

# UPDATE

## SUSTAINABILITY REPORT

# 2024





FOREWORD

Amprion is paving the way for a climate-friendly energy system. To cover the required investments, we are increasingly focusing on sustainable financial instruments such as green bonds. The basis for this strategy is the alignment of corporate activities with the principle of sustainability. In this context, our scientifically substantiated climate targets up to 2032 have set the course for reducing greenhouse gases in line with the Paris Climate Agreement. In addition, we provide more than 3,100 people with secure and attractive jobs with a future and support projects that focus on education and equal opportunities. This is also what we understand by sustainability.



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# REVIEW OF 2024

**From progress in grid expansion and the further development of corporate due diligence to testing climate-friendly solutions, Amprion consistently pursued its sustainability agenda throughout 2024.**

**January:** The Science Based Targets initiative (SBTi) validates Amprion’s CO<sub>2</sub> reduction targets and classifies Scope 1 and 2 target ambitions as being in line with a 1.5°C trajectory.

**March:** After the signing of the declaration of principles on respecting human rights and environmental concerns by the management in January, the declaration is published on the company website. Amprion thus fulfils a further obligation under the German Supply Chain Due Diligence Act (Lieferkettensorgfaltspflichten-gesetz, LkSG).

**April:** Amprion publishes the update on its sustainability-related performance in 2023.

**May:** Amprion again successfully places a green dual-tranche bond with a total nominal volume of 1.0 billion euros on the international capital market, followed by another in August with a volume of 1.1 billion euros.

**August:** Amprion and Siemens Energy jointly announce the piloting of the first vacuum circuit-breaker in the extra-high-voltage grid in Germany that does not use the climate-damaging insulating gas sulphur hexafluoride (SF<sub>6</sub>).

**November:** At the Ruhr University Bochum, experts from Amprion present current research results on innovative calculation methods for ice loads on overhead power lines resulting from changing weather factors due to climate change.

## THE AMPRION GRID

Our 11,000-kilometre-long extra-high-voltage grid transports electricity in an area from the North Sea to the Alps. Our grid is of central importance for the success of the energy transition. By expanding it, we enable electricity generated from renewable energy sources to get to where it is needed. At the same time we are creating a “breathing” system that can balance out weather-induced fluctuations in in-feeds from renewable energy sources. As a result, the energy system is more resilient.



**kilometres** is the length of our transmission grid. It transports electricity all the way from the North Sea to the Alps.



For more information about Amprion, please visit our [website](#).

## AMPRION IN BRIEF

Amprion is one of four transmission system operators in Germany. Our lines are the lifelines of society: they secure jobs and quality of life for 29 million people. We keep the grid stable and secure – and are paving the way for a climate-neutral energy system by expanding our grid. We also take on overarching tasks for the interconnected networks in Germany and Europe.

More than 3,100 employees in Dortmund and at more than 30 other locations help to keep the lights on. Their actions are guided by the principles of sustainable development and socially responsible corporate governance.

# SUSTAINABILITY MANAGEMENT

## SUSTAINABILITY AT AMPRION

Amprion is paving the way for a climate-friendly energy system while ensuring maximum system security. To fulfil our responsibilities, we integrate ecological, social and compliance aspects into our business activities. We structure our commitment to sustainability in five areas of action and pursue goals and measures in order to make Amprion fit for the future.

The Sustainability department is responsible for implementing the sustainability strategy. The Sustainability Management Team is responsible for setting targets and coordinating measures in the five areas of action, measuring their success and ensuring transparency as part of its regular reporting. At the same time, the team works closely with Amprion's specialist departments to drive forward important projects such as the climate strategy and prepares for external requirements such as the Corporate Sustainability Reporting Directive (CSRD) at an early stage.

## SUSTAINABLE FINANCING

In 2024, Amprion placed two green dual-tranche bonds on the international capital market with nominal volumes of 1.0 billion euros and 1.1 billion euros respectively. The proceeds will be used exclusively to fund sustainable projects that meet the criteria of the Amprion Green Finance Framework. The annual **Green Finance Investor Report** creates transparency. Among other things, it reports on the utilisation of the liquid funds raised from green bonds (Allocation Report) as well as on the environmental and technical impacts (Impact Report).

Amprion's exceptional ESG performance was once again assessed by the rating of the renowned agency Sustainalytics. With a score of 9.0, Amprion was ranked 6th out of 650 companies worldwide in the "Electric Utilities" sector as of 31 December 2024. The score achieved places Amprion in the best possible risk category "negligible risk", which only a few utility companies worldwide have attained. Amprion also achieved a top score in the ESG rating from the rating agency Sustainable Fitch in July 2024 and was able to further improve its ESG entity score compared to the previous rating.

 For more information about Amprion's commitment to sustainability, please visit our **website**.

## OUR FIELDS OF ACTION





FIELD OF ACTION

# CORPORATE GOVERNANCE



With its core business, Amprion contributes to a climate-friendly, secure and efficient electricity system that ensures quality of life and jobs for millions of people. This fact shows that responsibility for society and the environment is an essential characteristic of Amprion's strategy. Our corporate governance is also measured against this standard.

## VALUE-BASED ACTION

Personal responsibility, honesty, integrity and respect for our fellow human beings and the environment are the values that determine Amprion's actions. Our Compliance Management System (CMS) ensures that all company employees adhere to these values as well as to all applicable rules and laws. Our **Compliance Code** provides our employees with guidance in everyday life. We also require all new employees to complete online compliance training. Our **compliance whistleblower system** can be used to report violations or misconduct at any time. As in previous years, no fines were imposed on Amprion in connection with violations of the law in 2024. Furthermore, Amprion does not make donations to any political parties.

