OUR SUSTAINABILITY STRATEGY

LIVED RESPONSIBILITY

ENABLING THE ENERGY SYSTEM OF TOMORROW

amprion

CONTENTS

Lived Responsibility. Enabling the Energy System of Tomorrow.

Our transmission system connects power markets in Germany and Europe for the energy world of today and tomorrow. At the same time we make our contribution to the best system security. We place high value on the protection of people and the environment, and we act for the well-being of the community. As a reliable partner, we are in communication with our customers and other stakeholders.

We are responsible and future-oriented in our work on the best possible expansion, reconstruction and operation of the power grid, as well as the energy system's ongoing development.

Dear readers,

We are making sure that the energy world of tomorrow is created safely and in harmony with the community and the environment as it integrates renewable energy. That's why we promote the development of a low-emission, sustainable energy system in everything we do. This follows our legislated mandate as a power supplier, but we also see ourselves as designers and balanced intermediaries between competing interests.

Preparing the infrastructure for the energy system of tomorrow demands long-term thinking that goes hand in hand with responsibility towards people in today's world. We are a reliable partner to our stakeholders and place great importance in being an attractive employer to our staff and the junior workforce.

We would like to further increase and publicly promote our contribution to social responsibility. This is why we have developed a strategy and identified important spheres of activity. In addition we have set clear goals that we are highly dedicated to achieving. In so doing, we would like to keep improving, achieve more transparency in our sustainability performance and allow ourselves to be judged by it.

DR. HANS-JÜRGEN BRICK
Chief Commercial Officer
and Chief Financial Officer

DR. KLAUS KLEINEKORTE
Chief Technical Officer

The strategic orientation sets the foundation, but we still have a lot to do. We want to live responsibly and act sustainably. We can only achieve our goals if we inspire our executives and employees and they continue to show commitment. The current strategy report shows the way. We invite you to join us.

We hope you find this reading inspiring and look forward to your suggestions and comments: nachhaltigkeit@amprion.net.

Dortmund, September 2019

DR. HANS-JÜRGEN BRICK

DR. KLAUS KLEINEKORTE

Amprion in Overview

With its 11,000-kilometre extra-high-voltage grid, Amprion GmbH, based in Dortmund, is a major transmission system operator in Germany and Europe. As an innovative service provider, Amprion offers power plants, distribution grid operators and industrial operations the highest system security. Around 1,400 employees are committed to this.

~63 GW

is the total power installed in the Amprion grid area.

79,200 KM²

is the span of Amprion's grid area – from Lower Saxony to the alps.

11,000 KM

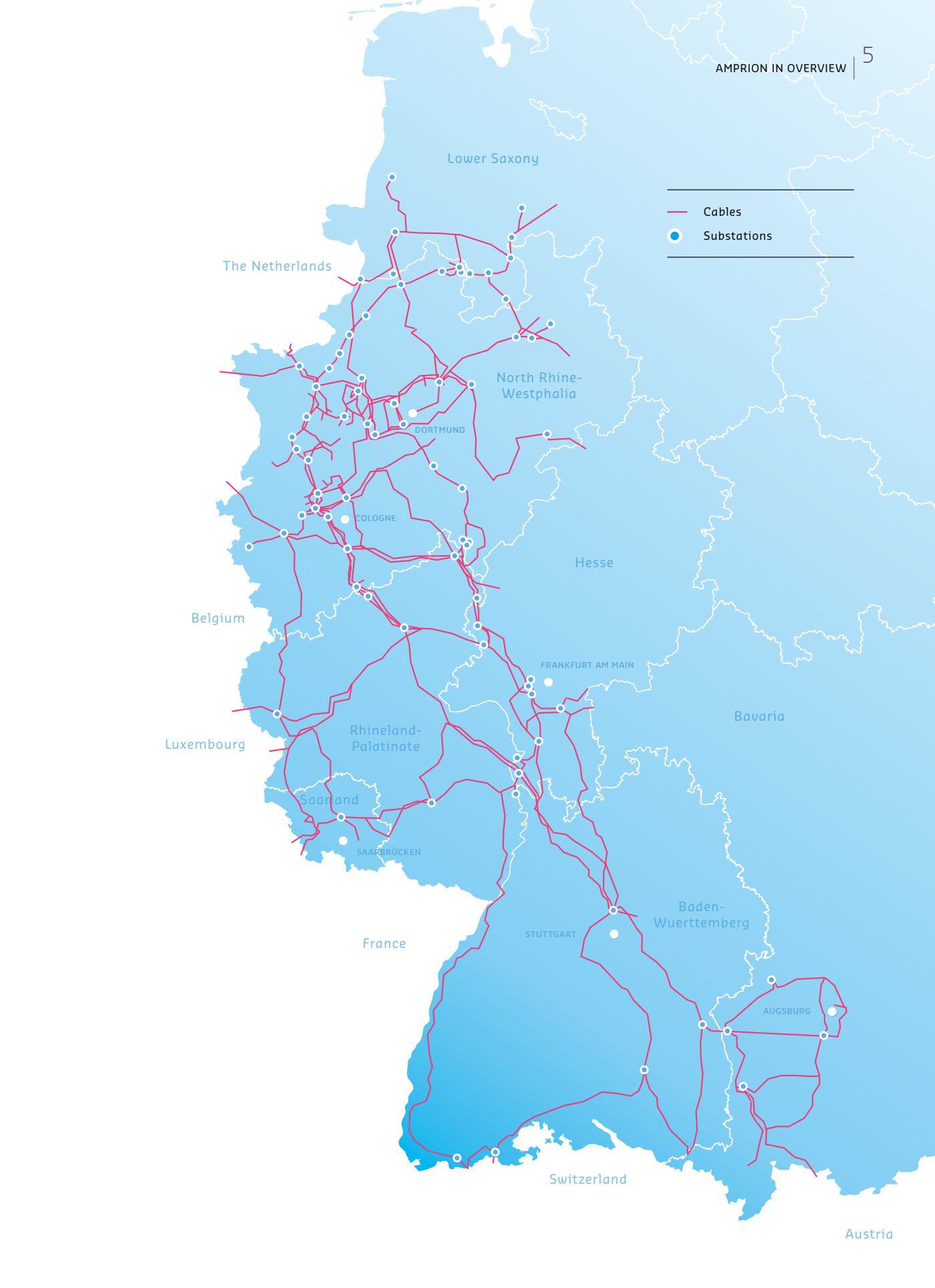
is the length of Amprion's transmission system.

~29 MILLION

people are provided with electricity via the Amprion grid.

160

Substations connect the Amprion grid with generators, regional distribution grids and our industrial customers.


Lower Saxony
Cables
Substations
The Netherlands
North Rhine-
Westphalia
DORTMUND
COLOGNE
Hesse
Belgium
FRANKFURT AM MAIN
Bavaria
Luxembourg
Rhineland-
Palatinate
Saarland
SAARBRÜCKEN
Baden-
Wuerttemberg
France
STUTTGART
AUGSBURG
Switzerland
Austria

Challenges in Our Work

The transformation of the energy world is challenging for power operators, energy generators, industry and consumers. New, decentralised structures are emerging and the entire system is becoming more complex through the connection of many different energy sources.

Climate conservation and sustainability are issues of increasing importance to society. Public stakeholders, politicians, businesses and individuals are all being challenged to make an effective contribution. Amprion is committed to this and takes its responsibility seriously. This also includes making use of our particular role as an electricity transmission system operator to promote the transition of the energy system.

Global Sustainability Goals

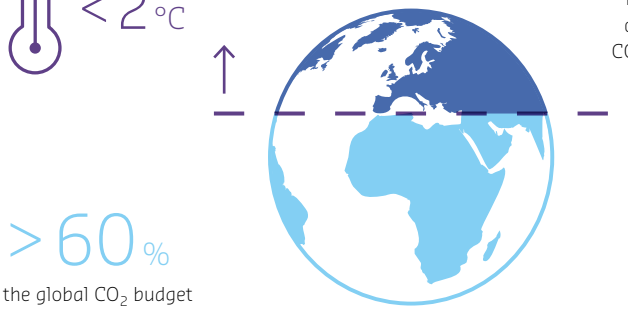
The United Nations has published a global sustainability agenda. Seventeen goals for sustainable development are to be reached by 2030. These goals include responsible use of resources, the expansion of reliable infrastructure, and the preservation of biodiversity and humane working conditions. The goal of "affordable clean energy" takes on a special role as the basis of a sustainable economic system. As the reconstruction of the energy system is necessary on a national and international level, it is an important pillar in the European and national political agenda.

