

INTRODUCTION

LETTER FROM THE CFO

GREEN HIGHLIGHTS

OUR CONTRIBUTION TO THE UNITED NATIONS SDGS IN 2023

ALLOCATION REPORT

SAMPLE PROJECTS
IN OUR ELIGIBLE
ASSET CATEGORIES

**IMPACT REPORT** 

ASSURANCE REPORT

GLOSSARY

LEGAL NOTICE AND DISCLAIMER GREEN FINANCE INVESTOR REPORT

2023

# INTRODUCTION



LETTER FROM THE CFO

**GREEN HIGHLIGHTS** 

OUR CONTRIBUTION TO THE UNITED NATIONS SDGS IN 2023

ALLOCATION REPORT

SAMPLE PROJECTS IN OUR ELIGIBLE ASSET CATEGORIES

IMPACT REPORT

ASSURANCE REPORT

**GLOSSARY** 

LEGAL NOTICE
AND DISCLAIMER



The energy transition in Germany and Europe is fully under way with the aim of reaching climate neutrality. Amprion is helping to shape this transformation: we are paving the way for a sustainable energy system that is climate-neutral, safe and efficient. This aligns with our mission to ensure the highest level of system security possible, so that people are guaranteed a reliable power supply.

Amprion is one of the enablers of the energy transition in Germany and Europe! In a way, green is our business model. We are expanding and converting our power grid, thereby enabling the transition to a climate-neutral energy system. This will require substantial investment over the next five years (around €27.5 billion in the period to 2028).

Over the next decade, we intend to expand and upgrade more than 5,500 kilometres of power lines with the objective, among other things, of integrating new renewable power into our grid. We are going to raise a large proportion of this on the capital market through various sustainable financing instruments.

In order to comply with reporting requirements under the Green Bond Principles (GBP), we publish this Green Finance Investor Report on an annual basis. The report provides our investors with comprehensive information on the progress of the Eligible Assets and the allocation of proceeds. As promised in our Green Finance Framework, our Green Finance Investor Report also includes an allocation reporting section and an impact reporting section.

# LETTER FROM THE CFO

#### **DEAR READERS.**

LETTER FROM THE CFO

INTRODUCTION

**GREEN HIGHLIGHTS** 

**OUR CONTRIBUTION** TO THE UNITED NATIONS SDGS IN 2023

**ALLOCATION** REPORT

SAMPLE PROJECTS IN OUR ELIGIBLE **ASSET CATEGORIES** 

IMPACT REPORT

**ASSURANCE** REPORT

**GLOSSARY** 

LEGAL NOTICE AND DISCLAIMER

It is my pleasure to present to you our Green Finance Investor Report for 2023. Following our debut last year, this report provides a broad overview of how we invest in our sustainable projects and how the work to upgrade and expand our grid is helping to achieve a climate-neutral energy system.

The energy transition in Germany is fully under way and Amprion is a key player in shaping this transformation.

Before I look back at 2023, the most important point first: 100% of all proceeds from our green bonds go into our portfolio of sustainable projects that Finance Framework!

The year 2023 was a very successful year for Amprion. We continued to grow

in all areas and once again invested a record amount of over €3 billion in grid expansion, more than double the total spent in 2022.

In order to ensure that projects are implemented on time, we have developed our security-of-capacity strategy: we have taken a proactive approach and last vear alone secured €17 billion of production and installation capacity by contract. This covers around 80% of the materials and services that we need for projects that are scheduled for implementation in the period to 2030. In our procurement activities, we maintain a consistent focus on quality meet the criteria set out in our Green and on minimising risks. And when awarding contracts, we favour short delivery routes and local providers wherever possible.

As an enabler of Germany's energy transition, we have a business model that is intrinsically "green". Sustainability is therefore a central strategic issue at Amprion. Here, we once again chalked up some significant achievements last year, for example by further improving our ESG ratings from 9.6 to 9.0. At Sustainalytics, we rank among the top companies worldwide in the industry and the region. This puts Amprion in the best possible category, "negligible risk". Another milestone for us. our CO2 reduction targets were approved by the renowned Science Based Targets initiative (SBTi), a climate action organisation that enables companies and financial institutions worldwide to play their part in combating the climate crisis. Our targets are aligned with the Paris Agreement and the 1.5°C target.



Peter Rüth

tandem with its introduction, we will

then also report the content required by

the underlying European Sustainability

Reporting Standards (ESRSs). In addition,

we will then apply and publish the EU

Taxonomy key performance indicators

for Amprion. This classification system

for sustainable economic activities

is becoming ever more important

in the context of the CSRD and the

EU's Sustainable Finance Disclosure

Regulation (SFDR). Our business activities

are already intrinsically sustainable and

classified as "enabling activities" under

the EU Taxonomy, to which end we

actively contribute to its technical

We were also successful on the

financing side. Having now established

ourselves as a frequent issuer on the

international capital markets, in August

2023 we launched a green dual-tranche

criterion "climate change mitigation".

INTRODUCTION

LETTER FROM THE CFO

**GREEN HIGHLIGHTS** 

**OUR CONTRIBUTION** TO THE UNITED NATIONS SDGS IN 2023

**ALLOCATION** REPORT

SAMPLE PROJECTS IN OUR ELIGIBLE **ASSET CATEGORIES** 

IMPACT REPORT

**ASSURANCE** REPORT

**GLOSSARY** 

LEGAL NOTICE AND DISCLAIMER Internally too, we are continuously progressing. In 2023, we further investors continue to show in our expanded our sustainability reporting sustainable financial instruments. I would and switched to the internationally like to take this opportunity to once recognised Global Reporting Initiative again express my sincere thanks for this. (GRI) Standards. We are already making On the following pages of this report, preparations to ensure that our reportyou will read how we have allocated the ing for the 2025 financial year meets the inflow of funds and what the proceeds requirements of the Corporate Sustainof the bond transaction will do for the ability Reporting Directive (CSRD). In environment.

> Obviously, we will continue to invest heavily in upgrading and expanding the transmission grid. Over the next five-year period to 2028 alone, we are planning to invest €27.5 billion. At the same time. we are always mindful of the feasibility and cost effectiveness of our investments. We only build what is necessary and practicable in the energy industry environment.

Our very good creditworthiness is important and exciting journey. rated by Moody's and Fitch. The two rating agencies assign us a solid investment-grade rating of, respectively, Baa1 and BBB+ with a stable outlook and confirmed these ratings as recently as spring 2024.

