

# Ready to accelerate

Sustainability Report 2019





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# About this report

Elia Group's Annual Report 2019 consists of three parts: the Activity Report, the Sustainability Report and the Financial Report where we inform our stakeholders about our company, corporate social responsibility, and financial results. You are currently reading the Sustainability Report.

Please visit

[www.eliagroup.eu/publications](http://www.eliagroup.eu/publications)

to consult parts one and three.

## 2019 Sustainability Report

In this report, Elia Group provides information on the economic, environmental and social impacts caused by its everyday activities. We also give insight into our values and governance model, and demonstrate the link between our strategy and our commitment to a sustainable global economy.

The Sustainability Report concerns regulated information, published on 13 April 2020 after trading hours.

## GRI Standards : Core option

This report has been prepared in accordance with the GRI Standards, the first global best practice for reporting publicly on a range of economic, environmental and social impacts.

The applicable GRI-Standards performance indicators are highlighted in the report wherever Elia Group has reported on economic, environmental or social impacts. Consult the GRI Content Index on page 73 for a full overview.

The online references in this report provide more in-depth information on a subject by way of video, brochure or webpage.



# 1. Elia Group

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# 1.1. Introduction

Elia Group consists, amongst others, of transmission system operators (TSO's) Elia (Belgium), 50Hertz (North & East of Germany) and the joint consultancy company Elia Grid International (worldwide).

Together Elia and 50Hertz operate 19,271 km of high-voltage connections that supply power to 30 million end users. As such, our group is one of Europe's top 5 TSOs. With a reliability level of 99.99%, we provide society with a robust power grid.

Elia Grid International (EGI) provides consultancy services in asset management, power system operations and security, system and market operations, owner's engineering and investment advice to international clients.

More information on Elia Group can be found in the Activity Report 2019 on pages 12-13.

This Sustainability Report provides transparency on Elia Group's Sustainability performance and describes the integration of sustainability in our Elia's Group strategy.

As TSO's, Elia and 50Hertz lead the way in the energy transition. We have a crucial role to play in the decarbonisation of the energy sector and society in general through the integration of increasing volumes of renewable energy in the electricity system.

This report combines information from Elia and 50Hertz and provides integrated data and facts where possible. It thereby continues a path of increasing professionalism and alignment in our sustainability reporting:

50Hertz started in 2016 with the German sustainability codex (DNK) based on GRI standards.

Elia followed in 2017 using the following international sustainability standards to identify a number of relevant topics with the goal of creating a robust sustainability programme:

- Global Reporting Initiative (GRI) - sector supplement Electric Utilities
- Sustainability Accounting Standards Board (SASB) - Infrastructure Standards – Electric Utilities
- ISO 26000 standards

Since 2018, we have evolved in the alignment of reporting methods linking Elia with 50Hertz. The Global Reporting Initiative (GRI) provides the framework and both companies report in accordance with the GRI Core Standard. Efforts to deliver a joint sustainability report in the future will continue. As from this year, we are pleased to say that both the structures and GRI disclosures are similar for both entities. This goes naturally hand in hand with a continuous improvement in sustainability performance.

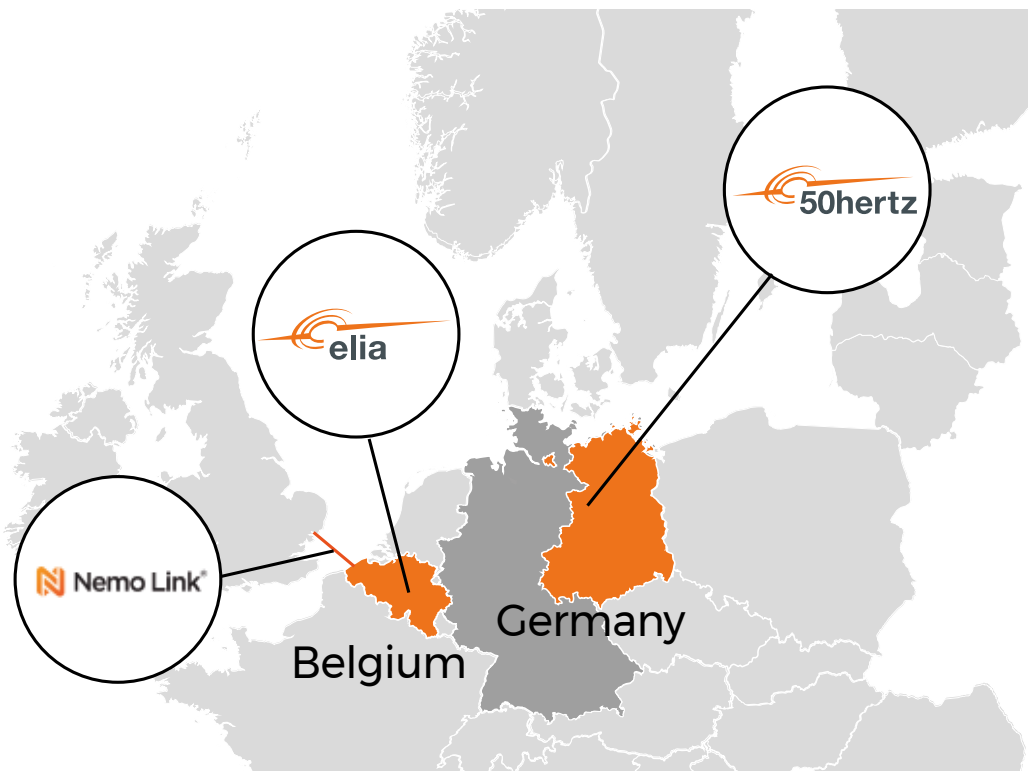
In addition to this, we are also working towards building up the number of joint initiatives between the two TSO's.

In 2019, Elia and 50Hertz have once again improved their sustainability rating. In the latest edition of the Sustainalytics Environment, Social and Governance rating report, they scored respectively 74 points (Elia) and 79 points (50Hertz) out of 100 earning them 'outperformer' status.

GRI 102-14

“Our main priority is to make the energy transition a reality. We fully support the European Green Deal's ambitions to make Europe the first climate-neutral continent by 2050. We are trying to accelerate the implementation of our extensive multi-year programme, while keeping within budget and maintaining the required quality. We are also examining our own activities. Without compromising the safety of our workforce and the grid, we are making our processes more sustainable and aim to be completely climate neutral by 2040. As a company providing a service for society, we have a duty to set an example in this regard.

Chris Peeters, CEO Elia Group



# 1.2. Elia Group Companies

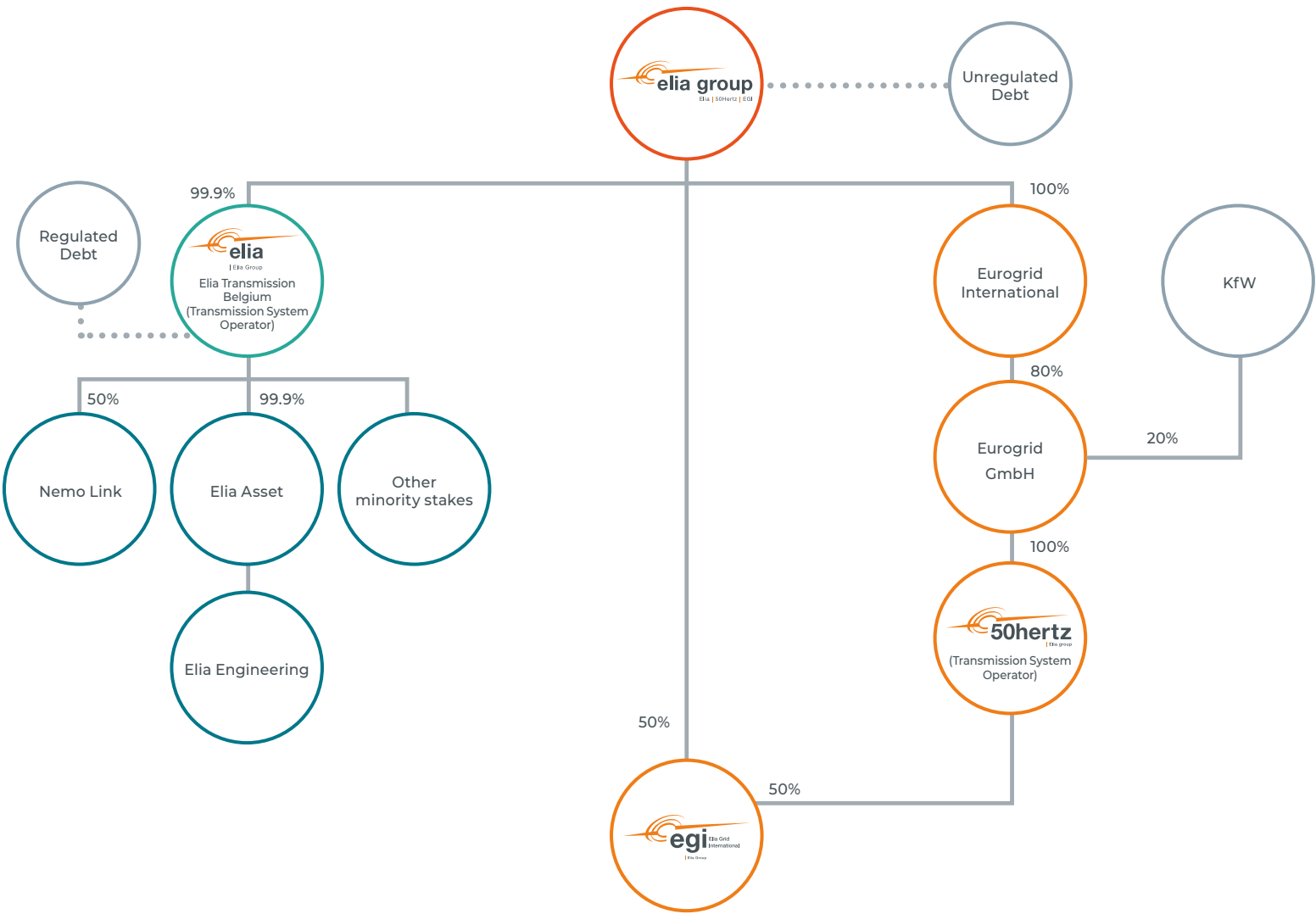
GRI 102-5

**Elia Group** acts as a holding company owning Elia Transmission Belgium (Belgian TSO), Eurogrid International (comprising the activities of 50Hertz, the German TSO) and Elia Grid International (the Group's international consultancy branch). Its main shareholder is the municipal holding Publi-T. Elia Group (formerly Elia System Operator SA/NV) is listed on the regulated market of Euronext Brussels, since June 2005.

Further information on page 148 of the Activity Report 2019.

Any reference to **Elia** hereunder includes the following companies: Elia Assets (EA), Elia Transmission Belgium (ETB, formerly Elia System Operator – ESO) and Elia Engineering (EE).

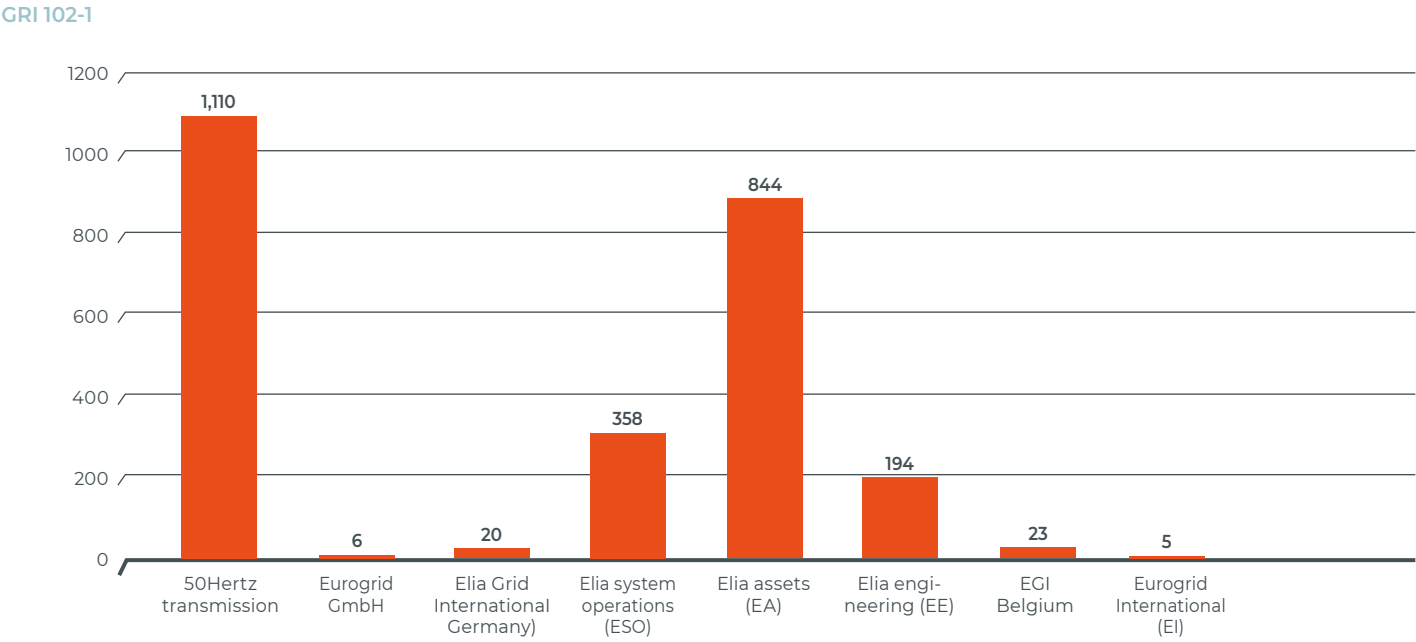
Any reference to **50Hertz** hereunder includes the following companies: 50Hertz Transmission and 50Hertz Offshore.



- Entities regulated in Belgium
- Entities not regulated in Belgium
- New entity



1.2.1. Breakdown by company and number of employees



1.2.2. Composition of the workforce

GRI 102-8, GRI 102-41, GRI 405-1, GRI 102-7

	2017	2018	2019
<b>Total employees Elia Group</b>	2,385	2,441	<b>2,560</b>
<b>Total employees Elia</b>	1,350	1,366	<b>1,424</b>
<b>by gender</b>			
– men	1,094	1,105	<b>1,150</b>
– women	256	261	<b>274</b>
<b>by responsibility level</b>			
director	8	8	<b>8</b>
senior manager	33	29	<b>33</b>
direct leader	510	540	<b>577</b>
white collar	799	789	<b>806</b>
blue collar	0	0	<b>0</b>
<b>total employees 50Hertz</b>	1,035	1,075	<b>1,136</b>
<b>by gender</b>			
– men	817	833	<b>869</b>
– women	218	242	<b>267</b>
<b>by responsibility level</b>			
director	6	6	<b>4</b>
senior manager	40	40	<b>43</b>
direct leader	93	80	<b>81</b>
white collar	896	949	<b>1,012</b>
blue collar	0	0	<b>0</b>

Belgium represents 56% of Elia Group workforce while Germany represents 44%.

Overall, 21% of Elia Group's employees are female. For direct leaders and above, 21% of Elia Group's leaders are female.

In 2019, all of German and Belgian employees were covered by collective bargaining agreements.

N.B. All technicians of the group being considered as white-collar workers, there are no blue-collar workers.

1.3. Policies

1.3.1. Values, principles, standards and code of conduct

GRI 102-16, GRI 102-17, GRI 102-19, GRI 102-20, GRI 102-26, GRI 102-32GRI 102-33, GRI 205-1

The 6 building blocks and the 6 aspirational values of Elia Group are described in the Activity Report 2019 on pages 92-93. They reflect fundamental principles that are deeply rooted within Elia Group.

Those values are also the basis of our **Code of Ethics**, guidelines and policies underlying all the Elia Group's activities.

Elia Group's integrity and ethics are a crucial aspect of our internal control environment. The Management Committee and management regularly communicate about these principles in order to clarify the mutual rights and obligations of the company and its employees. These rules are disseminated to all new employees, and compliance with them is formally included in employment contracts. The Code of Ethics as well as the guidelines also helps to prevent employees from breaching any legislation on the use of privileged information or market manipulation and suspicious activities. Management consistently ensures that employees comply with internal values and procedures and – where applicable – take any actions deemed necessary, as laid down in the company regulations and employment contracts.

The Code of ethics, guidelines and policies define what Elia Group regards as correct ethical conduct and sets out a number of principles on the avoidance of conflicts of interests. Acting honestly and independently with respect to all stakeholders is a key guiding principle for all of our employees. Elia's Code of Ethics expressly states that the Group prohibits bribery in any form, misuse of prior knowledge and market manipulation. Elia Group and its employees do not use gifts or entertainment to gain competitive advantage. Facilitation payments are not permitted by Elia Group. Disguising gifts or entertainment as charitable donations is also a violation of the Code of Ethics. Moreover, the Code of Ethics prohibits all forms of racism and discrimination, promotes equal opportunities for all employees, and ensures the protection and confidential use of IT systems.

All parties involved in procurement must abide by Elia Group's Supplier Code of Conduct and all associated regulations. Elia Group's **Supplier Code of Conduct** is published internally and externally and is based on four pillars: confidentiality, non-discriminatory treatment of suppliers, transparency, and avoidance of conflicts of interest. The management of the employees involved in the procurement and payment processes regularly provides opportunities for training and awareness-raising on these topics.

By virtue of its legal status as an electricity transmission system operator, Elia and 50Hertz are subject to a large number of statutory and regulatory rules setting out three fundamental principles: non-discriminatory conduct, confidential processing of information, and transparency towards all electricity market players as regards non-confidential market information. With a view to meeting these specific obligations,

Elia has drawn up an Engagement Program, which has been approved by the Corporate Governance Committee. The Compliance Officer reports annually to the relevant regulatory and corporate bodies in this regard.

Any violations of these codes can be reported to the Compliance Officer, who handles them objectively and confidentially. The Compliance Officers of Elia and 50Hertz declare that no such violations were reported by internal employees or external stakeholders in 2019. Internal Audit's annual programme includes a number of actions and verification audits designed to act as specific safeguards against fraud. Any findings are systematically reported to the Audit Committee. In 2019, no relevant findings relating to fraud were reported in the specific audit-reviews of the fraud risks in the financial and purchasing processes.

Moreover, during the reporting year the group did not receive any significant fines or non-monetary sanctions for non-compliance with laws and/or regulations in the social and economic area.

GRI 419-1

Moreover, during the reporting year the company did not receive any significant fines or non-monetary sanctions for non-compliance with laws and/or regulations in the social and economic area.

1.3.2. Joint projects

We are convinced that a stronger cooperation between our two TSOs will make all entities more fit-for-future, unlock additional potential, create value, safeguard long-term sustainability and enrich the Group's culture. To realise this common ambition, we are reinforcing the collaboration on different levels and in different activities by establishing Group functions and a new Elia Group Committee.

Elia Group has set up the Elia Group Committee (EGC). Its role is to define and steer the development of Elia Group effectively and efficiently by formulating recommendations to the Executive Committees of the two TSOs in the domains covered by Group functions covered by Group functions such as Reputation.

1.3.3. Sustainability ambitions at group level

GRI 102-15, 102-29

In 2019, we launched internally the **Sustainability initiative** with the aim of better embed sustainability into our strategy and processes.

Sustainability initiative (Ambitions)

The fight against climate change is one of the biggest challenges humanity faces in the 21<sup>st</sup> century. Elia Group is assisting in the move towards a decarbonised society by facilitating the energy transition. In line with our Vision ‘A successful energy transition for a sustainable world’, Elia Group is actively building the grid, systems and markets that will enable the **decarbonisation of our society**. We believe that this should be our highest priority, as it will not only help society, but also drive our organic growth now and in the future.

We have to choose our actions and prioritize the allocation of our resources so that we can maximize our impact in facilitating and **accelerating the energy transition**.Where can our expertise make a real difference for the realization of energy transition? By the realization of infrastructure projects integrating renewables definitely but also by acting as facilitator on further electrification (e.g. sector coupling) or by giving the customer direct access to the benefits of the energy transition (e.g. Internet of Energy). Also **digitalization of our business** by integration of blockchain, artificial intelligence, etc. enables us to better anticipate the context of the energy transition and to maintain and even increase the service level to the customer.

In order to make our impact on energy transition (CO<sub>2</sub> reduction) more explicit in the choices we make and the priorities we set, we are developing a methodology to assess impact on our portfolio of projects (capex and corporate).

The company's own corporate sustainability profile needs to be in line with the above mentioned ambition. The Group therefore aims to be among the **top European TSOs** with respect to sustainability performance. As a TSO serving society, our commitment to sustainability and performance is crucial in order to be credible and resilient. For Elia Group, environmental protection and the conservation of resources is an integral part of our culture and strategy.

Therefore Elia Group defined **5 lighthouses projects** integrated into his strategy linked to the most impactful SDGs.

CLIMATE CHANGE

- Reduce CO<sub>2</sub> emission intensity (tCO<sub>2</sub>e/GWh transported) by 42% (2°C target)
- Become carbon-neutral on our own operations
- Maintain leading position in SF<sub>6</sub> insulation gas leak rate
- Aspire to an SF<sub>6</sub>-free grid

CIRCULAR ECONOMY

- Integrate eco-design and recycling requirements of our assets beyond compliance (pylons, transformers)
- Improve biodiversity towards 100% of our lines in forests
- Regenerate vegetation around substations and under pylons
- Zero tolerance on herbicides in substations

HEALTH & SAFETY

- Safety culture (zero fatalities)

HUMAN RESOURCES

- Be recognized as a company valuing and promoting diversity and inclusion

ETHICS

- Zero tolerance towards ethical breaches

In parallel to this, we launched an analysis to better understand our impact in terms of Sustainable development goals (SDG's). The results are described hereunder.

Sustainable Development Goals

As already in 2018, the Elia Group had decided to widen its view on sustainable business management and to integrate the Sustainable Development Goals (SDG) into a sustainability framework. In a first step, 11 of the 17 internationally valid sustainability goals were identified and clustered from top and high to medium priority.

In order to better understand the risks and opportunities that SDGs present for their own business activities, 50Hertz and Elia launched a quantitative assessment along the value chain in the 2019 reporting year. This allowed the 2018 perspective, which only took into account their own operations, to be fundamentally expanded. The science-based approach of the S&P Global consulting subsidiary Trucost was assigned for the analysis. The internal prioritisation was completely confirmed by the analysis (for the highest priority) and also largely confirmed for the high priority.



What are the Sustainable Development Goals?

In 2015, the international community of states represented by the United Nations has agreed 17 goals for sustainable development.

Within the context of Agenda 2030, these global goals, which apply equally to all states, are intended to reduce inequalities, promote equal opportunities and stimulate sustainable economic growth.

All - governments and companies alike - are called upon to meet this challenge, but also to focus on opportunities and risks and tap the potential of sustainability.

Opportunities



Risks



The Elia Group has a strong, positive influence on SDG 7 "Affordable and Clean Energy" with its business model of increasingly integrating sustainable energies into the grids. At the same time, this also creates positive influences that lead to sustainable cities and communities (SDG 11). The Group contributes to a good employment situation and stable growth in the various regions of its grid areas, thus strengthening SDG 8 "Decent Work and Economic Growth". Overall, Elia Group's business activities and revenues contribute 100% positively to SDGs.

This positive influence is offset by both opportunities and risks, the alignment of which with the corporate strategy is carefully examined. These include, for example, more intensive investigation of the effects of climate change and other related risks on the Group's own business activities and those of the supply chain.

Materiality matrix

GRI 102-15, GRI 102-46, GRI 102-47, GRI 103-1

End 2019, beginning 2020 a survey was launched within 50Hertz and Elia to determine themes material for Elia Group.

The materiality matrix determines the relevant sustainability topics for the Elia management and stakeholders and was prepared with the department heads from Elia Group.

In a subsequent phase, this materiality matrix will be used as a basis for engaging with external stakeholders.

In a comprehensive approach, the respective stakeholder groups, their concerns and relevant/important topics were identified and clustered in a matrix. The so-called materiality matrix determines the relevant topics on which Elia has economic, environmental and social impacts and their influence on our stakeholders.

A survey was conducted within Elia Group, all the senior managers and directors had to answer.

A second survey for our external stakeholders will be launched in 2022.

<b>Business and economic issues</b> <ul style="list-style-type: none"><li>• Cost and process efficiency</li><li>• Network availability and reliability</li><li>• System and market integration of RE</li><li>• Demand-driven grid development</li><li>• Sustainable/green financing</li><li>• Internationalisation and diversification</li></ul>	<b>Corporate Governance/Operating practices</b> <ul style="list-style-type: none"><li>• Corruption and bribery</li><li>• Business ethics</li><li>• Customer orientation and satisfaction</li><li>• Legal and regulatory environment</li><li>• Transparency and openness</li><li>• Risk management</li></ul>
<b>Labor practices/Employees</b> <ul style="list-style-type: none"><li>• Human development and training in the workplace</li><li>• Conditions of work and social protection</li><li>• Social dialogue and employee relations</li><li>• Employee health, safety and wellbeing at work</li><li>• Diversity and equal opportunities</li><li>• Recruitment strategy and talent acquisition</li></ul>	<b>Environment</b> <ul style="list-style-type: none"><li>• Environmental Management System</li><li>• Waste and hazardous materials engagement</li><li>• Greenhouse gas emissions and adaptation</li><li>• Energy consumption and efficiency</li><li>• Biodiversity impacts</li><li>• Emissions</li></ul>
<b>Community involvement/Stakeholder engagement</b> <ul style="list-style-type: none"><li>• Employment creation and skills development</li><li>• Sustainability in the value/supply chain</li><li>• Community involvement (incl. education and culture)</li><li>• Transparent dialogue</li><li>• Technology development and access</li><li>• Alliances with stakeholder groups</li></ul>	

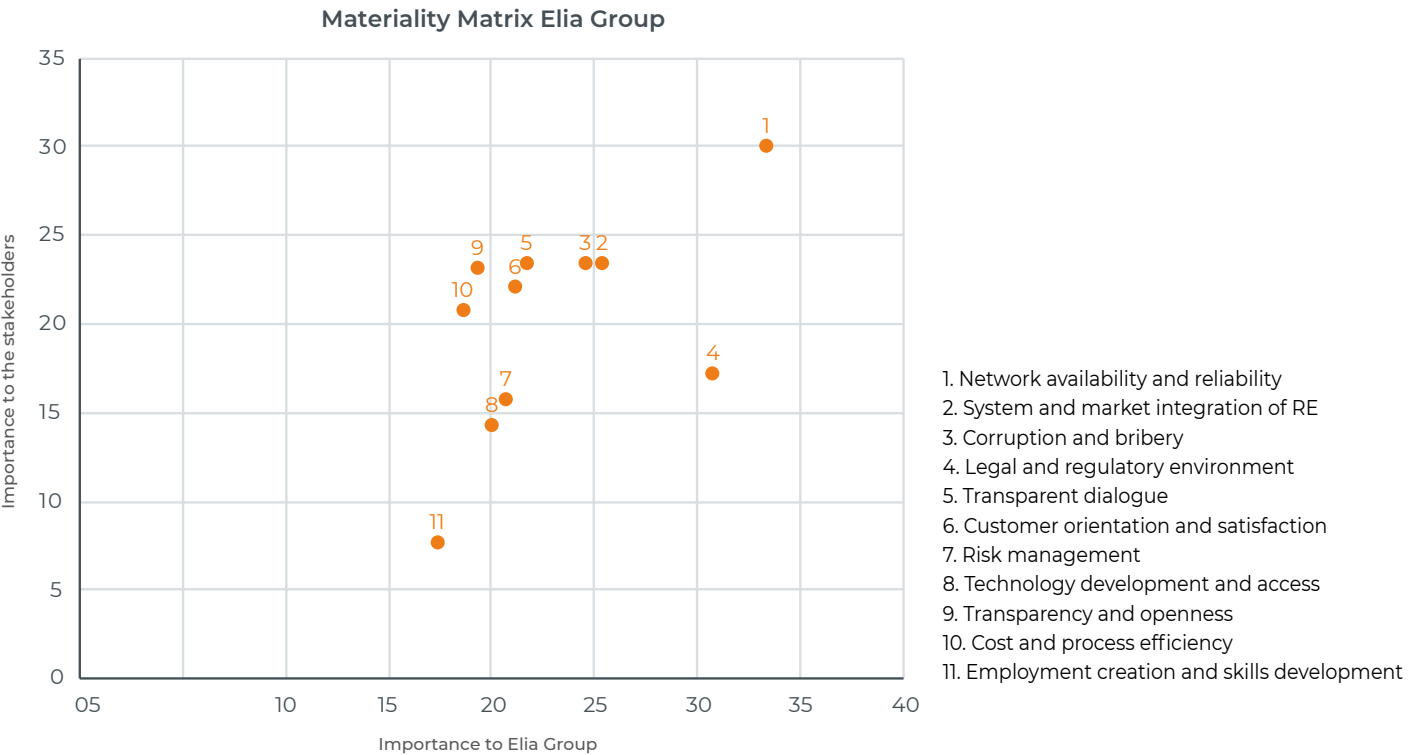
In the course of harmonizing sustainability reporting at the level of the Elia Group, the main economic, environmental and social topics of 50Hertz and Elia were combined in 2019 and an internal survey was conducted. The aim is to harmonize the different materiality analyses in a comparable way.

