



FINANCIAL REPORT

2022

Why does Amprion issue green bonds?

Green is essentially our business model. On the one hand, we enable the transformation to a climate-neutral energy system by expanding and converting the power grid. To this end, we are raising investment funds. On the other hand, there is a strong demand for green investments from large investment companies. We are an excellent fit for this. We want to be as attractive as possible for our investors. This is also certified by the EU taxonomy, according to which our core business is considered an enabling activity.

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THE AMPRION GRID

- Power lines
- Substations
- National borders

At a glance

Amprion can look back on a successful financial year in a challenging environment. Revenues rose to €3,512.6 million in 2022 compared to the previous year – an increase of 36.6%. At €228.2 million, the adjusted IFRS consolidated net income was stable at the average level of previous years. Regulatory effects led to a deviation of around 12% compared to the previous year.

€1,452 MILLION

The Group's investments in the modernisation and expansion of its grid.

€3,513 MILLION

Amprion Group's total revenue under IFRS.

€17,600 MILLION

The Group's planned investments in the modernisation and expansion of its grid by 2027.*

€6,576 MILLION

Amprion's Regulated Asset Base (RAB) in 2022.**

€228 MILLION

Amprion's adjusted consolidated net income.

*Balance-sheet date: 31 December 2022

**Including Amprion Offshore GmbH.

SHAREHOLDER STRUCTURE

Amprion GmbH is one of four transmission system operators in Germany. Amprion GmbH has two shareholders: M31 Beteiligungsgesellschaft mbH & Co. Energie KG that holds 74.9% and RWE AG with a 25.1% share.

25.1%

RWE AG

74.9%

M31 BETEILIGUNGSGESELLSCHAFT
MBH & CO. ENERGIE KG

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DEAR READER,

Amprion can look back on a successful financial year in a challenging environment. Revenues rose to € 3,512.6 million in 2022 compared to the previous year – an increase of 36.6%. At € 228.2 million, the adjusted IFRS consolidated net income was stable at the average level of previous years. Regulatory effects led to a deviation of around 12% compared to the previous year.

A particular challenge in the business year was the supply situation in the winter of 2022/2023. Above all, the gas shortage due to the Ukraine war and the high unavailability of French nuclear power plants have led to a tense situation in Germany. As a transmission system operator, we have reassessed grid security with the help of special analyses and prepared ourselves intensively for the winter months. Together with the Federal Ministry for Economic Affairs and Climate Action, the Federal Network Agency and the three other transmission system operators in Germany, monitoring processes were established and measures implemented to ensure system stability and security of supply during the winter months.

The energy system in Germany is facing a fundamental transformation. The governing coalition has significantly raised the medium-term climate targets: the share of renewable energies in gross electricity consumption is to increase to 80% by 2030 – 15 percentage points higher than specified by the previous federal government. Along with this, the transmission grid also has to be expanded faster than planned. In 2022, we were successful in this regard: we carried out major investment measures and obtained public law approvals for more than 200 kilometres of transmission lines.

We are currently implementing more construction projects than ever before - including the new extra-high voltage line from Ganderkesee via St. Hülfe to Wehrendorf and the power connection from Kruckel to Dauersberg.

We are also moving forward with the major energy transition projects that connect the electricity generation sites in northern Germany with the consumption centres in the south. We have made progress in the planning and construction of the direct current connections Corridor B, A-North and Ultranet. We are also stepping up the pace to bring wind power generated at sea to land: we were able to lay important foundations for a faster implementation of our offshore projects BorWin4, BalWin1 and BalWin2.

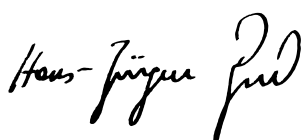
At many locations, we are preparing our switching and transformer stations for the phase-out of coal-fired power generation or are constructing new ones. Numerous projects for rotating phase shifters and static synchronous compensators as well as phase shifter transformers are currently being implemented. The new plants help to keep the voltage in the grid stable at all times and to better control load flows.

We want to continue our commitment to a climate-friendly, secure and affordable energy system in the coming years. To this end, we are driving innovations and getting involved in the political discussion. One focus is on the reform of the electricity market design. To this end, Amprion has developed the concept of the system market. With this approach, we want to ensure that power plants, storage facilities and electrolyzers are located in the right places in the grid in the future. We also support joint

planning of the electricity, gas, heat and hydrogen sectors to make the future energy system as efficient and sustainable as possible.

The path to climate neutrality involves enormous financial efforts. We plan to invest a total of around €18 billion by 2027 (Balance-sheet date: 31. December 2022). In order to be able to handle this volume, Amprion has continued its activities on the international capital market and successfully placed its first green dual-tranche bond for a total of €1.8 billion in 2022. A groundbreaking step, which we intend to follow with further steps. Our continued good financial basis is also reflected in the assessments of the rating agencies.

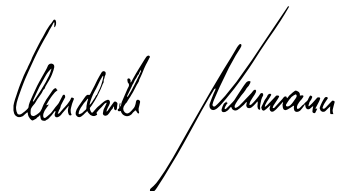
With innovation and acceleration, we are successfully transforming the energy system. In this process, we can count on a competent and motivated workforce that has grown to 2,237 FTE in 2022. We sincerely thank our employees and our shareholders for their support in challenging times and look forward to 2023 with optimism.



DR HANS-JÜRGEN BRICK
Chief Commercial Officer (CCO) and
Chief Executive Officer (CEO)



PETER RÜTH
Chief Financial Officer (CFO)



DR HENDRIK NEUMANN
Chief Technical Officer (CTO)

Interview with CFO Peter R uth

We build trust

Amprion is well on its way to establishing itself as a major player on the capital market, says CFO Peter R uth. Investors show great interest in the transformation of the energy system. Amprion is therefore intending to issue further green bonds.

Interview: VOLKER G TTSCHE

Photo: JULIA SELLMANN

What were you most proud of as CFO of Amprion last year?

PETER R UTH: Of course, among other things, the successful issuance of our first green bond should be mentioned here. We have reached our funding target via the issuance of two tranches, which were both oversubscribed several times and further optimised our maturity profile. In addition, we were able to successfully manage this ambitious project across departments with our experts in parallel to many other projects. Teamwork at its best at Amprion! We also had to manage the conversion to the international accounting standard IFRS and the introduction of a software platform with SAP S/4 HANA in my division, just to name two other major topics.

Why did you issue a green bond?

Grid expansion is part of our core business, and thereby we make the transition to a climate-neutral energy system possible. Green is essentially our business model and part of our DNA. It is therefore almost a matter of course that we raise funds earmarked for green projects. In addition, there is a huge demand from the major investment companies for green investment opportunities. We are a perfect match for this. We want to be as attractive as possible for our investors. This is also reflected by the EU taxonomy, according to which we, as a TSO, are classified as an “enabling activity”. This means that our economic activities are green.



CFO Peter RÜth

Will the current grid expansion targets and the associated investments remain unchanged?

We are operating in an enormously dynamic market against the backdrop of the war in Ukraine. In addition to the climate goals, other important topics have to be taken into account that I often think are neglected in the public discussion: in the field of energy, independence and affordability are important as well. With a view to the climate neutrality target by 2045, it can be said that for this purpose the grid expansion needs to be significantly accelerated – otherwise the necessary transport capacities will be lacking with the conversion to renewable energy generation. In view of this, we have to constantly review our capex plans and adjust them if necessary – upwards rather than downwards.

How do you plan to finance this?

We focus on an efficient mix of equity and debt. Our owners are willing to continue to support our path in the crucial grid expansion. On the debt side, we rely on our trusting and very solid banking relationships and the commercial paper market for short-term financing. As part of our bridge-to-bond approach, we initially replace short-term borrowings with bond issues on the international capital market. However, the conversion of the entire energy system does not only raise the question of financing. Indeed, such a large-scale project is only possible on the basis of a broad societal consensus. In concrete terms, this means that we also have to reach out to the people on the ground and explain our plans.

Do you plan to issue more bonds in the future, including green ones?

Definitely. I would like to mention the keyword “frequent issuer” in this context. The question is always: how can we be as attractive as possible for our investors and what fits our business model? Green bonds play an important role in our considerations. However, we do not rely on a simple green bond framework, but have defined a broader green finance framework. This means that we can use other financing instruments such as syndicated loans or promissory notes as green financing instruments in the future as well. Our focus will therefore clearly be on green financing in the future.

What has changed in the discussions with investors compared to the previous year?

After presenting ourselves to international investors for the first time in the previous year, we are now already better known in the market. Our business model is understood, so the talks went into more detail this time. The investors show great interest in the transformation of the energy system and are intensively dealing with this complex topic. These discussions are a great pleasure because we also experience recognition for our performance.

How satisfied are you with the performance of your bonds in the market?

Especially after the issuance of our green bond, we observed that the spreads of our bonds – namely, the premiums compared to the reference interest rates – have decreased. This is a good sign. Among other things, we attribute it to our increasing presence on the capital market, our growing liquidity in the bonds and the gain in confidence among investors. In short, I am very satisfied with this. Amprion is well on its way to establishing itself strongly on the capital market.

Let's dare to look ahead: what do you wish for 2023?

I think at the top of everyone's list is the wish for an immediate end to this cruel war in Ukraine. The effects are devastating and a great human tragedy. Against this background, many other wishes sound trivial. Nevertheless, I hope for the greatest possible support in the social and political environment so that we can further accelerate the necessary grid expansion. Otherwise, 2022 has shown that even distortions on the (energy) markets are no problem for our stable business model, which is non-cyclical. Of course, we want to maintain this stability in 2023. We will also see further progress in terms of sustainability.