In May this year, we once again issued a green dual-tranche bond for a total amount of €1 billion. The use of the bond for a total of €1.2 billion. We are net proceeds and the impact of this Chief Financial Officer (CFO)

delighted by the strong interest that transaction will be outlined in the next Green Finance Investor Report for 2024.

> We continue to concentrate on our core mission to plan, build and operate a transmission network that best meets demand. System security and stability are our top priorities. To achieve the energy transition's ambitious goals, we need to take a holistic view of the energy system and give consideration to a variety of possible technology-agnostic solutions. As a company, it is essential that we strike a balance between growth and practicability. We will make every effort to ensure that we do so.

> I would like to take this opportunity to sincerely thank our stakeholders for their continuous interest and their support and would be delighted if they continued to be our close companions on this

» As a company, it is essential that we strike a balance between growth and practicability. «

fetu flülle

PETER RÜTH

# **GREEN HIGHLIGHTS**

INTRODUCTION

LETTER FROM THE CFO

#### **GREEN HIGHLIGHTS**

OUR CONTRIBUTION TO THE UNITED NATIONS SDGS IN 2023

**ALLOCATION** REPORT

SAMPLE PROJECTS IN OUR ELIGIBLE **ASSET CATEGORIES** 

IMPACT REPORT

**ASSURANCE** REPORT

GLOSSARY

LEGAL NOTICE AND DISCLAIMER

## **Update** Sustainability Report 2023

# **SBTi confirms** Amprion's CO<sub>2</sub> reduction targets

## **ESG** risk rating improved by Sustainalytics

## **Outstanding ESG** ratings from **Sustainable Fitch**

- Amprion's corporate performance,
- Amprion achieves an ESG rating of

## €1.2 billion green bond

dual-tranche issued in August 2023: €3 billion of green bonds issued in total

### **Our investments** of €3.1 billion

are more than double the amount invested in 2022

## €17 billion of capacities

have been secured comprising 80% of materials and resources needed for projects until 2030)

# **Groundbreaking** ceremony for the **A-North project**

Agreement on limiting global warming

# OUR CONTRIBUTION TO THE UNITED NATIONS SDGS IN 2023

INTRODUCTION

LETTER FROM THE CFO

**GREEN HIGHLIGHTS** 

OUR CONTRIBUTION TO THE UNITED NATIONS SDGS IN 2023

ALLOCATION REPORT

SAMPLE PROJECTS
IN OUR ELIGIBLE
ASSET CATEGORIES

IMPACT REPORT

ASSURANCE REPORT

**GLOSSARY** 

LEGAL NOTICE
AND DISCLAIMER



Amprion contributes directly and indirectly to the United Nations (UN) Sustainable Development Goals (SDGs) established in autumn 2015. Specifically, the UN has set 17 Sustainable Development Goals with a total of 169 targets to be achieved by 2030.

# SUSTAINABLE DEVELOPMENT HIGHLIGHTS

#### **UNITED NATIONS SDG 7**

Affordable and clean energy

- ightarrow Installed grid capacity
  - renewable energy: 31,883 MW

#### INTRODUCTION

LETTER FROM THE CFO

**GREEN HIGHLIGHTS** 

#### OUR CONTRIBUTION TO THE UNITED NATIONS SDGS IN 2023

ALLOCATION REPORT

SAMPLE PROJECTS
IN OUR ELIGIBLE
ASSET CATEGORIES

IMPACT REPORT

ASSURANCE REPORT

**GLOSSARY** 

LEGAL NOTICE AND DISCLAIMER

#### **UNITED NATIONS SDG 8**

Decent work and economic growth

- → Rate of work-related/commuting accidents [LTIF¹]: 4%
- $\rightarrow$  No. of deaths: 0
- → No. of work-related/commuting accidents among contractors' workers: 0
- → Employee turnover: 2.1%
- → Overall percentage of women: 21.8%
- → Cases of discrimination: 0

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

#### **UNITED NATIONS SDG 13**

Take urgent action to combat climate change and its impacts

- Enabling the energy transition by integrating power generation based on renewable energy
- → Setting reduction targets for Amprion's GHG emissions:
  - Scope 1 & 2: 63% by 2032 on a 2017 base year
  - Scope 3: 58.1% by 2032 per km of annual extended and renewed transmission grid lines on a 2021 base year

#### **UNITED NATIONS SDG 15**

Life on land

- → Flowering meadows: 22
- → Maintenance based on Integrated Vegetation Management 9,000 hectares

#### **UNITED NATIONS SDG 9**

Build resilient
infrastructure,
promote inclusive
and sustainable
industrialisation
and foster innovation

→ Grid availability: 100%

# ALLOCATION REPORT



INTRODUCTION

LETTER FROM THE CFO

**GREEN HIGHLIGHTS** 

OUR CONTRIBUTION TO THE UNITED NATIONS SDGS IN 2023

ALLOCATION REPORT

SAMPLE PROJECTS
IN OUR ELIGIBLE
ASSET CATEGORIES

IMPACT REPORT

ASSURANCE REPORT

**GLOSSARY** 

LEGAL NOTICE AND DISCLAIMER Due to the large number of individual projects, the information regarding the Green Finance Project Portfolio is provided on an aggregated portfolio basis. Amprion's Green Finance Framework distinguishes between new financing and refinancing of Eligible Assets. Refinancing is defined as the financing of assets that were taken into operation more than one year before approval by the Green Finance Committee. The share of new financing and refinancing is illustrated on the following page.

# €3.0 billion GREEN BONDS OUTSTANDING

#### INTRODUCTION

LETTER FROM THE CFO

**GREEN HIGHLIGHTS** 

OUR CONTRIBUTION TO THE UNITED NATIONS SDGS IN 2023

ALLOCATION REPORT

SAMPLE PROJECTS IN OUR ELIGIBLE ASSET CATEGORIES

IMPACT REPORT

ASSURANCE REPORT

GLOSSARY

LEGAL NOTICE AND DISCLAIMER **61.5%**GREEN BOND RATIO<sup>1</sup>

Share of long-term funding amounting to €4.88 billion

 $_{"}\checkmark"$ : assurance procedures performed

- <sup>1</sup> The reporting date is 31 December 2023.
- <sup>2</sup> Compared to last year's report, the allocation for the years 2019–2022 was reduced by a total of €54.8 million due to a new loan outside the scope of Amprion's Green Finance Framework (exclusion of relevant projects from the Green Finance Project Portfolio).
- <sup>3</sup> From September to December 2019.

