increased to 215 km per year in 20232025. Close cooperation with partners in the chain and municipalities will be necessary in 2021 to achieve this upscaling and the associated underlying improvements.

Outlook for 2021

The core objective of risk management remains unchanged in 2021: to support line in performing risk management. To do so, the risk management department is targeting excellent execution of its core tasks in the risk management process (see the section on the risk management process). Key concepts include: creating good risk awareness within the departments, a complete insight into the long-term and short-term uncertainties and effective support on risk management by the line. Developments with regard to COVID-19 will remain uncertain. Accordingly, we are also closely monitoring the impact of COVID-19 on Stedin Group in 2021.

In addition, the department is committed to the further development towards Enterprise Risk Management. We are guided by the principles of good corporate governance in the Corporate Governance Code. We are further adding to our basic registers with risks and implementing measures to further mitigate those risks.

This further broadens the basis for the In-control process and strengthens the demonstrable degree of risk management. To that end, Corporate Risk issues an independent opinion on the In-control statement. We will also integrate the various risk areas, such as information security, privacy, compliance and safety more closely into the risk management application, thus providing a uniform insight into risk. Lastly, we will start to work with risk limits. These provide a clearer insight into when risks are at an acceptable level and where additional action is necessary.

For a description of the accidents in 2020, see Safety and security.

For an overview of the average downtime in electricity and gas supply, see Reliability of our grids.

For an overview of uncertainties concerning the smart meter, see High-quality products and services.

Most important risks and opportunities for Stedin Group in 2020

This section describes the most important risks and opportunities for Stedin Group. For information about our financial reporting risks, see Judgements, estimates and assumptions as well as Management of financial risks in the Financial Statements.

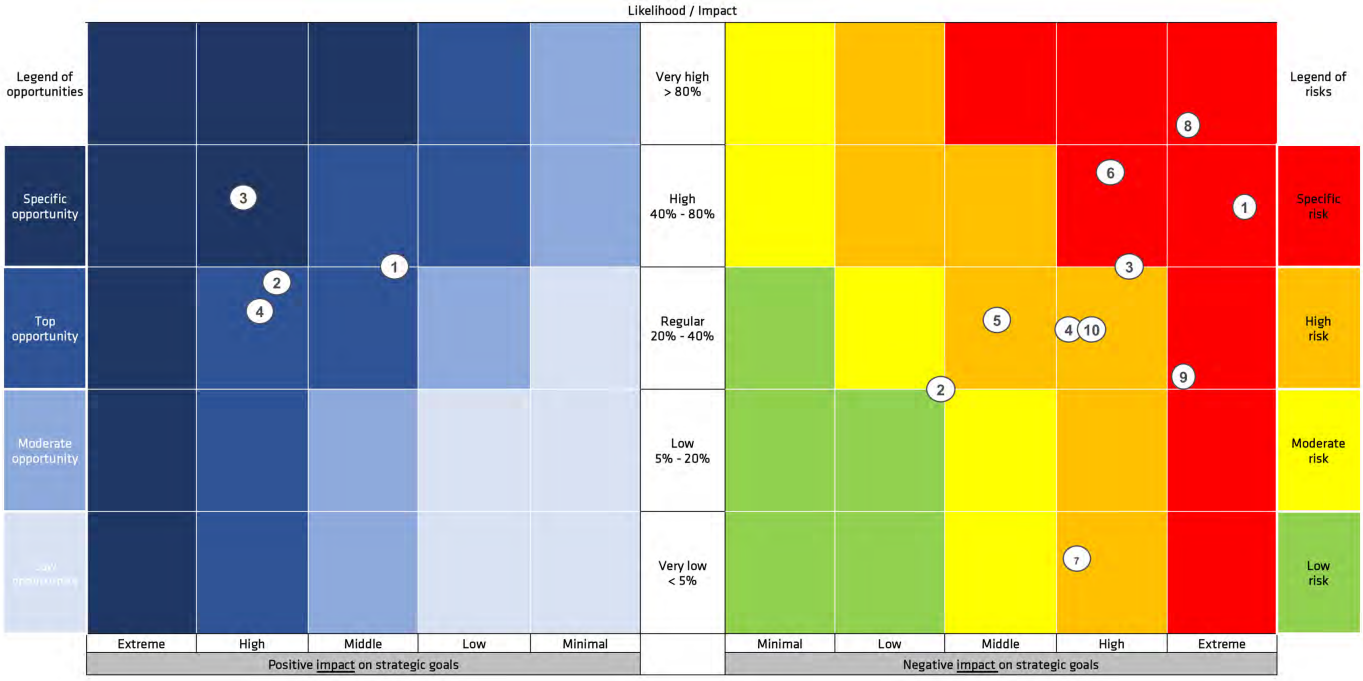
Connection of risks and opportunities to strategic spearheads and material topics

			Strategic spearheads			
			Improved grid management	Facilitating the energy transition	Sustainable business operations	Change from 2019
Risk	Category	Material topics				
1 Cyberattack	Operational	Data security, privacy and cybersecurity – Supply security – Reputation	•		•	↑
2 Unavailability of enough people with the required technical competences	Operational	Sufficient technical/IT staff – Training and development		•	•	↓
3 IT landscape insufficiently prepared for the future	Strategic	Smart grids, data technology and innovation		•	•	↓
4 Agility of the organisation	Strategic	Organisation's capacity for change – Reputation	•	•	•	=
5 Uncertainties concerning changes in laws and regulations	Compliance	Stakeholder dialogue and environment Heat transition	•			=
6 Uncertainties concerning long-term financing	Financial	Economic, financial performance – Investing in infrastructure		•	•	↑
7 Impact of accidents	Safety	Safety at work and in the environment – Reputation			•	=
8 Insufficient connection and transmission capacity	Strategic	Investing in infrastructure – Contributing to the energy transition – Customer satisfaction – Stakeholder dialogue and environment	•	•	•	=
9 Loss of communication network	Operational	Contributing to the energy transition – Reputation		•	•	=
10 Increased likelihood of surge to replace obsolete assets	Strategic	Economic, financial performance – Investing in infrastructure – Supply security	•	•	•	+
Opportunity						
1 Strategic supplier relationships		Stakeholder dialogue and environment – Social responsibility in the supply chain		•	•	↑
2 Disruptive technologies and methods		Smart grids, data technology and innovation		•		=
3 Provide stakeholders and customers with more self-services		Contributing to the energy transition – Reputation – Customer satisfaction – Stakeholder dialogue and environment	•	•		=
4 Building a future-proof IT landscape		Smart grids, data technology and innovation – Data security, privacy and cybersecurity	•	•		=

+ New in 2020 / = Equal to 2019 / ↑ Increased relative to 2019 / ↓ Decreased relative to 2019

Categories of strategic risks and opportunities

Stedin Group assigns its strategic risks and opportunities to five categories, from low to top. In evaluating risks and opportunities, we compare the likelihood of their occurrence with their potential impact on the achievement of our three strategic spearheads. This comparison led to the risk matrix below for 2020.



Strategic opportunities:

1. Strategic supplier relationships
2. Disruptive technologies and methods
3. Provide stakeholders and customers with more self-services
4. Building a future-proof IT landscape

Strategic risks:

1. Cyberattack
2. Unavailability of enough people with the required technical competences
3. IT landscape insufficiently prepared for the future
4. Agility of the organisation
5. Uncertainties concerning changes in laws and regulations
6. Uncertainties concerning long-term financing
7. Impact of accidents
8. Insufficient connection and transmission capacity
9. Loss of communication network
10. Increased probability of wave of replacements of absolate assets.

Risks

Title of risk:	① Cyberattack
Description of risk	As a result of its strategic location as well as its social and economic importance, the Stedin Group infrastructure is an attractive target for cyberattacks. A cyberattack can endanger the continuity of Stedin Group and society.
Risk tolerance	Avoiding
Change from 2019	↑
Risk assessment	Top
How did we respond to this fact in 2020	Cybersecurity has been more strongly embedded in the business processes. The commitment to security throughout Stedin was boosted further in 2020 by the implementation of the ISO27001 standard.

Title of risk:	② Unavailability of enough people with the required technical competences
Description of risk	Due to ageing and tightness in the labour market, there is a risk that we will no longer have enough staff with the required technical or other competences.
Risk tolerance	Avoiding
Change from 2019	↓
Risk assessment	Moderate
How did we respond to this fact in 2020	We have increased our insight into and grip on inflow, internal advancement and outflow. A Strategic Personnel Plan for the operational departments is in place, and we are building on a successfully launched labour market campaign. This is supported by the courses of our in-house training school and the newly established mobility desk. Using these instruments, we have reduced this risk to the desired level.

Title of risk:	③ IT landscape insufficiently prepared for the future
Description of risk	Stedin Group needs an integral IT infrastructure in order to support the future primary processes and facilitate the energy transition.
Risk tolerance	Neutral
Change from 2019	↓
Risk assessment	High
How did we respond to this fact in 2020	Effective steps are being taken within Stedin to ensure that the IT landscape is more adequate for the future. In the HICC project, a large part of the business applications was moved to the cloud. In addition, the key starting principles for a future-proof IT landscape were substantiated, and recommendations were made for a system-based approach. Moreover, the revised organisation of vendor management enables us to better anticipate market developments.

Title of risk:	④ Agility of the organisation
Description of risk	The culture and conduct of Stedin Group must change in accordance with the changes in the energy landscape so as to fulfil its role in the energy transition.
Risk tolerance	Neutral
Change from 2019	=
Risk assessment	High
How did we respond to this fact in 2020	This year, our leadership profile was augmented with a description of the type of conduct we need in order to realise Stedin's vision & strategy. We will be utilising this profile as a guideline in the coming period to further advance the development of leaders & teams. A clear ambition has been formulated. We also know where we stand at present and what we need to do to advance our development.

+ New in 2020 / = Equal to 2019 / ↑ Increased relative to 2019 / ↓ Decreased relative to 2019

Title of risk:	⑤ Uncertainties concerning changes in laws and regulations
Description of risk	National or European governments may take undesirable decisions on the role of regional grid managers. This situation can lead to uncertainty about the implementation of our strategy.
Risk tolerance	Averse
Change from 2019	=
Risk assessment	High
How did we respond to this fact in 2020	Stedin Group closely follows developments in Europe and The Hague, and it is represented in the national lobby, preferably through the industry association Netbeheer Nederland. Our Regulation department participates in the European lobby. Stedin Group is aware of amendments to existing laws and new laws well in advance. The delay in developing/updating Energy Act 1.0 is an aspect that requires attention. This may lead to sub-optimal regulations, temporarily or otherwise, to implement necessary changes sooner.

Title of risk:	⑥ Uncertainties concerning long-term financing
Description of risk	A regulation model that is not aligned with the financial challenges of the grid managers in the energy transition entails a risk of further cost increases that outpace increases in regulated revenue. This can endanger the availability of financing.
Risk tolerance	Avoiding
Change from 2019	↑
Risk assessment	Top
How did we respond to this fact in 2020	The present regulatory model is not aligned with the task and the financial challenges of the grid managers in the energy transition. As the increase in investments outpaces increases in regulated revenue, a capital requirement arises and Stedin's financial position comes under pressure. Investments in our grids with a view to ensuring good grid management and realising the energy transition lead to a capital requirement of €750 million to €1 billion. Additionally, it became clear in 2020 that the WACC, as set by the Netherlands Authority for Consumers and Markets, will decrease further in the new regulation period. This will result in a considerable decrease in income for grid managers. To ensure that we can undertake the required investments, we need to critically assess our own costs and respond to the developments of financial markets as well as laws and regulations. The talks with various stakeholders to strengthen equity were continued in 2020. Talks were also conducted with the Netherlands Authority for Consumers and Markets on adjustments to the regulatory model. These will also be continued in 2021.

Title of risk:	⑦ Impact of accidents
Description of risk	Due to insufficient safety awareness and learning ability, there is a risk of unsafe situations. As a consequence, Stedin Group could suffer reputational damage and be subject to sanctions imposed by regulators.
Risk tolerance	Averse
Change from 2019	=
Risk assessment	High
How did we respond to this fact in 2020	Our multi-year safety programme is based on the principles of the High Reliability Organisation (HRO). We completed phase 1 'Raising awareness' in 2018 and phase 2 'Updating knowledge' in 2020. We have now started on phase 3, 'Embedding routines'. The entire Stedin Netbeheer organisation obtained certification for level 4 of the Safety Culture Ladder in 2020. Work is under way within DNWG in 2021 on certification for level 3 of the Safety Culture Ladder as a stepping stone to level 4 in 2022. For NetVerder, we are examining how we can apply the Safety Culture Ladder for that type of organisation.

+ New in 2020 / = Equal to 2019 / ↑ Increased relative to 2019 / ↓ Decreased relative to 2019

Title of risk:	⑧ Insufficient connection and transmission capacity
Description of risk	If we fail to reinforce our grids soon enough, it is possible that we may not be able to provide transmission capacity for our customers. In that situation, we will be unable to comply with customers' requirements, customers will have to cancel their projects and this situation will delay the achievement of the climate objectives.
Risk tolerance	Neutral
Change from 2019	=
Risk assessment	Top
How did we respond to this fact in 2020	Stedin is party to all relevant Regional Energy Strategies and National Charging Infrastructures. We also map customer demand to a far greater extent, so that our customers know where capacity is available and where potential bottlenecks might arise in the grid. In addition, we have adopted a more proactive investment approach and have drawn up 'Master Plans' that provide insight into the infrastructure that is necessary to achieve the objectives by 2050. It has become clear for Enduris that we are probably too late for one region, and we therefore had to issue an advance warning of structural congestion in the municipalities of Schouwen-Duiveland and Tholen.

Title of risk:	⑨ Loss of communication network
Description of risk	Due to uncertainties concerning the long-term availability of our communication networks (GPRS and CDMA), there is a risk that we will be unable to read out information from the smart meters or will have to incur more costs for permanent access or alternative technology.
Risk tolerance	Avoiding
Change from 2019	=
Risk assessment	Top
How did we respond to this fact in 2020	In 2020, investments were made in the CDMA network that allow its useful life to be extended to 2034. Stedin is also in talks with the Ministry of Economic Affairs and Climate Policy on the form of the auction for the licence for the use of the CDMA network as from 2025. Negotiations with telecom providers on the use of the GPRS network are continuing, in cooperation with other grid managers.

Title of risk:	⑩ Increased likelihood of surge to replace obsolete assets
Description of risk	With the current policy, we see a greater likelihood of a surge to replace assets due to their growing obsolescence. Preparing for a possible surge of replacements entails uncertainty because the amount and timing are difficult to predict.
Risk tolerance	Neutral
Change from 2019	+
Risk assessment	High
How did we respond to this fact in 2020	On the one hand, we have further improved and strengthened the risk-based maintenance on the basis of failure curves. On the other, we schedule replacements by using and combining many more data sources. This has enabled us to increase the effectiveness of maintenance and replacements. Both the risk-based maintenance and scheduling of replacements are carried out on the basis of machine learning and advanced analytics.

+ New in 2020 / = Equal to 2019 / ↑ Increased relative to 2019 / ↓ Decreased relative to 2019

Opportunities:

Title of opportunity:	① Strategic supplier relationships
Description of opportunity	Strategic relationships with suppliers increase our responsiveness and improve our cost-effectiveness.
Change from 2019	↑
Opportunity assessment	High
How did we respond to this fact in 2020	We have established a Strategic Vendor Board in which we implement the collaboration with new and existing suppliers and carry out the programme management for our tendering procedures. The creation of the new supply chain organisation in May 2020 aims to properly tailor supply to requirements/demand. By reciprocally sharing long-term objectives and requirements with our strategic suppliers, we can collaborate more effectively and efficiently and achieve shared objectives.

Title of opportunity:	② Disruptive technologies and methods
Description of opportunity	We see an opportunity to apply new methods, technologies and new ways of collaborating and to utilise data effectively. This enables us to better carry out our task within the energy system, increase our capacity for innovation, work more efficiently and facilitate the energy transition.
Change from 2019	=
Opportunity assessment	High
How did we respond to this fact in 2020	In 2020, the ambition for hydrogen in the natural gas grid became tangible, with the project Stad aan 't Haringvliet op Waterstof in 2025 (Town at 't Haringvliet on Hydrogen by 2025). There are also specific experiments in the area of reducing peak load in flats that are switching to induction cooking, and pilot studies are under way for facilitating decentralised generation and exchange of electricity. Also, Opening Bid 1.0 was launched to make the heat transition transparent and manageable. Lastly, results were achieved on innovating existing business processes, such as using automation on financial approval processes and gas business operations.

Title of opportunity:	③ Provide stakeholders and customers with more self-services
Description of opportunity	By assisting stakeholders and customers, and by giving them control, we enable them to improve the sustainability of the energy system while minimising societal costs.
Change from 2019	=
Opportunity assessment	Top
How did we respond to this fact in 2020	By developing products and services in fields such as heat transition, electrical mobility and generation, we give customers insight into the possibilities on our grid, on the basis of which they can make choices in the energy transition. We create insight into what our environment is asking of us in the long term, so that we can invest effectively and are engaged proactively in dialogue with customers on opportunities and limitations in the energy infrastructure.

+ New in 2020 / = Equal to 2019 / ↑ Increased relative to 2019 / ↓ Decreased relative to 2019

Title of opportunity:	④ Building a future-proof IT landscape
Description of opportunity	Stedin Group is increasingly becoming a data and IT-driven organisation. By building a future-proof IT landscape, we are increasing our flexibility and our innovative potential.
Change from 2019	=
Opportunity assessment	Top
How did we respond to this fact in 2020	In order to increase Stedin's flexibility, agility and capacity for innovation, we need to link process architecture and technology to the greatest possible extent. The combination of the HICC project, the expansion of the API management, the de-customisation of SAP and the advancement of digitalisation initiatives will help Stedin to capitalise on this opportunity.

+ New in 2020 / = Equal to 2019 / ↑ Increased relative to 2019 / ↓ Decreased relative to 2019

In-control statement

As the Board of Management, we are responsible for the adequate design and operating effectiveness of our risk management and control system. This system is aimed at achieving strategic and operational objectives and at monitoring the reliability of our financial reporting and our regulatory compliance. The inherent limitations that apply to any internal risk management and control system must, however, be taken into account. This means we will never be able to absolutely guarantee that we will achieve our company objectives or that our processes, including the financial reporting process, will be free from errors, losses, fraud or violations of laws and regulations.

We monitored and evaluated the design and operating effectiveness of the system during 2020 and discussed this with the senior leadership team, the Board of Management and the Supervisory Board. Monitoring and evaluation took place based on regular business control reports containing an overview of operational risks and controls, business self-assessments resulting in Letters of Representation and quarterly updates on strategic risks and opportunities. Account was also taken of the information from reports from the internal audit function and the external auditor. In 2020, as a result of our investments in our Internal Control Framework, we had more opportunity to determine the adequate design and operating effectiveness of our risk management and control system over the course of the year. These interim assessments gave rise to improvement plans that have in part already been implemented and in part are yet to be implemented. Full implementation of the recovery plans will lead to more manifest and efficient control of business operations.

We declare that:

• the in-control process provides sufficient insight into any failings in the effectiveness of the internal risk management and control systems;

• the aforementioned systems provide reasonable assurance that the financial reporting does not contain any material inaccuracies;

• based on the current state of affairs, it is justified that the financial reporting is prepared on a going concern basis;

and

• the report states those material risks and uncertainties that are relevant to the expectation of the company's continuity for the period of 12 months after the preparation of the report.

Rotterdam, 17 February 2021

Board of Management,

Marc van der Linden, CEO (chair)

Danny Benima, CFO

David Peters, CTO

Report of the Supervisory Board

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Interview with Doede Vierstra, chair of the Supervisory Board

The energy transition is causing radical change

In February 2020, Doede Vierstra officially started as chair of the Supervisory Board. One month after that, the lockdown commenced. This period felt unreal. Even so, it was possible to work successfully on the greatest challenge facing Stedin according to Doede: the energy transition. 'We are entering a phase in which everything will change. We will have to learn as we go along'

A visit to the crisis team in a building that was almost completely empty, a meeting of shareholders with cameras only and all shareholders attending remotely. It was an unusual start to a term of office. 'Fortunately, I had already started onboarding before this, so I was in fact still able to shake a few people's hands', Doede says. 'It is admirable to see how quickly Stedin and all our stakeholders switched over to a new way of working, ensuring that consultations proceeded as usual. As a result, we did not lose any time with regard to talking about the energy transition. Everyone deserves praise for that.'

According to Doede, the energy transition is the greatest challenge for the Netherlands in the years ahead. 'It is not easy to maintain a balance between all interests and the various tasks that need to be carried out. To that end, the Supervisory Board's role is to connect the parties involved. On the other hand, it is also a sparring partner, using its knowledge and experience to assist these talks in making the necessary progress. Sometimes, you need to push a little, and sometimes, you need to explain more.' Above all, the challenge is to ensure that everyone moves at the same speed. 'We can't advance any faster than the weakest link. That requires a huge amount of liaising and coordination.'

Doede, with ample experience on a variety of boards, believes the can-do mentality is typical of Stedin. 'But so is the pervasive mutual trust. This is not something you'll find everywhere. We are open, we listen to each other and we don't play games with each other. We can share matters with the Works Council in all openness, because this is invariably dealt with in a constructive manner. That is worth a great deal, and it is something we need to cherish.

The four challenges for the years ahead

Doede sees four major challenges for the years ahead: how to finance the energy transition, laws and regulations, making choices and vital employees. 'Above all, we need people with special competences, for instance in digital technologies. To me, those are the vital professionals. We must train and retain professionals ourselves.' If you want to understand what is so radical about this transition, says Doede, you need to look at digitalisation. 'What matters are our options for optimisation. What will we do if we temporarily don't need solar or wind energy? How can we deal with this in an intelligent way? This is hugely complex, calls for extensive digital knowledge and competence and will fundamentally change our infrastructure. That is what we need to prepare for now.'

How to finance the energy transition remains a big issue in this connection, of course. Stedin will need a great deal of money in the coming years to be able to make the investments required for the energy transition. 'We will call on our shareholders for this, amongst others. It is important to me to show them that this is an investment that will deliver returns. And yes, it will require us to make choices. To be realistic. To ensure our customers are on board, so that they also know what is possible. For instance, endlessly committing to solar power in every municipality will not work. This cannot all be done at the same time, neither in practical nor in financial terms. That is why we want to look jointly at how this can be financed, why we engage in dialogue with the central government and why laws and regulations are so important. At present they are not calibrated to the new reality. Sooner rather than later, an adjustment will be required that takes account of the much higher investments.'

Doede hopes that we will transition to a sustainable energy system that makes optimal use of all sustainable sources at our disposal and in which no energy is lost. 'That is the grail we are chasing. The way I see it, it is highly worthwhile to contribute to this.'

Report of the Supervisory Board

As Supervisory Board, we are tasked both with exercising supervision and with providing advice. We also act as the employer of the Board of Management and serve in the role of external ambassador. In this report, the Supervisory Board renders account on the performance of its activities in 2020.

The year 2020 was largely characterised by the challenges inherent in the energy transition. At the same time, a great deal of attention was of course devoted to COVID-19 and its consequences, the care for the safety and health of our employees and customers and staffing at the top of the organisation. In performing our duties, we focus on long-term value creation.

A number of specific topics that were addressed in 2020 are described below.

Topics

Strategic objectives

Progress on strategy, based on the three strategic spearheads, is a recurring topic for discussion in the Supervisory Board. A monthly report is received on execution and progress with regard to the objectives that have been formulated. Strategic topics are regularly reviewed in the Supervisory Board meetings. The annual two-day session provides an opportunity for additional in-depth examination of such topics; in this year's session, we extensively considered the topic of Corporate Finance and the interaction with regulation in relation to the energy transition. Organisational development was a further topic that we considered in greater depth in that session. Both elements – funds as well as people – are crucially important in achieving the energy transition.

Secretary of the Supervisory Board Suzanne van Nieuwenhuijzen; on the screen, from left to right and top to bottom: Dick van Well, Hanne Buis, Doede Vierstra, Theo Eysink, Annie Krist, Arco Groothedde.

Shareholders and long-term financing
Stedin has a substantial need for capital in order to finance the energy transition. This is to be met by various routes. In 2020, this topic was frequently discussed by the Supervisory Board and between the Board of Management and the Supervisory Board.

'In the choices it needs to make, the Board of Management must weigh up the interests of all stakeholders, and as the Supervisory Board, we exercise supervision over this.'

With regard to the governance of Stedin and where the discussion concerns the powers of the Supervisory Board, the Supervisory Board is not just a supervisory body but also a party in the dialogue. The shareholders are an important stakeholder for Stedin, and the Supervisory Board accordingly sets great store by a good relationship with them.

Safety
The Supervisory Board notes that all the efforts that have been made in the past few years in the field of safety have clearly produced results. The safety ratios were again improved in 2020. The Supervisory Board monitors safety within the company via a periodic dashboard. Safety awareness in a broad sense is given considerable attention within the company, through the execution of the multi-year safety programme HRO (High Reliability Organisation). The Supervisory Board endorses the importance of this programmer for a company such as Stedin.

CDMA/Connectivity strategy
In various meetings in the past year, we considered the role of the smart meter and connectivity in the energy system and in the energy transition. The roll-out of the smart meter is a huge task and presents a number of challenges. The development of new – smarter – meters is continuing. At the same time, this must tie in with connectivity solutions. The Supervisory Board deems it advisable to look for solutions for this across the sector as a whole.

Succession management
Given the major challenges facing Stedin, good leadership is essential. The Supervisory Board looks not only at the Board of Management in that connection but also at broader organisational developments. Steps have been taken based on previous insights and ambitions, and the leadership of the top layer has been systematically improved. During the offsite retreat in July, extensive attention was devoted to design principles, leadership development, succession management and diversity of the Board of Management and the layer below it.

COVID-19
Since the outbreak of COVID-19 early in the year, the Supervisory Board has been monitoring its impact on the Stedin organisation, its employees and customers. The Supervisory Board was impressed by the rapidly established and professionally operating crisis organisation, in combination with the 'can-do mentality' within the company, which allowed most of the activities to go ahead.

Other important topics
In addition to the topics singled out above, the Supervisory Board devoted attention to numerous topics that are relevant within Stedin. All three strategic spearheads were considered in this connection. For example, with regard to 'Improved grid management', attention was devoted to the major outage in The Hague in August 2020 and the follow-up procedures for the explosion in Jan van der Heijdenstraat in The Hague in 2019, as well as to facilitating the energy market and developments concerning C-ARM and smart meters. With a view to making the energy transition possible, we considered stakeholder management and public affairs and the developments concerning the Heating Supply Act (Warmtewet), for instance. In connection with the third pillar – Sustainable business operations – the Supervisory Board devoted considerable attention to how the business can be financed. Other topics we focused on included Stedin's One Planet Strategy and succession management and leadership.

Composition of the Supervisory Board and schedule of appointment and retirement

Name	Appointment or reappointment	Due to retire in
Mr D.G. (Doede) Vierstra RC	20 September 2019	20 September 2023
Ms H.L. (Hanne) Buis, LLM	21 September 2018	21 September 2022
Ms A.J. (Annie) Krist	13 April 2018	13 April 2022
T.W. (Theo) Eysink RA	12 February 2021	12 February 2025
Mr A.P.G. (Arco) Groothedde	30 September 2020	30 September 2024
Mr P.E.G. (Pieter) Trienekens	6 February 2019	1 February 2020 (stepped down)
Mr D. (Dick) van Well	30 January 2017	1 February 2021 (stepped down)

Pieter Trienekens served as chair until 1 February 2020; as of that date, Doede Vierstra succeeded him as chair of the Supervisory Board. Doede had already been appointed as a member of the Supervisory Board a few months earlier at the Extraordinary General Meeting of Shareholders (EGM) of 20 September 2019. Mr Arco Groothedde was appointed as a member of the Supervisory Board in the EGM of 30 September 2020. He will succeed Dick van Well, who had been appointed to serve until 1 February 2021 and is not eligible for reappointment. This means that there are temporarily, until 1 February 2021, six members of the Supervisory Board. The composition of the Supervisory Board was emphatically considered in this recruitment process; the additional expertise of Groothedde relates mainly to data and digitalisation. Groothedde was appointed for a term of four years. Theo Eysink's term of office was set to expire on 1 February 2021; he was reappointed for a second term at the EGM of 12 February 2021.

The Supervisory Board sets great store by diversity in its composition. Until September 2020 and after February 2021, the gender ratio male/female in the Supervisory Board was and is 3/2; in the intervening period, it was 4/2. The ratio on the Board of Management is unchanged from 2019, at 3/1. Following the departure of Dick van Well, the arrival of Arco Groothedde represents a further rejuvenation of the Supervisory Board. In addition, the Supervisory Board aims for diversity in competences.

The search for a new member of the Supervisory Board in 2020 was based on a clear preference for someone with knowledge of data and IT and digital transformation processes. Arco Groothedde was therefore a welcome addition for the competences already available on the Supervisory Board.

Working method and meetings

The Supervisory Board held six regular meetings in 2020, as well as five extra ad hoc meetings with the full Supervisory Board. The regular meetings were always preceded by a consultation of the Supervisory Board, behind closed doors. Afterwards, the Supervisory Board held a consultation with the chair of the Board of Management. The Board of Management attended the meetings of the Supervisory Board; due to her absence, Judith Koole (COO) did not attend the meetings of the Supervisory Board. The other members of the Board of Management and the members of the Supervisory Board attended all regular meetings. The agendas for the meetings were prepared by the secretary, in consultation with the members of the Board of Management and the chair of the Supervisory Board. The reports of the meetings were prepared on an alternating basis by the secretary (Suzanne van Nieuwenhuijzen) and the deputy secretary (Kirsten Wilkeshuis).

After the coronavirus measures became effective in mid-March, the Supervisory Board met mainly via digital means. The same applies to the meetings of the committees and other consultations. All participants in the offsite retreat at the start of July were physically present, with due observance of the guidelines of the National Institute for Public Health and the Environment).

Attendance rate of Supervisory Board members at meetings

Name	Supervisory Board meeting	Audit Committee	Selection, Remuneration and Appointments Committee
Doede Vierstra	100%		100%
Theo Eysink	100%	100%	
Dick van Well	100%	100%	100%
Annie Krist	100%	100%	
Hanne Buis	83%		83%
Arco Groothedde	100%*		

* Arco Groothedde became a member of the Supervisory Board on 30 September 2020.

Committees

The Supervisory Board has two committees, the Audit Committee and the combined Selection, Remuneration and Appointments Committee (SRA Committee). The committees prepare decision-making for the Supervisory Board in the area of responsibility concerned and advise the Supervisory Board. Decision-making takes place in a Supervisory Board meeting in which all members are present. All members of the Supervisory Board have access to the documents of the committees. In the next Supervisory Board meeting to be held, the chair of the committee provides an oral update and, if they are ready, the draft minutes of the meeting of the committee are shared.

Audit Committee

In this year's meetings, extensive attention was given to the long-term financing, but also to the internal risk management and control systems for cybersecurity, treasury, internal audit and compliance, as well as the regular topics. The meetings, of which four were held in 2020, are attended as standard by the CFO, the internal audit manager, the external auditor and the finance director. The compliance officer attends as a guest at least twice a year. The terms of reference of the Audit Committee have been posted on the Stedin Group website.