We are also committed to recognising, supporting and complying with fundamental values throughout our value chain. In our **Supplier Code of Conduct**, which all suppliers are required to accept, we set specific expectations for the protection of the environment and human rights in the supply chain. In accordance with the obligations of the German Supply Chain Due Diligence Act (Lieferkettensorgfaltspflichtengesetz, LkSG), Amprion published a policy statement on the protection of human rights in 2024. Prior to this, we had already carried out an environmental and human rights risk analysis and set up an internal complaints procedure. In general, Amprion relies on local procurement structures. In 2024, Amprion purchased 56%<sup>1</sup> of its total procurement volume from suppliers based in Germany (2023: 88%).

<sup>1</sup> The significant decline is due to high order volumes for major projects outside Germany.

## CORPORATE GOVERNANCE IN THE SPIRIT OF SUSTAINABILITY

At Amprion, the Management Board is responsible for promoting sustainability. Since 2023, the variable remuneration of the Management Board has also been linked to the achievement of certain sustainability targets, such as the reduction of CO<sub>2</sub> emissions.

The Sustainability department is assigned to the department of Chief Executive Officer (CEO) Dr Christoph Müller, who succeeded Dr Hans-Jürgen Brick in this role at the beginning of 2025. Dr Hendrik Neumann as Chief Technical Officer (CTO) and Peter RÜth as Chief Financial Officer (CFO) are both members of the Management Board. The CFO is kept informed about current developments by the Sustainability department four times a year. In this context, the CFO helps to align the work of the sustainability team. Moreover, an internal dialogue is regularly held between the Head of Sustainability and the CEO every one to two weeks.

As the uppermost supervisory body, the Supervisory Board monitors the activities of the Management Board of Amprion, also with regard to all aspects concerning sustainability. The Supervisory Board consists of 16 members, none of whom have an executive function at Amprion. Half of the Supervisory Board members represent the employees and the other half the shareholders. All of the Supervisory Board members are independent and have no personal or business relationship with the company or its management.



You can find more information on this field of action in our **Sustainability Report 2022**.

**GUIDING PRINCIPLES**

**BASIC PRINCIPLES OF OUR CORPORATE GOVERNANCE**

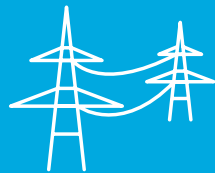
**Profitability, efficiency and sustainability**

Amprion guarantees an efficient transmission system that supports energy policy goals with a view to 2030/2045.



**System security and reliable grid operation**

Amprion ensures system security and establishes the conditions necessary to configure the grid to meet demands, manage it efficiently and operate it safely.



**Environmental protection**

Amprion meets high environmental protection standards in its planning, construction and operation of the grid.



**Innovation, knowledge and skills**

Amprion manages the grid with the help of a qualified workforce.



**Collaborations**

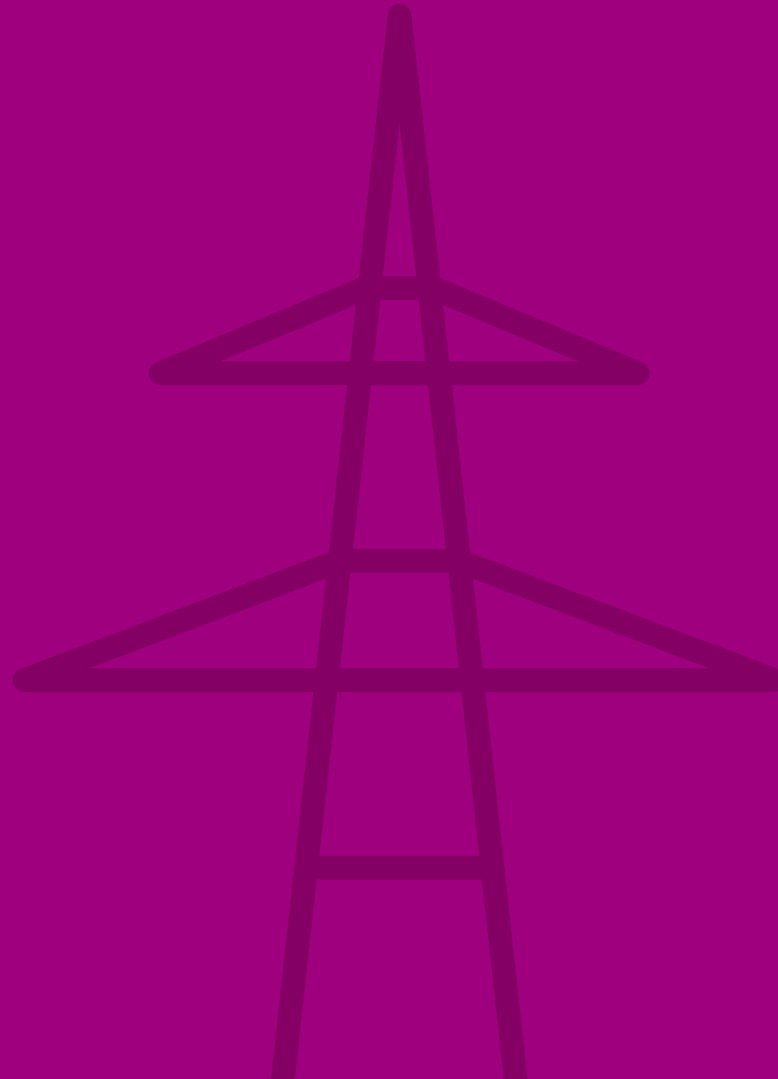
Amprion cooperates with other grid operators and maintains respectful relations with authorities and organisations.