The Decarbonisation of Germany and Europe

To limit global warming to under two degrees, the international community agreed to reduce CO_2 emissions by at least 80 percent by 2050 in the Paris Climate Protection Agreement in December 2015. Goals for the future of the domestic energy market have also been developed on a European level. "Energy union and climate conservation" was recorded as one of the European Commission's priorities. To reach the two-degree goal, Germany is aiming for climate neutrality by 2050, along with neighbouring European countries. This goal and the steps to achieve it are to be established at a national level in climate conservation law, and also through the implementation of further measures suggested by the Commission for Growth, Structural Change and Business. The transformation of the energy system has been under way since 2000 through the Renewable Energy Act (EEG). This gives priority to renewable energy and accelerated the proportion of its consumption from 6.7 percent at that time to 37.8 percent in the year 2018. It is now a staple

THE CO_2 BUDGET

Humanity only has a few years left to limit CO_2 emissions and reduce the irreversible changes due to climate change.



* IPCC, 2018: CO_2 budget for 67 % probability of limiting global warming to under 2°C
** WRI, 2014

of energy generation. Transmission systems are being expanded and reconstructed, as well as innovatively operated and managed, in order to integrate increasing amounts of renewable energy into the energy system. This also involves bringing it from its source location to users, thereby ensuring a reliable power supply.

The Needs of People and the Environment

Corporate responsibility has to keep ecological and social aspects in mind. The reconstruction of the energy system results in encroachment on the natural environment and the landscape. It is therefore very important to consider residents and also to preserve biodiversity through nature and habitat conservation. Many square kilometres of natural habitat are lost in Germany each year, and species extinction continues unabated. Thirty-six percent of domestic animal species are threatened, and over 70 percent of habitats are considered endangered. In regard to social relevance, rising energy prices lead to additional burdens on private households and energy-intensive industries, which see their competitive ability increasingly affected. The entire economy is similarly confronted with increasing challenges, from skilled-worker shortages to the maintenance of reliable delivery chains. In addition, the social expectation of citizens and interest groups to be involved in decisions that affect their surroundings is growing.

Sustainable Action – Lived Responsibility

In light of these many-faceted challenges and interests, we are taking responsibility – for people and the environment – and are helping shape a sustainable future for the energy system. Since this will only work with thorough intensive dialogue, we seek ongoing exchange with our stakeholders.

Energy World in Transition

The latest shutdown of the last nuclear power plant in Germany

2022

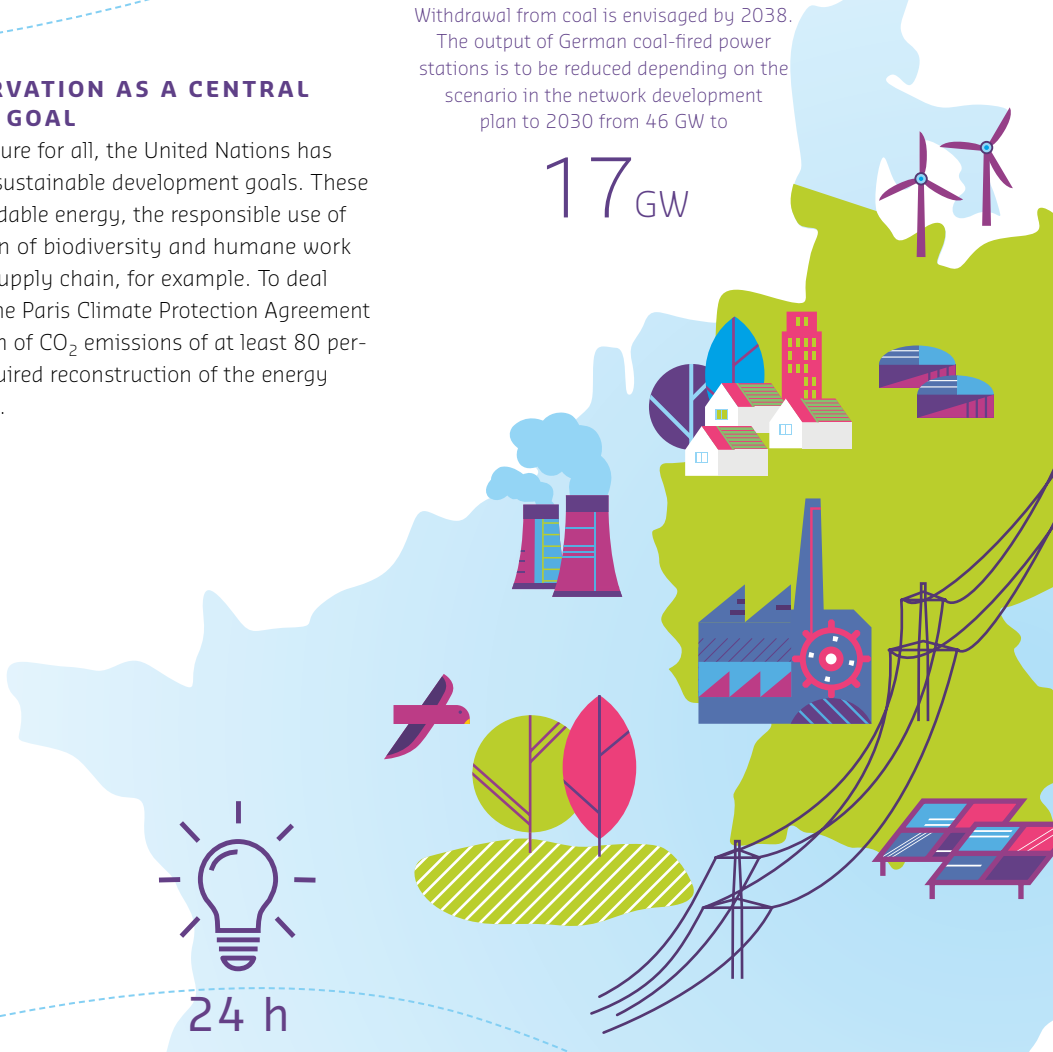
Withdrawal from coal is envisaged by 2038. The output of German coal-fired power stations is to be reduced depending on the scenario in the network development plan to 2030 from 46 GW to

17 GW

1

CLIMATE CONSERVATION AS A CENTRAL SUSTAINABILITY GOAL

To enable a liveable future for all, the United Nations has determined 17 global sustainable development goals. These include clean and affordable energy, the responsible use of resources, preservation of biodiversity and humane work conditions along the supply chain, for example. To deal with climate change, the Paris Climate Protection Agreement provides for a reduction of CO_2 emissions of at least 80 per-cent by 2050. The required reconstruction of the energy system is a major task.



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3

SECURITY AND STABILITY IN GERMANY AND EUROPE

Amprion guides and monitors the grid, keeps the power supply balanced between power consumption and generation, and also provides stability for the energy system of the future – 24 hours a day, seven days a week. For this, we take on an important role in the coordination of the German and European integrated networks and make our grid available to power trading.

11.9 %

The increase in German cross-border trade volume from 78.2 TWh (2007) to 87.5 TWh (2018)

The proportion of renewable energy in power consumption in Germany will rise in every scenario in the grid development plan from just under 37.8 % (2018) to at least

65 %

~1 MILLION

species are threatened with extinction in the coming years and decades according to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).

2

THE TRANSMISSION SYSTEM OF THE FUTURE

Amprion makes an important contribution with the integration of electricity from renewable energy into the German energy system. We expand and reconstruct our grid in line with demand. We place high value on the protection of people and the environment and involve the public at an early stage. We facilitate species diversity along the lines through effective habitat management.

BY 2030

around 11,560 km of grid strengthening and expansion measures will be required in Germany

FROM PLANNING TO CONSTRUCTION OF CABLES

ASSESSMENT OF DEMAND

1. SCENARIO PARAMETERS
How will power generation and power usage change?

2. GRID DEVELOPMENT PLAN
Where does the high-voltage grid need to be expanded or strengthened?

PLANNING AND APPROVAL

3. NATIONAL CONSUMPTION PLAN
Which projects does legislation stipulate?

4. NATIONAL DEPARTMENTAL PLANNING/REGIONAL PLANNING PROCEDURE
Where do the line corridors run?

5. PLANNING APPROVAL PROCEDURE
Where does the cable run within the line corridor?

CONSTRUCTION

6. REALISATION OF INTENTIONS
Implementation of the project

Pursuing Common Goals

Gerald Kaendler, head of Asset Management at Amprion, and Angela Hahlbrock, Sustainability Officer at Amprion, met with Antonella Battaglini, CEO of the Renewables Grid Initiative, for a conversation about sustainability at Amprion. The initiative works with Amprion, other European transmission system operators and non-government organisations on the best possible integration of renewable energy into the network infrastructure.