Selection, Remuneration and Appointments Committee

With effect from September, Dick van Well was succeeded by Hanne Buis as chair of this Committee. The recruitment and selection of a new member of the Supervisory Board (see Self-assessment and education) was one of the topics; in line with the governance agreements, consultation took place on this with the delegation of shareholders. Other topics included the continuing education for Supervisory Board members, self-assessment and the amendment of the profile for the Supervisory Board (adopted in the AGM in September 2020). The remuneration of the Board of Management members and Supervisory Board members for 2020, which is in accordance with the adopted remuneration policy and respects the limits of the Senior Executives in the Public and Semi-Public Sector (Standards for Remuneration) Act (Wet normering topinkomens, WNT), is described in the Remuneration report for 2020 section. The terms of reference of the Selection, Remuneration and Appointments Committee have been posted on the Stedin Group website.

Self-assessment and education

We carried out the self-assessment in several steps in 2020, supported by the HR Director. The outcomes of questionnaires and individual interviews were presented to the Supervisory Board and discussed at the offsite retreat in July. The emphasis was on procedural and relational aspects. The main outcomes of this process were shared with the members of the Board of Management. One of the results this led to was better pre-meeting consultation with each other on expectations regarding the topics to be discussed in the meetings. This contributes to better meetings. It also enhances the Supervisory Board's role in acting as a sparring partner.

As members of the Supervisory Board, we believe it is important to develop continually. The world around us is changing rapidly, and we will have to change with it if we are to serve effectively in our role. A workshop on 'Corporate Finance', which was held during our offsite retreat in July, gave us in-depth insight into the financial challenges of the energy transition and Stedin's position within it. In addition, we elected to receive refresher training, in the form of a customised Nyenrode programme, in two modules (corporate governance, strategy and transition).

The new member of the Supervisory Board, Arco Groothedde, followed an induction programme after his appointment, in connection with which he spoke with various line managers and support department managers. Owing to the coronavirus guidelines, those talks took place in digital form. Other members of the Supervisory Board also received briefings and information on the Stedin organisation in individual talks with employees.

Independence of members of the Supervisory Board

The articles of association and the terms of reference of the Supervisory Board include provisions on the independence of Supervisory Board members. The composition of the Supervisory Board is such that its members are able to operate independently and critically in respect of one another, the Board of Management and any particular interests involved. Following the departure of Pieter Trienekens in February 2020, the independence requirement for supervisory board members pursuant to the Corporate Governance Code is complied with in full. A permitted exception applies with regard to independence within the meaning of the Electricity Act (Elektriciteitswet) and the Gas Act (Gaswet), as Annie Krist also serves as CEO of GasTerra.

Ancillary positions are reported to the chair and the secretary of the Supervisory Board. None of the Supervisory Board members exceeds the maximum number of supervisory positions at large Dutch companies or major foundations. The topic of 'ancillary positions' was discussed last year in the Supervisory Board meeting on 30 September 2020.

No material transactions occurred in 2020 that involved potential conflicts of interests between the company and Supervisory Board members.

Contacts with shareholders

In 2020, the contacts between Stedin and the shareholders were intensified, mainly in connection with the process concerning the long-term financing. Within the Supervisory Board, the chair in particular was closely involved in this process, and consultation regularly took place with the other Supervisory Board members. There were three meetings of shareholders, two of which took place in digital or hybrid form. We hope that there will be more opportunities for informal meetings again in the coming year.

Contacts with the Works Council

In the context of broadly weighing up stakeholder interests, the Supervisory Board sets great store by good contact with the Works Council. A 'tripartite consultation' takes place twice a year; in 2020, this was in July and in December. Besides the members of the Supervisory Board, these are attended by the members of the Board of Management and a delegation from the Works Council. The topics that were discussed in 2020 were long-term financing, the coronavirus at Stedin and the consequences of the latter. Safety is a topic that also regularly features at these meetings. The chair of the Audit Committee was present when the full-year figures were discussed by the Works Council. The transparent and pleasant way of collaborating between the Works Council, the Board of Management and the Supervisory Board can serve as an example for other organisations; the Supervisory Board accordingly considers it justified that Stedin competed for the '3D trophy', an award for the collaboration between the Works Council, the Board of Management and the Supervisory Board. Two Supervisory Board members were interviewed for this purpose. You can read more about the Works Council in the section on Vital employees in a changing environment.

Changes on the Board of Management

Marc van der Linden (CEO)

On 30 September 2020, the imminent departure of the current CEO Marc van der Linden was announced. Marc van der Linden's term of office will expire as of 1 February 2021. He will remain as CEO until 1 July 2021 at the latest. The search for a new CEO has been initiated. The Supervisory Board expresses its gratitude for the way in which Marc made Stedin independent following the unbundling from Eneco and gave further shape to the strategy for the coming years.

Judith Koole (COO)

The Board of Management had to cope without Judith Koole (COO) in 2020 for a large part of the year. Judith's operational tasks were taken over by Coen Terlingen during this period. Judith issued a power of attorney to the other members of the Board of Management for her tasks as member of the Management Board. This made it possible to continue her work during her absence.

Judith Koole's term of office as a member of the Board of Management will expire on 1 February 2021. In consultation with the Supervisory Board, Judith Koole indicated that she would step down as a member of the Board of Management of Stedin Holding N.V. She will continue at Stedin for a considerable time. As from 5 December 2020, she is therefore no longer a senior executive of Stedin Netbeheer B.V. The Supervisory Board will search for a new COO in 2021.

Recommendation to the shareholders concerning the financial statements

The financial statements were prepared by the Board of Management and audited by Deloitte Accountants B.V., which issued an unqualified opinion on them. The members of the Board of Management and the Supervisory Board have signed the financial statements. The Supervisory Board submits the financial statements to the General Meeting of Shareholders for adoption, together with the dividend proposal for the 2020 financial year. It is furthermore proposed to the General Meeting of Shareholders to discharge the Board of Management in respect of its management in the financial year 2020 and the Supervisory Board in respect of the supervision exercised over the Board of Management in the same financial year.

Word of thanks

The Supervisory Board wishes to thank the employees, management, the Works Council and the Board of Management for their considerable involvement, professionalism and commitment. We wish to thank the shareholders for their support and the trust they place in Stedin.

Lastly, a word of thanks to the chair of the Board of Management, Marc van der Linden, who has stated that he will be leaving Stedin by 1 July 2021 at the latest. We understand the choice Marc has made, and we are very grateful to him for the contribution he has made to the present organisation. We would also like to thank Judith Koole, who has stepped down as a member of the Board of Management. We are pleased that Judith will continue to be involved in the organisation for a considerable time. Lastly, we thank Dick van Well, who is stepping down as a member of the Supervisory Board with effect from February 2021. His long involvement first at Stedin Netbeheer B.V. and subsequently at Stedin Holding N.V. has been very valuable for the organisation.

Rotterdam, 17 February 2021

The Supervisory Board

Doede Vierstra (chair)
Hanne Buis
Theo Eysink
Arco Groothedde
Annie Krist

Remuneration report for 2020

This remuneration report describes the remuneration policy applied for the Board of Management and the Supervisory Board of Stedin Group. We also provide explanatory information on the application of the Senior Executives in the Public and Semi-Public Sector (Standards for Remuneration) Act (Wet normering topinkomens, WNT).

Remuneration policy for the Board of Management

A new, updated remuneration policy for the Board of Management of Stedin Group became effective on 1 January 2020. The Supervisory Board (SB) approved the new policy at the end of 2019, and on 7 February 2020, it was also approved by the General Meeting of Shareholders.

The main changes in terms of content of the remuneration policy relate to the net fixed expense allowance of €160 per month. The total employee benefits package consists, on the one hand, of a fixed annual salary and, on the other, of a number of other elements of remuneration. The members of the Board of Management do not receive variable remuneration. The fixed annual salary consists of 12 monthly salaries plus 8% holiday allowance. The other elements of remuneration provide for participation in the ABP pension scheme, 30 days of leave annually, the option of participating in the group health insurance and invalidity insurance, a net expense allowance and a fully electric lease car. Each year, the Supervisory Board determines the fixed annual salary of the members of the Board of Management.

Senior Executives in the Public and Semi-Public Sector (Standards for Remuneration) Act

The Senior Executives in the Public and Semi-Public Sector (Standards for Remuneration) Act (Wet Normering Topinkomens, WNT) is applicable to the business units Stedin Netbeheer B.V. and Enduris B.V. The Board of Management of Stedin Group is also the highest executive body of the grid manager Stedin. The four members of the Board of Management qualify as senior executives of Stedin Netbeheer B.V. pursuant to the WNT. In addition, the director of DNWG Groep N.V. qualifies as a senior executive of Enduris B.V. pursuant to the WNT, on a 50% basis. He is the director of the infrastructure company DNWG Infra B.V. on the remaining 50% basis. Unlike the Board of Management, the director of DNWG Group is not employed by the grid manager. He therefore qualifies as a senior executive without employment.

The remuneration policy for the Board of Management limits the total remuneration of the members of the Board of Management, which may not exceed the general maximum remuneration under the WNT. In 2020, that maximum was €201,000. The WNT transitional rules apply neither at Stedin Netbeheer B.V. nor at Enduris B.V.

The WNT also applies to the members of the Supervisory Board of Stedin Group. They qualify as senior supervisory directors. Under the remuneration policy for the Supervisory Board, the maximum remuneration for the chair and for the members of the Supervisory Board is 15% and 10% of the applicable WNT standard respectively.

Disclosures on remuneration

The reporting on the WNT remuneration of Stedin Group is part of the Notes to the consolidated financial statements, WNT compliance for 2020 by Stedin Netbeheer B.V. and Enduris B.V..

COO Judith Koole was absent for a long time in 2020. An operational director was temporarily appointed for the portion of her work that relates to directing operations. Her strategic activities were taken over by CEO Marc van der Linden and CTO David Peters. The interim operational director does not qualify as a senior executive pursuant to the WNT. Judith Koole's term of office as a member of the Board of Management will expire on 1 February 2021. In consultation with the Supervisory Board, Judith Koole indicated that she would step down as a member of the Board of Management of Stedin Holding N.V. She will continue at Stedin for a considerable time. With effect from 5 December 2020, she ceased to be a senior executive of Stedin Netbeheer B.V.

As of 1 January 2020, several amendments were implemented in the WNT Implementing Regulations. One of those amendments concerns the requirement to disclose the remuneration at the affiliated entity if there is an overlap of the activities as a senior executive and the activities at an affiliated entity. DNWG Staff B.V. is an affiliated enterprise of Enduris B.V. DNWG Infra B.V. and Enduris B.V. are not affiliated. Full application of the implementing regulations means that the WNT in effect encompasses the enterprise DNWG Infra B.V., even though that is not required to comply with the WNT. Therefore, the total remuneration of the director of DNWG Group including DNWG Infra is disclosed in the Notes to the consolidated financial statements in a separate table.

Except for the Board of Management, employees of Stedin Group are employed by a personnel company (Personeels B.V.). Personnel companies are not subject to a requirement to report on other executives who receive remuneration exceeding the individually applicable threshold amount. Disclosing this information after all may constitute a breach of the privacy of the executives concerned pursuant to the General Data Protection Regulation (GDPR). Therefore, Stedin Group does not report this information. Nevertheless, Stedin Group does specifically take account of the WNT in remunerating its employees. This is reflected, for instance, in the new remuneration policy (effective as from 2019) for the management layer that reports to the Board of Management at Stedin Groep Personeels B.V. The contents of that remuneration policy are similar to those of the Board of Management and no longer provide for variable remuneration. The maximum salary according to the salary scale including 8% holiday allowance was approximately €162,000 in 2020. Stedin Group also applies the maximum hourly rate under the WNT as the maximum rate for external staff hired to temporarily fill senior management positions. In 2020, that maximum was €193 per hour.

In 2020, the number of other executives who receive remuneration exceeding the individually applicable threshold amount decreased to one. They numbered 11 in the preceding year and 5 in 2018. The number of cases that exceeded the threshold was higher only in 2019 due to the introduction of the new remuneration policy at Stedin Groep Personeels B.V. In that year, the variable performance-related remuneration was converted into fixed salary; in addition, the payment of the variable remuneration for 2018 was effected. Adjusted for this non-recurring effect, however, the number of cases that exceeded the threshold in 2019 was the same as in 2018.

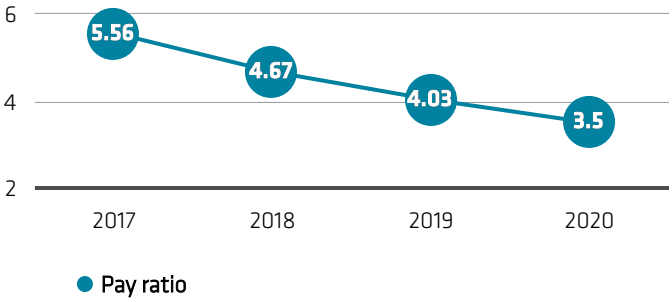
Pursuant to Section 4.2 of the WNT, Stedin has decided not to report on specific remuneration information on the grounds of Section 383(1) and Section 383c of Book 2 of the Dutch Civil Code. No rights to subscribe to or acquire shares in the capital of the company or a subsidiary have been granted to members of the Board of Management or Supervisory Board of Stedin Group. Nor have any loans, advances or guarantees been provided to the members of the Board of Management or Supervisory Board of Stedin by the company, its subsidiaries or the companies whose financial information is consolidated by Stedin.

Pay ratios

The ratio between the highest remuneration and the median remuneration decreased further in 2020, for the third consecutive year, to 3.50. That is more than 13% lower than the ratio in 2019 (4.03). This year, the decrease in the ratio was again a combination of an increase of the median remuneration and a decrease of the highest remuneration. That ratio is -4.38. The remuneration ratio was determined by reference to the annual pay for pension purposes of employees working at the business units that were part of Stedin Holding N.V. as at 31 December 2020. The annual pay for pension purposes is a uniform and objective remuneration concept that includes 12 months' full-time salary, 8% holiday allowance and variable payments, such as payments for on-call shifts and emergency repair shifts, one-off payments for service anniversary bonuses and payments at the end of the employment, among other things.

Pay ratio

2017	5.56		
2018	4.67	16%	lower compared to 2017
2019	4.03	14%	lower compared to 2018
2020	3.50	13%	lower compared to 2019



2020 Financial Statements

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Financial statements

These financial statements present the financial information of Stedin Holding N.V. for the full year 2020, with comparative figures for 2019.

References in the financial statements to Stedin Group are to Stedin Holding N.V. and its subsidiaries including its legal predecessors.

Consolidated statement of income

x € 1 million	Note	2020	2019
Net revenue	4	1,216	1,220
Other income	5	13	14
Total net revenue and other income		**1,229**	**1,234**
Personnel expenses	6	409	405
Cost of sales and contracted work	7	317	300
Other operating expenses	8	228	220
Less: Capitalised own production	9	-188	-180
		766	**745**
Depreciation, amortisation and impairment of non-current assets	10	334	317
Total operating expenses		**1,100**	**1,062**
Operating profit		**129**	**172**
Financial income and expenses	11	-56	-67
Result from associates and joint ventures after income tax*		-1	247
Profit before income tax		**72**	**352**
Income tax	12	-30	-27
Result after income tax		**42**	**325**
Profit distribution:			
Profit after income tax attributable to holders of Stedin Holding N.V. perpetual subordinated bonds (after income tax)		12	12
Profit after income tax attributable to the shareholders of Stedin Holding N.V.		30	313
Result after income tax		**42**	**325**

* In 2019, Joulz Diensten has been sold, with a result after taxes of € 251 million.

Consolidated statement of comprehensive income

x € 1 million	Note	2020	2019
Result after income tax		**42**	**325**
Unrealised gains and losses that will not be reclassified to the income statement (net of tax effects)			
Effect of changes in tax rate on revaluation reserve	17.22	-29	-12
Unrealised gains and losses that may be reclassified to the income statement			
Unrealised gains and losses on cash flow hedges	22	-17	-11
Recycling cash flow hedge reserve to income statement		3	3
Deferred tax liabilities on cash flow hedges / cost of hedging	17	3	1
Effect of change in tax rate on cash flow hedge reserve / cost of hedging	17	4	1
Total other comprehensive income		**-36**	**-18**
Total comprehensive income		**6**	**307**
Profit distribution:			
Holders of Stedin Holding N.V. perpetual bond loan (after income tax)		12	12
Shareholders of Stedin Holding N.V.		-6	295
Total comprehensive income		**6**	**307**

Consolidated balance sheet

x € 1 million	Note	31 December 2020	31 December 2019
ASSETS			
Non-current assets			
Property , plant and equipment	13	7,057	6,753
Intangible assets	14	93	95
Right-of-use assets	15	81	86
Associates and joint ventures	16	4	3
Financial assets			
- Derivative financial instruments	18	16	39
- Other non-current financial assets		16	13
Total non-current assets		**7,267**	**6,989**
Current assets			
Inventories	19	51	36
Current tax assets	28	3	20
Trade and other receivables	20	165	172
Derivative financial instruments	18	3	-
Cash and cash equivalents	21	83	72
Total current assets		**305**	**300**
TOTAL ASSETS		**7,572**	**7,289**
LIABILITIES			
Group equity			
Equity attributable to Stedin Holding N.V. shareholders	22	2,390	2,448
Perpetual subordinated bond loan	22	501	501
Total group equity		**2,891**	**2,949**
Non-current liabilities			
Provisions for employee benefits	23	11	12
Other provisions	24	24	30
Deferred tax liabilities	17	274	232
Derivative financial instruments	18	84	52
Interest-bearing debt	25	2,893	2,985
Deferred income	26	787	707
Other liabilities	27	-	1
Total non-current liabilities		**4,073**	**4,019**
Current liabilities			
Provisions for employee benefits	23	3	3
Other provisions	24	5	2
Derivative financial instruments	18	2	-
Interest-bearing debt	25	290	19
Trade and other liabilities	27	308	297
Total current liabilities		**608**	**321**
TOTAL LIABILITIES		**7,572**	**7,289**

Consolidated cash flow statement

x € 1 million	Note	2020	2019
Profit after income tax		**42**	**325**
Adjusted for:			
· Financial income and expenses recognised in the income statement	11	56	67
· Income tax recognised in the income statement	12	30	27
· Share in result of associates and joint ventures	13	1	-247
· Depreciation, amortisation and impairments of property, plant and equipment, intangible assets and right-of-use assets	10	334	317
· Result on sale of property, plant and equipment and intangible assets		-1	-1
· Movements in working capital	35	3	-14
· Amortisation of customer construction contributions received	26	-21	-19
· Movements in derivative financial instruments	32	22	-
· Movements in provisions, derivative financial instruments and other		-11	5
Cash flow from business operations		**455**	**460**
Interest paid		-58	-71
Interest received		1	1
Corporate income tax received		10	-16
Cash flow from operating activities		**408**	**374**
New loans issued		-7	-4
Repayments of loans granted		4	4
Disposal of subsidiaries*		-	310
Investments in property, plant and equipment		-614	-641
Disposal of property, plant and equipment		1	1
Investments in intangible assets		-1	-2
Customer construction contributions received	26	105	96
Cash flow from investing activities		**-512**	**-236**
Dividend payments		-52	-46
Payment of lease liabilities	16	-17	-17
Coupon on perpetual subordinated bonds	22	-16	-16
Repayment of non-current interest-bearing debt	25	-	-648
Repayment of current interest-bearing debt	25	-1,175	-727
Non-current interest-bearing debt newly issued	25	-	492
Current interest-bearing debt newly issued	25	1,375	727
Cash flow from financing activities		**115**	**-235**
Movements in cash and cash equivalents		**11**	**-97**
Balance of cash and cash equivalents as at 1 January		72	169
Balance of cash and cash equivalents as at 31 December		**83**	**72**

* In 2019, Joulz Diensten has been sold, with a result after taxes of € 251 million.

Consolidated statement of changes in group equity

	Equity attributable to Stedin Holding N.V. shareholders											
x € 1 million	Paid up and called-up share capital	Share premium	Revaluation reserve	Legal reserve	Cash flow hedge reserve	Cost of hedging reserve	Retained earnings	Undistributed profit	Total	Perpetual subordinated bond loan	Non-controlling interests	Total group equity
As at 1 January 2019	**497**	**-**	**754**	**-**	**-65**	**-1**	**907**	**106**	**2,198**	**501**	**-**	**2,699**
Total other comprehensive income after income tax	-	-	-12	-	-6	-	-	-	**-18**	-	-	**-18**
Profit after income tax 2019	-	-	-	-	-	-	-	313	**313**	12	-	**325**
Total comprehensive income	**-**	**-**	**-12**	**-**	**-6**	**-**	**-**	**313**	**295**	**12**	**-**	**307**
Transactions with shareholders												
Dividend payments relating to 2018	-	-	-	-	-	-	-	-46	**-46**	-	-	**-46**
Coupon on perpetual subordinated bond loan	-	-	-	-	-	-	-	-	**-**	-16	-	**-16**
Tax on coupon on perpetual subordinated bond loan	-	-	-	-	-	-	-	-	**-**	4	-	**4**
Total transactions with shareholders	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-46**	**-46**	**-12**	**-**	**-58**
Other												
Profit appropriation 2018	-	-	-	-	-	-	60	-60	**-**	-	-	**-**
Release from revaluation reserve due to depreciation of regulated networks	-	-	-22	-	-	-	22	-	**-**	-	-	**-**
Reclassification	-	-	-	-	1	-	-	-	**1**	-	-	**1**
Total other	**-**	**-**	**-22**	**-**	**1**	**-**	**82**	**-60**	**1**	**-**	**-**	**1**
As at 31 December 2019	497	-	720	-	-70	-1	989	313	**2,448**	501	-	**2,949**
Total other comprehensive income	-	-	-29	4	-8	1	-4	-	**-36**	-	-	**-36**
Profit after income tax 2020	-	-	-	-	-	-	-	30	**30**	12	-	**42**
Total comprehensive income	**-**	**-**	**-29**	**4**	**-8**	**1**	**-4**	**30**	**-6**	**12**	**-**	**6**
Transactions with shareholders												
Dividend payments relating to 2019	-	-	-	-	-	-	-	-52	**-52**	-	-	**-52**
Coupon on perpetual subordinated bond loan	-	-	-	-	-	-	-	-	**-**	-16	-	**-16**
Tax on coupon on perpetual subordinated bond loan	-	-	-	-	-	-	-	-	**-**	4	-	**4**
Total transactions with shareholders	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-52**	**-52**	**-12**	**-**	**-64**
Other												
Profit appropriation 2019	-	-	-	-	-	-	261	-261	**-**	-	-	**-**
Release from revaluation reserve due to depreciation of regulated networks	-	-	-29	-	-	-	29	-	**-**	-	-	**-**
Total other	**-**	**-**	**-29**	**-**	**-**	**-**	**290**	**-261**	**-**	**-**	**-**	**-**
As at 31 December 2020	**497**	**-**	**662**	**4**	**-78**	**-**	**1,275**	**30**	**2,390**	**501**	-	**2,891**

See note 22 Group equity for more details on group equity.

Notes to the consolidated financial statements

1. Accounting principles for financial reporting

1.1. General information

Stedin Holding N.V. (below: Stedin Group) is a public limited liability company under Dutch law with its registered office in Rotterdam, is a holding company of subsidiaries and is registered with the Chamber of Commerce under number 24306393.

Stedin Group's main activity is to ensure safe, reliable and affordable energy supply. The grid managers of Stedin Group, Stedin Netbeheer and Enduris, achieve this on the one hand by building and managing the electricity and gas networks and preparing them for the future and on the other hand by facilitating the energy market. Stedin Netbeheer operates in the provinces of South Holland and Utrecht as well as parts of the North-East Friesland and Kennemerland regions. Enduris operates in the province of Zeeland. The subsidiary DNWG Infra provides energy infrastructure services to business customers. Utility Connect is a joint operation with Alliander that focuses on data communication for smart meters.

Stedin Netbeheer and Enduris operate alongside five other Dutch regional grid managers in a regulated market. Each regional grid manager is a monopolist within its own service area. Regulation means that the work performed by the grid operator is set out in law and that the rates are set by the Netherlands Authority for Consumers and Markets (ACM). The regulatory model encourages grid operators to perform as well as possible (in terms of efficiency and quality) by using a benchmark model.

More information on the composition of the Group is provided in note 3 Operating segments and the list 36 Overview of subsidiaries.

The consolidated financial statements have been prepared by the Board of Management of Stedin Group. The 2019 financial statements have been signed by both the Board of Management and the Supervisory Board of the company in the meeting of 23 March 2020 and were adopted by the General Meeting of Shareholders on 13 May 2020.

Unless otherwise stated, all amounts in this annual report are in millions of euros. The historical cost principle is applied. In derogation from this, certain assets and liabilities, including property, plant and equipment and derivatives, are measured at fair value. Unless stated otherwise, these accounting policies have been consistently applied for all financial years included in these financial statements. The accounting policies applied in the financial statements are based on the assumption of the company's continuity.

1.2. Key events in 2020

No events occurred in 2020 that represent a significant uncertainty for the equity and results as at the end of the financial year on 31 December 2020. For more details, see our annual report.

Coronavirus

The coronavirus has led to the necessary postponement of work – mainly customer-related work – and the rescheduling of work. With a negative impact of around €6 million on the operating result, the overall impact was limited. The impact of COVID-19 was mainly reflected in lower revenue from heavy-use customers and higher costs for absence of own staff due to illness and quarantine measures if they experienced symptoms of illness. This was partly offset by lower costs of contracted work due to the lower level of activity.

Energy transition

The energy transition presents, besides the operational challenge, above all a financing challenge. Stedin expects it will need to invest around 7 billion in the period up to 2030. This amount will be financed in part by positive operational cash flows and can in part be borrowed, but Stedin also expects to need an amount of between €750 million and €1 billion in additional equity. Stedin is engaged in talks on this with its shareholders. To meet the equity requirement in the short term, Stedin will request capital of 200 million.

Changes in corporate income tax rate

In December 2020, the Upper House of Dutch Parliament approved the bill to increase the corporate income tax rate to 25% in 2021 and subsequent years. Calculations performed in 2019 still applied rates of 25% for 2020 and 21.7% as from 2021. These were the future statutory rates in 2019, but they were changed back to 25% in 2020. This means that the deferred tax assets and liabilities are settled at the rate of 25%. The measurement of the deferred tax assets and liabilities as at 31 December 2020 is based on the rate of 25%. For the explanation, see 17 Deferred tax assets and liabilities.

1.3. International Financial Reporting Standards (IFRS)

The consolidated financial statements of Stedin Group have been prepared in conformity with IFRS as applicable at 31 December 2020 and as adopted by the European Union (EU) and with the definitions of Part 9, of Book 2 of the Dutch Civil Code. IFRS comprises both the IFRS standards and the International Accounting Standards issued by the International Accounting Standards Board (IASB) and the interpretations of IFRS and IAS standards by the IFRS Interpretations Committee (IFRIC) and the Standing Interpretations Committee (SIC) respectively. Where necessary, the accounting policies of joint operations and associates have been aligned with those of Stedin Holding N.V. The consolidated financial statements have been prepared using the going concern and accruals concepts.

Amended IFRS standards and interpretations

The following amendments to IFRS standards that have been adopted by the European Commission with effect from the financial year 2020 are relevant to Stedin Group and have been applied in preparing the consolidated financial statements.

Interest Rate Benchmark Reform – amendments

The IASB published the 'Interest Rate Benchmark Reform – phase II' (Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16) as a response to the potential consequences of the IBOR reform for financial reporting if an interest rate benchmark is replaced.

Interbank offered rates (IBORs) are interest rate benchmarks such as LIBOR, EURIBOR and TIBOR, which represent the costs of obtaining unsecured loans in a specific combination of currencies and maturities as well as in a specific interbank loan market. Recent market developments have called into question the long-term viability of those benchmarks.

These amendments do not have consequences for the financial statements of Stedin Group, because there have been no changes to the market interest rate used for hedge accounting. Apart from this, Stedin only recognises financial instruments on the balance sheet that are linked to Euribor, which already complies with the European Benchmark Regulation arising from this amendment and therefore does not need to be replaced.

COVID-19-related rent concessions – amendment to IFRS 16

In May 2020, the IASB issued COVID-19-related rent concessions (amendment to IFRS 16) that provide practical relief to lessees in accounting for rent concessions occurring as a direct consequence of COVID-19, by introducing a practical exemption to IFRS 16, effective from October 2020.

This amendment has no impact on the financial statements of Stedin Group, as no rent concessions have been agreed between Stedin Group and the lessors.

Revised Conceptual Framework

The IASB has revised the Conceptual Framework. The IASB has also updated references in standards so that they refer to the new Framework. The IASB has not amended standards to reflect the changes in the framework, such as revising definitions of assets and liabilities in the standards.

The amendments introduced have no effect on the financial statements of Stedin Group.

Definition of materiality – amendments in IAS 1 and IAS 8

The IASB has implemented amendments in the definition of materiality in response to the concerns experienced by entities in making materiality judgements when preparing financial statements.

These amendments have no impact on the financial statements of Stedin Group.

IFRS 3 – 'Definition of a business'

The IASB has issued 'Definition of a Business (Amendments to IFRS 3)', aimed at resolving the problems arising when an entity determines whether it has acquired a business or a group of assets.

These amendments have no impact on the financial statements of Stedin Group.

New IFRS standards and interpretations relating to subsequent financial years

The following new IFRS standards are relevant to Stedin Group and have been adopted by the European Commission but are not mandatory for 2020. They will be applied from 1 January 2021:

Amendments to IFRS 10 and IAS 28 – Sale or Contribution of Assets between an Investor and its Associate or Joint Venture

The amendments to IFRS 10 and IAS 28 deal with situations where there is a sale or contribution of assets between an investor and its associate or joint venture. Specifically, the amendments state that gains or losses resulting from the loss of control of a subsidiary that does not contain a business in a transaction with an associate or a joint venture that is accounted for using the equity method are recognised in the parent's profit or loss only to the extent of the unrelated investors' interests in that associate or joint venture. Similarly, gains and losses resulting from the revaluation of investments retained in any former subsidiary (that has become an associate or a joint venture that is accounted for using the equity method) at fair value are recognised in the former parent's profit or loss only to the extent of the unrelated investors' interests in the new associate or joint venture.

The effective date of the amendments has yet to be set by the IASB; however, earlier application of the amendments is permitted. It is anticipated that the application of these amendments may have an impact on the Group's consolidated financial statements in future periods should such transactions arise. Stedin Group has no other, undisclosed proposed transactions that may have an impact.

Amendments to IAS 1 – Classification of Liabilities as Current or Non-current

The amendments to IAS 1 affect only the presentation of liabilities as current or non-current in the balance sheet and not the amount or timing of recognition of any asset, liability, income or expenses, or the information disclosed about those items.

The amendments clarify that the classification of liabilities as current or non-current is based on rights that are in existence at the end of the reporting period, specify that classification is unaffected by expectations about whether an entity will exercise its right to defer settlement of a liability, explain that rights are in existence if covenants are complied with at the end of the reporting period and introduce a definition of 'settlement' to make clear that settlement refers to the transfer to the counterparty of cash, equity instruments, other assets or services.