FIELD OF ACTION

# SECURE POWER SYSTEM



Amprion is paving the way for a climate-neutral, secure and therefore sustainable energy system in the heart of Europe. To achieve this aim, we are focusing on expanding our electricity grid on land and at sea in line with demand. At the same time, we are integrating smart technologies into the grids and working together with partners from the worlds of industry and science to develop innovative solutions for the energy transition.

## PROGRESS IN GRID EXPANSION

As part of the energy transition, Amprion is driving forward the modernisation of the grid. To achieve this aim, we are in the process of strengthening and expanding our grid, which covers around 11,000 kilometres, including around 3,700 kilometres of onshore projects required by law under the Energy Line Expansion Act (EnLAG) and the Federal Requirements Planning Act (BBPlG). We are also working on projects to connect offshore wind power to Amprion's grid. Between 2025 and 2029, Amprion plans to invest around 36.4 billion euros in the further development of the grid infrastructure.

One milestone was the commissioning of a phase-shifting transformer at our Hanekenfähr plant site in April 2024. The symbolic commissioning in August 2024 was attended by the Federal Minister of Economics, Dr Robert Habeck, the Energy Minister of Lower Saxony, Christian Meyer, and the Mayor of Lingen, Dieter Krone. Phase-shifting transformers enable the control of electricity flows and thus help to avoid overloads in the grid. Amprion is currently installing two such systems in Lingen-Hanekenfähr. The investment has a high economic benefit, as the systems avoid annual costs of around 36 million euros for redispatch measures, which are necessary to stabilise the grid.

## KEY DATA SECURE POWER SYSTEM

### Status of grid expansion: February 2025



\* Only includes projects that are stipulated in the Power Grid Expansion Act (EnLAG) and the Federal Requirements Plan Act (BBPlG).

\*\* The 1st approval phase leads to the determination of the approximate route, the so-called route corridor.

\*\*\* The 2nd approval phase leads to the determination of the exact route within the route corridor.

### Technical data of the grid

	2024	2023	2022
Power circuit [km] <sup>1</sup>	10,204.16	10,230.10	10,275.00
Length of routes [km]	5,726.70	5,659.80	5,623.46
Overhead lines	5,645.80	5,583.90	5,545.90
Cables	80.90	75.90	77.56
Interconnectors [no.]	13	13	13
Substations [no.]	160	158	164

<sup>1</sup> The reduction in the power circuit is due to the planned decommissioning of the 220 kV voltage level.

## AWARD-WINNING INNOVATION FOR GRID STABILITY AND THE ENERGY TRANSITION

In 2024, Amprion received the prestigious RGI Grid Award from the Renewable Grid Initiative in the “Technological Innovation & System Integration” category. The company won the award for developing the world’s first STATCOM system with a capacity of 300 MVar and grid-forming control, which is designed to contribute to grid stability despite the high level of renewable energy input. The system is part of Amprion’s innovative strategy to pave the way for a climate-neutral energy system. The project also includes close collaboration with research institutions and industrial partners in order to implement the latest technologies and promote knowledge transfer.

 You can find more information on this field of action in our **Sustainability Report 2022**.

**~36.4**

**billion €** is the amount that Amprion is planning to invest in the development of the grid infrastructure between 2025 and 2029.

### Installed capacity of the grid

	2024	2023	2022
<b>Total [MW]</b>	<b>71,815</b>	<b>67,025</b>	<b>63,853</b>
<b>Non-renewable energy</b>	<b>36,118<sup>1</sup></b>	<b>35,142</b>	<b>35,378</b>
<b>Renewable energy</b>	<b>35,697</b>	<b>31,883</b>	<b>28,475</b>
Solar	20,420	16,912	14,334
Wind	12,404	12,136	11,503
Biomass	1,649	1,607	1,511
Hydropower (except pumped storage)	976	956	896
Geothermal	8	8	8
Other	240	264	223

<sup>1</sup> The main reason for the slight increase compared to the previous year is the expansion of gas-fired power plants as flexible conventional power plants in the energy system.

### Grid availability

	2024 <sup>1</sup>	2023	2022
Grid availability [%]	99.9877	100.0000	100.0000
Interruptions/100 km circuit length [min]	0.6370	0.000	0.000
Average duration of interruptions [min]	65	0	0
Volume of energy non-transported [MWh]	11.92	0.00	0.00

<sup>1</sup> The supply interruption in 2024 was due to external conditions (thunderstorms) in conjunction with deviations in technical settings.

### Grid investments

	2024	2023	2022
Investments in the grid [in € million]	4,102	3,067	1,456

### Grid losses<sup>1</sup>

	2024	2023	2022
Volume [MWh]	2,479,781	2,557,542	3,052,275
Price [€ cents/kWh]	18.733	14.513	7.258

<sup>1</sup> Due to corrections over the course of the year, the figures for grid losses in 2024 are provisional. The figures for 2023 have been adjusted compared to the previous year’s report based on the final values.



FIELD OF ACTION

# SOCIETY AND CUSTOMERS



The energy transition is a joint project. As such, its success is directly linked to public acceptance. In the various project regions we therefore rely on the most constructive cooperation possible and an early and transparent dialogue. We also maintain an intensive dialogue with the distribution grid and power plant operators as well as our industrial customers.

## DIALOGUE IN THE PROJECT REGIONS

Grid expansion follows a legally required procedure consisting of several stages. Beyond the legal framework, it is important to us to include the concerns of local authorities and citizens in our planning at an early stage. We therefore invite them to inform themselves and provide information, even prior to the formal approval process. Specifically, we present our plans and provide information on relevant topics relating to our projects, the respective approval process and opportunities for participation.