“The investors show great interest in the transformation of the energy system and are intensively dealing with this complex topic. These discussions are a great pleasure.”



AMPRION ON THE CAPITAL MARKET

Amprion successfully tapped the international capital market again in 2022. In mid September, Amprion placed its first green bond in two tranches with a total nominal volume of €1.8 billion. The transaction was oversubscribed several times.

The five-year bond (€800 million nominal volume) bears an interest rate of 3.450%. The bond with a maturity of ten years (€1 billion nominal volume) bears an interest rate of 3.971%. Amprion will use the proceeds to further advance the necessary conversion and expansion of the electricity grid and thus fulfil its legal mandate. The proceeds will be used exclusively for projects that meet the criteria of sustainability. For this purpose, Amprion has established a Green Finance Framework in advance, which not only enables the issuance of green bonds, but also the entire financing with further instruments along sustainability criteria.

In a difficult market environment, the latest benchmark transaction benefited in particular from Amprion’s convincing business model, increased awareness on the capital market, growing investor interest in green bonds and the stable to gradually slightly improved assessments of the rating agencies. In mid June, Fitch confirmed Amprion’s rating including the outlook, while Moody’s confirmed the rating a month later while raising the outlook from “negative” to “stable”.

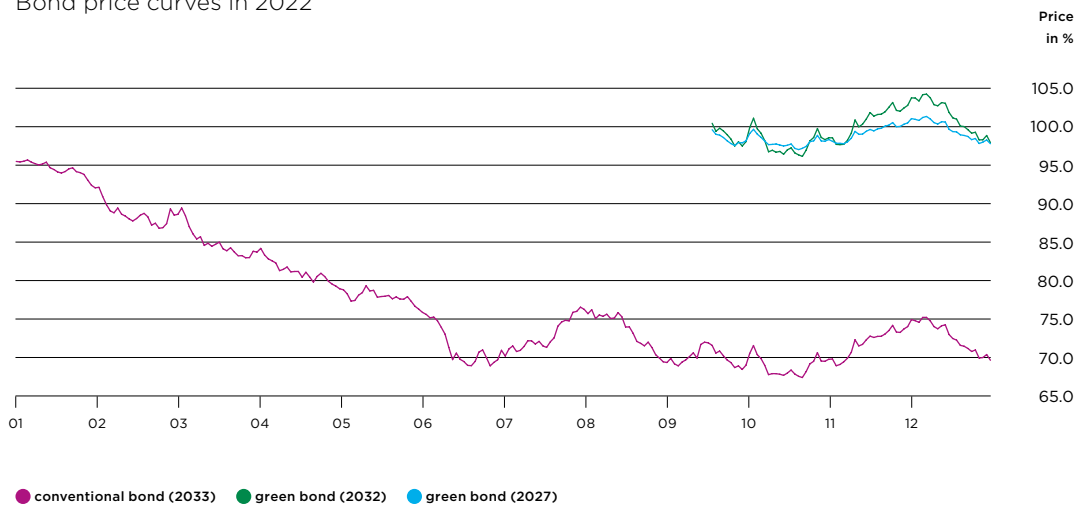
Rating agency	Rating (long-term)	Outlook	Rating (short-term)
Moody's	Baa1	stable	Prime-2
Fitch	BBB+	stable	-

As at 31 December 2022

Overall, the interest rate and market environment for European issuers was much more challenging than in previous years. Finally, the world’s leading central banks have started to address the immensely rising inflation figures with significant interest rate hikes. First and foremost, the US Federal Reserve (Fed) raised its key interest rates seven times in the course of the past year. Since mid December, the US interest rate remains in a target range of currently 4.25–4.5%. For the current year, the Fed has indicated further interest rate hikes in its outlook. The European Central Bank (ECB) followed the Fed’s lead with a time lag as well as significantly milder hikes: overall, the ECB raised the key interest rate four times by 0.5 to 0.75 percentage points from June to December to 2.5% most recently. The ECB also foresees further interest rate hikes.

Chart

Bond price curves in 2022



Against this background, according to the German Bundesbank, the current yields of European government bonds have increased significantly over the course of the year. For example, yields on ten-year federal bonds have risen by 67 basis points to 2.0% since the end of the second quarter of 2022. With more than 2.4% in mid October, they even reached their highest level in more than ten years. After a temporary drop in yields in November and December, rates rose again significantly until the end of the year. The ten-year Bund yield reached its annual high of 2.56% at year end.

The spread is the risk premium of a corporate bond compared to a first-class, quasi-risk-free government bond. For Amprion’s first conventional bond of 2021 (maturity twelve years), the spread tightened to around 90 basis points after the successful issuance of the green dual-tranche bond in 2022, after a spread of up to 180 basis points had previously been recorded. The average spread in 2022 was around 114 basis points. The tightening of the spread is also attributable to the increased liquidity in Amprion’s debt instruments following the issuance of the green dual-tranche bond. This enabled Amprion to successfully position itself further on the capital market on its way to becoming a “frequent issuer”. In addition, Amprion’s ability to attract investors on the capital market was increased by the switch to the IFRS international accounting standard as well as the offering of the green dual-tranche bond. This is also reflected in the tightening of the spreads.

The most recently issued green dual-tranche bond shows a positive price development too. From the issuance until the end of 2022, the spread of the five-year bond has been quoted at an average of 84 basis points. At the end of the year, the spread had tightened again significantly to 74 basis points. The ten-year bond developed similarly and was trading at a spread of 104 basis points at the end of the year. The average spread from the time of the issuance until the end of 2022 has been 110 basis points, which is significantly below the issue level.

As part of its transparent capital market communication, Amprion has further intensified its dialogue with international debt capital investors. The Investor Relations department, which, among other things, manages the communication between investors and the company and monitors the internal processes for compliance with the follow-up obligations arising from the listing of the (future) bonds, has been strengthened in terms of staff. The constant dialogue with investors, analysts and journalists is to be further expanded in 2023.

In May 2022, the first international earnings call with investors and analysts took place. Here Peter R uth, Chief Financial Officer of Amprion, and his team explained Amprion's business development.

As part of the marketing of the green bond, Amprion conducted a virtual roadshow with potential investors. In addition to the kick-off event, which was attended by more than 90 potential investors, around 25 individual and group meetings were held over two days. In addition, the company presented itself at an international investor conference in November 2022. Amprion will continue and intensify the dialogue in the current year.



Current information for investors is available on Amprion's website in a separate section: www.amprion.net/Amprion/Finance/

Senior Bond DE000A3E5 VX4 | € 800 million | 0.625% | 12 years (23 Sep. 2033)

Amprion GmbH

Documentation	Debt issuance programme	Stock exchange/	
Currency	euros	Law	Luxembourg/Euro MTF/German Law
Issue amount	€ 800 million	Face value	€100,000
Value date	23 Sep. 2021	Clearing agency	Clearstream Banking AG
Maturity	12 years/23 Sep. 2033	Paying agent	Commerzbank Aktiengesellschaft
Coupon (fixed interest rate)	0.625%	ISIN/WKN	DE000A3E5VX4/A3E5VX
Coupon payment	annually (first payment 23 Sep. 2022)	Final terms	general corporate purposes
Issue price	98.741%		

Senior Green Bond DE000A30VPL3 | € 800 million | 3.450% | 5 years (22 Sep. 2027)

Amprion GmbH

Documentation	Debt issuance programme	Stock exchange/	
Currency	euros	Law	Luxembourg/Euro MTF/German Law
Issue amount	€ 800 million	Face value	€100,000
Value date	22 Sep. 2022	Clearing agency	Clearstream Banking AG
Maturity	5 years/22 Sep. 2027	Paying agent	Commerzbank Aktiengesellschaft
Coupon (fixed interest rate)	3.450%	ISIN/WKN	DE000A30VPL3/A30VPL
Coupon payment	annually (first payment 23 Sep. 2023)	Final terms	the net proceeds from the Green Bonds will be allocated as set out in Amprion's Green Finance Framework
Issue price	100.000%		

Senior Green Bond DE000A30VPM1 | €1,000 million | 3.971% | 10 years (22 Sep. 2032)

Amprion GmbH

Documentation	Debt issuance programme	Stock exchange/	
Currency	euros	Law	Luxembourg/Euro MTF/German Law
Issue amount	€1,000 million	Face value	€100,000
Value date	22 Sep. 2022	Clearing agency	Clearstream Banking AG
Maturity	10 years / 22 Sep. 2032	Paying agent	Commerzbank Aktiengesellschaft
Coupon (fixed interest rate)	3.971%	ISIN/WKN	DE000A30VPM1/A30VPM
Coupon payment	annually (first payment 22 Sep. 2023)	Final terms	the net proceeds from the Green Bonds will be allocated as set out in Amprion's Green Finance Framework
Issue price	100.000%		

IFRS key data

With the establishment of consolidated financial statements that are prepared in accordance with International Financial Reporting Standards (IFRS) in 2022, we put the focus on internationally established IFRS key figures. EBITDA (i.e. earnings before interest, taxes, depreciation and amortisation) and net income are adjusted for the effects of the change in the regulatory account in order to achieve better national and international comparability and a more accurate reflection of the company's actual performance.

In particular, regularly realised deviations between the revenues actually generated and the revenue cap set in accordance with German GAAP (HGB) are recorded in the regulatory account; however, this cannot be reflected under IFRS. These deviations can only be determined ex post at the end of the year, and are then recorded in the regulatory account. The balance of the relevant calendar year is determined in the following year and is then settled in later years on an annuity basis over three years via the revenue caps of three years. This smoothing mechanism is intended to avoid strong periodic fluctuations in grid charges and to increase their predictability.