WHAT CHALLENGES DOES AMPRION FACE IN MAKING ITSELF SUSTAINABLE AND FUTURE-ORIENTED?

GERALD KAENDLER (GK) Amprion connects customers with renewable energy on land, at sea and in power plants. The next step is to integrate the renewables into the system. That is the biggest challenge we have, beyond the purely technical power connection.

» We are a reliable partner. Our sustainability management helps us with that.«

ANGELA HAHLBROCK

ANGELA HAHLBROCK (AH) Amprion is already a sustainably operating business. We are taking on the challenges of the social and political transition. That means we are helping shape the energy system's reconstruction, keeping the power system stable, and looking after people and the environment as well as social concerns. We will keep satisfying different interests in a balanced way, informing our stakeholders and participating appropriately.

ANTONELLA BATTAGLINI (AB) I can see that Amprion wants to try new concepts. But the industry is still very conservative. At the same time, everything is getting more complicated, because there are more stakeholders. That is why we need close cooperation with stakeholders and concerned parties right now. And it is important that Amprion is constantly challenged to do more and go further. That is the role that we are taking on.

WHAT CONCRETE BENEFITS DOES SUSTAINABILITY HAVE FOR YOU?

AH Our sustainability management takes a consistent approach. We want to develop it further, adopt new approaches and make our engagement more visible.

AB Transparency is a key element. If you don't measure, monitor and report, you have only just begun. The issue of planning is also important. Planning is essential. If you invest here early, you save time and money later. So it's also risk management.

GK By structuring our activities better and creating more transparency, we build trust for the future. The sustainability strategy is a fundamental step, because it changes the culture of the company.

» We have to challenge each other. Because we can always do better.«

ANTONELLA BATTAGLINI

» The sustainability strategy is a fundamental step, because it changes the culture of the company.«

GERALD KAENDLER

HOW DID YOU DEVELOP THE SUSTAINABILITY STRATEGY?

AH With a lot of commitment. The employees who took part were highly motivated. Together we identified relevant issues where we could make a contribution, by looking at the United Nations' global sustainability goals, for example.

GK We had numerous workshops with many participants. Our colleagues made a substantial contribution. And I think we have a lot of examples of how our people commit to making Amprion more sustainable. We also see ourselves as a responsible business. That doesn't just mean the integration of renewable energy into the power system, it also includes our use of resources and particularly our employees' work environment. If a business wants to attract talented newcomers, it has to offer meaningful work. Making a contribution to energy transformation at Amprion is meaningful.

DO YOU ALSO ENCOUNTER LOSS OF TRUST IN THE BUSINESS?

AB The question isn't whether people trust Amprion or not, but what trust means in today's society. In certain areas, trust in the future has declined significantly. That affects everyone. Building it up requires a personal relationship. Like many other transmission system operators, Amprion speaks with people on the ground. With the right handling, that can make a real contribution to sustainability in the broadest sense of the word.

AH Trust and respect are the cornerstones of our dealing with stakeholders. People would like more participation in decision-making processes. Because we are creating the future today. We are a reliable partner. Our sustainability management helps us with that. Transparency supports trustworthiness.

GK Most people still don't know what it means when political decision-makers talk about abstract CO_2 reduction goals and CO_2 prices. We make it concrete in our planning. We are often the first to say what the consequences of these decisions are for everyone in a particular area. This transparency is something that we definitely have to achieve.

WHAT DO YOU NEED TO DEVELOP SUSTAINABLE SOLUTIONS?

GK Our cables and facilities have to operate and keep working for decades. That's why we have to think in long-term scenarios. When policy goes in one direction and our networks can physically follow it, we arrange investments that will be used in the future, according to our current assessments. That is sustainable.

AH We develop solutions fit for the future. We also take into account aspects such as resource conservation and cost efficiency. Because we need long-term, stable concepts for an energy world in transition. Openness and constant communication with stakeholders is also important for that.

AB I welcome Amprion's readiness and commitment to actively shape the future and look for appropriate solutions to ensure safety and sustainability. Because we have huge challenges ahead of us. The more we talk about the future, the better, because we have to understand and create this future as a community. We have to challenge each other. Because we can always do better.

Our Sustainability Strategy and its Spheres of Activity

Lived responsibility, enabling the energy system of tomorrow. That describes the central goal we are pursuing with our sustainability strategy. For the consistent management of our activities we have identified five spheres of activity – which also take into account the challenges of the future and our stakeholders' expectations.

Sustainability has already determined our operation for many years. We are now integrating our sustainability strategy more into our business practice and processes. Sustainability is therefore an integral part of our business strategy. Here we describe our spheres of activity, what we are already doing and what we want to achieve. Each of our goals focuses on the energy world of tomorrow. At the same time, we connect responsible operations with foresight and efficiency – for people and the environment.

Implementation of the Sustainability Strategy

All areas of our business have contributed to the development of our sustainability strategy. The foundation was a comprehensive analysis of internal as well as external challenges in the field. The expectations of relevant stakeholder groups were also expressly incorporated. The result was a complete picture of the sustainability context and the relevant issues for Amprion: 16 individual issues, from which we have derived five spheres of activity.

Structuring our sustainability issues into spheres of activity aligns our activity with goals and increases transparency. This way our performance and its development can be clearly measured and presented.

SPHERES OF ACTIVITY

SECURE POWER SYSTEM

- Grid reconstruction
- Grid and system development
- System security
- European framework
- Collaborations

CORPORATE GOVERNANCE

- Compliance
- Procurement

COMMUNITY AND CUSTOMERS

- Regional engagement
- Customers
- Community

EMPLOYEES

- Workplace health and safety
- Corporate culture
- Active personnel development

ENVIRONMENT

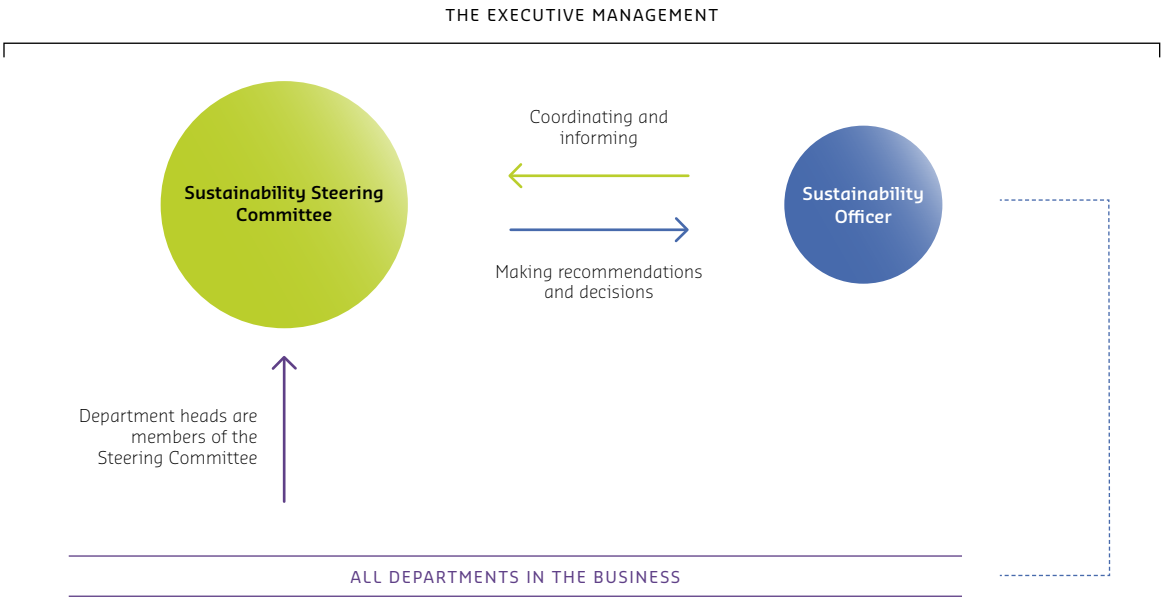
- Nature conservation
- Species conservation
- Resource conservation and climate protection

OUR SUSTAINABILITY MISSION

Our transmission system connects power markets in Germany and Europe for the energy world of today and tomorrow. At the same time we make our contribution to the best system security. We place high value on the protection of people and the environment, and we act for the well-being of the community. As a reliable partner, we are in communication with our customers and other stakeholders.

We are responsible and oriented to the future in our work on the best possible expansion, reconstruction and operation of the power grid, as well as the energy system's ongoing development.