The amendments are applied retrospectively for annual periods beginning on or after 1 January 2023, with early application permitted. These amendments have no impact on the financial statements of Stedin Group.

Amendments to IFRS 3 – Reference to the Conceptual Framework

The amendments update IFRS 3 so that it refers to the 2018 Conceptual Framework instead of the 1989 Framework.

These amendments have no impact on the financial statements of Stedin Group.

Amendments to IAS 37 – Onerous Contracts – Cost of Fulfilling a Contract

The amendments specify that the 'cost of fulfilling' a contract comprises the 'costs that relate directly to the contract'. Costs that relate directly to a contract consist of both the incremental costs of fulfilling that contract (examples would be direct labour or materials) and an allocation of other costs that relate directly to fulfilling contracts (an example would be the allocation of the depreciation charge for an item of property, plant and equipment used in fulfilling the contract).

The amendments apply to contracts for which the entity has not yet fulfilled all its obligations at the beginning of the annual reporting period in which the entity first applies the amendments. Comparatives are not restated. Instead, the entity shall recognise the cumulative effect of initially applying the amendments as an adjustment to the opening balance of retained earnings or another component of equity, as appropriate, at the date of initial application.

The amendments are effective for annual periods beginning on or after 1 January 2022, with early application permitted. It is anticipated that these amendments will have no impact on the financial statements of Stedin Group.

Annual improvements to IFRS Standards 2018-2020

The annual improvements include amendments to four standards.

Amendments to IFRS 1 and IAS 41 do not apply to Stedin Group, as Stedin Group is not a first-time adopter of IFRS (IFRS 1) nor an agricultural business (IAS 41). The amendment to IFRS 16 regards only the removal of an illustrative example and therefore does not apply to the financial statements of Stedin Group.

The amendment that may have an impact is the following:

IFRS 9 'Financial Instruments'

The amendment clarifies that, in applying the '10 per cent' test to assess whether to derecognise a financial liability, an entity only includes fees paid or received between the entity (the borrower) and the lender, including fees paid or received by either the entity or the lender on the other's behalf.

The amendment is applied prospectively to modifications and exchanges that occur on or after the date the entity first applies the amendment.

The amendments are effective for annual periods beginning on or after 1 January 2022, with early application permitted.

Stedin Group has not opted for early application of this amendment and will examine its possible consequences for the financial statements later, but it anticipates that this amendment will not have a significant impact on the financial statements.

2. Accounting policies

2.1. Basis of consolidation

The consolidated financial statements incorporate the financial statements of Stedin Holding N.V., its subsidiaries and the relevant proportion of the joint operations, non-consolidated joint ventures, associates and other capital interests.

An overview of the entities included in the consolidation is provided in note 36 Overview of subsidiaries in the notes to these financial statements.

Subsidiaries

A subsidiary is an entity over which Stedin Group has control. This means that the company controls, directly or indirectly, this entity's financial and business operations so as to obtain economic benefits from its activities. Control is based on the existing and potential voting rights that can be exercised or converted and additionally on the existence of other agreements that enable Stedin Group to determine operational and financial policy.

Pursuant to the full consolidation method, 100% of the assets, liabilities, income and expenses of subsidiaries are recognised in the consolidated financial statements. The results of subsidiaries acquired during the financial year are included from the date on which control was obtained. Subsidiaries are derecognised from the date on which control ceases to exist. Intercompany balances, transactions and results on such transactions between subsidiaries are eliminated. Unrealised losses are likewise eliminated, unless the transaction concerned provides cause for recognising an impairment loss. The accounting policies of subsidiaries have if necessary been adapted to ensure a consistent application of accounting policies within Stedin Group. Losses on associates are recognised up to the amount of the net investment in the associates, including the book value as well as any expected credit losses on loans and guarantees granted to the associate.

Minority interests consist of the capital interests of minority shareholders and are measured on the basis of the fair value of the identifiable assets and liabilities when a subsidiary is acquired and the minority interest in subsequent changes to the equity. Minority interests in the equity and results of subsidiaries are disclosed separately.

Joint arrangements

Joint operations and joint ventures are entities for alliances in respect of which there are contractual undertakings with one or more parties under which they have joint decisive control over that entity. A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets and are accountable for the liabilities relating to the arrangement. A joint venture is a joint arrangement whereby the parties that have joint control over the arrangement have rights to the net assets of the arrangement.

Only the share of Stedin Group in the assets, liabilities, income and expenses of joint operations is consolidated on the basis of Stedin Group's accounting policies. Joint ventures are recognised using the equity method in accordance with the accounting policies of Stedin Group. Interests in joint operations and joint ventures are recognised from the date on which joint control is obtained until that joint control no longer exists.

Associates

An associate is an entity over whose financial and operational policies Stedin Group exercises significant influence, but no decisive control. In general, 20% to 50% of the voting rights are held in an associate.

The share in associates is recognised in the consolidated financial statements using the equity accounting method, in which initial recognition is at historical cost with the carrying amount being adjusted for the share in the result. Dividends received are deducted from the book value. Associates are recognised from the date on which significant influence is obtained until the date on which that influence no longer exists. Results on transactions with associates are eliminated in proportion to the equity interest in the associate.

Losses on associates are recognised up to the amount of the net investment in the associate, including the book value as well as any expected credit losses on loans and guarantees granted to the associate.

2.2. Accounting policies

2.2.1. General

The main accounting policies used in preparing the 2020 financial statements of Stedin Group are summarised below. The accounting policies used in these financial statements are consistent with the accounting policies applied in the 2019 financial statements, except for the effect of newly applied and amended standards as set out in note 1.3 International Financial Reporting Standards (IFRS).

2.2.2. Impairments of assets

Impairment is present when the book value of an asset is higher than the recoverable amount. The recoverable amount of an asset is the higher of the sale price less costs to sell and the value in use. An asset's value in use is based on the present value of estimated future cash flows, calculated using a pre-tax discount rate that reflects the time value of money and the specific risks of the asset. The recoverable amount of an asset that does not independently generate a cash flow and that is dependent on the cash flows of other assets or groups of assets is determined for the cash-generating unit of which the asset is part.

A cash-generating unit is the smallest identifiable group of assets separately generating cash flows that are significantly independent of the cash flows from other assets or groups of assets. Cash-generating units are distinguished on the basis of the economic interrelationship between assets and the generation of external cash flows rather than on the basis of separate legal entities.

Goodwill is allocated on initial recognition to one or more cash-generating units, in line with the way in which the goodwill is assessed internally by the management. Impairment tests are performed each year to assess the value of goodwill based on expected future cash flows.

An assessment is carried out annually for assets other than goodwill to assess whether events or changes indicate impairment. If there is evidence of impairment, the recoverable amount of the relevant asset or cash-generating unit is determined.

When the book value of assets allocated to a cash-generating unit is higher than the recoverable amount, the book value is reduced to the recoverable amount. This impairment is recognised in profit or loss. Impairment of a cash-generating unit is first deducted from the goodwill attributed to that unit (or group of units) and then deducted proportionately from the book value of the other assets of that unit (or group of units).

Impairment previously recognised may be reversed through the income statement if the reasons for it no longer exist or have changed. Impairment is only reversed up to the original book value less regular depreciation. Impairment losses on goodwill are not reversed.

2.2.3. Foreign currencies

The financial statement items of Stedin are administrated in the currency of the economic environment in which Stedin Group operates. The euro (€) is Stedin Group's functional currency and the currency in which the financial statements are presented.

Transactions in foreign currencies are translated into the functional currency (€) at the exchange rate prevailing on the date of the transaction. Monetary assets and liabilities denominated in foreign currencies on the reporting date are translated into euros at the exchange rate prevailing on the reporting date. Foreign currency exchange differences that arise on foreign currency transactions or translation of balance sheet items are recognised in the income statement, except if these foreign currency risks are hedged by derivative financial instruments for which hedge accounting is applied.

2.2.4. Netting off

Receivables and payables with a counterparty are netted if there is a contractual right and the intention to settle these simultaneously. In the absence of an intention or actual netted settlement, the existence of an asset or liability is determined for each contract.

2.2.5. Segment information

Business segments are based on Stedin Group's internal organisation and management reporting structure. The results of business segments are reviewed regularly by the Board of Management to make decisions about resources to be allocated to a segment and assess its financial performance.

Transfer prices for internal revenues and costs are at arm's length terms. The accounting policies of Stedin Group are also applied in segment reporting. The results of individual segments do not include financial income and expense, the share of profit of associates and joint ventures or the tax charge.

2.2.6. Net revenues and other income

Net revenue

Stedin Group recognises revenue when it satisfies the performance obligation by transferring goods or services to the customer. The time of transfer is:

- over a period; or
- at a moment in time.

It is inherent in the services of Stedin Group that these are transferred to the customer during the period in which they are provided. The services of the Group can be subdivided into regulated services and non-regulated services.

Revenue from regulated services

The rates for the regulated services of Stedin Group are subject to the regulation framework of the Dutch regulator for the provision of energy services, the Netherlands Authority for Consumers and Markets (ACM). With regard to the non-regulated services, Stedin Group is not subject to a regulator for the pricing of the services.

Energy distribution services

Energy distribution services comprise distribution, connection and metering services for electricity as well as distribution, connection and metering services for gas. Stedin Group distributes electricity and gas via its grids to the customer's connection. The distribution services are recognised during the supply period. The revenue from distribution services consists of a fixed periodic payment for the use and the availability of the grids as well as a payment per distributed volume. These services relate to performance obligations that are satisfied during a period. The revenues for the use and the availability of the grids are allocated to the supply period in equal amounts. Allocation in equal amounts represents the availability of the grid during the entire year under review. The volume-based payments are recognised in the income statement in the period in which the distribution service was provided. Amounts settled via subsequent costing in rates of subsequent years are accounted for as revenue in the year when the rate is actually realised on the basis of the services provided in that year.

Customer construction contributions received and reconstructions

In order to make distribution services for electricity and gas possible, Stedin Group will construct grid connections for new supply points. The customer pays a contribution towards the construction costs for such a new connection. The connection is inseparably linked to the distribution services and forms an integral part of the payment for distribution services. Revenue from customer construction contributions is therefore recognised in equal amounts over the expected useful life of the connection point concerned. Stedin Group also receives contributions for reconstruction work carried out on the grid. Like the customer construction contributions, these are recognised in equal amounts over the expected useful life of the grid. The customer construction and reconstruction contributions received in advance are contract liabilities and are recognised in the balance sheet under 'Deferred income'.

Selling prices
The selling prices of regulated services are based on the rates as determined by the ACM for the distribution of energy. The rates for customer construction contributions have also been determined by the ACM. Adjustments in the selling prices of regulated services can arise mainly as a consequence of failures in the grid for which customers are required to be compensated by law. These adjustments in selling prices are presented as a deduction from variable revenue. Variable revenue is recognised only to the extent that it is highly probable that this revenue will not be reversed.

Other income, revenue from non-regulated services
The non-regulated services of Stedin Group comprise the data processing of energy meters; the management, maintenance and rental services of energy meters; failure, management, maintenance and rental services for transformers; and services in the field of high-voltage projects. Stedin Group applies the portfolio approach for these activities, under which revenue is recognised for the progress of the delivered performance. Revenue from other services is mainly allocated on the basis of the percentage of completion of the project based on the accumulated costs of the project on the balance sheet date compared with the total expected project costs. Selling prices for non-regulated services are in line with the market as laid down in the relevant agreement between Stedin Group and the customer.

In addition, Stedin Group leases a number of business premises and parts of business premises, due to cost considerations, and transformers to third parties. The assets are recognised by Stedin Group in property, plant and equipment. Lease revenues are recognised in equal amounts through the income statement of Stedin Group as net revenue and other income over the term of the lease.

Contract assets and liabilities
Contract assets relate to the non-enforceable claims under and expenditure for contracts with customers. For Stedin Group, these are the amounts not yet invoiced. Stedin Group presents contract assets under 'Trade and other receivables'. A bad debt provision is recognised for the balance sheet item 'amounts not yet invoiced' in the same way as for the Trade receivables. Contract liabilities are presented as 'Deferred income' and as part of 'Trade and other liabilities'.

2.2.7. Cost of sales and contracted work
The purchase costs for compensation of technical and administrative network losses are recognised in the period in which the revenues from the sale are realised. The costs of materials and services from third parties are also included in this line item.

2.2.8. Financial income and expenses
Financial income comprises interest income from the financial assets, including loans issued and cash and cash equivalents. This interest income is calculated on the basis of the effective interest method.
Financial expenses consist mainly of interest expense on interest-bearing liabilities, calculated on the basis of the effective interest method. The interest-bearing liabilities consist of borrowings and debt, except the perpetual subordinated bond loan. The interest expense for the perpetual subordinated bond loan is not included in this item. It is accounted for directly in group equity. In addition, financial expenses also include the other financing costs.

Gains and losses on financial hedging instruments are, insofar as these are taken through the income statement, also accounted for under financial income and expenses. Dividend income from other capital interests is recognised when it falls due.

2.2.9. Income taxes
Income taxes comprise current taxes and movements in deferred taxes. These amounts are recognised in profit or loss unless they concern items that are recognised directly through group equity. Current tax is the amount of income taxes payable or recoverable in respect of the taxable result for the year under review and is calculated on the basis of applicable tax legislation and rates.

Income taxes comprise all taxes based on taxable profits and losses, including taxes payable by subsidiaries and associates on distributions to Stedin Holding N.V. Additional income taxes on the result before dividend distributions are recognised at the same time as the obligation to distribute that dividend is recognised.

2.2.10. Property, plant and equipment

Property, plant and equipment is subclassified into the following categories:

- land and buildings;
- machinery and equipment;
- regulated networks;
- other operating assets;
- assets under construction.

Networks and network-related assets

Stedin Group's networks and network-related assets in the regulated domain are measured at the revalued amounts. The revalued amount is the fair value at the date of the revaluation less accumulated depreciation and impairment.

The fair value of these network assets is measured at the beginning of each new regulatory period. If there are indications in the interim period that the fair value differs significantly from the book value, the revaluation will be adjusted. An increase in the book value as a result of a revaluation of networks and network-related assets in the regulated domain is recognised directly in group equity through the revaluation reserve. A reduction in the book value is first recognised directly in group equity through the revaluation reserve insofar as the amount of the revaluation reserve is sufficient. If the decrease exceeds the revaluation reserve, the excess is recognised through the consolidated income statement.

Networks and network-related assets are initially measured at cost, until the time of the first revaluation. The difference between the depreciation based on the revalued book value and depreciation based on the original historical cost, less deferred tax, is transferred periodically from the revaluation reserve to retained earnings.

See note 2.2.26 Fair value for a detailed description of fair value.

Land and buildings, machinery and equipment, other operating assets and assets under construction

Other property, plant and equipment is recognised at cost less accumulated depreciation and impairment. Cost comprises the initial acquisition price plus all directly attributable costs. Cost of assets constructed by the company comprises the cost of materials and services, direct labour and an appropriate proportion of directly attributable overhead costs.

Financing costs

Financing costs directly attributable to the purchase, construction or production of an eligible asset are recognised in cost in accordance with IAS 23. If an asset comprises multiple components with differing useful lives, these components are recognised separately.

Subsequent expenditure

Expenses incurred at a later date are only added to the book value of an asset if and to the extent that the condition of the asset is improved compared to the originally formulated performance standards. Overhaul, repair and maintenance are recognised as an expense in the period in which the costs are incurred. If an asset comprises multiple components with differing useful lives, these components are recognised separately. Costs incurred to replace components of property, plant and equipment that are replaced for the asset to be capable of operating in the intended manner are capitalised while simultaneously removing the carrying amount of the replaced components.

Depreciation and amortisation

Depreciation is recognised in the consolidated income statement using the straight-line method based on estimated useful life, taking into account the estimated residual value. Useful lives and residual values are reassessed annually, and any changes are recognised prospectively. Land, sites and assets under construction are not depreciated.

Category	Useful life in years
Buildings	25 - 50
Machinery and equipment	10 - 50
Regulated networks	10 - 50
Other operating assets	3 - 25

2.2.11. Leases

Stedin Group as lessee

The provisions of IFRS 16.9 are taken into account by Stedin Group in assessing whether a contract is or includes a lease. At the inception of the contract, Stedin Group assesses whether a contract is or includes a lease. A contract is or includes a lease if the contract grants the right to exercise control over the use of an identified asset during a certain period, in return for compensation. With respect to each lease in which Stedin Group is the lessee, Stedin Group calculates a right-of-use asset and a corresponding lease liability, except for short-term leases (defined as leases with a lease term of 12 months or less) and leases with a value of €5,000 or less. Stedin Group recognises the lease payments for these leases on a straight-line basis as operational expenses in the income statement.

The lease liability is initially measured at the present value of the future lease payments, discounted by using the rate implicit in the lease. If this rate cannot be readily determined, the lessee uses the incremental borrowing rate. The incremental borrowing rate is based on the risk-free market interest rate, increased by a risk premium applying specifically to Stedin Group for a similar term and with a similar security as that which Stedin Group would have to pay in order to borrow the funds necessary to obtain a similar asset.

Lease payments that are included in the measurement of the lease liability comprise:

- fixed lease payments, less any rent reductions and/or investment contributions;
- variable lease payments that depend on an index or rate, initially measured using the index or rate at the commencement date;
- the exercise price of purchase options, if the lessee is reasonably certain to exercise the options;
- payments of penalties for terminating the lease, if it is reasonably certain that the lessee will exercise the option to terminate the lease.

The lease liability is subsequently increased each month to reflect the interest on the lease liability and decreased to reflect the lease payments.

Stedin Group remeasures the lease liability and the right-of-use assets whenever:

- the lease term has changed or the expectation of the exercise of an extension option, termination option or purchase option has changed;
- the lease payments change due to indexation, for instance;
- a lease contract is modified.

On the commencement date, a right-of-use asset is measured at cost. This cost price consists of the amount of the initial statement of the lease liability, the initial direct costs incurred and the lease payments made on or before the commencement date, minus all the lease incentives received and the initial direct costs incurred.

Stedin Group determines the lease term as the non-cancellable period of a lease, together with:

- periods covered by an option to extend the lease if Stedin Group is reasonably certain to exercise that option;
- periods covered by an option to terminate the lease if Stedin Group is reasonably certain not to exercise that option.

In this assessment, Stedin Group considers all relevant facts and circumstances that create an economic incentive to exercise the option to extend the lease or not to exercise the option to terminate the lease.

Variable leases that do not depend on an index or rate are not included in the measurement of the lease liability and the right-of-use asset. The related payments are recognised as an expense in the income statement.

As a practical expedient, IFRS 16 permits a lessee not to separate non-lease components and instead account for any lease and associated non-lease components as a single arrangement. Stedin Group does not apply this simplification.

The right-of-use asset is periodically assessed, in accordance with IAS 36, to determine whether events or changes apply that may indicate impairment.

The right-of-use asset and the lease liability must be assessed together as a single transaction for the purpose of recognising deferred taxation. Therefore, there are no temporary differences upon initial recognition. Deferred taxation is recognised for temporary differences subsequently arising when the right-of-use asset is depreciated and the lease liability is reduced.

Leases are recognised in the balance sheet under right-of-use assets and interest-bearing debt for the lease liability. Depreciation on right-of-use assets is recognised in depreciation and the interest expense is recognised in financial expenses in the income statement. Cash flows relating to the leases are shown separately in the cash flow statement.

Stedin as lessor
Stedin Group leases a number of business premises and transformers to third parties. The assets are recognised by Stedin Group in property, plant and equipment. Lease revenues are recognised in equal amounts through the income statement of Stedin Group as net revenue and other income over the term of the lease.

Depreciation and amortisation

Depreciation is recognised in the consolidated income statement using the straight-line method based on the estimated lease term of the right-of-use asset. The lease term is assessed when the lease contracts are changed and the lease term can be terminated or renewed, based on the lease contract.

The following useful lives are applied:

Category	Useful life in years
Leasehold and buildings	1-100
Leased cars	1-6

2.2.12. Goodwill

The acquisition price of a subsidiary, joint venture or associate is equal to the amount paid to purchase the interest. If the acquisition price is higher than the share in the fair value at the date of acquisition of the identifiable assets, liabilities and contingent liabilities, the excess is recognised as goodwill. Any shortfall is recognised as a gain in profit or loss.

Goodwill is measured at cost less impairment. Goodwill is allocated to one or more cash-generating units. Allocated goodwill is tested for impairment annually. This test is not performed as long as goodwill has not been allocated.

Goodwill purchased on acquisition of subsidiaries and joint operations is recognised in the balance sheet under intangible assets. Goodwill paid to acquire an interest in a joint venture or associate is included in the cost of acquisition.

For further details, see note 14 Intangible assets.

2.2.13. Other intangible assets

Other intangible assets comprise customer databases acquired with acquisitions, software and licences, concessions, permits, rights and development costs. The related costs are capitalised if it is probable that these assets will generate economic benefits and their costs can be reliably measured. Other intangible assets have a finite useful life and are recognised at cost less accumulated amortisation and impairment.

Software

Software is capitalised at cost. Cost of standard and customised software comprises the one-time costs of licences. Costs of software maintenance are recognised as an expense in the period in which they are incurred.

Depreciation and amortisation

Amortisation is recognised as an expense on the basis of the estimated useful life from the time that the relevant asset is available for use. Other intangible assets are amortised using the straight-line method. The residual value of these assets is nil. Amortisation is presented in the income statement as a component of 'Depreciation, amortisation and impairments of non-current assets'.

The following useful lives are applied:

Category	Useful life in years
Licences	3 - 30
Software	3 - 5
Concessions, permits and rights	3 - 30
Development costs	5 - 15

2.2.14. Deferred taxes

Deferred taxes are calculated using the balance sheet method for the relevant differences between the book value and tax base of assets and liabilities. Deferred taxes are measured using the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on applicable tax rates and tax laws. Deferred taxes are recognised at face value.

Deferred tax assets are recognised for deductible temporary differences, tax losses carried forward and unused tax credits available for set-off if and to the extent that it is probable that future taxable profit will be available against which unused tax losses and unused tax credits can be utilised.

Deferred tax assets for all deductible temporary differences relating to investments in subsidiaries, joint operations, and interests in associates as well as joint ventures are only recognised if it is probable that the temporary difference will reverse in the near future and that future taxable profit will be available against which the deductible temporary difference can be utilised.

Deferred tax liabilities are recognised for all taxable temporary differences arising from investments in subsidiaries, joint operations and interests in associates and joint ventures, unless Stedin Group can determine the time at which the temporary difference will reverse and it is probable that the temporary difference will not reverse in the near future.

As soon as insights change following consultation with the inspector or Stedin and positions become less uncertain, this will result in recognition in the current position or assessment/reassessment of risks. The uncertain tax position is disclosed in the financial statements when a cumulative or non-cumulative material uncertain impact can be expected to arise from it, i.e. before it is accounted for in the current position.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to set off tax assets against tax liabilities and if the deferred tax assets and liabilities relate to taxes levied by the same tax authority on the same fiscal unity.

2.2.15. Derivative financial instruments

Hedge accounting

Derivative financial instruments are classified as hedging instruments if they are used to hedge the risk of fluctuations in current or future cash flows or fluctuations in the fair value of assets or liabilities. If the hedge can be attributed to a particular risk or to the full movement in the transaction associated with an asset, liability or highly probable forecast transaction or balance sheet item, the attributed derivative financial instruments are recognised as hedging instruments.

The positive book values of the derivative financial instruments are recognised under the derivative financial instruments in current and non-current assets in the consolidated balance sheet. The negative book values of the derivative financial instruments are recognised in the current and non-current liabilities in the consolidated balance sheet.

Cash flow hedge accounting

Cash flow hedge accounting is intended to mitigate movements in future cash flows. If the conditions for cash flow hedge accounting are met, the effective portion of the changes to the fair value of the derivative financial instruments concerned is recognised in the consolidated statement of comprehensive income as 'Unrealised gains and losses on cash flow hedges'. These changes (after income tax) are then recognised in the cash flow hedge reserve in group equity or in the reserve for cost of hedging.

Amounts recognised through group equity are transferred to the consolidated income statement when the hedged asset or liability is settled. When a hedging instrument expires or is sold, terminated or exercised, or when the conditions for hedge accounting are no longer met although the underlying future transaction has yet to take place, the accumulated result remains in group equity (in the cash flow hedge reserve) until the forecast transaction has taken place. If the forecast transaction is no longer likely to take place, the accumulated result is transferred directly from group equity to the consolidated income statement.

Fair value hedge accounting

Fair value hedge accounting is applied to mitigate the risk of changes in the fair value of the hedged positions. If the conditions for fair value hedge accounting are met, the change in the fair value of the hedged positions and the change in fair value of the derivative financial instruments are recognised in the consolidated income statement. The ineffective portion is hereby recognised directly through the consolidated income statement.

2.2.16. Other non-current financial assets

Other financial assets are mainly long-term items with a term of more than one year, such as loans, receivables and prepayments to associates, joint ventures or third parties. Long-term receivables, loans and prepayments are measured at amortised cost using the effective interest method.

2.2.17. Assets/liabilities held for sale

Assets/liabilities held for sale and discontinued operations are classified as held for sale when the book value will be recovered through a sale transaction rather than through continuing use. This classification is only made if it is highly probable that the assets/liabilities or operations are available for immediate sale in their present condition and the sale is expected to be completed within one year.

Assets/liabilities held for sale are measured at the lower of the book value preceding classification as held for sale and fair value less costs to sell.

2.2.18. Inventories

Inventories are recognised at the lower of weighted average cost and direct net realisable value. Cost of inventories is the purchase price including directly attributable costs incurred to bring the inventories to their present location in their present condition. Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs to sell. Impairment of inventories is recognised through the consolidated income statement if the book value exceeds the net realisable value.

2.2.19. Trade and other receivables

Trade and other receivables have a term of less than one year. These receivables also include the net amounts at the reporting date that have yet to be billed for services supplied. On initial recognition, receivables are accounted for at amortised cost less impairment losses due to expected losses for bad debts in connection with credit risk.

The expected credit losses are estimated on the basis of the credit quality of the counterparty on the basis of individual estimates or estimates for a portfolio of similar receivables. For the assessment of risks in portfolios, Stedin Group uses a simplified model that is based on Stedin's experience of receivables with the same risk profile, supplemented by expected developments of the debtors and the economic environment.

Receivables are written off when it is clear that the debtor will no longer be able to pay.

2.2.20. Cash and cash equivalents

Cash and cash equivalents comprise cash and bank balances, short-term cash loans as well as deposits with a maturity of no more than three months.

2.2.21. Perpetual subordinated bond loan

The perpetual subordinated bond loan is classified under group equity in the consolidated financial statements, in agreement with the contractual conditions for the bond loan.

The principal of the perpetual subordinated bond loan is presented at face value. Both the discount and transaction costs relating to the issue of the bond loan were charged directly to equity when the loan was issued. The coupon interest is paid annually and the associated tax effects are recognised in the valuation of the loan.

The company financial statements apply IFRS for the presentation of this bond loan.

2.2.22. Provisions for employee benefits

Pensions

The pension liabilities of almost all business units have been placed with the industry-wide pension funds: Stichting Pensioenfonds ABP (ABP) and Stichting Pensioenfonds Metaal en Techniek (PMT). A limited number of employees have individual plans insured with various insurance companies.

The amount of the pension depends on age, salary and years of service. Employees may opt to retire earlier or later than the state retirement age, in which case their pension is adjusted accordingly. Retiring later than the state retirement age is only possible with Stedin's consent. At ABP, employees can retire between 60 and the state retirement age plus 5 years. At PMT, this is between five years before and five years after the state retirement age.

The most important pension plans, which have been placed with ABP, are group plans in which several employers participate. These plans are essentially defined benefit plans. However, as Stedin has no access to the required information and because participation in the group plans exposes Stedin to actuarial risks connected with present and former employees of other entities, these plans are treated as defined contribution plans, and the pension contributions payable for the financial year are accounted for as pension expenses in the financial statements.

Other provisions for employee benefits

A provision is recognised for the obligation of Stedin Group to pay out amounts related to long-service benefits and on the retirement of employees. A provision is also recognised for the obligation of Stedin Group to contribute towards the health insurance premiums of retired employees, salary payments in the event of illness and the employer's risk under the Unemployment Insurance Act (Werkloosheidswet). Where appropriate, these liabilities are calculated at the reporting date using the projected unit credit method, using a pre-tax discount rate that reflects the current market assessment of the time value of money.

2.2.23. Other provisions

A provision is recognised when there is a present legal or constructive obligation that is of an uncertain amount or timing due to a past event, the settlement of which will probably lead to an outflow of resources.

Provisions that will be settled within one year of the reporting date, or that are of limited material significance, are recognised at face value. Other provisions are recognised at the present value of the expected expenditure. The specific risks inherent to the relevant obligation are taken into account when determining this expenditure. The present value is calculated using a pre-tax discount rate that reflects the current market assessment of the time value of money. The expected expenditure is determined based on detailed plans in order to limit the uncertainty regarding the amount.

2.2.24. Interest-bearing debt

On initial recognition, interest-bearing debt is carried at fair value less directly attributable transaction costs. Subsequent to initial recognition, interest-bearing debt is recognised at amortised cost using the effective interest method.

2.2.25. Trade and other liabilities

Trade payables and other financial liabilities are recognised at fair value. They are subsequently carried at amortised cost. Liabilities with a term of less than one year are not discounted on initial recognition. In view of their short-term nature, trade and other liabilities are recognised at face value.

2.2.26. Fair value

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value can be measured in various ways, and depending on the use of observable inputs, the value is classified into the following categories:

Level 1

Level 1 recognises financial instruments whose fair value is measured using unadjusted quoted prices in active markets for identical instruments.

Level 2

Level 2 recognises financial instruments whose fair value is measured using market prices or pricing statements and other available information. Where possible, the measurement method uses observable market prices. Contracts for derivative financial instruments are measured by agreement with the counterparty, using observable interest rate and foreign currency forward curves.

Level 3

Level 3 recognises financial instruments whose fair value is measured using calculations involving one or more significant inputs that are not based on observable market data.

2.3. Judgements, estimates and assumptions

In preparing these financial statements, the management of Stedin Group used judgements, estimates and assumptions that affect the reported amounts and rights and obligations not disclosed in the balance sheet. In particular, they relate to the useful life of property, plant and equipment, the measurement of the fair value of the relevant assets and liabilities and impairment of assets. The judgements, estimates and assumptions that have been made are based on market information, knowledge, historical experience as well as other factors that can be deemed reasonable in the circumstances. Actual results could, however, differ from the estimates. Judgements, estimates and assumptions are reviewed on an ongoing basis. Changes in accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period.

If the revision also affects future periods, the change is made prospectively in the relevant periods. Any points of particular importance with regard to judgements, estimates and assumptions are set out in the notes to the income statement and balance sheet items concerned.

Useful life and residual value of property, plant and equipment and intangible assets

The depreciation periods and residual values of property, plant and equipment and intangible assets are based on the asset's expected useful technical and economic life. The useful life and residual value are reviewed annually. An asset's useful life or residual value may change as a result of changes in external or internal factors, including technological developments and market developments. These factors can also lead to impairment of an asset. If there is an indication of possible impairment, the asset's recoverable amount is measured and compared with its book value. If the recoverable amount is lower, impairment is applied. For more information, see note 13 Property, plant and equipment.