In addition, we want to make the dynamic development of our operating financial strength more transparent and comparable. Since September 2022, we have therefore been reporting continuously on the cash-flow-oriented key figure "Funds from Operations" (FFO), which is established in the industry and on the international capital market. Here, too, individual adjustments are made to provide a picture of the financial strength of the Amprion Group that is as accurate as possible from an economic perspective.

We are supplementing our set of IFRS key figures with the key regulatory figure "Regulated Asset Base" (RAB). This figure represents the basis of our regulated revenue structure and is based on the annual financial statements of Amprion GmbH according to German GAAP (HGB). At the end of 2022, the RAB amounted to around € 6.6 billion (2021: € 5.1 billion). The increase is mainly attributable to the increased investments in 2022 and the correspondingly increased assets.

Rounded, in € million, IFRS	2022	2021	Change in %
Revenue	3,512.6	2,571.8	36.6
EBITDA	350.5	688.8	-49.1
<i>EBITDA adj.</i>	772.6	867.0	-10.9
Consolidated net income	-60.4	138.6	-143.6
<i>Net income adj.</i>	228.2	260.6	-12.4
Funds From Operations (FFO)	320.5	648.9	-50.6
<i>FFO adj.</i>	278.3	630.1	-55.8
Regulated Asset Base (RAB)*	6,576.0	5,148.0	27.7

* According to local GAAP (HGB) and including Amprion Offshore GmbH.

The financial year 2022 was marked by the start of the war in Ukraine and the resulting distortions on the energy and electricity markets. This had a temporary impact on Amprion's business since the costs for system services temporarily increased significantly and had a correspondingly large influence on the development of revenue and the unadjusted earnings figures EBITDA and net income. Expenses for system services are generally completely refunded with a time delay via the relevant regulatory model. These regulation model-induced earnings effects, which are reflected in a non-operationally justified increased earnings volatility, are therefore only temporary.

In the reporting year, the Amprion Group generated revenues of € 3,512.6 million. This corresponds to an increase of approximately 36.6 per cent compared to the previous year (2021: € 2,571.8 million). About a third of the increase is due to additional costs in connection with system services and has an economic counterpart in the cost of materials, which significantly exceeds the increase in revenues. As a result of these additional costs, EBITDA fell to € 350.5 million (previous year: € 688.8 million), the consolidated net income to € -60.4 million (previous year: € 138.6 million). In accordance with the regulatory provisions, the costs incurred for system services which are not already covered by the revenue cap, are returned with a time delay via revenue over a period of three financial years and are therefore fully offset. The purely temporary burden on the unadjusted earnings figures EBITDA and net income is therefore adjusted in the adjusted key figures "adjusted EBITDA" and "adjusted net income" in an economically appropriate manner. The resulting significantly lower earnings volatility across periods reflects Amprion's operating business much more appropriately from an economic point of view. "Adjusted EBITDA" amounted to € 772.6 million in the reporting year (2021: € 867.0 million), while "adjusted net income" amounted to € 228.2 million (2021: € 260.6 million).

The slight decrease in the adjusted ratios of approximately 10.9 and 12.4 per cent respectively, despite higher revenue from capital costs due to the additional investment, is mainly due to the use of congestion revenue. Proceeds from congestion management can, if available, be used for redispatch near the border. In 2022, congestion proceeds were almost completely used to cover redispatch costs incurred near the border. In comparison, only slightly more than half of the congestion proceeds were used for this purpose in 2021. Due to this significantly higher allocation of congestion revenue compared to the previous year, the resulting adjustment effect was comparatively lower in the adjusted key figures.

The cash-flow-oriented key figure FFO declined mainly as the result of the sharp increase in costs for system services of € 320.5 million (previous year: € 648.9 million). After adjustment for non-cash expenses/income that are customary for the industry, the adjusted FFO amounts to € 278.3 million (previous year: € 630.1 million).

AMPRION 2023: **OUR GOALS**

A

SHAPING THE CHANGE:
**EXPANDING THE ELECTRICITY
GRID FASTER**

THINKING AHEAD:
**PLANNING THE CLIMATE-
NEUTRAL ENERGY SYSTEM
COMPREHENSIVELY**

STEMMING INVESTMENTS:
DOING BUSINESS SUSTAINABLY

**B**

As a leading transmission system operator in Germany and Europe, Amprion is making its contribution to achieving the climate targets: “We want to expand the electricity grid more quickly, drive forward the planning of the climate-neutral energy system and operate sustainably as a company,” says Amprion CEO Dr Hans-Jürgen Brick. “That is what our strategy is focused on.”

Germany is to become climate-neutral by 2045 at the latest – without compromises in security and stability of energy supply. The importance of these factors is made clear by the energy crisis resulting from the war in Ukraine. “With the climate-neutral energy system in 2045, we have a clear goal in mind. Along the way, we will very carefully monitor the necessary milestones to ensure system safety at all times,” says Amprion CTO Dr Hendrik Neumann. Amprion sees itself as a next-generation transmission system operator that plays a key role in shaping the transformation of the energy system. “This is based on the company’s financial capabilities,” says Amprion CFO Peter Rüth.

SHAPING THE CHANGE: EXPANDING THE ELECTRICITY GRID FASTER

We support the necessary transformation to a climate-neutral energy system by expanding the transmission grid as quickly as possible while always maintaining the highest level of system security.

Germany is facing a fundamental transformation towards a climate-neutral energy system. We actively shape this change by expanding and converting our grid on land and at sea over a length of 5,500 kilometres. There is no time to lose. Every acceleration matters! We contribute through concrete proposals for accelerating the approval procedures and innovations. In order to accelerate the pace of grid expansion, we also need uniform rules that can be applied to as many projects as possible. Nature and species protection laws must be simplified and more use must be made of existing grid corridors.

Amprion combines climate neutrality with system security: our transmission lines are lifelines of society, securing life quality and jobs for millions of people. Electricity from renewable energies must reach companies safely and reliably at all times. Only by doing so can we maintain the industrial basis in Germany and drive forward decarbonisation. With the transformation of the energy system, the demands on the system management and operation of the transmission grid are increasing. With the new System Operation and Control Centre in Brauweiler, we are paving the way for the next generation of system management. Among other things, it relies on innovative processes to increase the capacity utilisation of the existing grid.



THINKING AHEAD: **PLANNING THE CLIMATE-NEUTRAL ENERGY SYSTEM COMPREHENSIVELY**

We continue to develop our expertise, take on further key tasks and put ourselves in a position to plan and manage the climate-neutral energy system in an integrated and coordinated manner.

We are ready to take on more responsibility. To this end, we are expanding our skills in cross-sectoral system planning, system management and innovation management. Our System Operation and Control Centre in Brauweiler is the largest and most modern grid control centre in Europe. It has a modular structure and offers the perspective of modelling an integrated climate-neutral energy system. We already use artificial intelligence to operate the grid more securely.

We rely on cooperation and maintain an intensive dialogue with stakeholders, in order to help shape the energy transition and its framework conditions. This also includes innovations in market design: Amprion has developed the concept of the system market. The system market ensures that power plants, storage facilities and electrolysers are located in the right places in the grid. Only then can a climate-friendly, secure and affordable energy system evolve.



STEMMING INVESTMENTS: **DOING BUSINESS SUSTAINABLY**

We sustainably ensure that we are viable in financial terms. Only in this way can we raise the necessary equity and debt capital to finance the grid expansion and continue to act flexibly. The prerequisite for this, of course, is an appropriate regulatory framework.

Amprion is the only transmission system operator in Germany that finances itself independently on the international capital market. Our solid and sustainable ownership structure is the basis for successfully managing further investments in grid expansion. We have realigned our financing strategy in recent years and will continue to rely on an efficient mix of equity and debt capital. On the debt side, we will expand our financing instruments as needed. We will also appear on the international capital market in 2023. We are a sustainable company. We have a sustainability strategy, develop it further and translate it into practice. We support our customers in achieving their climate targets by working together on grid projects towards decarbonisation. We will develop the outstanding Scope 3 mitigation pathways for greenhouse gas emissions in 2023 and seek their recognition by the Scientific Based Targets Initiative. Internally, we focus on a corporate culture that strengthens interdisciplinary cooperation and promotes diversity.

cash & transfers ▾

research ▾



3M 6M YTD 1Y 3Y 5Y



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REPORT OF THE SUPERVISORY BOARD

Ladies and Gentlemen,

Amprion GmbH can look back on a successful 2022 financial year. The company mastered the challenges associated with the tense supply situation in the winter of 2022/2023 and further intensified grid expansion for the energy transition.

The Supervisory Board has accompanied this development. It has fulfilled its duties in accordance with the law and the Articles of Association, and in particular fulfilled its supervisory and advisory function vis-à-vis the Management Board. To this end, the Supervisory Board was informed by the Management Board in writing and orally about the course of business, fundamental questions of business policy and the situation and development of the company, discussed significant business transactions in detail with the Management Board and made necessary decisions. The Chairman of the Supervisory Board also discussed important matters with the Managing Board outside of the Supervisory Board meetings and addressed questions of corporate strategy and business policy in preparation of the meetings of the Board. In addition, the Audit Committee fulfilled the tasks required by the Articles of Association and comprehensively prepared the adoption of the annual financial statements and the approval of the consolidated financial statements by the Supervisory Board.

In the reporting period, four Supervisory Board meetings were held. The consultations focused on the detailed reports of the Management on the situation of the company, including the development of revenue and earnings, as well as the strategic goals of the company. In addition, the Supervisory Board intensively discussed and approved the submitted financial plan for the year 2023. Furthermore, the long-term investment plan until 2032 was also discussed in detail and approved by the Supervisory Board. Furthermore, the Supervisory Board dealt with the regulatory environment of the company and the upcoming or already implemented changes to the legal framework.