ORGANISATIONAL STRUCTURE OF SUSTAINABILITY MANAGEMENT



GOALS

Sustainability, as an integral component of our business strategy, provides us with clear goals. Each of our goals focuses on the energy world of tomorrow. At the same time, we connect responsible operations with foresight and efficiency – for people and the environment.

Sustainability Goals and Their Implementation

We have formulated main goals and secondary goals for the spheres of activity in our sustainability strategy, which we want to reach successively in the coming years. They follow our sustainability mission and make it concrete. We will work hard on achieving these goals and report regularly on their status.

Sustainability Management

To underscore the importance of sustainability to our business, we have nominated a Sustainability Officer who reports directly to the executive management in this capacity. She leads the sustainability management. Her job includes the coordination of internal activities and reporting, which then tracks the achievement of goals. She works closely with all business areas, facilitates dialogue with stakeholders and is responsible for the communication of sustainability activities. A steering committee in which all departments are represented was established to ensure comprehensive leadership that is anchored in the executive.

Reporting and Stakeholder Dialogue

Reporting will be an important part of sustainability management at Amprion over the coming years. Following an initial internal stocktake, we want to expand our sustainability performance in the five spheres of activity, quantify it regularly and make it public. Transparent reporting is also an important instrument in communication with stakeholders.

CORPORATE GOVERNANCE

Our business is regulated and follows a legislated mandate. Reliability is the core of our business; sustainability is our goal.

With our core business, the supply of electricity, we play a central role in the reconstruction of the energy system. We follow a legislated mandate described in the German Energy Act (EnWG), which we are implementing with dedication and ambition. Our corporate governance is strictly guided by it and emphasises its own main points. Reliable and socially responsible business practice is given the highest priority. Ultimately Amprion has a special responsibility among Germany's four transmission systems. Our grid area comprises one of the most densely populated metropolitan areas in Germany and Europe, with around 29 million people.

Core Business Defined by Legislators

Amprion meets the requirements of an "independent transmission system" as set out in the EnWG and therefore has the task of supplying electricity and ensuring system security. We are required to run, optimise according to demand, strengthen and expand a safe, reliable and competent transport network. To allow effective competition, we offer customers transparent and non-discriminatory network access. This is verified by the Federal Network Agency, which is also responsible for the regulation of the planned network development of the four transmission systems. Amprion has appointed an officer to ensure the program's adherence to non-descriminatory equal treatment according to the EnWG. He is entitled to attend all meetings of the executive, the board and the company.

Reliability Through Good Business Leadership

Amprion's business is regulated. Legislators and the regulatory authority, the Federal Agency Network, set the parameters for our business operations. In this context sustainable finance is of crucial importance for the fulfilment of our statutory tasks. In addition, the executive is monitored by a supervisory board, which is also required by the EnWG.

Transparent operations and reliability are basic principles of our business. They are the basis for trusting collaboration with our external and internal stakeholders. We currently already publish all relevant financial and industrial energy data. With the expansion of sustainability management and the appointment of a Sustainability Officer, further ecological and social data will soon be available.

Middle Management System Compliance

Personal responsibility, honesty, and respect for other people and the environment are central values in the work of Amprion and its employees. With the published Compliance Code as well as the compliance guidelines as internal policy, Amprion ensures that the business and its employees conduct themselves responsibly and according to law. The compliance guidelines describe how decisions are to be made in accordance with ethical basic values and how to deal with conflict. They also influence the corporate culture.

Amprion's compliance management system was audited in 2018 according to the auditing standard IDW PS 980

EXTRACT: AMPRION'S GUIDELINES

Our fundamental principles are included in the following guidelines:

Economy, efficiency and sustainability

Amprion will provide a capable transmission system that supports energy policy goals with 2030/2050 in view.

System security and safe power supply operation

Amprion will ensure system security, design the grid according to need, administer it efficiently and operate it safely.

Environmental conservation

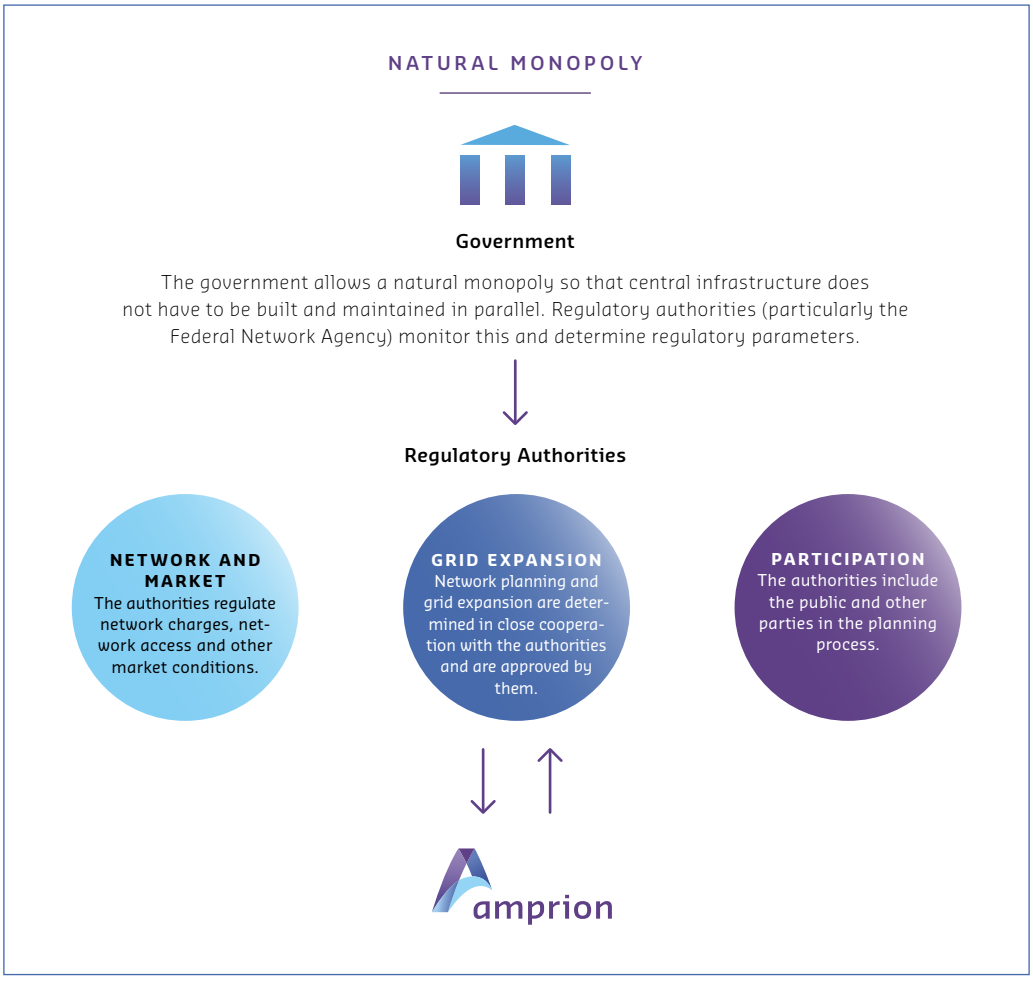
Amprion will achieve high standards for environmental conservation in planning, construction and operation.

Innovation, science and proficiency

Amprion will actively manage the grid. This requires qualified employees.

Collaborations

Amprion is involved in collaboration with other power suppliers and maintains respectful dealings with authorities and organisations.



and certified in the area of anti-corruption. It consists of the following elements:

- The Compliance Code as a basis for Amprion's basic principles in compliance,
- Compliance guidelines that specify the basic principles for typical everyday compliance risks that arise in the workplace, and
- A compliance handbook that describes the processes of compliance management.

Criteria for Responsible Procurement

In procurement arrangements, Amprion maintains reliable supplier relationships. Energy efficiency and environmental aspects are determining factors in the choice of providers. Our "General Procurement and Payment Requirements" (EZB) require the observance of workplace safety and environmental conservation as well as legally and ethically impeccable behaviour from our suppliers and service providers. Contractors are required to be responsible in dealing with energy and natural resources. Procurement guidelines regulate responsibilities in the purchasing process.

The new Amprion building in Dortmund was occupied in the spring of 2019.

OUR GOALS

1 COMPLIANCE

We continue to develop our compliance management system on the basis of the certification IDW PS 980.

2 PROCUREMENT

In procurement we make sure that suppliers and contractors act responsibly. They are required to conform to workplace safety, environmental conservation, and legally and ethically impeccable behaviour.