Fair value of regulated networks

The fair value of regulated networks is determined in alignment with the expected payment method of the ACM. The expected future rates related to Stedin Group's market share and expected limits for possible rate components are included in the calculation method. For more information, see note 13 Property, plant and equipment.

Goodwill

The acquisition price of a subsidiary, joint venture or associate is equal to the amount paid to purchase the interest. If the acquisition price is higher than the share in the fair value at the date of acquisition of the identifiable assets, liabilities and contingent liabilities, the excess is recognised as goodwill.

Goodwill is measured at cost less impairment. Allocated goodwill is allocated to one or more cash-generating units. Allocated goodwill is tested for impairment annually. If the goodwill allocation has not been completed yet, this item will not be tested for impairment annually.

For further details, see note 14 Intangible assets.

Network losses

Allocation is a process by which estimates are used to determine the quantities of distributed electricity and gas and allocate them to users. In addition, as part of the allocation process, the network losses are determined as accurately as possible on the basis of data on standard annual consumption. The consumption levels initially allocated to consumers are adjusted for the actual quantities obtained through meter readings ('reconciliation'), along with a recalibration of the estimates. Pursuant to statutory arrangements on allocation and reconciliation, this process must be settled within 21 months after the end of the month of delivery. The expected results from the reconciliation are estimated as accurately as possible and incorporated in the financial statements. The ultimate settlement based on actual consumption figures may potentially have an effect on future results. The estimate of the obligation in connection with network losses not yet settled is part of 'Other liabilities and deferred income' as stated in note 27 Trade and other liabilities.

3. Operating segments

Business segments are based on Stedin Group's internal organisation and management reporting structure and have not changed in comparison with the 2019 financial statements of Stedin Group. The segments are:

Segment Stedin

The business segment Stedin comprises the regulated domain: the grid manager Stedin. Stedin manages the gas and electricity grids in its service area.

Segment DNWG

The business segment DNWG is the entity DNWG Groep N.V., consisting of the grid manager Enduris B.V., which manages the gas and electricity grids in the province of Zeeland; DNWG Infra B.V. (formerly DELTA Infra B.V.), which provides non-regulated electricity, gas, water and data infrastructure services; and DNWG Warmte B.V., which provides heat infrastructure services.

Segment 'Other and eliminations'

The main components of the segment 'Other and eliminations' are the infrastructure, metering and steam network services of NetVerder, the activities of the holding company and the elimination of intragroup transactions. The other units are non-reportable segments according to the criteria in IFRS 8 'Operating Segments', since they are not material and are therefore included within the segment 'Other and eliminations'. This segment also includes the discontinued operations of Joulz Diensten (until the end of April 2019) in the comparative figures.

Since the balance sheets per operating segment are not periodically reported in the internal management information, Stedin Group has decided not to present these. The accounting policies for the group's financial statements applied by Stedin Group are also applied in segment reporting.

The operating results are not cyclical in nature and are not materially affected by seasonal patterns.

3.1. Net revenues and other income, operating profit and investments by segment

Stedin Group operates solely in the Netherlands, and all its revenues are generated in the Netherlands. In accordance with the requirements of IFRS 15, the following table disaggregates the net revenue in 2020 into categories that reflect the way that the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors. For the regulated domain, Stedin Group sought alignment wherever possible with the periodic reports required by the Netherlands Authority for Consumers and Markets (ACM). The table also provides a reconciliation of the disaggregated revenue with the segment information on the basis of the internal organisation and management reporting structure:

2020 x € 1 million	Segment Stedin	Segment DNWG	Other and eliminations	Total
Net revenue				
- Regulated electricity transmission, connection and metering services	681	99	-13	767
- Regulated gas distribution, connection and metering services	325	30	-	355
- Infrastructure services and other	44	48	2	94
Other income	10	3	-	13
Total revenue	1,060	180	-11	1,229
Operating expenses	650	132	-16	766
Depreciation, amortisation and impairments of property, plant and equipment and intangible assets	287	37	10	334
Total operating expenses	937	169	-6	1,100
Operating profit	**123**	**11**	**-5**	**129**
Financial income and expenses	-23	-3	-30	-56
Profit after income tax subsidiaries	-	1	-2	-1
Profit before income tax	**100**	**9**	**-37**	**72**
Income tax	-39	-6	15	-30
Result after income tax	**61**	**3**	**-22**	**42**

Investments in 2020 based on the internal organisation and management reporting structure were as follows:

2020 x € 1 million	Segment Stedin	Segment DNWG	Other and eliminations	Total
Investments in property, plant and equipment and intangible assets	560	66	4	630

Revenue and results for and investments in 2019 based on the internal organisation and management reporting structure were as follows:

2019 x € 1 million	Segment Stedin	Segment DNWG	Other and eliminations	Total
Net revenue				
- Regulated electricity transmission, connection and metering services	681	91	-5	767
- Regulated gas distribution, connection and metering services	309	29	-	338
- Infrastructure services and other	45	52	18	115
Other income	13	1	-	14
Total revenue	1,048	173	13	1,234
Operating expenses	622	123	-	745
Depreciation, amortisation and impairments of property, plant and equipment and intangible assets	266	44	7	317
Total operating expenses	888	167	7	1,062
Operating profit	**160**	**6**	**6**	**172**
Financial income and expenses	-27	-4	-36	-67
Profit after income tax subsidiaries	-	-2	249	247
Profit before income tax	**133**	**-**	**219**	**352**
Income tax	-38	-2	13	-27
Result after income tax	**95**	**-2**	**232**	**325**

2019 x € 1 million	Segment Stedin	Segment DNWG	Other and eliminations	Total
Investments in property, plant and equipment & intangible assets	539	66	52	657

Non-current assets by country

The non-current assets of the Stedin and 'Other and eliminations' segments relate in full to entities registered in the Netherlands.

Major customers

Stedin Group has no customers for which the revenue per customer amounts to 10% or more of total revenue.

4. Net revenue

x € 1 million	2020	2019
Electricity transmission and connection services	726	742
Gas distribution and connection services	316	308
Metering services	81	55
Infrastructure services and other	93	115
Total	**1,216**	**1,220**

Net revenue for 2020 decreased by € 4 million compared with the preceding financial year. This decrease was mainly attributable to the sale of Joulz Diensten in 2019. In 2019, Joulz Diensten contributed € 16 million to revenue, for a period of four months. Additionally, regulated revenue from heavy-use customers decreased compared with 2019 due to a decrease in peak capacity and peak volumes, mainly as a result of COVID-19.

This was partly offset by higher revenue in the metering domain, which increased by around € 26 million, due to higher metering tariffs. The 2019 metering tariffs comprised a larger component for repayment of surplus profits. The remaining repayable surplus profits in future tariffs are disclosed in 29 Contingent assets and liabilities. The number of low-use connections increased for both gas and electricity at Stedin.

5. Other income

Other income decreased by € 1 million compared with the preceding financial year to € 13 million. Other income includes the revenue from non-regulated services as described in note 2.2.6 Net revenues and other income.

6. Personnel expenses

x € 1 million	2020	2019
Wages and salaries	243	245
Social security contributions	33	33
Pension contributions	38	38
External staff	65	61
Other employee benefit expenses	30	28
Total	**409**	**405**

Personnel expenses increased by € 4 million compared with the preceding year.

The 2019 expenses included an amount of € 5 million, across the various expense categories, relating to Joulz Diensten, that are no longer included in 2020. Additionally, the costs for temporary hiring of external staff decreased by € 3 million owing to a lower number of FTEs of external staff temporarily hired. This was partly offset by an increase in personnel expenses of € 12 million, mainly due to a wage increase under the Collective Labour Agreement with effect from 1 May 2020 (approximately € 4 million) and a lower number of hours worked by external staff hired that was directly attributable to own investment projects. Hours worked by hired external staff and directly attributed to own investment projects are deducted from costs of external staff as capitalised production. The amount concerned is € 10 million (2019: € 18 million).

6.1. Number of employees

Average workforce (in FTEs)	2020	2019
Stedin	3,532	3,554
DNWG	607	639
NetVerder	5	5
Other	-	50
Total average no. of fte	**4,144**	**4,248**
Employed outside the Netherlands	-	-
Male	84%	84%
Female	16%	16%

6.2. WNT compliance for 2020 by Stedin Netbeheer B.V. and Enduris B.V.

The WNT is applicable to Stedin Netbeheer B.V. and Enduris B.V. The applicable maximum remuneration in 2020 was €201,000. This is the general maximum remuneration.

6.2.1 Remuneration of senior executives

The four members of the Board of Management of Stedin Group are employed by Stedin Netbeheer B.V. on the basis of an employment contract for an indefinite period and all qualify as senior executives pursuant to the WNT. All four members of the Board of Management were appointed after 2013. Therefore, no transitional rules apply.
Judith Koole stepped down as a member of the Board of Management with effect from 4 December 2020. As from 5 December 2020, she therefore no longer qualifies as a senior executive of Stedin Netbeheer B.V.

The senior executive of Enduris B.V. is employed by DNWG Staff B.V., on the basis of an employment contract for an indefinite period. He qualifies as a senior executive without employment on a 50% basis for the grid manager Enduris B.V. At the start of 2020, he had already filled this position for more than 12 months. His remuneration has been determined in accordance with the definition of remuneration for senior executives with employment, of which 50% is charged to Enduris by DNWG Staff. In 2019, his remuneration was determined in the months from January to the end of April on the basis of the actual personnel expenses charged to Enduris B.V. This applied to calendar months 8 to 12 of fulfilment of his duties. From the 13th month of fulfilling his duties, the months of May to the end of December 2019, his remuneration was presented in the same way as in 2020.

Table 1 *Senior executives with employment and senior executives without employment after the 13th month of fulfilling their duties*

Data for 2020 x € 1	Marc van der Linden	Danny Benima	Judith Koole	David Peters	Koen Verbogt
Position details	CEO	CFO	COO	CTO	Director
Start and end dates of duties in 2019	1 January-31 December	1 January-31 December	1 January-31 December	1 January-31 December	1 January- 31 December
Scope of appointment (in FTEs)	1	1	1	1	0.5
Employment relationship	yes	yes	yes	yes	no
Remuneration					
Remuneration plus taxed expense allowances	178,680	178,538	165,548	178,319	80,378
Remuneration payable in future	22,320	22,462	20,624	22,681	10,875
Sub-total	*201,000*	*201,000*	*186,172*	*201,000*	*91,253*
Maximum remuneration for position holder	201,000	201,000	186,172	201,000	100,500
-/- Amount paid but not owed and not yet refunded	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Total remuneration	**201,000**	**201,000**	**186,172**	**201,000**	**91,253**
Amount of excess and reason for (non-) allowability of excess	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Information on receivable due to amount paid but not owed	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Data for 2019

Position details	CEO	CFO	COO	CTO	Director	
Start and end dates of duties in 2019	1 January-31 December	1 January-31 December	1 January-31 December	1 January-31 December	1 January-30 April	1 May-31 December
Scope of appointment (in FTEs)	1	1	1	1	0.5	0.5
Employment relationship	yes	yes	yes	yes	no	no
Remuneration						
Remuneration plus taxed expense allowances	172,903	172,935	172,825	173,202	35,225*	52,042
Remuneration payable in future	21,097	20,954	21,175	20,798	Not applicable	6,941
Sub-total	*194,000*	*193,889*	*194,000*	*194,000*	*35,225*	*58,983*
Maximum remuneration for position holder	194,000	194,000	194,000	194,000	64,826	65,110
Total remuneration	**194,000**	**193,889**	**194,000**	**194,000**	**35,225**	**58,983**

* This concerns the remuneration in the relevant period as a senior executive officer without employment in the period calendar months 1 to 12.

6.2.2 Remuneration of senior supervisory directors

In 2020, there were two changes in the composition of the Supervisory Board of Stedin Group. The chair Pieter Trienekens stepped down on 31 January 2020. With effect from 1 February 2020, he was succeeded in this position by Doede Vierstra, who has been a member of the Supervisory Board since 20 September 2019. In anticipation of the departure of Dick van Well as of 1 February 2021, Arco Groothedde joined the Supervisory Board on 1 October 2020. The members of the Supervisory Board qualify as senior supervisory directors under the WNT.

Table 2 *Senior supervisory directors*

x € 1	Pieter Trienekens	Doede Vierstra	Dick van Well	Theo Eysink	Annie Krist	Hanne Buis	Arco Groothedde
Position details	Chairman	Member and Chairman	Member	Member	Member	Member	Member
Start and end dates of duties in 2019	1 January-31 January	1 January-31 December	1 January-31 December	1 January-31 December	1 January-31 December	1 January-31 December	30 September-31 December
Remuneration							
Total remuneration	**2,554**	**29,299**	**20,100**	**20,100**	**20,100**	**20,100**	**5,052**
Maximum remuneration for position holder	2,554	29,299	20,100	20,100	20,100	20,100	5,052
-/- Amount paid but not owed and not yet refunded	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Reason for (non-)allowability of excess	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Information on receivable due to amount paid but not owed	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Data for 2019							
Position details	Chairman	Member	Member	Member	Member	Member	Not applicable
Start and end dates of duties in 2019	1 January-31 December	20 September-31 December	1 January-31 December	1 January-31 December	1 January-31 December	1 January-31 December	Not applicable
Remuneration							
Total remuneration	**29,100**	**5,475**	**19,400**	**19,400**	**19,400**	**19,400**	**0**
Maximum remuneration for position holder	29,100	5,475	19,400	19,400	19,400	19,400	0

6.2.3 Total remuneration of senior executive employed by an affiliated entity

The director of Enduris B.V. is employed by DNWG Staff B.V. and is also responsible, as director of DNWG Groep N.V., for DNWG Infra B.V. DNWG Staff B.V. is an affiliated enterprise of Enduris B.V. The remuneration at Enduris has been determined in accordance with the definition of remuneration for senior executives with employment, of which 50% is charged to Enduris. His total remuneration at DNWG Staff is therefore twice the amount of his remuneration at Enduris.

Table 3 *Total remuneration of senior executive with other activities than those as senior executive at the entity that is subject to the WNT and/or remuneration for activities at affiliated legal entities*

Remuneration 2020	
x € 1	Koen Verbogt
Remuneration for the work performed as a senior executive at Enduris B.V.	91,253
Remuneration for the work performed other than as a senior executive at Enduris B.V.	0
Remuneration for work performed at related companies of Enduris B.V.	182,506
-/- Double counting due to internal invoicing	91,253
Subtotal	182,506
The remuneration maximum applicable to the WNT institution or a higher remuneration permitted for the individual senior official	201,000
-/- Amount paid but not owed and not yet refunded	Not applicable
Remuneration	**182,506**
Amount of excess and reason for (non-) allowability of excess	Not applicable
Information on receivable due to amount paid but not owed	Not applicable

6.2.4 Remuneration of non-senior executives

Besides the senior executives listed above, there were no other executives employed at Stedin Netbeheer B.V. or Enduris B.V. who received remuneration in 2020 exceeding the individually applicable threshold amount.

For the remuneration report as included in the report of the Supervisory Board, see Remuneration report for 2020.

7. Cost of sales and contracted work

x € 1 million	2020	2019
Cost of sales	208	175
Contracted work	109	125
Total	**317**	**300**

The cost of sales and contracted work increased by € 17 million compared with 2019.

The increase in the cost of sales and contracted work was mainly attributable to purchases of energy, due to the increased rates of TenneT, with an impact of approximately € 40 million. This was partly offset by favourable results in purchasing for network losses of some € 14 million and lower costs of materials of € 8 million as a result of reduced activity levels.

8. Other operating expenses

x € 1 million	2020	2019
Municipal sufferance taxes and concessions	70	71
IT costs	54	46
Lease expenses	5	6
Accommodation costs	23	22
Provisions	1	13
Other expenses	75	62
Total	**228**	**220**

Other operating expenses increased by € 8 million compared with the previous year,

These expenses rose primarily due to higher ICT costs (around € 8 million) and other expenses (around € 11 million). This was partly offset by a decrease in the costs for provisions, which had been high in 2019 owing to the provision for removing gas connections, see 24 Other provisions.

Other operating expenses includes, under 'Provisions', € - million (2019: € 1 million) as an addition to the provision for expected credit loss.

9. Capitalised own production

Hours worked by own staff and directly attributed to own investment projects are deducted from operating expenses as capitalised production.

Compared with the preceding financial year, capitalised own production increased by € 8 million to € 188 million. The increase was caused by the need for Stedin to implement more safety measures due to the coronavirus, which meant more direct labour hours were worked on each project.

Hours worked by external staff attributed to own investment projects are deducted from personnel expenses (external staff); see note 6 Personnel expenses.

10. Depreciation, amortisation and impairment of non-current assets

2020 x € 1 million	Land and buildings, machinery and equipment	Networks	Other	Total
Depreciation and amortisation	7	288	9	304
Depreciation and amortisation lease	7	-	10	17
Disposals	2	11	-	13
Disposals lease	-	-	-	-
Total 2020	**16**	**299**	**19**	**334**

2019 x € 1 million*	Land and buildings, machinery and equipment	Networks	Other	Total
Depreciation and amortisation	6	278	11	295
Depreciation and amortisation lease	8	-	10	18
Disposals	-	4	-	4
Disposals lease	-	-	-	-
Total 2019	**14**	**282**	**21**	**317**

* The 2019 figures have been adjusted to separately show the depreciation and disposals of the right of use assets, according to IFRS 16.53(a).

Depreciation and amortisation as well as disposals relate to property, plant and equipment as well as to intangible assets and to right-of-use assets, and they increased by € 17 million compared with 2019.

Regular depreciation and amortisation increased by € 8 million, due to a shorter useful life of smart meters, an increase in property, plant and equipment as well as right-of-use assets. Disposals increased by € 9 million. This increase was attributable in full to disposals in regulated networks.

The disposals of non-current assets amount to € 13 million (2019: € 5 million).

11. Financial income and expenses

x € 1 million	2020	2019
Interest income	-1	-1
Interest expense	56	67
Interest expense lease	1	1
Total	**56**	**67**

The financial income and expenses in 2020 amounted to € 56 million (2019: € 67 million). The financial expenses relate mainly to the interest expense for external financing. In addition, interest was capitalised in 2020 on the assets under construction for an amount of € 5 million (2019: € 3 million).

12. Income tax

Income tax on the result from continuing operations is as follows:

x € 1 million	2020	2019
Current tax expense	11	20
Current tax income prior years	-	-2
Current tax expense and tax income for current year	**11**	**18**
Release of deferred taxation due to a change in corporate income tax rates	11	2
Movements in deferred taxes	8	7
Income taxes	**30**	**27**

The current tax income and expense on the result from continuing operations is as follows:

x € 1 million	2020	2019
Profit before income tax	**72**	**352**
Participation exemption	1	-247
Non tax-deductible expenses	1	1
Different depreciation methods for tax purposes	-30	-28
Taxable amount	**44**	**78**
Nominal tax rate	25%	25%
Current tax expense	**11**	**20**

The effective tax burden expressed as a percentage of the profit before income tax from continuing operations is as follows:

	2020	2019
Nominal tax rate	**25.0%**	**25.0%**
Effect of:		
- Participation exemption	0.4%	-17.4%
- Non tax-deductible expenses	0.4%	0.1%
- Change in corporate income tax rates	15.4%	0.7%
- Tax incentives (Energy Investment Allowance)	0.0%	0.0%
- Corporate income tax for prior years	0.2%	-0.5%
- Other	-0.2%	-0.2%
Effective tax rate	**41.2%**	**7.7%**

The corporate income tax is settled between Stedin Holding N.V. and its subsidiaries as if the subsidiaries were independently liable to tax.

13. Property, plant and equipment

x € 1 million	Land and buildings	Machinery and equipment	Regulated networks*	Other operating assets	Assets under construction	Total
Historical cost as at 1 January 2019	**29**	**41**	**10,051**	**49**	**6**	**10,176**
Investments	40	3	590	8	3	**644**
Disposals	-	-1	-28	-	-	**-29**
Reclassification from / to assets held for sale	-	-1	-	-	-	**-1**
Reclassification other	1	1	-6	6	-3	**-1**
Historical cost as at 31 December 2019	**70**	**43**	**10,607**	**63**	**6**	**10,789**
Investments	1	2	613	2	1	**619**
Disposals	-2	-	-36	-	-	**-38**
Reclassification other	-	-2	9	-1	-6	**-**
Historical cost as at 31 December 2020	**69**	**43**	**11,193**	**64**	**1**	**11,370**
Accumulated depreciation and impairment as at 1 January 2019	**12**	**16**	**3,702**	**40**	**-**	**3,770**
Annual depreciation and impairment	3	4	278	4	-	**289**
Disposals	-	-1	-23	-	-	**-24**
Reclassification other	-1	3	-1	-	-	**1**
Accumulated depreciation and impairment as at 31 December 2019	**14**	**22**	**3,956**	**44**	**-**	**4,036**
Annual depreciation and impairment	3	4	288	5	-	**300**
Disposals	-	-	-25	-	-	**-25**
Reclassification other	-	-3	7	-2	-	**2**
Accumulated depreciation and impairment as at 31 December 2020	**17**	**23**	**4,226**	**47**	**-**	**4,313**
Net book value as at 31 December 2019	**56**	**21**	**6,651**	**19**	**6**	**6,753**
Net book value as at 31 December 2020	**52**	**20**	**6,967**	**17**	**1**	**7,057**

* Regulated networks also comprises assets under construction.

The net book value of property, plant and equipment increased by € 304 million compared with the preceding year. Stedin Group's investments in property, plant and equipment amounted to € 619 million and related mainly to the regulated gas and electricity grids as well as to the large-scale offer and installation of smart meters. The disposals related to asset retirements (especially the machinery and equipment in the regulated domain).

Regulated grids also comprise assets under construction. An amount of € 5 million in interest was capitalised in 2020 on the assets under construction, applying an interest rate of 2.3% (2019: € 3 million, at 2.5%).

Regulated networks are measured at the revalued amount, i.e. the fair value at the date of the revaluation (NRAV) less accumulated depreciation and impairment.

Other property, plant and equipment is recognised at cost less accumulated depreciation and impairment.

The main data used to measure fair value are:

Parameters for measuring fair value of regulated networks

Valuation method (ACM)	Income approach derived from indexed value of regulated assets (NRAV)
Cash flow horizon for networks in years	Remaining term of regulated networks
WACC (ACM) applied in percent	4.04%
Date of change of WACC (ACM)	2021
Market share of Stedin Group in the Netherlands (ACM) in percent	Electricity transmission 24% and gas distribution 26%

The most recent revaluation took place in 2017. There were no changes in the valuation methodology in 2020. The fair value of the grids (NRAV) will be reassessed in 2021, when the new regulation information from the ACM will be available. In 2021, the

ACM will publicly disclose this information again, as a result of which the unobservable parameters for fair value measurement of 'level 3' in IFRS 13 will be 'objective market data' again for Stedin Group for that moment.

In 2021, the ACM is reviewing how to treat the current regulatory payments for the existing gas grid. In doing so, it considers both alternative utilisation of the gas grid and the affordability of the charges. Under the current regulatory rules, if the number of users decreases, the investments will be apportioned among fewer users, resulting in a higher tariff and therefore more costs for individual users. Stedin considers the current depreciation periods of 25 years to be appropriate for the expected useful lives on the basis of the existing utilisations and the current regulatory regime. As soon as an alternative utilisation of the gas grid, an accelerated removal or a change in the payments structure becomes clear, this may lead to a different assessment of useful life, and depreciation charges may change in the future.

As described in 'Removing gas connections' in note 24 Other provisions, Stedin will accelerate the removal of gas connections that are 'out of operation'. The accelerated removal affects the estimated remaining useful life of the connections concerned. This situation did not affect the 2019 and 2020 results.

In 2020, an impairment occurred in respect of the building in Delft, of €2 million, as its recoverable amount had decreased. In 2020, the useful life of the GPRS smart meters was revised, resulting in higher depreciation of around €6 million in the 2020 financial year. The annual impact on the future periods is less than € 6 million.

As at 31 December 2020, the book value of regulated grids at historical cost was € 6,191 million (31 December 2019: € 5,850 million).

14. Intangible assets

The movements in intangible assets in 2020 were as follows:

x € 1 million	Goodwill	Licences and software	Concessions, permits and rights	Total
Historical cost as at 1 January 2019	**77**	**31**	**11**	**119**
Investments	-	1	1	**2**
Reclassification other	-	-	2	**2**
Historical cost as at 31 December 2019	**77**	**32**	**14**	**123**
Investments	-	-	1	**1**
Historical cost as at 31 December 2020	**77**	**32**	**15**	**124**
Accumulated amortisation and impairments as at 1 January 2019	**-**	**18**	**4**	**22**
Annual amortisation and impairment	-	5	1	**6**
Accumulated amortisation and impairments as at 31 December 2019	**-**	**23**	**5**	**28**
Annual amortisation and impairment	-	3	1	**4**
Reclassification other	-	-	-1	**-1**
Accumulated amortisation and impairments as at 31 December 2020	**-**	**26**	**5**	**31**
Net book value as at 31 December 2019	**77**	**9**	**9**	**95**
Net book value as at 31 December 2020	**77**	**6**	**10**	**93**

Goodwill

The goodwill relates to the acquisition of DNWG in 2017. Stedin Group completed the fair value measurement of the identifiable assets and liabilities in the first half of 2018. The finalised goodwill was allocated, on the basis of the synergy benefits, to the cash-generating units Stedin Netbeheer (€30 million) and DNWG (€47 million).

Impairment test

For the purpose of the annual impairment testing, goodwill arising from the DNWG acquisition was allocated to two cash-generating units (CGUs), Stedin and DNWG, which were determined at the operating segments level.

The book values of the goodwill as at 31 December 2020 were as follows:

x € 1 million	Stedin	DNWG	Total
Book value	30	47	77

Stedin Group carried out an impairment test on goodwill for each CGU as at 30 June 2020. This involves a comparison between the recoverable amount of the CGU and its book value. The fair value is determined based on the recoverable amount. Due to the lack of observable market data, the valuation method is a level 3 fair value within the fair value hierarchy. The recoverable amount functions, where appropriate, as an approximation of the realisable value. In principle, the recoverable amount is based on pre-tax cash flow projections, discounted using a pre-tax weighted average cost of capital (pre-tax WACC).

The estimated projected cash flows for the 2020-2034 period are derived from the Financial Strategic Plan (FSP) of Stedin Group as approved by the Board of Management and the Supervisory Board, among other things. The budgets for the CGUs Stedin and DNWG are distinctly included in the FSP, covering the 2020-2025 period. The 2026-2034 period is derived from the extrapolation of the FSP projections. The projected investments are based on the Strategic Investment Plan (SIP). The SIP covers a 15-year projection period (2020-2034). Therefore, 2034 is regarded as a natural starting point for the residual value period.

The following items are the most important factors and assumptions used in the goodwill impairment test:

- the estimated fair value of the regulated assets (the so-called normalised regulated asset value or NRAV);
- the market shares of Stedin and DNWG respectively;
- the relative profitability of Stedin and DNWG respectively; the return on investment on the regulated assets (actual pre-tax WACC), as set by the Netherlands Authority for Consumers and Markets (ACM);
- the long-term inflation forecasts and the long-term growth rate;
- the weighted average cost of capital (WACC).

Regarding the aforementioned items, we note the following:

- Stedin Group applies fair value as the valuation principle for its regulated network components. The fair value is derived from the NRAV. As a logical consequence of this accounting policy, the variance between the realisable value and the book value of the regulated assets for both CGUs (Stedin and DNWG) is limited. Accordingly, by definition, there is an increased risk of goodwill impairment.

- The market shares of the CGUs Stedin and DNWG are based on the relative market shares of Stedin and DNWG in the combined output (samengestelde output, SO) of the sector as a whole. This is based on 2015 data as published by the ACM. It is assumed that both the Stedin and DNWG market shares will remain constant in the future.

- The profitability of Stedin and DNWG partly depends on the instrument of 'yardstick competition'. The allowed revenue which the ACM grants to the individual Dutch grid managers for their regulated activities depends on the sector-average costs and the market share of each grid manager. Stedin's market share is approximately 24% for electricity distribution and 26% for gas distribution. DNWG's market share is approximately 3% for electricity distribution and 2% for gas distribution. The system of 'yardstick competition' means that the revenues and future cash flows of Stedin and DNWG are affected by both their own performance and that of other grid managers. The allowable income is revisited by the ACM at the beginning of each five-year regulation period; this will be done again in 2021. The underlying data are also published once every five years. As a result, grid managers cannot reliably estimate overperformance or underperformance compared to other regional grid managers during a regulatory period, nor the potential impact on their future cash flows. The next recalibration will take place in 2021.

- In view of the deviations between the individual performance of Stedin and DNWG compared to the benchmark, a convergence assumption of seven years was used in the determination of the realisable value of both CGUs. In this convergence assumption, the operational expenses and the level of investment of Stedin and DNWG in the year are assumed, with effect from the year 2027, to be equivalent to those of their market share.

- The capital costs as defined by the ACM constitute an important cost component for determining the sector-average costs. The capital costs include depreciation charges based on regulatory accounting principles as well as a return on the NRAV on the basis of the actual pre-tax WACC. The ACM determines the WACC based on relevant market parameters and corporate finance theories. The WACC assumptions utilised by Stedin Group management for its projections are derived from the proposed WACC communicated by the ACM for the next regulation period. For the subsequent regulation periods as of 2027 onwards, Stedin Group management made its own estimate for the regulated and non-regulated WACCs. These WACCs are primarily derived from i) market observations with regard to the relevant parameters such as interest rates, risk profiles, market fees and capital ratios and ii) the approach utilised by the ACM to define the WACC. The WACCs were used for two objectives, namely for the return on the NRAV and for the discount rate. The post-tax WACC of Stedin and DNWG is a weighted average for the regulated (1.7%-3.8%) and non-regulated activities (8.5%).

- The long-term growth rate that was used to determine the terminal values of the two CGUs is conservatively estimated at 0%. For the projection period until 2034, a growth rate has been used that is equal to the expected inflation (1.5%). This has been chosen to remain consistent with the SIP period, which ends in 2034.

For both Stedin and DNWG, the buffer between the net book value and the net realisable value is relatively small due to the fact that the fair value is used as the valuation principle for regulated assets. On the basis of the above assumptions, no impairment is indicated.

Based on the impairment test carried out on 30 June 2020 as well as additional analysis, there was no indication as at 31 December 2020 that the goodwill associated with both CGUs is impaired.

The outcome of the impairment test depends on changes in certain key estimates and assumptions. The most important ones are:

- the investment levels;
- the convergence assumption;
- the discount rate;
- the long-term growth rate.

Stedin Group performed a sensitivity analysis of changes in the key assumptions and estimates that were used to determine the realisable value for both CGUs. Stedin Group is of the opinion that any reasonably possible change in the key assumptions on which the realisable values are based will not lead to a decrease of the realisable value below the book value. The sensitivities to changes in key assumptions on which the realisable values of Stedin and DNWG are based are described below:

- If 1% of the regulated investments is not earned back via future tariffs (for example due to inefficiencies), this results in a decrease in the realisable value of Stedin by €31 million and of DNWG by €4 million.