Communication with those affected follows clear premises. These include always informing owners, residents and interested members of the local public about planned grid expansion measures close to their homes - before, during and after the approval process. It also means celebrating the project completion together. We held several commissioning events with local authorities, political representatives and local residents to celebrate each system becoming operational. The symbolic commissioning of the Garenfeld substation in Hagen in September 2024 is a successful example of continuous communication in the course of our projects. It was preceded by many years of intensive exchange and dialogue.

# KEY DATA SOCIETY AND CUSTOMERS

### Stakeholder engagement: municipalities and citizens

	2024	2023	2022
Events on project communication (different formats) [no.]	618	570	590
Participants at dialogue events for citizens and municipalities [no.]	18,322	9,150	8,554

### Our dialogue formats for citizens and municipalities

	Federal and state politics, esp. local MdL/MdB <sup>1</sup>	trade associations	infrastructure Business and Public managers	Citizens' action groups and project-region	Public in the local alliances with affected properties	Owners and residents with affected properties	Environmental protection and nature conservation representatives/associations	Media (local and national)	Municipalities, towns, districts
<b>Citizens' Info market</b>					•	•	•	•	•
<b>Citizens' consultation meeting/ construction consultation</b>					•	•	•	•	•
<b>Stakeholder consultations</b>	•	•	•	•	•	•	•	•	•
<b>Excursions and on-site visits</b>	•		•	•	•	•	•	•	•
<b>Infomobile</b>					•	•	•		•
<b>Lecture and discussion events</b>	•	•	•	•	•	•	•	•	•
<b>Owners' forum</b>			•	•		•			•
<b>Workshop, round table, workshop process, planning dialogue, etc.</b>	•	•	•	•	•	•	•	•	•

<sup>1</sup> MdL = Member of the State Assembly, MdB = Member of the German Bundestag.

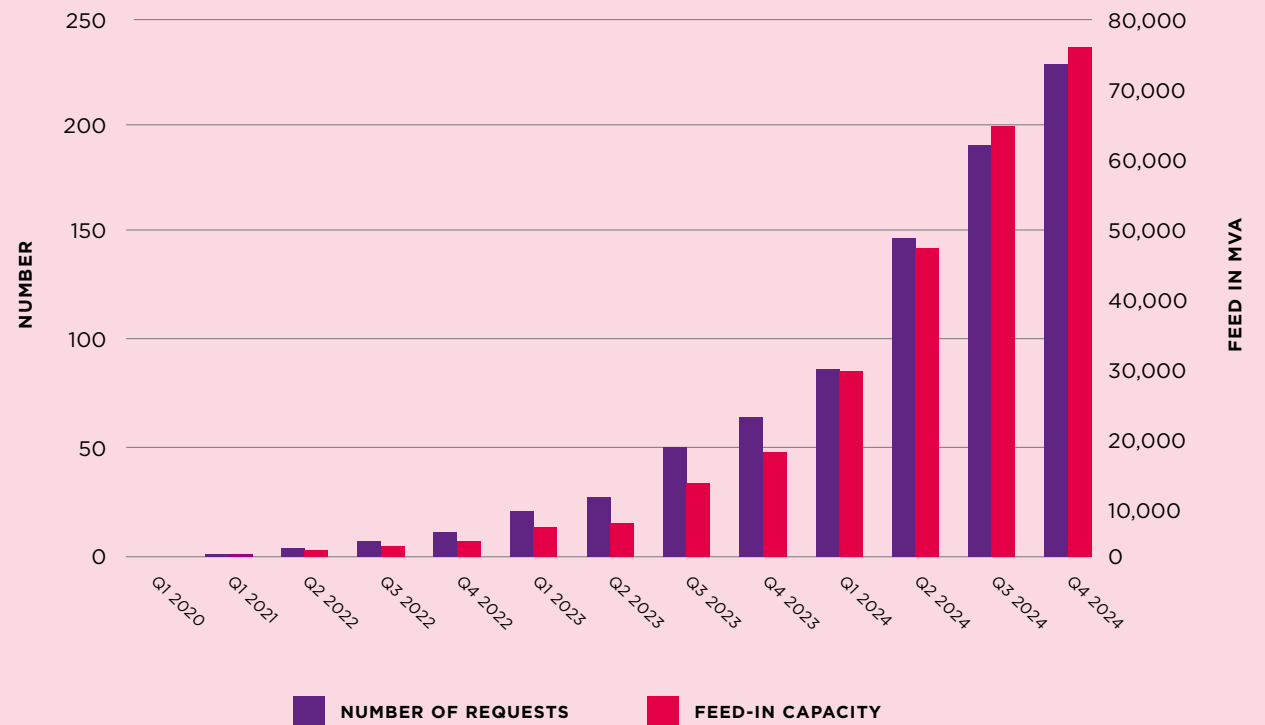
## IN PARTNERSHIP WITH CUSTOMERS

As a transmission system operator, Amprion provides its grid customers from the industrial, distribution system operator and power plant operator segments with non-discriminatory access to the extra-high-voltage grid. Reliable and cooperative relationships with our customers take a high priority.

We therefore engage in regular dialogue with them in various formats. We also survey customer satisfaction and loyalty every two to three years as part of a customer survey. The last customer survey took place in 2023 and resulted in an overall satisfaction and loyalty rate of 86%. In addition to good cooperation, expertise, reliability and trustworthiness, customers also rated Amprion's commitment to a liveable environment as particularly positive.

The grid connection sector is currently experiencing a dynamic development. In particular, Amprion is receiving an increasing number of enquiries from developers of large-scale battery projects with connection capacities of 100 MW to 1.5 GW. In 2024 alone, Amprion received a total of around 230 enquiries for the grid connection of battery storage systems with a feed-in capacity of 76 GVA.