Our resolution:

- To implement measures within the parameters of the National Action Plan for Economic and Human Rights

SECURE POWER SYSTEM

With the expansion of renewable energy and the consolidation of the European power markets, the power system will be reconceived and further developed from the ground up. We work on it every day – with consistent system security. That is also what we mean by sustainability.

Power from renewable sources is not consistently available and the feed-in quantities vary depending on the weather. That's why our task of "system management" – that is, transporting power as well as balancing the flow of electricity between generation and use – is becoming more and more challenging. We discuss the increasing challenges with all those involved.

Our goal is to ensure the safety of the German power system, also after the withdrawal from nuclear and coal-fired power, while taking into account significant power trading with our European neighbours. We support Germany's inclusion in the European domestic market. In addition we will reinforce or establish around 2,000 kilometres of cable, so that our grid can absorb and transport power from renewable energy to a considerably greater extent. At the same time, we will also further develop our guidance and control systems in the substation facilities so we can respond flexibly to new challenges and optimise the grid for the future.

To make the reconstruction of the power system as efficient as possible, the NOVA principle applies to all measures. NOVA stands for network optimisation before network strengthening before network expansion. For example, this avoids or reduces both cost and the impact on the landscape.

Thinking and creating the future

As we create the energy world of tomorrow with our network project, we also optimise our grids for the future. All transmission system operators anticipate collaborative development in Germany to identify what needs to be done. Amprion uses modelling that responds sensitively to future developments and enables multi-faceted prognoses. These are then considered in comprehensive scenarios. We also think outside the box. Because anticipating long-term developments in advance is our own objective. The analyses serve as the foundation for scenarios that are compiled every two years according to the Energy Act (EnWG). The scenario framework endorsed by the Federal Network Agency forms the foundation for the network development plan (NEP).

The expansion of renewable energy means that more decentrally-generated power will be integrated into the transmission and distribution grids.

The NEP sets out where the German extra-high-voltage grid is to be expanded or strengthened and what projects are needed for it. Members of the public, groups and institutions can take a position on current drafts during a consultation phase. After relevant reworking, the NEP is forwarded to the Federal Network Agency, which checks it thoroughly and releases it for the implementation of endorsed measures. In the end, the results enter the national requirement plan. This is how our legislated mandate is updated with the involvement of all interest groups.

Expanding the grid in line with demand

Grid expansion in line with demand is part of our legislated mandate. Until 2028, Amprion will invest around 9.3 billion Euro in the strengthening or construction of power lines and facilities. We also promote new technologies in direct current transmission systems and power-to-gas. Amprion is also active in the area of offshore grid connection. Progress made so far is evident. According to the legislation for expansion of energy cables (EnLAG), Amprion is responsible for 13 projects with a total length of 720 kilometres. Around half the line length is in the approval process, 270 kilometres are already finished, and 135 kilometres are currently under construction. Projects from the National Consumption Planning Act (BBPIG) are also taking shape: 870 kilometres of line are in the approval process, a stretch of 80 kilometres is already constructed and 100 kilometres are under construction.

To make the power supply network more flexible internationally and more efficient, power suppliers are constructing additional cross-border power lines. Electricity transmission system operators determine requirements with reference to consumption and generation forecasts. They then establish a Europe-wide Ten-Year Network Development Plan (TYNDP) with the European Network of Transmission System Operators for Electricity (ENTSO-E). Amprion is actively involved in this process as a member of the

network, and is participating in eight projects in the framework of the TYNDP. These include the German-Belgian direct current bridge ALEGrO, which is an underground cable with a capacity of up to 1,000 megawatts set to become operational in 2020.

37.8 %

was the proportion of renewable energy in German power consumption in the year 2018, which was an increase from 36 % in comparison to the previous year

Operating networks

Our system management in Brauweiler near Cologne makes sure that Amprion fulfils its legislated mandate at all times: to guarantee system security in the interest of the German national economy. Amprion guides and monitors the grid, keeps the flow of electricity balanced between consumption and generation, and also provides reliable energy transmission – 24 hours a day, seven days a week.

In addition our employees follow the transmission system's workload and coordinate the flow of electricity that comes from power trading within Germany as well as between Germany and other countries in the European integrated network. If individual elements in the network fail, cables are in danger of overloading or the balance between generation and consumption threatens to tip, they make sure it does not result in network outages. For this they appoint operating reserve and redispatch measures (adjustment of the power supply), which increasingly involve large consumers, innovative energy storage and renewable energy.

A highly innovative new network control system is currently being created in Brauweiler to support the work of the engineers and further optimise system management. The latest technologies are used to control the workload of the transmission system. These include measuring the temperature around aerial cables and adjusting the transmission capability accordingly (adaptive aerial cable operation), for example.

Rethinking and managing the networks of the future

Amprion also supports European power market integration. To that end, we are working in collaboration with partners across Europe on the implementation of the Clean Energy Package (CEP). The European Commission wants to use this to reach climate goals and ensure a sustainable and economically efficient power supply for the whole of Europe.

For many years we have worked together with the European transmission system operators in regional security cooperatives to ensure system security across Europe. The goal is to collaborate regionally to predict the flow of electricity in Europe as accurately as possible and implement measures for system security together. We are also collaborating on the development of requirements for a sustainably robust market design within the framework of ENTSO-E. This takes into account the above-mentioned challenges such as the increasing proportion of fluctuating generation capacity, and takes a problem-solving approach.

We are part of the research projects Innosys 2030 and Gridcast, which aim to increase the proportion of renewable energy and simultaneously ensure high network and system security. In addition, Amprion cooperates with distribution grid operators so that decentralised production units within the distribution grid can be more closely involved in system management processes, such as voltage maintenance and grid redevelopment.

OUR GOALS

1 GRID RECONSTRUCTION

We are committed to implementing the grid expansion and reconstruction measures required by 2023. Our ambitious planning and projects take account of the upcoming withdrawal from nuclear energy, the progressive withdrawal from coal, and the increasing proportion of renewable energy.

Our resolution:

- More robust planning through three scenario analyses that go beyond the legislated framework
- Development of a concept for increasing market acceptance of the grid expansion

2 GRID AND SYSTEM DEVELOPMENT

We are developing a concept for a system that looks to 2050. It completely and sustainably incorporates the reconstruction of the energy system, and also ensures safe, efficient and sustainable energy transmission. We take an active role in the expansion of the German and European energy system so we can reach climate and market goals together.

Our resolution:

- Stronger alignment of our activities with the need to decarbonise
- Assessment and certification of the CO_2-neutral portion in electricity transmission
- Concepts for the application of power-to-gas and storage (integrated energy)
- Further development of the power connection policy

3 SYSTEM SECURITY

Our goal is to maintain the current high level of system security, while taking into account the increasing challenges posed by the transformation of the energy system and the upcoming effects of implementing the European Clean Energy Package (CEP) standards.

Our resolution:

- Retain the current level of transmission system outage time as challenges increase
- Ensure 24/7 operation and the maintenance of power supply equipment as capacity increases
- Measures for better integration of renewable energy
- Completion of research projects for grid reconstruction to a proportion of 100 % renewable energy

4 EUROPEAN FRAMEWORK

We take an active part in the further development of the European domestic market to evenly shape the three pillars of future energy supply: renewable energy, system security and the market.

Our resolution:

- Shaping the further development of the EU domestic market (particularly CEP)
- Collaboration with ENTSO-E and facilitation of regional collaborations
- Increased transparency by visualising generation development in Germany and Europe