#### PERFORMANCE OF AMPRION'S GREEN FINANCE PROJECT PORTFOLIO<sup>2</sup>

	in € million	2019³	2020	2021	2022	2023	Total
NEW FINANCING	Grid connection offshore	0.6	25.0	36.0	82.8	1,276.4	1,420.8
92.8%	Onshore DC projects	31.0	174.5	160.6	253.4	404.3	1,023.8
	Onshore AC projects including substations	182.2	513.5	715.5	804.6	937.4	3,153.2
	Total	213.8	713.0	912.1	1,140.8	2,618.1	5,597.8
REFINANCING	Grid connection offshore	0.0	0.0	0.0	0.0	0.0	0.0
7.2%	Onshore DC projects	53.5	97.1	18.6	2.1	40.1	211.5
	Onshore AC projects including substations	22.8	69.3	42.7	12.8	69.5	220.9
	Total	76.3	166.4	61.3	14.9	109.6	428.6
	Grand total						6,026.4

 ${}_{\mbox{\tiny M}}\mbox{\rlap/}{}''\colon$  assurance procedures performed on all numbers

#### **OUTSTANDING GREEN FINANCING INSTRUMENTS**

Instrument type	ISIN	Coupon	Issue date	Maturity date	Volume in € million
Green bond	DE000A30VPL3	3.450%	22/9/22	22/9/27	800
Green bond	DE000A30VPM1	3.971%	22/9/22	22/9/32	1,000
Green bond	DE000A3514E6	3.875%	7/9/23	7/9/28	500
Green bond	DE000A3514F3	4.125%	7/9/23	7/9/34	700
Total allocated					3.000

 $\slash\hspace{-0.6em}\slash\hspace{-0.6em}$  ": assurance procedures performed on all numbers

LETTER FROM THE CFO

**GREEN HIGHLIGHTS** 

**OUR CONTRIBUTION** TO THE UNITED **NATIONS SDGS** IN 2023

**ALLOCATION REPORT** 

SAMPLE PROJECTS IN OUR ELIGIBLE **ASSET CATEGORIES** 

**IMPACT REPORT** 

**ASSURANCE** REPORT

**GLOSSARY** 

LEGAL NOTICE AND DISCLAIMER

#### **GREEN FINANCE COMMITTEE**

Amprion has established a Green Finance This includes removing assets from Committee with responsibility for evaluating and selecting Eligible Assets. Finance Committee held its second meeting to update the Green Finance Portfolio. The evaluation and selection process for new Eligible Assets was eligibility criteria set out in the Green Finance Framework. The Green Finance Committee is also responsible for monitoring the selected Eligible Assets Finance Portfolio. and ensuring that the Green Finance Portfolio is aligned with the criteria outlined in the Green Finance Framework.

the Green Finance Portfolio if they no longer meet the relevant eligibility In the reporting period, the Green criteria. Finally, the Green Finance Committee ensures that the proceeds from green financing instruments are invested in Eligible Assets included in the Green Finance Portfolio. Given the carried out in accordance with the €6.026.4 billion invested in our Green Finance Portfolio, the €3.0 billion of green bonds currently outstanding only represent a portion of the total Green



# SAMPLE PROJECTS IN OUR ELIGIBLE ASSET CATEGORIES

INTRODUCTION

LETTER FROM THE CFO

**GREEN HIGHLIGHTS** 

OUR CONTRIBUTION TO THE UNITED NATIONS SDGS IN 2023

ALLOCATION REPORT

SAMPLE PROJECTS
IN OUR ELIGIBLE
ASSET CATEGORIES

IMPACT REPORT

ASSURANCE REPORT

GLOSSARY

LEGAL NOTICE
AND DISCLAIMER

In this report, we present updates on our selection of sample projects that fall under the Eligible Asset categories in the Green Finance Framework. Environmental protection and species conservation play a central role in all our projects and Amprion does its utmost to minimise the impact on nature and the environment during the necessary expansion and upgrade of the transmission grid, or to take appropriate action to offset the impact.

Protecting people and nature is of great importance to us. Therefore, we make sure that the construction and operation of the power lines have as little impact as possible on humans, wildlife and the environment. Nevertheless, interference in nature is unavoidable. In these cases, we compensate for such impacts with the help of various nature conservation projects in accordance with legal requirements.

### **GRID CONNECTION OFFSHORE**

# DolWin4 and BorWin4 | BBPIG, Projects 78 & 79

INTRODUCTION

LETTER FROM THE CFO

**GREEN HIGHLIGHTS** 

OUR CONTRIBUTION TO THE UNITED NATIONS SDGS IN 2023

ALLOCATION REPORT

SAMPLE PROJECTS
IN OUR ELIGIBLE
ASSET CATEGORIES

IMPACT REPORT

ASSURANCE REPORT

**GLOSSARY** 

LEGAL NOTICE
AND DISCLAIMER



Amprion is building the DolWin4 and BorWin4 grid connection systems from the North Sea to Lingen. The two planned offshore connection systems will be installed next to one another.

DolWin4 will measure around 215 kilometres in length, of which about 60 kilometres will run off the coast.

BorWin4 has a total route length of about 280 kilometres, of which approximately 125 kilometres are at sea.

Landwards, both DolWin4 and BorWin4 are planned as underground cables using DC technology. Both DolWin4 and BorWin4 can individually transmit an output of 900 megawatts (MW). Combined, this equates to the electricity demand of a large city such as Hamburg with 1.8 million inhabitants. Both connections are scheduled to start transmission in 2028. The total project costs for DolWin4 and BorWin4 are expected to amount to approximately €3.9 billion.

# ENVIRONMENTAL AND SPECIES PROTECTION MEASURES

Implementing our DolWin4 and BorWin4 projects requires crossing the island of Norderney in the North Sea. Our aim is to speed up the construction of our offshore grid connection systems while minimising the negative impacts on people and nature.

To cross beneath Norderney and the mainland dyke on the North Sea coast, we are using horizontal directional drilling, or HDD for short. This "closed" construction method enables pipes to be laid below ground without digging a hole. In 2023, drilling was carried out southwards from the centre of the island into the Norderney mudflats.

Using this technique, we first drill channels, into which prefabricated cable conduits are then inserted. During the work to install the cables, we then insert the energy cable systems into the installed cable conduits.

This procedure, which was carried out for two projects simultaneously for the first time on the DolWin4 and BorWin4 projects, enables us to cross the island with relatively little construction work taking place on the surface. Dunes and dykes on Norderney and the mainland coast are not negatively impacted.