BDO AG, Wirtschaftsprüfungsgesellschaft Hamburg, the auditors elected by resolution of the shareholders on 3 May 2022 and appointed by the Supervisory Board of the company, audited the annual financial statements and the management report as well as the consolidated financial statements prepared in accordance with International Financial Reporting Standards (IFRS) and the Group management report of Amprion GmbH for the financial year 2022, including the underlying accounting processes, and issued an unqualified audit opinion in each case.

The auditor's report, the annual and consolidated financial statements, the management report and the Group management report were distributed to the members of the Supervisory Board

in due time prior to the Supervisory Board meeting on 12 April 2023 and were discussed in detail at the meeting. The auditor participated in the deliberations of the Supervisory Board and reported on the main results of their audit. They were also available to provide additional information. The Supervisory Board approved the results of the audit. On its part, it reviewed the annual financial statements and the management report as well as the consolidated financial statements and the group management report prepared by the Management Board. Based on the final results of its review, there are no objections to be made. The Supervisory Board has approved the annual financial statements and the management report as well as the consolidated financial statements and the Group management report for the 2022 financial year; the annual financial statements are thus adopted.

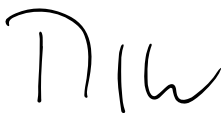
During the 2022 financial year, the following personnel changes occurred in the Supervisory Board:

Upon notification of the order of the Dortmund District Court dated 20 January 2022, Dr Christoph Gehlen, Head of the Power Lines at Amprion GmbH, was appointed as a new member of the Supervisory Board after the previous representative of the senior executives on the Supervisory Board, Mr Riehm, entered the passive phase of his partial retirement.

Dr Peter-Henrik Blum-Barth, Director of Investments Liquid Assets of SV SparkassenVersicherung Holding AG, has resigned from his position as a member of the Supervisory Board of Amprion with effect from 31 March 2022. Mr Roland Oppermann, Chief Financial Officer of SV Sparkassen-Versicherung Holding AG, has been appointed as a member of the Supervisory Board of Amprion with effect from 1 April 2022.

The Supervisory Board wishes to express its thanks and appreciation to the Management Board and all employees of Amprion for their work in the 2022 financial year.

Dortmund, 12 April 2023



UWE TIGGES

Chairman of the Supervisory Board



GROUP MANAGEMENT REPORT

of Amprion GmbH, Dortmund,
for the financial year 2022



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FUNDAMENTALS OF THE GROUP

Group structure and business activities of the Group

Amprion GmbH, headquartered in Dortmund, is one of four transmission system operators (TSOs) in Germany. From the North Sea to the Alps, the company operates its network at voltage levels of 220 and 380 kilovolts (kV) and is expanding it in accordance with market requirements. The extra-high-voltage grid links the generation units to the main centres of consumption and is a vital component of the transmission grid in both Germany and Europe. The transmission grids play a central role in transporting power to our customers and maintaining a high security of supply in Germany. They are also indispensable for integrating renewables into the energy system. They are therefore an important element in achieving the European goal of climate neutrality by 2050.

In addition, Amprion controls and monitors the safe transport of electricity within the extra-high-voltage (EHV) grid in its control area. For this purpose, the grid operations managers in Brauweiler/Pulheim ensure that electricity consumption and generation are kept in balance at all times. The system services required and the electricity necessary to compensate grid losses are sourced using transparent tender procedures in line with regulations. The company also coordinates the exchange programmes and the subsequent volume balancing both for the entire transmission grid in Germany and for the northern part of the European interconnected grid.

Thanks to its central location within Europe, Amprion's network is a vital hub for Europe's electricity trading. Amprion provides transmission grid capacities at the interconnecting feeder lines to France and Belgium, the Netherlands, Switzerland and Austria by means of market-based methods. These are largely developed by Amprion, other TSOs, electricity exchanges and regulatory authorities.

Amprion GmbH's shareholders are M31 Beteiligungsgesellschaft mbH & Co. Energie KG, Düsseldorf, a consortium of mainly German institutional investors from the insurance industry and pension funds, that holds 74.9% of the shares, and RWE AG, Essen, with the remaining 25.1% of the shares.

Amprion GmbH is the parent company of the Amprion Group. As such, it holds 100% of the shares in its only subsidiary, Amprion Offshore GmbH, Dortmund. The business purpose of this company is the construction, operation, acquisition, marketing and use of grid facilities for offshore connections, associated transport and distribution systems for electricity and information transmission facilities, as well as the provision and marketing of services in these areas. Amprion Offshore GmbH will be the owner of the grid connections and will act as the developer for the related approval procedures. It does not employ any staff of its own.

For the purpose of structuring the legal relationships between Amprion GmbH and Amprion Offshore GmbH, the mutual rights and obligations have been regulated in a control and profit and loss transfer agreement, an operations management agreement and a construction and transfer of use agreement. A consolidated tax group relationship is in place with Amprion GmbH – as the sole shareholder – for sales tax, trade tax and corporate income tax purposes.

Commentary on group reporting

Amprion GmbH is preparing a group management report for the Amprion Group for the first time for the 2022 financial year, which is additionally supplemented voluntarily with explanations and reporting elements on the situation of Amprion GmbH as an individual company. The group management report was prepared in accordance with the relevant requirements of Section 315 HGB and in consideration of the relevant specifications of *German Accounting Standard (DRS) 20 – Group Management Report*.

For financial reporting and corporate management purposes, the Group is divided into the two segments *Transmission System Operation* and *Offshore Grid Connections* – in accordance with the corresponding requirements of International Financial Reporting Standard 8 (*IFRS 8*) – “*Reporting Segments*”. These are distinguished from each other according to regulatory criteria. The basis for this differentiation is formed by the different regulatory systems, which significantly shape the economic framework conditions and business activities of the two segments and thus also of the Group as a whole. The regulatory framework of the *Transmission System Operation* segment is derived from the Energy Industry Act (**EnWG**), the Electricity Network Charges Ordinance (StromNEV), the Electricity Network Access Ordinance (StromNZV) and the Incentive Regulation Ordinance (**ARegV**). In comparison, the regulatory framework of the *Offshore Grid Connections* segment is based on the legal obligation pursuant to Section 17d (1) of the German Energy Industry Act (EnWG) to construct and operate offshore grid connection systems.

The *Transmission System Operation* segment follows the organisational demarcation of Amprion GmbH as an independent legal entity, while the *Offshore Grid Connections* segment corresponds analogously to Amprion Offshore GmbH.

Due to the current size of Amprion Offshore GmbH – measured in terms of revenue, annual result and balance sheet total – compared to Amprion GmbH, the economic situation of the Group in the 2022 financial year, as in previous years, is largely driven by the economic activities of Amprion GmbH and thus by the *Transmission System Operation* segment. Accordingly, the *Offshore Grid Connections* segment is still of secondary importance in quantitative terms for the past financial year. However, with regard to the future economic activity of the Amprion Group and due to the contracts concluded by Amprion Offshore GmbH in 2022 for the construction of four offshore converter systems, the company – and thus the segment *Offshore Grid Connections* – is already qualitatively material for the economic situation of the Group as at 31 December 2022. Pursuant to Section 290 (1) HGB, this results in a legal obligation for Amprion GmbH to prepare consolidated financial statements and a group management report for the first time for the 2022 financial year. Amprion GmbH has made use of the option under Section 315e (3) HGB and prepares its consolidated financial statements in accordance with International Financial Reporting Standards (IFRS). The first IFRS consolidated financial statements have already been prepared voluntarily for the 2021 financial year – in full compliance with the IFRS to be applied in the European Union – and have been audited by an independent group auditor and approved by the Supervisory Board of Amprion GmbH.

The key performance indicators used by the Group are sales revenue and net income, which are derived from the annual financial statements of Amprion GmbH under HGB as well as the number of employees. As a result of the profit and loss transfer agreement concluded with Amprion Offshore GmbH, Amprion GmbH's net income includes the full amount of Amprion Offshore GmbH's net income for the year under HGB. In the management report of Amprion GmbH for the previous year, forecasts were given for the performance indicators mentioned. These serve as a reference for corresponding deviation analyses between forecast values and actual values for the 2022 financial year.

The economic situation of the Group is explained in the following statements primarily on the basis of the IFRS consolidated financial statement figures. The information and explanations on the key performance indicators mentioned above inevitably deviate from this. Therefore, in accordance with the requirements of DRS 20.101, these are included in the analysis of the course of business and the Group's position with reference to the amounts reported in the IFRS consolidated financial statements.

Wherever the term "Amprion" is used in this group management report, this generally refers to the Amprion Group. Statements that refer exclusively to Amprion GmbH or Amprion Offshore GmbH or to one of the two Group segments are clearly identified as such.

FINANCIAL REPORT

Political and energy regulatory environment

EU Clean Energy Package

Amprion consistently implements the European regulatory requirements of the Clean Energy Package and the legal provisions contained therein. These relate in particular to the further development of European electricity market integration in the European transmission system operator association ENTSO-E. This will further expand the European electricity exchange possibilities. This has a positive impact on numerous Amprion business processes (e.g. European redispatch optimisation, European control energy procurement) and investments.