5 COLLABORATIONS

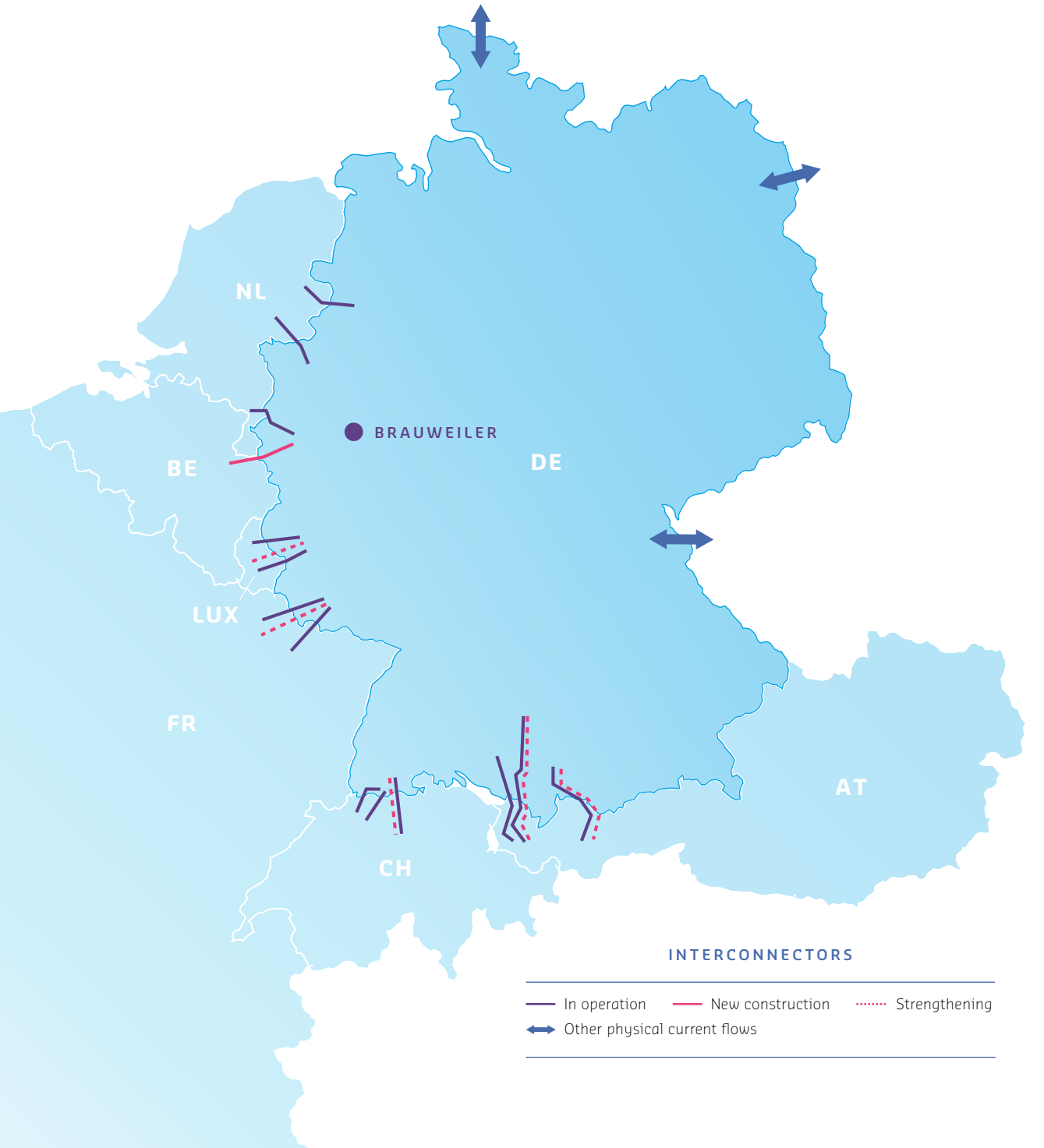
We are expanding our collaborations so that together with our partners, we can meet the dynamically changing challenges posed by the further development of the energy system in Germany and Europe.

Our resolution:

- Expansion of collaboration between transmission system and distribution grid operators and other stakeholders
- Active role in server hosting
- Completion of at least five collaborative projects with science

AMPRION CONNECTS EUROPE

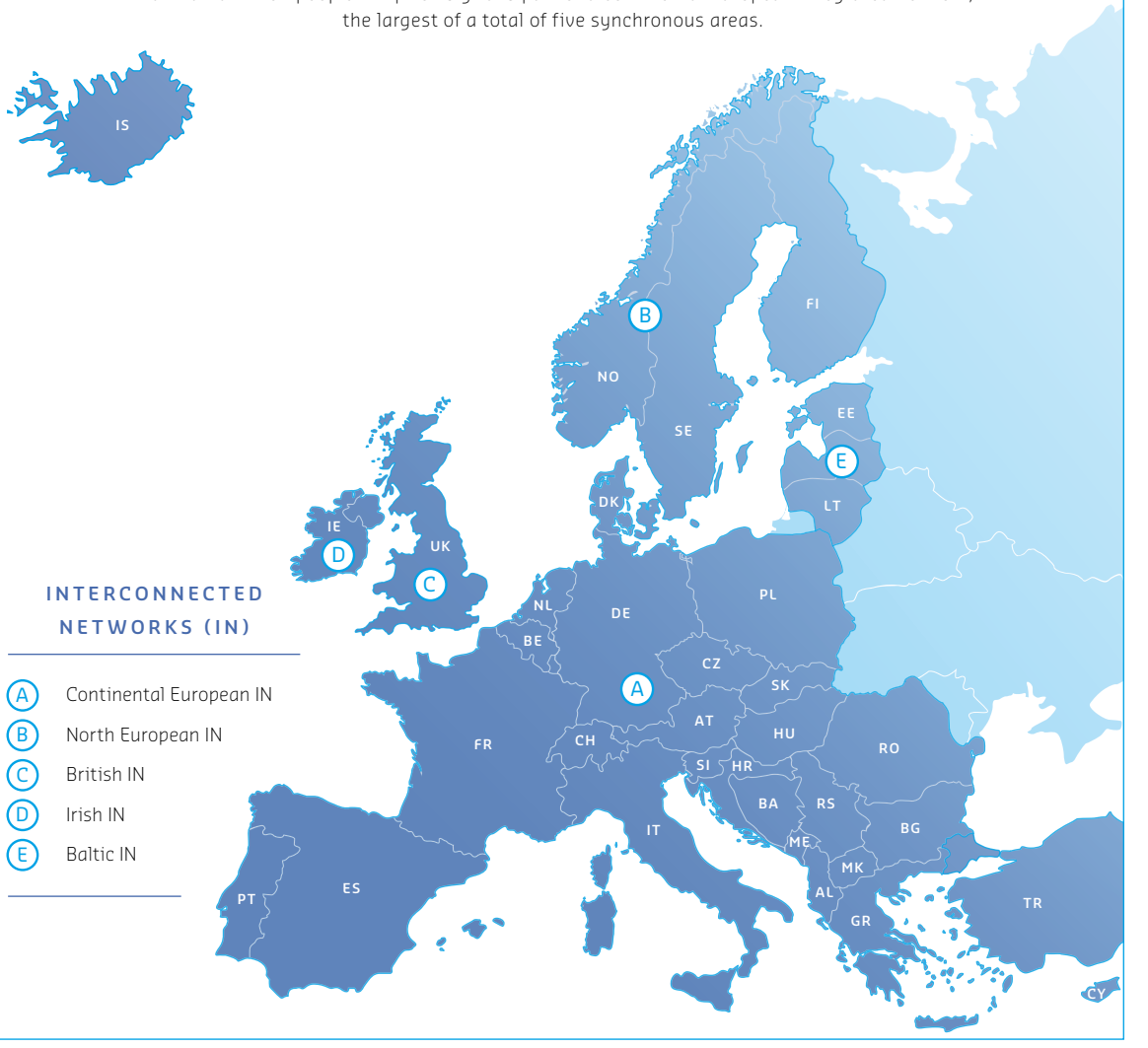
Because of its central location, our network area is connected with many European transmission systems. Common interconnectors are used to connect the grids. Amprion's main control centre in Brauweiler makes a substantial contribution to system management in Europe.



A central success factor for energy transition is the better integration of renewable energy into the overall energy system. Here we offer a joint problem-solving approach with our cooperative partner Open Grid Europe. With our project “hybridge”, we are planning the first commercial power-to-gas facility in Germany, which links the electricity and gas infrastructure systems to bring in the next phase of energy transition. The goal is to enter the hydrogen economy and promote the decarbonisation of the entire economy through intelligent facility operation.

ENTSO-E

Forty-three transmission system operators from 36 countries collaborate under the umbrella of ENTSO-E. Together they are responsible for a power grid that supplies more than half a billion people. Amprion’s grid is part of a continental European integrated network, the largest of a total of five synchronous areas.



COMMUNITY AND CUSTOMERS

We need more network infrastructure in order to advance climate conservation. This means everyone involved has to work together. We enter into communication, consider the location, connect interests and develop appropriate solutions.

Amprion connects. Our goal is to harmoniously bring together the interests of people, the environment and technology. It is important to us to develop solutions together and involve local interests early, even before the formal process starts. For this we enter into a dialogue with our local contacts, as intermediaries between various positions and with the clear mandate to promote the reconstruction of the energy system.