A-North | BBPIG, Project 1

INTRODUCTION

LETTER FROM THE CFO

**GREEN HIGHLIGHTS** 

OUR CONTRIBUTION TO THE UNITED NATIONS SDGS IN 2023

**ALLOCATION** REPORT

**SAMPLE PROJECTS** IN OUR ELIGIBLE **ASSET CATEGORIES** 

IMPACT REPORT

**ASSURANCE** REPORT

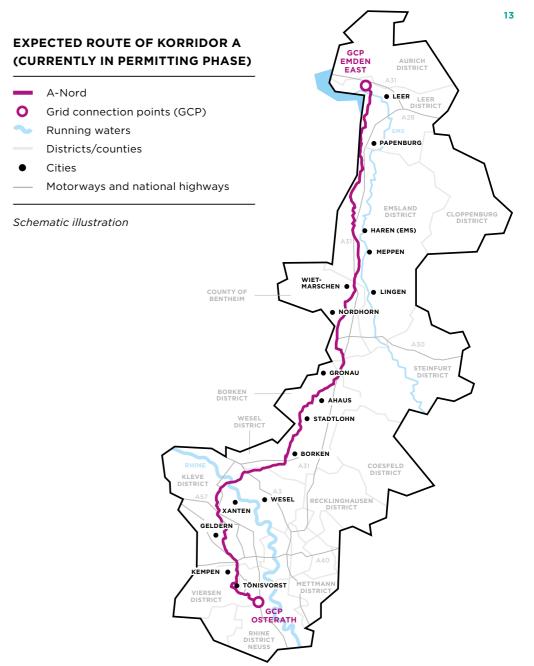
**GLOSSARY** 

LEGAL NOTICE AND DISCLAIMER

The A-North DC link from Emden, near the North Sea coast, to Osterath, near Düsseldorf, forms the northern part of 2 GW. This equates to the amount of the "Korridor A" DC link, Korridor A will be one of the main corridors in the German transmission grid. It will transport the steadily growing volume to approximately €3.1 billion. of wind energy from the north to the centre and the south of Germany. As a DC connection. A-North will relieve the strain on the existing AC grid and transport large amounts of energy over long distances with lower grid losses.

A-North will be approximately 300 kilometres in length and have a capacity consumed by two million people. The arid is scheduled to be commissioned in 2027. The total project costs will amount

The groundbreaking ceremony took place in October 2023, meaning that construction work on the A-North project began ahead of the original schedule. The laving of the foundation stone for the converter station in Emden followed in June 2024.





LETTER FROM THE CFO

**GREEN HIGHLIGHTS** 

OUR CONTRIBUTION TO THE UNITED NATIONS SDGS IN 2023

ALLOCATION REPORT

SAMPLE PROJECTS IN OUR ELIGIBLE ASSET CATEGORIES

IMPACT REPORT

ASSURANCE REPORT

**GLOSSARY** 

LEGAL NOTICE
AND DISCLAIMER



# ENVIRONMENTAL AND SPECIES PROTECTION MEASURES

Throughout construction, the A-North project will receive pedological, water law-related and environmental support.

#### **GREEN CONSTRUCTION ROUTE**

The A-North project seeks the opportunity to install a "green construction route" before construction work begins, so as to prevent or reduce soil structure damage during the construction phase. This involves installing a stable turf layer, including robust root systems.

The intention in ideally constructing site access roads and areas to accommodate site facilities on a planted top soil is to protect the subsoils, including the pore system and earthworm channels. The natural soil functions and the yield capacity are best maintained.

To maximise the protective effect, the greenery's root system must be as thick and plentiful as possible. Where possible, therefore, planting takes place around nine months before a planning approval decision – usually between spring and late summer. Depending on local conditions, consideration is given to the cultivation period where possible. On arable land, a German pasture grass mix is usually used to green the construction route.

Once the construction work has been completed, the site access roads can usually be fully dismantled without driving over the unprotected ground.

INTRODUCTION

LETTER FROM THE CFO

**GREEN HIGHLIGHTS** 

OUR CONTRIBUTION TO THE UNITED NATIONS SDGS IN 2023

ALLOCATION REPORT

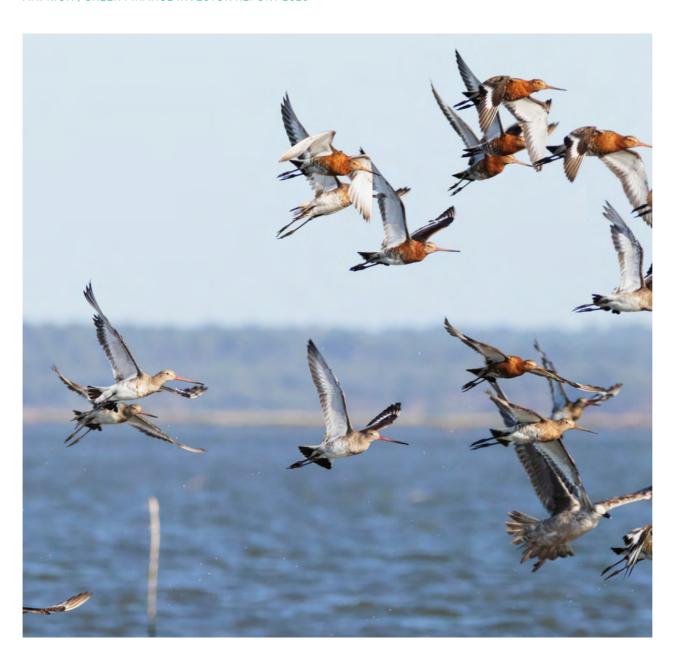
SAMPLE PROJECTS IN OUR ELIGIBLE ASSET CATEGORIES

IMPACT REPORT

ASSURANCE REPORT

GLOSSARY

LEGAL NOTICE AND DISCLAIMER



#### **GROUND-NESTING BIRD SPECIES**

The A-North project uses underground cables and crosses the Ems and the Rheiderland bird reserve.

This bird reserve is home to various ground-nesting bird species, such as lapwings and black-tailed godwits in the summer months, or migratory birds, such as barnacle geese, which fly south from Scandinavia in the autumn and return several months later.

Amprion has purchased a total of 40 hectares of mostly continuous agricultural land near the bird reserve and developed a programme of offset measures.

This set of measures is the largest to be implemented for the A-North project. It will provide a wide variety of species with a compensatory area during the construction of our project.