“Easter Package”

At the national legislative level, the first half of 2022 was dominated in particular by the so-called “Easter Package”, which was published in the *Federal Law Gazette* on 28 July 2022. The “Easter Package” is an article law and includes the following individual laws:

- Act on Immediate Measures for an Accelerated Expansion of Renewable Energies and Further Measures in the Electricity Sector,
- Second Act amending the Wind Energy at Sea Act and other provisions,
- Act on the Amendment of Energy Industry Law in Connection with the Immediate Climate Protection Programme and on Adjustments in the Law on End-Customer Supply,
- Act to Increase and Accelerate the Expansion of Onshore Wind Energy Plants,
- Fourth Act to Amend the Federal Nature Conservation Act.

With the “Act on Immediate Measures for an Accelerated Expansion of Renewable Energies and Further Measures in the Electricity Sector”, the Renewable Energies Act (Erneuerbare-Energien-Gesetz, EEG 2023) and the Combined Heat and Power Act (Kraft-Wärme-Kopplungsgesetz, KWKG 2023) were amended, among others. The EEG 2023 for the first time establishes the use of renewable energies as being in the overriding public interest and raises the expansion targets for 2030 to 80% and from 2035 to an almost complete electricity supply from renewable energies.

An essential core of the Article Law is the newly created Energy Financing Act (EnFG). On the one hand, it abolishes the EEG levy as of 1 January 2023 and provides for 100% federal budget financing of EEG support. On the other hand, the levy system will be standardised so that the levy obligation will in future be linked solely to electricity consumption from the public grid. Furthermore, the mandatory introduction of a separate KWKG account is planned from 2024.

With the “Act on the Amendment of Energy Industry Law in Connection with the Immediate Climate Protection Programme and on Adjustments in the Law on End-Customer Supply”, among other things, initial changes were realised in the course of the European Court of Justice (ECJ) case law on compatibility with the Electricity Internal Market Directive 2009/72 in the area of unbundling regulations for the Independent Transmission System Operator. In addition, Section 21b of the Energy Industry Act (Energiewirtschaftsgesetz, **EnWG**) created a special provision for regulatory claims and obligations of transmission system operators. For the first time, this enables regulatory claims to be recognised in the regulatory account as at the reporting date of 31 December 2022 in accordance with HGB.

The acceleration of grid expansion is an essential aspect of the legislative package. It already begins at the level of the network development plan, in that spatial aspects will in future have to be taken into account and examined to a greater extent in network planning. In return, the procedural step of federal sectoral planning is largely eliminated for projects under the responsibility of the federal government.

The “Easter Package” contains an important change with regard to the assessment of noise emanating from extra-high-voltage grids. In particular, it leads to a more realistic assessment instead of a previously theoretical “worst case” consideration. For offshore grid connections, the regulations of the Wind Energy at Sea Act (WindSeeG) for approval in the area of the foreign economic zone were changed. This relates in particular to the possibility of carrying out a planning approval procedure instead of a plan approval procedure. At the same time, an amendment to the EnWG allows the start of construction of offshore grid connection lines to be handled more flexibly. Further simplifications concern the preparation for construction and the early start of construction, so that the implementation of projects can also be made more flexible.

Substitute Power Plants Readiness Act

The “Act on the Provision of Replacement Power Plants to Reduce Gas Consumption in the Electricity Sector in the Event of an Imminent Gas Shortage by Amending the EnWG and Other Energy Industry Regulations Ersatzkraftwerkebereithaltungsgesetz, EKBG” came into force on 10 July 2022.

The aim of the law is to provide the electricity market with additional generation capacities from power plants using the energy sources hard coal, lignite and mineral oil until 31 March 2024. For this purpose, power plants shall be used that are currently only available to a limited extent, would soon be decommissioned or are in reserve. These additional generation capacities are intended to reduce electricity generation in power plants fired with natural gas as much as possible.

Electricity Price Brake Act

On 23 December 2022, the “Act to Introduce an Electricity Price Brake and to Amend Other Provisions of Energy Law” was promulgated in the Federal Law Gazette.

The aim of the law is to relieve end consumers from the significant increase in electricity prices. The electricity price brake applies to electricity consumption from 1 January 2023 to 31 December 2023 and limits the end-customer labor price to a fixed value during this period of application. The German Federal Government is also authorised to extend the period of application to 30 April 2024 by statutory order. In March 2023, the relief amounts for January and February 2023 will be credited retroactively. Relief for end consumers will also be provided by means of a federal subsidy for the pro rata financing of transmission system costs. The TSOs will play a key role in implementing the law.

For Amprion, the Act on the Electricity Price Brake has far-reaching procedural implications both on the relief side and on the levy side. The relief amounts are paid out by Amprion as one of the four TSOs to the end consumers via the electricity suppliers. On the revenue side, the plant operators pay the surplus revenue to the distribution system operators (DSOs) by means of a self-assessment. This so-called skimming is done with the help of a tool to be developed by the TSOs. The DSOs forward the surplus revenues in aggregated form to the TSOs. The total payment flows are processed via the separate accounts set up at the TSOs.

The four TSOs have a legal claim against the German Federal Government for settlement of the account balances. Furthermore, the TSOs are only obliged to pay out if there is sufficient liquidity in the accounts. This minimises the financial risks for Amprion and the four TSOs.

Regulatory environment

Imputed interest rates on equity for the fourth regulatory period

On 12 October 2021, the **Federal Network Agency** (Bundesnetzagentur, BNetzA) set an equity interest rate for the fourth regulatory period of 5.07% for new plants before taxes and 3.51% for old plants before taxes. This means that the equity capital interest rates have been reduced by around 27% and 32% respectively compared to the previous interest rates (before tax) of 6.91% for new installations and 5.12% for old installations. The Federal Network Agency justified the reduction of the interest rates with the current conditions on the capital markets. Amprion GmbH filed an appeal against this decision with the Düsseldorf Higher Regional Court (Oberlandesgericht, OLG) on 8 December 2021.

Productivity factor

The individual and sectoral productivity factors are elements for determining the revenue cap. The controllable cost shares within the revenue cap of the grid operators are adjusted to an efficient level from the perspective of the Incentive Regulation Ordinance (Anreizregulierungsverordnung, **ARegV**) with the help of the two factors. The **Federal Network Agency** therefore carries out an efficiency comparison for the TSOs before each regulatory period.

FOR THE THIRD REGULATORY PERIOD

The Federal Network Agency set the individual productivity factor for Amprion at 100.0% on 20 December 2018 and the general sectoral productivity factor for electricity (Xgen Strom) at 0.9% on 28 November 2018. Amprion GmbH appealed against the decision for the sectoral productivity factor to the OLG Düsseldorf on 18 January 2019. The OLG Düsseldorf granted Amprion a further extension of the deadline for filing the statement of grounds of appeal until 20 July 2023. The further extension of the deadline was applied for with the consent of the Federal Network Agency in view of the model proceedings before the BGH being conducted by another TSO. In the comparable proceedings on the Xgen Gas, the Federal Court of Justice (BGH) overturned the decision of the OLG Düsseldorf and confirmed the Federal Network Agency's determination.

FOR THE FOURTH REGULATORY PERIOD

With its decision of 16 September 2022, the Federal Network Agency started the data collection for the determination of the general sectoral productivity factor for electricity.

Efficiency value calculation for the fourth regulatory period

In order to determine the individual efficiency value of TSOs for the fourth regulatory period, a relative reference network analysis is carried out in accordance with Section 22 (2) **ARegV**. This is an optimisation procedure for determining model network structures and plant quantity structures which, under the existing boundary conditions, have an optimal relationship between costs and network services (reference grid). On 8 February 2022, the Federal Network Agency adopted the "Specification of Requirements for the Collection of Data for the Implementation of the Relative Reference Network Analysis for the Fourth Regulatory Period".

Decisions on the regulatory account

The differences between the revenues generated on the basis of actual volume development and the permitted revenues as well as differences between planned and actual costs of cost items that cannot be influenced on a permanent basis are recorded in the regulation account. The regulatory account balance determined by the network operator and its distribution through additions or deductions to the revenue caps are subject to approval by the Federal Network Agency.

On 2 June 2021, the Federal Network Agency approved the regulatory account balance for 2017 and its distribution by means of additions or deductions to the revenue caps 2019 to 2021. Amprion GmbH filed an appeal against the decision with the OLG Düsseldorf on 16 July 2021. The OLG Düsseldorf dismissed the appeal on 10 August 2022. Amprion GmbH filed an appeal against this decision with the Federal Court of Justice on 12 September 2022.

On 16 August 2022, the Federal Network Agency issued its decision on the regulatory account balance for 2018 and its distribution by additions or deductions to the revenue caps 2020 to 2022. An appeal was also filed against this decision. The appeal is pending the decision of the Federal Court of Justice in the proceedings for the regulatory account for 2017.

Calculation of capital and operating costs resulting from approved investment measures

On 15 December 2020, the Federal Network Agency amended the determination for calculating the capital and operating costs resulting from approved investment measures. Among other things, this limits the assessment basis for imputed trade tax to the notional equity ratio of 40%. Amprion GmbH filed an appeal on 18 January 2021. By decision of 23 March 2022, the OLG Düsseldorf ruled that the determination is unlawful with regard to operative clause 3 (group financing) and operative clause 4 (hybrid bond), but lawful with regard to operative clause 5 (limitation of the assessment basis for imputed trade tax to a notional equity ratio of 40%).

Redispatch 2.0

On 1 October 2021, the new legal regulations on the management of grid congestion in Sections 13 ff. **EnWG** came into force. Among other things, these stipulate that the previous regulations on feed-in management will no longer apply and that renewable energy plants and CHP plants with a minimum output of 100 kW will be integrated into the existing redispatch regime. For this purpose, an industry solution was developed under the leadership of the German Association of Energy and Water Industries (BDEW).