**Grid connection requests for battery storage: cumulative number and feed-in capacity<sup>1</sup>**



<sup>1</sup> Not every enquiry results in a project being implemented.

## SOCIAL RESPONSIBILITY

One focus of Amprion's social commitment is the financial support of projects that aim to remove barriers to education and promote equal opportunities. An internal guideline sets out criteria for selecting projects and initiatives, among other things. The first project organisations to receive funding include the educational and social enterprise CJD Dortmund and Caritas-FKS-Essen gGmbH. A total of five funding agreements were concluded in 2024.

Amprion also supports the social commitment of its employees with the "Social Projects in the Network" (SPIN) programme. In 2024, a total of 29 SPIN projects were funded, covering a broad spectrum of charitable activities (2023: 27 SPINs).

 You can find more information on this field of action in our **Sustainability Report 2022**.

**3,390**

people attended Amprion's customer events in 2024.

### Stakeholder engagement: grid customers

	2024	2023	2022
Participants at customer events [no.]	3,390	2,881	1,329
Customer loyalty [loyalty index] <sup>1</sup>	86	86	80
Brand potential [BVC] <sup>2</sup>	16.2	16.2	-

<sup>1</sup> The index measures customer loyalty based on the following categories: value for money, mutual trust, appreciation in relations with customers and willingness to recommend. These criteria are rated on a scale from 0 (minimum customer loyalty) to 100 (maximum customer loyalty). The value of 2024 refers to the results of the survey from 2023.

<sup>2</sup> BVC = Brand Value Creator. This indicator measures the attractiveness of a company's brand based on the two criteria of brand performance and brand proximity, which are assessed as averages on a scale of 1 to 10 and added together.

### Our dialogue formats for customers

	2024		2023		2022	
	No. of events	No. of customer representatives	No. of events	No. of customer representatives	No. of events	No. of customer representatives
Amprion Customer's Day	1	130	1	107	1	150
NetzDialog	3	400	1	172	2	186
DSO Day	2	475	2	480	3	213
Customer surveys	-	-	1	253	-	-
NetzImpuls	3	2,385	3	1,869	2	780
<b>Total</b>	<b>9</b>	<b>3,390</b>	<b>8</b>	<b>2,881</b>	<b>8</b>	<b>1,329</b>



FIELD OF ACTION

# ENVIRONMENT



Amprion is paving the way for the climate-neutral energy system of the future. At the same time, we are contributing to the decarbonisation of our own business in accordance with science-based targets for CO<sub>2</sub> reduction. The protection of habitats and ecosystems is an equally important factor. We take the utmost care to protect natural habitats and adhere strictly to environmental regulations when expanding the grid. We then maintain our routes and assets in accordance with environmental standards.

## GRID INFRASTRUCTURE IN THE CONTEXT OF NATURE AND SPECIES PROTECTION

Amprion takes the protection of flora and fauna into account, both in its construction measures and in the operation of the grid. In order to conserve resources and thus protect people and the environment, we only carry out grid expansion measures if existing grid capacities cannot be further optimised or strengthened (NOVA principle). In addition, Amprion is obliged to take compensatory and replacement measures in the course of its construction projects.

In 2024, Amprion tested an alternative method to compensate for the loss of tree cavities. Artificial cavities, crevices and cracks were milled directly into trees to replicate natural woodpecker cavities and bark roosts. These structures provide immediately usable habitats for bats and breeding sites for birds. The aim is to test their effectiveness in comparison to traditional nesting boxes and to reduce the cost of ordering, storing and maintaining them.

We maintain existing power lines as part of our integrated vegetation management policy. Thus we ensure the safe transmission of electricity and at the same time protect the flora and fauna along our overhead power lines. Amprion is committed to protecting insects by planting flowering meadows and maintains biotopes for insects in its own grid area. In this context, Amprion has initiated the pilot project called “Flowerline” together with the Rhineland Palatinate Cultural Landscape Foundation and the University of Koblenz as a scientific partner. This

## KEY DATA ENVIRONMENT

### Energy consumption<sup>1</sup>

in MWh	2024 <sup>2</sup>	2023	2022
<b>Total [MWh]</b>	<b>152,420</b>	<b>154,454<sup>4</sup></b>	<b>149,110</b>
Non-renewable sources			
Diesel <sup>3</sup>	8,443	8,728	8,746
Petrol <sup>3</sup>	593	399	108
Natural gas	4,342 <sup>5</sup>	6,285 <sup>4</sup>	7,153
Electricity	56,271	56,299 <sup>4</sup>	67,810
District heating	216	216 <sup>4</sup>	191
Renewable sources			
Electricity	82,555	82,527 <sup>4</sup>	64,996
Energy intensity [total energy consumption (excl. grid losses) in MWh/installed capacity in MVA] <sup>6</sup>	1.58	1.72	1.71
Share of renewable energy sources in total energy consumption [%]	59.4	59.4	48.9

<sup>1</sup> Excluding grid losses.

<sup>2</sup> The consumption figures for natural gas, district heating and electricity included in the total value were partly estimated on the basis of the previous year's figures.

<sup>3</sup> Excludes fuel consumption (diesel and petrol) for business travel with own cars or rental vehicles.

<sup>4</sup> The estimated values for 2023 in the last report have been corrected in this report based on actual consumption data.

<sup>5</sup> The reason for the decrease compared to the previous year is the move to more energy-efficient office buildings.

<sup>6</sup> Compared to the previous sustainability report, the calculation of the installed capacity of transformers in MVA now includes not only the transformation level into downstream high-voltage networks, but also the capacity of the extra-high-voltage level 380/220 kV.



project aims to measure insect activity in flowering meadows at a total of 34 pylon sites near Koblenz over a period of three years. The selected areas have a high ecological potential due to the lack of agricultural utilisation. The Rhineland-Palatinate Cultural Landscape Foundation planted the flowering meadows in autumn 2023.