# ONSHORE AC PROJECTS AND SUBSTATIONS

Kruckel-Dauersberg | EnLAG, Project 19

INTRODUCTION

LETTER FROM THE CFO

**GREEN HIGHLIGHTS** 

OUR CONTRIBUTION TO THE UNITED NATIONS SDGS IN 2023

ALLOCATION REPORT

SAMPLE PROJECTS
IN OUR ELIGIBLE
ASSET CATEGORIES

IMPACT REPORT

ASSURANCE REPORT

**GLOSSARY** 

LEGAL NOTICE
AND DISCLAIMER



Our Kruckel-Dauersberg project forms the northern part of a new 380-kilovolt (kV) connection running all the way from Kruckel in North Rhine-Westphalia to Dauersberg in Rhineland-Palatinate, replacing the previous 220 kV connection. The project comprises two electric circuits with a maximum transmission capacity of 2.4 GW each and will provide electricity to the centres of consumption in the west and south of Germany.

In addition to the new 380 kV pylons, 110 kV circuits will be installed in individual sections in order to minimise the impact on nature and the landscape.

Amprion is extending and upgrading a 126-kilometre grid line along an existing route. Commissioning is currently scheduled for 2026 and will bring even more flexibility and efficiency to our transmission grid. The total costs for the project are expected to amount to approximately €1.2 billion.

Almost all sections of the project were under construction at the end of 2023. The 380 kV lines are being built in the space occupied by the existing route. This allows any new use of the environment and new negative impacts on residents to be kept to a minimum. The procedure requires temporary facilities to be built, such as on section B between Ochsenkopf (city of Iserlohn) and Attendorn, in order to ensure the security of supply in the grid area. A number of 220 kV pylons that are no longer needed will be dismantled in the course of the procedure.

On one pylon in Iserlohn, a helicopter was also used to transport away parts of the pylon. By using the helicopter, Amprion was able to prevent the substantial interference in the environment that would have been necessary due to the challenging topography locally had parts of the pylon been taken away in the usual manner.

# ENVIRONMENTAL AND SPECIES PROTECTION MEASURES

In connection with our Kruckel-Dauersberg project, a spruce forest covering an area of around three hectares was converted into a mixed oak-hornbeam forest appropriate to the location.

Furthermore, Amprion owns an ecologically valuable old-growth forest within the Siesel conservation area, in the northern part of the old Lenne backwater.

Having developed near-natural mixed beech forests in this area back in 2012 through a series of conservation measures, Amprion then converted younger spruce forests covering an area of around 30,000 m<sup>2</sup> into a near-natural oak-hornbeam forest in 2023.

By implementing this measure, Amprion was able to create a continuous deciduous forest over an area now measuring around eleven hectares. This forest represents the major part of the cut-off Lenne backwater in Siesel and ensures a near-natural stretch of water.

INTRODUCTION

LETTER FROM THE CFO

**GREEN HIGHLIGHTS** 

OUR CONTRIBUTION TO THE UNITED NATIONS SDGS IN 2023

ALLOCATION REPORT

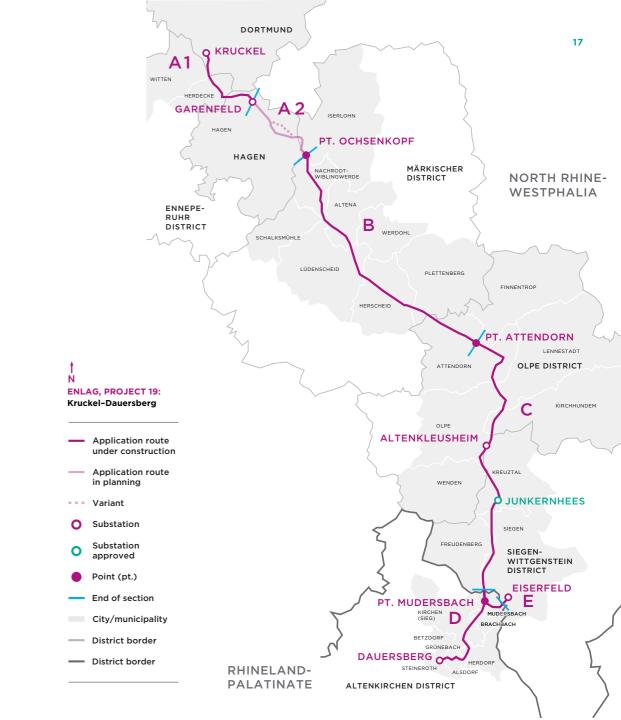
SAMPLE PROJECTS
IN OUR ELIGIBLE
ASSET CATEGORIES

IMPACT REPORT

ASSURANCE REPORT

**GLOSSARY** 

LEGAL NOTICE AND DISCLAIMER



# IMPACT REPORT





"✓": assurance procedures performed



"✓": assurance procedures performed

INTRODUCTION

LETTER FROM THE CFO

**GREEN HIGHLIGHTS** 

OUR CONTRIBUTION TO THE UNITED NATIONS SDGS IN 2023

ALLOCATION REPORT

SAMPLE PROJECTS
IN OUR ELIGIBLE
ASSET CATEGORIES

#### IMPACT REPORT

ASSURANCE REPORT

**GLOSSARY** 

LEGAL NOTICE
AND DISCLAIMER

Due to the large number of individual projects, the information regarding the Green Finance Portfolio is provided on an aggregated basis. In order to report on the environmental impact of our Eligible Assets financed by green financing instruments such as green bonds, we publish two metrics.

- Potential annual greenhouse gas (GHG) emissions (tCO<sub>2</sub>e) reduced/avoided (in 2035 compared with annual GHG emissions in 2019)
- Number of households theoretically supplied with 100% renewable energy in 2023

# POTENTIAL ANNUAL GHG EMISSIONS REDUCED/AVOIDED IN 2035 COMPARED WITH ANNUAL GHG EMISSIONS IN 2019

In order to integrate the increasing share of renewable energy into the energy system, we are extending and upgrading our grid infrastructure and driving forward its transformation. The German government has specified that Germany will aim to have a climate-neutral energy system by 2045. In order to achieve this objective, the German electricity system needs to be almost climate-neutral as soon as 2035, as this is essential to expanding the role of electricity in transport and heating through increasing use of electric vehicles and heat pumps.