As a result, 19 material topics of high and very high importance were identified, which determine the guidelines for reporting and stakeholder dialogues of Elia Group. For 11 of these 19 topics, a broad correspondence between 50Hertz and Elia Transmission was identified. These topics are shown in the materiality matrix below.

For 8 of the 19 topics of high and very high importance, Elia Transmission and 50Hertz have a different focus on the importance for stakeholders or the own company. This different focus is due to both external and internal factors. The differing environment of infrastructure, regulatory framework and corporate culture in Belgium and Germany lead to a different assessment. This applies to the topics of demand-driven grid development, business ethics, human development and training in the workplace, conditions of work and social protection, social dialogue and employee relations, employee health, safety and wellbeing at work, recruitment strategy and talent acquisition, and alliances with stakeholder groups.

These 8 topics will be subjected to a detailed examination in 2020 and their allocation to the materiality matrix will be reviewed and adjusted if necessary. There are also planned to reconcile the new materiality matrix with the interests of the relevant stakeholders. This group includes shareholders, the public, non-governmental organizations (NGOs), politicians, regulatory bodies, investors, media, customers, suppliers and representatives of the Elia Group. This reconciliation is also planned for 2022.

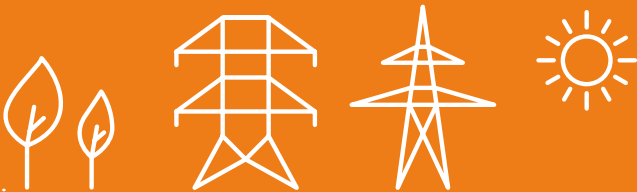
The above described approaches have shown a convergence of results, confirming the focus of Elia Group on the commonly identified priorities.





# 2. Elia in Belgium

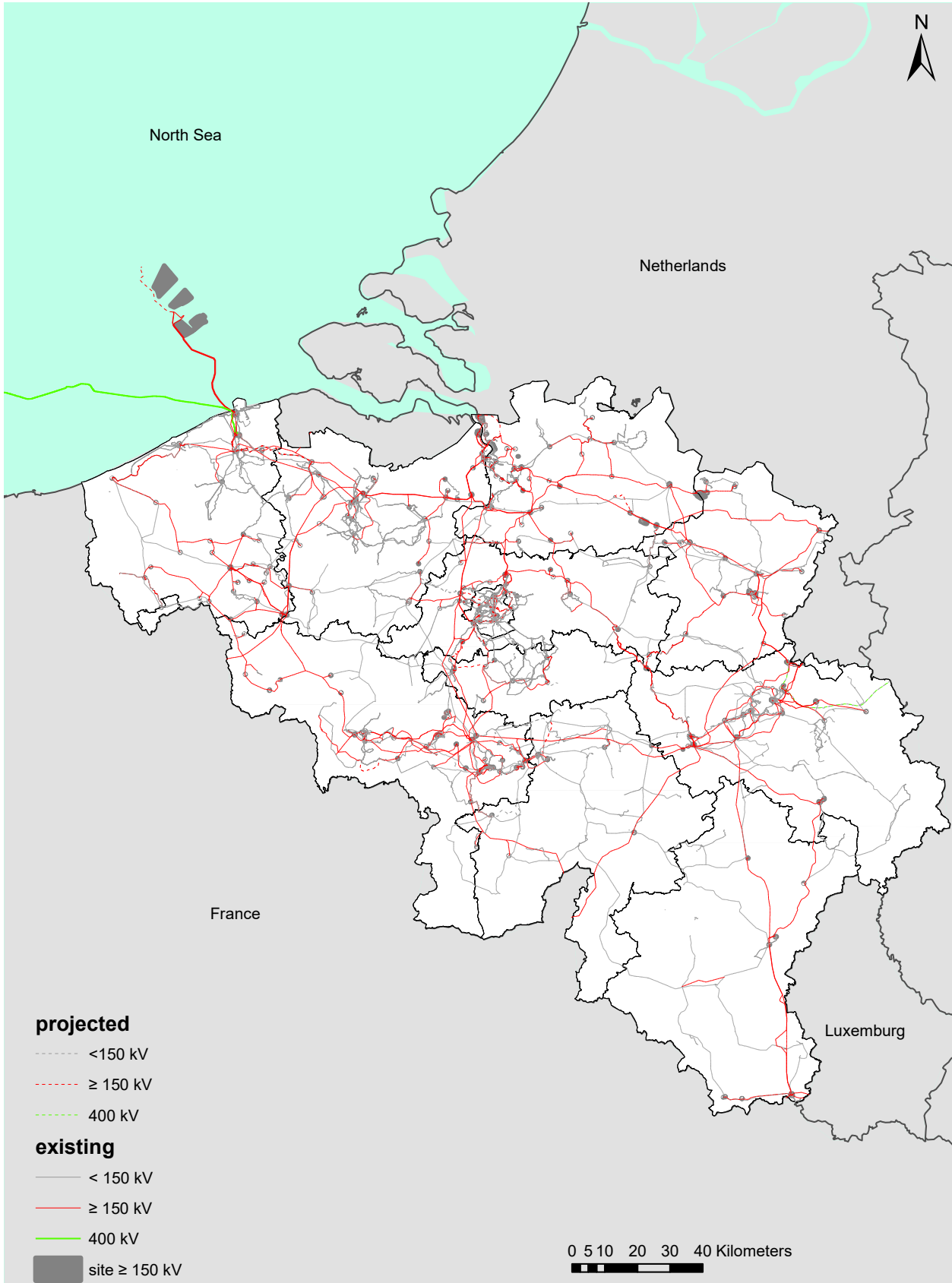
2.1. GRID	16
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# 2.1. Grid

## 2.1.1. Grid map



## 2.1.2. High-voltage lines

G4-EUS-EU4

	2017		2018		2019	
Voltage	Underground cabling	Overhead lines	Underground/ submarine cabling	Overhead lines	Underground/ submarine cabling	Overhead lines
400 kV (DC)	-	-	9	-	70*	-
380 kV	20	919	40	919	40	918
220 kV	5	301	47	301	135	300
150 kV	514	1,975	573	1,973	628	1,939
110 kV	-	8	-	8	-	8
70 kV	302	2,311	293	2,290	317	2,404
36 kV	1,968	8	1,938	8	1,917	8
30 kV	108	22	84	22	75	22
<b>TOTAL</b>	<b>2,917</b>	<b>5,544</b>	<b>2,984</b>	<b>5,521</b>	<b>3,182</b>	<b>5,599</b>

\* The Nemo Link interconnector – total length 140 km – is a joint venture (50/50) between National Grid Interconnector Holdings Limited, a subsidiary company of the UK's National Grid Plc, and Elia.

## 2.1.3. Substations and converters

	2017	2018	2019
# substations >= 150 kV	298	297	300
# substations < 150 kV	516	516	507
HVDC Converter station	0	1	1
<b>TOTAL</b>	<b>814</b>	<b>814</b>	<b>808</b>

Delivering the necessary grid infrastructure is key for the energy transition to happen. As we integrate more and more variable renewable electricity and as electricity exchanges at European level increase, our investment programme is vitally important to guarantee a reliable, affordable and sustainable energy system in the future. There is globally an increase in the length of underground cables installed and a shift toward higher tension.

### Major grid developments in 2019

- The Modular Offshore Grid (MOG) that connects offshore generation units, 4 wind farms in the North Sea, to the mainland was inaugurated in September 2019.
- NemoLink, the first subsea interconnector between Belgium and the UK is commercially operational since end of January 2019. The 140 km of subsea and underground cables electrically connect Belgium and UK providing both countries with improved grid reliability and access to sustainable generation.





## 2.2. Sustainability Management

### 2.2.1. Business model

GRI 102-1, GRI 102-2, GRI 102-6, GRI 102-7, GRI 102-9, SDG9

Elia is Belgium's high-voltage transmission system operator (30 kV to 400 kV), operating 8,781 km of lines and underground cables throughout Belgium and supplying thereby 11 million people with electricity, 24 hours a day, 365 days a year. Elia has also several customers – which are mostly large industrial companies – directly connected to its network.

Elia's main responsibilities are the development and maintenance of the grid, the management of the balance between the consumption and generation of energy and the facilitation of access to the market. Elia also develops innovative solutions in order to better integrate renewables into the system, balance the network and put the consumer really at the centre of the future energy system.

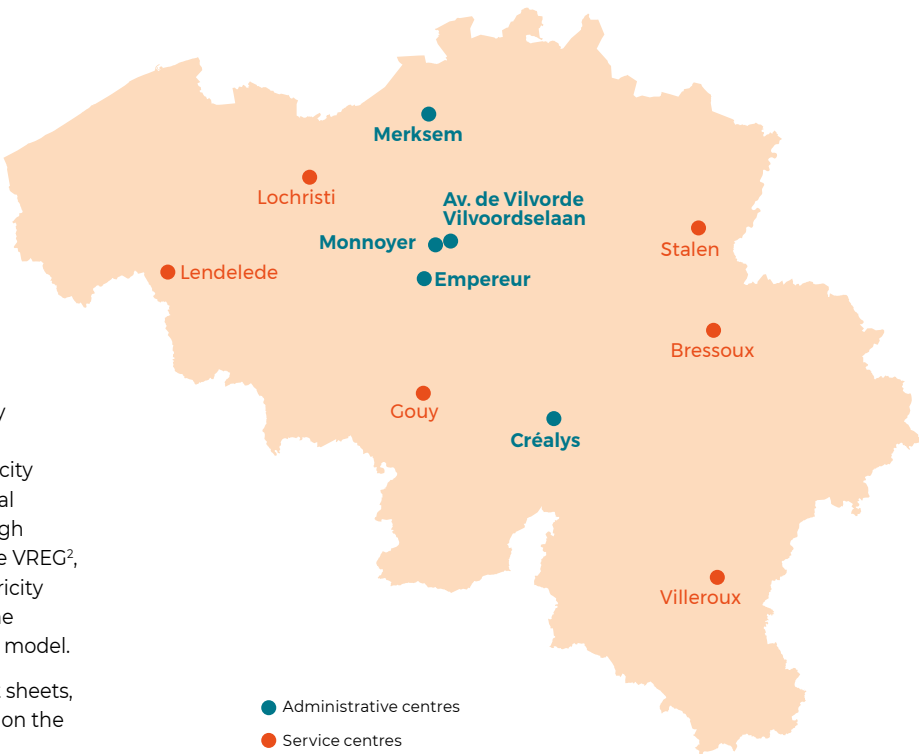
As the only operator of the Belgian high-voltage grid (including the offshore grid), Elia has a “natural monopoly” of the grid, and is therefore subject to regulatory supervision. Its public mission and responsibilities are an integral part of the legislation governing the Belgian electricity market. Furthermore, it's controlled by the CREG<sup>1</sup>, the federal regulator for the electricity market with regard to its very high voltage grid (110 kV-400 kV) and tariffs, and regionally by the VREG<sup>2</sup>, CWAPE<sup>3</sup> and BRUGEL<sup>4</sup>, the regional regulators for the electricity market with regard to its high voltage grid (30 kV-70 kV). The regulatory system has a substantial impact on the business model.

All the products and services are set out in detail in product sheets, which are available online or can be ordered as a hard copy on the 'Product sheets'<sup>5</sup> page.

### 2.2.2. Locations

GRI 102-3, GRI 102-4

To cover its activities in the entire country, Elia has several administrative centres<sup>6</sup> (control centres) and service centres<sup>7</sup> in Belgium. All the headquarters of Elia are located in Brussels.



1. CREG: Commission for Electricity and Gas Regulation.
2. VREG: Vlaamse Regulator van de Elektriciteits- en Gasmarkt.
3. CWAPE: Commission Wallonne pour l'Energie.
4. BRUGEL: régulateur bruxellois pour les marchés du gaz et de l'électricité/Brusselse reguleringscommissie voor de gas- en elektriciteitsmarkt.
5. [www.elia.be/en/products-and-services/product-sheets](http://www.elia.be/en/products-and-services/product-sheets).
6. Administrative centre: support services and national/regional control centre.
7. Service centre: branch/satellite office.

### 2.2.3. Memberships

GRI 102-12, GRI 102-13, SDG17

Elia is involved in various societies, associations, and initiatives in the field of renewable energies, climate and environmental protection, human rights and harmonisation of the European electricity market.

	Energy	Climate	Environment	Human rights
WORLD ENERGY COUNCIL	✓			
CIGRE - Conference Internationale des Grands Réseaux Electriques	✓			
Go15 - Reliable and Sustainable Power Grids	✓			
Centre on Regulation in Europe	✓			
ENTSO-E - European Network of Transmission System Operators for Electricity	✓		✓	
Coordination of Electrical System Operators	✓			
RGI - Renewables Grid Initiative	✓	✓	✓	
Energy Web Foundation	✓	✓		
The Shift	✓	✓	✓	✓
UNGC - United Nations Global Compact	✓			
Synergrid	✓			
Osiris	✓			
Conseil des Gestionnaires des Réseaux de Bruxelles	✓			
Vlaamse Raad van Netwerkbeheerders	✓			
Powalco	✓			
BECI - Brussels Enterprises Commerce and Industry	✓			
FEB - Fédération des Entreprises de Belgique	✓			
UWE - Union Wallonne des Entreprises	✓			
VOKA - Vlaams Netwerk van Ondernemingen	✓			
AGORIA	✓			
Communauté Portuaire Bruxelloise	✓			
COGEN Vlaanderen	✓	✓		

2.2.4. Values, principles, standards and code of conduct

GRI 102-16, GRI 102-17, GRI 102-19, GRI 102-20, GRI 102-26, GRI 102-32, GRI 102-33

The 6 values are now common within Elia group (see 1.3.1.)

The Code of Ethics oversees that discrimination within the organisation is not tolerated. This applies regardless of race, colour, sex, religion, political opinion, ethnic background, social origin, age, sexual orientation or physical capabilities.

In addition, it aims to ensure that all employees receive equal opportunities through fair judgement. Elia’s internal policy on discrimination and equal opportunities builds on the International Labour Organization convention C111 concerning Discrimination.

For Elia, business activity that is successful in the long term is achieved by acting in the best interest of the company as well as in the interest of society. This is reflected in the company vision "A successful energy transition - for a sustainable world".

Elia has expressed its commitment to responsible corporate management by being signatory of the United Nations Global Compact (UNGC) – the leading U.N. initiative for businesses to advance on the Sustainable Development Goals for 2030. Elia is also committed and actively working on topics included in the 10 Principles of the UNGC.

Under the overall responsibility of the Chief Community Relations Officer, the Environment & CSR department has defined a sustainability concept and a roadmap of measures for the continuous expansion of sustainability reporting. All environmental related reporting and sustainable communication to external stakeholders is coordinated by the Community Relations department

In addition, internal management systems based on recognized standards such as environmental management (according to ISO 14001) and early public acceptance are used in Sustainability core areas.

Finally, a network of ambassadors has been developed at the initiative of passionate colleagues, the group shares ideas, tips and tricks, successes and events, and organises workshops within the company through a cooperative process. Ideas are also shared via the intranet, allowing other interested colleagues to participate.

2.2.5. Relevant legal framework

Elia complies with applicable law. The business activities are subject to numerous regional, national and European legal regulations.

Further information on the laws and regulations relevant to our business activities can be found on our website.  
<https://www.elia.be/en/company/legal-framework>

2.2.6. Anti-corruption

GRI 205-1, GRI 205-2

As part of the Code of Ethics, a policy regarding bribery and corruption has been formulated. The Code of Ethics outlines what is considered bribery and corruption. Apart from barring any involvement in a practice (be it direct or indirect via our suppliers) where bribery or corruption has taken place, Elia also focusses on capacity building for our employees. Trainings allow employees to recognize behaviours or incidents where bribery or corruption may be at play, and provides them with a safe, anonymous space to report any such matter.

Since 2018, Elia has a policy in place that regulates the external reporting point for business integrity breaches. In the case, internal staff and external stakeholders anonymously report suspected integrity violations, an internal committee is convened immediately to deal with the case and take further internal action if necessary. The committee reports to the management of Elia annually and on an ad hoc basis as required.

In 2019, the external reporting point did not receive any tip-offs about corruption. In 2019, Internal Audit dealt with one complaint received via an anonymous letter. After internal investigation and discussions with the employee, it was decided to take no further action on this complaint. Elia also regularly provides all employees involved in the procurement process and financial process with training on the basics of procurement, anti-corruption and compliant behaviour.

2.2.7. Risk management

GRI 102-30, GRI 102-11, GRI 201-2

As part of its systematic risk management, Elia regularly surveys and assesses the following risk areas:

- Profit & loss
- Health & safety
- Cash
- Security of supply
- Reputation

Elia aims to avoid risks to the Company’s continued existence, to reduce risk positions as much as possible where feasible and to optimize the opportunity/risk profile. Risk guidelines set out how risks are systematically identified, recorded, assessed and monitored each financial quarter.

Risk workshops are held regularly with the risk owners (mostly the department heads). The corporate risk manager converses with the management to discuss the most significant risks and risk-related issues. In the area of sustainability, for example, these are occupational safety and new requirements from environmental legislation. Additionally, the risks assessed and monitored will be extended related to risk based on climate change.

2.2.8. Security

Critical infrastructures

In 2019, the Elia Security department started with the rollout of the new security policy for substations. Due to its importance, the focus on the implementation of a high security concept (i.a. deployment of a redundant detection system) for multiple Critical Infrastructures.

In order to verify the content of the Elia Security Plan for Critical Infrastructures, the ministry of Economy performed multiple inspections in Critical substations. The first feedback of the ministry is positive, detailed reports are to be expected in 2020

In line with the Security policy, the first strategic substations received a full upgrade concerning physical and electronic security measures. In addition, the implementation of the online access control system (to monitor access to high-voltage substations in real time) was started in 2019.

A new Security risk assessment (inventory, analysis, evaluation) was elaborated in 2019. The core Security risks were integrated in the corporate Risk Framework and the Elia Security Maturity could be defined. The aim is to mitigate all the identified risks to an acceptable level.

Elia's special focus on innovation allows it to respond to new (future) security challenges and the new methods adopted by criminals. Due to a close collaboration between the TDI (Transformation, Data & Information) Department and Security, Elia was able to obtain a first derogation for flights with drones that can patrol high-voltage lines beyond the visual line of sight. Two separate high voltage lines in both Wallonia and in Flanders were overflowed. This providing Elia the opportunity to determine if the usage of drones is efficient for supervising the Grid. The outcome of the first flights is expected in 2020.

Emergency and restoration

G4-EUS-DMA Disaster/ Emergency Planning and Response

Should an electricity crisis occur, as a result of natural disasters – such as extreme weather conditions –, malicious attacks or a fuel shortage, Elia has set up a crisis management which consists in 3 main plans:

- The **emergency plan** describing the internal crisis organization and related procedures following the Standardized Emergency Preparedness Plan (SEPP) methodology developed by Crisis & Emergency Management Centre (CEMAC)<sup>8</sup>
- The **system defense plan**: automatic and manual measures aiming to prevent a blackout at any cost, to limit the extension of disturbances and to stabilize the electric power system when in Emergency State, in order to return to Normal or Alert State as soon as possible with minimal impact on grid users  
In accordance with the system defense plan, Elia has established a load shedding plan containing an amount of demands to be manually or automatically disconnected, when necessary to prevent the propagation or worsening of an electricity crisis.
- The **restoration plan**: set of actions that can be used after a disturbance with large scale consequences (e.g. blackout) to bring the electricity system back to the normal state

Elia regularly trains its crisis teams by means of simulated exercises, e.g. the system operators are prepared for crisis situations by means of theoretical and practical trainings on a real time simulator.

IT

The further reinforcement of the robustness, security and protection of our IT and network systems is a key recurring component in preserving the confidentiality of critical data.

Best practices and information are exchanged at a national level in the utility sector (Synergrid), as well as on a European level (ENTSO-E). We evaluate the threat landscape and evolutions to be able to put the right risk mitigation measures into action.

A number of concrete measures from 2019 in this field are listed below:

- Monthly external scanning of Elia's external perimeter (Elia's public IP addresses) in order to assess the potential vulnerabilities of Internet applications with regard to possible cyber risks.
- In 2019, there was an external maturity assessment with regard to IT risks and the maturity of the organisation with regard to IT Security.

As from 2020, this topic will be handled at group level and joint actions will be launched in Elia Belgium and 50Hertz at the same time.

8. CEMAC is a Belgian centre of expertise active in the field of emergency planning, crisis & emergency management and crisis communications. It also describes the interfaces with the external stakeholders who are involved in an electricity crisis.



2.2.9. Political influence

GRI 102-16, GRI 415-1

This is the responsibility of the Public & Regulatory Affairs and External Relations department.

The different governments at federal and regional level give us our license to operate and the regional government are also competent for giving the authorization to build the infrastructure. With this regulated monopoly, we have a duty to accomplish our tasks in the interest of society complying with all regulations pertaining to the operation of the transmission system. Besides, thanks to our wide portfolio of activities, we are the only player at national level with a global view on the electricity system but also including a regional and local approaches. This puts us in a unique position to provide analysis, advice

and recommendations to public authorities, so that informed decisions can be taken.

Elia Group aims to involve political stakeholders and regulators as early as possible. This gives all parties a chance to outline their point of view, improves the information flow and builds up trust.

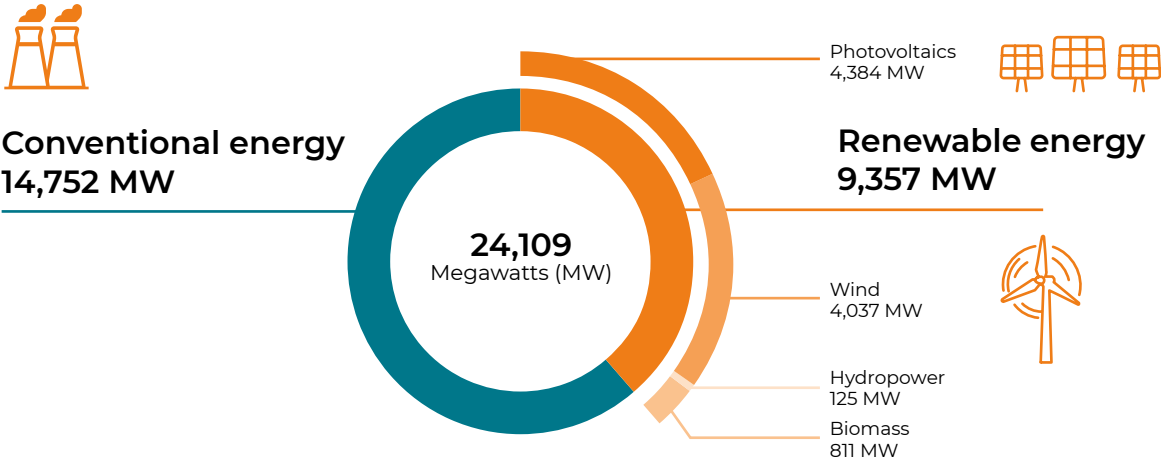
Elia ensures that employees who are active in terms of social and energy policy are guided in their communications and their actions by clearly defined principles. In this respect, a Corporate Reputation Committee has been set up the coordinate the different contacts with (political) stakeholders. Furthermore, Elia is registered in the EU Transparency Register and is committed to its Code of Conduct.



2.3. Energy – Market and integration of renewables<sup>9</sup>

2.3.1. Installed capacity

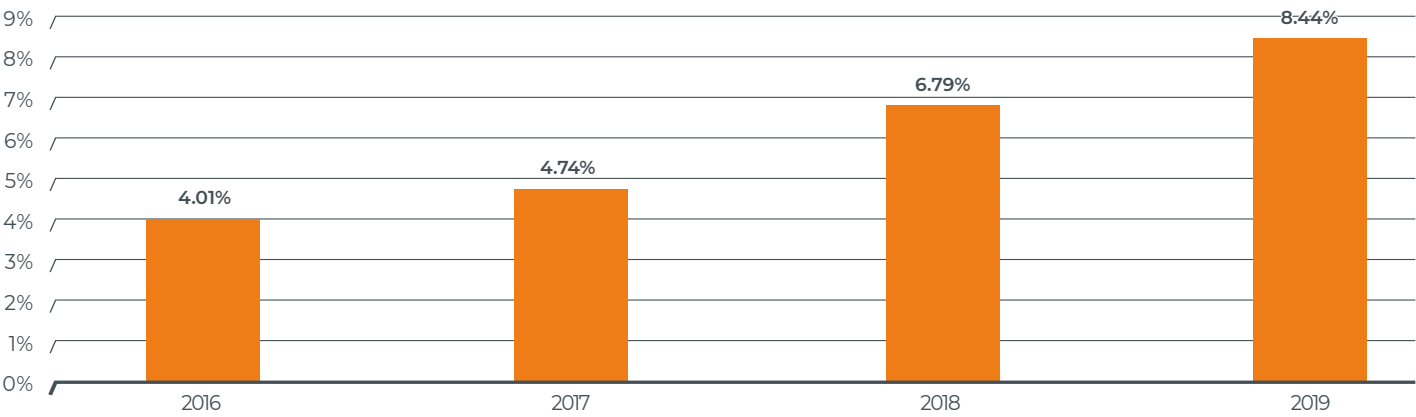
GRI 302-2, SDG7



The installed capacity in Belgium is mainly natural gas and nuclear energy but the share of renewables sources is steadily increasing.

2.3.2. Evolution

DEVELOPMENT OF THE RE SHARE IN ELECTRIC SUPPLY IN ELIA GRID AREA



The Modular Offshore Grid (MOG), inaugurated in September 2019, connects offshore generation units, 4 wind farms in the North Sea to the mainland.

9. Sources: statbel, febeg

2.3.3. Energy import & export

GRI 102-6, GRI 302-2



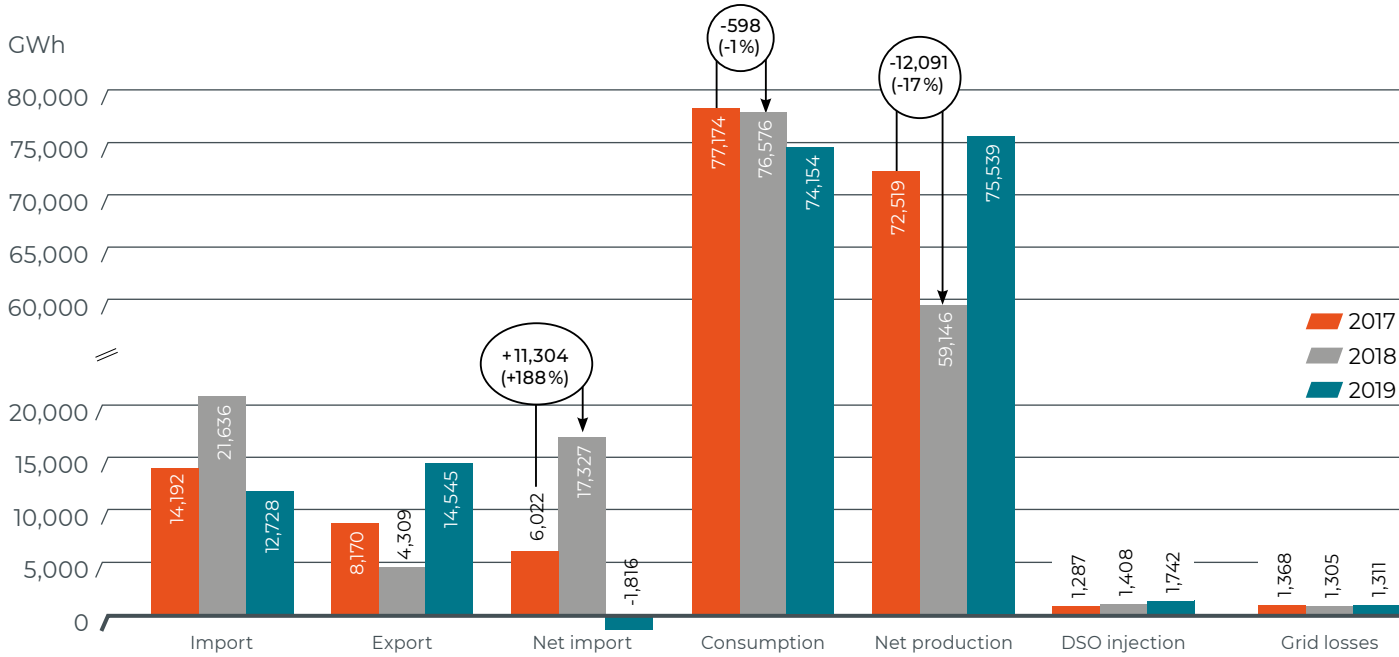
Since 2019, there is a new interconnection, between Belgium and the United Kingdom via the Nemo Link connection.

The first interconnector with Germany (project ALEGrO) is currently under construction.