We pay particular attention to the protection of birds. For example, we have installed a growing number of bird protection markers on the ground cables above the conductor cables. This approach can reduce the risk of collision for many species locally by up to 90%. Today, around 416 kilometres of our power lines are equipped with such bird protection markers.

## CLIMATE AND ENVIRONMENTAL PROTECTION AT AMPRION

The basis for operational environmental protection at Amprion is provided by certified management systems for the environment and energy in accordance with ISO standards 14001 and 50001. At the same time, we have ambitious climate change targets for the decarbonisation of our own business, which have been scientifically validated and approved by the SBTi. Our target is to reduce our direct and energy-related indirect greenhouse gas emissions (Scope 1 and Scope 2) by 63% by 2032 compared to the base year 2017. We will reduce the greenhouse gas emissions of our value chain (Scope 3) by 58.1% per kilometre of annually extended and renewed transmission grid lines by 2032 compared to the base year 2021.

### Greenhouse gas emissions

in tonnes of CO <sub>2</sub> e	2024 <sup>1</sup>	2023 <sup>2</sup>	2022
<b>Total</b>	<b>2,418,509</b>	<b>1,874,870</b>	<b>2,040,632</b>
<b>Scope 1</b>	<b>8,974</b>	<b>6,570</b>	<b>12,065</b>
Diesel <sup>3</sup>	2,246	2,322	2,325
Petrol <sup>3</sup>	157	105	29
Natural gas <sup>3</sup>	873	1,263	1,445
SF <sub>6</sub> emissions <sup>4</sup>	5,686	2,867	8,254
Refrigerant losses from A/C units <sup>5</sup>	12	12	12
<b>Scope 2<sup>6,7</sup></b>	<b>764,067</b>	<b>785,369</b>	<b>1,101,596</b>
Own consumption of electricity	44,906	44,928	50,068
Grid losses <sup>8</sup>	719,100	740,380	1,051,474
District heating	61	61	54
<b>Scope 3</b>	<b>1,645,468</b>	<b>1,082,931</b>	<b>926,971</b>
Category 1 (purchased goods and services) <sup>9</sup>	273,136	190,779	184,910
Category 2 (capital goods) <sup>9</sup>	1,265,954	783,505	605,117
Category 3 (fuel- and energy-related activities)	97,603	101,518	130,570
Category 4 (upstream transportation and distribution) <sup>9</sup>	2,809	2,232	1,717
Category 5 (waste generated during operations)	1,614	1,259	1,592
Category 6 (business travel)	890	630	372
Category 7 (employee commuting)	3,462	3,008	2,693
<b>Greenhouse gas intensities</b>	<b>2024</b>	<b>2023<sup>1</sup></b>	<b>2022<sup>2</sup></b>
Combined greenhouse gas intensity for Scope 1 and 2 [GHG emissions (t CO <sub>2</sub> e)/volume of transport kilometres (TWh*km)]	36.22	38.93	47.97
Greenhouse gas intensity for Scope 3 <sup>10</sup> [GHG emissions (t CO <sub>2</sub> e)/length of routes extended and renewed annually (km)]	10,240.69	9,024.43	7,028.11

<sup>1</sup> Values are provisional based on estimated energy consumption, activity data, output totals and the emission factor of electricity generation (GHG emissions).  
<sup>2</sup> The estimated values for 2023 in the last report were corrected in this report based on actual consumption, expenditure totals and activity data and the emission factor of electricity generation (GHG emissions).  
<sup>3</sup> Conversion factors for fuels (calorific value in kWh) for diesel/petrol according to the Federal Office of Economics and Export Control of 17 July 2024. CO<sub>2</sub> emission factors for fossil fuels according to the Federal Office of Economics and Export Control of 1 August 2024.  
<sup>4</sup> For the years 2023 and 2024, the calculation of SF<sub>6</sub> emissions is based on a global warming potential (GWP) of 24,300 on the basis of the 6th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC). For the year 2022, a factor of 22,800 on the basis of the IPCC's 4th Assessment Report (2007) is applied.  
<sup>5</sup> Estimate based on the previous year's figure.  
<sup>6</sup> Location-based calculation.  
<sup>7</sup> Emission factor for the German electricity mix according to ENTSO-E, published by the German Association of Energy and Water Industries.  
<sup>8</sup> Grid losses without own consumption and according to billing system.  
<sup>9</sup> If the changes in the underlying emission factors are not taken into account, the increase in absolute emissions due to grid expansion is around 22% lower.  
<sup>10</sup> If the changes in the underlying emission factors are not taken into account, the greenhouse gas intensity for Scope 3 falls to 8,165.26 tCO<sub>2</sub>e/km, a decrease of 10% compared to 2023.

In 2024, the sum of Scope 1 and Scope 2 emissions was reduced by more than 40% compared to the base year. The lower figure is primarily due to a further decline in grid loss-related emissions, driven by the decarbonisation of the power system enabled by Amprion. Absolute Scope 3 emissions continued to rise in 2024. On the one hand, this is due to our continued significant increase in investments in grid expansion for the energy transition. On the other hand, the updated expenditure-based emission factors used to calculate emissions, such as for steel and copper products in particular, are significantly higher than in the previous year.<sup>1</sup>

Amprion is working on replacing the greenhouse gas sulphur hexafluoride (SF<sub>6</sub>) with alternative, more climate-friendly gases. The improvement is an essential key to building climate-friendly substations in the future. Amprion is cooperating with manufacturers to increase the maturity of SF<sub>6</sub>-free technologies under real operating conditions. One current example is the collaboration between Amprion and Siemens Energy to pilot the first 420 kV vacuum circuit breaker in the extra-high-voltage grid in Germany that does not use SF<sub>6</sub> at all. Both companies signed a letter of intent to this effect at the CIGRE in Paris in August 2024.