- A one-year delay in the convergence assumption results in an increase in the realisable value of Stedin by €6 million and a decrease in the realisable value of DNWG by €3 million.

- An increase in the (regulated) discount rate of 0.1% results in a decrease in the realisable value of Stedin by €4 million and of DNWG by €3 million.

- A decrease of the long-term growth rate by 0.2% results in a decrease in the realisable value of Stedin by €4 million and of DNWG by €4 million.

None of the above sensitivities result in a material negative buffer or an impairment indication.

15. Right-of-use assets

x € 1 million	Land and buildings	Lease vehicles	Total
Right-of-use assets as at 1 January 2020	**72**	**31**	**103**
Investments	1	10	**11**
Contract modifications	6	-1	**5**
Disposals	-16	-1	**-17**
Right-of-use assets as at 31 December 2020	**63**	**39**	**102**
Investments	1	9	**10**
Contract modifications	2	-	**2**
Disposals	-2	-2	**-4**
Right-of-use assets as at 31 December 2020	**64**	**46**	**110**
Accumulated depreciation as at 1 January 2020	**-**	**-**	**-**
Annual depreciation and impairment	7	10	**17**
Disposals	-	-1	**-1**
Accumulated depreciation as at 31 December 2020	**7**	**9**	**16**
Annual depreciation and impairment	7	10	**17**
Disposals	-2	-2	**-4**
Accumulated depreciation as at 31 December 2020	**12**	**17**	**29**
Net book value as at 31 December 2019	**56**	**30**	**86**
Net book value as at 31 December 2020	**52**	**29**	**81**

Stedin Group has entered into leases for a number of business premises and sites. In addition, Stedin Group leases a vehicle fleet. In 2020, Stedin Group concluded new leases for the vehicle fleet in particular.

The lease liabilities are disclosed in 25 Interest-bearing debt.

The table below presents the total lease expenses for 2020:

x € 1 million	2020	2019
Depreciation charges for right-of-use assets	**-17**	-17
Interest expense on lease liabilities	**-1**	-1
Lease cost in profit & loss	**-5**	-6
Total	**-23**	**-24**

16. Associates and joint ventures

x € 1 million	2020	2019
Book value as at 1 January	**3**	**5**
Share in profit after income tax	1	-2
Book value as at 31 December	**4**	**3**

This table relates to the 33.3% interest in Zebra Gasnetwerk B.V. (below: Zebra). ZEBRA manages and operates a high-pressure gas transport pipeline. This pipeline is used to transport high-calorific gas that is taken in from the gas distribution network of Fluxys in the import station in Sas van Gent. The gas is distributed to connected high-volume consumers. On 19 December 2019, an asset sale and purchase agreement was signed between Enduris BV, Enexis Netbeheer BV, Zebra Activa BV, Entrade Pipe BV and Gasunie Transport Services BV. As part of this transaction, among other assets, the assets of the extra high-pressure gas grids were transferred to Gasunie Transport Services BV in 2020.

17. Deferred tax assets and liabilities

Deferred tax assets and liabilities are as follows.

x € 1 million	Assets as at 31 December 2020	Assets as at 31 December 2019	Liabilities as at 31 December 2020	Liabilities as at 31 December 2019
Property, plant and equipment	-	-	297	250
Cash flow hedges	26	20	-	-
Provisions	1	2	-	-
Interest-bearing debt	-	-	4	4
Total	**27**	**22**	**301**	**254**

Deferred tax assets and liabilities relate mainly to property, plant and equipment and cash flow hedges taken through group equity.

Movements in deferred taxes during 2020 are as follows:

x € 1 million	Net balance as at 1 January 2020	Recognised in profit or loss	Recognised in other comprehensive income	Net balance as at 31 December 2020	Assets	Liabilities
Property, plant and equipment	250	18	29	297	-	297
Cash flow hedges	-20	-	-6	-26	26	-
Provisions	-2	1	-	-1	1	-
Interest-bearing debt	4	-	-	4	-	4
Deferred income tax liabilities (assets) for netting	**232**	**19**	**23**	**274**	**27**	**301**
Netting off					-27	-27
Total					**-**	**274**

The major portion of the deferred tax on property, plant and equipment relates to the difference between the carrying amounts and tax bases in the valuation of the networks. The deferred tax liability relating to property, plant and equipment was caused mainly by the difference between the book values and tax bases in the valuation of the networks at the time of the introduction of corporate income tax for Stedin Group, accelerated depreciation for tax purposes applied in the past, the revaluation of the networks and the valuation of the acquired networks as part of the accounting for the acquisition of DNWG.

In December 2020, the Upper House of Dutch Parliament approved the bill to increase the corporate income tax rate to 25% in 2021 and subsequent years. Calculations performed in 2019 still applied rates of 25% for 2020 and 21.7% as from 2021, which were the future statutory rates in 2019 but were changed back to 25% in 2020. This means that the deferred tax assets and liabilities are settled again at the rate of 25%. The measurement of the deferred tax assets and liabilities as at 31 December 2020 is based on the rate of 25%.

	As at 31 December 2020	As at 31 December 2020	
	old rates	new rates	Difference
Deferred tax assets	24	27	-3
Deferred tax liabilities	-261	-301	40
Netted	**-237**	**-274**	**37**

Released to income statement	-11
Addition charged to cash flow hedge reserve	3
Released to the revaluation reserve in equity	-29
Total	**-37**

Movements in deferred taxes during 2019 are as follows:

x € 1 million	Net balance as at 1 January 2019	Recognised in profit or loss	Recognised in other comprehensive income	Net balance as at 31 December 2019	Assets	Liabilities
Property, plant and equipment	229	9	12	250	-	250
Intangible assets	-1	1	-	-	-	-
Cash flow hedges	-17	-	-3	-20	20	-
Provisions	-2	-	-	-2	2	-
Interest-bearing debt	3	1	-	4	-	4
Deferred tax liabilities (assets) before netting	**212**	**11**	**9**	**232**	**22**	**254**
Netting off					-22	-22
Total					**-**	**232**

Expiration periods for deductible temporary differences as at 31 December 2020 are as follows:

Category	Period
Property, plant and equipment	1 - 50 years
Intangible assets	1 - 25 years
Cash flow hedges	1 - 30 years
Provisions	1 - 10 years

18. Derivative financial instruments

Fair value of derivative financial instruments:

x € 1 million	Assets as at 31 December 2020	Liabilities as at 31 December 2020	Assets as at 31 December 2019	Liabilities as at 31 December 2019
Currency swap and forward contracts	19	86	39	52
Total	**19**	**86**	**39**	**52**

The classification by maturity is set out below:

x € 1 million	Assets as at 31 December 2020	Liabilities as at 31 December 2020	Assets as at 31 December 2019	Liabilities as at 31 December 2019
Classification				
Current / short term	3	2	-	-
Non-current / long term	16	84	39	52
Total	**19**	**86**	**39**	**52**

All derivative financial instruments have been assigned as effective hedges and value changes of these instruments are recognised directly in group equity and presented in the cash flow hedge reserve, where applicable. More information on movements in that reserve and the expected cash flows is provided in note 32.4 Derivative financial instruments and cash flow hedge reserve.

19. Inventories

Inventories increased compared with the preceding financial year. This is because it was not possible to execute all projects in the year, whereas inventories for them were in place. An obsolescence allowance of € 2 million has been deducted from the value of inventories (2019: € 2 million).

An amount of € 1 million within the obsolescence allowance relates to meters (2019: € 1 million).

20. Trade and other receivables

Trade and other receivables includes mainly amounts receivable from customers and amounts not yet invoiced (contract assets) for the provision of transmission services.

This item can be broken down as follows:

x € 1 million	As at 31 December 2020	As at 31 December 2019
Trade receivables	113	120
To be invoiced*	39	38
Other receivables and accruals*	13	14
Total	**165**	**172**

* The 2019 figures have been adjusted for comparison purposes.

Note 32.2 Credit risk states the age and impairments of the trade receivables and contract assets.

Trade receivables decreased by € 7 million compared with the preceding year. This decrease was mainly attributable to a lower position of the receivables from energy companies due to lower revenue at the end of 2020.

21. Cash and cash equivalents

At 31 December 2020, cash and cash equivalents comprised bank balances of €50 million and short-term cash loans of €33 million (2019: bank balances of €37 million, short-term cash loans of €35 million). Cash and cash equivalents are held mainly in euros. Cash and cash equivalents that are not freely available to Stedin Group amounted to €- million (2019: €0.1 million) at year-end.

22. Group equity

Share capital

Stedin Holding N.V.'s authorised share capital is €2 billion, divided into 20 million shares with a nominal value of €100 each. At 31 December 2020 and 2019, 4,970,978 shares had been issued and fully paid.

Share premium

Stedin Holding N.V. (formerly Eneco Holding N.V.) was incorporated in 2000. At that time, the shareholders of N.V. Eneco acquired a capital interest in the company by contributing their capital interests in N.V. Eneco to Stedin Holding N.V. Insofar as the value of that interest exceeded the nominal value of the shares, the excess value was taken to share premium. The share premium reserve can be regarded as paid-up share capital.

The share premium reserve was used for unbundling the energy company Eneco in the form of a repayment in kind to the shareholders.

Revaluation reserve

The revaluation reserve relates to the revaluation of networks and network-related assets at fair value. The difference between depreciation based on the revalued book value and depreciation based on the original historical cost, less deferred tax, was transferred from the revaluation reserve to retained earnings. The revaluation reserve is not freely at the disposal of the shareholders. The revaluation reserve amounted to €662 million at year-end 2020 (2019: €720 million). In 2020, €29 million was withdrawn from the revaluation reserve (to be used for the deferred tax liability) as a consequence of the adjustment of the corporate income tax rate.

Legal reserve

A legal reserve is included in group equity for the amount of the book value of the internally developed intangible assets.

Cash flow hedge reserve

The cash flow hedge reserve is not freely at the disposal of the shareholders. More information on the movements and the underlying hedging relationships is set out in note Derivative financial instruments and cash flow hedge reserve.

Perpetual subordinated bond loan

On 1 December 2014, Stedin Holding N.V. issued a perpetual subordinated bond loan ('Perpetual Fixed Rate Reset Securities') with a total nominal amount of €500 million at an annual coupon interest of 3.25% and an issue price of 99.232%. This resulted in net proceeds of €496 million. Directly attributable costs of €3 million were deducted from these proceeds, resulting in an addition of €493 million to the group equity in 2014. The bonds are listed on the Euro MTF Market of the Luxembourg stock exchange. On 31 December 2020, the market value was €526 million. The book value at year-end 2020 was €501 million, which is the nominal principal amount including €1 million in accrued interest.

The perpetual subordinated bond loan is regarded as an equity instrument and is subordinated to all of Stedin Group's creditors but has certain preferences over the shareholders in the event of the company being wound up. Stedin Holding N.V. has no contractual obligation to redeem the loan. Any payment of current or deferred coupon interest is conditional and dependent on distributions to shareholders. Consequently, the bondholders cannot force Stedin Holding N.V. to pay the coupon interest or to redeem all or part of the loan.

23. Provisions for employee benefits

x € 1 million	Long-service benefits	Other	Total
As at 1 January 2019	**14**	**3**	**17**
Additions	-	3	3
Withdrawals	-3	-1	-4
Release	-1	0	-1
As at 31 December 2019	**10**	**5**	**15**
Additions	1	4	5
Withdrawals	-1	-1	-2
Release	-1	-3	-4
As at 31 December 2020	**9**	**5**	**14**

Classification (x € 1 million)	As at 31 December 2020	As at 31 December 2019
Current	3	3
Non-current	11	12
Total	**14**	**15**

Long-service benefits

This provision covers the obligation to pay amounts to employees on achieving a certain number of years of service and on the retirement of employees.

The following actuarial assumptions were used for the provisions:

	31 December 2020	31 December 2019
Discount rate	1.0%	1.0%
Future salary increments	1.4% - 2.5%	1.4% - 3.0%
Mortality table	GBM & GBV 2014-2019	GBM & GBV 2013-2018

Long-service payments are made over the long term. The provision is remeasured annually using current employee information.

24. Other provisions

x € 1 million	Other provisions
As at 1 January 2019	**24**
Additions	14
Withdrawals	-3
Release	-3
As at 31 December 2019	**32**
Additions	3
Withdrawals	-4
Release	-2
As at 31 December 2020	**29**

Classification (x € 1 million)	As at 31 December 2020	As at 31 December 2019
Current	5	2
Non-current	24	30
Total	**29**	**32**

The other provisions amount to € 29 million (2019: € 32 million), comprise several provisions of different kinds and are mainly of a long-term nature. They include, for instance, a provision for legal proceedings and claims of € 3 million (2019: € 6 million), a provision for decommissioning of € 4 million (2019: € 4 million) and obligations amounting to € 8 million entered into on behalf of Stichting Zeeuwse Publieke Belangen (2019: € 9 million).

Stichting Zeeuwse Publieke Belangen (Zeeland Public Interest Foundation)

Stichting Zeeuwse Publieke Belangen is a unique alliance between the province of Zeeland, the municipalities of Zeeland and Stedin Group. The foundation was established to safeguard the arrangements concerning the sale of DNWG/Enduris to Stedin Group in terms of employment, energy supply and the energy transition, among other things. The foundation makes a budget available to promote the energy transition in Zeeland.

In addition, the provision for the accelerated removal of 'gas connections out of operation' of € 12 million was recognised in 2019. See below for more detailed information. The expected period in which an outflow of resources from these provisions will occur exceeds one year.

Removal of gas connections

In the first half of 2019, grid managers agreed at the industry level in Netbeheer Nederland that removing gas connections is no longer to be performed at the discretion of grid managers but will be accelerated with a view to safety and be subject to supervision by SodM. This agreement relates to shut-off gas connections with the status 'out of operation' that are still 'pressurised'. The related costs are not charged to existing and former customers. In 2019, a provision was recognised and charged to operating expenses for an amount of € 12 million.

Stedin Group expects that it will have removed the gas connections concerned by the end of 2024. The accelerated removal affects the estimated remaining useful life of the connections concerned. Depreciation due to the change in useful life does not affect the 2019 and 2020 results.

The provisions were discounted in 2020 using rates ranging up to 1,0% (2019: 1,0%).

25. Interest-bearing debt

Classification (x € 1 million)	As at 31 December 2020	As at 31 December 2019
Current	290	19
Non-current	2,893	2,985
Total	**3,183**	**3,004**

Movements in interest-bearing debt:

x € 1 million	2020	2019
As at 1 January	**3,004**	**3,044**
New non-current interest-bearing debt	-	492
New current interest-bearing debt	1,375	727
Repayments of non-current interest-bearing debt	-	-648
Repayments of current interest-bearing debt	-1,175	-727
Lease liabilities	-5	86
Foreign currency exchange differences	-29	17
Interest rate swaps	13	10
Other movements	-	3
As at 31 December	**3,183**	**3,004**

The maturities of the interest-bearing debts are presented below:

x € 1 million	As at 31 December 2019	As at 31 December 2018
Within 1 year	290	19
1 to 2 years	535	94
2 to 3 years	11	538
3 to 4 years	121	10
4 to 5 years	534	126
After 5 years	1,692	2,217
Total	**3,183**	**3,004**

Most interest-bearing debts as at 31 December 2020 were contracted by Stedin Holding N.V., and no collateral has been provided. More information on interest-bearing debt is included in 32 Financial risk management.

The lease liabilities that are capitalised as of 1 January 2019 as a result of the application of IFRS 16 are included in interest-bearing debt. For information on right-of-use assets, see 15 Right-of-use assets.

The total lease liability as at 31 December 2020 was €81 million (2019: €86 million). The maturities of this lease liability are: €14 million within one year, €39 million from one to five years and €28 million after five years.

There is no liquidity risk for the lease liabilities arising from right-of-use assets. The lease liabilities are monitored by the Corporate Control department.

The following significant financing transactions took place in 2020:

- In 2020, €200 million was raised in current debt: €100 million in private loans and €100 million under the Euro Commercial Paper Programme.
- The long-term debt portfolio was virtually unchanged in 2020; the change was attributable to a small repayment on amortising loans and exchange differences.

Some of the loans are subject to financial covenants, which are set out below:

- a gearing ratio (Total net borrowings / Total capitalisation) lower than 70%;
- an interest coverage ratio (EBITDA / net interest expense) higher than 3.

The above ranges for ratios are assessed at the end of each measurement period.

The following definitions apply,

- Measurement period: 12-month moving average per 31 December and 30 June of each financial year.
- Total net borrowings: sum of current and non-current interest-bearing debt, minus cash and cash equivalents.
- Total capitalisation: sum of current and non-current interest-bearing debt and total group equity adjusted for goodwill, intangible assets and minority interests.
- EBITDA: profit before income tax, adjusted for depreciation, amortisation, net interest payable, profit of group entities sold, revaluations, one-off items and share of minority interests.
- Net interest expense: sum of financial income and expenses.

The tables below show that Stedin Holding N.V. complied with the conditions stated above during 2020.

Gearing ratio	2020	2019
Principal amounts payable of interest-bearing debt	3,183	3,004
Cash and cash equivalents	-83	-72
Net debt	3,100	2,932
Principal amounts payable of interest-bearing debt	3,183	3,004
Equity	2,891	2,949
Equity adjustments	-93	-95
Total equity	5,981	5,858
Gearing ratio	**51.8%**	**50.1%**

Interest coverage ratio	2020	2019
Profit before income tax	72	352
Depreciation and amortisation	334	317
Financial income and expenses	56	67
Profit after income tax of group entities sold	1	-247
EBITDA	463	489
Net interest payable	60	70
Interest coverage ratio	**7.7**	**7.0**

26. Deferred income

x € 1 million	2020	2019
Book value at 1 January	725	648
Customer construction contributions received	105	96
Income recognised	-21	-19
Book value at 31 December	**809**	**725**

Classification	2020	2019
Current	22	18
Non-current	787	707
Total	**809**	**725**

The short-term deferred income is reported under 'contract liabilities' in 'Trade and other liabilities'.

27. Trade and other liabilities

x € 1 million	As at 31 December 2020	As at 31 December 2019
Trade liabilities	74	86
Accrued and other liabilities	173	161
Contract liabilities	27	23
VAT	30	24
Pension contributions	4	4
Total	**308**	**298**

Classification

Current	308	297
Non-current	-	1
Total	**308**	**298**

Trade and other liabilities increased by € 10 million compared with 2019. The net position for network losses is reported under 'Accrued and other liabilities'. This comprises a receivable for the electricity network losses not yet settled of € 3 million and a provision for the gas network losses of € 2 million.

The decrease in trade liabilities was mainly attributable to a decrease in investments in the fourth quarter of 2020 compared with the fourth quarter of 2019, which led to a decrease in invoices received or yet to be received.

The decrease in trade liabilities was set off by an increase in other liabilities of € 12 million. This was attributable to network losses (approximately € 6 million), other liabilities (approximately € 6 million) and interest expense payable (approximately € 1 million).

The contractual obligations increased by € 4 million, partly due to an increase of the work in progress position (€ 2 million) and an increase of the short-term Customer construction contributions (Bijdrage Aansluitkosten, BAK) (€ 2 million).

28. Current tax assets and liabilities

Current tax assets and liabilities are as follows:

x € 1 million	As at 31 December 2020	As at 31 December 2019
Corporate income tax	3	20
Total current tax assets	**3**	**20**

x € 1 million	As at 31 December 2020	As at 31 December 2019
Corporate income tax	-	-
Total current tax liabilities	**-**	**-**

29. Contingent assets and liabilities

Contingent assets and liabilities other than guarantees are presented at present value. Present value is calculated using a discount rate that reflects current market assessments of the time value of money. The discount rate applied is the euro zero coupon yield curve.

Energy purchase commitments

Stedin Group has energy purchase commitments to offset administrative and technical network losses. Based on the rates applicable in 2020, the obligation amounts to €292 million (2019: €361 million) and relates to the period from 2021 to the end of 2031.

Investment obligations

At 31 December 2020, Stedin Group had entered into investment obligations for a total amount of €46 million (2019: €5 million). These investment obligations relate to investments in smart meters. The investment obligations have been entered until 2024.

Other obligations

In addition, Stedin Group entered into contractual obligations for an amount of €8 million (2019: €8 million). These are mainly contractual obligations for maintenance.

Guarantees

Stedin Group has issued group and bank guarantees to third parties of €6 million (2019: €33 million). Of that total, Stedin Holding N.V. issued €0 million (2019: €27 million) in guarantees. This guarantee was provided by a subsidiary.

Stedin Group has taken out directors' and officers' liability insurance for the members of the Supervisory Board, the members of the Board of Management, the directors and other executives within Stedin Group. To the extent possible, the directors are indemnified by Stedin Group, subject to specific conditions, against costs in connection with civil-law, criminal-law or administrative-law proceedings in which they could be involved because of their position.

Results 'Meetdomein'

The rates that Stedin charges as a grid manager for low-use meter rental are regulated and based on the Ministerial Metering Tariff Regulation (Ministeriële Regeling Meettarieven, MR), which lays down how the ACM sets such rates. The maximum rates that grid managers may charge are currently based on the 2005 rate levels, plus an annual inflation adjustment in accordance with the consumer price index. Since 2011, the ACM has monitored the costs incurred in executing the metering task. It should be possible in this regard to fund the Large-Scale Roll-Out of Smart Meters project from the returns that are achieved. The Ministerial Metering Tariff Regulation ensures that consumers ultimately do not pay more than the break-even rates. To this end, the ACM may include the returns achieved in future decisions on rates. We currently estimate that Stedin has achieved sufficient returns at this moment to achieve the agreed completion rate of smart meter installations, including a discount to be granted on the metering tariffs of €21 million after 2021.

Legal proceedings

Stedin Group is involved either as plaintiff or defendant in various legal and regulatory claims and proceedings related to its operations. The amounts claimed in some of these proceedings may be significant to the consolidated financial statements. Liabilities and contingencies in connection with these claims and proceedings are assessed periodically based on the latest information available. A liability is only recognised if an adverse outcome is considered to be probable and the amount of the loss can be reasonably estimated; see note 24 Other provisions.

Stedin is involved with several municipalities in claims for municipal sufferance taxes. The potential impact for Stedin is a receivable ranging up to approximately €38 million. Due to uncertainties, this potential receivable is not recognised in the balance sheet as at 31 December 2020.

Rendant

Stedin has been designated by the Minister of Economic Affairs and Climate Policy as grid manager for a third-party electricity grid and gas grid. The proceedings are currently ongoing at a district court and are expected to be completed during 2021. Accordingly, Stedin will acquire the electricity grid and gas grid for an amount to be determined in due course.

Fiscal unity

Stedin Holding N.V. forms a fiscal unity for corporate income tax purposes with all its consolidated participating interests as included in note 36 Overview of subsidiaries. The companies, including Stedin Holding N.V., that are part of a fiscal unity are jointly and severally liable for the tax obligations of that fiscal unity.

There is also a fiscal unity for VAT purposes that includes Stedin Holding N.V. and all its consolidated participating interests as included in note 36 Overview of subsidiaries. Only companies, including Stedin Holding N.V., that are part of a fiscal unity are jointly and severally liable for the tax obligations of that fiscal unity.

Cash pool

Under its participation in the Stedin Group cash pool, Stedin Holding N.V., like the other participants, is jointly and severally liable for deficits in Stedin Group's cash pool.

30. Related party transactions

Related parties are entities affiliated with Stedin Group in which key management (or their family) of Stedin Group has reporting or partial control or decisive influence. Associates and joint ventures are related parties of Stedin Group. Related party transactions take place on terms of business normally prevailing with independent third parties.

Receivables outstanding from associates concern loans granted for an amount of €17 million (2019: €15 million) and are mainly of a long-term nature. In 2020, €7 million of loans were granted and €4 million of repayments were received. The loans have a term of five years, at interest rates varying from 0.3% to 2.6%. Receivables and liabilities in respect of related parties are not covered by collateral and are paid by bank.

Related parties in which members of the Supervisory Board or members of the Board of Management are or were involved are as follows:

- Stichting Zeeuwse Publieke Belangen is coordinated from within Stedin Group under the Samen Sterker programme. Its governing board is composed of the following individuals: David Peters (Stedin Group), Koen Verbogt (Stedin Group), Carla Schönknecht (province of Zeeland) and Loes Meeuwisse (Association of Municipalities in Zeeland). The fund is financed by Stedin up to a maximum of €10 million. In 2020, the governing board of the foundation committed €0.7 million to six approved project proposals and paid out €0.6 million.
- The object of Stichting OUNZ (OUNZ foundation) is to hold ownership of the rights of principal superficies with regard to the grids of DNWG Group and to provide rights of subsuperficies with regard to the gas grids as well as the electricity grids to DKCN, Evides and Enduris in order to carry out grid manager tasks. Stedin has the right, through Enduris, to appoint one of the three directors of Stichting OUNZ. The value of the rights is not material, and there are no other material financial transactions between Stedin and OUNZ.
- Supervisory Board member Annie Krist is CEO of GasTerra, which engages in trading and supplying natural gas. Stedin has no direct relationship with GasTerra.
- Former Supervisory Board member Pieter Trienekens is a member of the Supervisory Board of DNV Kema in Arnhem. DNV is a supplier of Stedin Group.
- Former Supervisory Board member Dick van Well is a member of the Supervisory Board of Dura Vermeer Groep N.V. Dura Vermeer is a supplier of Stedin Group.
- Supervisory Board member Theo Eysink is executive vice president corporate control of KPN N.V. KPN is a supplier of Stedin Group.
- Board of Management member Marc van der Linden is chair of Netbeheer Nederland and member of the Advisory Board of Technisch College Rotterdam. Netbeheer Nederland has a cooperative alliance with Stedin Group. Technisch College Rotterdam provides training courses for Stedin Group.
- Board of Management member David Peters is chair of the Supervisory Board of USEF and governing board member of E-Laad. USEF has a cooperative alliance with Stedin Group. E-Laad is a supplier of Stedin Group.
- Board of Management member Danny Benima is a member of the Audit Committee of EDSN. EDSN has a cooperative alliance with Stedin Group.

The aforementioned persons were not involved in commercial transactions between the named suppliers and Stedin Group. Contract reviews, negotiations or awards between the two companies were effected at arm's length terms and conditions.

Note 6 Personnel expenses provides details of the remuneration of members of the Board of Management and the Supervisory Board. These persons are 'key management'. There is no other relationship between the members of the Management and Supervisory Boards and Stedin Group except that of customer on normal arm's length terms and conditions.

In addition to the remuneration for senior executives as included in the WNT, compliance Section 6.2, Stedin has undertaken to pay departing members of the key management, as part of their extended involvement with Stedin and with deferred payment dates, a payment within the limits of the WNT, i.e. up to €75,000 per person.

Other relationships with parties:

- The municipality of Rotterdam is the largest shareholder of Stedin Group (approximately 31.7%) and has significant influence. There is no relationship other than the shareholder relationship, except that of customer and supplier at normal arm's length terms and conditions. Stedin Group applies the exemption from detailed disclosures on related party transactions with government-related entities (IAS 24.25).
- Stedin takes initiatives in the areas of innovation and improving sustainability and actively maintains alliances and associations with various stakeholders. Collaboration can take various shapes, such as through Netbeheer Nederland or on a project basis, as a sponsor or more systematically through foundations, such as Stichting ElaadNL, Stichting EVnetNL, Stichting Flexipower Alliance Network or USEF, in which Stedin can participate as a director. These parties are not related parties.

2020 x € 1 million	Purchased goods & services	Recharging of employee benefits, facilities and other expenses
Joint arrangements		
Utility Connect B.V.	7	0
TensZ B.V.	2	7
TeslaN B.V.	7	6
Infra Netwerkgroep Omexom VOF	-	-
Total	**16**	**13**
Associates		
Energie Data Services Nederland B.V.	19	-
Zebra Gasnetwerk B.V.	1	1
Total	**20**	**1**

2019 x € 1 million	Purchased goods & services	Recharging of employee benefits, facilities and other expenses
Joint arrangements		
Utility Connect B.V.	7	1
TensZ B.V.	2	6
TeslaN B.V.	4	5
Infra Netwerkgroep Omexom VOF	-	-
Total	**13**	**12**
Associates		
Energie Data Services Nederland B.V.	14	-
Zebra Gasnetwerk B.V.	1	-
Total	**15**	**-**

31. Auditors' fees

The fees below concern auditors' fees and advisory services provided by Stedin Group's external auditor: Deloitte Accountants B.V., as defined in Section 1.1 of the Audit Firms (Supervision) Act (Wet toezicht accountantsorganisaties, Wta), and the entities associated with the Deloitte network.

x € 1.000	2020	2019
Audit of the financial statements	1,127	1,163
Other audit engagements	413	304
Other non-audit services	-	-
Total	**1,540**	**1,467**

In the fee for the audit of the financial statements of Stedin Holding N.V., all auditor's fees required to be incurred in order to audit the consolidated and separate financial statements of the company are attributed to the financial year to which the financial statements apply.

The other audit engagements concern audits in respect of the statutory financial statements of subsidiaries and related engagements.

Other non-audit services concern services permitted under the Wta and partly charged by entities associated with the Deloitte network. Since 24 October 2017, Stedin Holding N.V. has qualified as a public interest entity (PIE). Hence, as of that date, a prohibition applies on performing the engagement for the statutory audit of the financial statements if the audit firm or another part of its network provides or has provided services other than audit services to Stedin Holding N.V. and its affiliated entities during the period in which independence is required. Since that time, the auditor's engagement has only covered audit engagements.

32. Financial risk management

Capital management

The primary goal of Stedin Group's capital management is to safeguard access to the capital and money markets in order to optimise its financing structure and costs in accordance with the long-term financial plan and economic parameters

determined by the regulator in each regulation period. Given the capital-intensive nature of the company, it is important to be able to contract financing in various different financing markets and thereby create a balanced financing mix. Stedin Group can influence its capital structure by altering its leverage ratio. Stedin Group regards both capital (including the perpetual subordinated bond loan) and non-subordinated debt as relevant components of its financing structure and therefore of its capital management. The present interest-bearing debt was raised in roughly equal proportions in the US private placement market, the European bond market and the private loan market. In addition to maintaining relationships with these existing investors in the above-mentioned financing markets, Stedin Group also maintains relationships with six Dutch and international banks that have all made financing capacity available to Stedin. These banks can also offer a wide range of financial products and services if required.

Since 2017, a Stedin Group financing strategy was formulated that targets the ratios that are relevant for the credit rating and particularly the core ratio: cash flow from operating activities/net interest-bearing debt. In this context, for the purpose of calculating the ratios, the perpetual subordinated bond loan issued in 2014 is classified by Standard & Poor's as an instrument with a 50% equity and 50% debt component. This qualification differs from the treatment under IFRS, for which the perpetual subordinated bond loan is treated entirely as equity. Net interest-bearing debt (excluding discontinued operations) is defined as current and non-current interest-bearing debt less cash and cash equivalents.

Financial risk management

The following financial risks can be identified in connection with ordinary business operations: market risk, credit risk and liquidity risk. **Market risk** is the exposure to changes in value of current or future cash flows and financial instruments due to changes in market prices. Within this category, Stedin is mainly exposed to currency and interest rate risks.