Belgium exported more electricity in 2019 than it imported. This in contrast to 2018, which stood out with a significant level of electricity imports due to the unavailability of some nuclear reactors. This level of exports must be addressed globally and in the context of an increasingly European market logic. It is mainly explained

by the good availability of the electricity generation facilities in Belgium (in particular the nuclear power units). The development of interconnections (i.e. connections with neighbouring countries) also plays a role in the circulation of these electricity flows.

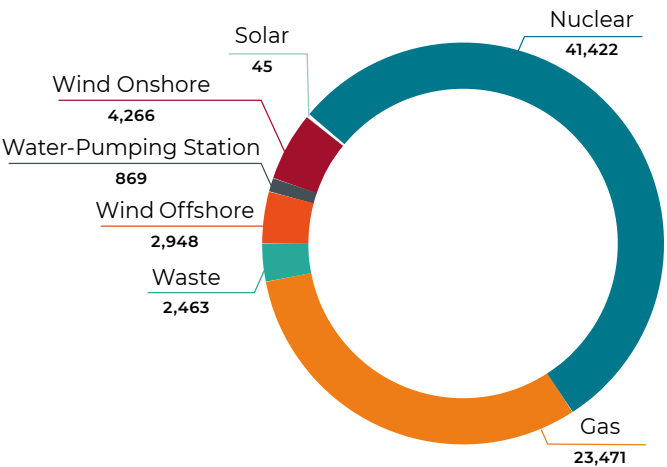
2.3.4. Energy balance



Consumption in Belgium increases during the winter months. This stresses the importance of international interconnections and reliable and sufficient domestic production.

Performance of production sources (energy mix)

ENERGY MIX 2019 [TWh]



In 2019, 54.9% of the energy produced in Belgium came from nuclear production units. The production values from nuclear power are significantly higher than those of 2018 (46%), which was marked by the significant unavailability of several reactors, especially during the last months of the year. This figure is in line with the figures for 2017 (50%).

Renewable energy production (offshore/onshore wind and solar only) increased by 38% in absolute terms compared to 2018 (5.46 TWh in 2019 compared to 3.95 TWh in 2018). Relatively high solar generation in the summer months and higher wind generation in the winter months constitute the main part of renewable generation.

2.3.5. Grid losses

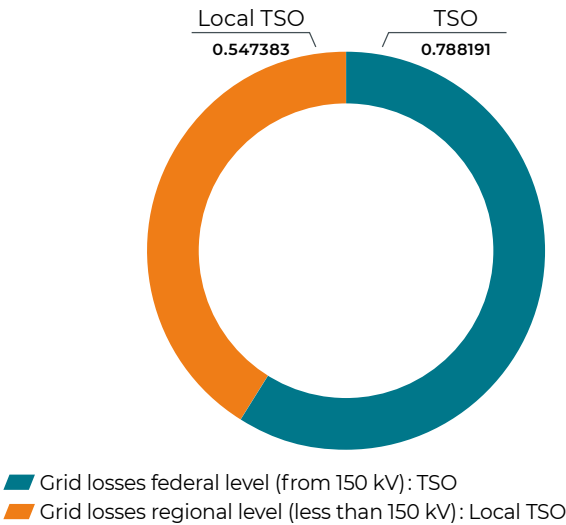
Grid losses are the difference between the amount of electricity entering the Elia grid and the amount of electricity supplied. They are unavoidable when transmitting electricity and dependent on i.a. voltage and length. They occur in the form of current heat losses in transmission lines, in transformers and other system elements as well as leak and corona losses.

In Belgium, there is a distinction between two categories of grid losses:

- Losses on the grid monitored on the federal level (> 150 kV) compensated following the federal legislation;
- Losses on the grid monitored on the regional level (< 150 kV) compensated following an approach specific to each region

GRID LOSSES (TWh)

G4-EUS-EU12



- Grid losses federal level (from 150 kV): TSO
- Grid losses regional level (less than 150 kV): Local TSO

The high-voltage direct current (HVDC) technology is more suitable than conventional three-phase alternative current technology for transmitting large quantities of electricity with low grid losses and optimal control over long distances.

Nemo Link, the interconnector with UK uses this technology as well as our ALEGrO project that will provide interconnection between Elia's grid and the German grid. Elia and 50Hertz are considering an evaluation project together, the aim of which is to compensate grid losses with renewable energies in order to reduce the CO<sub>2</sub> footprint in Scope 2 (see 2.9.5.).





## 2.4. Grid reliability

### G4 EUS Security of Supply

In order to meet electricity demand at all times, Elia must ensure the reliability of its grid to its customers<sup>10</sup>. As a transmission system operator (TSO), Elia provides an infrastructure with adequate electricity inter-connections for well-functioning markets and systems which forms the best guarantee of security of supply. However, even where markets and systems function well and are interconnected, the risk of an electricity failure exists.

The set of actions set up to cope with a large-scale electricity failure caused by an exceptional event<sup>11</sup> is described in section 2.2.8. Security – Emergency plan and restoration.

The following section covers the grid interruptions caused by less serious incidents.

### 2.4.1. Grid availability and interruptions

#### Grid interruptions

In order to assess the grid availability on one year, we record the number of incidents leading to at least one customer interruption that lasted more than 3 minutes (international standard) and for which Elia is responsible. Any interruption caused by customer errors, thunderstorms, third parties, birds, etc. are not considered here.

#### GRID INTERRUPTIONS (NUMBER INCIDENT)



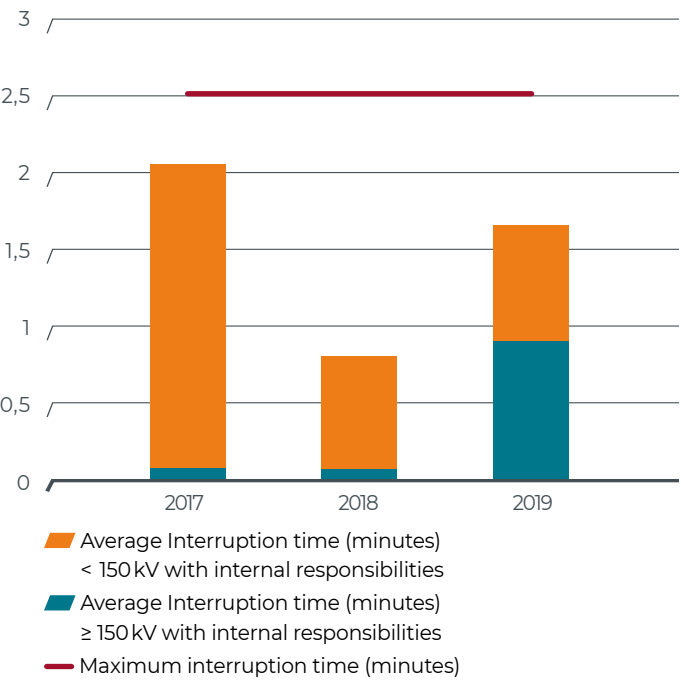
No exceptional event occurred in 2019.

The majority of interruptions take place on the local transmission network (< 150 kV) as most customers are connected to the local (regional) transmission grid rather than the federal transmission grid.

When discussing grid interruptions, the **average interruption time** (AIT)<sup>12</sup> is also considered. It represents the equivalent interruption time if all the customers connected to the grid had been interrupted the same way (i.e. during the same time) during the observation and is calculated as Energy Not Supplied / Yearly Average Power.

The **Maximum interruption time** is the reference value used for calculating the Average Interruption Time (AIT)<sup>13</sup> incentive relating to continuity of supply by the Belgian federal regulator, the CREG. For the period 2016-2019, its value was 2.55 minutes.

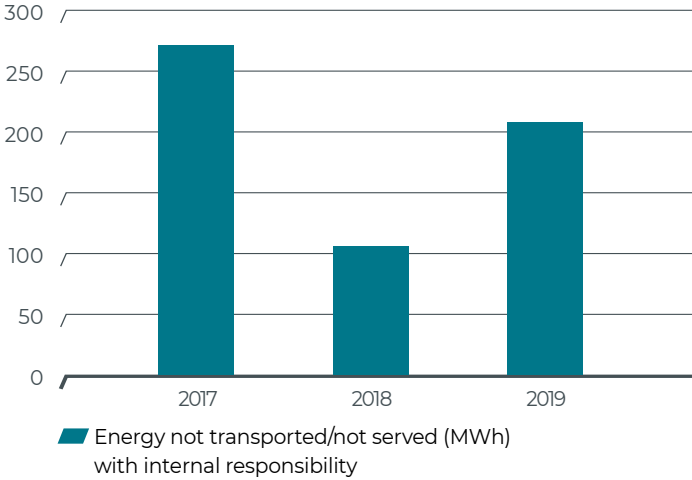
#### AVERAGE INTERRUPTION TIME (MINUTES)



The **average interruption time** on the Belgium grid, (i.e. the sum of the AIT on the regional and federal grids) has remained below this reference value over the last three years.

Energy not supplied (ENS) refers to all energy not supplied to our customers during outages of more than three minutes caused by Elia's internal problems. However, it does not take into account the impact of major events.

#### ENERGY NOT TRANSPORTED/NOT SERVED (MWH)



The ENS score achieved is higher than last year due to several technical failures i. a. as consequences of the heat waves on our utilities.

#### Grid availability

Onshore availability represents the availability of the interface points between the Elia grid and the customer's grid. It takes into account all the interruptions caused by intrinsic risks (weather, third parties, animals outside building, etc.) or by internal Elia problems (e.g. material failure, human error) which lasted more than three minutes, but excludes interruptions directly caused by Elia's customers.

#### CALCULATION METHOD:

	2017	2018	2019
Onshore grid availability at connection points	0.99999580	0.99999039	0.99999671

In 2019, the onshore availability in Belgium remained at a very high level (above 0.99999).

## 2.5. Human Resources

### GRI 102-7, GRI 102-8, GRI 401-2, GRI 401-3, GRI 405-1

### 2.5.1. Management approach

#### GRI 102-41

Elia owes its success entirely to the success of its employees. It is the responsibility of the Company to help them develop their skills, foster their health and commitment, involve them in decisions and guarantee equal opportunities for all.

Elia complies with international guidelines beyond the reach of its collective agreements and company agreements, such as the core labour standards of the International Labour Organisation (ILO: C87, C98 and C135) and the worker's rights in the UN Global Compact.

There were no cases of discrimination in 2019.

In 2019, Elia received the **Top employer** certification<sup>14</sup> for the second time in a row.



### 2.5.2. Head Count

#### GRI 405-1

The composition of the workforce of Elia Group is detailed in section 1.2.2. on page 8.

	2017	2018	2019
<b>Total employees Elia</b>	<b>1,350</b>	<b>1,366</b>	<b>1,424</b>
<b>by type of employment</b>			
- full-time	1,220	1,237	1,295
- part-time	130	129	129
<b>by gender</b>			
<b>Belgium</b> - men	1,094	1,105	1,150
- women	256	261	274
<b>by age</b>			
- below 30 years	208	196	211
- between 30 and 50 years	786	809	828
- over 50 years	356	361	385

10. Direct customers, distribution system operators, grid operators and all those having an access contract.

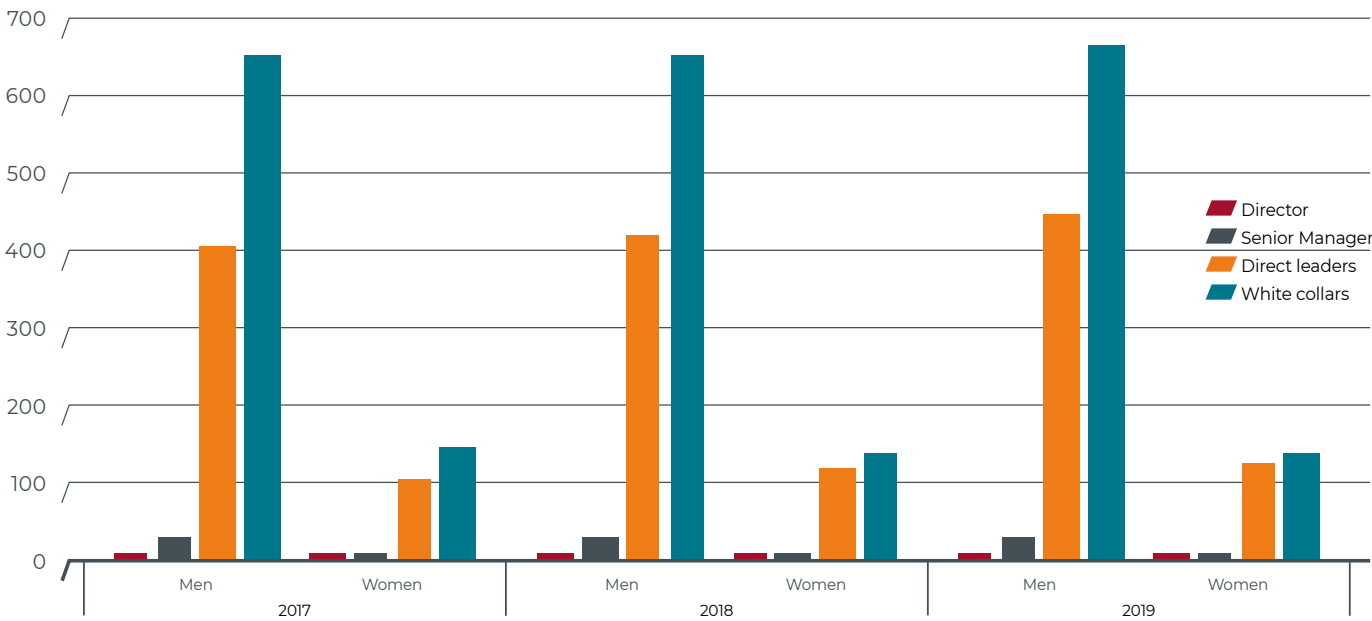
11. Exceptional events represent the number of natural disasters, storms or other climatological circumstances, nuclear or chemical accidents, explosions, and so on resulting in an interruption that lasted more than three minutes. No exceptional event occurred in 2019.

12. AIT is mostly calculated and communicated because it is a normalized and commonly used indicator very useful for benchmarking as it allows assessing the performance of the grid regardless i.a. the size of the grid or the number of customers connected.

13. Based on a seven-year average, this value was introduced in 2015 and validated by CREG for four years. This reference value has been reviewed during 2019, the new reference (2,1 minutes) will be used as from 2020.

14. The Top Employer certification is awarded in more than 115 countries to companies that are providing an excellent working environment and consider this a top priority. Over the past year, Elia has invested heavily in internationalisation and training. The award is an important accolade and an additional advantage when it comes to attracting new talent in an increasingly competitive labour market

BREAKDOWN BY RESPONSIBILITY LEVEL AND GENDER



	2017		2018		2019	
	Men	Women	Men	Women	Men	Women
Director	5	3	5	3	5	3
Senior Manager	28	5	25	4	28	5
Direct leaders	405	105	423	117	449	128
White collars	656	143	652	137	668	138

N.B. All technicians of the group being considered as white-collar workers, there are no blue-collar workers.

Women are well represented both at director and direct leader levels. To counter the underrepresentation of women in Senior Manager roles, two main actions have been put in place:

- The inclusion of selection criteria on leadership and soft skills in addition to technical skills
- Internal transfers from less to more technical areas.

The existing cultural change programme (MAD programme) will act as a catalyst.

2.5.3. Workability

GRI 401-1, GRI 401-2

Employees of Elia benefit from a family-friendly work environment and the opportunity to find a work-life balance.

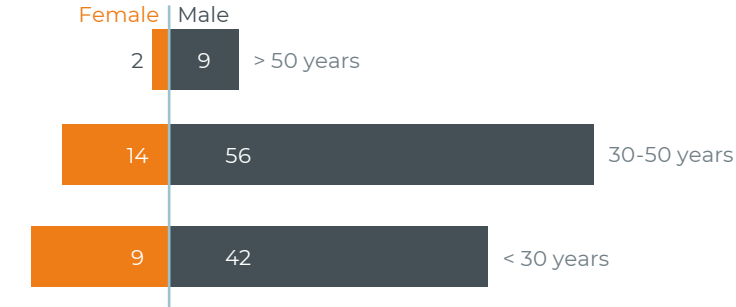
The early recognition and prevention of work-related illnesses and the ability to remain employable are also integral parts of occupational health and safety at Elia. In order to achieve these goals, Elia guarantees sufficient occupational medical precautions, the focus of which is on individual protection and individual prevention of health risks.

In addition, Elia regularly provides company medical consultations, vaccinations and advice on workplace ergonomics for all employees. A qualified counselling service is available to employees at all times in confidence in the event of individual stress, conflicts or problems of addiction. Employees can also take part in various public sporting events, such as the "20km of Brussels", inter-TSOs football league and cycling tour of Elia.

Calculation method

- The new hires include all new employees within the planned budget and all the employees that were recruited as additions to the original budget. Changes in positions are not included.
- The number of leavers is determined based on all employees leaving the company as a result of dismissal or resignation from 1 January to 31 December of the year concerned. Retiring employees are excluded from the scope.

NEW HIRES PER AGE AND GENDER



Turnover rate = 
$$\frac{\text{\# employees who left}}{(\text{\#employees begin of year}+\text{\#employees end of year})/2}$$

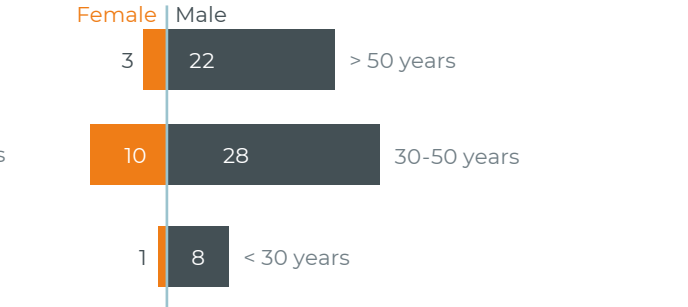
After an historical low number of leavers, Elia moves towards the Belgian private sector average.

There is always an exit interview for leavers.

Our recruitment team has a bit modified its recruitment method in order to recruit more efficiently by conducting more attitude- and behavior-oriented interviews.

Potential job applicants are invited to use an online “match tool” in order to evaluate if Elia’s company culture matches theirs, hence ensuring that they will work for an employer that suits them well.

EMPLOYEE TURNOVER BY AGE AND GENDER



Parental leave

GRI 401-3

In Belgium, every worker has the right to take parental leave. In order to take care of his child, the worker may for a period of four months, completely suspend the execution of his employment contract (full-time parental leave); the four-month period may, at the worker's choice, be divided by month and be taken part-time.

N.B. It is not possible to report on the total number of employees within Elia who are entitled to this type of leave as they may have already taken this leave while working at another company.

In 2019, 112 employees took parental leave.

		2017		2018		2019	
		Number	Rate (%)	Number	Rate (%)	Number	Rate (%)
TOTAL	Men	56	67%	57	66%	75	67%
	Women	28	33%	30	34%	37	33%
Full time parental leave (>=1 month)	Men	33	-	31	-	39	-
	Women	16	-	16	-	21	-
	Total	49	58%	47	54%	60	54%
Parental leave as a deduction of full time employment	Men	23	-	26	-	36	-
	Women	12	-	14	-	16	-
	Total	35	42%	40	46%	52	46%

RETIREMENT

G4-EUS-EU15

Percentage of employees eligible to retire in the next 5 and 10 years (With an assumed retirement age of 65 for exempts and 63 for not exempts)

	5 years	10 years
Exempts	2.86%	8.75%
Non exempts	10.12%	24.71%

N.B.: Data calculated for calendar year 2018, to be updated in the next year report



2.5.4. Employee survey

An Employee survey, the Sonar Survey, has been conducted within Elia in 2019, the results will be analysed and used in the coming years to improve our HR policy and also in Health and Safety to target issues related to employee wellbeing.

The next employee survey will take place in 2020.

2.5.5. Training

GRI 404-1

The Company can only reach its corporate goals if the staff is highly qualified and thoroughly informed about current developments. Employees are therefore offered individually tailored education and training opportunities and relevant additional qualifications. Within Elia, the Talent team is responsible for the proper development and deployment of talent.

The training offer within Elia can be categorized in 3 main subcategories:

- Technical competences and Safety competences which are required to perform tasks specific to our core business (training specifically focused on safety is detailed in 2.6.2.)
- Soft skills

Programs for upgrading employee skills and career transition assistance programs (i.a. innovation, “intrapreneurship”, leading the change, external education programs).

All of the employees receive regular performance and career development reviews.

AVERAGE HOURS OF TRAINING PER YEAR PER EMPLOYEE

	2017	2018	2019
men	59	58	43
women	48	40	18

Most of the training offered being the mandatory technical and safety competences for our technical employees on-field – where the women ratio is low – it is logical that the women’s training rate is low.

N.B. we spotted an error in our 2018 Sustainability report on the p. 24 chart; the men and women chart bars for 2016 and 2018 were inverted.

2.5.6. Remuneration policies

GRI 102-35 – GRI 102-38, GRI 405-2

Elia remuneration policy in Belgium is mainly focused on attracting and retaining our best talents, rewarding performance and supporting the culture of feed-back and continuous development when possible. The remuneration systems are refined according to the need to ensure that the Company remains an attractive employer for our staff in the future. For non-exempt<sup>15</sup> population, together with the Energy sector, Elia negotiates our collective agreements. For exempt population, our remuneration practice is based on internal equity combined with market competitiveness, maturity in the role, respect of the company values & safety leadership and performance regardless of gender. The total cash is completed by a competitive company benefits, health insurances and the offer of a company pension scheme. In addition, employees have the opportunity, to participate in the success of the previous financial year within the framework of an Employee Share purchase plan allowing all employees to purchase shares at a reduced price. Elia in Belgium transparently releases, as requested by the Belgian corporate Governance code, the total earnings of the management team in the consolidated financial statements in detail, listing the fixed and variable overall remuneration, as well as corporate pensions and any other benefits to Elia management team in Belgium. The features of the remuneration systems are explained with disclosures in the corporate governance declaration.

Elia is willing to disclose its annual total compensation ratio<sup>16</sup> (as done by 50Hertz); we are working internally on the calculation method and making every effort in order to achieve this soon.

2.5.7. Incentive systems

The remuneration system includes success and performance based elements, which offer an incentive for achieving common corporate goals and corresponding individual goals.

A number of goals relate to sustainable corporate management such as compliance with occupational health and safety guidelines.

2.5.8. Social Consultation and Dialogue

GRI 402-1

The social consultation at Elia foresees in the information, dialogue and negotiation through the legal consultative bodies like the works council, the committee for prevention and protection at work and the trade union delegation. These bodies consist of a representation of the employee and of the employer. Each body has an advisory mission relating to certain matters and a decision-making mission relating to certain matters. A group-wide exchange takes place in the European Works Council of Elia Group with representatives of Elia and 50 Hertz.

Besides these legal bodies, we involve our social partners in a social consultation and dialogue outside these legal bodies via the participation in workgroups to prepare together the realization of our strategy and so to be involved in the future of our organization.

2.6. Safety

GRI 403-1, GRI 403-2, GRI 403-3

2.6.1. Management approach

Elia operates facilities where accidents, asset failure or external attacks may cause harm to people. The safety and welfare of individuals (both Elia’s staff, the staff of the relevant affiliates and third parties) is a key priority and a daily preoccupation for the Group and the relevant affiliates. The Group and its relevant affiliates have put a Health and Safety policy in place and they undertake safety analyses and promote a safety culture.

As part of our commitment to safety, Elia Group is continuously working towards a zero accident rate for all types of work-related accidents and not only electrical risks.

Every employee is instructed on how to be conscious of hazards, report them immediately and submit suggestions for promoting safe and healthy working conditions. In 2019, occupational health and safety was once again one of the key projects in Elia’s business plan.

Therefore, occupational health and safety and injury and illness prevention are integrated into our corporate strategy. Elia Group applies the highest safety standards for our own employees, our contractors and everyone coming into contact with our infrastructure.

In Belgium, the GO FOR ZERO safety programme (begun in 2015 and planned until end 2019) aimed to embed the safety culture within Elia and with contractors and includes all projects.

After addressing training, tools and procedures, our main objectives in 2019 were the anchoring of the progress already made via the actions on operational dialogue and continuous improvement.

Supported by our culture change programme, Make a difference, we continuously underline the importance of three key behaviours: “Give and receive feedback”, “Have impact” and “One Voice”.

With our “Keep your distance” campaign, we also aim to protect the general public and some target audiences such as the building sector and populations living near to our installations with signs, leaflets and other information campaigns.

Besides the sector-specific risks, we also address the risks related to the wellbeing of our employees with the Care4Energy programme that ensures their wellbeing by targeting mental, physical, emotional and personal development.

We have also signed a 2 year-partnership with VIAS, the Belgian road safety Institute, in order to promote road safety among our employees and raising their awareness of the risks, but also of good practices as road users (motorists, cyclists and pedestrians) in our professional and private travels).

Wellbeing Survey

The survey was conducted in November to measure the evolution we made with our programma CARE4Energy and to start new initiatives in order to continue our progress.

Safety Weeks

Elia organises bi-annually Safety Weeks for its staff in an effort to raise awareness about the importance of safety. The programme included various communications, training sessions and team exercises, designed to ensure that everyone got involved and took the messages on board. In May 2019, the spotlight was on wellbeing. In September, we focused on “Safety leadership” i.e. behaviours that we no longer wish to see in the company (safety share).

2.6.2. Trainings (and information)

Elia continuously trains its staff. There is a compulsory training path for all field employees, which is periodically updated. Elia also provides training material, training and tests to contractors.

A Safety information newsletter is sent 6 times per year to our contractants.

Safety flashes are also sent out on an ad hoc basis when Elia identifies specific risks associated to working with specific tools or reminders of our good practices.

2.6.3. Inspections

Occupational health and safety is not limited to our own employees. The stringent Elia standards also apply to contracted companies working on Elia construction sites. During the contracting process and later, it is ensured that suppliers comply with Elia strict safety requirements.

Both the safety team as the management carry out inspections on a regular basis.

#SAFETY INSPECTIONS

	2017	2018	2019
by Safety	153	153	384
by Management	1,444	1,151	940

15. (non)-exempt refers to the right to be paid overtime; non-exempts are the white-collars employees, non-exempts are the direct leaders, senior managers and directors  
16 Ratio of the annual total compensation for the organization’s highest-paid individual in each country of significant operations to the median annual total compensation for all employees (excluding the highest-paid individual) in the same country.

2.6.4. Accidents (occupational injuries)

It is worth noting that due to big infrastructure projects (i.a. grid enhancement in the Port of Antwerp), the number hours of work performed by our contractors has increased significantly in 2019.

Safety is always Elia's number-one priority. Our goal is zero accidents, not only for our own employees, but also for our contractors, the distribution system operators and anyone else in the vicinity of our facilities. Therefore we provided figures for both employees and contractors.

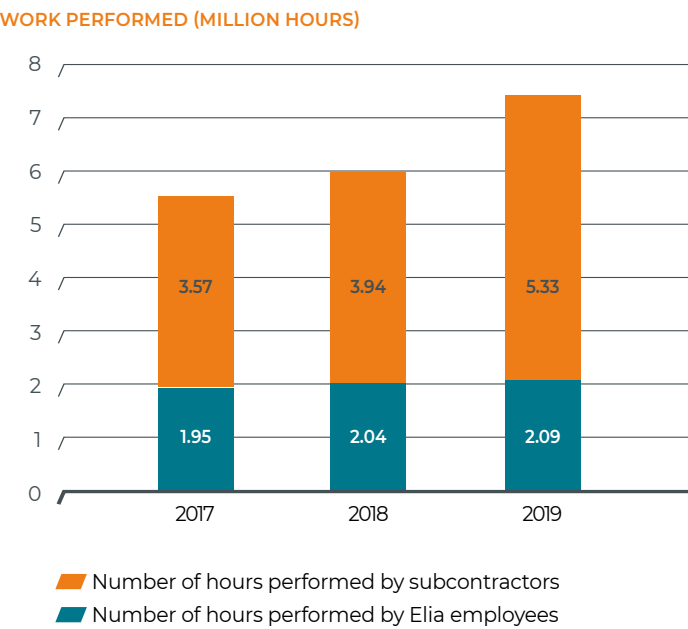
No fatal accident has been recorded in 2019.

			2017	2018	2019
Employees	#employees injured with at least 1 missed workday	Men	6	4	4
		Women	1	2	0
	#work related fatalities	Men	0	0	0
		Women	0	0	0
	Accident rate <sup>(1)</sup>		3.6	2.9	1.9
	Total recordable injury (TRI) rate <sup>(2)</sup>		7.7	7.3	5.7
Contractors	Accident severity <sup>(3)</sup>		0.10	0.11	0.05
	Fatal accidents	Nr.	0	0	0
	#accidents (with & without lost time)	Total	51	44	41
	Accident rate <sup>(1)</sup>		9.8	5.6	3.4
	Total recordable injury rate (TRI) <sup>(2)</sup>		15.1	11.1	7.7
Fatal accidents		Nr.	1	1	0

(1) Number of work related accidents with missed time (>1day) x 1,000,000/number of hours worked  
(2) Number of work related accidents x 1,000,000/number of hours worked  
(3) Number of missed days due to work-related accidents in calendar days x 1,000 / number of hours worked

Third parties

Elia must be notified of all works in the vicinity of high-voltage facilities so that the Contact Centre (see "2.8.3. Stakeholders Dialogues") can inform the relevant parties of the risks involved and the safety distances to respect. Third parties working in the vicinity of high-voltage facilities are indeed not always aware of the dangers of such installations; just entering the danger zone around high-voltage conductors can trigger a fatal electric arc, even without direct contact being made.