<sup>1</sup> If the changes in the underlying emission factors are not taken into account, the increase in absolute emissions due to grid expansion is around 22% lower.

 You can find more information on this field of action in our **Sustainability Report 2022**.

**SF<sub>6</sub>**

	2024	2023	2022
Quantity of SF <sub>6</sub> emitted [kg]	234	118	362
SF <sub>6</sub> emissions [t CO <sub>2</sub> e] <sup>1</sup>	5,686	2,855	8,254
SF <sub>6</sub> emission rate [Ma. %]	0.08	0.04 <sup>2</sup>	0.18

<sup>1</sup> For the years 2023 and 2024, the calculation of SF<sub>6</sub> emissions was based on a global warming potential (GWP) of 24,300 based on the 6th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC). For the year 2022, a factor of 22,800 was calculated on the basis of the 4th Assessment Report of the IPCC (2007).

<sup>2</sup> Adjusted calculation method in 2023 for the stock of SF<sub>6</sub> operating facilities, therefore no direct comparability with the previous year's figures.

**Waste**

	2024 <sup>1</sup>	2023 <sup>2</sup>	2022
<b>Total [t]</b>	<b>8,820</b>	<b>7,631</b>	<b>9,656</b>
Non-hazardous waste	5,096	4,459	4,662
Hazardous waste	3,724	3,172	4,994
Recovery/recycling [%]	84	81	87
Disposal [%]	16	19	13

<sup>1</sup> Preliminary waste figures for 2024.

<sup>2</sup> The estimated values for 2023 in the last report were corrected in this report based on the actual waste figures.

**Biodiversity**

	2024	2023	2022
Maintenance based on integrated vegetation management [ha]	9,000	9,000	9,000
Flowering meadows [no.]	23	22	20
Kilometres of power line with bird markers [km]	416	386	358

FIELD OF ACTION

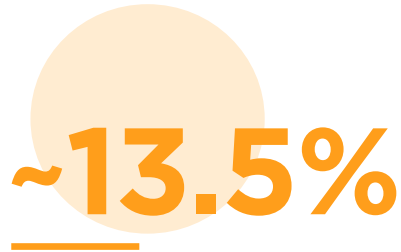
# EMPLOYEES



The employees at Amprion contribute in various ways to the security and stability of the electricity grid in view of the increasing integration of renewable energy. In return, Amprion offers a wide range of entry-level and development opportunities at the centre of the energy transition as well as attractive working conditions. These also include a safe and healthy working environment and a corporate culture of solidarity.

## SUSTAINABLE AND ATTRACTIVE WORKPLACE

Amprion offers its approximately 3,100 employees secure and attractive jobs in the important future-oriented field of the energy transition. The number of Amprion employees grew by a further 13.5% in the reporting year compared with the previous year. In August 2024, 22 apprentices also started their professional future at Amprion as industrial and office clerks, IT specialists and electronics technicians for industrial engineering, four of them as part of a dual study programme.



more employees than in the previous year: numerous new employees started their careers at Amprion in 2024.

## KEY DATA EMPLOYEES

### Workforce<sup>1,2,3</sup>

	2024	2023	2022
<b>Total [FTE]</b>	<b>3,089.4</b>	<b>2,721.3</b>	<b>2,339.4</b>
<b>Gender</b>			
Women	691.5	570.5	462.8
Men	2,397.0	2,150.8	1,876.7
<b>Employment relationship</b>			
<b>Full-time [FTE]</b>	<b>2,824.0</b>	<b>2,536.0</b>	<b>2,183.0</b>
Women	572.0	492.0	401.0
Men	2,252.0	2,044.0	1,782.0
<b>Part-time [FTE]</b>	<b>151.0</b>	<b>106.5</b>	<b>80.0</b>
Women	105.0	71.3	56.0
Men	46.0	35.2	24.1
<b>Semi-retirement [FTE]</b>	<b>113.5</b>	<b>78.8</b>	<b>76.4</b>
<b>Permanent [FTE]</b>	<b>2,976.4</b>	<b>2,631.7</b>	<b>2,237.4</b>
Women	627.3	520.8	405.4
Men	2,349.1	2,111.0	1,832.1
<b>Temporary [FTE]</b>	<b>112.0</b>	<b>89.6</b>	<b>102.0</b>
Women	64.1	49.7	57.4
Men	47.9	39.9	44.6
<b>Pay scale [FTE]</b>	<b>2,363.4</b>	<b>2,075.5</b>	<b>1,801.8</b>
Pay scale [%]	76.5	76.3	77.0
<b>Non-pay scale [FTE]</b>	<b>663.3</b>	<b>590.1</b>	<b>492.0</b>
Non-pay scale [%]	21.5	21.7	21.0
<b>Trainees [FTE]</b>	<b>18.0</b>	<b>15.8</b>	<b>5.8</b>
Trainees [%]	0.6	0.6	0.2
<b>Senior executives [FTE]</b>	<b>43.7</b>	<b>39.9</b>	<b>39.8</b>
Senior executives [%]	1.4	1.4	1.7
<b>On parental leave [no.]</b>	<b>42</b>	<b>58</b>	<b>44</b>
Women	31	47	32
Men	11	11	12

<sup>1</sup> Figures as of 31 December 2024.

<sup>2</sup> For reasons of data protection and comparability, results for the gender characteristics “diverse” and “not specified” are only included in the total figures, but not in their breakdowns.