Credit risk can be defined as the potential loss if a counterparty or its guarantor cannot or will not meet its contractual obligations.

Liquidity risk arises when the company will be unable to meet its payment obligations.

The policy is designed to minimise volatility and negative consequences of unforeseen circumstances on financial results. Procedures and guidelines have been drawn up in accordance with the objectives formulated for this, which are derived from the strategic objectives and are evaluated and (if required) adjusted at least once a year.

The Board of Management is responsible for risk management. In this context, it sets out procedures and guidelines and ensures compliance. The authorisations to commit Stedin Group are specified in the Governance & Authority Structure document. Mandates have also been drawn up for all business units to manage the above risks – for instance, for purchasing. The Board of Management and operational management regularly review the results, the ratios, the principal risks (or the concentration of certain risks) and the measures to manage them.

Scenarios are applied in the long-term financial plan. Operational and staff management reports to the Board of Management by means of an In-control statement twice a year.

The internal Investment Risk Committee is in charge of the formulation and application of the risk policy and advises the Board of Management accordingly. The Supervisory Board exercises supervision over the course of business and risk management by conducting reviews and discussions of strategic plans, budgets, key performance indicators, forecasts, results and risk policy.

The Treasury department is responsible for the active monitoring and management of capital, market risks, credit risks and liquidity risks of Stedin Group and handling the internal financing of wholly-owned subsidiaries. The control principles for these risks are laid down in the Treasury Charter, as adopted by the Board of Management. The Treasury Charter describes, amongst other things, the risk appetite and the instruments available for managing risks.

The table below shows the correlation between the financial risks to which Stedin Group is exposed with regard to assets and liabilities, the instruments used to manage them and the applicable accounting:

Balance sheet item	Classification and measurement	Risks, the instruments used to manage them and classification and valuation applied			
		Foreign currency risk	Interest rate risk	Commodity price risk	Credit risk
Loans, trade receivables, contract assets and other receivables	Amortised cost	No material risk	No material risk	No material risk	Provision for expected credit losses
Interest-bearing and other liabilities	Amortised cost	Forward contract / Cross Currency SWAP Hedge accounting	Interest rate swap Hedge accounting	Not applicable	Not applicable
Trade and other liabilities	Amortised cost	No material risk	No material risk	The purchasing strategy for expected grid losses limits price fluctuations.	Not applicable

Sections 32.1 to 32.4 discuss individual aspects of the table for each risk.

32.1. Market risk

Stedin Group has identified the following relevant market risks:

- foreign currency risk: the exposure to changes in value in financial instruments arising from changes in exchange rates;
- interest rate risk: the exposure to changes in value in financial instruments arising from changes in market interest rates;
- commodity price risk: the exposure to changes in value in financial instruments arising from changes in commodity prices. Stedin Group is faced with this type of risk mainly when purchasing for network losses and is sensitive to the effect of market fluctuations in the prices of various energy commodities, such as electricity and green certificates. The commodity price risk is part of the financial long-term planning and is to date not hedged by means of derivative financial instruments.

The table below shows the fair value and the book value of the loans portfolio that is subject to market risks. Borrowings of €2.7 billion are fixed rate (fair value risk). The other borrowings bear a variable interest rate that follows the development in market rates (cash flow/interest rate risk).

x € 1 million	Bookvalue as at 31 December 2020	Fair value as at 31 December 2020	Bookvalue as at 31 December 2019	Fair value as at 31 December 2019
Bond loans	1,811	1,885	1,796	1,846
Other loans	1,291	1,524	1,122	1,348
Total	**3,102**	**3,409**	**2,918**	**3,194**

The fair value of the bond loans was determined on the basis of the year-end closing rate. This value was measured in accordance with fair value level 1. The fair value of the other loans was determined using the present value method ('income approach'). This was based on the relevant market interest rates for comparable debt. Consequently, the information for establishing value is covered by fair value level 2. The table does not include the perpetual subordinated loan, as this item is classified as equity under IFRS; see note 22 Group equity for more details.

Foreign currency risk

Foreign currency risk within Stedin Group relates mainly to borrowings denominated in currencies other than the euro and to a lesser extent to purchasing and cash and cash equivalents. The foreign currency risks are risks in respect of future cash flows in foreign currencies and in respect of balance sheet positions in foreign currencies. To meet Stedin Group's financing

requirements, loans were contracted in 2009 in non-euro currencies: US dollars (USD), Japanese yen (JPY) and pounds sterling (GBP).

Companies included in the consolidation are not permitted to maintain substantial positions in foreign currencies without the Treasury department's approval. Based on the aggregate foreign currency position and the associated limit set for open positions, the Treasury department determines whether hedging is desirable and the strategy to be followed.

Cash flow hedges for foreign currency risks

At 31 December 2020, the foreign currency risks arising from these loans were hedged for the entire term using cross-currency interest swaps and FX forward contracts. The main nominal values and rates of the derivative financial instruments as at 31 December 2020 are as follows:

	Nominal cash flows less than one year x 1 million	Nominal cash flows more than one year x 1 million	Total nominal cash flows x 1 million	Average rate	Nominal value x € 1 million	Book value x € 1 million
Expected cash flows	USD 54	USD 197	USD 251	1.324	190	181
	GBP 40	GBP 64	GBP 104	0.851	122	83
	JPY 510	JPY 29,180	JPY 29,690	132.188	225	158
Total					**537**	**422**

Stedin applies cash flow hedging to these borrowings and derivative instruments, and therefore the foreign currency exchange differences with regard to the borrowings and changes in fair value of the derivative financial instruments are taken in conjunction to the cash flow hedge reserve and any hedging ineffectiveness is taken in conjunction through the income statement. Further details of the hedging relationship are provided below:

	Changes in the cash flow hedge and the cost of hedging reserve comprise:				
x € 1 million	Derivative financial instrument	The hedged currency risk	Derivative financial instrument recognised in other comprehensive income	Balance of the cash flow hegde reserve	Reclassification recognised in the income statement
Expected cash flows	-71	10	-71	65	1
Total	**-71**	**10**	**-71**	**65**	**1**

The hedging relationships did not lead to hedge ineffectiveness in the reporting period. A breakdown of movements in the cash flow hedge reserve is provided in note Derivative financial instruments and cash flow hedge reserve.

Interest rate risk

The interest rate risk policy is aimed at managing the net financing liabilities through fluctuations in market interest rates. A specified range for the proportions of loans at fixed and variable interest rates and a desired weighted average term of the debt portfolio serves as the base tool. Stedin Group can use derivative financial instruments to achieve the desired risk profile.

	2020	2019
Average interest rate	1.9%	2.4%

The average interest rate is calculated as the weighted average of the monthly interest expense in 2020. If all other variables remain constant, it is estimated that a general increase of 1 percentage point in Euribor (for a period of 12 months) would lead to a decrease in profit before income tax of €4.0 million (at 31 December 2019: €7.0 million).

Cash flow hedge for interest rate risk

In anticipation of the issue of loans, Stedin Group entered into derivative financial instruments to hedge the interest rate risk during the term of the loan. The derivative financial instruments entered into for this were settled at the balance sheet date.

x € 1 million	Balance of the cash flow hegde reserve	Reclassification recognised in the income statement
Cash flow hedge reserve for interest expense	-13	2
Total	**-13**	**2**

Fair value hedge

Stedin Group applies fair value hedges to convert part of its fixed-interest loans into variable-interest loans to achieve effective alignment with the strategic allocation between variable-interest and fixed-interest loans. The fair value hedging relationships for interest rate risks as at 31 December 2020 were as follows:

x € 1 million	Nominal cash flows less than one year	Nominal cash flows more than one year	Total nominal cash flows	Average rate	Nominal value	Book value
Expected cash flows	-	1	1	0.07%	100	104
Total					**100**	**104**

The table below shows details of the hedging relationship:

	Change in the fair value of:			
x € 1 million	Derivative financial instrument	The hedged interest risk	Derivative financial instrument recognised in other comprehensive income	Accumulated change in interest-bearing debt
Expected cash flows	4	4	-	9
Total	**4**	**4**	**-**	**9**

The hedging relationships did not lead to hedge ineffectiveness in the reporting period. A breakdown of movements in the cash flow hedge reserve is provided in note Derivative financial instruments and cash flow hedge reserve. In 2020, an interest rate swap derivative was terminated, for which the cash flow received is presented in the cash flow statement in the derivative financial instruments as part of cash flow from business operations. The amount received is accounted for in the income statement based on the maturity of the loan.

Commodity price risk

Stedin Group is faced with this type of risk mainly in connection with purchasing for network losses. Stedin Group is exposed to the effect of market fluctuations in prices of various energy commodities, such as electricity and green certificates. Stedin has purchase contracts that provide access to the energy market for the expected purchase volumes. Stedin applies a policy of frequent purchasing for network losses in line with actual consumption, which reduces its sensitivity to price fluctuations and targets an average price level. The remaining commodity price risk is not hedged by derivative financial instruments.

32.2. Credit risk

The maximum credit risk is equal to the balance sheet value of the financial assets, including derivative financial instruments. Stedin Group's credit risk towards financial institutions mainly concerns cash and cash equivalents and derivative financial instruments for interest and currency hedging transactions. The Treasury policy takes account of limits for each counterparty and term in order to limit any concentration of credit risks and requires a minimum credit rating of A- equivalent Standard & Poor's (S&P) and/or Moody's and/or Fitch (for which purpose the lowest rating is decisive).

Credit risk for trade receivables and contract assets

The credit risk policy is designed not to provide customers with any credit going beyond normal supplier credit as set out in the applicable conditions of supply. Measures in place to limit debtor risk are:

- credit limits or bank guarantees for business customers;
- in principle, receivables must be paid within thirty days in accordance with standard conditions of supply;
- receivables for which payment is overdue are monitored and active dunning is applied;
- recourse to debt collection agencies and different collection methods for current and former customers.

The credit risk on trade receivables can be subclassified into mainly low-use (regulated) and heavy-use customers.

Since the introduction of the suppliers model, the credit risk relating to retail consumers is borne by the energy suppliers, where the concentration risk has consequently grown. A range of risk-mitigating measures have been implemented for this, including periodic monitoring and reporting of the risk profile of the energy suppliers. Individual signals for potential bad debts and credit ratings are used to value credit risk on energy suppliers.

The credit risk for high-use customers, other receivables and contract assets is limited, as most receivables are limited in size and the concentration risk is also limited. For the assessment of risks in the various heavy-use portfolios, Stedin Group uses a simplified model that is based on Stedin's experience of receivables with the same risk profile, supplemented by expected developments of the debtors and the economic environment.

Trade receivables, amounts not yet invoiced and other receivables are as follows:

x € 1 million	As at 31 December 2020	As at 31 December 2019
Trade receivables	113	120
To be invoiced*	39	38
Other receivables and accruals*	13	14
Total	**165**	**172**

* The 2019 figures have been adjusted for comparison purposes.

The breakdown of the outstanding trade receivables (including those not yet invoiced, excluding other receivables and accruals) and bad debts provision by age is as follows:

		2020		2019	
x € 1 million	Expected loss %	Receivables	Provision / impairments	Receivables	Provision / impairments
Receivables from low-use customers	0.1% - 100%	75	1	75	1
Receivables from high-use customers, other receivables and to be invoiced					
Before maturity date	0.1% - 1%	64	-	60	1
After maturity date					
- under 3 months	1% - 25%	10	-	20	1
- 3 to 6 months	1% - 100%	1	-	3	-
- 6 to 12 months	5% - 100%	3	1	2	1
- over 12 months	65% - 100%	5	4	6	4
Face value		**158**	**6**	**166**	**8**
Less: provision / impairments		**-6**	**-**	-8	
Total		**152**	**-**	**158**	

In the bad debt provision, an amount of €2 million (2019: €3 million) concerns trade receivables that have been provided in full. The table below presents the movements in the bad debts provision in detail:

x € 1 million	2020	2019
As at 1 January	**8**	**10**
Additions through income statement	-	1
Withdrawals	-2	-3
As at 31 December	**6**	**8**

32.3. Liquidity risk

Liquidity risk is the risk that Stedin Group is unable to obtain the required financial resources to meet its obligations in a timely manner. In that connection, Stedin Group regularly assesses expected cash flows over a period of several years. These cash flows include operating cash flows, dividends, interest payable and debt redemption, replacement investments and the consequences of changes in Stedin Group's credit rating. The aim is to have sufficient funds at all times to meet liquidity requirements. Great importance is attached to managing all the above risks to prevent Stedin Group from finding itself in a position in which it cannot meet its financial obligations. In addition, liquidity needs are planned on the basis of short, medium and long-term cash flow forecasts. The Treasury department compares this capital requirement against available funds.

Financing policy and available credit

The financing policy aims to develop and maintain an optimal financing structure, taking into account the current asset base, agreements and principles regarding regulation and the investment programme. The criteria for the financing policy are access to the capital market as well as flexibility at acceptable financing terms and costs. Financing is contracted centrally and apportioned internally. Subsidiaries are financed by a combination of equity and intercompany loans.

In mid-2017, Stedin Group concluded a revised Revolving Credit Facility of €600 million with six banks. The facility matures at the end of July 2024 and can be used for general operational purposes, working capital financing or debt refinancing. Stedin

Group also has a €750 million Euro Commercial Paper programme under which €100 million had been issued at year-end (2019: €0 million) and a €3 billion Euro Medium Term Note programme under which €1.8 billion had been issued at 31 December 2020 (2019: €1.8 billion).

Liquidity risk arising from potential margin calls relating to foreign currency and interest rate management transactions is closely monitored. There are also procedures to ensure that appropriate thresholds and provisions are included in ISDAs and CSAs (Credit Support Annex). As in the previous year, Stedin Group did not receive any margin calls in 2020.

Cash outflows

The table below shows forecast nominal cash outflows and any interest arising from financial instruments over the coming years. The cash flows from derivative financial instruments are based on the forecast net cash outflows (also see note 25 Interest-bearing debt for the terms).

As at 31 December 2020 x € 1 million	Within 1 year	1 to 5 years	After 5 years	Total
Interest-bearing debt	328	1,323	1,812	3,463
Derivative financial instruments	1	12	-80	-67
Trade and other liabilities	308	-	-	308
Total	**637**	**1,335**	**1,732**	**3,704**

As at 31 December 2019 x € 1 million*	Within 1 year	1 to 5 years	After 5 years	Total
Interest-bearing debt	54	892	2,410	3,356
Derivative financial instruments	0	25	-38	-13
Trade and other liabilities	297	1	-	298
Total	**351**	**918**	**2,372**	**3,641**

* The comparative figures have been adjusted because the expected future cash flows of the interest-bearing debt in the category 1-5 years, by mistake did not include a bond of € 300 million. This will be fully absorbed again in 2020. This omission does not affect the figures from the main tables.

Trade and other liabilities include, in 'contract liabilities', deferred income of €27 million (2019: €23 million).

32.4. Derivative financial instruments and cash flow hedge reserve

Derivative financial instruments

The derivative financial instruments are of a long-term nature. As in 2019, the derivative financial instruments are categorised as fair value level 2. The cash flow hedge instruments applied are derivative financial instruments that are subject to net settlement between parties.

Cash flow hedge reserve

Movements in the cash flow hedge reserve with regard to the hedges referred to above were as follows:

x € 1 million	Interest rate risk	Foreign currency risk	Total
As at 1 January 2019	**-5**	**-60**	**-65**
Movement in fair value of cash flow hedges	-13	3	**-10**
Deferred tax liabilities	2	-1	**1**
Reclassification cash flow hedge reserve to income statement	1	2	3
	-	1	1
As at 31 December 2019	**-15**	**-55**	**-70**
Movement in fair value of cash flow hedges	-	-18	-18
Deferred tax liabilities	2	1	3
Reclassification cash flow hedge reserve to income statement	-1	4	3
	1	3	4
As at 31 December 2020	**-13**	**-65**	**-78**

The cash flow hedge reserve can be subclassified as follows by active hedging relationships and reserves for which the hedge has been discontinued, and the reserve will be reclassified to the income statement with the future cash flows:

x € 1 million	Active hedging relationships	Discontinued hedging relationships	Total
As at 1 January 2020	**-50**	**-20**	**-70**
Movement in fair value of cash flow hedges	-18	3	-15
Deferred tax liabilities	4	-1	3
Change in corporate income tax rate	3	1	4
As at 31 December 2020	**-61**	**-17**	**-78**

Periods in which the cash flows from the cash flow hedges are expected to be realised:

x € 1 million	As at 31 December 2020	As at 31 December 2019
Expected cash flows		
Within 1 year	1	-
1 to 5 years	12	25
After 5 years	-80	-38
Total	**-67**	**-13**

The total cash flow hedges recognised in profit or loss in the future are recognised in the cash flow hedge reserve after deduction of taxes. Periods in which the cash flows from the cash flow hedges are expected to be realised:

x € 1 million	As at 31 December 2020	As at 31 December 2019
Expected recognition through the income statement after income tax		
Within 1 year	-1	-4
1 to 5 years	-21	-20
After 5 years	-56	-46
Total	**-78**	**-70**

33. Credit rating

A key pillar in Stedin Group's financial policy is to maintain good access to the available sources of financing, including the money and capital markets. It is important to that end that existing and potential capital providers have proper insight into Stedin Group's credit rating.

Stedin Holding N.V. and Stedin Netbeheer B.V. each have a credit rating with the rating agency Standard & Poor's (below: S&P). This rating consists of a long-term rating with outlook and a short-term rating. The outlook indicates the expected change in the long-term rating for the coming years.

The most recent rating awarded by S&P in September 2020 is A- with a stable outlook for the long term and A-2 for the short term. This rating is unchanged from 2019.

The most important ratio for Stedin Group is the ratio of Funds from Operations (below: FFO) to the Net Debt ratio for freely available cash and cash equivalents (Net Debt), which is a customary ratio in the market for the sustainability of debt. S&P applies a multi-year average of this ratio as part of its assessment of the credit rating. Stedin Group presents this figure only at year-end 2020 and 2019.

The calculation of this ratio follows the figures in these financial statements, supplemented with the adjustments applied by S&P. These analytical adjustments are made in order to enhance the comparability of the figures as well as the financial position between Stedin Group and other businesses. The main adjustment concerns the perpetual subordinated bond loan as an instrument with a 50% equity component and a 50% debt component (by contrast to IFRS, where it is part of equity in its entirety). In addition, pension liabilities are included in the S&P definition of debt.

The calculation is set out in the table below:

x € 1 million	2020	2019
EBITDA*	461	489
-/- Interest paid	-57	-70
-/- Tax paid	10	-16
-/- S&P adjustments**	-11	-9
S&P - Funds from Operations	403	394
Non-current interest-bearing debt	2,826	2,913
Current interest-bearing debt	276	5
Lease liabilities	81	87
-/- Cash and cash equivalents	-83	-72
IFRS - NET DEBT	3,100	2,933
+ S&P adjustments**	261	263
S&P - NET DEBT	3,361	3,196
FFO / Net Debt – S&P adjusted	**12.0%**	**12.3%**

* Profit before income tax adjusted for depreciation, amortisation, net interest payable, profit of group entities sold, revaluations and share of minority interests.

** These adjustments are published by S&P on behalf of Stedin Group for 2019.

Current and non-current interest-bearing debt, interest paid and tax paid in accordance with these financial statements. Lease liabilities are part of non-current interest-bearing debt and are presented separately for comparative purposes.

The FFO/Net Debt ratio decreased to 12.0% in 2020, from 12.3% in 2019. The increase in the FFO by €9 million was largely driven by lower taxes paid, despite the lower operating profit (EBITDA). The net debt ratio (Net Debt) at year-end 2020 was €168 million higher than in 2019 due to short-term cash loans. Total interest-bearing loans outstanding increased by €184 million.

Tax paid in 2020 was €26 million lower due to a refund received in 2020 arising from the adjustment of the advance payment in 2020. The lower operating profit of €28 million was attributable to lower capacity tariffs due to lower energy consumption of customers caused by the coronavirus and the sold business units Joulz Infradiensten B.V. and Joulz Meetbedrijf B.V. Additionally, the purchase costs increased due to the increase in TenneT's rates.

S&P adjustments can be viewed in the S&P rating report of September 2020 (which is available via the Investor Relations website) on the basis of figures in the 2019 financial statements. For the most recent rating reports, see our website: http://www.stedingroep.nl/eng/investor-relations.

34. Subsequent events

Above all, the energy transition presents, besides the operational challenge, a financing challenge. Stedin expects to have to invest around 7 billion in the period up to 2030. This amount will be financed in part by positive operational cash flows and can in part be borrowed, but Stedin also expects to need an amount of between €750 million and €1 billion in additional equity. Stedin is engaged in talks on this with its stakeholders. To meet the equity requirement in the short term of €180 to €200 million, Stedin is engaged in talks with its shareholders.

35. Notes to the consolidated cash flow statement

The consolidated cash flow statement has been prepared using the indirect method. To reconcile the movement in cash and cash equivalents, the result after income tax is adjusted for items in the income statement as well as for movements in the balance sheet that did not affect receipts and payments during the financial year 2020.

The cash flow statement distinguishes between cash flows from operating, investing and financing activities. Cash flow from operating activities includes interest and income tax payments as well as interest and dividend receipts. Development costs, investments in and disposals of non-current assets (including financial interests) are included in cash flow from investing activities. Dividends paid out are recognised as outgoing cash flow from financing activities.

The consolidated cash flow statement includes the cash flows for continuing operations and for discontinued operations.

Movements in working capital

Working capital consists of inventories and current receivables less trade and other liabilities. The table below shows movements in working capital recognised in the cash flow from operating activities:

x € 1 million	2020	2019
Movements in inventories	-15	-
Movements in trade and other receivables	7	-12
Movement in trade and other liabilities	11	-2
Total	**3**	**-14**

36. Overview of subsidiaries

	2020 %	2019 %	City
Consolidated participating interest			
Stedin Netbeheer B.V.*/**	100.00	100.00	Rotterdam
Stedin Netten B.V.*	100.00	100.00	Rotterdam
N.V. Stedin Netten Noord-Holland*	100.00	100.00	Rotterdam
N.V. Stedin Noord-Oost Friesland*	100.00	100.00	Rotterdam
DNWG Groep N.V.*/**	100.00	100.00	Goes
DNWG Infra B.V.*	100.00	100.00	Goes
DNWG Warmte B.V.*	100.00	100.00	Goes
DNWG Staff B.V.*	100.00	100.00	Goes
Enduris B.V.*	100.00	100.00	Goes
NetVerder B.V.*/**	100.00	100.00	Rotterdam
Stedin Groep Personeels B.V.*/**	100.00	100.00	Rotterdam
Joint arrangements			
Utility Connect B.V.**	40.72	40.72	Vianen
TensZ B.V.	50.00	50.00	Rotterdam
TeslaN B.V.	50.00	50.00	Goes
Infra Netwerkgroep Omexom VOF	50.00	50.00	Dordrecht
Associates			
Energie Data Services Nederland B.V.	21.16	21.16	Amersfoort
Zebra Gasnetwerk B.V.	33.33	33.33	Bergen op Zoom

* Stedin Holding N.V. has issued a declaration of joint and several liability (403 declaration) for the subsidiaries marked with an *.

** These subsidiaries are direct subsidiaries of Stedin Holding N.V.

Company income statement

x € 1 million	Note	2020	2019
Total net revenue and other income	38	**3**	**4**
Cost of sales, contracted work and operational expenses		-2	-1
Depreciation, amortisation and impairment of non-current assets		-6	-3
Total operating expenses		**-8**	**-4**
Operating profit		**-5**	**-**
Financial income and expenses	43	-31	-36
Profit before income tax		**-36**	**-36**
Profit of participating interests*	40	63	346
		27	**310**
Income tax		15	15
Profit after income tax		**42**	**325**
Profit distribution:			
Profit after income tax attributable to holders of Stedin Holding N.V. perpetual subordinated bonds (after income tax)		12	12
Profit after income tax attributable to shareholders of Stedin Holding N.V.		30	313
Profit after income tax		**42**	**325**

* Profit of participating interests concerns € 65 million for participating interests at balance sheet date 31 December 2020 and € -2 million for the sold associate Joulz Diensten.

Company balance sheet

Before profit appropriation

x € 1 million	Note	As at 31 December 2020	As at 31 December 2019
ASSETS			
Non-current assets			
Property, plant and equipment		54	59
Intangible assets	39	77	77
Financial assets	40	5,355	5,324
Total non-current assets		**5,486**	**5,460**
Current assets			
Receivables from group companies	41	760	579
Current tax assets		2	20
Accruals and other receivables		18	16
Cash and cash equivalents		46	53
Total current assets		**826**	**668**
TOTAL ASSETS		**6,312**	**6,128**
LIABILITIES			
Equity			
Share capital	22	497	497
Revaluation reserve	22	662	720
Legal reserve	22	4	-
Cash flow hedge reserve	22	-78	-70
Cost of hedging reserve	22	-	-1
Retained earnings	22	1,275	989
Undistributed profit for the year	22	30	313
Equity attributable to Stedin Holding N.V. shareholders		**2,390**	**2,448**
Perpetual subordinated bond loan	22	501	501
Total equity		**2,891**	**2,949**
Non-current liabilities			
Provisions		4	4
Deferred tax liabilities		59	42
Interest-bearing debt	25	2,825	2,913
Derivative financial instruments	18	84	52
Total non-current liabilities		**2,972**	**3,011**
Current liabilities			
Interest-bearing debt	25	276	5
Liabilities to group companies	41	137	122
Derivative financial instruments	18	2	-
Other liabilities	42	34	41
Total current liabilities		**449**	**168**
TOTAL LIABILITIES		**6,312**	**6,128**

Notes to the company financial statements

37. Accounting principles for financial reporting

The company financial statements have been prepared in accordance with the provisions of Part 9, Book 2 of the Dutch Civil Code, and the same accounting policies have been applied as in the consolidated financial statements as permitted by Section 362(8), Part 9, Book 2 of the Dutch Civil Code. The descriptions of the activities and structure of the company as stated in the 'Notes to the consolidated financial statements', including disclosures of directors' remuneration and a list of participating interests in group companies, also apply to the company financial statements.

The company financial statements of Stedin Holding N.V. consist of the company income statement and the company balance sheet. The euro is the functional currency. All amounts are in millions of euros, unless stated otherwise.

Participating interests in group companies

Participating interests in group companies over whose commercial and financial policies significant influence is exercised are stated at net asset value, but not for an amount lower than nil. If the net asset value is negative, the participating interest is stated at nil. In this context, other long-term interests are taken into account, which in effect must be qualified as part of the net investment in the participating interest. Where the company provides security for all or part of the debts of the participating interest concerned, or is in effect under an obligation (in proportion to its share) to enable the participating interest to pay its debts, a provision will be created. The amount of this reserve is determined with due regard for any bad debt provisions already deducted from the receivables concerned. A statutory reserve is formed for reserves of participating interests that are subject to restrictions on distributions.

Stedin Holding N.V. provides loans to participating interests, and credit losses might arise on those loans. Stedin has opted to eliminate the expected credit losses on loans to and receivables from participating interests in the company financial statements, as required by IFRS 9.

Revaluation reserve

The legal entity maintains a revaluation reserve with respect to:

- increases in the value of assets, other than financial instruments, directly recognised in equity;
- increases in the value of assets where changes in value are taken to profit and loss and for which no regular market prices exist;
- changes in the value of derivatives stated at fair value and subject to cash flow hedge accounting.

Deferred tax liabilities are deducted from the revaluation reserve in the event of differences between valuation for accounting and for tax reporting purposes. The realised part of the revaluation reserve is taken to the other reserves.

For the other accounting policies relating to equity, see note 2.2.21 Perpetual subordinated bond loan to the consolidated financial statements.

38. Net revenue and other income

Net revenue and other income relates to the accommodation costs for the premises at Nijverheidsweg, Utrecht, as well as Keileweg, Rotterdam, recharged to Stedin Netbeheer B.V.

39. Intangible assets

Intangible assets relates to the goodwill arising on the acquisition of DNWG. For more details, see note 14 Intangible assets to the consolidated financial statements.

40. Financial assets

x € 1 million	Subsidiaries	Receivables from subsidiaries	Derivative financial instruments	Total
Bookvalue as at 1 January 2019	**3,943**	**1,307**	**15**	**5,265**
Result of subsidiaries	99	-	-	**99**
Effect in corporate income tax changes	-4	-	-	**-4**
Disposals	-59	-	-	**-59**
Movements in loans to subsidiaries	-	-1	-	**-1**
Movement in fair value of financial instruments	-	-	24	**24**
Bookvalue as at 31 December 2019	**3,979**	**1,306**	**39**	**5,324**
Result of subsidiaries	65	-	-	**65**
Effect in corporate income tax changes	-11	-	-	**-11**
Movement in fair value of financial instruments	-	-	-16	**-16**
Reclassification	-	-	-7	**-7**
Bookvalue as at 31 December 2020	**4,033**	**1,306**	**16**	**5,355**

In both 2020 and 2019, no depreciation and impairments were applied to the non-current financial assets.

For an overview of all capital interests, see note 36 Overview of subsidiaries to the consolidated financial statements.

41. Receivables from and liabilities to group companies

Receivables from and liabilities to group companies are all short term.

42. Other liabilities

Other liabilities can be specified as follows:

x € 1 million	As at 31 December 2020	As at 31 December 2019
VAT	19	17
Other	15	24
Total other liabilities	**34**	**41**

43. Financial income and expenses

The financial expenses relate mainly to the interest expense for external financing of Stedin Group. The financial expenses amount to €61 million (2019: €69 million) and the financial income to €30 million (2019: €33 million). The income concerns interest amounts recharged within the Group.

44. Contingent assets and liabilities

Fiscal unity

Stedin Holding N.V. forms a fiscal unity for corporate income tax purposes with all its consolidated participating interests as included in note 36 Overview of subsidiaries. The companies, including Stedin Holding N.V., that are part of a fiscal unity are jointly and severally liable for the tax obligations of that fiscal unity. There is also a fiscal unity for VAT purposes that includes Stedin Holding N.V. and all its consolidated participating interests as included in note 36 Overview of subsidiaries in the consolidated financial statements. Only companies, including Stedin Holding N.V., that are part of a fiscal unity are jointly and severally liable for the tax obligations of that fiscal unity.

Cash pool

Under its participation in the Stedin Group cash pool, Stedin Holding N.V., like the other participants, is jointly and severally liable for deficits in Stedin Group's cash pool.

Guarantees

Stedin Holding N.V. has taken out directors' and officers' liability insurance for the members of the Supervisory Board, the members of the Board of Management, directors and other executives within Stedin Group. To the extent possible, the directors are indemnified by Stedin Holding N.V., subject to specific conditions, against costs in connection with civil-law, criminal-law or administrative-law proceedings in which they could be involved because of their position.

In addition to the contingent assets and liabilities for Stedin Holding N.V. above, see note 29 Contingent assets and liabilities in the consolidated financial statements for a comprehensive overview.