Despite extensive awareness-raising campaigns rolled out in recent years, works are however still being performed without being reported to Elia in advance. Elia is expanding its campaigns and is also working on more preventive measures.

No fatal accident has been recorded in 2019.

2.7. Suppliers, human rights and local added value

2.7.1. Suppliers and amount of spendings in EURO-Zone

SDG 12, GRI 102-9, GRI 204-1

2.7.1.1. Supply chain management

GRI 308-1, GRI 308-2, GRI 414-1

Elia has to comply with the European tendering rules. The application of these rules and other internal guidelines ensure that every supplier receives the same non-discriminatory and transparent treatment and that the information sent is treated confidentially. The selection process of suppliers and signing of new contracts are based on an evaluation of multiple criteria. The exposure to social or environmental risks is mitigated by the fact that every purchase is performed by a multifunctional team, including specific representatives from environmental and/ or safety. Depending on the purchase, the selection and awarding criteria are adapted to ensure that the selected supplier is fully aware of and therefore compliant with Elia's objectives and values.

Elements relating to Sustainability are integrated in the tendering contract, as well as within the general purchasing conditions, which are signed by the suppliers.

Elia is committed to translate its strong ethical principles to the procurement process, and to have a positive impact on its wider environment via the purchases performed, also avoiding risks flowing from non-compliance with certain rules and norms within the supply chain.

In 2018, Elia has elaborated a Supplier Code of Conduct, containing internationally recognised principles regarding ethical conduct, health and safety, environmental and social aspects. This code makes now systematically part of the documents for European purchasing procedures.

In order to instrument this set of principles as a lever for a positive supply chain impact, we set up a risk-based approach. For all purchasing categories we assess risks based on traditional supply chain risks and supply chain sustainability risks. A matrix is drawn up to prioritise supplier engagement activities.

To rationalise resource and impact management we aim to focus on the suppliers, who are most relevant from that risk perspective. In 2019, besides having suppliers electronically confirm that they accept the terms of the Supplier Code of Conduct, we are planning to roll out an in-house, Sustainability Supplier Self-Assessment questionnaire to high-risk suppliers and some hand-picked, medium-risk suppliers to receive detailed information on where improvements are needed.

2.7.1.2. Number of suppliers– EURO zone vs non-EURO zone

This data refers to the following Elia group companies: ESO, EA, EE, EI and EGI<sup>17</sup> Belgium.

	2017	2018	2019
# EURO-zone suppliers	2,374	2,305	2,271
# Non EURO-zone suppliers	92	116	109
# non-EURO countries within Elia suppliers	12	19	16

The number of suppliers outside the EURO-zone increases and is getting more diverse but it is still limited to 5%.

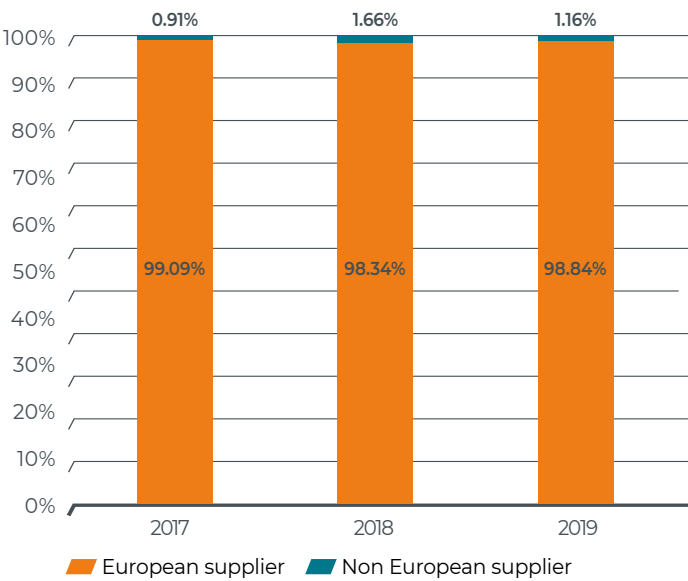
17. ESO: Elia System Operator, EA: Elia Asset, EE: Elia Engineering, EI: Eurogrid International, EGI: Elia Grid International



2.7.1.3. Split of yearly spend – EURO zone vs non-EURO zone

GRI 204-1

SPLIT YEARLY SPEND EURO VS NON-EURO



There was a strong increase in the total spend (+ 39%) in the last 3 years due to the new offshore activities.

Spending outside the EURO-zone is still limited to 1.2 % of the total amount. On top of that, it is concentrated in the same three countries of the previous year, albeit in a different order: the UK (67%) is still ahead but the USA (12%) took the second position and Switzerland (less than 1%) came in third.

Procurement outside the EURO-zone countries is very limited today and the environmental impact is also considered in the awarding criteria. Therefore, Elia complies with the high EU or Belgian standards in terms of environment, social responsibility and worker wellbeing.

A specific evaluation of the safety aspects is carried out separately since it is crucial for Elia to have suppliers on board that share the same values when it comes to the importance of safety.

2.7.2. Human rights

GRI 414-1

Elia is committed to its responsibility to protect human rights and naturally respects the right to privacy, personal safety, freedom of opinion and property rights of employees, residents and customers. Elia also assumes responsibility for compliance with social standards in the supply chain. For this reason, Elia is not only a member of the United Nations Global Compact, but is also committed to the core labour standards of the International Labour Organization (ILO).

There is only limited impact on human rights violation for Elia as Elia’s activities are mainly based within Europe. The large majority of purchases outside Europe are IT and consultancy related.

It is also reflected in one of the lighthouse projects of the Sustainability Initiative related to compliance and ethics (s"see 1.3.3. Sustainability Ambitions").



2.8. Stakeholder Engagement

2.8.1. Management approach

GRI 102-40

Stakeholder involvement helps accelerate infrastructure processes to the benefit of society. Elia regularly contacts and exchanges information with various stakeholder groups. As part of the materiality analysis process, Elia’s stakeholder environment was analysed and defined. Depending on the specific strategic topics, Elia has contacts with public authorities and administrations, political parties, local citizens, civil society (associations representing environmental, economic, agricultural or other interests) or clients directly connected to its network.

Stakeholder group	Mode of Engagement	Frequency	Main topics / expectations
Employees	– Performance management – Intranet – Donations	– Regular	– Employees - Human development – Employees - Wellbeing – Community involvement
Customers	– Customer satisfaction survey – Users’ Group / Working Groups – Elia extranet – Annual	– 4 to 6 times a Year	– Transmission services – Environment – Fair operating practices
Society	– Social events – Engagement via own employees	– Regular	– Community involvement
Shareholders	– Shareholder meeting	– Regular	– General corporate performance incl. the contribution to society
Regulators	– Reports – Communication	– Regular	– Fair operating practices

GRI 102-42, GRI 413-1

Within the company, a Corporate Reputation Committee has been created, presided over by the Chief External Relations Officer in order to follow up, for selected issues, on the different stakeholder contacts organized by the concerned departments within Elia.

Elia has many stakeholders’ initiatives. The method and frequency of engagement per stakeholder group and the link to the material topics are summarized in the table hereunder:

2.8.2. Public acceptance

GRI 102-29, GRI 102-43, GRI 102-44, G4 EUS Stakeholder Participation

Elia is convinced that an early involvement with all stakeholders is vital for the success of the energy transition and for the huge projects needed in order to achieve a sustainable grid expansion. The approach is to give all parties a chance to outline their point of view, improves the information flow and builds up trust.

A transparent and consistent approach aimed at meeting societal requirements and community expectations as far as possible will significantly improve the acceptance of projects. Furthermore, this approach has to be clearly communicated to the various stakeholders from the outset of the projects so that many concerns and anxieties can be addressed quickly.

To achieve this objective, the Community Relations department developed an integrated communication and public acceptance methodology, integrating stakeholders and communication actions in a systematic way in the grid development in order not only to control the risk of costs and timing but also to be able to realize the best project in the interest of the society.

As early as in the concept phase of our projects, we are already working closely with all stakeholders such as local communities, associations, NGOs and various government organizations. With this approach, we build sustainable relations with them and we are having more interactions, understanding, supports and buy-in.

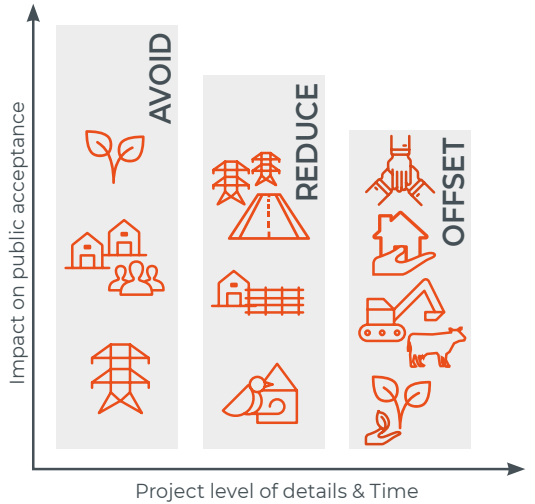


For the two most important projects in Wallonia and Flanders, Elia started also an early participation process with the stakeholders that represent the civil society and some regional experts. The objective was to define the best project and collect their opinion based on their different expertises.

For some topics like technology, we also started a participative work with academics to discuss the best technology's choices for both projects.

Elia also communicates and cooperates transparently throughout the entire development process. In addition to the legally required public information meetings in the context of the development of this type of project, we organize a series of "info-markets", which are information sessions for local residents.

We furthermore developed a public reference framework to mitigate the impact of the realisation of new infrastructure projects and to compensate for the remaining impacts.



**Avoid** – We systematically favour the scenario that has no impact on the public, landscape or natural environment. When developing the grid, Elia always seeks to use the existing corridors by upgrading the existing grid or building the new one practically on the same location than the old one.

**Reduce** – Impacts that are unavoidable are limited in intensity/size and/or restored. Where the construction of new infrastructure is necessary, Elia seeks, as soon as possible, to limit the potential impact by moving as far away as possible from inhabited or protected (nature, landscape, heritage) areas and by aligning on the existing infrastructure. Independant external offices and Elia's internal experts weigh out different alternatives scenarios and identify reduction measures.

**Offset** – Residual impacts that cannot be avoided, reduced or repaired are, as far as possible, compensated/mitigated. This in order to at least have a positive impact on another location.

Several initiatives were set up together with governors and mayors who are indispensable when it comes to bringing all the interested parties together.

2.8.3. Stakeholders Dialogues

GRI 102-21

Elia's Users' Group

Elia regularly organizes Users' Group meetings and working groups. The Users' Group provides a platform that allows Elia to maintain an ongoing dialogue with its main customers and partners. Every year, about four Users' Group plenary meetings are scheduled to inform the market participants and stakeholders about important and strategic topics related to our business. In support of these plenary meetings, there are three working groups which usually meet four times per year (more if necessary). They consist of the following:

- System Operation and European Market Design Working Group:** This working group mainly addresses topics related to the operation of the high-voltage grid and capacity calculation, as well as initiatives and developments linked to the European integration of the electricity markets.
- Belgian Grid Working Group:** This working group addresses issues associated with the Elia grid and related mechanisms, products and services that are of interest to Elia's customers.
- Balancing Working Group:** This working group mainly addresses operational, technical and market-related issues in order to prepare for the challenges Elia's balancing market will face in the coming years. Under the WG Balancing and WG Belgian Grid there are four task forces. The task forces are set up on an ad hoc basis to handle specific issues when necessary. Currently, two task forces are active:
- Implementation of Strategic Reserves Task Force:** This task force is aimed at informing and consulting market players and stakeholders about all relevant issues linked to the implementation of strategic reserves.
- CIPU Redesign (iCAROS) Task Force:** This task force aims to discuss topics related to future asset coordination procedures with the relevant stakeholders.

User' Group	Session
Plenary meetings	14.02.2019 - Tariff proposal 2020-23: public consultation
	09.04.2019 - Clean Energy Package
	06.05.2019 – Internet of Energy (IoE)
	28.06.2019 - Adequacy and Flexibility study
	19.09.2019 - Clean Energy Package - 70% rule
	03.12.2019 - Future-proofing the EU Energy System towards 2030

Customer Satisfaction survey

Every two years, Elia measures the customer satisfaction level among its key stakeholders (distribution system operators, grid users, producers, access responsible parties, Users' Group, etc.). The main objectives of this survey are to provide an overview of the Key Performance Indicators (KPI's) related to service quality and their evolution over time.

The latest surveys were conducted in 2018 with 250 stakeholders. The KPIs measured by the Elia Satisfaction Index, reflect how stakeholders evaluate the products and services of Elia in general, the Customer Effort Score, reflecting the ease of doing business with Elia, the customer satisfaction regarding account management and image etc. The overall aim is to identify our strengths and weaknesses among the different stakeholders in order to further optimise the customer relationship.

With regards to the Elia Satisfaction Index, Elia scored 66%, reflecting the high quality of products and services. The majority of the stakeholders still describe collaboration with Elia as "easy". Compared to 2016, there is a status quo on the evaluation of Elia's Key Account Managers. Regarding image, there were stable results for Elia's expertise and communication with a significant increase in the extent to which Elia innovates.

The survey highlighted the strengths that need to be maintained and priorities were set to further improve stakeholder satisfaction.

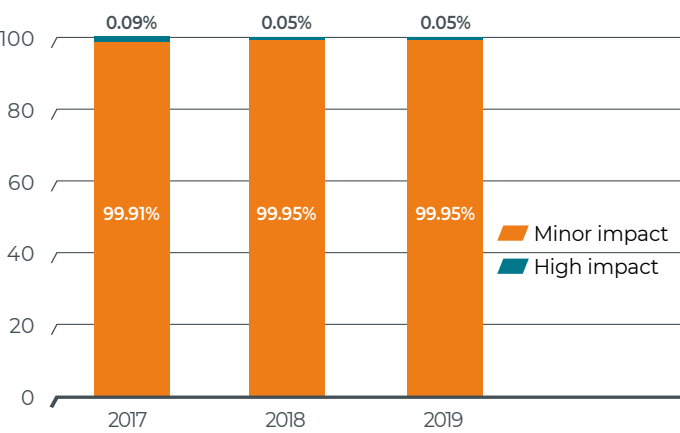
The next survey will take place in 2020.

Contact centres

The two Elia Contact Centres receive and handle requests for information from various sources; local residents, contractors, engineering firms, public authorities, utilities and project developers, to name a few. Because of the specific risks involved in working near a high-voltage facility, anybody wishing to carry out work close to high-voltage lines, high-voltage pylons, underground electricity cables or high-voltage substations is required to report these works to Elia. We can then provide them with maps of the relevant facilities and instructions about the safety measures to take while working near them.

There are statutory timeframes within which Elia has to answer the requests (7 working days from receipt).

% OF REQUEST HANDLED BY OUR CONTACT CENTRE



In 2019, our contact centres received 70,881 requests, 99,95% of these were answered within the set times.

Upon request via the Contact Centre or any communication channel, Elia offers information and free electromagnetic field measurements to the owners of land and buildings located near Elia facilities. In 2019, we performed 108 measurements.

2.8.4. Cooperations

SDG 11, GRI 203-2

LOCAL ADDED VALUE / SUPPORTING LOCAL INITIATIVES

For the past three years, Elia has established a structural partnership with the public utility foundation Be Planet<sup>18</sup> to develop and support ecological transition initiatives by citizens in municipalities where Elia infrastructure projects are underway. Elia supported 22 projects during those 3 years.

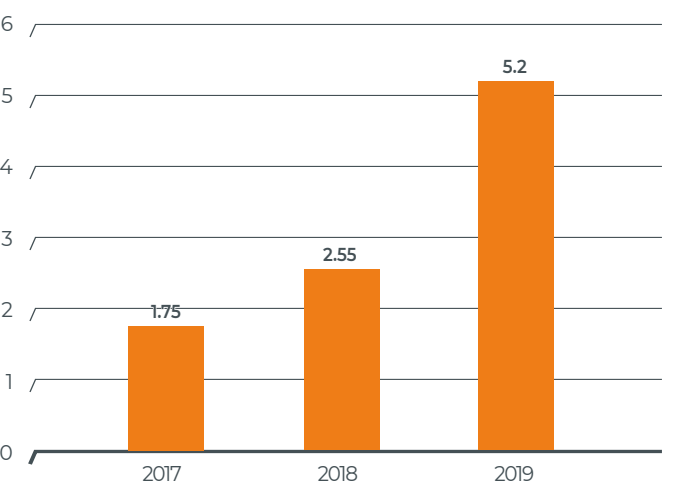
In 2020, Elia renewed the collaboration with Be Planet. Through this collaboration we are setting up a fund and methodology (call for citizen projects) to compensate municipalities for the impact of an overhead line.

WE GOT HEART

Any Elia employee involved in a community or charity-run project can request a contribution from Elia. Elia donated a total of EUR 10,000€ to 2 of these projects in 2019. In addition to this, Elia donated almost EUR 12,000 to various initiatives such as financial support for third world charities and sporting events, amongst others.

As we did in 2017 and 2018, 5.2 ton of our hardware (laptops, docking stations, printers, screens and carrying cases) received a second life, they were mostly donated to schools.

HARDWARE DONATED (TON)



18. <https://www.beplanet.org/>



# 2.9. Environmental aspects

## 2.9.1. Management approach

GRI 102-11

Sustainability, as well as a clear commitment to environmental and climate protection and the conservation of resources, are all integral components of the corporate strategy of Elia.

When developing and building our grid, we always strive to find socially responsible, economically efficient solutions. To this end, we try to limit the construction of new infrastructure, preferring to optimise and upgrade the existing infrastructure wherever possible.

Our goal is to keep the impact of our corporate and construction sites and other activities towards people and natural habitats to an absolute minimum. Elia respects flora, fauna and biodiversity, uses natural resources conservatively and keeps the energy consumption and emissions of our activities at the lowest level possible.

The challenge faced with the energy transition is to adapt our infrastructure while maintaining a sustainable approach in terms of environmental impacts.

We developed the avoid-reduce-offset approach described in 2.8.2. with the least impact on environment in mind.

We adopt the precautionary principle to reduce and avoid possible negative impacts by conducting/carrying out studies (e.g. studies in EMF), by calculating our carbon assessment and by bringing climate risks into the regular risk management.

An environmental impact assessment is legally required and conducted in the early stages of any project's development in order to identify, predict, and analyse impacts on the physical environment, as well as social, cultural, and health impacts.

The Department Community Relations is responsible for the appropriate handling and implementation of all tasks relating to environmental and nature conservation issues, quality management and the management of related tasks. Within this department, the team Environment & CSR advises in terms of process control and ensures the stringent implementation of the environmental and quality strategy and legal compliance.

Elia's supplier code of conduct which is binding for all suppliers contains additional principles on environmental protection and resource conservation.

Although Elia's core activities are not the origin of soil pollution, it has been established that a significant part of the Belgian soils is historically polluted as a direct result of nearby or in situ (prior use) industrial activities or backfilling with polluted soil.

Several remediation actions have been launched on our sites. The soil legislation has since been enforced in the three Belgian regions. Elia has developed a plan to map the soil condition on its own land in order to schedule the intervention priorities in keeping with existing and new soil legislation.

In 2019, EUR 1,370,000 has been paid for surveys, follow up and the realization of remediation works.

Budget (million EUR)	2017	2018	2019
TOTAL	1.1	1.2	1.4

The site with substantial soil pollution detected in 2018 (as reported in last year report) will undergo a remediation in 2020 based on an action plan validated in 2019 by the Brussels regional authorities.

## 2.9.2. Biodiversity and landscape integration

SDG 14

GRI 304-1 – GRI 304-2 – GRI 304-3

G4-EUS-EN12

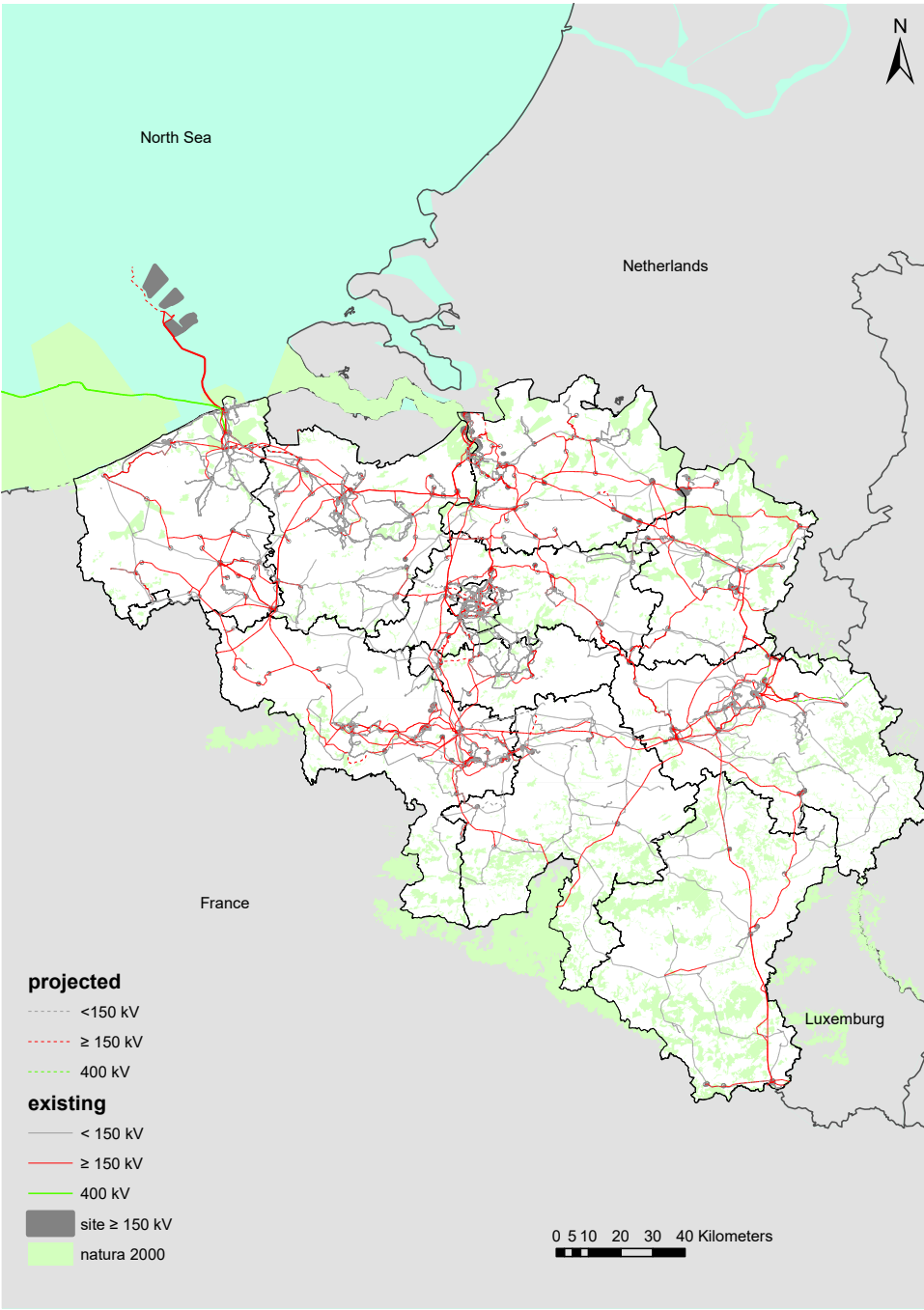
Elia's land-use can be divided into the following categories:

- areas under overhead lines (mostly on private land);
- areas over underground lines (mostly on public domain, such as roads) + marine territory in the North Sea;
- areas under the pylons (sometimes Elia owns the small plot of land where the pylon is);
- areas needed to build and maintain substations (the gravel must be kept free of weed for safety reasons).

The total length of our utilities located in Natura 2000 areas (on land and sea) is 665 km.

The modular approach of the MOG design made it possible to limit the number of submarine cables, thereby reducing not only the cost for society but also reducing the impact on the marine environment.

Elia signed the Marine Grid Declaration of the Renewables Grid Initiative (RGI) in 2019, which lays down standards for the early involvement of stakeholders and for nature and species conservation in the development of the offshore grid beyond the legal requirements.



Source:  
<http://natura2000.eea.europa.eu/#>

### 2.9.2.1. Compensation/Mitigation measures

Elia has some parts of land it owns that are managed for nature protection nearby protected areas, such as a marsh with ponds in (Merelbeke Flora, Ville-sur-Haine) where Elia encouraged amphibians to settle there by creating and maintaining ponds.

Other mitigation measures aim at minimising the landscape impacts, by planting trees and shrubs. "Green screen" plantations are also used to enhance the landscape integration of Elia's installations. This

approach was used in the context of the Stevin Project (in West and East Flanders) from 2015 to 2018 by planting more than 26 km. Similar measures will be set up in 2020 in the context of our project Boucle de l'est (in the east of the Province of Liège).

2.9.2.2. Ecological aisles management

For safety reasons (to prevent falls and short circuits), no trees are allowed to grow close to high-voltage overhead lines. Up until recently, the standard maintenance policy for overhead lines involved ensuring that a corridor of approximately 50 meters wide below the lines was kept clear of all vegetation with a rotary slasher every eight years. This obligation can indirectly be beneficial to specific ecosystems with great ecological value, for example the moors (present in the High Fens nature reserve, in the eastern part of Belgium) are better protected in the corridors under the overhead lines crossing them, because the rest of the moors were planted with trees for wood production and by draining these areas. Besides, Elia was from 2012 a forerunner in the implementation of a seven-year LIFE project completed in 2017 (see Activity Report 2019, p. 84).

This Europe-wide project aimed to transform 130 km of forest corridors into fully-fledged 'ecological corridors'. Instead of using rotary slashers, Elia restored more stable natural environments below the lines (using peat bogs, bushes and grasslands managed by grazing). Given the success of the project, Elia decided in 2018 to pursue this action for another five years without subsidies under the name “Life2” in order to further monitoring the evolution of these areas and their maintenance while special attention is given to the control and removal of invasive plants.

Elia – as 110 companies and organisations – signed the “Green Deal Bedrijven en Biodiversiteit”, an initiative of the Flemish Department of the Environment. It consists of agreements, on a voluntary basis, between the Flemish government and private partners that commit to increasing biodiversity on their sites over the next three years. By 2021, 1250 hectares of industrial land in this region will be developed to promote biodiversity. As a participating party, Elia undertook to implement/organise various actions in the years 2018-2021.

2.9.2.3. Bird protection

There is a risk of collision and sometimes the electrocution of birds in areas with overhead lines and in substations (where the lines go down). Therefore, Elia is installing markers and nests to reduce the impact and to protect some endangered species. With the help of Belgium's leading environmental associations, Elia has identified the 130 sections of its network that pose the greatest hazard to birdlife. Measuring 200 km in total, they are gradually being fitted with bird anti-collision devices over a 10 year-period (starting from 2016). If a project is due to take place on these sections, markers will be installed immediately. For sections without projects, we will take advantage of scheduled interventions to fit markers on conductors or earth connections.

Bird markers	2017	2018	2019
Total of HV Lines equipped (km)	13.62	26.24	37.59

Since 2016, Elia has installed bird markers on 37.6 km of lines.

### Firefly

In 2019, Elia hung a new type of bird markers named Firefly on her power lines to make them more visible to birds.

The markers are placed on the high-voltage line in Noordschote (West Flanders, one of the most dangerous high-voltage lines for birds in Belgium) over a distance of 3 kilometres.

Natuurpunt and Elia have been working together since 2012 to solve the problem of birds falling victim to power lines.

Firefly markers are 11 to 15 cm long plates with 2 reflectors on each side. They are fixed every 30 metres. In total, more than 500 Fireflies will be suspended.

The Firefly markers are fixed on the high-voltage lines with a clip and move in the wind. The reflectors reflect the light, making the line more visible to the birds. They are especially useful at dusk and dawn, when the birds are most active .

19. Flemish independent volunteer association that ensures the protection of vulnerable and threatened nature.

2.9.3. Water protection

GRI 306-5

Elia is committed to effective water protection. As the business activities of Elia do not result in significant water usage, its responsibility in this regard is not so much to reduce water consumption, but to consider water resources in the ground during grid and substation projects and to avoid water and soil pollution with hazardous materials. Containment systems equipped with coalescence filters are installed beneath transformers in substations to prevent drips from entering the soil. These systems are inspected regularly by maintenance technicians and refurbished or replaced when needed. Waste water is only discharged with appropriate permission from water authorities.

In the context of her offshore projects, Elia contributes to making the North Sea safe for humans and the environment. Every preparation includes the removal of i.a. explosive remnants of war (UXO - Unexploded Ordnances) from previous world wars.