The Grid Development Plan (GDP) 2037/2045 (2023) includes the necessary activities in the German electricity grid in order to achieve climate neutrality by 2035. With regard to  $tCO_2e$  due to power generation in 2035, the old GDP 2035 (2021), Scenario B 2035 included a value of 120 million tonnes compared with 20 million tonnes in the GDP 2037/2045 (2023), Scenario B 2037<sup>4</sup>. As the reference value for 2019, we use a  $tCO_2e$  value of 223 million tonnes as published by the Federal Environment Agency (*Umweltbundesamt*)<sup>5</sup>. Thus, in comparison with the GDP 2035 (2021), the reduction in annual  $tCO_2e$  due to power generation between 2019 and 2035 almost doubled in the GDP 2037/2045 (2023).

All factors used in the impact calculations are based on the most recent and regularly updated forecasts. The Eligible Assets financed under the Framework support this goal of a climate-neutral electricity system and enable the energy transition by connecting and transporting additional renewable energy as well as by increasing the transport efficiency of our grid.

Some 92.8% of our Green Project Portfolio is allocated to new financing, meaning these projects have not yet been taken into operation. Therefore, these projects did not have any carbon impact in 2023. These projects will be steadily put into operation over the period to 2035. Our Green Project Portfolio contains many different offshore and onshore projects in connection with grid expansion which combine to integrate more renewable energy and transport it throughout Germany and have a reciprocal effect on one another with regard to CO<sub>2</sub> savings. Due to this complexity, we decided to apply a portfolio approach. We calculate the future impact of all our projects by comparing the difference between CO<sub>2</sub> emissions due to power generation (tCO<sub>2</sub>e) in 2019 and the estimated CO<sub>2</sub> emissions due to power generation (tCO<sub>2</sub>e) in 2035 for our grid area based on the GDP 2037/2045

INTRODUCTION

LETTER FROM THE CFO

**GREEN HIGHLIGHTS** 

OUR CONTRIBUTION TO THE UNITED NATIONS SDGS IN 2023

ALLOCATION REPORT

SAMPLE PROJECTS
IN OUR ELIGIBLE
ASSET CATEGORIES

IMPACT REPORT

ASSURANCE REPORT

**GLOSSARY** 

LEGAL NOTICE
AND DISCLAIMER



The GDP 2037/2045 (2023) has specified activities for the target year 2037 in Scenario B. Given the action taken by the German government to accelerate grid projects, climate neutrality can be expected earlier, in 2035. Consequently, the values in the GDP 2037/2045 (2023), Scenario B 2037 have been applied to the target year 2035.

Source: Entwicklung der spezifischen Treibhausgas-Emissionen des deutschen Strommix in den Jahren 1990 – 2021, page 12 published by the Federal Environment Agency (Umweltbundesamt).

INTRODUCTION

LETTER FROM THE CFO

**GREEN HIGHLIGHTS** 

OUR CONTRIBUTION TO THE UNITED NATIONS SDGS IN 2023

ALLOCATION REPORT

SAMPLE PROJECTS
IN OUR ELIGIBLE
ASSET CATEGORIES

IMPACT REPORT

ASSURANCE REPORT

**GLOSSARY** 

LEGAL NOTICE
AND DISCLAIMER

(2023), Scenario B 2037 $^6$  as confirmed by the Federal Network Agency in 2023. The year 2019 is the reference year for the calculation of the  $tCO_2e$  impact and is also the starting point for the allocation of proceeds from our green financing instruments. Our reference period ends in 2035 and is therefore aligned with the political goals which target an almost climate-neutral German electricity system in 2035.

The potential reduced or avoided annual GHG emissions in 2035 compared with the annual GHG emissions in 2019, achieved through the allocation of proceeds from all the outstanding green bonds totalling €3.0 billion to our Green Project Portfolio, amount to 3.52 million tonnes CO₂e by 2035.

"✓": assurance procedures performed on all numbers

To calculate this impact, we used the market simulations for Scenario B 2037 in the GDP 2037/2045 (2023), which was published and confirmed by the Federal Network Agency in 2023.

In detail, the impact was calculated based on the following assumptions:

- Net electricity consumption in Germany in 2019 (published by the Federal Network Agency) and 2035 (calculated internally based on the GDP 2037/2045 (2023), Scenario B 2037)
- Average CO<sub>2</sub> emissions (tCO<sub>2</sub>e) per kWh in 2019 (published by the Federal Environment Agency) and 2035 (calculated internally based on the GDP 2037/2045 (2023), Scenario B 2037)

Net electricity consumption in Germany has been multiplied with the share of Amprion's grid within the German grid to calculate the tCO<sub>2</sub>e for Amprion's share in 2019 and 2035, respectively.

The difference in the annual  $tCO_2e$  for Amprion's share between 2019 and 2035 represents the potential annual avoided  $tCO_2e$  in 2035 compared with annual GHG emissions in 2019 which can be achieved through the development of our grid infrastructure as at 2035.

To calculate the impact for the outstanding green financing instruments, the total volume of investments between 2019 and 2035 has been taken into account and scaled down to the total volume of outstanding green bonds (€3.0 billion).

Potential annual GHG emissions (tCO<sub>2</sub>e) reduced/avoided attributable to outstanding green financing instruments

Potential annual tCO<sub>2</sub>e reduced/avoided in the X Amprion grid Total volume of issued green bonds

Total amount of investments (contributing to the grid in 2035)<sup>7</sup>

 $_{"}\checkmark"$ : assurance procedures performed

<sup>&</sup>lt;sup>6</sup> In the previous Green Finance Investor Report published in 2022, the impact was calculated on the basis of the Grid Development Plan 2035 (2021), Scenario B 2035. Scenario B is a "medium" scenario within the published scenarios.

<sup>&</sup>lt;sup>7</sup> The total amount of investments is based on Amprion's annually updated investment plan.

#### INTRODUCTION

LETTER FROM THE CFO

**GREEN HIGHLIGHTS** 

OUR CONTRIBUTION TO THE UNITED NATIONS SDGS IN 2023

ALLOCATION REPORT

SAMPLE PROJECTS IN OUR ELIGIBLE ASSET CATEGORIES

#### IMPACT REPORT

ASSURANCE REPORT

**GLOSSARY** 

LEGAL NOTICE AND DISCLAIMER



# NUMBER OF HOUSEHOLDS THEORETICALLY SUPPLIED WITH 100% RENEWABLE ENERGY IN 2023

The number of households theoretically supplied with 100% renewable energy in 2023 is around 14 million, which is about 34% of all the households in Germany.