Delays occurred in the finalisation and implementation of the industry solution in the companies that were not within Amprion's sphere of influence. As a result, the legally intended standardisation of the responsibility for the financial compensation of redispatch measures to the grid operator could not be implemented on time. In cooperation with the **Federal Network Agency**, the industry has developed a "transitional solution for a secure entry into redispatch 2.0". This stipulates that the balancing of any measures will initially continue to be ensured by the respective balancing group manager. According to the concept of the transitional solution, the balancing group manager receives cost compensation in the form of an agreed financial compensation instead of the balancing compensation, which can be refinanced via the grid charges. This transitional solution was originally limited until 31 May 2022, even in justified exceptional cases.

On 28 November 2022, the **Federal Network Agency** published a notice on information obligations, down payments to balancing group managers and the amount of financial compensation of plant operators.

There are currently obstacles to further progress in the industry, particularly with regard to the complexity of the target solutions developed and the unacceptable risks in the area of balancing compensation from the TSOs' point of view. Amprion currently assumes that the transitional solution will continue to be applied until fundamental changes are implemented.

Business performance

Grid business

In 2022, the fourth step towards the introduction of uniform national grid fees was taken on the basis of the Grid Fee Modernisation Act, which came into force in July 2017. It provides for a gradual standardisation of the transmission grid fees from 2019 over five years, so that the grid fees will be completely standardised from 2023. The 2022 grid charges consist of a 20% company-specific and an 80% nationally uniform grid charge.

On 20 December 2018, the Federal Network Agency set the revenue cap for the third regulatory period from 2019 to 2023 on the cost basis of the 2016 financial year. Amprion GmbH filed an appeal against the decision on 25 January 2019. The OLG Düsseldorf dismissed the appeal in its decision of 13 May 2020. Amprion GmbH appealed against this decision to the Federal Court of Justice.

The defined starting level, the development of the permanently uncontrollable costs, the overall consumer price index as well as the general productivity factor and the individual efficiency value are the basis for the revenue cap and subsequently the grid charges, which were published on 14 December 2021. The revenue cap 2022 increased due to the following developments:

- Higher costs for system services due to increased prices,
- Higher costs from approved investment measures due to ongoing grid expansion,
- Contracting of special technical grid operating facilities and a rotating phase shifter.

Counteracting effects were:

- Reimbursement of additional revenues achieved via the regulatory account system,
- Removal of individual lignite-fired power plants from the security reserve.

The aforementioned changes are not or only partially within Amprion's sphere of influence and lead to an increase in the grid charges in the extra-high-voltage grid level in the usage hour range between 5,000 and 8,760 hours, which is relevant for the majority of customers, from 19.1% to up to 20.8%.

Amprion's customers are industrial companies, distribution network operators and power stations connected directly to the extra-high-voltage grid. The sales and revenue structure is characterised largely by major distribution network operators, from which Amprion receives around 82% of its grid fees. Companies in the chemical, steel and aluminium industries pay around 15% of the grid fees. The remaining grid fees result from the own consumption of the power plants connected to the transmission grid.

In the business year, the withdrawal volume of directly connected customers fell by around 5%. This decrease is due to the fact that more energy was generated in the customer grids. This led to a reduced draw from Amprion's grid. Furthermore, the decline is due to the current political and economic situation and, in particular, the associated energy-saving measures and energy price increases.

EEG financing requirements

The EEG levy, which does not affect the result, was abolished by law with effect from 1 January 2023. In future, the promotion of renewable energies will be financed by the federal budget. This financing is intended to cover the difference between the revenues and the expenses of the TSOs in executing the EEG compensation mechanism, which is based on the Energy Financing Act (EnFG) and the Renewable Energies Ordinance (EEV). The EEG financing requirement is the financial requirement for the promotion of the expansion of renewable energies under the EEG for a calendar year, calculated in accordance with the provisions of Annex 1 EnFG. This is essentially the revenue from TSO marketing of the renewable energy quantities generated outside direct marketing and self-supply and fed into the grid, less the expenses for the EEG support payments. The financing requirement can also have a negative value (corresponding to repayments to the Federal Government).

The modalities and the distribution of payments by the Federal Government to the TSOs' EEG accounts shall be governed by a public law contract between the TSOs and the Federal Republic of Germany, represented by the Federal Ministry of Economics and Climate Protection. The contract shall be concluded in accordance with Article 3 (9) EEG.

On 15 October 2022, the TSOs published the EEG financing need for 2023 in the amount of €-3,637 billion. The main reasons for the surplus are the increased revenues from TSO marketing in the wake of the significantly higher exchange electricity prices and the lower payments for market premiums. No liquidity reserve was included in the calculation of the financing need, as the legal system does not allow for a positive liquidity reserve in the event of a negative financing requirement.

Grid fee-based surcharges

The processing of the grid fee-based surcharges is basically neutral in terms of earnings for Amprion. The levy for disconnectable loads will cease to apply from 2023. In accordance with Section 20 (2) AbLaV, the regulation largely ceased to apply on 1 July 2022. The amount carried forward from the annual accounts for 2021 and the short year 2022 will be included in the grid charges in accordance with the provisions of the ARegV as agreed with the Federal Network Agency.

The following overview shows the development of the grid fee-based surcharges in the years 2021 to 2023:

	2023	2022	2021
KWKG surcharge	0.357 cents/kWh	0.378 cents/kWh	0.254 cents/kWh
Section 19 StromNEV (Electricity Grid Charge Ordinance) surcharge	0.417 cents/kWh	0.437 cents/kWh	0.432 cents/kWh
Offshore grid surcharge	0.591 cents/kWh	0.419 cents/kWh	0.395 cents/kWh
Surcharge for disconnectable loads	-	0.003 cents/kWh	0.009 cents/kWh

System services

In the 2022 financial year, the costs of system services were significantly above the level of the previous year. The high prices of CO₂ emission certificates, electricity, hard coal and natural gas contributed significantly to this. The price of natural gas in particular rose to an unprecedented level with the start of the war in Ukraine. The initially reduced and finally non-existent supply of natural gas through the Nord Stream 1 pipeline tightened the supply. Since natural gas was

stored as a priority, prices remained high for a long period during the reporting year despite low consumption. Only when gas storage facilities were filled and temperatures were mild in autumn and at the beginning of winter could a clear easing of the natural gas price be observed. This also had an effect on the costs for redispatch measures. In the financial year, as in the previous year, the majority of redispatch measures were called up from the preventive processes coordinated by the four TSOs.

The costs of grid loss energy also increased significantly due to the sharp rise in energy prices. In the business year, larger grid loss volumes were incurred due to the unavailability of numerous nuclear power plants in France. These grid loss quantities had to be additionally procured at significantly increased prices within the framework of short-term management.

Grid reserve

On the basis of analyses by the TSOs, the Federal Network Agency annually reviews and confirms the grid reserve requirement for the following winter half-year. The remaining additional demand that cannot be covered by power plants in the domestic grid reserve must be covered via an expression of interest procedure. The TSOs submitted their system analysis and the resulting need for grid reserve power plants to the Federal Network Agency for confirmation on 1 March 2022. In its report of 29 April 2022, the Federal Network Agency indicated the need for reserve power of 8,264 MW determined by the TSOs for the winter half-year 2022/2023. The need for redispatch measures increased significantly compared to the previous year.

The grid reserve demand cannot be covered exclusively by domestic grid reserve power plants in winter 2022/2023. The procurement of additional grid reserve capacity by another German TSO from foreign power plants in the amount of 1,424 MW was therefore necessary. As a result of the new regulatory requirements through Redispatch 2.0, the TSOs have been obligated by law to make the deployment order of all redispatch measures cost-dependent since 1 October 2021. Amprion has observed that the grid reserve power plants have been used more frequently since then.

With the entry into force of the Substitute Power Plants Readiness Act, the possibility of market participation was created for grid reserve power plants that do not use natural gas to generate electricity via the newly created Section 50a **EnWG**, which is limited in time until 31 March 2024. In Amprion's control area, hard coal-fired power plants in the grid reserve returned to the electricity market for a limited period in October 2022. The power plants that were to be transferred to the grid reserve on 31 October 2022 have remained in the market for a limited period in accordance with Section 50a of the German Energy Act. For the duration of the market participation of these systemically important plants, the entitlement to reimbursement of generation expenses, operational readiness expenses and opportunity costs in accordance with

the grid reserve specifications is waived. During the market return, the plants can – as is usual for market power plants – also be used within the framework of redispatch measures. The other natural gas power plants in the grid reserve cannot return to the market.

The costs of the grid reserve are refinanced completely and simultaneously via the grid fees.

Act to Reduce and End the Use of Coal for Power Generation (KVBG)

In the financial year, the **Federal Network Agency** invited tenders for a capacity of 1.2 GW in the fifth bidding round under the KVBG to reduce coal-fired power generation with a bid deadline of 1 March 2022 and for a capacity of 0.7 GW in the sixth bidding round with a bid deadline of 1 August 2022. In the fifth bidding round, one lignite-fired power plant in Amprion's control area was awarded a contract. The ban on coal-firing and the marketing ban for this plant will take effect on 26 May 2024. No power plant in Amprion's control area was awarded a contract in the sixth bidding round.

With the entry into force of the Substitute Power Plants Readiness Act, regulations on temporary participation in the electricity market and on remaining in the market were included in Section 50a **EnWG**. They apply to plants that were awarded a contract in the third and fourth bidding rounds of the KVBG and for which a coal-firing ban would take effect in 2022 and 2023. These power plants are subject to a closure ban until 31 March 2024. They also have the option to participate in the electricity market for a limited duration until that date. In Amprion's control area, the operators of the hard coal-fired power plants that were to be transferred to the grid reserve on 31 October 2022 are taking advantage of the option to remain on the market.