2.9.4. Energy Consumption

GRI 302-1, SDG7, SDG13

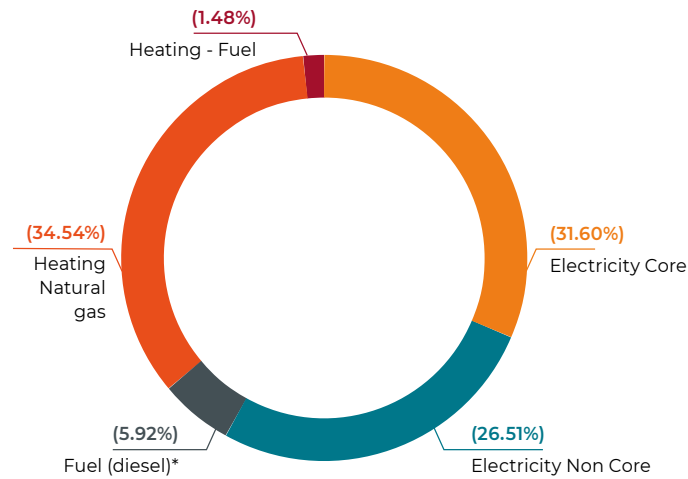
Elia consumes several energy sources for its core and non-core activities.

The two most recently built administrative centres of Elia, Monnoyer in Brussels and Crealys in Wallonia are BREEAM<sup>20</sup> certified (the latter having been certified in 2019). As required by the Belgian regional regulations, energy audits were conducted on some of our administrative buildings.

The electricity consumption of Elia can be subdivided in two categories:

- **Core:** energy used by all the infrastructure directly related to its business model i.e. all the substations and al.
- **Non-core:** energy used by the support services, administrative centres.

ELECTRICITY CONSUMPTION WITHIN THE ORGANISATION



20. Building Research Establishment Environmental Assessment Method - the British standard for sustainable buildings.

The impact of the energy consumption of our activities is further assessed in the next section.

Note: In the previous report (Sustainability Report 2018), the unit of the electricity consumptions disclosed was megawatt-hour (MWh) and not kilowatt-hour (kWh).

2.9.5. Emissions

SDG 13, SDG7 , GRI 201-2, GRI 305-1 – GRI 305-2 – GRI 305-3

Greenhouse gas emissions – Carbon assessment

Elia supports the objectives of the EU and the Federal Government to reduce CO<sub>2</sub> emissions, in particularly by expanding the grid, which allows an increase in the share of carbon-neutral energy sources.

In order to assess its own greenhouse gas emissions, Elia has been conducting a carbon assessment since 2010 to identify direct and indirect emissions from its activities in Belgium and is taking steps to control and reduce greenhouse gas emissions from its activities.

Since 2017, Elia has participated in the CDP, an international, non-profit organization providing a global system for companies, investors and cities. This organization measures, discloses, manages and shares environmental information. When it comes to climate change, a company's score is based on two factors:

- the level of detail and the comprehensiveness of its responses, and
- its awareness of climate issues, management methods and its progress on acting on climate change.

The scope of the carbon assessment conducted within Elia is the emissions of Elia System Operator (now Elia Transmission Belgium), Elia Assets and Elia Engineering.

The total 2018 emissions amount to 282.219 tCO<sub>2</sub>eq.

Elia has obtained a rating of B- from the CDP in 2019 for the year 2018.

N.B.: We announced in the previous sustainability report that the scope of the carbon assessment would be reviewed in order to include the emissions of Germany. This has not happened yet but we will strive to the expansion of the scope of this assessment in our next report.



**Calculation method:** In order to assess the carbon footprint of the emissions of a company, its emissions are broken down in three categories ("scopes"):

**Scope 1:** direct emissions of greenhouse gases from owned or controlled sources

They are mainly due to SF<sub>6</sub> gas leakage from our installations (see below) and natural gas consumption for heating.

**Scope 2:** indirect emissions of greenhouse gases resulting from the generation of purchased or acquired energy consumed by the organization

They are mainly due to grid losses that are unavoidable when transmitting electricity and on which Elia has not a direct influence.

**Scope 3:** all other indirect emissions of greenhouse gases (not included in scope 2) that occur in the value chain (outside our company), including both upstream and downstream emissions (by buying goods and services, employee commuting, business travels et al)

These are mainly generated by the construction and dismantling of our assets and network.

GHG emissions 2019

Greenhouse gas emissions in 2019 in t CO <sub>2</sub> equivalent*		
<b>DIRECT (SCOPE 1)</b>		
SF <sub>6</sub> losses	5,875.00	1.89%
Heating (natural gas and fuel)	782.00	0.25%
Fuel vehicles	4,165.00	1.34%
Other	118.00	0.04%
<b>Total SCOPE 1</b>	<b>10,940.00</b>	<b>3.51%</b>
<b>Indirect (scope 2)</b>		
Electricity consumption	1,467.00	0.47%
Grid losses	257,766.00	82.73%
<b>Total SCOPE 2</b>	<b>259,233.00</b>	<b>83.20%</b>
<b>Other indirect (scope 3)</b>		
Assets	35,744.00	11.47%
Other	5,669.00	1.82%
<b>Total SCOPE 3</b>	<b>41,413.00</b>	<b>13.29%</b>
<b>TOTAL</b>	<b>311,586.00</b>	<b>100.00%</b>

\*Emission factors: ADEME and IPCC 5th Assessment (AR5)

The calculated figure in the carbon footprint corresponds to 219 tonnes of CO<sub>2</sub> equivalents per person including grid losses and 38 tonnes of CO<sub>2</sub> equivalents per person excluding grid losses (basis, headcount 2019: 1424 employees).

Focus on SF<sub>6</sub> (Scope 1)

Sulphur hexafluoride (SF<sub>6</sub>) gas has been used for over 30 years as an electrical insulator in high-voltage devices, including gas-insulated switchgear (GIS). Both its chemical and physical properties (i.a. inert, non-flammable) make this gas particularly well suited for its use in high-voltage electrical equipment. GIS is often used in densely populated areas because it is much more compact when compared to traditional switchgear which uses air as an insulator (AIS).

It has however a very high global warming potential (GWP rapprox. 23.000 t CO<sub>2</sub> eq). For this reason, SF<sub>6</sub> is used in switchgear in a closed circuit, i.e. emissions to the environment are virtually eliminated. The pressure chambers are permanently monitored technically for possible leaks. However, despite all these protective measures, natural leakage cannot be 100 percent avoided due to the sealing technology and the necessary gas handling.

Elia has developed an investment and maintenance policy to minimize the risk of SF<sub>6</sub> leakage. Manufacturers are obligated to guarantee a very stringent maximum percentage of SF<sub>6</sub> loss throughout the lifetime of the facilities. The maintenance policy aims to maintain operations involving compartments filled with SF<sub>6</sub> to a minimum.

The volume of SF<sub>6</sub> gas installed on the Elia grid (36 kV to 380 kV inclusive, excluding the NEMO substation) is 119 tons. Consumption of SF<sub>6</sub> gas (as a replacement and as a top-up in the event of a leak) is closely monitored using a system that tracks each cylinder of SF<sub>6</sub>. The SF<sub>6</sub> leak rate for all Elia facilities was “< 0.25%” in 2019.

2.9.6. "Electric and Magnetic fields (EMF)

SDG 3, GRI 416-1

The electrical transmission and distribution systems in Europe are mainly operated with alternating voltage at a frequency of 50 Hz. Hence, they create electric and magnetic fields (EMFs) of Extremely Low Frequency, as is also the case for all applications of electricity, including domestic appliances.

Although no causal link can be established between magnetic field exposure from electricity transmission infrastructures and human health, Elia takes this issue very seriously; both for each project on the electricity grid and with scientific studies that improve the knowledge on the subject.

Elia has continued to contribute, yearly EUR 370,000, into broadening scientific knowledge for many years. It also supports several research centres and universities within the Belgian BioElectroMagnetics Group (BBEMG) whose scientific independence is enshrined in a cooperation agreement.

At an international level, Elia has also concluded a research contract with the Electric Power Research Institute (EPRI - a non-profit organization that conducts research in energy and the environment), an agreement granting Elia access to the results of international research studies in this field.

To communicate transparently on the subject, Elia provides various tools: a dedicated website, information sheets, a brochure, newsletters, information sessions (with the possible presence of an independent expert) and, at the request of local residents, carries out free measurements of electric and magnetic fields via its Contact Center, see further information in 2.8.3. Stakeholders Dialogues.

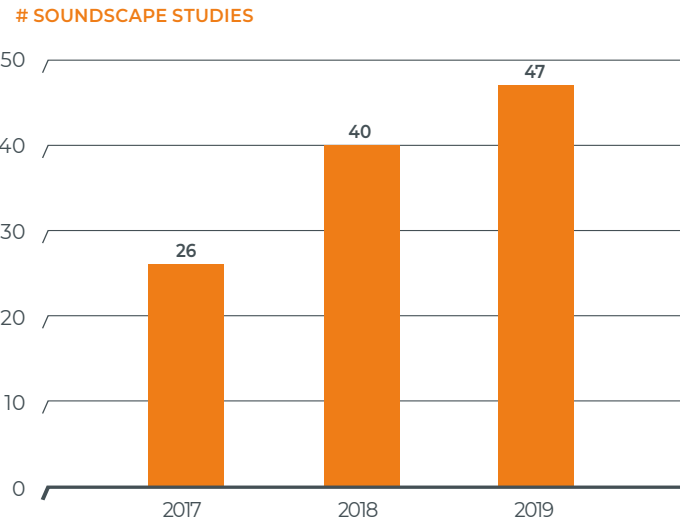
The study of magnetic fields is also one of the criteria analysed for each project developed by Elia. In accordance with the precautionary policy established in Flanders and Brussels, Elia assesses future exposure to magnetic fields by means of specific calculations (modelling) and mitigation/reduction measures are applied where necessary.

2.9.7. Noise

SDG 3

Elia's facilities cannot generate any noise pollution. This matter is governed by acoustic standards, varying from region to region; these must be respected in order to avoid any noise pollution near Elia's facilities. Noise can be caused, e.g., by transformers in high-voltage substations, high-voltage lines, and pylons. Underground lines do not cause any noise.

Elia always carries out soundscape studies prior to the realization of its infrastructure projects to ensure that the acoustic standards are not exceeded. Furthermore, Elia conducts noise studies in the event of complaints (see also Contact Centres).



These are the soundscape studies carried out in 2019 in the context of projects.

There were 8 acoustic measures done on request in 2019.

2.9.8. Waste

GRI 306-2

Elia produces different waste streams related to its activities, including some recyclable and hazardous waste.

This waste is generated during maintenance work or infrastructure projects and in the administrative and service centres.

Elia has set up a waste management policy to collect, sort and handle its waste.

At our technical sites, all types of waste generated on-site – including hazardous materials – are stored in so-called container parks, guaranteeing optimal storage in dedicated locations. They are eventually removed periodically or upon request by authorized collectors specialised in the collection, transport and recycling of hazardous and non-hazardous waste. On our construction sites, the contractors must comply with environmental legislation as well and organize the sorting of the construction site waste they produce during the execution of their contract.

Total weight (ton)	Non-hazardous waste	Hazardous waste
Recycled	2434.13	23.02
Disposed of	0.00	15.46
<b>Total</b>	<b>2434.13</b>	<b>38.47</b>

N.B.: all the data related to the weight of waste produced on our construction sites might not have been gathered as this waste is under the responsibility of our external contractors

The sorting rules and procedures are identical, regardless of the site even if the regulations can slightly differ in function of the region where this site is located.

Hazardous waste is determined on the base of its waste code from the European List of Waste.

The waste disposal contractor provides Elia with information on the waste disposal method (and attests) as legally required in Belgium.



# 3. 50Hertz in Germany

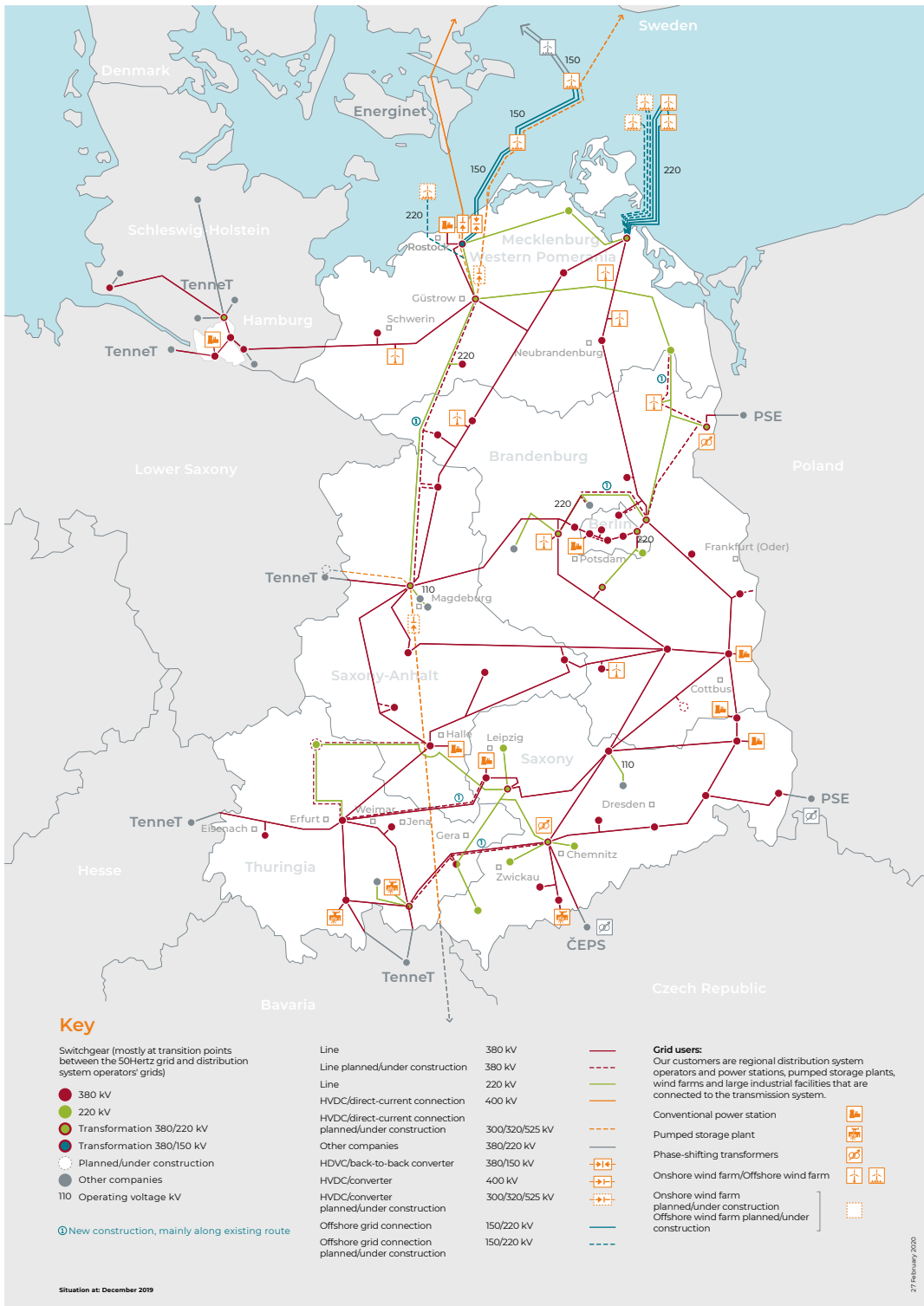


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# 3.1. Grid

## 3.1.1. Grid map



## 3.1.2. High-voltage lines

G4-EUS-EU4

	Underground cabling (km)	Difference	Overhead lines (km)	Difference
400 kV (DC)	15 km	0	0 km	0
380 kV	55 km	0	7,250 km	0
220 kV	293 km	+100 km	2,607 km	0
150 kV	270 km	0	0 km	0
Total	633 km		9,857 km	

## 3.1.3. Substations, converters and switching stations

	2017	2018	2019	Difference
Substations	65	65	65	0
Switching stations	7	8	9	+1
Total	72	73	74	



# 3.2. Sustainability Management

## 3.2.1. Business model

GRI 102-1, GRI 102-2, GRI 102-6, GRI 102-7,GRI 102-9, SDG9

50Hertz operates one of the most modern electricity transmission grids in Europe in northern and eastern Germany. Thereby the supply of electricity to 18 million people is secured around the clock. Across 10 locations, 50Hertz acts as an interface between energy producers and distribution grid operators and large-scale consumers. With a team of 1,120 employees, 50Hertz ensures that electricity operates continuously. 50Hertz manages the distribution of 10,490 kilometers of lines. It coordinates the electricity market players in the grid area as well as managing and coordinating the electricity market players, manages and coordinates balancing groups and puts electricity from renewable

energies that is not directly sold onto the electricity exchange. To ensure successful energy transition, 50Hertz develops innovative solutions for the system and market integration of intermittent renewable energies.

50Hertz has a so-called "natural monopoly" with the transmission grid in its grid area, i.e. in the area in the northern and eastern Germany, the company is the sole operator of the extra-high voltage grid and is therefore subject to regulatory supervision by the national regulatory authority - the Federal Network Agency (BNetzA). The regulatory system has a substantial impact on the business model. The BNetzA is also responsible for the revenue cap to calculate the grid fees for 50Hertz.

## 3.2.2. Locations

GRI 102-3, GRI 102-4



## 3.2.3. Memberships

GRI 102-12, GRI 102-13, SDG17

50Hertz is proud to be involved in various societies, associations, and initiatives. Of course, specifically directing their attention to the fields of renewable energies, climate and environmental protection, human rights and the harmonisation of the European electricity market. For example:

	Energy	Climate	Environment	Human Rights
AVEU Arbeitgeberverband Energie- und Versorgungswirtschaftlicher Unternehmen e.V. [employers' association of energy and utility companies]	✓			✓
BDEW – Federal Association of the Energy and Water Industry	✓			
German committee of CIGRE Conseil International des Grands Réseaux Électriques	✓			
ENTSO-E – European Network of Transmission System Operators for Electricity	✓		✓	
GoI5 – Reliable and Sustainable Power Grids (indirect through Elia)	✓		✓	
RGI – Renewables Grid Initiative	✓	✓	✓	
UN Global Compact		✓	✓	✓
VDE-Elektrotechnischer Verein e.V. [electrotechnical association]	✓			
World Energy Council	✓			
Diversity Charter				✓

## 3.2.4. Values, principles, standards and code of conduct

GRI 102-16, GRI 102-17, GRI 102-19, GRI 102-20, GRI 102-26, GRI 102-32, GRI 102-33

For 50Hertz, a business activity that is successful in the long run, is achieved by acting in the best interest of the company as well as in the interest of society. This is reflected in the company vision "A successful energy transition - for a sustainable world". 50Hertz has made it its mission to make the energy transition possible. The company has set itself five strategic goals in order to fulfill this task to the highest possible standard. It is for this reason that 50Hertz wants to stabilise security of supply at its peak, running in parallel with expanding the transmission grid in line with demand, achieving a competitive and sustainable result, further improving the efficiency, and adopting a value-based corporate culture with a strong focus on occupational safety.

The sometimes opposing objectives and interests of 50Hertz and its stakeholders are to be reconciled as much as possible. We aim for the maximum possible transparency, which is has been embodied in this report.

50Hertz has expressed its commitment to responsible corporate management in its sustainability principles and corporate charter.

These state that the company acts as per the ten principles of the UN Global Compact in the areas of human rights, labor standards, environmental protection and, anti-corruption. In April 2017, 50Hertz intergrated themselves into this global coalition of values and has been involved in the German Global Compact network ever since. Employees also have access to corporate documentation that includes all applicable directives, guidelines and manuals, work instructions, process manuals and, work agreements. The company charter and guidelines specify what is meant by and expected within correct business conduct and make it clear that all employees comply with the law. These principles result in organizational measures that are contractual, and apply to all staff across the board.

Under the overall responsibility of the Managing Director Finance, the Corporate Development department has defined a sustainability concept and a roadmap of measures for the continuous expansion of sustainability reporting. The Communication & Policy department continues to define the reporting processes.

The importance of the continuous expansion of sustainability management is illustrated by the inclusion in the annual business plan, which is valid for five years. As part of the sustainability strategy, targets, indicators and, measures are systematically developed and reviewed and consequently secured in the corporate strategy. A company-wide committee at senior management level (CSR Board) oversees this from



the development of measures to reporting, and is later officiated by the Chief Financial Officer and the Chief Human Resources Officer. The CSR Board convenes twice a year to agree on targets and processes.

The implementation of individual measures and the recording of key figures is the responsibility of various departments, unit and, teams within company. The CSR core team meets every three months to deliberate this. Those responsible for data provide key figures on the central transparency management platform in a comprehensible manner throughout the company. Sustainability risks are discussed and evaluated with the management in the quarterly updated risk analysis and, at an annual risk conference. Additionally, certified management systems such as ISO 45001 in the field of health and safety at work and ISO 27001 in information security management, or internal management systems based on recognized standards such as environmental management (according to ISO 14001) and early public acceptance (according to VDI 7000) are used in CSR core areas.

3.2.5. Relevant legal framework

50Hertz is always up to date and remains compliant with applicable law. The business activities are subject to numerous national and European legal regulations. In the future, the Climate Protection Act passed in October 2019 will have a further influence on business activities. Further information on the laws and regulations relevant to our business activities can be found on our website. CSR.50Hertz.com

3.2.6. Anti-corruption

GRI 205-2

The company charter and guidelines on preventing corruption set out 50Hertz's understanding of correct ethical conduct and make it clear that the company complies with the law and does not tolerate corruption. These principles flow into organisational measures that are binding throughout company.

In 2019, corporate governance was strengthened by taking on board a managerial position for compliance and internal control systems. Guidelines and internal control systems were further approved by the management team. The guideline sets out the objectives and binding standards for the effective and compliant design of internal control systems. Since 2010, 50Hertz has adopted these guidelines that regulate the whistleblower system and prescribes the establishment of an internal compliance committee and an external ombudsman. The Compliance Committee comprises one member from the Legal and Human Resources departments and the Compliance Coordinator. Once a year, the ombudsman informs the Compliance Committee in a written report about his use and the number of potential risks received. If the ombudsman passes on a justified tip to 50Hertz, the Compliance Committee is immediately summoned to deal with the case in hand and, if necessary, seek to take further internal action. The committee reports to the 50Hertz management annually, and on an ad hoc basis if required. 50Hertz is currently evaluating whether the existing system can be applied to other areas such as anti-discrimination and human rights due diligence. In 2019, the ombudsman received no indication of corruption. In the financial year 2019, no significant fines were imposed on 50Hertz with legal effect in connection with general business

activities or with power line construction projects or operations. The reporting threshold for administrative offenses was set at 25,000 euros. On top of that, 50Hertz provides up to date training for all employees involved in the purchasing process on the topics of procurement basics, anti-corruption, and compliant behaviour. Since 2016, 23 training courses for 250 employees have been held across the company in various locations. For employees at management level, purchasing and project management, the training courses in the area of compliance and anti-corruption were completed in 2019. Further training courses are held if and when required, for example for new staff.

3.2.7. Risk management

GRI 102-30, GRI 102-11

As part of systematic risk management, 50Hertz regularly surveys and assesses the following risk areas:

- Protection of life and limb
- Profit & loss
- Liquidity
- Reputation
- Security of supply.

50Hertz evidently aims to avoid risks to the company's continued existence, to reduce risk positions as much as possible - where feasible - and to optimise the risk/opportunity profile. A risk guideline sets out how risks are systematically identified, recorded, evaluated and monitored every quarter. A risk conference is held annually whereby all head of departments (second management level) as risk owners and the risk manager together with the management, discuss the most significant risks and risk-related issues. In the context of sustainability, various risks are assigned to the Environmental, Social and Governance (ESG) areas. These include risks relating to occupational safety, environmental protection and data security and transparency. 50Hertz is persistently developing its management of ESG risks. For example, the risk conference due to be held in February 2020 will for the first time address a separate cluster of these risks. 50Hertz plans to work with key areas of the company to assess possible climate impacts on its business activities based on long-term scenario guidelines. At the project management level, an integrated process for the integrated planning of schedule, budget and risk management was installed.

3.2.8. Security

G4-EUS-DMA Desaster/Emergency Planning and Response

As an operator of critical infrastructure, 50Hertz is obligated to ensure information security by the IT-SiG (IT-Sicherheitsgesetz/IT Security Act). Information must be processed, stored and communicated in such a way that the availability, confidentiality and integrity of the information and the systems are effectively ensured.

The information security management system according to ISO 27001 was recertified in 2019. IT risks are systematically identified and administered using the established security process. In the year under review, there were no identified cyber attacks recorded at 50Hertz or damage caused by information security incidents.

Within the framework of the Basic Data Protection Regulation (DSGVO) and also with a view to future digitisation projects, the data protection management system (DSMS) was revised and the position of data protection manager was created. Together with the external data protection officer, they form the data protection team at 50Hertz and continuously work to develop the management system. This also included a training and awareness program for all internal and external employees. Direct contact persons in the departments responsible for data protection were given seperate, more robust training.

For 50Hertz, safety goes beyond the corporate boundaries. For example, crisis management and crisis communication with internal and external stakeholders are trained in regular crisis team exercises. Not only are the existing structures, processes and reporting channels reviewed and continuously improved, but also the skills of the crisis management team members and employees are intensively trained to effectively manage unforeseen events under particular pressure and to make snap and effective decisions for crisis management. These and other measures are designed to continuously and holistically increase the resilience of 50Hertz. In addition to the training concept for all members of the crisis team, this also includes the review of the property protection concepts and further development of the general corporate security.



3.2.9. Political influence

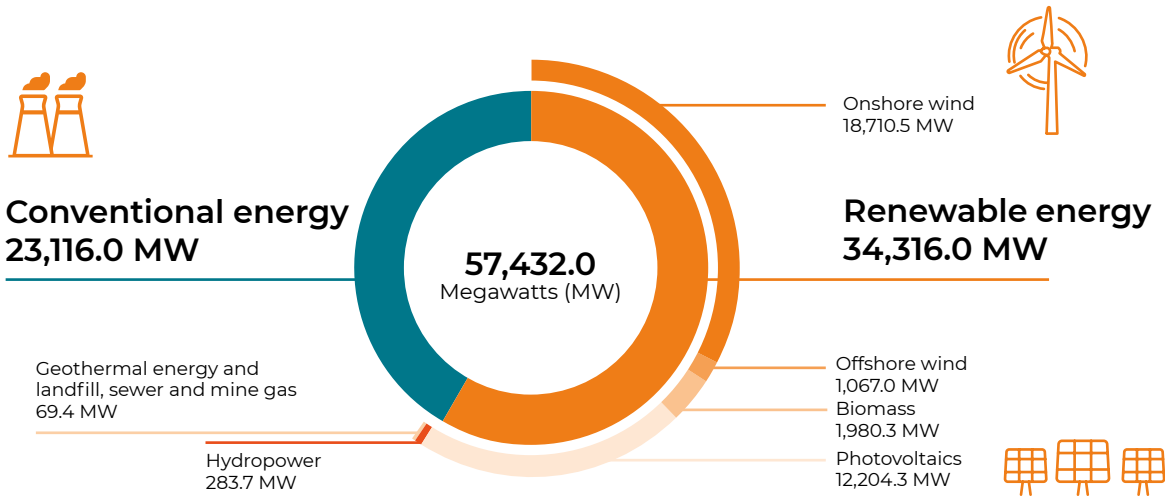
GRI 102-16, GRI 415-1

Because legislative or regulatory activities have a major impact on 50Hertz's business activities, the company presents its positions transparently and publicly in the political process. The responsibility for this lays with the Communication & Policy department. This political communication is carried out responsibly and is exempt from donations to political parties. Ethical principles for the political petitioning were established. This guideline, which is binding throughout the company and has been approved by the management, regulates the procedures in the political environment. It sets out that 50Hertz does not make any donations to politicians, political parties or political institutions and when sponsoring, focusses its attention on appropriate consideration and balance. Responsibility for donations to party-related foundations and associations is rooted centrally in the Communication & Politics department. Coupled with specific training programmes, 50Hertz ensures that employees who are active in social and energy policy are guided by clearly defined principles in their communications and actions. What's more, 50Hertz is registered in the EU Transparency Register and is bound by its Code of Conduct. In 2019, 50Hertz made no donations to politicians or political parties.