Liabilities statements of group companies

On behalf of the group companies included in the consolidation, liability statements have been issued by the legal entity as referred to in Section 403 of Book 2 of the Dutch Civil Code. This declaration is included in the overview in note 36 Overview of subsidiaries. Pursuant to these liability statements, Stedin Holding N.V. is jointly and severally liable for all debts arising from legal acts performed by those group companies.

45. Subsequent events

Above all, the energy transition presents, besides the operational challenge, a financing challenge. Stedin expects to have to invest around 7 billion in the period up to 2030. This amount will be financed in part by positive operational cash flows and can in part be borrowed, but Stedin also expects to need an amount of between €750 million and €1 billion in additional equity in the long term. Stedin is engaged in talks on this with its stakeholders. To meet the equity requirement in the short term of €180 to €200 million, Stedin is engaged in talks with its shareholders.

46. Profit appropriation

Proposal for appropriation of profit for 2020

The articles of association of Stedin Holding N.V. contain provisions concerning profit appropriation. The Articles of Association state that the Board of Management may reserve a maximum of 50% of the profit available for distribution where at least 50% of the profit is available for the General Meeting of Shareholders, excluding exceptional income. The General Meeting of Shareholders may decide to distribute this amount in whole or in part. The Board of Management shall, after the approval of the Supervisory Board, make a recommendation to the General Meeting of Shareholders concerning the amount to be distributed. The Board of Management intends, with the approval of the Supervisory Board, to increase the reserves by an amount equal to 50% of the profit available for distribution for the 2020 financial year, i.e. an amount of €20.6 million.

Stedin Holding N.V. has designated the following items as incidental items:

x € 1 million	2020	2019
Profit after income tax	**42**	**325**
Result attributable to holders of Stedin Holding N.V. perpetual subordinated bonds	-12	-12
Incidental income:		
Change in corporate income tax rate	11	2
Profit on disposal of Joulz Diensten	-	-251
Profit after income tax available for distribution to the shareholders	41	64
Proposed dividend	21	52
Increase of general reserve after proposed dividend distribution	**21**	**273**

A recommendation will be made to the General Meeting of Shareholders to resolve to pay a dividend of €20.6 million, subject to the condition that Stedin's financing requirement for an amount of at least €180 million in equity has been met, by 31 August 2021 at the latest. A further recommendation will be made to the General Meeting of Shareholders not to resolve to distribute the profit not added to the reserves if and as long as the aforementioned condition has not been met. A recommendation will be made to the General Meeting of Shareholders to resolve to add to the reserves the profit not added to the reserves by the Board of Management if the aforementioned condition has not been met by 31 August 2021 at the latest.

If dividend is distributed, this means a distribution of €4.14 per share (2019: €10.46 per share), which amount will be made available no later than 30 days after the condition referred to above has been met. The proposed profit appropriation has not been recognised in the balance sheet as at 31 December 2020.

Rotterdam, 17 February 2021

Stedin Holding N.V.

Board of Management

Marc van der Linden, CEO (chair)
Danny Benima, CFO
David Peters, CTO

Supervisory Board

Doede Vierstra (chair)
Hanne Buis
Theo Eysink
Annie Krist
Arco Groothedde

Other information

Profit appropriation pursuant to the articles of association

According to the company's articles of association, the Board of Management may increase the reserves by an amount equal to at most half of the profit available for distribution, with the approval of the Supervisory Board. The remaining portion is at the disposal of the General Meeting of Shareholders. Following approval by the Supervisory Board, the Board of Management will put forward a proposal to the General Meeting of Shareholders for the remaining amount. The General Meeting of Shareholders can decide to distribute all or part of the remaining portion. Undistributed profit is added to the reserves.

The articles of association also state that the General Meeting of Shareholders may decide to make interim distributions, subject to the provisions of the articles of association. There are no restrictions in the articles of association on the size of interim distributions, only the legal restrictions that apply to public limited liability companies. A decision to distribute an interim dividend from the profit for the current financial year can also be taken by the Board of Management, subject to the approval of the Supervisory Board.

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This independent auditor's report is an English translation of the signed Dutch independent auditor's report as issued at February 17, 2021.

Independent auditor's report

To the shareholders and the Supervisory Board of Stedin Holding N.V.

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS 2020 INCLUDED IN THE ANNUAL REPORT

Our opinion

We have audited the accompanying financial statements 2020 of Stedin Holding N.V., based in Rotterdam. The financial statements include the consolidated financial statements and the company financial statements, as reported on page 143 until 213 of the annual report.

In our opinion:

- The accompanying consolidated financial statements give a true and fair view of the financial position of Stedin Holding N.V. as at December 31, 2020, and of its result and its cash flows for 2020 in accordance with International Financial Reporting Standards as adopted by the European Union (EU-IFRS), with Part 9 of Book 2 of the Dutch Civil Code, and with the provisions of and under the Public and Semi-public Sector Senior Officials (Standard Remuneration) Act ("Wet normering topinkomens" or "WNT").

- The accompanying company financial statements give a true and fair view of the financial position of Stedin Holding N.V. as at December 31, 2020, and of its result for 2020 in accordance with Part 9 of Book 2 of the Dutch Civil Code.

The consolidated financial statements comprise:

1. The consolidated balance sheet as at December 31, 2020.

2. The following statements for 2020: the consolidated statement of income, the consolidated statement of comprehensive income, the consolidated cash flow statement and the consolidated statement of changes in group equity.

3. The notes comprising a summary of the significant accounting policies and other explanatory information.

The company financial statements comprise:

1. The company balance sheet as at December 31, 2020.

2. The company income statement for 2020.

3. The notes comprising a summary of the accounting policies and other explanatory information.

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Basis for our opinion

We conducted our audit in accordance with Dutch law, including the Dutch Standards on Auditing and the Audit Protocol WNT ("het controleprotocol WNT"). Our responsibilities under those standards are further described in the "Our responsibilities for the audit of the financial statements" section of our report.

We are independent of Stedin Holding N.V. in accordance with the EU regulation on specific requirements regarding the statutory audits of public interest entities, the 'Wet toezicht accountantsorganisaties' (Wta, Audit firms supervision act), the 'Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten' (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence) and other relevant independence regulations in the Netherlands. Furthermore, we have complied with the 'Verordening gedrags- en beroepsregels accountants' (VGBA, Dutch Code of Ethics).

We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Materiality

Based on our professional judgement we determined the materiality for the financial statements as a whole at EUR 15 million. The materiality is based on EBITDA (i.e. the result before financial income and expenses, taxes, depreciation and amortization) as defined by Stedin Holding N.V. in disclosure note 25 of the annual report.

The audits of significant components within the group have been performed with a materiality that has been determined by the group audit team, varying from EUR 7.5 million to EUR 12.75 million.

Additionally, we have audited the WNT information as included in note 6.2 of the financial statements with the requirements as included in the Audit Protocol WNT 2020.

We have also taken into account misstatements and/or possible misstatements that in our opinion are material for the users of the financial statements for qualitative reasons.

We agreed with the Supervisory Board that misstatements in excess of EUR 0.75 million, which are identified during the audit, would be reported to the board, as well as smaller misstatements which in our view contain an obligation to be reported on qualitative or WNT grounds.

Scope of the group audit

Stedin Holding N.V. is heading a group of entities. The financial information of this group is included in the consolidated financial statements of Stedin Holding N.V.

Our group audit mainly focused on significant components. We ourselves have performed audit procedures for entities Stedin Netbeheer B.V., Stedin Groep Personeels B.V., and Stedin Holding N.V. We have used other Deloitte auditors to perform the audit of component DNWG Groep N.V. Through this, 98% of consolidated revenue and 99% of consolidated total assets have been audited.

For the audit of DNWG Groep N.V., we have determined the audit procedures to be performed on the financial information of DNWG Groep N.V. We have also determined the nature, timing, and extent of our involvement in the work of the auditor of DNWG Groep N.V. We have sent out audit instructions to the Deloitte auditor concerning the audit of DNWG Groep N.V. and we have had several meetings with the management of DNWG Groep N.V. and the respective audit team during the planning-, interim-, and year-end audit phases.

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During these meetings, amongst others, the findings of the Deloitte auditor were discussed. We have also assessed the performed audit procedures and audit file of the auditor DNWG Groep N.V.

By performing the abovementioned audit procedures at the respective (group)entities, together with additional procedures at group level, we have been able to obtain sufficient and appropriate audit evidence about the group's financial information to provide an opinion about the consolidated financial statements.

Scope of fraud and non-compliance with laws and regulations

In accordance with the Dutch Standards on Auditing, we are responsible for obtaining reasonable assurance that the financial statements taken as a whole are free from material misstatements, whether due to fraud or error. Non-compliance with law and regulation may result in fines, litigation or other consequences for the Company that may have a material effect on the financial statements.

Consideration of fraud

In identifying potential risks of material misstatement due to fraud, we obtained an understanding of Stedin Holding N.V. and her environment, including the company's internal controls. We evaluated the fraud risk assessment of the group and made inquiries with management, those charged with governance and with others within the group**.** We evaluated several fraud risk factors to consider whether those factors indicated a risk of material misstatement due to fraud. We involved forensic specialists in our risk assessment.

Following these procedures, and the presumed risks under the prevailing auditing standards, we considered the fraud risks in relation to management override of controls, including evaluating whether there was evidence of bias by management, which may represent a risk of material misstatement due to fraud.

As part of our audit procedures to respond to these fraud risks, we evaluated the design and implementation **of** the internal controls relevant to mitigate these risks. Furthermore, we performed substantive audit procedures, including detailed testing of journal entries, evaluating the accounting estimates for bias, and assessing the supporting documentation in relation to post-closing adjustments.

The procedures described are in line with the applicable auditing standards and are not primarily designed to detect fraud. Our procedures to address fraud risks did not result in a Key Audit Matter.

Because of the characteristics of fraud, particularly when it involves sophisticated and carefully organized schemes to conceal it, such as forgery, intentional omissions, misrepresentation and collusion, an unavoidable risk remains that we may not detect all fraud during our audit.

Consideration of compliance with laws and regulations

We assessed the laws and regulations relevant to the Company through discussion with management, those charged with governance and others and through reading minutes and reports of internal audit.

To the extent material for the related financial statements, and as a result of our risk assessment procedures, and while realizing that the effects from non-compliance could considerably vary, we considered adherence to (corporate) tax law and financial reporting regulations, the requirements under the International Financial Reporting Standards as adopted by the European Union (EU-IFRS), Part 9 of Book 2 of the Dutch Civil Code and the WNT with a direct effect on the financial statements as an integrated part of our audit procedures.

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We obtained sufficient appropriate audit evidence regarding provisions of those laws and regulations generally recognized to have a direct effect on the financial statements.

Apart from these, the group is subject to other laws and regulations where the consequences of non-compliance could have a material effect on amounts and/or disclosures in the financial statements, for instance, through imposing fines or litigation. We have identified the Electricity Act 1998, the Gas Act, The Independent Network Management Act, the Energy Transition Progress Act, the General Data Protection Regulation and the Public Procurement Act 2012 as those laws and regulations that most likely would have such an effect.

Our procedures are more limited with respect to these laws and regulations that do not have a direct effect on the determination of the amounts and disclosures in the financial statements. Compliance with these laws and regulations may be fundamental to the operating aspects of the business, to the group's ability to continue its business, or to avoid material penalties (e.g., compliance with the terms of operating licenses and permits or compliance with environmental regulations) and therefore non-compliance with such laws and regulations may have a material effect on the financial statements. Our responsibility is limited to undertaking specified audit procedures to help identify non-compliance with those laws and regulations that may have a material effect on the financial statements.

Our procedures are limited to (i) inquiry of management, and if applicable, the Supervisory Board, as to whether the group is in compliance with such laws and regulations; (ii) inspecting correspondence, if any, with the relevant licensing or regulatory authorities to help identify non-compliance with those laws and regulations that may have a material effect on the financial statements.

Naturally, we remained alert to indications of (suspected) non-compliance throughout the audit.

Finally, we obtained written representations that all known instances of (suspected) fraud or non-compliance with laws and regulations have been disclosed to us.

Our key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements. We have communicated the key audit matters to the Supervisory Board. The key audit matters are not a comprehensive reflection of all matters discussed.

These matters were addressed in the context of our audit of the financial statements as a whole and in forming our opinion thereof, and we do not provide a separate opinion on these matters, nor are these matters to be viewed as separate opinions.

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Key Audit Matters Audit 2020

Key Audit Matter

Valuation of Goodwill and Regulated Networks

Description	*How the key audit matter has been addressed*
Goodwill The goodwill in the consolidated balance sheet amounts to EUR 77 million and is related to the acquisition of DNWG Groep N.V. in 2017. The goodwill is allocated to the cash generating units (CGU's) Stedin Netbeheer B.V. and DNWG Groep N.V. Stedin conducts a goodwill impairment test on an annual basis in line with EU-IFRS.	We have audited management's impairment test for the CGU's to which goodwill is allocated to assess whether goodwill might be subject to an impairment. This also includes an assessment of the design and implementation of internal controls related to this impairment test. The outcome of this analysis is included in note 14 in the financial statements.
The goodwill impairment test contains significant assumptions about – amongst others - the following items: • Future investments and the fair value of regulated networks. • Market share and profitability of Stedin and DNWG, including their performance compared to other regional grid operators. • The weighted average cost of capital (WACC) of regulated networks as assessed by the "Autoriteit Consument en Markt (ACM)". • The discount rate. • The long-term inflation and growth rate. The assumptions are based on the regulatory methodology for the current regulatory period (2017-2021) and are, where deemed relevant, also included in the analysis of the valuation of regulated networks. Significant estimates will be influenced by, amongst others, future rates for network operators, including the regulatory determination of the method decision for the period 2022-2026 in 2021, the energy transition, and the climate agreement, which can all have significant consequences.	With the assistance of our valuation experts, we evaluated the realizable value of the CGU's to which goodwill has been allocated and assessed the most significant assumptions. Specifically, we evaluated the cash flow forecasts in the valuation model and the sensitivity of significant assumptions as included in note 14 in the financial statements. We have reconciled the cash flow forecasts with authorized budgets and have taken note of the internal procedures and controls with respect to determining these budgets. Finally, we verified whether the notes in the financial statements comply with the requirements of IAS 36, are sufficient and give appropriate insights in the valuation of goodwill and regulated networks.

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Regulated networks The book value of regulated networks of Stedin Holding N.V. amounts to EUR 7.0 billion. These assets are valued applying the revaluation model in IAS 16. The fair value of the regulated networks is periodically assessed at the inception of a new regulatory period. In case that in the meantime triggering events are identified that the fair value significantly differs from the book value, an adjustment to the valuation of the regulated networks will be recognized. In 2021, this value will be redetermined and can therefore differ from the current book value. Based on the performed goodwill impairment tests, the Board of Management has determined that the recoverable amount per CGU is higher than the carrying value as included in note 14 of the financial statements. The Board of Management furthermore determined that there are no indicators for an impairment of regulated networks as disclosed in note 13 in the financial statements.	For the regulated networks, we have assessed the evaluation of management for indicators of possible impairment of regulated networks, including the assessment of the useful life of gas networks. This evaluation is documented in disclosure note 13 of the financial statements. *Observation* Based on the procedures performed we do not have findings to report on the financial statements.

Control Framework and reliability and continuity of automated data processing

Description	*How the key audit matter has been addressed*
In 2020, Stedin Holding N.V. worked on further identifying the risks and internal controls over financial reporting, resulting in a new control framework that has been taken into use as of the end of 2020 as indicated in the Report of the Board of Management on page 120. We refer to the In-control statement on page 131 in the Report of the Board of Management where they indicate that from interim evaluations, improvement plans have come forward which partly have been implemented and partly will be implemented in the future. An element of internal control within Stedin relates to automated data processing. The reliability hereof is dependent on the effectiveness of IT controls. Several applications, databases and interfaces are used which are relevant for the primary processes and the preparation of the financial statements.	As part of our procedures, we have obtained an understanding of the internal control environment to assess the risks of material misstatement and to determine further audit procedures to address these risks. As the implementation of the new internal control framework has been completed towards the end of 2020, we have solely tested the manual internal controls – insofar relevant for the scope and planned procedures of our audit on the financial statements – on design and implementation. We have tested the effectiveness of the IT controls to the extent relevant within the scope of our audit of the financial statements, such as change management, (logical) access security and information security. This work was performed by specialized IT-auditors in our audit team. Our procedures consisted of evaluating developments in the IT-infrastructure and subsequently testing the design, implementation and operating effectiveness of relevant IT controls.

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	Control deficiencies that were identified, were addressed by testing alternative controls or by performing specific substantive procedures. *Observation* Based on the procedures performed we do not have any findings to report on the financial statements

Emphasis of matter related to the impact of the energy transition and uncertainties regarding long-term financing

The Board of Management notes that because of the energy transition, Stedin Groep N.V. is facing future substantial investments that cannot be timely financed from the current expected growth in regulated revenue through the present regulatory model. Stedin is investigating additional financing options. We draw attention to the explanation on this matter in the financial statements on page 150 and the Report of the Board of Management on page 127.

Compliance with antiaccumulation clause WNT not audited

In accordance with the Audit Protocol WNT 2020, we have not audited the antiaccumulation clause, as described in article 1.6a WNT and article 5, lid 1, sub j 'Uitvoeringsregeling WNT'. This means that we have not audited whether or not there is a violation of standards by a senior officer due to any employment as a senior officer at other institutions subject to WNT, and whether the information required in this context is accurate and complete.

REPORT ON THE OTHER INFORMATION INCLUDED IN THE ANNUAL REPORT

In addition to the financial statements and our auditor's report thereon, the annual report contains other information that consists of:

- The Report of the Board of Management
- The Report of the Supervisory Board
- The other information
- The general information

Based on the following procedures performed, we conclude that the other information:

- Is consistent with the financial statements and does not contain material misstatements.
- Contains the information as required by Part 9 of Book 2 of the Dutch Civil Code.

We have read the other information. Based on our knowledge and understanding obtained through our audit of the financial statements or otherwise, we have considered whether the other information contains material misstatements.

By performing these procedures, we comply with the requirements of Part 9 of Book 2 of the Dutch Civil Code and the Dutch Standard 720. The scope of the procedures performed is substantially less than the scope of those performed in our audit of the financial statements.

Management is responsible for the preparation of the other information, including the Report of the Management Board in accordance with Part 9 of Book 2 of the Dutch Civil Code and the other information as required by Part 9 of Book 2 of the Dutch Civil Code.

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REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

Engagement

We were engaged by the Supervisory Board as auditor of Stedin Holding N.V., as of the audit for the year 1997 and have operated as statutory auditor ever since that date.

No prohibited non-audit services

We have not provided prohibited non-audit service as referred to in Article 5(1) of the EU Regulation on specific requirements regarding statutory audits of public-interest entities.

DESCRIPTION OF RESPONSIBILITIES REGARDING THE FINANCIAL STATEMENTS

Responsibilities of the Board of Management and the Supervisory Board for the financial statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with EU-IFRS, Part 9 of Book 2 of the Dutch Civil Code and the provisions of and under the WNT. Furthermore, management is responsible for such internal control as management determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

As part of the preparation of the financial statements, management is responsible for assessing the company's ability to continue as a going concern. Based on the financial reporting frameworks mentioned, management should prepare the financial statements using the going concern basis of accounting unless management either intends to liquidate the company or to cease operations, or has no realistic alternative but to do so.

Management should disclose events and circumstances that may cast significant doubt on the company's ability to continue as a going concern in the financial statements.

The Supervisory Board is responsible for overseeing the company's financial reporting process.

Our responsibilities for the audit of the financial statements

Our objective is to plan and perform the audit assignment in a manner that allows us to obtain sufficient and appropriate audit evidence for our opinion.

Our audit has been performed with a high, but not absolute, level of assurance, which means we may not detect all material errors and fraud during our audit.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements. The materiality affects the nature, timing and extent of our audit procedures and the evaluation of the effect of identified misstatements on our opinion.

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We have exercised professional judgement and have maintained professional skepticism throughout the audit, in accordance with Dutch Standards on Auditing, The Audit Protocol WNT 2020, ethical requirements, and independence requirements. Our audit included e.g.:

- Identifying and assessing the risks of material misstatement of the financial statements, whether due to fraud or error, designing and performing audit procedures responsive to those risks, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtaining an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control.

- Evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Concluding on the appropriateness of management's use of the going concern basis of accounting, and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the company to cease to continue as a going concern.

- Evaluating the overall presentation, structure and content of the financial statements, including the disclosures.

- Evaluating whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

Because we are ultimately responsible for the opinion, we are also responsible for directing, supervising and performing the group audit. In this respect we have determined the nature and extent of the audit procedures to be carried out for group entities. Deciding factors were the size and/or the risk profile of the group entities or operations. On this basis, we selected group entities for which an audit or review had to be carried out on the complete set of financial information or specific items.

We have communicated with the Supervisory Board regarding, amongst other matters, the planned scope and timing of the audit and significant audit findings, including any significant findings in internal control that we identified during our audit. In this respect we also submit an additional report to the audit committee in accordance with Article 11 of the EU Regulation on specific requirements regarding statutory audit of public-interest entities. The information included in this additional report is consistent with our audit opinion in this auditor’s report.

We have provided the Supervisory Board with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

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From the matters communicated with the Supervisory Board, we determine the key audit matters: those matters that were of most significance in the audit of the financial statements. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, not communicating the matter is in the public interest.

Rotterdam, February 17, 2021

Deloitte Accountants B.V.

Signed on the original: drs. A. van der Spek RA

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Reporting policy

In this integrated 2020 Annual Report, Stedin Group renders account on its financial and non-financial performance and the value that the company creates for stakeholders in the short and long term.

Stedin Group reports half-yearly and yearly per calendar year; the most recent report was the Stedin Holding 2020 half-year report. This annual report of Stedin Group relates to the period 1 January 2020 to 31 December 2020. It consists of the Report of the Board of Management, the Report of the Supervisory Board (including the Remuneration Report) and the financial statements. The financial information of Stedin Holding N.V. for the full year 2020 and comparative figures for 2019 are presented and accounted for in the financial statements. Figures for 2020 and comparative figures for 2017, 2018 and 2019, where available, are presented and accounted for in the management report. The financial statements have been prepared in conformity with International Financial Reporting Standards (IFRS), as adopted by the EU. The Global Reporting Initiative (GRI) Standards are applicable to our non-financial performance, at comprehensive level. Stedin Group also complies with the EU Directive on disclosure of non-financial and diversity information as applicable to Public Interest Entities (PIE).

The financial information in this annual report has been consolidated for Stedin Holding N.V. and its subsidiaries. The subsidiaries Stedin, Joulz Diensten, and DNWG are consolidated in the non-financial information within Stedin Group. Discontinued operations are included for the period in which they were part of the group.

Stakeholder selection

By means of this report, we aim to inform a broad target group of stakeholders about our performance. We identify the following groups of stakeholders: customers, employees, shareholders, local environment and communities, government and regulators, investors and rating agencies, suppliers, partners and environmental organisations/NGOs. This selection is based on our analysis, according to which they have the greatest influence on our strategy and business operations and at the same time experience the greatest impact from our activities and strategic choices.

Reporting standards

For its non-financial performance, Stedin Group applies the GRI Standards at the 'comprehensive' level and the guidelines of the <IR> Framework of the International Integrated Reporting Council. We aim to progress continually towards structuring our report as an integrated report that meets the requirements of the <IR> Framework and the GRI Standards.

The consolidated financial statements of Stedin Group have been prepared in conformity with IFRS as applicable at 31 December 2020 and as adopted by the European Union (EU), and the definitions of Part 9, Book 2 of the Dutch Civil Code. IFRS comprises both the IFRS standards and the International Accounting Standards issued by the International Accounting Standards Board (IASB) and the interpretations of IFRS and IAS standards by the IFRS Interpretations Committee (IFRIC) and the Standing Interpretations Committee (SIC) respectively.

In addition, Stedin Group complies with the regulations applying to Public Interest Entities, including the Audit Firms (Supervision) Act (Wet toezicht accountantsorganisaties, Wta). With effect from 2018, Stedin Group also voluntarily applies the Dutch Corporate Governance Code. Departures are explained.

Reporting process

The Board of Management is ultimately responsible for the integrated annual report and has delegated its preparation to a steering group. The Reporting project leader is responsible for the composition of the report. The responsibility regarding content is divided between the Strategy, Communication, Finance and Risk departments. The financial and non-financial strategic KPIs are an integral part of the planning and control cycle. The results are discussed in the regular business reviews. A responsible party is designated for each topic on the basis of an accountability index. The Board of Management reviews the final version before it is submitted to the Supervisory Board.

Selection of topics

Content selection is based on the strategy including strategic themes, risks and opportunities and key performance indicators (KPIs) as defined by the Board of Management. The contents of the annual report will be partly determined in the years ahead on the basis of the materiality analysis. The topics in the 2020 materiality matrix are based on interviews held with both internal and external stakeholders.

SDGs

Stedin Group reports on the United Nations' Sustainable Development Goals (SDGs, drawn up to make the world 'a better place' by 2030) that are relevant to us. Stedin Group contributes to a limited extent to achieving those goals. We provide insight into this in the sections 'One Planet Thinking and Sustainable Development Goals (directly or indirectly)', with cross-references to the relevant disclosure in the annual report.

DNWG

We have aimed to disclose results at the Stedin Group level wherever possible in this report. Where it was not possible at year-end 2020 to present the DNWG results, the Stedin result only is reported. To the best of our knowledge, the reported data fairly present our performance.

Assurance of non-financial information

This financial year, no assurance was sought with regard to the reliability of the non-financial information. It is possible that this will be done in the financial year 2021.

GRI Index

We have adopted the GRI Standards guidelines in our sustainability reporting.

GRI_Index_ENG

GRI Std.	GRI Indicators	Reference	Note
	GENERAL DISCLOSURES		
102-1	Name of the organisation	About us: Stedin Group's activities	
102-2	Primary brands, products and/or services	About us: Stedin Group's activities	
102-3	Location of headquarters	About us: Profile	Blaak 8, 3011 TA Rotterdam
102-4	Number of countries where the organisation operates (that are relevant to sustainable development)	About us: Profile	Stedin Group operates and has its registered office in the Netherlands.
102-5	Nature of ownership and legal form	Governance: Corporate Governance	
102-6	Major markets served (geographical distribution, sectors and types of customers)	About us: Stedin Group's activities	
102-7	Scale of the reporting organisations	About us: Key figures and ratios for 2020	
102-8	Information on total number of employees	About us: Stedin Group's activities About us: Key figures and ratios for 2020	
401-1	Employee turnover	About us: Key figures and ratios for 2020	
405-1	Diversity of boards and employees	About us: Key figures and ratios for 2020	
102-9	The organisation's value and supply chain	About us: Profile About us: Stedin Group's activities Strategy: Mission, vision and strategy Strategy: Value creation and impact measurement	
102-10	Significant changes during the reporting period	About us: Stedin Group's activities / Non-regulated activities / Review of the portfolio	
102-11	Information on application of the precautionary principle	Governance: Risk management	
102-12	Externally developed economic, environmental and social charters or principles to which the organisation subscribes	Results: Sustainable business operations / Safety and security / Charters and principles Governance: Corporate Governance / Integrity	OECD guidelines, UDHR, ILO
102-13	Membership of associations or advocacy organisations	About us: Stedin Group's activities / Partnerships	
102-14	A statement from the organisation's highest authorised party about the relevance of sustainability to Stedin Group and its strategy for addressing sustainability.	Crucial craftsmanship: Foreword Strategy: Developments within society and the energy market Results: Sustainable business operations / One Planet Thinking / One Planet governance	
102-15	Key impacts, risks and opportunities	Strategy: Developments within society and the energy market Strategy: Stakeholders and materiality Strategy: Connectivity, KPIs and targets Strategy: Sustainable Development Goals	
EU3	Number of household, industrial and institutional customers	About us: Key figures and ratios for 2020 / Stedin Group's ratios	

EU4	Length of transmission and distribution networks per regulatory regime	About us: Key figures and ratios for 2020 / Stedin Group's ratios	
	Ethics and Integrity		
102-16	The organisation's values, principles, standards and norms of behaviour	Governance: Corporate Governance / Integrity / Code of conduct and guidelines for conduct	
102-17	Procedure for advice about unethical or illegal practices	Governance: Corporate Governance / Integrity / Reporting Facility Governance: Corporate Governance / Integrity / Confidential advisers	
	Procedure for raising concerns about confirmed or suspected unethical or illegal practices | whistleblower procedure	Governance: Corporate Governance / Integrity / External report	House for Whistleblowers
	Governance		
102-18	Governance structure of those responsible for decision-making on economic, social and ecological (ESG) impact	Governance Report of the Supervisory Board	
102-19	Process for delegating authority for ESG topics	Governance: Corporate Governance / Governance roles Results: Sustainable business operations / One Planet Thinking / One Planet Governance	
102-20	Responsibility for ESG topics at executive level and/or post holders reporting to highest governance body	Governance: Corporate Governance / Governance roles Results: Sustainable business operations / One Planet Thinking / One Planet Governance	
102-21	Processes for consultation between stakeholders and the highest governance body on ESG topics	Governance: Corporate Governance / Governance roles Results: Sustainable business operations / One Planet Thinking / One Planet Governance Strategy Stakeholders and materiality	
102-22	Composition of the highest governance body	Governance: Corporate Governance / Biographical details of members of the Board of Management of Stedin Group	
102-23	Chair of the highest governance body	Governance: Corporate Governance / Biographical details of members of the Board of Management of Stedin Group Governance: Corporate Governance / Biographical details of members of the Supervisory Board	
102-24	Nomination and selection processes for the highest governance body	Governance: Corporate Governance / Governance roles Results: Corporate Governance / Supervisory Board	
102-25	Process for the highest governance body for employees with integrity issues / whistleblower procedure	Corporate Governance Corporate Governance / Integrity	
102-26	Role in the development of mission, vision, strategy, policy and goals related to ESG impact	Strategy Results: Sustainable business operations / One Planet Thinking / One Planet Governance Governance: Risk management / Risk governance	
102-27	Actions taken to enhance knowledge of ESG topics	Strategy: Developments within society and the energy market	

		Strategy: Value creation and impact measurement Strategy: Sustainable Development Goals Strategy: Stakeholders and materiality Strategy: Connectivity, KPIs and targets	
102-28	Evaluating the highest governance body's ESG performance	Strategy: Developments within society and the energy market Strategy: Stakeholders and materiality Strategy: Connectivity, KPIs and targets Governance: Risk management/Risk governance Results: Sustainable business operations / One Planet Thinking / One Planet Governance Report of the Supervisory Board	
102-29	Role of the highest governance body in identifying and managing ESG impacts, risks and opportunities	Governance: Risk management	
102-30	Role of the highest governance body in reviewing the effectiveness of risk management processes for ESG topics	Governance: Risk management	
102-31	Frequency of review of ESG impacts, risks and opportunities	Governance: Risk management	
102-32	The highest body that reviews and approves the sustainability report	Disclosure column	The Audit Committee of the Supervisory Board
102-33	Process for communicating critical concerns to the highest governance body	Governance: Corporate Governance / Integrity	
102-34	Number of critical concerns communicated and procedure for response of highest governance body	Governance: Corporate Governance / Integrity	
102-35	Remuneration policies for the highest governance body	Report of the Supervisory Board: Remuneration report for 2020	
102-36	Process for determining remuneration	Report of the Supervisory Board: Remuneration report for 2020	
102-37	Stakeholders' involvement in remuneration	Report of the Supervisory Board: Remuneration report for 2020	
102-38	Ratio of top salary – median salary	Report of the Supervisory Board: Remuneration report for 2020	
102-39	Ratio of the increase in top salary – average increase	Report of the Supervisory Board: Remuneration report for 2020	
205-1	Operations assessed for risks related to corruption	Governance: Corporate Governance / Integrity	
205-2	Percentage of employees that receive training on anti-corruption policies	Governance: Corporate Governance / Integrity	
205-3	Action in response to incidents of corruption	Governance: Corporate Governance / Integrity	
206-1	Legal actions against unfair competition, cartels and monopolies	Governance: Corporate Governance / Integrity	
102-40	A list of stakeholder groups engaged by the organisation	Strategy: Stakeholders and materiality General information: Reporting Policy / Stakeholder selection	
102-41	Percentage of employees covered by collective labour agreements	About us: Key figures and ratios for 2020	