 $_{"}\checkmark"$ : assurance procedures performed

It is important to note that this figure only partly refers to the proceeds from the green financing instruments, as it includes all investments made by Amprion up until 2023 in order to include renewable energy sources in the grid. The figure has been calculated using the following formula:

Number of households theoretically supplied with 100% renewable energy

Amount of fed-in renewable energy provided in Amprion grid area in kWh in 2023

Average electricity consumption per household in Germany

 $_{"}\checkmark":$  assurance procedures performed

For the average electricity consumption per household in Germany, we used the latest available reference (publication *Stromverbrauch der privaten Haushalte nach Haushaltsgrößenklasse*, dated Sept. 2023) published by the Federal Statistical Office (*Statistisches Bundesamt*), indicating a value of 3,383 kWh/p.a. per household in 2021. This is the most recent data available.

# ASSURANCE REPORT



#### ACCEPTANCE TO THE TERMS OF INFORMATION

Report "Independent Practitioner's Report on a Limited Assurance Engagement" (BDO document or Information) regarding the Green Finance Investor Report of Amprion GmbH.

Before you access the BDO document, you agree to the following for yourself or for the (natural and / or legal) persons represented by you (hereinafter collectively "you"):

- 1. BDO does not make any recommendation regarding a financial interest or the acquisition of interests in the project. For this reason, you confirm that the Information will not be used by you or any other party as the sole basis for a business decision.
- 2. The BDO document was solely prepared on the basis of a contractual relationship with our client, which is the exclusive addressee of our services. By granting access to the BDO document no express or implied contract for providing services or information (Auskunftsvertrag) is concluded, nor shall the agreement between our client and us provide any form of protection in your favor, nor does the provision of Information include you within the scope of protection afforded by that agreement. We do not accept any liability towards you and, accordingly, you hereby agree that you shall bring no claims against us for any damages that may result in connection with the receipt or use of the Information. Our liability for willful misconduct, tort and harm to life, limb, or health shall remain unaffected thereby.
- 3. You understand that the Information in the BDO document is solely based on knowledge we obtained during the course of our engagement.
- 4. If you consider the Information provided in the BDO document to be relevant for your purposes, it is solely your responsibility to assess such Information and, if necessary, to supplement and adjust such Information before making any decisions or drawing any conclusions on that basis. You hereby acknowledge that we make no warranty or guarantee that the Information made available is adequate or suitable for your purposes.

INTRODUCTION

LETTER FROM THE CFO

**GREEN HIGHLIGHTS** 

OUR CONTRIBUTION TO THE UNITED NATIONS SDGS IN 2023

ALLOCATION REPORT

SAMPLE PROJECTS
IN OUR ELIGIBLE
ASSET CATEGORIES

IMPACT REPORT

ASSURANCE REPORT

**GLOSSARY** 

LEGAL NOTICE
AND DISCLAIMER

Chairman of the Board of Management: Andrea Bruckner - Parwäz Rafiqpoor
Country of approval: The legal title of 'auditing company' was awarded in the Federal Republic of Germany.
Registered office of the company: Hamburg (District Court of Hamburg HRB 1981)
VAT identification number: VAT ID NO.: DE 11 85 14 042



5. You agree to treat the Information confidential and not to disclose it to any other third parties without our prior written consent and subject to the following exceptions: affiliates (within the meaning of § 15 of the German Stock Corporation Act (AktG), the statutory auditor of your annual financial statements or any other auditors or advisors who are subject to a duty of confidentiality and your governing bodies and employees, if and to the extent that such persons need the Information in connection with the aforementioned purpose. You hereby acknowledge that you have an obligation to advise the aforementioned third parties prior to disclosing the Information to them that the Information must be kept strictly confidential and that BDO assumes no responsibility or liability to them. In addition, disclosure is permitted if it is required by law and/or regulatory or court order.

6. Irrespective of the above section 2 you are hereby informed that in our client contract it is agreed, that claims for damages due to negligence (ordinary or gross negligence) arising out of the contractual relationship with our client, except for damages resulting from injury to life, body or health as well as for damages that constitute a duty of replacement by a producer pursuant to § 1 ProdHaftG [German Product Liability Act: Produkthaftungsgesetz], are limited to an amount of € 5 million. As agreed with our client this equally applies to claims made by third parties arising from, or in connection with the contractual relationship. Whether there is a loss event within the meaning of this clause shall be determined in accordance with sec. 54 para. 2 of the German Accountants Act (WPO). The aforementioned liability limit applies to all claimants and is available to them collectively only once in accordance with sec. 428 of the German Civil Code (BGB).

7. This Agreement shall be governed by the laws of the Federal Republic of Germany under the exclusion of the provisions of conflict of laws.

If you wish to access the BDO document, click "ACCEPT". By clicking the "ACCEPT" button, you accept the above terms and conditions and agree to their applicability in relation to you as the recipient of the information.

I wish to have access to the BDO document and hereby confirm as the recipient of information the binding nature of the above conditions.

Click on the "ACCEPT" button and use the password "Amprion2024!" to declare your agreement with the terms and conditions and to gain access to the BDO document.

ACCEPT

INTRODUCTION

LETTER FROM THE CFO

**GREEN HIGHLIGHTS** 

OUR CONTRIBUTION TO THE UNITED NATIONS SDGS IN 2023

ALLOCATION REPORT

SAMPLE PROJECTS IN OUR ELIGIBLE ASSET CATEGORIES

IMPACT REPORT

ASSURANCE REPORT

**GLOSSARY** 

LEGAL NOTICE
AND DISCLAIMER

# **GLOSSARY**

INTRODUCTION

LETTER FROM THE CFO

**GREEN HIGHLIGHTS** 

OUR CONTRIBUTION TO THE UNITED NATIONS SDGS IN 2023

ALLOCATION REPORT

SAMPLE PROJECTS
IN OUR ELIGIBLE
ASSET CATEGORIES

IMPACT REPORT

ASSURANCE REPORT

**GLOSSARY** 

LEGAL NOTICE AND DISCLAIMER

## Alternating current (AC)

Alternating current has been used in power supply worldwide since the beginning of the 20th century. Its advantage: the applied voltage can be increased and decreased flexibly and with low losses by means of a transformer. This possibility is crucial for the operation of the electricity grid. It makes it relatively easy to connect power plants, including wind energy and photovoltaic plants. and consumers, such as distribution networks or electricityintensive companies. to the transmission arid. Across the different arid levels. the alternating current can be gradually transformed up or down - so that it finally arrives at the domestic socket at 230 volts.