# 3.3. Energy – Market and integration of renewables

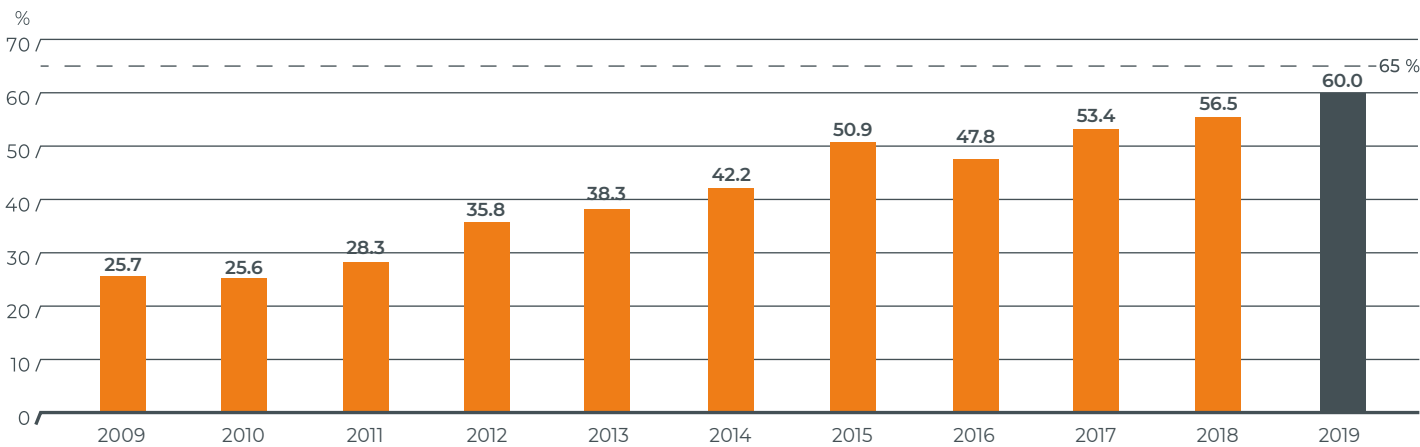
## 3.3.1. Installed capacity

SDG7, GRI 302-2



## 3.3.2. Evolution

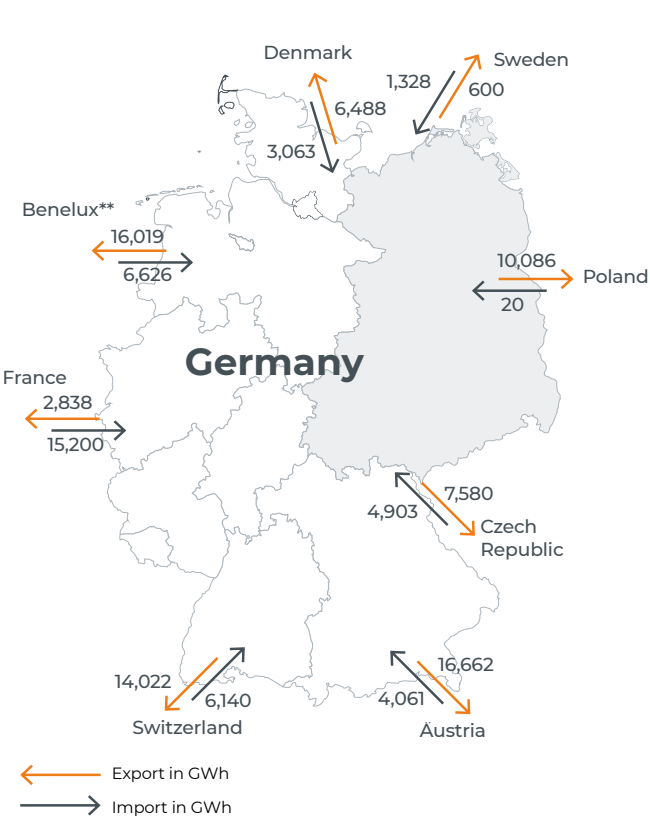
CHANGE IN THE SHARE OF RENEWABLE ENERGY IN ELECTRICITY CONSUMPTION



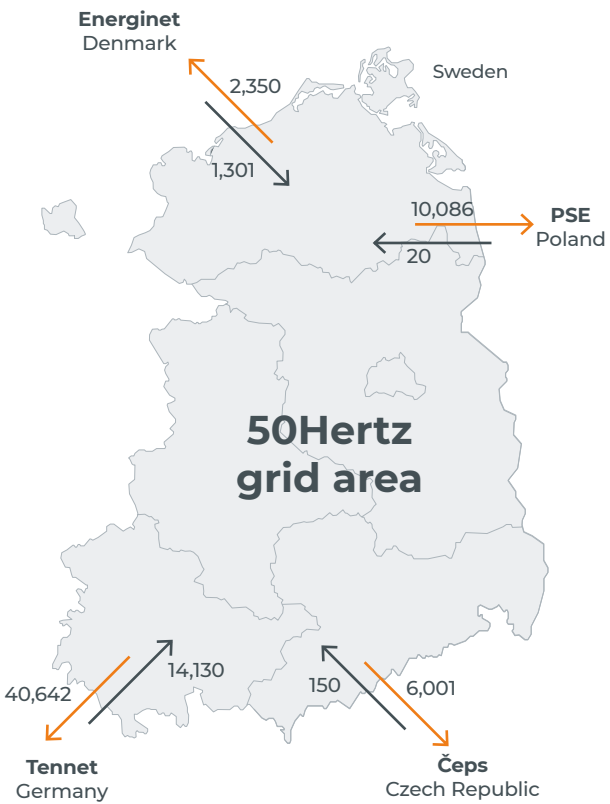
On average, 60 percent of the electricity consumed in the 50Hertz grid area has already been generated from renewable energies by 2019. 50Hertz is prepared to make additional efforts to achieve the political renewable expansion target of 65 percent in 2030 in Germany. This requires a reliable and sustainable regulatory framework.

## 3.3.3. Energy import & export

GRI 102-6, GRI 302-2

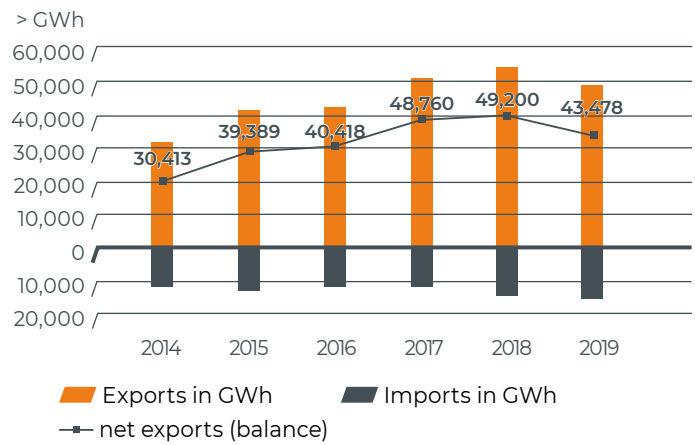


\*\* The interconnector with Belgium is currently under construction and is due for completion in 2020.

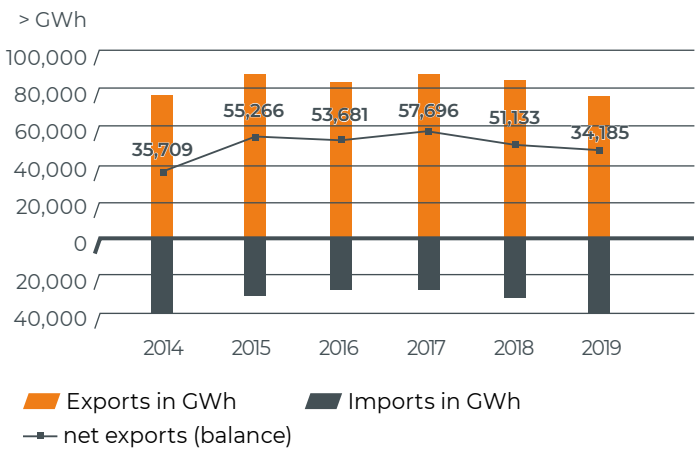


Total exports in 2019: 59,079 GWh  
Total imports in 2019: 15,602 GWh  
**Net exports in 2019: 43,478 GWh**

CHANGE IN EXPORTS AND IMPORTS IN THE 50HERTZ CONTROL AREA



CHANGE IN EXPORTS AND IMPORTS AT GERMANY'S NATIONAL BORDERS





3.3.4. Energy consumption

In the grid area of 50Hertz, electricity consumption is stable over the year at 99 TWh in 2019 (96.8 TWh in 2018 and 96 TWh in 2017 and 2016).

3.3.5. Grid losses

G4-EUS-EU12

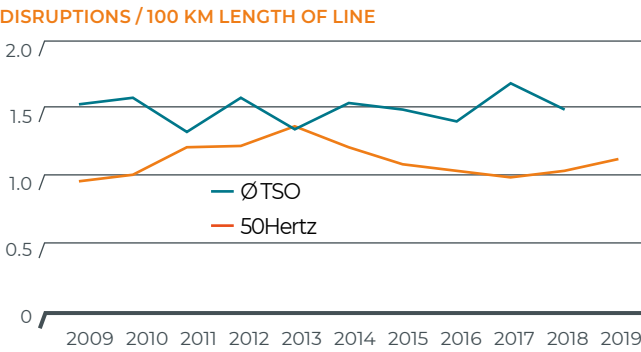
When electricity is transmitted, energy losses are inevitable. They present themselves in the form of current heat losses in transmission lines, in transformers and other system elements as well as as leak and corona losses. In 2019 the grid losses of 50Hertz totalled 2.3 TWh. The grid losses of the extra-high voltage level were 1.9 TWh, and those of the transformation level 0.4 TWh. 50Hertz has already premeditated the South-East Link between Saxony-Anhalt and Bavaria, the first 525 kV high-voltage direct current (HVDC) transmission line in its grid area. This technology is more suitable than conventional three-phase AC technology for transmitting large quantities of electricity with low grid losses and optimal control over long distances. To be able to better predict the losses more precisely and to be able to purchase electrical energy for balancing more cost-effectively on the electricity market, 50Hertz has developed a new forecasting model based on artificial intelligence (AI). 50Hertz has developed the grid loss model in cooperation with the Fraunhofer Institute for Optronics, Systems Engineering and Image Analysis (IOSB) in Ilmenau. Additionally, 50Hertz is considering an evaluation project in corporation with Elia, the aim of which is to counteract grid losses with renewable energies in order to reduce the CO<sub>2</sub> footprint in Scope 2.

3.4 Grid reliability

G4 EUS Security of Supply

3.4.1. Grid availability and interruptions

50Hertz had a better realibility of the grid in 2019 in Germany, compared to the other TSOs based on the number of disr uptions.



3.5. Human Resources

3.5.1. Management approach

GRI 102-8, GRI 103-2, GRI 103-3, GRI 402, GRI 405-1, GRI 405-2, SDG5, SDG8

50Hertz owes its success entirely to its employees. It is the responsibility of the Company to aid in developing skills, foster their health and commitment, involve them in decision-making and guarantee equal opportunities for all. The maintenance and development of the value-based corporate culture is one of the Company's fundamental goals and the strategic foundation for all personnel decisions. As part of the management team, the Chief Human Resources Officer is responsible for all personnel strategy issues.

An annual updated five-year business plan serves as a framework for qualitative and quantitative personnel planning. 50Hertz complies with international guidelines beyond the reach of its collective agreements and company agreements, such as the core labour standards of the International Labour Organisation (ILO: C87, C98 and C135) and workers' rights in the UN Global Compact.

At 43.1, the average age of employees at 50Hertz marginally untouched compared to the previous year.

At 50Hertz, health and safety is the highest priority. This is also emphasised in the guidelines on health and occupational safety, which is mandatory for all employees. In 2019 the previous management system according to OHSAS 18001 was changed to ISO 45001 and the initial certification was granted. The change strengthened governance and dialogue formats and merged company health management with occupational safety.

As a reflection of its convictions and in compliance with the ILO convention 111, 50Hertz is committed to promoting diversity and strictly condemns any discriminatory conduct in all aspects of professional life. All of our employees enjoy equal rights regardless of their ethnic origin, age and gender, their sexual orientation, religious affiliation, political views, national or social origin, or any known differences.

50Hertz is committed to valuing all employees and their abilities in the same way - regardless of their individuality.

To further emphasize this commitment, 50Hertz is a member of the Diversity Charter, a corporate initiative to promote diversity in companies and institutions. In the year under review, 50Hertz participated in the nationwide Diversity Day for the first time with a program to better inform and educate employees.

The goal of equal opportunities for men and women is enshrined in the IG BCE's "Charter of Equality" signed by 50Hertz.

The company's in-house initiative "50:50 - the women's network" has set itself the goal of promoting the further development of personal and professional skills as well as the presence and influence of women at 50Hertz. In 2017, 50Hertz submitted the first report on equality and equal pay in the annex to the management report. The share of women on the Supervisory Board of 50Hertz Transmission remains unchanged from the previous year at 17 percent. In the extended management board, the share of women rose from 0 percent on 31 December 2018 to 17 percent one year later.

On 7 August 2017, the Management Board of 50Hertz Transmission decided that the share of women in the first and second management levels (divisional and departmental managers) below the Management Board should reach 10 per cent and 16 per cent in the third management level below (departmental managers) by 30th June 2022. As of December 31, 2019, the target of 10 percent at the first and second management levels below the management level was easily exceeded with just under 11 percent, while the target of 16 percent at the third management level was optimally achieved.

The continuous recruitment and promotion of female managers is an important part of the 50Hertz human resources strategy. In the medium term, 50Hertz Transmission therefore aims to achieve or exceed a so-called "fair share" concerning the talent market, i.e. a representative representation of the proportion of women outside the company in the occupations that occur at 50Hertz.

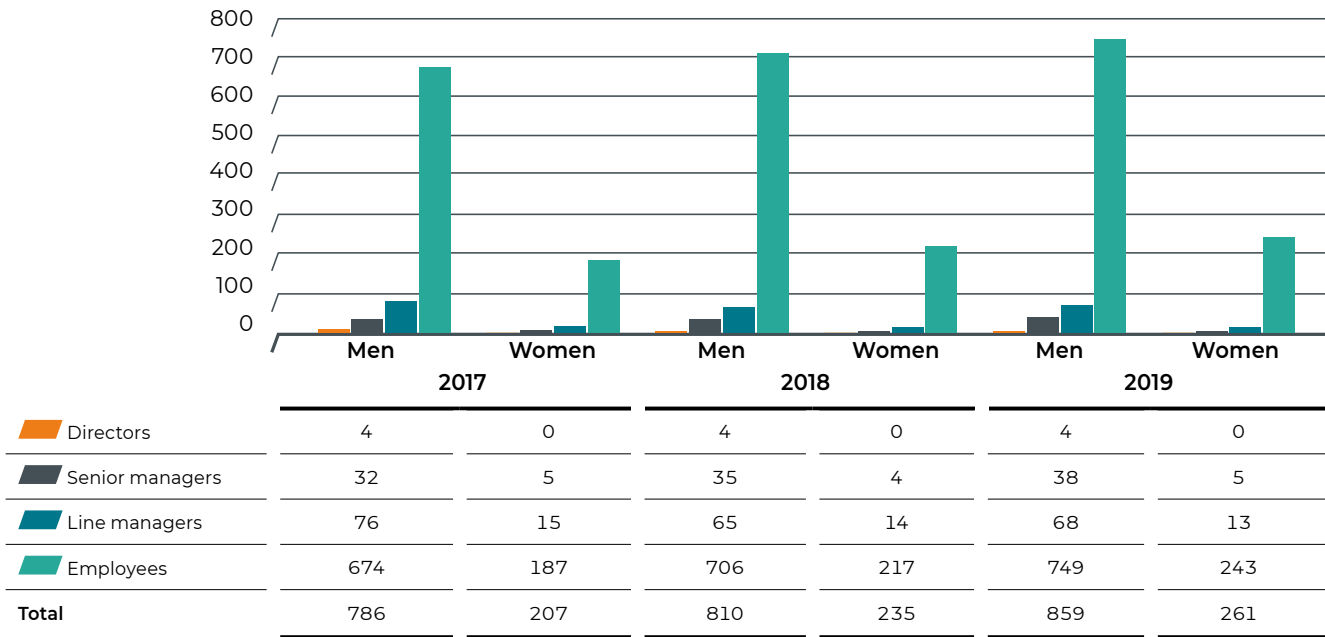
At 50Hertz, adopting diversity and equal opportunity also means giving people with health-related disabilities the same opportunities as those without. We concluded an inclusion agreement in 2013 with the Works Council, the Spokesmen's Committee, and the representative body for disabled employees at 50Hertz, which contains measures aimed at supporting people with disabilities in their working life. An internal inclusion team is charged with implementing and monitoring the agreement. During the financial year, the proportion of severely disabled and equivalent employees was 2.3%. In total, 10 employees with restrictions were employed by 50Hertz in the reporting year. This proportion will continue to be gradually increased in accordance with workplace-specific requirements in commercial and technical departments. In line with this, a cooperation with the Annedore-Leber-Berufsbildungswerk has been established to better facilitate young people with disabilities to enter the job market. In the year under review, the first trainee was taken on as a permanent apprentice and another started her internship. Furthermore, a cooperation with AfB gGmbH for the disposal of IT client hardware is continued. As a recognised inclusion company, AfB gGmbH offers disabled people a job as well as contributing to the avoidance of additional CO<sub>2</sub> emissions by refurbishing and selling used IT equipment.

There were no cases of discrimination recorded in 2019.

### 3.5.2. Head Count

GRI 401-1, GRI 401-2

#### Total number of employees

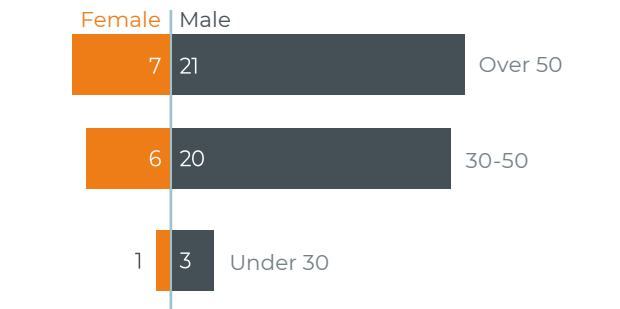


### 3.5.3. Workability

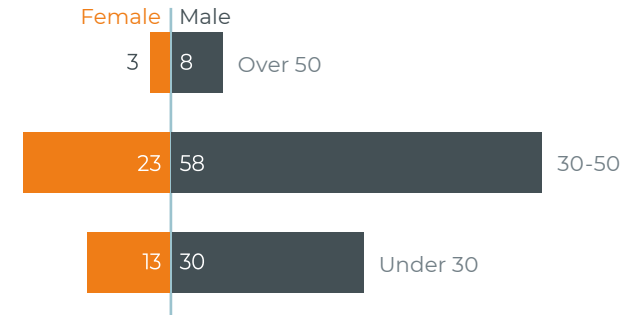
Employees of 50Hertz benefit from a family-friendly working environment and the opportunity to find a better work-life balance. To be able to give parents the necessary flexibility for managing childcare, there is a company agreement promoting the compatibility of work and family. The agreement regulates questions of parental leave, support services, flexible work hours, special leave and sabbaticals, as well as professional well-being and emotional support. In the 50Hertz Netzquartier building, daycare is also available for the children of our employees, which also offers spaces for children within the surrounding neighbourhood. Beyond that, we have established a parent-child office to cater for short-term childcare needs.

The early recognition and prevention of work-related illnesses and the ability to remain employable are also integral parts of occupational health and safety at 50 Hertz. If these goals are to be achievable, 50Hertz guarantees sufficient occupational medical precautions, the focus of which is on individual protection and individual prevention of health risks. On top of this, 50Hertz regularly provides company medical consultations, vaccinations and advice on workplace ergonomics for all employees. A qualified external confidential counselling service is readily available to employees in the event of individual stress, conflicts or problems of addiction. Employees can also take part in various public sporting events, such as the "Berlin Team Relay Race", the "Rennsteig Autumn Race" in Thuringia or the Diehrhagen Team Run in the Mecklenburg-Western Pomerania region to further promote individual wellbeing.

#### NUMBER OF DEPARTURES BY AGE AND GENDER



#### NUMBER OF NEW HIRES BY AGE AND GENDER



Together with the General Works Council and the IG BCE, an agreement was established on developing and maintaining the employability of our staff. This agreement provides a basis for personnel policies that will help us tackle the effects of demographic change. Our objective is for employees to be able to carry out their work activities without any limitations until they reach their foreseen retirement age.

In 2019, the company agreement on maintaining the ability to work was extended by a further five years.

#### AVERAGE AGE

AGE	YEARS
Employees covered by collective agreements	42.6
Employees not covered by collective agreements	48.3
Executives	51.7
Management	52

#### RETIREMENTS

G4 EUS 15

PERCENTAGE OF WORKFORCE EXPECTED TO RETIRE IN THE NEXT FIVE YEARS	M	F
Total for 50Hertz Transmission	6.1%	1.5%
Directors	0%	0%
Senior managers	14.29%	0%
Line managers	6.17%	1%
Employees	5.78%	1.62%

#### PARENTAL LEAVE

PARENTAL LEAVE	
Number of employees on parental and caregiver leave	13
Male	0
Female	12
Number of employees on parental leave 1 January 2019 — 31 December 2019	74
Male	50
Female	24

### 3.5.4. Employee survey

Various formats are available for the regular exchange of information with employees (see section on stakeholder participation), and in particular the regular employee survey. The next employee survey will take place in 2020.

### 3.5.5. Training

GRI 404-1, GRI 404-2

The Company can only reach its corporate goals if the staff are highly qualified and continuously kept in the loop about ongoing and current developments. Employees are therefore offered individually tailored education and training opportunities and relevant the chance to achieve additional qualifications. Systematic succession planning guarantees that a sufficient number of potentially suitable employees are available for all management positions and that we can fill vacancies from within the company if and when the time arises. To that end, we identify and develop talent , through programmes such as "Young Professionals" designed and offered in cooperation with Elia Group. 50Hertz obtains qualified new talent through our internal apprenticeship programme, a 24-month trainee programme and by hosting internships and supervising doctoral, bachelor's, and master's theses in cooperation with universities and colleges. In 2018, a total of 73 student employees and 6 trainees worked for 50Hertz. Currently, 28 young men and women are underway with their industrial or business apprenticeships, which corresponds to a trainee rate of 2.4 %. On average, each employee received 16.29 hours of training in the reporting year, excluding regular safety training. What's more, management staff are also offered 50Hertz-specific training modules for developing individual leadership skills.

### 3.5.6. Remuneration policies

GRI 102-38, GRI 102-41

Fair pay for employees and attractive benefits are a matter of course at 50Hertz. The remuneration systems are refined according to the need to ensure the Company remains an attractive employer for our staff in the future. IG BCE (the Union for the Mining, Chemical and Energy Industries), together with the Employers' Association of Energy and Supply Companies (Arbeitgeberverband Energie- und versorgungswirtschaftlicher Unternehmen e.V. – AVEU), assigns our collective agreements. Fair remuneration based on requirements and performance regardless of gender is supplemented by comprehensive company benefits along with the offer of a company pension scheme. In addition, employees have the opportunity to involve themselves in the success of the previous financial year within the framework of an Elia Group stock program. For the seventh time in 2019, every employee was offered shares within the company at a reduced price. 50Hertz transparently and voluntarily releases the total earnings of the management team in the consolidated financial statements in detail, listing the fixed and variable overall remuneration, as well as corporate pensions and any other benefits to 50Hertz's management. The features of the remuneration systems are further explained with disclosures in the corporate governance declaration.

The factor of compensation of the highest-paid employee to the average annual total compensation for all employees is 6.8.



3.5.7. Incentive systems

The remuneration system includes success- and performance-based elements, which offer an incentive for achieving common corporate goals and corresponding individual goals. A number of goals related to sustainable corporate management, such as compliance with occupational health and safety guidelines or successful social dialogue.

3.5.8. Codetermination

GRI 102-41, GRI 402

50Hertz is not only committed to the freedom of association, collective industrial agreements and the protection of employees' representatives but also values the trusting and persistent cooperation with all codetermination bodies. The Supervisory Board of 50Hertz comprises six members and is above the equal representation of employee and employer interests as contractually guaranteed by legal requirements. In 5 supervisory board meetings in 2019, through written reports, and in verbal presentations conducted by management, the Supervisory Board was updated, and discussed the current status of our business, our economic situation and the status and development of risks. A Spokesmen's Committee with information and consultation rights represents the interests of our executives. Our Works Council is responsible for representing all employees who are protected by collective agreements and all non-pay scale employees at 50Hertz. A group-wide exchange takes place in the European Works Council of Elia Group. During joint activities like the Industrial Group Committee of the Electricity Industry and the Work Group of Network Operators, we actively cultivate employee interests in the infrastructure networks' sector. Furthermore, we regularly send guest speakers and lecturers to educational events hosted by IG BCE to further boost knowledge on both sides. In order to support our employees' union commitment, we offer orientation and information events such as our "Schnupperkurse Mitbestimmung" (trial courses on codetermination). The youth and trainee representation (Jugend- und Auszubildendenvertretung – JAV), which was first established and elected for a two-year term in December 2016, represents the interests of our young employees across the board. JAV operates closely with the other codetermination bodies.



3.6. Safety

3.6.1. Management approach

GRI 403-1

Occupational health and safety and injury and illness prevention are integrated into our corporate strategy and performed by all employees as they go about their daily business. Every employee is instructed on how to be mindful of hazards, report them immediately and submit suggestions for promoting ongoing health and safety working conditions. In the financial year, occupational health and safety were once again one of the key projects in 50Hertz's business plan.

The "gib8" campaign launched in 2018 was continued in order to further sensitize employees and suppliers of 50Hertz to occupational health and safety issues. As part of the campaign, objectives were expanded and a set of measures with rules of conduct for a safety culture was implemented. Once a year, an occupational safety competition is also held to further brief and motivate the workforce. This takes into account the accident figures of the individual sites from the previous year, and prior knowledge of occupational safety is reviewed and anchored from a practical perspective that varies each year.

The personal protective equipment (PPE) worn by workers is always updated and new PPE is wear-tested and the catalogue is amended in line with the respective requirements.

3.6.2. Trainings

Employees in the technical areas receive training six times per year, while those in the engineering and commercial areas receive training once a year. The existing instructions have been extended to other areas, for example, a specific tailored height training for transformers.

3.6.3. Inspections

GRI 403-2

Occupational health and safety is not only constraint to our own employees. The stringent 50Hertz standards also apply to contracted companies working on 50Hertz construction sites outside of the company. During the contracting process and later via IT-supported construction monitoring by specially trained 50Hertz employees, it is ensured that suppliers comply with 50Hertz's strict safety requirements as any other contractual employee. This is transparently and bindingly regulated by a special code of practice to ensure occupational safety when using external companies within the 50Hertz transmission grid area. The process for dealing with incidents relating to occupational safety and environmental protection in connection with external orders was enhanced as part of the implementation of ISO 45001. Part of this is an escalation model for the development of the supplier affected and the upgrading of avoidance measures. The agreement on quality assurance on construction sites at 50Hertz is subject to the agreement for new contracts. This includes an unhindered right to carry out inspections by 50 Hertz. In the year under review, 1,260 inspections were administered. (1,159 construction site inspections carried out in 2018).

3.6.4. Accidents

GRI 403-2

In the 2019 reporting period, five reported accidents occurred at 50Hertz, which were commuting accidents. There were no on-site work-related accidents. The goals set for the accident rate and accident severity were accomplished in 2019. In an effort to prevent future accidents at work, every accident was intensively evaluated and occupational safety measures were put in place. With a total of 18 accidents at third-party contractors, the number of accidents increased compared with the previous year (11 accidents). 16 accidents involved minor injuries (cuts, tripping, and falls). There were no fatal accidents in the year under review.

ACCIDENT STATISTICS

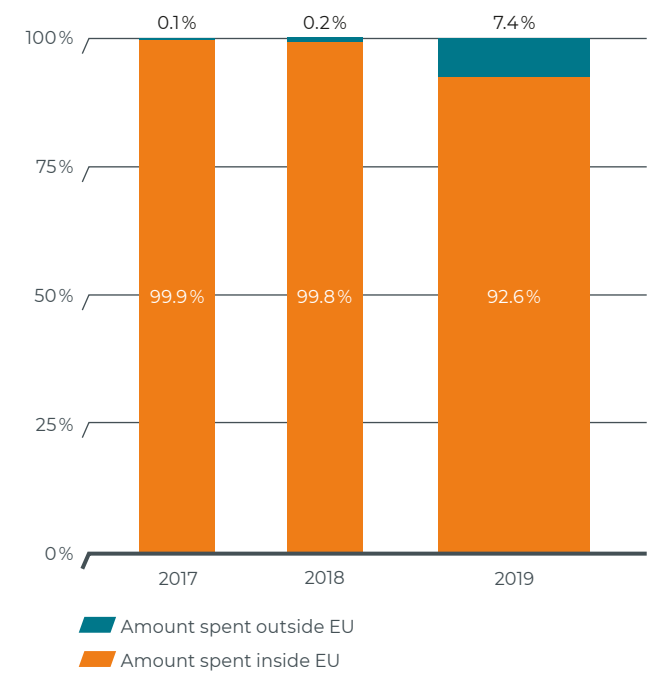
	31.12.2017	31.12.2018	31.12.2019
Work-related accidents at 50Hertz (with at least two days of downtime)	6	3	0
Frequency rate <sup>1</sup>	4.5	2.0	0.6
Severity rate <sup>2</sup>	0.23	0.02	0.00
Number of accidents in contracted companies	16	11	13

<sup>1</sup> Number of work-related accidents resulting in downtime (at least one day) x 1,000,000 ÷ number of hours actually worked.  
<sup>2</sup> Number of calendar days of downtime due to work-related accidents x 1,000 ÷ number of hours actually worked.