Phase shifter

Amprion GmbH has commissioned RWE Generation SE to convert the Westfalen Block E power plant to a phase shifter in accordance with the Federal Network Agency decision of 1 June 2021. The phase shifter has been commissioned in May 2022. Adjustments to the cooling system have significantly reduced the required power consumption. On 29 November 2022, Amprion GmbH submitted a voluntary self-commitment to the Federal Network Agency and applied for procedural regulation in order to refinance the costs for the conversion and operation of the plant. On 21 December 2022, the Federal Network Agency approved the costs for the conversion and the use of the plant as a phase shifter.

The voluntary self-commitment *Freiwillige Selbstverpflichtung*, FSV and the corresponding determination of the Federal Network Agency ensure that the costs can be refinanced at the same time.

Capacity reserve

The plants held in the capacity reserve are used to balance the energy system in the event of exceptional and unforeseeable situations. They can also be used by the TSOs to resolve grid congestion. For the first provision period from 1 October 2020 to 30 September 2022, a reserve capacity of 1,056 MW was available to the German TSOs. The awards for the second provision period from 1 October 2022 to 30 September 2024 were made in February 2022. Bids amounting to 1,086 MW were awarded. The fuel of all plants awarded bids is gas. In Amprion's control area, two power plant units with a total capacity of 710 MW are committed in the capacity reserve.

The costs of the capacity reserve are refinanced completely and simultaneously via the grid charges.

Special technical grid operating facilities

Special technical grid operating facilities are building blocks for maintaining system security. The total demand for special technical grid operating facilities was determined by the TSOs in 2017 and confirmed by the Federal Network Agency at 1,200 MW. In 2020, RWE Generation SE was awarded the contract by Amprion for the construction and operation of a gas-fired power plant with a capacity of 300 MW at the Biblis site. It was commissioned in early March 2023. Furthermore, in February 2021, Gaskraftwerk Leipheim GmbH & Co. KG was awarded a contract for a further 300 MW. Commissioning is scheduled for August 2023. Both facilities will be used exclusively in emergency situations to maintain grid stability in Germany. The special technical grid operating facilities are not available to the electricity market.

The costs of special technical grid operating facilities are refinanced completely and simultaneously via the grid fees.

Safety readiness and supply reserve

Individual lignite-fired power plants were on standby pursuant to Section 13g **EnWG**. These have been provisionally taken offline for four years. After the four years in security standby, these plants would have had to be decommissioned permanently. The Substitute Power Plants Readiness Act stipulates that plants are transferred from security standby to the supply reserve and are allowed to participate in the market again. In Amprion's control area, this concerns three lignite-fired power plants with a total capacity of around 900 MW. According to the "Supply Reserve Call Ordinance", the plants will initially have the opportunity to participate in the market from 1 October 2022 to 30 June 2023 as part of the supply reserve. This possibility can be extended until 31 March 2024.

System operation and control

Amprion did not experience any large-scale disruptions in its own extra-high-voltage grid in the financial year. System operation was again characterised by the continuing expansion of renewable energy plants and the increasing cross-border transmission capacity in accordance with the Clean Energy Package. In this context, the commissioning of the load flow-based capacity calculation in the core region from 8 June 2022 represents a significant further development of the international processes. The minimum capacities applied here require that the calculated capacities are validated in order to be able to limit them in the event of possible system hazards. In this context, the German TSOs are working closely with the TSOs of Austria and the Netherlands, with Amprion playing a significant role. Furthermore, the financial year was characterised by the stabilisation of the system management processes for the situation in winter 2022/2023.

Supply situation in winter 2022/2023

Power plants that were previously held in the grid reserve and security standby to ensure system security can return to the market. The amended **EnWG** empowers the Federal Government to do this by statutory order. This ordinance was issued immediately after the amendment came into force.

The results of special analyses (“grid stress test”) were published on 5 September 2022. These assessed the power balance as well as the grid security for the winter of 2022/2023. The analyses were prompted by several risk factors that came together in the financial year: the primary energy crisis due to the Ukraine war, the high unavailability of French nuclear power plants in particular and the low water levels of the rivers used to cool the power plants. The special analyses have shown that an accumulation of these risk factors can lead to critical situations in grid operation in the winter months of 2022/2023. In order to be able to detect, prevent and manage an energy shortage situation, monitoring processes were developed and put into effect in collaboration between the Federal Ministry of Economics and Climate Protection, the **Federal Network Agency** and the TSOs. The four German TSOs have made recommendations to ensure stable system operation in winter 2022/2023. These include measures for load reduction, increasing transport capacities through weather-dependent overhead line operation and intensifying redispatch cooperation with foreign countries. In addition, it was recommended to continue operating the three remaining German nuclear power plants with the loaded fuel assemblies in so-called stretch operation until spring 2023.

Emergency synchronisation of Ukraine

Due to the war in Ukraine, the Ukrainian transmission system operator Ukrenergo applied to ENTSO-E for emergency synchronisation with the continental European interconnected system. Following approval by the Association of European Transmission System Operators, Amprion was instrumental in supporting the implementation, which was successfully completed on 16 March 2022.

Innovative projects

Amprion is intensifying its innovation activities to ensure that the transition to a climate-neutral energy system in Europe succeeds. Cooperation with national and international partners plays a major role here, because the energy transition can only succeed through cooperation.

During grid expansion, the impact on nature shall be kept to a minimum. Amprion has developed a flushing drilling method for laying **underground cables**. This is intended to prevent drilling fluid from escaping unhindered from the flushing circuit.

Together with DSOs, Amprion has taken on the task of evaluating and further developing the potential of a coordinated exchange of reactive power between DSOs and TSOs. A concept developed together with Westnetz GmbH is now in effect.

The feed-in and withdrawal of electrical energy in the electricity system must be balanced at all times. To compensate for short-term deviations, the TSOs use, among other things, the so-called minute reserve. Until now, it has been activated domestically. Since autumn 2022, Amprion has been operating a Europe-wide platform for minute reserves on behalf of the European TSOs with the Manually Activated Reserves Initiative (MARI). The guiding idea is that the European TSOs use a common platform to coordinate cross-border supply and demand with regard to the minute reserve and to procure control reserves more cost-effectively.

For a potential restoring of the electric grid, Amprion is currently still dependent on conventional large-scale power plants. In order to make the best possible use of the potential of offshore generation capacity connected via high-voltage direct current transmission (HVDC) in the future, Amprion is currently working with wind farm operators, manufacturers of HVDC systems and offshore wind turbines as well as leading research institutions to ensure that offshore wind farms connected via HVDC can also contribute to grid and supply restoration. In addition, Amprion is shaping the topic of offshore networking through initiatives such as EUROBAR and through active participation in European research projects on the topic of manufacturer-independent networked HVDC systems with partners from industry and research. Amprion is involved in other national and international public research projects.

Asset management

Amprion has been certified in accordance with the requirements of the international standard ISO 55001 "Asset Management – Management Systems" since 2015. ISO 55001 supports companies in establishing systematic and efficient asset management. External auditors regularly check whether the requirements of ISO 55001:2014 are being met. In November 2022, the recertification audit took place with a positive result for Amprion: the certificate was extended for another three years. An important focal point was the extension of the scope to include the offshore business.

Technical safety management

Since 2011, Amprion has met the requirements for technical safety management. This is a voluntary self-monitoring tool that reviews the organisational structure and processes. The focus is on occupational safety and work in accordance with legal requirements and recognised rules of technology. External auditors check compliance with the requirements in accordance with VDE-AR-N 4001. The last audit took place in October 2021, with Amprion's technical managers being audited. As a result, the certificate was renewed and is valid until 2027. A surveillance audit is planned for 2024.

Workforce

Amprion continued to expand its workforce in the financial year. The number of permanent employees increased by 8.5% from 2,062 FTE (Full-Time Equivalent) to 2,237 FTE as at 31 December 2022. It is 3.2% below the value forecast for this performance indicator in the previous year's management report of Amprion GmbH. This is due in particular to the shortage of skilled workers. Based on task analyses related to specific events and processes, as well as in particular the development of the offshore field of action and increased tasks in grid development and grid management, the FTE target value was adjusted to 2,639 permanent FTEs as at 31 December 2023.

In the 2022 financial year, 13 apprentices started their training at Amprion in commercial and technical professions. A total of 47 apprentices are currently completing their training at Amprion. Ten apprentices successfully completed their training, nine of whom accepted a job offer from Amprion.

In order to strengthen professional and personal expertise, there were around 8,200 participations in internal and external training measures in the current business year. Due to the Covid-19 pandemic, the majority of these took place online in 2022. In addition, the company again conducted a process to assess potential in order to fill future management positions in the company primarily with its own staff. The potential candidates identified in this way are further developed into managers in needs-based programmes. The potential assessments take place every two years.

The fluctuation rate remained low at 2.3% (previous year: 1.9%). The average age of the workforce decreased by 0.1 years compared to the previous year and was 39.7 years at the end of the reporting year. The average length of service decreased from 9.4 to 9.0 years. The proportion of women in the workforce increased by 0.4 percentage points to 20.7% as at 31 December 2022 (previous year: 20.3%).

Amprion GmbH continued its employee capital participation programme in the financial year by issuing profit-sharing *jouissance* rights. The participation rate was 79.9% (previous year: 81.7%).

Occupational health and safety

Occupational health and safety is a high priority for the Group. Therefore, an awareness of these issues is regularly raised among employees by means of specific instructions on conduct.