In Dialogue with Municipalities and Residents

Our transmission system covers the most densely populated regions in Germany. Residential and commercial areas have grown around our cables over decades. This is why many interests are affected by the expansion and reconstruction of the power grid. That makes it all the more important to listen to and collect opinions and suggestions. For this we use various communication formats such as information sessions, public consultations and our mobile information centre, particularly in small locations. In 2018 alone there were 561 events that we either organised or contributed to with lectures and presentations. All of our network expansion projects go through an approval process prescribed by law. This gives the public, environmental groups, associations and authorities the opportunity to actively put their concerns forward in the process.

Example: Communication on A-Nord

Amprion is involved in the planning and construction of Corridor A. This is a new direct current connection that is to transport wind power from the north of Lower Saxony to North Rhine-Westphalia and Baden-Wuerttemberg, and is to be completed by 2025. A website and a project brochure provide information about the northern section (A-Nord), which is being built as an underground cable. We also use various formats to involve interest groups. In Münsterland

Amprion uses various communication formats to reach the public, interested parties and decision-makers.

we initiated communication with 60 farmers with "Farm Week". In 2018 Amprion's mobile information centre stopped in 23 locations and reached more than 3,500 people.

Example: Planning Dialogue in Borgholzhausen

Since the start of 2018, Amprion has used a new form of communication, known as planning dialogue, to make the planning and construction of an extra-high-voltage cable near the town Borgholzhausen even more transparent. For this, the project team invited various interest groups to the table and thus created a central place for the exchange of some conflicting points of view. Representatives of the town, an action group, agriculture, business, tourism, forestry, environmental and nature conservation as well as members of the public chosen by lottery were brought in conversation with each other. Amprion also brought a scientific institution into this new dialogue process. The German Institute of Urban Affairs (Difu) attended and evaluated the meetings. The goal was to find a concept for the course of a future underground cable line together – which was successful. The Renewables Grid Initiative distinguished this dialogue format in May 2019 with a "Best Practice of the Year" award as one of the most outstanding practices. Amprion will continue with transparent and open communication throughout the approval process and construction phase.

In Partnership Together

Energy-intensive businesses from the areas of chemistry, steel and aluminium, distribution network operators and electricity producers are among our direct customers. In 2018 we transported around 114 terawatt-hours of energy for them. Their satisfaction is an important concern for us. Through surveys, we regularly determine our immediate customers' satisfaction in areas such as competence, customer orientation, reli-

To keep the lights on, we contribute to ensuring a durable and secure power supply.

ability and trustworthiness. The results show that our role in energy transition is considered important – for technical implementation as well as at a political level. Our customers also expect that we will take an active role in the transformation of the energy system, for example by advising decision-makers, supporting other stakeholders with technical understanding and informing the public. We regularly hold customer events to communicate energy industry developments with representatives of large industrial customers. For customers involved in the distribution grid, we hold what we call grid dialogues to facilitate further collaboration.

Reliable – Across Europe and at All Times

A durable and safe power supply is fundamental to our highly industrialised and interconnected society. Because businesses and users can rely on constantly available power, we contribute to the protection of jobs and the conveniences of our modern environment. Maintaining all this through the upheaval of the Europe-wide connected energy system demands concepts that cross regions. That is why Amprion is working with

numerous stakeholders and in various initiatives on a cohesive domestic power market that connects the transmission system operator areas and contributes to the matching of prices. By facilitating energy trading between European regions, we make an important contribution to future system and supply security.

Customer satisfaction in 2018 was

80 %

OUR GOALS

1 REGIONAL ENGAGEMENT

Information and participation is fundamental to the acceptance of grid expansion measures. We seek early communication with interest groups and the public in the area and incorporate their local knowledge. Where possible, we create a benefit for the affected area within the parameters of executing the project.

Our resolution:

- Constant observance of the principles of project communication
- Early consideration of the public's interests as well as incorporation of local knowledge
- Designated contact partners for local and regional interest groups
- Guidelines for Stakeholder Management

2 CUSTOMERS

We ensure the highest system security and offer our customers competitive prices during the transformation of the energy system. We continue to develop our collaboration with our customers through constant communication and advocating for their interests. In this we operate as a solution-focused, competent partner.

Our resolution:

- Retain high levels of customer satisfaction, customer loyalty and brand appeal expansion

3 COMMUNITY

We make an active contribution to public welfare by helping create a safe, efficient and future-oriented power system, and by developing the German and European power market in collaboration with other stakeholders.

The goals from the sphere of activity "Safe Power System" are particularly applicable:

- Retain the current level of transmission system outage time as challenges increase
- Ensure 24/7 operation and the maintenance of power supply equipment as capacity increases
- Measures for better integration of renewable energy

ENVIRONMENT

Respecting people and the environment
and reducing the effects of our business are the basis
of responsible conduct.

We take our responsibility to people and the environment seriously. That's why we go well beyond legislated requirements in the planning, construction and operation of our cables and facilities. For example, we have pursued effective habitat management of aerial cables and actively advocated for bird conservation for many years. We also regularly question what we can do to make our cables and facilities as well as our operations even more environmentally friendly.

Conservation in Line Maintenance

Line maintenance and environmental conservation go hand in hand at Amprion. We are also a frontrunner in habitat management in our line maintenance. Today we maintain an area of around 11,000 hectares according to these guidelines. Our maintenance measures contribute to the ongoing development of local vegetation as well as to the conservation of endangered arid and wetland habitats. We are also successful with our maintenance concept along the 2,000 kilometres of our lines that cross forests. The resulting stable forest borders offer habitats for many species in need of protection. Some of our line areas now have environmental protection status, which proves that our concept is successful.

We started maintaining the vegetation under our aerial cables according to ecological criteria over twenty years ago. This gave the hazel hen an expanded habitat, and the endangered smooth snake can now repopulate. Rare species of orchid also profit from our habitat management in Hunsrück, where the nature reserve "Meadow at Hirtenborn" can be found under our aerial cables.

For around

1,000

hectares the habitat management is adapted annually

Habitat management undertaken by Amprion over many years encourages biodiversity along the lines.

Soil Conservation for Underground Cabling

Amprion relies on innovative technology in electricity transport, while keeping environmental friendliness in mind. This also applies to underground cabling, which preserves the landscape, but requires comprehensive encroachment in the ground. Its protection is consequently an important aspect for the approval process and during the construction of underground cable projects. That is why we bring in experts to accompany every stage. We learned valuable lessons in the underground cable pilot project in Raesfeld, which was based on early inclusion of residents and a new concept in soil conservation. Our commitment to soil conservation there attracted a lot of interest across Europe. It instigated a significant dialogue about soil conservation with other transmission system operators, non-government organisations and permit authorities.

Long-term Commitment to Bird Conservation

Bird conservation is a central concern for Amprion. Our recognised commitment has developed over almost twenty years. The beginning was marked by research projects with ornithological institutes, universities and groups that examined in detail the possible dangers that aerial cables posed to birds. This led to working with ornithologists to initiate bird conservation programs that are a significant part of our aerial cable management today. The research project resulted in the development of cable markers specific to this group of animals, which were then installed on the relevant sections of line. Thanks to these special bird conservation markings on the cables above the overhead line conductors, the collision risk for birds has been lowered by 90 percent.

Amprion attaches nesting baskets to pylons. That way aerial cables also offer habitats for birds.

Along with other power suppliers, we support the "Bird and Power Line Hotline" to further improve bird conservation and collaborate with environmental groups as holders of important knowledge. It is operated by the Nature and Biodiversity Conservation Union Germany (NABU) on behalf of the Renewables Grid Initiative. The hotline helps identify areas that are particularly relevant from the point of view of bird conservation. Power suppliers and NABU analyse the data together for the ongoing improvement of bird conservation.

We also owe our attention to more bird species than merely to those that find overhead line conductors difficult to see and avoid. Within the framework of our comprehensive bird conservation program, some sections of cable are fitted with nesting aids. With these, Amprion makes it possible for various species like kestrels, peregrines and tree falcons to breed on transmission towers.

Environmental Management at Our Premises

In environmental conservation, Amprion places great value on the implementation of recognised standards. Our environmental management is certified according to the international standard ISO 14001 and our energy management according to ISO 50001.

We have met our requirements for energy efficiency in the new building. The new construction is a model of sustainable building management. It was fitted out in March 2019 for up to 880 employees and was planned and constructed according to the standard DGNB Gold. Because of innovative heating and cooling technology and other energy efficiency measures, its primary energy requirement is comparatively low. Seventy percent of it is covered by renewable energy, particularly geothermal energy in conjunction with photovoltaics.

The black-and-white bird conservation markings are installed on top of the overhead line conductor by helicopter.

OUR GOALS

1 NATURE CONSERVATION

In the area of line maintenance, our habitat management is based on our physiographically adapted aerial cables with regionally appropriate solutions. We consciously take soil conservation into account during the completion of our projects.