# 3.7. Suppliers, human rights and local added value

## 3.7.1 . Suppliers and amount of spendings in EURO-Zone

GRI 102-9, GRI 204-1



## 3.7.2. Human rights

GRI 205-1, GRI 308-1, GRI 308-2, GRI 414-1

50Hertz is committed to its responsibility to protect human rights and naturally respects the right to privacy, personal safety, freedom of speech and property rights of employees, residents, and customers. 50Hertz also undertakes responsibility for compliance with social standards in the supply chain. For this reason, 50Hertz is not only a member of the United Nations Global Compact but is also committed to the core labour standards of the International Labour Organization (ILO).

In order to ensure that business partners also comply with internationally valid regulations on human rights, (such as the banning of forced and child labour) sustainability and ethics are essential components of the supplier and service provider assessment. Since 2019, a joint Code of Conduct for suppliers of the Elia Group has been an integral part of all supplier contracts of 50 Hertz. In the periodic supplier meetings 50Hertz informs employees on sustainable action and therefore communicates the understanding for compliance with ethical principles and guidelines of sustainable development. All orders are placed centrally. In this respect, all 50Hertz business locations are cross-referenced and monitoired for human rights diligence issues and anti corruption.

The successive expansion of supply chain management to include sustainability issues will continue for years to come. Following an initial risk assessment of the 20 largest suppliers on sustainability issues and the human rights in 2018, a more in-depth analysis of possible human rights risks in the direct and indirect supply chain was carried out in the year under an intense review. The analysis was based on the human rights due to diligence requirements set out in the German National Action Plan (NAP). As a result, four human rights risks at 50Hz and in the supply chain were acknowledged and prioritised.

- Health and safety in the workplace
- Environmental protection and health
- Employment and working conditions
- Freedom of assembly and expression

The risks identified will be analysed in greater depth in the coming reporting year and appropriate measures will be undertaken.

## 3.7.3. Local added value

TAX POLICY AND ADDED VALUE

GRI 203-1, GRI 203-2, GRI 204-1, GRI 201-1, GRI 413-1

50Hertz and its subsidiaries are evidently subject to tax. Taxes are used to finance measures and current expenses of regional administration bodies. The various regional administration bodies are then entitled to the revenue generated from the different tax brackets. As an employer, 50Hertz pays the wage tax for its employees directly to the tax authorities. This wage tax is recorded under personnel expenses. The federal government primarily imposes income and corporate income tax as well as VAT. Through a complicated financial equalisation scheme between the regional administration bodies, which is laid out in the financial constitution of German basic law, these taxes partially go indirectly to the regional administration bodies of federal states and communities in 50Hertz's grid area. In 2019, 50Hertz paid out EUR 64.7m (prior year: EUR 40.9m) in corporate income tax. Additionally, EUR 1,050.9m (prior year: EUR 1,158.3m) VAT and EUR1,029.9m (prior year: EUR 1,053.0m) input VAT were incurred. There were no legal disputes on tax issues in the year under review. In addition to these federal taxes, the municipalities also levy real estate tax and trade tax. These taxes go directly to the municipalities. In layman's terms, this part of 50Hertz's added value can be directly used in the municipalities of 50Hertz's grid area via their households to finance their expenses. During the financial year, the 50Hertz paid EUR 0.4m (prior year: EUR 0.4m) in real estate tax and EUR 60.8 (prior year: 47.9m) in trade tax. In its regulations adopted by management, 50Hertz has implemented a non-agressive tax policy and to pay its taxes on time and in accordance with the law. By making this voluntary commitment in the areas it can influence, 50Hertz has created a framework for sustainably distributing the added value generated. The main beneficiaries of this are predominantly weaker regions, located in 50Hertz's grid area. In 2019, 50Hertz secured goods and services totalling EUR 707.5m from companies headquartered in Germany. Out of this amount, EUR 346.9m went to companies based in 50Hertz's grid area. This is equivalent to a share of around 49 percent.

CORPORATE CITIZENSHIP AND LOCAL ADDED VALUE

50Hertz supports numerous projects in its grid area, primarily relating to cultural, energy and environmental education, as well as youth and social affairs. Clear management and organizational structures have been established for the implementation of our many social activities. Our Communications & Policies department is responsible for our engagement in such causes. The Department coordinates with management to set the goals, coordinate the activities and examines - together with the Legal Department and the Compliance Committee - requests for projects worthy of support. Our guideline for donations and sponsoring defines our general support principles, assessment criteria, and the organizational process, and is required for all employees. When granting donations and sponsoring support, it is always agreed that the cause coincides with our corporate values, is

geared towards sustainability, offers true added value for our society and the public and follows the well-defined process.

In the surroundings of the headquarters, the 50Hertz Netzquartier sees itself as a respected corporate citizen, which actively contributes to making the new residential and working district "Europacity" attractive to its surrounding residents. The daycare facility "Energiebündel" welcomes not only children of 50Hertz employees but also from the neighbourhood. Since summer 2017, the "Rundgang 50Hertz" exhibition has been held annually in the Netzquartier building. Together with the Hamburger Bahnhof Museum for Contemporary Art in Berlin, outstanding work by graduates of various art academies in the grid area were exhibited.This presented talented young artists with a platform for entering the world of the professional art market, making valuable connections and further pursuing their career.

Specifically educating children and adolescents about the energy transition is of great importance to the company. An interactive exhibit called "Energie gemeinsam wenden" (Changing energy together), developed by 50Hertz and the Independent Institute for Environmental Issues (Unabhängiges Institut für Umweltfragen e.V.), lightheartedly, albeit educational, teaches students about different aspects of the energy transition. In the 2019 reporting year, a total of 890 students visited the exhibit.

50Hertz also supports selected projects in its grid area that substitutes a multi-faceted cultural landscape. As part of the renowned Artist in Residence programme at the Konzerthaus Berlin, the pianist Wíkingur Ólafsson was supported. We also supported the Musikfestspiele Mecklenburg-Vorpommern once again.

In 2019, 50Hertz was once again involved in numerous initiatives, associations and organisations throughout the entire grid area. These included the Rennsteig Herbstlauf in the Thuringian Forest, the Heinz Sielmann Foundation and the German Maritime Search and Rescue Association.



# 3.8. Stakeholder Engagement

## 3.8.1. Management approach

As part of the materiality analysis process, the 50Hertz stakeholder environment was analysed and defined. The company regularly contacts and exchanges information with these stakeholder groups. Internal project-related guidelines define the timelines and interactions between project planning, approval, public participation, and stakeholder management. This includes comprehensive lessons through learned processes, which enable the company to unceasingly develop the standardised “tool kit” for public participation at 50Hertz. Moreover, 50Hertz participates in the debate on the quality of public participation, for example, in the Alliance for a Diverse Democracy of the Bertelsmann Foundation and as a member of the Dialog-Gesellschaft e.V.

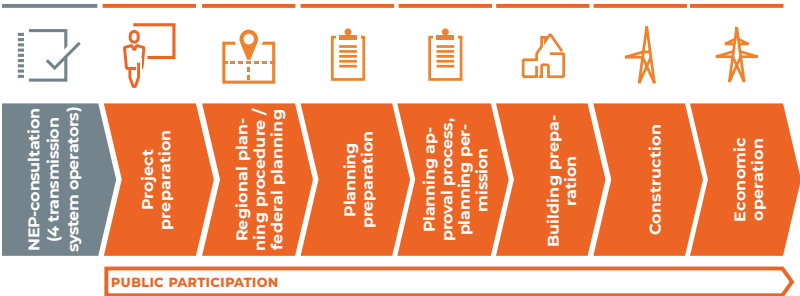
## 3.8.2. Public acceptance

GRI 102-29, GRI 102-43, GRI 102-44, GRI 413-1, G4 EUS Stakeholder Participation

When planning and implementing the grid expansion, 50Hertz takes a comprehensive dialogue and participation approach. The involvement of relevant stakeholder groups plays a vital role when it comes to sustainable grid expansion. Firstly, regional and local stakeholder

groups are carefully analysed and issues, questions, and concerns of those living locally are addressed. For this, 50Hertz follows the VDI 7000 standards. This allows 50Hertz to develop and implement a participation plan together with the region, based on both the standards of early public participation that were deemed successful, and the project specifications of each individual project. In the regions in which existing capacities are being increased or new transmission substations and lines are being built, the need to inform and involve citizens varies. 50Hertz wants to align itself to the specific needs and engage in dialogue locally. This is the only way to further improve plans, integrate common knowledge that is only available locally and involves those affected.

Liasion with relevant stakeholder groups begins very early in the planning phase of projects. This includes consultations on grid development plans as well as grid enhancement and expansion projects. Discussions with the affected parties is conducted according to clearly defined requirements, in set formats and by means of a standardised “tool kit”.



### Target groups

Policy and administration	✓	✓	✓	✓		✓	✓	✓
Citizens' initiatives	✓			✓	✓			
Residents		✓	✓	✓	✓	✓	✓	✓
Public interest bodies	✓		✓		✓		✓	
NGOs	✓		✓	✓				✓

### Participation

World Café								
Group conferences			✓		✓			
Planning panels		✓		✓				
Dialogue mobile		✓	✓	✓	✓	✓		
1:1 discussions	✓	✓		✓				
Advisory board		✓	✓	✓	✓	✓	✓	

### Dialogue

Work groups (across all Federal states)		✓	✓	✓	✓	✓	✓	
Information market	✓*	✓	✓		✓			
Press talks			✓		✓			
Hotline		✓	✓	✓	✓	✓	✓	✓
Launches								✓
Regional events		✓	✓	✓	✓			
Project presentation	✓	✓	✓	✓	✓			

### Information

Public relations	✓		✓	✓	✓	✓	✓	✓
Newsletter			✓	✓	✓	✓	✓	✓
Printed material		✓	✓	✓	✓	✓	✓	✓
Website	✓	✓	✓	✓	✓	✓	✓	✓

\* As part of the consultation on NEP, the 4 transmission system operators are holding information and dialogue events, where selected procedures, methods and used data will be presented for the 1st draft of the NEP. Subsequent to this, opinions about it can be given.

3.8.3. Stakeholder dialogues

GRI 102-21, GRI 102-40

	FINANCIAL SECTOR			ENVIRONMENT/SOCIETY									MARKET				
	Shareholders	Investors	Rating agencies	German Federal Network Agency	Political decision-makers	Non-governmental organisations	Citizens' initiatives	Trade unions	Public	Media	Employees	Research and education	Suppliers	Generators	Distribution system operators	Major consumers	Transmission system operators
DIALOGUE																	
OWN FORMATS																	
Reports	✓	✓	✓	✓	✓	✓						✓					
Press conferences		✓								✓							
Telephone conferences		✓	✓														
Co-determination								✓			✓						
Information sessions		✓									✓		✓				
Conventions/conferences														✓	✓	✓	✓
Scientific advisory committee												✓					
Partnerships with higher education institutes												✓					
Research work												✓					
Network meetings for visitor groups					✓												
Visitor groups					✓							✓			✓		✓
Cultural events									✓		✓						
Learning activities for children and teenagers									✓								
Media relations work									✓	✓	✓						
Outreach activities					✓		✓		✓								
Publications							✓		✓		✓						
FOREIGN FORMATS																	
Guest lectures								✓				✓					
Committees					✓			✓									
Work and network meetings						✓		✓							✓		✓

Personal and digital: 50Hertz on information tour

50Hertz wants to replace its 220 kV line from Bad Lauchstädt in Saxony-Anhalt via Wolframshausen to Vieselbach in Thuringia with a more powerful 380 kV line. The project, called "Grid Connection South Harz", was presented and discussed publicly for the first time at seven information events in the region. For the southern section alone, the planning team visited seven locations in five days and provided interested citizens with information. What will change in concrete terms? When will details be available? The citizens have many questions. The point of these info-markets is to present information and educate the public. The extensive reporting in the regional media and the support in the social media are fundamentally helpful in this respect.

3.8.4. Cooperations

Active leadership of associations and participation in research and development projects is an integral part of innovation management at 50Hertz. In various cooperations with academic as well as industrial partners, activities in the areas of new technologies, energy markets, and system security, the integration of renewable energies and the necessary development of the electrical system are key elements. Overall, around EUR 2m (prior year: around EUR 2m) was spent on research and development projects in 2019. This was compensated by EUR 0.25m (prior year: around EUR 0.15m) that 50Hertz received in public non-repayable subsidies.

Furthermore, 50Hertz is the lead coordinator of the WindNODE joint project, in which more than 70 partners in the northeast German model region are currently underway in joint solutions to integrate even larger amounts of renewable energy into the power grids as efficiently as possible. In addition to energy suppliers, grid operators, and high-tech specialists, companies from the automotive industry, supply and disposal industry, housing industry, and retail trade, as well as several universities and research institutes from the region are on board.

In the "Connect+" project, the four transmission and 16 distribution system operators have joined forces to cooperatively face the challenges of implementing the Network Expansion Acceleration Act (NABEG). The legislator has hereby determined that in the future, all plants for the generation or storage of electrical energy with a nominal output of 100 kilowatts or more can be used to prevent foreseeable bottlenecks in the electricity grid from occurring from the outset.

The Scientific Council was established for the purpose of regular exchanges between science and practice. The voluntary committee currently consists of 16 professors from the fields of energy technology, economics, law, and politics. The council meets once or twice a year to discuss and evaluate current topics and future issues in relation to 50Hertz. In 2019 the focus of the two meetings was on the subjects "Consequences of the coal phase-out for grid development", "Active grid management" and "Assistance systems for system management" as well as "Use of AI".

Additionally, 50Hertz has been collaborating with a number of universities in the grid area for a number of years. The topics of joint studies relate, for example, to the quality of extra-high voltage grids, the operation of three-phase and direct current on a single pylon, the determination of critical conditions in the 50Hertz grid or the implications of the energy transition for the economy, politics, and society. Moreover, we regularly share our expertise within universities and research institutes through a series of practice-oriented lectures and workshops.

Collectively with various European environmental associations and other transmission system operators, 50Hertz is a founding member of the "Renewables Grid Initiative" (RGI), which promotes grid expansion throughout Europe for the effective integration of renewable energies and promotes the distribution of innovative participation practices (further selected memberships on page 49).

Cooperation with universities and partners



In the project "GreenHydroChem Central German Chemical Triangle" the material use of hydrogen plays a crucial role. To this end, water at the Leuna site is to be split into hydrogen and oxygen in a 50-megawatt electrolyser using renewable electricity. The hydrogen will then be converted into basic materials such as methanol in local chemical plants, for example. The real-world laboratory concept "Reference Power Plant Lausitz" goes one step further: Here, hydrogen is to be produced with green electricity in an electrolyser, made available for transport and industry and, if necessary, converted back into electricity using the heat generated. A hydrogen storage tank as well as a battery and a supercapacitor for storing electricity will enhance the plant. Both projects are designed to contribute to system and supply security in the grid. 50Hertz expects the projects to make progress in the development of Power-to-X technologies, which will play an important role in the energy transition.



# 3.9. Environmental aspects

## 3.9.1. Management approach

GRI 102-11, GRI 102-26, GRI 308-1, GRI 308-2, G4-EUS-DMA Biodiversity

Environmental and social sustainability, as well as a clear commitment to environmental protection and the conservation of resources, are all integral components of the corporate strategy. 50Hertz is a frontrunner in the integration of renewable energies into the entire electrical system: In 2019, around 60% of gross electricity consumption in the 50Hertz balancing zone was derived from wind or photovoltaic power as well as biomass, hydropower and other renewable energies. The development of the extra-high-voltage grid is necessary for transporting gradually increasing amounts of renewable energies over long distances and to ensure the security of the electricity supply and an effective electricity market. Our main goal is to sustain the impact of 50Hertz's plants and activities on people and natural habitats to an absolute minimum. Therefore, compliance with the NOVA principle is a matter of course for 50Hertz. NOVA states, grid optimisation (Netz-Optimierung) before reinforcement (Verstärkung) before expansion (Ausbau). Simply put, 50Hertz only builds new lines when all other options for increasing grid capacity have been exhausted.

The planning, operation, maintenance, and environmentally friendly conversion and expansion of our transmission grid in the northern and eastern parts of Germany follow national and European frameworks and regulations. This operational implementation of environmental requirements is controlled by means of company guidelines and process instructions, which are continually updated and adapted. In our environmental protection organisation guideline, 50Hertz has set out tangible obligations and tasks. Principally, the management team is responsible for environmental protection. It defines the goals and organization of the Company's environmental protection efforts. Within management, the Chief Technical Officer assumes the function of the environmental officer. The management also directs the hazardous materials, waste and water protection officers, who advise the entire organisation on environmental issues.

Since October 2019, the new Department of Environment/Quality Management/Business Unit Control has been responsible for the appropriate handling and implementation of all tasks relating to environmental and nature conservation issues, quality management and the management of related tasks. The department advises the head office functions (staff functions) at the various company locations in respect to process control and ensures the stringent implementation of the environmental and quality strategy and legal compliance.

50Hertz ensures the availability of any relevant information and all required resources for fulfilling the strategic and operative objectives relating to energy efficiency and environmental protection. Environmental protection activities are documented internally via annual environmental reports. The Environmental Report for the 2019 reporting year is due to be published in March 2020. For this reason, some of the figures mentioned are based on calculated estimates and have therefore been marked.

50Hertz consistently and actively works on continuously improving its environmental performance, energy-related performance and

management system. To progressively further develop operational environmental protection and energy management, you also need to raise awareness of and actively involve employees, which are motivated to act in an environmentally friendly and energy-efficient way. In doing so, the legal requirements for training are consequently met. As the law requires water protection and waste officers to attend a two-day training every two years, at 50Hertz employees receive one day of training every year. The training for employees and hazardous materials officers involved in the hazardous materials process is provided every five years. Individual company departments, such as the Procurement/Facility Management Department and the project units, are given training as and when required.

The "Agreement on Quality Assurance on Construction Sites" is an essential part of new contracts. Suppliers and contains, among other things, are concerns of the precautionary principle in environmental protection. Compliance with this principle is frequently checked by means of IT-supported construction inspections. In the year under review, 1,260 construction site inspections were carried out. The common code of conduct for suppliers of Elia Group is assumed for 50Hertz and contractual for all suppliers. The code of conduct enlists additional principles on environmental protection and resource conservation.

## 3.9.2. Biodiversity

GRI 304-1, GRI 304-2, GRI 304-3, G4-EUS-DMA, Biodiversity, G4-EUS-EN12, SDG12

### 3.9.2.1. COMPENSATION MEASURES

GRI 304-2

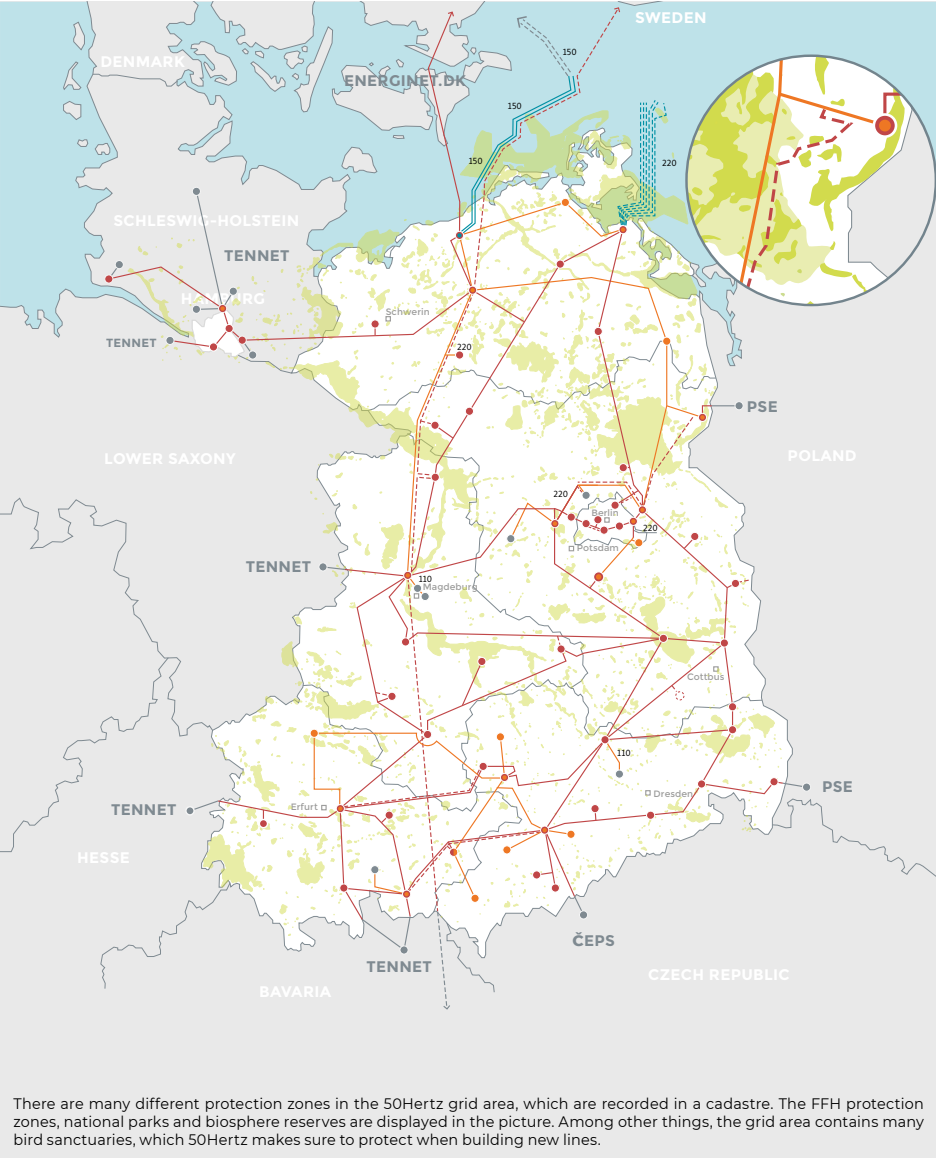
It is the policy of 50Hertz to keep its impact on nature and the restriction of biodiversity to a minimum. During permit approval procedures for project planning, not only do we consider the economy, needs of residents and technological concerns, but also keeping in mind the protection of plant and animal life. In the preliminary stages of such procedures, environmental impact assessments are launched to minimise any nature conservation conflicts at the early stages. Then, an appropriate route is identified in which, in a subsequent step, the exact route of the line through that corridor is mapped and a list of necessary protective, compensatory and replacement measures is initiated. All the examinations are conducted together with external environmental planners, routing experts and, if necessary, other scientific and nature conservation specialists. Only once the entire process is completed can the construction project commence – under external ecological construction supervision. Site preparation and construction schedules are implemented in ways that minimise even the slightest impact on natural features, take conservation periods and requirements into consideration from the get-go and compel companies subcontracting for 50Hertz to consider the environmental aspects of their operations. Following this, a final assessment is underway.

According to the BNatSchG , companies are obligated to avoid causing preventable damage to nature and the landscape or to otherwise keep it to a bare minimum. Whenever possible and reasonable, lines

are bundled with existing overhead lines and infrastructures such as railway beds and highways. Line routes are modified to the local natural features so as to impact the integrity of the landscape no more than necessary. Where interference is unavoidable, 50Hertz takes compensatory and replacement measures. These can be divided into six categories: planting measures, forestry measures, water measures, species protection, dismantling measures and other measures. When planning and implementing compensatory and replacement measures, 50Hertz liaises with the affected communities, conservation agencies, interested citizens and NGOs at the early stage of the process. 50Hertz works with them as partners to develop suitable plans early on and suggests these to the authorities as part of our approval planning. For this purpose, regional eco pools are being used on a regular basis. Eco pools are contributions to projects of other organisations, as well as compensation payments, which enable more comprehensive measures than planting individual replacement plants and are therefore more effective, efficient and sustainable. In 2017, 50Hertz adopted guidelines for targeted compensation management. They define the action areas necessary for successful approval and

implementation of the measures. The internal assessment commission meets every two months to debate on these measures. The preferred measures are recorded in a real estate cadastre. There are currently 202 compensatory and replacement measures in progress in the 50Hertz grid area and 566 being implemented, maintained or were completed. Therefore, the total number of compensatory and replacement measures has increased from 710 in 2017 to 768 in the reporting year.

A further step towards consequently reducing the impact on the environment is the development of the "compactLine" pylon design. Lowering mast heights, narrowing routes and a solid wall mast with a smaller circumference are the hallmarks of this innovative research and development project. In the future, it should make it possible to reduce the impact of overhead lines on the landscape and nature in endangered areas. The compact design offers an ideal opportunity to integrate a new 380 kV line into sections of existing 220 kV lines. Following the one-year test operation, which commenced in August 2018, the evaluation began in the year under review we are awaiting the results in the second quarter of 2020.

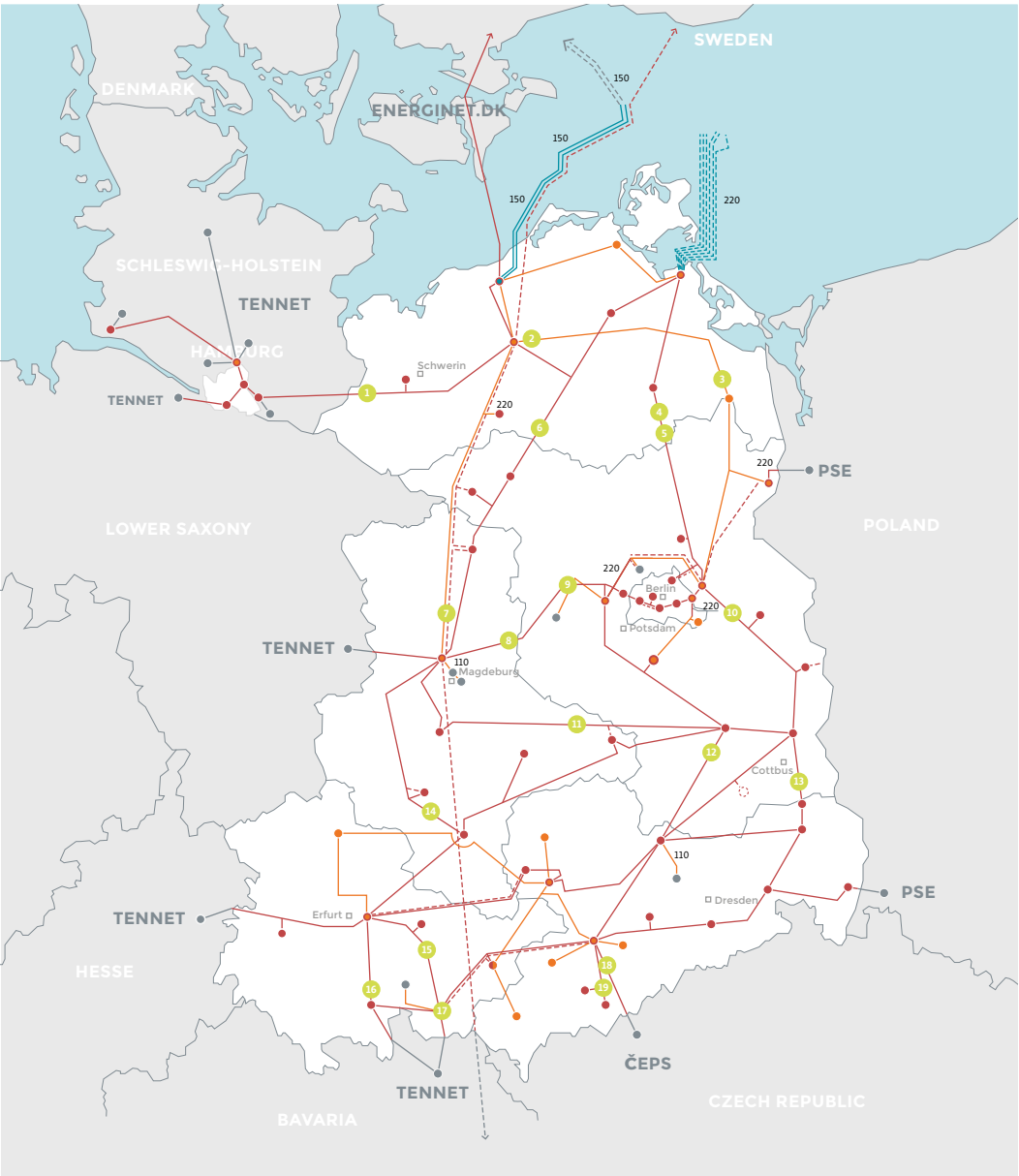


3.9.2.2. ECOLOGICAL AISLES MANAGEMENT

GRI 304-3

In order to build an overhead line in forested areas, we generally have to establish aisles. In accordance with the necessary safety distances, the lines need sufficient room to move to the sides and to the ground. Trees must, therefore, be removed from the aisles in sections and at regular intervals. However, trees and shrubs provide natural habitats for countless animals and plants. The objective of 50Hertz is therefore to impact these natural areas as little as possible in the long term and to increase the biodiversity under the lines. With the "Ecological Aisle Management" (EAM), which was already signed-off in 2010 in cooperation with the University of Applied Sciences Erfurt, a forward-looking, intervention-minimising and ecologically compatible route

planning and management is being pursued. The path under an overhead line is designed in such a way that natural habitats are created there again, taking into account safe operation. During the course of the project, a biologically diverse and valuable pathway is accordingly developed. 50Hertz is applied by the EAM on a mandatory basis for new lines and on a voluntary basis for existing lines. In the year under review, the various EAM projects that had already been launched were intensively examined for their biodiversity benefits. The aim of the review is to detect the most efficient measures and implement them accordingly in the future.