102-42	The basis for identifying and selecting stakeholders	Crucial craftsmanship: Foreword Strategy: Stakeholders and materiality
102-43	Approach to and frequency of stakeholder engagement	Transitioning together: Foreword Strategy: Stakeholders and materiality
102-44	Results of stakeholder management	Strategy: Stakeholders and materiality
102-45	Operational structure of associates	Financial statements: Notes to the consolidated financial statements
102-46	Process for determining report content and implementation of GRI principles	Strategy: Stakeholders and materiality Strategy: Value creation and impact measurement Strategy: Reporting policy
102-47	A list of all the material topics identified in the process for defining report content	Strategy: Stakeholders and materiality
102-48	The effect of any restatements of information given in previous reports	Financial statements: Notes to the consolidated financial statements Accounting policies: 2.3 Judgements, estimates and assumptions
102-49	Significant changes from previous reporting periods	
102-50	Reporting period	Other information: Reporting policy
102-51	Date of most recent report	Other information: Reporting policy
102-52	Reporting cycle	Other information: Reporting policy
102-53	Contact point for questions regarding the report or its contents	Disclaimer: Publication details
102-54	In accordance option chosen by the organisation	Other information: Reporting policy
102-55	GRI content index	Other information: GRI Index
102-56	Policy with regard to external assurance	Governance: In-control statement Other information: Independent Auditor's Report Other information: Reporting policy
	SPECIFIC INFORMATION – SPECIFIC DISCLOSURES	
	Economic, financial performance	
103-1 103-2 103-3	Description and definition of material topics; (evaluation) management approach	Strategy: Stakeholders and materiality Strategy: Connectivity, KPIs and targets Other information: Reporting policy
201-1	Economic ratios (incl. accruals) 'for the community' in euros	2020 Financial Statements
201-2	Financial implications and other risks and opportunities for Stedin's activities due to climate change	Strategy Governance: Risk management
201-3	Coverage of the organisation's defined benefit plan obligations	2020 Financial Statements
	Investing in infrastructure	
103-1 103-2 103-3	Description and definition of material topics; (evaluation) management approach	Strategy: Stakeholders and materiality Strategy: Connectivity, KPIs and targets Other information: Reporting policy

	Organisation's capacity for change	
103-1 103-2 103-3	Description and definition of material topics; (evaluation) management approach	Strategy: Stakeholders and materiality Strategy: Connectivity, KPIs and targets Other information: Reporting policy
	Smart grids, data technology and innovation	
103-1 103-2 103-3	Description and definition of material topics; (evaluation) management approach	Strategy: Stakeholders and materiality Strategy: Connectivity, KPIs and targets Other information: Reporting policy
	Reliability of energy supply, availability of grid	
103-1 103-2 103-3	Description and definition of material topics; (evaluation) management approach	Strategy: Stakeholders and materiality Strategy: Connectivity, KPIs and targets Other information: Reporting policy
EU 28	Interruption frequency for electricity	About us: Key figures and ratios for 2020 / Stedin Group's ratios
EU 29	Average duration of interruption Annual average downtime	About us: Key figures and ratios for 2020 / Stedin Group's ratios
	Heat transition (discontinue use of Groningen natural gas)	
103-1 103-2 103-3	Description and definition of material topics; (evaluation) management approach	Strategy: Stakeholders and materiality Strategy: Connectivity, KPIs and targets Other information: Reporting policy
	Security of supply	
103-1 103-2 103-3	Description and definition of material topics; (evaluation) management approach	Strategy: Stakeholders and materiality Strategy: Connectivity, KPIs and targets Other information: Reporting policy
EU 28	Interruption frequency for electricity	About us: Key figures and ratios for 2020 / Stedin Group's ratios
EU 29	Average duration of interruption Annual average downtime	About us: Key figures and ratios for 2020 / Stedin Group's ratios
	Data security, privacy and cybersecurity	
103-1 103-2 103-3	Description and definition of material topics; (evaluation) management approach	Strategy: Stakeholders and materiality Strategy: Connectivity, KPIs and targets Other information: Reporting policy
418-1	Total number of substantiated complaints concerning breaches of customer privacy and losses of customer data	Strategy: Connectivity, KPIs and targets
	Customer satisfaction	
103-1 103-2 103-3	Description and definition of material topics; (evaluation) management approach	Strategy: Stakeholders and materiality Strategy: Connectivity, KPIs and targets Other information: Reporting policy
EU3	Number of household, industrial and institutional customers	About us: Key figures and ratios for 2020 / Stedin Group's ratios
	Stakeholder dialogue and environment:	

103-1 103-2 103-3	Description and definition of material topics; (evaluation) management approach	Strategy: Stakeholders and materiality Strategy: Connectivity, KPIs and targets Other information: Reporting policy	
413-1	Degree of local community engagement in operations	Strategy: Developments within society and the energy market	
415-1	Financial or in-kind contributions to political parties, persons or institutions	Governance: Corporate Governance / Integrity	
	Stedin Group's reputation		
103-1 103-2 103-3	Description and definition of material topics; (evaluation) management approach	Strategy: Stakeholders and materiality Strategy: Connectivity, KPIs and targets Other information: Reporting policy	
307-1	Monetary value of fines or sanctions for non-compliance with environmental laws and regulations	Disclosure column	We expect to be able to present this information for 2021.
406-1	Number of incidents of discrimination and corrective actions taken	Governance: Corporate Governance / Integrity / Reporting Facility	
419-1	Monetary value of fines or sanctions for non-compliance with laws and/or regulations in the social and economic area	Disclosure column	We expect to be able to present this information for 2021.
	Sufficient technical staff, IT staff, ...		
103-1 103-2 103-3	Description and definition of material topics; (evaluation) management approach	Strategy: Stakeholders and materiality Strategy: Connectivity, KPIs and targets Other information: Reporting policy	
	Training and development		
103-1 103-2 103-3	Description and definition of material topics; (evaluation) management approach	Strategy: Stakeholders and materiality Strategy: Connectivity, KPIs and targets Other information: Reporting policy	
404-1	Investments in training per employee per category	Results: Sustainable business operations: Professionally competent employees now and in the future	
404-2	Programmes for skills management and lifelong learning that support continued employability and facilitate career endings	Results: Sustainable business operations: Professionally competent employees now and in the future	
404-3	Percentage of employees receiving regular performance and career development reviews	Results: Sustainable business operations: Professionally competent employees now and in the future	
	Safety at work and in the environment		
103-1 103-2 103-3	Description and definition of material topics; (evaluation) management approach	Strategy: Stakeholders and materiality Strategy: Connectivity, KPIs and targets Other information: Reporting policy	
403-1	Workers' representation with regard to health and safety policies	Results: Sustainable business operations: Safety and security	
403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Results: Sustainable business operations: Safety and security	

403-3	Positions with high risk of diseases or accidents related to their occupation	Results: Sustainable business operations: Safety and security	
403-4	Health and safety topics covered in formal agreements with trade unions	Results: Sustainable business operations: Safety and security	
	Contributing to the energy transition		
103-1 103-2 103-3	Description and definition of material topics; (evaluation) management approach	Strategy: Stakeholders and materiality Strategy: Connectivity, KPIs and targets Other information: Reporting policy	
301-1	Total weight or volume of materials used	Results: Sustainable business operations: One Planet Thinking	
301-2	Percentage of input materials consisting of waste sourced externally	Results: Sustainable business operations: One Planet Thinking	
302-1	Energy consumption inside the organisation	Results: Sustainable business operations: One Planet Thinking	
302-2	Energy consumption outside of the organisation	Results: Sustainable business operations: One Planet Thinking	
302-4	Reduction of energy consumption	Results: Sustainable business operations: One Planet Thinking	
302-5	Reductions in energy requirements of products and services	Results: Sustainable business operations: One Planet Thinking	
305-1	Direct (Scope 1) GHG emissions by weight	Results: Sustainable business operations: One Planet Thinking	
305-2	Indirect (Scope 2) GHG emissions by weight	Results: Sustainable business operations: One Planet Thinking	
305-3	Other indirect (Scope 3) GHG emissions by weight	Results: Sustainable business operations: One Planet Thinking	
305-5	Reduction of GHG emissions	Results: Sustainable business operations: One Planet Thinking	
305-6	Emissions of ozone-depleting substances	Disclosure column	Not applicable
305-7	NOx, SOx and other significant air emissions	Results: Sustainable business operations: One Planet Thinking	
306-2	Total waste by type and disposal method	Results: Sustainable business operations: One Planet Thinking	
306-4	Hazardous waste	Results: Sustainable business operations: One Planet Thinking	
	Improving sustainability of purchasing activities		
103-1 103-2 103-3	Description and definition of material topics; (evaluation) management approach	Strategy: Stakeholders and materiality Strategy: Connectivity, KPIs and targets Other information: Reporting policy	
308-1	Percentage of new suppliers screened using environmental criteria	Governance: Corporate Governance / Supply chain responsibility	
414-1	Percentage of new suppliers that were screened using 'labour practices' criteria	Governance: Corporate Governance / Supply chain responsibility	
407-1	Identified significant risks of non-freedom and actions taken	Governance: Corporate Governance / Supply chain responsibility	
408-1	Identified significant risks of child labour and actions taken	Governance: Corporate Governance / Supply chain responsibility	

409-1	Identified significant risks of forced or compulsory labour and actions taken	Governance: Corporate Governance / Supply chain responsibility
412-1	Issue and risk management in the supply chain with regard to human rights	Governance: Corporate Governance / Supply chain responsibility
414-1	Degree of screening of suppliers on human rights issues.	Governance: Corporate Governance / Supply chain responsibility
414-2	Negative impacts on human rights resulting from the supply chain and actions taken	Governance: Corporate Governance / Supply chain responsibility

Interaction with our environment

Being 'in touch with our environment' is an increasingly important part of our task and our day-to-day work. At all levels. Listening and engaging in dialogue with our stakeholders is an indispensable step towards 'doing the right things right', having a shared understanding of the challenges we face in the energy transition and being and remaining in touch with what the environment asks and demands of us. Our mission is 'Working together to create an environment filled with new energy'. We do this actively on our three strategic spearheads and on the material topics prioritised by us and our stakeholders.

The importance of these material topics is also reflected in the ancillary positions held by members of our Board of Management. For example, CEO Marc van der Linden served as chair of Netbeheer Nederland in 2020. Also see Biographical details of members of the Board of Management of Stedin Group.

Our stakeholders

Our stakeholders are the people, groups or authorities that have an influence on Stedin Group and vice versa. Contacts with our stakeholders partly take place in a structured form, but they can also take place on an ad hoc basis, depending on the topic. The public and regulated nature of Stedin Group to a large extent determines the categorisation below into stakeholder groups.

- Internal: employees
- External: private and business customers, shareholders, investors and rating agencies, government, politics, regulators, energy supply chain, public organisations, local environment, NGOs and civil-society organisations, suppliers, media, memberships, interest groups and industry organisations, knowledge institutions and partners.

Policymakers and policy frameworks

Stedin Group aims to play a linking role in the transition to a new energy system to ensure that this remains safe, sustainable, reliable and affordable. Our core tasks as grid manager are impacted by the transition, and existing policy frameworks must be adapted to make the necessary changes possible. Owing to our public function, Stedin's interests in this regard are social interests. We engage in constructive dialogue with the stakeholders in the societal arena, and we contribute our experience and expertise. We mostly do this in cooperation with Netbeheer Nederland. These talks are always conducted by employees of Stedin Group. We do not engage a Public Affairs consultancy firm on a permanent basis. Nor does Stedin Group donate funds to politicians, political parties or government institutions.

Environment management

The energy transition will require numerous and sometimes major adjustments that also necessitate spatial adjustments. Strategic environment management is necessary to ensure this is supported by society. In order to create a shared position and support, we involve other organisations and stakeholders as early as possible to ensure effective coordination of plans. We do so in several ways – for example, by making data on our grids publicly accessible and by concluding covenants as well as agreements for long-term cooperation with municipalities and other parties. A new Environmental and Planning Act (Omgevingswet) will come into force in 2021 under which participation will be required, whereas at present it is voluntary.

Corporate social responsibility

We make active and broad-based efforts to promote an inclusive society.

Given our societal role, we are relatively reticent in engaging in sponsorship activities. Accordingly, we base our choice for sponsoring or a financial contribution on initiatives that are closely related to our core tasks such as stimulating the energy transition, knowledge about the energy transition and 'energy for everyone'. Our most important initiative in 2020 (and before) concerns supporting the Energy Bank in Rotterdam and The Hague. In 2020, this enabled us to assist 60 households to achieve energy savings. Our aim for 2020 was to assist 200 households. We were unable to achieve this target due to COVID-19.

The purpose of the Energy Bank is to ensure energy remains available as a primary necessity of life for households that do not have enough money to pay their energy bill. Stedin's assistance is provided through people as well as funds. Two Stedin employees provide advice as energy coaches to reduce energy costs. The contract also provides for an annual donation of €8,000. In 2020, the Energy Bank was again the charitable cause as part of the annual end-of-year gift. Stedin employees were able to opt for a personal gift or a financial contribution to the Energy Bank. As a result, we were able to hand over €2,500 to the Energy Bank in Rotterdam and The Hague.

Stedin's total sponsorship budget in 2020 was €36,000 (2019: €120,000; 2018 €225,000), part of which was also

used for community initiatives and good causes in which individual Stedin employees played an active role.

In the table below, we provide insight into the numerous contacts we have with our principal stakeholders.

Stakeholder	Note	Material topic
Employees	• All employees – quantitative employee survey • Works council – formal consultation and 3D consultation with Supervisory Board and Board of Management • 'Toekomstmakers' (Makers of the Future) – traineeship • F-Empower – staff association • Employees Association – staff association • Service Team Operations – training young people with an occupational disability • Trade unions – periodical negotiations on terms and conditions of service	③ ⑪ ⑫ ⑬
Private customers	• Customer panel – efforts to improve process, system, customer journey and/or communication • Customer survey – quantitative survey • Customer service – questions about connections, the smart meter and failures • Disputes Committee – independent body that considers complaints or damage claims that the customer and Stedin are unable to resolve. • Consumer organisations – dialogue with, for instance, the Association of (Prospective) Homeowners (VEH) and the Dutch Consumers' Association	⑥ ⑦ ⑧ ⑨ ⑬
Business customers	• Account support and customer service – products and services make the energy transition plans possible – efforts to improve processes, systems, the customer journey and/or communication. • Customer survey – quantitative survey • Collectives Desk – point of contact for questions on connections and arranging feed-in connections for returning energy to the grid for energy collectives • Representation of business customers within the Regional Energy Strategies • Industry/Port of Rotterdam – coordinate challenges of the energy transition for energy infrastructure	② ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑬ ⑭
Shareholders	• 44 Dutch municipalities – General Meeting of Shareholders and Extraordinary General Meeting of Shareholders. Formal and informal consultation, meetings on specific topics, individual contact • Shareholders' Committee – 9 members who represent the 44 shareholders of Stedin Group	All material topics
Investors and rating agencies	• Annual rating review meeting, financial publications	① ② ⑥ ⑬ ⑭ ⑮

① Economic, financial performance ② Investing in infrastructure ③ Organisation's capacity for change ④ Smart grids, data technology and innovation ⑤ Heat transition ⑥ Supply security ⑦ Data security, privacy and cybersecurity ⑧ Customer satisfaction ⑨ Stakeholder dialogue and environment ⑩ Stedin Group's reputation ⑪ Sufficient technical staff, IT staff ⑫ Training and development ⑬ Safety at work and in the environment ⑭ Contributing to the energy transition ⑮ Social responsibility in the supply chain

Stakeholder	Note	Material topic
Government	• European and national – laws and regulations, energy policy • Province, region, municipalities – regional and local energy policy, coordinate energy transition plans and realisation of (test) projects – Regional Energy Strategies, Regional Agenda for Charging Infrastructure Network, Transition Vision for Heat, Test beds for Natural Gas-free Districts, coordinate realisation of investments in the grids, provincial and municipal consultations on utilities, interprovincial consultation, covenants for multidisciplinary operations, permits, cooperation of security regions.	② ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑬ ⑭
Politics	• Upper House of Parliament and House of Representatives, States General, Ministries – influencing policy on relevant themes, frameworks for, for instance, Regional Energy strategies, contributing expertise and experience.	② ④ ⑤ ⑦ ⑭
Regulators	• State Supervision of Mines, Netherlands Authority for Consumers and Markets, Radiocommunications Agency Netherlands, Social Affairs and Employment Inspectorate, Dutch Safety Board, Dutch Data Protection Authority, Dutch Authority for the Financial Markets, Human Environment and Transport Inspectorate, EU Supervisors – inform (standard and ad hoc), knowledge exchange	⑥ ⑦ ⑧ ⑬
Energy supply chain	• Netbeheer Nederland, regional grid managers, national grid managers TenneT and Gasunie, energy producers and energy suppliers, parties responsible for metering, independent service providers, Energie Nederland, Energie Data Services Nederland, Vereniging Nederlandse Energie- en Data Uitwisseling – aimed at knowledge exchange, partnerships, promotion of interests, cooperation, dialogue	④ ⑥ ⑦ ⑧ ⑬ ⑭ ⑮
Public organisations	• Water authorities, Water companies, Directorate-General for Public Works and Water Management, ProRail, Staatsbosbeheer (National Forest Service in the Netherlands), housing associations, Cyber Security Board – consultation and coordination of work below ground and permit applications	① ⑧ ⑬ ⑭
Local environment	• Businesses and private individuals in an area where work is being or will in due course be carried out – environment management, engage in dialogue and inform	⑧ ⑨ ⑬
NGOs and civil-society organisations	• Natuur en Milieu, Milieudefensie, Greenpeace, Springtij – knowledge exchange, dialogue • Jinq, Energy Bank Rotterdam and The Hague, Stichting Hartekind, USEF Foundation – voluntary work, cooperation	⑫ ⑭ ⑮
Suppliers	• Contractors and suppliers of goods and services – cooperation, relationship management and dialogue	⑬ ⑮
Media	• National, regional and online media – inform	All material topics
Memberships **interest groups/ industry organisations**	• IPMA, Mijnaansluiting.nl, Dutch Power, Cigre Nederland, Nestor rapportage, Vereniging voor Energie Milieu en Water – member and/or an active role as chair or board member • Dutch Consumers' Association, Association of (Prospective) Homeowners (VEH), construction and electrical engineering industry association, Techniek Nederland, employers' association WENB, VNG (Association of Netherlands Municipalities) – inform, engage in dialogue, knowledge exchange	② ④ ⑤ ⑥ ⑦ ⑧ ⑪ ⑫ ⑬ ⑭
Knowledge institutions **Partners**	• Delft University of Technology, Eindhoven University of Technology, Wageningen University & Research, Erasmus University, Utrecht University and Groningen University, Nijenrode – knowledge exchange, research, cooperation • Senior secondary vocational education (MBO) and higher professional education (HBO) degree programmes – cooperation • Universal Smart Energy Framework, Deltalinqs, Dutch Power, Energy WEb Foundation, Energie Data Services Nederland, Green Village, Platform Groene Netten, Stichting Elaad, Missie H2, Starthubs.com, CE Delft, Netherlands Energy Research Alliance, Netherlands Organisation for Applied Scientific Research (TNO), GOPACS, IPO (Association of Provincial Authorities), Economic Board South Holland, Bouwend Nederland, Techniek Nederland – participation in management, cooperation	④ ⑤ ⑪ ⑭ ⑪ ⑫ ⑭ ② ④ ⑤ ⑥ ⑭

Three-year overview

	Unit	2020	2019	2018
Income statement				
Revenue	€ mln	1,216	1,220	1,270
Total operating income	€ mln	1,229	1,234	1,286
Total operating expenses	€ mln	1,100	1,062	1,074
EBITDA	€ mln	463	489	509
Operating profit	€ mln	129	172	212
Profit after income tax	€ mln	42	325	118
Balance sheet				
Property, plant and equipment	€ mln	7,057	6,753	6,406
Total assets	€ mln	7,572	7,289	6,991
Equity	€ mln	2,891	2,949	2,699
Total interest-bearing debt	€ mln	3,183	3,004	3,044
Investments in non-current assets	€ mln	620	646	607
Cash flows				
Cash flow from operating activities	€ mln	408	374	349
Cash flow from investing activities	€ mln	-512	-236	-475
Cash flow from financing activities	€ mln	115	-235	222
Credit rating				
Long-term rating (S&P)	rating	A-	A-	A-
Solvency*	%	43.0	43.3	43.3
FFO/Net debt**	ratio	12.0	11.7	12.2
Shares at 31 December				
Number of shares outstanding (x 1,000)	number	4,971	4,971	4,971
Other				
Electricity				
Active connections	number	2,322,692	2,302,475	2,285,701
Installed cables	km	852	1,034	806
Gas				
Active connections	number	2,120,821	2,120,671	2,114,935
Installed pipelines	km	197	221	250
Distributed volumes				
Electricity	GWh	20,171	21,100	21,330
Gas	mln m3	4,365	4,651	4,852

	Unit	2020	2019	2018
Other				
Average outage duration for electricity	minutes	26	20	17
Average outage duration for gas	seconds	26	87	69
Facilitated supplier switches	number	883	824	713

* Equity plus profit or loss for the period less expected dividend distributions for the current financial year divided by the balance sheet total, adjusted for the expected dividend distribution, connection contributions received and free cash and cash equivalents.

** This ratio is calculated in accordance with the Standard & Poor's (S&P) method. Funds From Operations (FFO) divided by net debt. FFO consists of EBITDA adjusted for lease expense, adjusted interest expense and tax expense. The net debt position is the sum of current and non-current interest-bearing debt, adjusted for off-balance liabilities, the hybrid loan and minus cash and cash equivalents. The ratio was calculated as at 31 December 2017. S&P applies a multi-year weighting to determine this ratio when assessing the credit rating.

Glossary

This section presents explanations of terms or abbreviations.

ACM
The Netherlands Authority for Consumers and Markets (ACM) is an independent public regulator whose tasks include oversight of compliance with the Gas Act and the Electricity Act 1998.

A- rating
The rating score of a company, or 'rating', is an assessment of its credit rating in the form of a 'mark'. Ratings are awarded by specialised agencies.

CAIDI
The Customer Average Interruption Duration Index is the average duration of an unforeseen interruption of electricity supply per customer affected.

CAPEX and OPEX
Capex are the Capital Expenditures, the costs related to developing and supplying our products and services. Opex are the Operating Expenditures, the operational costs to enable our business operations.

CDMA
Code Division Multiple Access is a telecommunications network for transmitting information across a wireless radio connection using spread spectrum techniques.

Congestion
Congestion occurs when a grid has insufficient capacity to transmit all electricity generated and purchased. In Congestion management, price mechanisms and market forces are used to manage demand and supply. This is called flexibility.

Corporate governance
Corporate governance concerns relations between the board of management, the supervisory board and the general meeting of shareholders. Good entrepreneurship (ethical and transparent conduct by the board of management) and effective supervision (including reporting on it) are key principles of corporate governance.

CGC
Corporate Governance Code. Good governance of a company protects the interests of shareholders, employees and other stakeholders. Rules of conduct for this are set out in the Corporate Governance Code. Listed companies are required to comply with this code by law. Stedin Group adheres to the CGC insofar as possible and applicable.

Commercial or non-regulated activities
These are the activities of Stedin Group that are subject to competition and are offered at the customer's request.

ETPA
Energy Trading Platform Amsterdam is an independent energy trading platform.

Flexibility
If a grid has insufficient capacity to transit all electricity generated and purchased, we deploy congestion management. In congestion management, price mechanisms and market forces are used to manage supply and demand (flexibility).

FFO – Net debt ratio
Funds from Operations (FFO) comprises revenue minus costs, taxes and interest expense, adjusted on the basis of the S&P method. Net debt ratio is the total of current and non-current debt, including adjustments for the hybrid loan and pension liabilities, minus the total of (free) cash and cash equivalents at year-end. Both are calculated on the basis of the financial information of Stedin Group.

Flexibility
Smart matching of electricity supply and demand to avoid peak load.

FTE
Full-time equivalent. Equivalent of the number of employees in full-time employment.

Regulated market
The activities of the grid manager that arise from the tasks that are exclusively reserved for the grid manager and for which maximum rates are set by the ACM. They include:

- installing, maintaining, modernising and managing connections to the electricity grid with a rated capacity up to 10 MVA;
- building, maintaining, modernising and managing electricity as well as gas grids;
- transmitting gas and electricity;
- safeguarding the safety and reliability of the grids in an effective manner;
- promoting safety in using equipment and installations that consume electricity as well as gas;
- facilitating the free market to enable customers to switch to a different energy supplier.

GPRS
General Packet Radio Service. This technology is an addition to the GSM network and can be used to send and receive mobile data quickly and reliably.

GRI
Global Reporting Initiative. The internationally applied standards for sustainability reporting, in which an organisation reports publicly on its economic, environmental and social performance.

IFRS
International Financial Reporting Standards. Set of reporting rules issued by the IASB. Stedin Group complies with these reporting rules, which were drawn up to harmonise financial reporting at an international level.

<IR> Framework
Integrated reporting is an extensive framework for business and investment decisions that are long-term, inclusive and purpose-oriented.

kV
Kilovolt (kV) is a unit of voltage equal to 1,000 volts.

LTE-M meter
An LTE-M meter communicates via the LTE technology instead of the GPRS or CDMA technology. LTE is short for Long Term Evolution and is the generic term for the 4G network.

LTI
Lost Time Injury. An LTI is an event that results in absence from work for more than one working day or shift – for instance, an accident in a workshop. Work carried out by and accidents of third parties are not included.

LTIR
Lost Time Injury Rate. Number of lost-time incidents per million hours worked.

Grid capacity and transmission capacity
Both terms are synonymous and refer to capacity in the grid.

Network losses
Network losses arise during the distribution of electricity. The greater the distance, the greater the loss. Network losses can also be caused by fraud and administrative losses (in the allocation and reconciliation process as well as the administrative process).

Net investments
Gross investments less customer construction contributions received from third parties.

NOC
Network Operations Center. Stedin's modernised control centre that monitors Stedin's service area 24/7.

PIE
A PIE is a Public Interest Entity. These are organisations that, due to their size or function in social and economic life, affect the interests of comparatively large groups.

OR
Works Council This is a body that consists of members of the works councils of the various business units of Stedin Group.

Regional Energy Strategy (RES)
Each region develops its own energy strategy in order to implement the measures for electricity and the built environment in the Climate Agreement. Examples are the regional generation of sustainable energy as well as plans to match supply and demand.

BoM
Board of Management. The board of management is the most senior executive body of an organisation. A board of management is responsible for the strategic management of the entity.

SB
Supervisory Board The supervisory board in the Netherlands is the supervisory body of public limited liability companies and private limited liability companies.

RIF
Recordable Incident Frequency. The number of occupational accidents per 200,000 hours worked.

Remuneration report
The remuneration report is a report on the remuneration of the Board of Management and the Supervisory Board. The remuneration policy of Stedin Group is prepared by the Selection, Appointments and Remuneration Committee of the Supervisory Board.

Petajoule (PJ)
That is 1 thousand trillion joules, and 1 petajoule is sufficient to supply energy to around 15,000 households for a full year.

SAIDI
System Average Interruption Duration Index. The annual average downtime: the average duration for which a customer is not supplied with electricity due to unforeseen interruptions (in minutes).

SAIFI
System Average Interruption Frequency Index. The interruption frequency: the average number of unforeseen interruptions with which customers are faced on an annual basis.

SDGs
Sustainable Development Goals. The Sustainable Development Goals are a set of goals for future international development. They have been formulated by the United Nations and are promoted as the global goals for sustainable development.

Smart meter
A smart meter enables the grid manager to read the meter for both electricity and gas from a distance, as well as the meter status information. The smart meter can also carry out instructions sent remotely, such as connecting or disconnecting a customer. Communication with the meter takes place via the cable network (Power Line Communication), via GPRS or via the CDMA network. The use of the smart meter should lead to energy savings.

Solvency
Equity plus profit or loss for the period less expected dividend distributions for the current financial year divided by the balance sheet total, adjusted for the expected dividend distribution, long-term portion of connection contributions received in advance and free cash and cash equivalents.

Voltage quality
The voltage at a connection to the electricity grid is required to be of a specific quality. Good voltage quality is important, for instance to ensure the continued proper operation of equipment.

Stakeholders
Stakeholders are individuals and groups that have an interest in a variety of ways in Stedin Group, such as employees, shareholders, customers, capital providers, suppliers, government and media.

Shortage of transmission capacity
Shortage of transmission capacity is shortage in the national and regional electricity grids due to the growth in large-scale solar farms and the growing demand for electricity in the Netherlands.

VIAG
The Natural Gas Safety Instructions (VIAG) for energy companies, in conjunction with the annexes and operational safety instructions, provide a set of uniform rules for the safe operation of gas production systems of grid managers.

Disclaimer

This report may contain forward-looking statements and projections. These can be identified by words such as 'anticipate', 'intend', 'estimate', 'assume', 'expect' or the negative equivalents of these terms and similar terms. These forward-looking statements and projections are based on current expectations and assumptions concerning expected developments and other factors that can affect Stedin Group. These are not historical facts or guarantees of future results. Actual results and events can differ from the current expectations due to factors such as economic trends, technological developments, changes in laws and regulations, the behaviour of suppliers and customers, currency risks, tax developments, financial risks or political, economic and social conditions.

Further information on potential risks and uncertainties that can affect Stedin Group is stated in the documents filed by Stedin Group with Euronext Amsterdam and the Euro MTF Market of the Luxembourg Stock Exchange.

Except as required on the basis of laws and regulations, Stedin Group rejects any obligation or liability to revise or adjust projections and forecasts in this document on the basis of new information, future events or otherwise, or to publicly disclose such adjustments or revisions.

Certain parts of the annual report and the financial statements have been audited by our auditor. The section entitled 'Independent Auditor's Report' describes which parts have been audited, and how, by the independent auditor.

This report is a translation of the Dutch annual report 2020 of Stedin Groep. In the event of any discrepancy, the Dutch version will prevail.

Copyright and brand names

Publication details

Published by
Stedin Holding N.V.
PO Box 49
3000 AA Rotterdam

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www.stedingroup.com

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