<sup>3</sup> Minor discrepancies may arise in totals due to rounding.



## CORPORATE CULTURE OF SOLIDARITY AND EQUAL TREATMENT

Amprion is constantly working to promote a corporate culture of solidarity. Among other things, this includes creating conditions that enable employees to combine productive work with their private lives. Amprion supports employees in this respect by its partnership with BUK Familienservice. The advice centre deals with issues such as childcare and caring for family members. Amprion is also committed to equal treatment and equal opportunities in the workplace. In this context, we launched the “Women in Energy” event series in 2024, which regularly addresses topics relating to the promotion of women.

Turnover	2024	2023	2022
<b>Turnover</b>			
<b>New hires [FTE]<sup>1</sup></b>	<b>474</b>	<b>485</b>	<b>289</b>
Women	139	142	69
Men	335	343	220
Under 30 years	165	151	87
30 to 50 years	278	295	183
Over 50 years	31	39	19
<b>Turnover [%]</b>	<b>2.5</b>	<b>2.1</b>	<b>2.3</b>
Turnover absolute [FTE]	71	52	49
Women [%]	24	23	16
Men [%]	76	77	84
Under 30 years [%]	20	21	16
30 to 50 years [%]	69	71	16
Over 50 years [%]	11	8	68

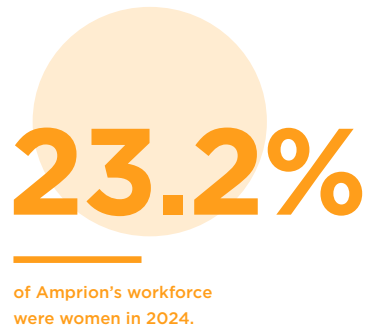
<sup>1</sup> Excluding employees returning from parental leave.

Age structure	2024	2023	2022
<b>Average age overall</b>	<b>39.5</b>	<b>39.6</b>	<b>39.7</b>
Under 30 years [no.]	437	449	392
30 to 50 years [no.]	2,167	1,838	1,552
Over 50 years [no.]	602	522	482
<b>Average age in supervisory bodies</b>	<b>56.4</b>	<b>55.4</b>	<b>54.4</b>
Under 30 years [no.]	0	0	0
30 to 50 years [no.]	1	1	2
Over 50 years [no.]	15	15	14

Amprion’s corporate culture also includes fair and performance-related remuneration structures. Equal pay for equal work and gender-neutral remuneration are firmly anchored in collective bargaining and works agreements. Across all occupational groups, the basic salaries of women were 7.0% lower than those of men at the end of the year (2023: 7.3%<sup>1</sup>). This is because the occupational groups are staffed differently by men and women. The ratio of the total annual remuneration of the highest-paid person to the median of all employees was 11.3 (2023: 8.9).

Amprion also supports its employees in developing their skills. On average, each employee spends 38 hours a year on training. Amprion focuses on needs-based and individual solutions.

<sup>1</sup> The previous year’s figure was adjusted on the basis of the current calculation method.



**Equal opportunities**

	2024	2023	2022
<b>Overall proportion of women [%]</b>	<b>23.2</b>	<b>21.8</b>	<b>20.7</b>
Proportion of women in management positions	14.0	12.5	10.0
Proportion of women in supervisory bodies	25.0	25.0	18.8
Proportion of severely disabled employees [%]	2.3	2.3	2.3
Cases of discrimination [no.]	2	0	0
Nationalities [no.]	38	34	28

**Basic and advanced training**

	2024	2023	2022
<b>Apprentices [no.]</b>	<b>53</b>	<b>42</b>	<b>47</b>
Proportion of apprentices [%]	1.7	1.5	2.0
Apprentices in their first year of training [no.]	22	15	13
Apprentices who have completed their training [no.]	9	17	10
Apprentices who started a job at Amprion after successfully completing their training [no.]	9	16	9
<b>Advanced training courses</b>			
In-house training events [no.]	1,024	791	612
Participation at in-house training events [no.] <sup>1</sup>	12,249	7,855	5,190
Participation at external training events [no.]	607	581	435
Average number of hours of advanced training per employee per year (qualified estimate)	38	38	38

<sup>1</sup> Exclusive e-learning.

## WORK SAFELY, STAY HEALTHY

Many activities at Amprion have a high risk potential due to their hazardous nature. These include electrical work in substations and on the grid, which sometimes involves working at great heights, as well as handling heavy loads. To ensure that our employees go home every day as healthy as when they arrived, Amprion has a certified occupational health and safety management system and a company health management programme. In this system, we define standardised company-wide framework conditions, processes and measures that make a significant contribution to protecting people from accidents at work and work-related illnesses, as well as promoting job satisfaction.

 You can find more information on this field of action in our **Sustainability Report 2022**.

### Occupational health and safety

	2024	2023	2022
Work-related/commuting accidents [LTI] <sup>1</sup>	29	17	10
Rate of work-related/commuting accidents [LTIF in %] <sup>2</sup>	6	4	3
Work-related injuries with serious consequences [no.] <sup>3</sup>	0	0	0
Deaths [no.]	0	0	0
Work-related/commuting accidents among contractors' workers [no.]	78	40	51
Deaths among contractors' workers [no.]	0	0	0

<sup>1</sup> LTI (Lost Time Injuries) = accidents related to work and business-related transfers/travels (absolute) resulting in lost time ≥1 day, without accidents on the way to or from work.

<sup>2</sup> LTIF (Lost Time Injury Frequency) = LTI x 1 million working hours/number of hours actually worked.

<sup>3</sup> Work-related injuries where employees still suffered from health restrictions six months later



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