Ecological Aisle Management (EAM)

	Measures	Area in hectares
1	Edge of forest, Kölziner Tannen	1.8 ha
2	Eco-account, Suckower Tannen	14 ha
3	Gameland, Bienenweide Schönwalde	5.6 ha
4	Biotope management NABU area	1.9 ha
5	Edge of forest eco-account, Hohenzieritz	2.5 ha
6	Edge of forest structuring, Satow meadow orchard	9.8 ha
7	Grazing, Mahlpfuhler Fenn	6 ha
8	Hohenbellin hedges	6 ha
9	NABU project, Marzahner Fenn	1.8 ha
10	Biotope management, Altlandsberg municipal forest	25 ha
11	Wild flower meadow, Külsoer Mühle	0.4 ha
12	Edge of forest pond, Rochhauer Heide	13 ha
13	Edges of forest, Döbbener Heide	12.6 ha
14	Biotope management, Harz conservation area	3.2 ha
15	Pilot line, Hummelshain	9.1 ha
16	Pilot line, Oberweißbach	1.8 ha
17	Biotope structuring, Ruppertsdorf	1 ha
18	Slope planting, Burkhardtsdorf	0.3 ha
19	Grassland seed test area	0.5 ha
		~ 116.3 ha



3.9.2.3. BIRD PROTECTION

G4 EUS EN12

Extra-high voltage power lines naturally affect the birdlife. For this reason, 50Hertz is also going to great lengths to help minimize negative effects on bird life. In the year under review, the results of a study carried out in association with the Brandenburg State Environmental Agency were evaluated. Video monitoring of a section of an overhead power line equipped with bird protection markers recorded only four accidents out of over 100,000 fly-bys. These results already show the effectiveness of bird protection markers, however, further investigations are still necessary to secure information on the installation and location of the markers. For this reason, the data material was handed over to the experts of the Renewables Grid Initiative (RGI) and the German Nature Conservation Union (NABU), who coincide to operate a bird finding portal, for further evaluation. Bird protection markers are currently installed on around 300 kilometres of an overhead line. 50Hertz plans to supply further overhead lines in 2020.

3.9.3. Water protection

GRI 306-5, SDG14

50Hertz is committed to effective water protection. As the business activities of 50Hertz are not subject to significant water usage, its responsibility in this regard is not so much to reduce water consumption, but to consider water resources in the ground during grid and substation projects as well as avoiding water and soil pollution with hazardous materials. To give an example, 50Hertz has installed special safety features in oil-containing systems. To protect the natural environment, elaborate constructions are installed beneath transformers in substations to prevent water droplets from entering the soil. The safety systems are inspected regularly by maintenance technicians and refurbished or replaced when needed. Wastewater is only discharged with appropriate permission from water authorities and if it were regularly tested for hazardous substances. With regard to water protection, the WHG “Wasserhaushaltsgesetz”: Water Resources Act and state-specific systems regulations (VAwS) are of specific importance to 50Hertz. Employees are trained in the environmentally friendly operation of our systems and water protection officers are continuously updated on all new developments. In the grid area, the requirements of the WHG and VAwS are especially relevant for the coastal regions of Mecklenburg-Western Pomerania.

The three submarine cables of the grid connection project Ostwind 1, for example, run from the Cluster Westlich Adlergrund in a southerly direction past the island of Rügen through the Greifswalder Bodden to the landing at Lubmin. In the landing zone, sensitive nature conservation areas and valuable biotopes must be crossed. By using the environmentally friendly, trenchless horizontal directional drilling method (HDD method), 50Hertz significantly reduces the impact on flora and fauna in the dune landscape. Furthermore, 50Hertz makes a significant contribution in making the Baltic Sea safe for humans as well as the environment. Every preparation includes the removal of contaminated sites on the bottom of the Baltic Sea, for example, explosive remnants of war from previous world wars. For the Ostwind 2 project, whose two offshore wind farms are expected to generate around 725 megawatts in the future, the first clearings and ground surveys began in 2019 in the shallow water area of the Baltic Sea and on land. The idea of an artificial reef is currently being examined as

compensation for unavoidable interventions in the Baltic Sea. In this way, an area of 17 hectares and a water depth of up to 40 metres could contribute to the diverse sealife in the Baltic Sea. In the year under review, 50Hertz signed the Marine Grid Declaration of the Renewables Grid Initiative (RGI), which lays down standards for the early involvement of stakeholders and for nature and species conservation in the development of the offshore grid beyond the legal requirements.

3.9.4. Energy Consumption

GRI 302-1, GRI 302-4, SDG7, SDG13

50Hertz fiercely supports the objectives of the EU and the Federal Government to reduce CO<sub>2</sub> emissions, in particular by expanding the grid, which allows an increase in the share of carbon-neutral energy sources, in addition to optimizing the company-wide CO<sub>2</sub> footprint. The second external energy audit, following the DIN EN 16247-1 was administered on a scheduled basis in the year under review in order to systematically record the energy consumption of our systems and administrative buildings. The energy consumption from 2018 was used as a base, and for the first time the new corporate headquarters, the 50Hertz Netzquartier in Berlin Mitte was included in the consumption figures. The planning and construction of the corporate headquarters were designed for sustainability in terms of energy efficiency, ecology, usage possibilities, and accessibility. The 50Hertz Netzquartier has been awarded the internationally recognised Gold Standard of the German Sustainable Building Council (DGNB) and the American LEED Standard (Leadership in Energy and Environmental Design). When it comes to new buildings, aspects of sustainable energy construction are already taken into account at the planning stage and implemented wherever possible.

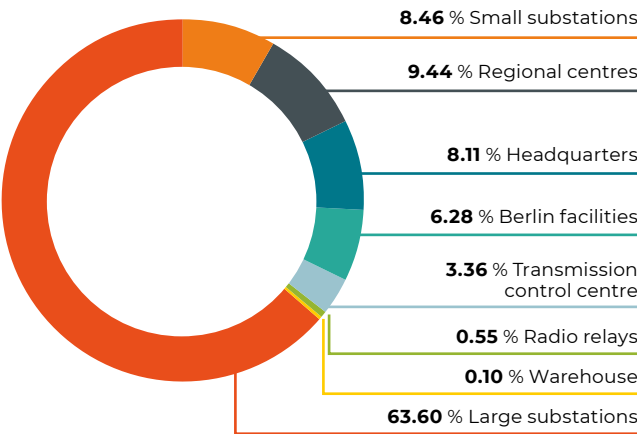
ENERGY CONSUMPTION

	2019		
	MWH	%	t co <sub>2</sub> -EQ
Electricity	63,627.87	89.82	34,168
District heating	1,182.55	1.67	331
Fuel (petrol)	808.28	1.14	163
Fuel (diesel)	0.16	0.00	0.04
Natural gas	5,219.39	7.37	1,388
Total energy consumption	70,838.25	100.00	36,050.04

Data source: External energy audit carried out in line with DIN EN 16247-1 in 2019.

The breakdown of total CO<sub>2</sub> emissions indicates the clear dominance of electricity with a share of almost 95 percent. A noticeable reduction in the CO<sub>2</sub> footprint can only be achieved in this segment. The largest share of electricity consumption, 55,497.65 MWh, is accounted for by the 50Hertz substations. All switch gear together, in which only electrical energy is required, account for a total share of almost 79 percent. The locations with administrative and control tasks, such as the headquarters, the regional centers and the control center, which also require thermal energy and fuels, account for a total share of almost 21 percent. The warehouse and radio relay stations do not have a significant share of consumption. Total energy consumption relating to the amount of electricity transmitted has decreased somewhat overall from 0.0629% in 2014 to 0.0605% in 2018.

DISTRIBUTION OF TOTAL ENERGY CONSUMPTION IN 2018



The energy audit has revealed optimization potential throughout the company, the feasibility of which has been carefully examined in terms of economic efficiency and sustainability. This included, for example, insulation work in the technical areas of the 50Hertz Netzquartier and the Teufelsbruch substation, as well as temperature adjustments to the air conditioning units from 21 degrees to 26 degrees in the technical rooms at the Röhrsdorf administration location. An energy-related refurbishment at the Bad Lauchstädt administrative location is also being examined.

3.9.5. Emissions

GRI 305-1, GRI 305-2, SDG7, SDG13

In addition to electricity consumption, the fleet vehicles have an indefinite influence on the CO<sub>2</sub> footprint. They are essential for fully covering the extensive grid area and fast access to the facilities. Since 2019, a new location concept with ten instead of seven locations has been supporting the reduction of the necessary travel distances and thus contributing to the reduction of greenhouse gas (GHG) emissions. In addition, a further eight diesel vehicles have been replaced by electric vehicles as part of fleet management. A further two hybrid vehicles were ordered. Large-scale use of electric vehicles is not yet planned for reasons of range. As part of the replacement procurement process, the fleet is being continuously adapted to endure the advancement of technological standards and efficiency. These measures are reflected in the reduced CO<sub>2</sub> emissions of the vehicle fleet. In 2019, these vehicles emitted 1,521 tons of CO<sub>2</sub>. Compared to the previous year (previous year's value 1,758 tons CO<sub>2</sub>), 237 tons of CO<sub>2</sub> were not released.

Today, sulphur hexafluoride (SF<sub>6</sub>) is used as an insulating and switching gas in gas-insulated high-voltage switchgear. It has very good electrical properties, is non-toxic and chemically very stable. However, SF<sub>6</sub> has a global warming potential per unit of a substance that is approximately 23,000 times higher than CO<sub>2</sub>. For this reason, SF<sub>6</sub> is used in switchgear in a closed circuit, i.e. emissions to the environment are, in this way, virtually eliminated. The pressure chambers are permanently monitored technically for potential leaks. However, despite all these protective measures, natural leakage is inevitable due to the sealing technology and the necessary gas handling. According to a voluntary commitment by SF<sub>6</sub> manufacturers and users, the loss

rate measured on the total stock of SF<sub>6</sub> in Germany may only amount to 0.6 percent - at 50 hertz, this rate was significantly lower in the year under review at 0.1 percent. 50Hertz ensures that this technical gas is handled extremely sensitively and responsibly during transport, storage and, use and is aiming for an alternative solution. Nevertheless, there is yet no marketable alternative to SF<sub>6</sub> for switchgear at the 220 and 380 kilovolt levels. Therefore, 50Hertz, together with 13 other companies, is funding a research project at the ETH Zurich. This project aims to systematically investigate alternative gases for their suitability as insulating and switching gases in switchgear. The research programme will be conducted over the course of three years.

Various modes of transport are used for business trips. In the reporting year, air travel accounted for 436 tonnes of CO<sub>2</sub>. In addition, employees travelled 546.000 kilometres by long-distance trains. Long-distance train journeys are not reported, as Deutsche Bahn claims to use 100% green electricity.

50Hertz is currently evaluating the successive expansion of its climate management scheme and the associated possibility of reducing its GHG emissions. For the reporting year 2019, the full CO<sub>2</sub> emissions from air travel were offset for the first time via the service provider atmosfair and the first wind farm in Nicaragua's Rivas province was supported. With a total capacity of 39.9 MW and an average electricity production of 196 GWh per year, the wind farm makes a considerable contribution to clean electricity production all while fighting the energy deficit of the second poorest country in this region. The project is in line with the Sustainable Development Goals (SDG 1, 3, 7, 8, 9, 13 and 17) of the United Nations.

In the reporting year, direct (Scope 1) and indirect GHG emissions (Scope 2) were calculated for the second time.

GHG EMISSIONS

Greenhouse gas emissions in 2019 in t CO <sub>2</sub> equivalent		
DIRECT (SCOPE 1)		
SF <sub>6</sub> leakage	4,256.56	0.38%
Emergency power system*	6.82	0.00%
Vehicule fleet*	1,758.18	0.14%
Total direct emissions	5,784.37	0.52%
INDIRECT (SCOPE 2)		
District heating*	184.86	0.02%
Total electricity consumption for the Netzquartier building*	2,007.93	0.18%
Grid losse	1,090,200.00	97.14%
Energy consumption by own assets	23,668.87	2.11%
Total indirect emissions	1,116,072.54	99.45%
INDIRECT (SCOPE 3)		
Flights	436.00	0.04%
Long-distance rail travel	0.00	0.00%
Total indirect emissions	436	0.04%
Total	1,122,292.91	100.00 %

\* The values provided here are estimates as of 31 December 2019. The following calculation bases and emission factors were used to work out the CO<sub>2</sub> equivalents: SF<sub>6</sub> – IPCC Fifth Assessment Report (AR5); vehicle fleet – direct fuel consumption; energy (electricity, district heating) – German Environment Agency 2017 and GHG Protocol Scope 2 Guidance; business trips – service provider data and GHG Protocol Scope 3 Guidance.

The calculated figure in the carbon footprint corresponds to 1,002 tonnes of CO<sub>2</sub> equivalents per person including grid losses and 29 tonnes of CO<sub>2</sub> equivalents per person excluding grid losses (basis: 1,120 employees).

3.9.6. Electric and magnetic fields (EMF)

Strict regulations apply in Germany for electric and magnetic waves, which are regulated by the Federal Emissions Act. 50Hertz fully complies within these limits. 50Hertz takes the concerns of citizens very seriously and, upon request, carries out measurements on site, together with the concerned citizens, all the while demonstrating a precautionary approach.

3.9.7. Noise

Just as in the field of electric and magnetic waves, strict limits apply in Germany for noise emissions, which are regulated by the Federal Emissions Act. 50Hertz fully complies with these limits.

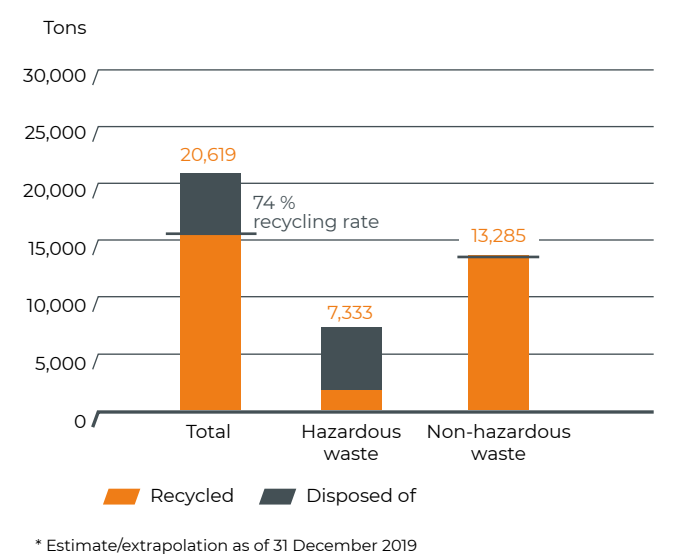
3.9.8. Waste

GRI 306-2

When it comes to handling waste, 50Hertz’s top priority is prevention. However, the annual waste production and composition is heavily dependent on restructuring and dismantling projects, as well as compensatory and replacement measures. A year-by-year comparison is therefore not applicable in this case. When dealing with waste that cannot be prevented, we act on the principle “Avoid – reuse – reduce – recycle – dispose”. When we build, convert or dismantle a system, we dispose of any parts we no longer need in a resource-friendly way.

In comparison with the previous year, construction and compensation projects generated less waste overall in the year under review.

WASTE DISPOSAL IN 2019



50Hertz was able to comply with the legally prescribed recycling requirement (recycling before disposal) at a recycling rate of approximately 74%.

4. GRI reference table

GRI 102-55

This annual Sustainability Report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core option. It is Elia Group’s third integrated annual report and covers the period from 1 January 2019 to 31 December 2019.

Common (C)	Belgium (B)	Germany (G)	GRI number	GRI description	Page
GRI 102: General information 2019					
1. Organisational Profile					
X		X	102-1	Name of the organisation	(C) Activity report p. 12 Sustainability report p. 8 (B) Sustainability Report p. 18 (G) Sustainability report p. 48
X	X	X	102-2	Activities, brands, products, and services	(C) Activity report p. 13 (B) Sustainability report p. 18 (G) Sustainability report p. 48
	X	X	102-3	Location of headquarters	(B) Sustainability report p. 18 (G) Sustainability report p. 48
	X	X	102-4	Location of operations	(B) Sustainability report p. 18 (G) Sustainability report p. 48
X			102-5	Ownership and legal form	(C) Activity report p. 148
X	X	X	102-6	Markets served	(B) Sustainability report p. 18 (G) Sustainability report p. 48
X	X	X	102-7	Scale of the organisation	(C) Sustainability report p. 8 (B) Sustainability report p. 18, 27 (G) Sustainability report p. 48
	X	X	102-8	Information on employees and other workers	(C) Sustainability report p. 8 (B) Sustainability report p. 27 (G) Sustainability report p. 55
X	X	X	102-9	Supply chain	(C) Activity report p. 4 (B) Sustainability report p. 18 & 33 (G) Sustainability report p. 48 & 60
X			102-10	Significant changes to the organisation and its supply chain	(C) Activity report p. 148
	X	X	102-11	Precautionary Principle or approach	(B) Sustainability report p. 21 & 38 (G) Sustainability report p. 50 & 66
X	X	X	102-12	External initiatives	(B) Sustainability report p. 19 (G) Sustainability report p. 49
X	X	X	102-13	Membership of associations	(B) Sustainability report p. 19 (G) Sustainability report p. 49
2. Strategy					
X			102-14	Statement from senior decision-maker	(C) Sustainability report p. 6 (C) Activity report p. 6
X	X	X	102-15	Key impacts, risks, and opportunities	(C) Activity report p. 6, p. 10, p. 132 (C) Sustainability report p. 12



3. Ethics and integrity					
X	X	X	102-16	Values, principles, standards, and norms of behaviour	(C) Activity report p. 93 (C) Sustainability report p. 9 (B) Sustainability report p. 20 & 22 (G) Sustainability report p. 49 & 51
	X	X	102-17	Mechanisms for advice and concerns about ethics	(C) Sustainability report p. 9 (B) Sustainability report p. 20 (G) Sustainability report p. 49
4. Governance					
X			102-18	Governance structure	(C) Activity report p. 114
X	X	X	102-19	Delegating authority	(C) Activity report p. 119 (C) Sustainability report p. 9 (B) Sustainability report p. 20 (G) Sustainability report p. 49
	X	X	102-20	Executive-level responsibility for economic, environmental, and social topics	(C) Activity report p. 125 (C) Sustainability report p. 9 (B) Sustainability report p. 20, (G) Sustainability report p. 49
X	X	X	102-21	Consulting stakeholders on economic, environmental and social topics	(C) Activity report p. 78 (B) Sustainability report p. 36 (G) Sustainability report p. 64
X			102-22	Composition of the highest governance body and its committees	(C) Activity report p. 116
X			102-23	Chair of the highest governance body	(C) Activity report p. 116
	X	X	102-26	Role of the highest governance body in setting purpose, values, and strategy	(C) Activity report p. 119 (C) Sustainability report p. 9 (B) Sustainability report p. 20 (G) Sustainability report p. 49 & 66
X	X	X	102-29	Identifying and managing economic, environmental and social impacts	(C) Activity report p. 72 (B) Sustainability report p. 35 (G) Sustainability report p. 62
X	X	X	102-30	Effectiveness of risk management processes	(C) Activity Report p. 132 (B) Sustainability report p. 21 (G) Sustainability report p. 50
		X	102-32	Highest governance body's role in sustainability reporting	(C) Sustainability report p. 9 (B) Sustainability report p. 20 (G) Sustainability report p. 49
		X	102-33	Communicating critical concerns	(C) Sustainability report p. 9 (B) Sustainability report p. 20 (G) Sustainability report p. 49
		X	102-38	Annual total compensation ratio	(B) Sustainability report p. 30 (G) Sustainability report p. 57
5. Stakeholder engagement					
X	X	X	102-40	List of stakeholder groups	(C) Activity report p. 4 (B) Sustainability report p. 35 (G) Sustainability report p. 64
	X	X	102-41	Collective bargaining agreements	(C) Sustainability report p. 8 (B) Sustainability report p. 27 (G) Sustainability report p. 57 & 58
X	X	X	102-42	Identifying and selecting stakeholders	(B) Sustainability report p. 35
X	X	X	102-43	Approach to stakeholder engagement	(C) Activity report p. 74 (B) Sustainability report p. 35 (G) Sustainability report p. 62
X		X	102-44	Key topics and concerns raised	(C) Activity report p. 74 (B) Sustainability report p. 35 (G) Sustainability report p. 62

6. Reporting principles					
X			102-45	Entities included in the consolidated financial statements	(C) Activity report p. 148
	X	X	102-46	Defining report content and topic Boundaries	(C) Sustainability report p. 12
X	X	X	102-47	List of material topics	(C) Sustainability report p. 12
			102-48	Restatements of information	There are no restatements of information provided in previous reports.
			102-49	Changes in reporting	The Annual Report 2019 is the third integrated annual reporting in line with the GRI - Core principles
			102-50	Reporting period	Fiscal year 2019
			102-51	Date of most recent report	Annual report 2019
			102-52	Reporting cycle	Annual reporting cycle
	X	X	102-53	Contact point for questions regarding the Annual Report	(B) <b>Marleen Vanhecke</b> External Communications & External Relations marleen.vanhecke@elia.be (G) <b>Kerstin Rippel</b> Communication and Public Affairs Kerstin.Rippel@50hertz.com
			102-54	Claims of reporting in accordance with the GRI Standards	This Annual Report has been prepared in accordance with the GRI Standards: Core option
X			102-55	GRI content index	(C) Sustainability report p. 73

GRI 103: Identified Material Aspects and Boundaries

X	X	X	103-1	Explanation of the material topic and its Boundary	(C) Activity report p. 16 (C) Sustainability report p. 12
X		X	103-2	The management approach and its components	(C) Activity report p. 16 (C) Sustainability report p. 12
X		X	103-3	Evaluation of the management approach	(C) Activity report p. 16 (C) Sustainability report p. 12

GRI 201: Economic performance

X			201-1	Direct economic value generated and distributed	(C) Activity report p. 19 Financial report (tbc)
X	X	X	201-2	Financial implications and other risks and opportunities for the organisation's activities due to climate change	(C) Activity report p. 14, 24, 42, 56 (B) Sustainability report p.21 (G) Sustainability report p.41

GRI 203: Indirect economic impacts

X		X	203-1	Development and impact of infrastructure investments and services supported	(C) Activity report p. 30 & 32 (G) Sustainability report p. 61
X		X	203-2	Significant indirect economic impacts, including the extent of impacts	(C) Activity report p. 30 (B) Sustainability report p. 37 (G) Sustainability report p. 61

GRI 204: Procurement practices

	X	X	204-1	Proportion of spending on local suppliers	(B) Sustainability report p. 33 & 34 (G) Sustainability report p. 60, 61
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GRI 205: Anti-Corruption					
	X	X	205-1	Operations assessed for risks related to corruption	(C) Sustainability p. 9 (B) Sustainability report p. 20 (G) Sustainability report p. 60
	X	X	205-2	Communication and training on anticorruption policies and procedures	(B) Sustainability report p. 20 (G) Sustainability report p. 50
X	X	X	205-3	Confirmed incidents of corruption and actions taken	No incidents of corruption occurred during the reporting period.
GRI 206: Anti-competitive behaviour					
X	X	X	206-1	Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	No legal actions pending or completed during the reporting year.
GRI 302: Energy					
	X	X	302-1	Energy consumption within the organisation	(B) Sustainability report p. 41 (G) Sustainability report p. 69
	X	X	302-2	Energy consumption outside of the organisation	(B) Sustainability report p. 23 & 24 (G) Sustainability report p. 52 & 53
GRI 304: Biodiversity					
X	X	X	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	(C) Activity report p. 84 (B) Sustainability report p. 38 (G) Sustainability report p. 66
X	X	X	304-2	Significant impacts of activities, products, and services on biodiversity	(C) Activity report p. 84 (B) Sustainability report p. 38 (G) Sustainability report p. 66
X	X	X	304-3	Habitats protected or restored	(C) Activity report p. 84 (B) Sustainability report p. 38 (G) Sustainability report p. 66
GRI 305: Emissions					
	X	X	305-1	Direct greenhouse gas (GHG) emissions (Scope 1)	(B) Sustainability report p. 41 (G) Sustainability report p. 71
	X	X	305-2	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	(B) Sustainability report p. 41 (G) Sustainability report p. 71
	X		305-3	Other indirect greenhouse gas (GHG) emissions (Scope 3)	(B) Sustainability report p. 41
GRI 306: Effluents and waste					
	X		306-2	Waste by type and disposal method	(B) Sustainability report p. 43 (G) Sustainability report p.72
GRI 307: Environmental compliance					
X	X	X	307-1	Non-compliance with environmental laws and regulations	The organisation has not identified any significant non-compliance with environmental laws and/or regulations.
GRI 308: Supplier Environmental Assessment					
	X	X	308-1	New suppliers that were screened using environmental criteria	(B) Sustainability report p. 33 (G) Sustainability report p. 60 & 66
	X	X	308-2	Significant actual and potential negative environmental impacts in the supply chain and actions taken	(B) Sustainability report p. 33 (G) Sustainability report p. 60 & 66

GRI 401: Employment					
	X	X	401-1	Total number and rates of new employee hires and employee turnover	(B) Sustainability report p. 28 (G) Sustainability report p. 56
X	X	X	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	There are no differences between the benefits provided to full-time and part-time employees.
	X	X	401-3	Parental leave	(B) Sustainability report p. 27 & 29 (G) Sustainability report p. 58
GRI 402: Labour/Management Relations (MA)					
	X				(G) Sustainability report p. 58
GRI 403: Occupational Health and Safety					
X	X	X	403-1	Occupational health and safety management system	(C) Activity report p. 98 (B) Sustainability report p. 31 (G) Sustainability report p. 59
	X	X	403-2	Hazard identification, risk assessment, and incident investigation	(B) Sustainability report p. 31 (G) Sustainability report p. 59
	X	X	403-3	Occupational health services	(B) Sustainability report p. 31 (G) Sustainability report p. 59
GRI 404: Training and Education					
X	X	X	404-1	Average hours of training per year per employee by gender, and by employee category	(C) Activity report p. 92 (B) Sustainability report p. 30 (G) Sustainability report p. 66
GRI 405: Diversity and Equal Opportunity					
X	X	X	405-1	Diversity of governance bodies and employees	(C) Sustainability report p. 8 (B) Sustainability report p. 27 (G) Sustainability report p. 55
	X		405-2	Ratio of basic salary and remuneration of women to men	(G) Sustainability report p. 55
GRI 406: Non-Discrimination					
X	X	X	406-1	Total number of incidents of discrimination and corrective actions taken	The organisation has not identified any incidents of discrimination during the reporting period.
GRI 413: Local Communities					
X	X	X	413-1	Operations with local community engagement, impact assessments, and development programmes	(C) Activity report p. 72 (B) Sustainability report p. 35 (G) Sustainability report p. 61, 62
GRI 414: Supplier Social Assessment					
	X	X	414-1	New suppliers that were screened using social criteria	(B) Sustainability report p. 33 & 34 (G) Sustainability report p. 60
GRI 416: Customer Health and Safety					
X		X	416-1	Assessment of the health and safety impacts of product and service categories	(C) Sustainability report p. 42
GRI 419: Socio-economic Compliance					
X	X	X	419-1	Monetary value of significant fines for non-compliance with laws and regulations in the social and economic area	(C) Sustainability report p. 9



G4 - Electric Utilities Specific (EUS)

Lines & losses & quality of service

X	X	EU4	Length of above and underground transmission and distribution lines by regulatory regime	(B) Sustainability report p. 17 (G) Sustainability report p. 47
X	X	EU12	Transmission and distribution losses as a percentage of total energy	(B) Sustainability report p. 25 (G) Sustainability report p. 54.

Demand management approach

X		DMA	Demand-side management programmes including residential, commercial, institutional and industrial programmes	(C) Activity report p. 59, 61, 66
X	X	DMA	Disaster / Emergency Planning and Response	(B) Sustainability report p. 21 (G) Sustainability report p. 50
X	X	DMA	Disaster / Stakeholder participation	(C) Activity report p. 74 & 78

Biodiversity

X	X	EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected area	(B) Sustainability report p. 38 (G) Sustainability report p. 66 & 70
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Health and safety & Human resources

X	X	EU15	Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region	(B) Sustainability report p. 29
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Reporting parameters

Registered office

This report is limited to Elia System Operator and Elia Asset, which operate as a single economic entity under the names Elia and 50Hertz Transmission.

The registered office of Elia System Operator and Elia Asset is located at  
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The registered office of Eurogrid International is located at  
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Reporting period

This annual report covers the period from 1 January 2019 to 31 December 2019.

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Ce document est également disponible en français.  
Dit document is ook beschikbaar in het Nederlands.

We would like to thank everyone who contributed to this annual report.