Our resolution:

- Habitat management on all relevant sections of line
- Further development of habitat management
- Soil conservation standards in the laying of underground cables

2 SPECIES CONSERVATION

We protect animal and plant species to a high level, actively engage in bird conservation on aerial cables and are working on new concepts for species conservation.

Our resolution:

- Consistent coverage of all relevant lines with bird conservation markings
- More transparency in bird conservation projects
- Concept for species conservation measures

3 RESOURCE CONSERVATION AND CLIMATE PROTECTION

We place high value on people and the environment. We will continue to improve our energy efficiency, use environmentally friendly materials and limit material usage as much as possible.

Our resolution:

- Pilot project with SF_6-free voltage transformers
- Establishing greenhouse gas balance
- High energy efficiency in new construction
- Resource saving and increased energy efficiency in existing buildings

EMPLOYEES

We need competent employees to conquer the multi-faceted challenges and fulfil our social mandate. This is why we encourage identification with the business and develop potential.

Our corporate culture is shaped by appreciation. This is also why our employees identify with their tasks at Amprion and actively commit to the reconstruction of the energy system. Amprion places the highest value on workplace safety and health. The operational health management at Amprion has developed organisational parameters, structures and processes to create a healthy workplace and to encourage employees in healthy behaviours. We promote comprehensive work across different areas and offer numerous opportunities for needs-based development in our everyday work practice. Amprion established ideas management to further improve processes in the business. All employees can submit suggestions for improvements and so contribute their experience and know-how within the everyday work environment. The spectrum of suggestions is wide and includes work safety as well as technical improvements, environmental conservation, health and sales. All accepted ideas are awarded premiums.

Working Safely and Promoting Health

Our goal is for employees to go home just as healthy as they come to work. Occupational safety management, certified according to the international standard OHSAS 18001, ensures they can work safely in all of Amprion's areas of activity. The topic of work safety is also a substantial component of our ongoing executive and employee training. For this we use external providers as well as internally developed formats, such as workshops and self-produced workplace safety films. Diverse offerings such as health days, various preventative courses and cancer check-ups help them stay healthy. Interested parties can contribute their suggestions in many ways: to the committee for health and prevention, to the team for corporate health management, or to the local health group.

Our employees take responsibility. They develop future-oriented solutions and use the best technology to deliver them.

Our Work: Challenging and Attractive

Amprion relies on teams with varied experience, perspective and skills to deal with the increasing complexity of their daily work. As new techologies develop and become established faster and faster, we also have to keep adapting as a business and keep our employees in a position to plan, build and operate the power grid of the future.

Our complex projects demand special competence, particular know-how and multi-faceted abilities and skills. We deliver this in training, seminars and workshops adapted to our business goals. Personal and subject-specific development is also supplemented with active participation in (expert) committees, the use of external training providers, and specialised communication with research institutions. We also identify our employees' potential early through regular feedback sessions and support them with needs-oriented measures. We build up talent already with our trainees in a well-directed approach and aim to take them on after they have completed their training. Forward-looking development has so far enabled us to fill the majority of our managerial roles internally.

Advice and Help for Employees

Amprion wants to be a genuine partner to its employees. Our Employee Assistance Program (EAP) supports our employees with health, domestic, psychological and legal questions. This goes well beyond the measures required by legislation or in the framework of management systems. Amprion employees and their dependants can call a hotline around the clock. Experts in medical and psychosocial advice answer questions and give valuable assistance regarding health issues, legal questions in debt advice, or mental strain. The confidential service does not stop at the border. The advice is guaranteed on holidays as well as when travelling for work.

Compatibility of Work and Private Life

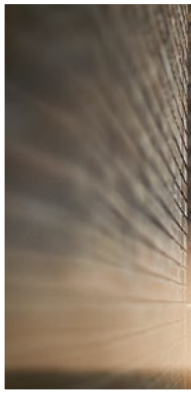
Our employees should be able to reconcile recreation time, family life and the care of dependants with their work. For this we have established a flexible time system so that personal needs can be better brought into harmony with work. At the Dortmund and Brauweiler locations we have established parent-child offices, with activities for children, where parents can work in case of a childcare emergency.

Employee Volunteering

Amprion wants to promote in a small way the things that keep the community together on a larger scale. This is why we support social concerns. The “Social Projects in the Network” (SPIN) program supports employees who volunteer in their free time. The projects supported by this promotion so far reflect a wide spectrum of charitable engagement: from education and childcare, through caring for seniors and people with a disability, to sport, culture and environmental conservation.

36

graduates were employed by Amprion in 2018



OUR GOALS

1 WORKPLACE HEALTH AND SAFETY

We place the highest value on workplace safety and the health of our employees and those of our partner companies. Therefore we regularly develop new measures and continually improve our established programs and processes. Our goal is for employees to go home just as healthy as they come to work.

Our resolution:

- Adjusting certification for workplace health and safety to ISO 45001
- Expanding the use of multilingual contractor instruction terminals for workplace health and safety to aerial cable construction
- More workshops with contractors on workplace safety
- New offer for workplace health management
- Regular needs-based health days
- Annual cancer prevention check-up for employees

2 CORPORATE CULTURE

We are an attractive employer that offers employees sustainable jobs and training. We continually support our employees, ensure the compatibility of recreation, family and work, and offer various opportunities for development.

We live a corporate culture that has a sense of identity based on mutually held values. We ensure our business success with committed, qualified employees who are strongly connected to their work, their teams and their organisation.

Our resolution:

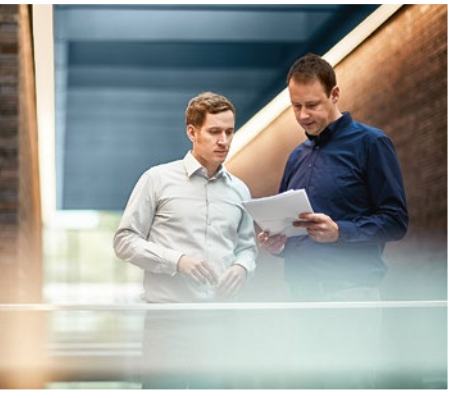
- Top ranking in employer attractiveness rankings
- Regular checks of the diversity concept for appropriateness

3 ACTIVE PERSONNEL DEVELOPMENT

As a growing business, we pursue active personnel development in alignment with business goals. We use recruiting, training and development to ensure that the right employees work in each part of our business, and we actively integrate new employees.

Our resolution:

- Personnel development planning meetings across at least 80 % of departments
- Capturing the quantity and quality of employee annual performance reviews through personnel development planning meetings



Close interdisciplinary collaboration is essential in developing and implementing the best solutions for the security and reconstruction of the energy system.

Glossary

Distribution Grid
The distribution grid distributes electricity within a specific region to supply stations and customer facilities. In distribution grids the power flow is substantially determined by customer load. Low-, mid- and high-voltage grids (> 110 kV) are used as distribution grids in Germany. In certain cases a 380 and 220 kV grid section can also be considered a distribution grid.

EEG
The "Renewable Energies Act" (EEG) was brought in on 1 April 2000. The version of the law revised on 21 July 2014 (EEG 2014) came into force on 1 August 2014. The EEG regulates preferential power connection for facilities that generate electricity from hydro power, landfill gas, mine gas, sewage gas, biomass, geothermal energy, wind power (on land and on water) and the sun. It also requires power suppliers to prioritise electricity generated in these facilities and binds them to a set feed-in tariff over a certain time span, usually of twenty years.

Interconnector
An interconnector is a power line that goes across the border of two neighbouring countries. In the EU, the transmission systems of all countries are connected with interconnectors.

Power Connection
The power connection is the technical connection of a customer's facilities to a grid.

Redispatch Management
If a bottleneck occurs, certain cables in the grid are relieved by relocating power plant feed-in. This procedure is called redispatch management. It is used preventatively in advance planning, for example to prevent grid overload a few hours ahead of time.

SDG
The Sustainable Development Goals (SDGs) are the United Nations' 17 goals for sustainable development. They were adopted in 2015 and are to be reached by 2030.

Substations
A substation is an electrical facility for the transmission of electricity between grids with different voltage levels.

Transmission System
The transmission system delivers electricity to secondary grids across regions and performs network tasks on a national and international level. This is why it is often also referred to as the "integrated network".

TYNDP
Every two years ENTSO-E develops a ten-year plan for network development (Ten-Year Network Development Plan, TYNDP). It applies across the community, is not binding and is intended to ensure more transparency in the entire EU transmission system.

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www.amprion.net/sustainability

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