#### Direct current (DC)

wind and solar plants

The expansion of

takes place predominantly in rural areas due to the amount of land required. The centres of consumption, however, tend to be in urban areas and industrial areas. Therefore, the transport of electricity from regions of high generation to regions of high consumption is necessary - for example, of wind energy from northern Germany to the industrial centres of southern and western Germany. High-voltage direct current is particularly suitable for transmitting large amounts of electricity over long distances. This is because transmission losses are lower than with alternating current - especially because no reactive power is needed to transport direct current.

## Federal Network Agency (FNA)

The Federal Network Agency is a regulatory body that supervises. maintains and promotes competition in the grid markets (electricity, gas, railway tracks). Every two years, the FNA reviews and approves the → Power Grid Development Plan and its basis as produced by → Transmission System Operators (TSOs) and the scenario parameters for the development of electricity generation for the next ten to twenty vears.

#### Federal Requirement Plan Act (BBPIG)

The Federal
Requirement Plan
Act contains grid
expansion projects
confirmed as
necessary by the

Federal Network
Agency which must
be implemented by
the transmission
system operators.

They are deemed necessary for the energy industry and are urgently required. The Federal Network Agency normally carries out federal planning for these

## Green Bond Principles (GPB)

projects.

Green Bond
Principles introduced
by the ICMA
(International Capital
Market Association)
are voluntary process
guidelines for issuing
green bonds.

## Greenhouse gas (GHG)

Greenhouse gases are gases that contribute to the greenhouse effect of a planet. They absorb part of the thermal radiation emitted by the

planet's surface, which would otherwise be emitted directly into space.

#### Grid Development Plan (GDP)

The Power Grid

Development Plan sets out the expansion projects in the German transmission grid in the following ten years. The power grid development Plans are developed by the four transmission system operators on the basis of assumptions about the development of electricity generation and consumption, the scenario parameters. The plan was created for the first time in 2012, and is to be further developed in a two-vear cycle as of 2017.

# International Capital Market Association (ICMA) The ICMA is an

association for capital market participants based in Zurich. The focus of its membership is on European banks and financial services providers. Its mission is to promote the development of international capital and securities markets and to develop the rules, principles and recommendations that form the basis for their successful

international industry

# Loan Market Association (LMA)

functioning.

The Loan Market
Association is an interest group whose task is to create and unify clauses and sample contract documentation. The main objective of the LMA is to improve liquidity, efficiency and transparency in the primary and secondary markets for syndicated loans in the EMEA region.

## Power Grid Expansion Act (EnLAG)

The Power Grid
Expansion Act regulates the expansion of power lines in the extra-high-voltage transmission grid.
Attached to the law as an appendix is a project overview which contains the planned construction projects for the expansion of the transmission grids.

#### Substation

This is a junction in the electricity grid. Several high-voltage and extra-highvoltage transmission lines converge at a substation. In these facilities, individual electricity circuits can be selectively switched on or off. It is also possible to direct the electricity via the transformers (voltage converters) to be distributed further on grids with lower voltage.

## Transmission system operators (TSO)

Transmission system operators are service companies that operate the infrastructure of the supra-regional electricity arids for the transmission of electrical energy. ensure that they are maintained and dimensioned to meet demand, and grant electricity traders/ suppliers access to these grids on a nondiscriminatory basis.

# United Nations Sustainable Development Goals (UN SDGs)

The 17 Sustainable
Development Goals
(SDGs) are a global
plan to build a better
world for people and
the planet by 2030.
Adopted by all United
Nations member states
in 2015, the SDGs are
a call for action by all
countries to promote
prosperity while protecting the environment.

# LEGAL NOTICE AND DISCLAIMER

INTRODUCTION

LETTER FROM THE CFO

GREEN HIGHLIGHTS

OUR CONTRIBUTION TO THE UNITED NATIONS SDGS IN 2023

ALLOCATION REPORT

SAMPLE PROJECTS
IN OUR ELIGIBLE
ASSET CATEGORIES

IMPACT REPORT

ASSURANCE REPORT

**GLOSSARY** 

LEGAL NOTICE
AND DISCLAIMER

This document provides general, non-exhaustive information as of the date hereof. To the extent that this document contains or incorporates by reference any public information, such public information has not been separately reviewed, approved or confirmed by Amprion GmbH or any of its subsidiaries. Accordingly, Amprion makes no representation, warranty or obligation, express or implied, and assumes no responsibility or liability for the fairness, accuracy, adequacy or completeness of such public information.

To the extent that this document contains statements about future events and expectations, these are forward-looking statements. None of the forward-looking statements, expectations, estimates or outlooks contained in this document are predictions or promises, nor should they be construed as an indication, representation or warranty that the assumptions underlying such forward-looking statements, expectations, estimates or outlooks are accurate or exhaustive or, in the case of assumptions, that they will be fully disclosed in the document.

Amprion does not assume any obligation to update, modify or supplement this document and the statements contained herein to reflect actual changes in assumptions or changes in factors affecting such statements, or to otherwise

notify the addressee if any information, opinion, expectation, estimate or outlook contained herein changes or subsequently becomes inaccurate.

This document is not intended to be, and should not be construed as, legal or financial advice. It does not constitute an offer or invitation to sell or a solicitation of an offer to subscribe for or purchase any securities or a recommendation with respect to any securities, and nothing in this document forms the basis of any contract or commitment, and it has not been approved by any securities regulatory authority.

The distribution of this document and the information contained herein may be subject to legal restrictions in certain jurisdictions. Any person who may come into possession of this document must make his or her own enquiries as to the existence of, and observe, any such restrictions. The information in this document has not been independently audited.

The addressee is solely responsible for the use of the information contained in this document and Amprion cannot be held liable for any direct, indirect or other loss or damage, arising from, or in connection with, the addressee's use of this document, or the information contained in this document.



NTRODUCTION

LETTER FROM THE CFO

GREEN HIGHLIGHTS

OUR CONTRIBUTION TO THE UNITED NATIONS SDGS

ALLOCATION REPORT

SAMPLE PROJECTS
IN OUR ELIGIBLE
ASSET CATEGORIES

IMPACT REPORT

ASSURANCE REPORT

GLOSSARY

LEGAL NOTICE
AND DISCLAIMER

We look forward to receiving your feedback on this report. Please send an email to ir@amprion.net

#### **INVESTOR CONTACT**

#### **Amprion GmbH**

Patrick Wang Head of Investor Relations Phone +49 (0)231 5849 12297 Email ir@amprion.net

#### PHOTOS

Amprion (p.2, p.3, p.6, p.10, p.12, p.14, p.16, p.21) iStock (p.1, p.14, p.15)