The Group uses the Lost Time Injury Frequency (LTIF) indicator for operational accident statistics. Since 2018, the LTIF has been continuously reduced for the fourth year in a row (2018: 7.4; 2019: 6.5; 2020: 4.6; 2021: 3.0; 2022: 2.7). In order to further improve on the historic best mark achieved this year, it was decided to implement a broad-based occupational safety campaign in 2023.

Following the conversion of the group-wide occupational health and safety management system (OH&S) from OHSAS 18001 to 14001 in the previous year, Amprion was successfully recertified this year by the responsible employers' liability insurance association (BG ETEM). Furthermore, the Occupational Safety Manual (OSH), which is the basis of the OH&S, was updated in the sense of continuous improvement.

To protect the health of its employees and the continued safe maintenance of business and system operations, Amprion, as an operator of critical infrastructure, again offered in-house Covid-19 and flu vaccinations at various locations this year.

Environmental management / protection

Amprion GmbH introduced an environmental management system in accordance with the ISO 14001 standard in 2017 and had it certified for the first time in the same year. After recertification in 2020, it was subjected to the annual surveillance audit in the following two years. In 2022, the auditors again confirmed the standard-compliant implementation, improvement and further development of the Group environmental management system. The next recertification is planned for 2023.

Information security

Information security is an important building block for ensuring stable business processes within the Group. This applies in particular to the areas of system management, project planning and operation of Amprion's electricity transmission grid. This assessment is confirmed by the Federal Office for Information Security. The operation and continuous improvement of an information security management system are necessary prerequisites for an appropriate level of information security. The successful recertification of the information security management system in 2020 proves that the Group implements and fulfils the requirements of the IT Security Act and, in particular, the requirements of the IT Security Catalogue of the **Federal Network Agency**. The maintenance of the certificate was confirmed by the surveillance audit in 2022.

Financial situation

Earnings

IFRS Group financial statements

in € million	2022	2021	Change
Revenue (external) and other operating income	3,675.9	2,693.3	982.6
Operating expenses	-3,745.3	-2,477.8	-1,267.5
Operating result (EBIT)	-69.4	215.5	-284.9
Financial result	-10.9	-13.1	2.1
Earnings before taxes (EBT)	-80.4	202.4	-282.8
Tax result	19.9	-63.8	83.7
Consolidated net income	-60.4	138.6	-199.1

Compared to the previous year, the Group's external sales revenues increased by 36.6% to €3,512.6 million (previous year: €2,571.8 million). This is due, on the one hand, to an increase of €333.0 million from €1,787.3 million to €2,120.3 million in revenues from grid fees, which is primarily due to volume effects. On the other hand, revenues from system services increased by €324.0 million, in particular as a result of higher revenues from redispatch measures and control work. In addition, the increase in other revenues by a total of €251.9 million is mainly due to higher revenues from congestion management.

In 2022, as in the previous year, Amprion Offshore GmbH and thus the *Offshore Grid Connections* segment realised solely internal sales revenue from the construction and usage transfer agreement concluded with Amprion GmbH in the amount of €3.6 million (previous year: €4.8 million). These were fully eliminated in the course of preparing the consolidated financial statements as part of the consolidation of income and expenses.

At €11,941.6 million (previous year: €12,502.3 million), the sales revenues in the HGB annual financial statements of Amprion GmbH for this financial performance indicator are at the level forecast in the previous year's management report of Amprion GmbH. The slight decrease of 4.5% relates to the settlement of the EEG equalisation mechanism in the amount of €6,474.4 million (previous year: €8,466.9 million), which has no effect on income, and is due to lower revenues from the EEG levy and the federal subsidy from the economic plan of the Energy and Climate Fund, which was only claimed in the previous year. This was offset by higher revenues from distributors and energy supply companies subject to the levy as well as from marketing on the electricity exchange due to the increase in exchange electricity prices.

Under HGB, revenues are significantly higher than according to IFRS, as income and expenses from levies that do not affect income – such as the one from the EEG compensation mechanism – are reported gross under revenues, cost of materials and other expense items under HGB. In the IFRS consolidated financial statements, on the other hand, a net presentation of income and expenses from apportionment mechanisms is required within the IFRS statement of comprehensive income.

The IFRS operating result for the financial year is €284.9 million lower than in the previous year. The largest burden on earnings resulted from the significantly higher expenses for system services. Unlike under HGB, this effect may not currently be offset under IFRS by the recognition of a regulatory claim and the (partial) reversal of a provision from regulatory obligations in connection with the regulatory account that was recognised in the HGB annual financial statements. In addition, a significant burden on the result resulted from higher personnel expenses due to the ongoing expansion of the workforce (€29.1 million). On the one hand, this was offset by a

total decrease in depreciation of €53.5 million, which was mainly due to significantly lower depreciation on right-of-use assets in connection with reserve power plants. On the other hand, higher proceeds from capital costs for investment measures in 2022 had the effect of increasing earnings due to the high level of investment activity.

The financial result improved by €2.1 million compared to the previous year, mainly due to the higher capitalisation of interest on borrowed capital. This was partly offset by higher interest expenses for long-term borrowed capital. The reasons for this are both the significantly increased debt financing volume and the comparatively higher borrowing costs due to the higher market interest rates in 2022. The Group had already issued a bond with a nominal volume of €800 million (nominal interest rate: 0.625%; IFRS effective interest rate: 0.767%) in September 2021. In September 2022, a green dual-tranche bond with a maturity of five years (nominal volume: €800.0 million; nominal interest rate: 3.450%; IFRS effective interest rate: 3.523%) and ten years (nominal volume: €1,000.0 million; nominal interest rate: 3.971%; IFRS effective interest rate: 4.012%) totalling €1,800.0 million was also issued on the international capital market.

The tax result essentially consists of expenses for income taxes for the current financial year and deferred tax income. The change and the associated reporting of a positive tax result was mainly due to the creation of new deferred tax assets and the reversal of deferred tax liabilities in connection with regulatory claims and obligations recognised in the tax balance sheet.

The HGB annual financial statements of Amprion GmbH show a year-on-year increase in net income of 16.2% to €213.4 million. This includes income from participations of €1.2 million from the profit transfer of Amprion Offshore GmbH, which operates as a separate IFRS 8 reporting segment *Offshore Grid Connections*.

According to HGB, the result for the 2022 financial year is - in contrast to IFRS - not negative, but clearly positive. This is due to the first-time recognition under HGB of a regulatory claim from negative balances in the regulatory account and the pro rata reversal of the provision from positive balances in the regulatory account (Section 21b (1) **EnWG**). In the management report of Amprion GmbH for the previous year, a net profit for the year at the previous year's level was forecast for the HGB annual result as a financial performance indicator.

Financial situation

IFRS Group financial statements

in € million	2022	2021	Change
Cash flow from operating activities	1,996.8	5,779.6	-3,782.8
Cash flow from investing activities	71.4	-2,661.2	2,732.7
Cash flow from financing activities	1,343.7	-996.9	2,340.7
Net change in cash and cash equivalents	3,412.0	2,121.5	1,290.5
Cash and cash equivalents at the end of the period	5,533.4	2,121.5	3,412.0

The cash flow from operating activities shown in the consolidated cash flow statement is significantly influenced in the financial year by the EEG compensation mechanism, which led to a considerably lower inflow of funds compared to the previous year. This decline is primarily due to lower payments from the EEG levy as well as lower payments from the Federal Government from the economic plan of the Energy and Climate Fund.

The cash flow from investing activities is characterised by the investments in the *Transmission System Operation* segment, which increased by 12.0%. This was offset by a shift from other financial assets to cash and cash equivalents. This relates to the release of interim cash investments from liquid funds from the EEG compensation mechanism.

The significant increase in cash flow from financing activities is mainly due to the raising of further long-term debt capital on the international capital market to secure liquidity in the context of the strongly growing investment activities. The bond issue volume in this context amounted to €1,800 million.

At the end of the period, cash and cash equivalents had increased to €5,533.4 million and consisted of EEG funds (€5,113.1 million), on the one hand, and liquid funds from the grid business amounting to €420.3 million, on the other. The latter are primarily held to cover future investments.

Financing

The Group is entirely financed through Amprion GmbH. The EEG credit tranche of the syndicated loan agreement from 2016 in the amount of €100.0 million ended on 15 March 2022 in accordance with the agreement. It was used to cover the liquidity needs of the EEG compensation mechanism and was not extended due to Amprion GmbH's positive EEG liquidity situation.

The network loan tranche of the syndicated loan agreement with a total of eight credit institutions had a total volume of €1,500.0 million as at 31 December 2022. The term was extended by one year in September 2022 until October 2026, with the option to extend it by a further year. The interest rate is based on the reference interest rate EURIBOR plus a margin. In the first quarter of 2023, the total volume was increased by €500.0 million to €2,000.0 million. As at the reporting date, the syndicated loan agreement in the amount of €6.0 million was utilised exclusively through guarantees. In addition, Amprion has a commercial paper programme with an issue volume of up to €900.0 million. It provides the Group with access to the short-term capital market. As at the reporting date, Amprion had not issued any commercial paper. The maximum drawdown during the financial year 2022 was €180 million.

In September 2022, Amprion GmbH published a Green Finance Framework. This defines the framework conditions for green financing. It also defines project categories for which funds raised through green financing instruments can be used. An external review of the Green Finance Framework was conducted by Sustainalytics (Second Party Opinion). The Green Finance Framework and the Second Party Opinion are freely available on Amprion's website. Under the Green Finance Framework, Amprion GmbH issued a green dual-tranche bond with a total nominal volume of €1,800.0 million and a maturity of five years (nominal: €800.0 million) and ten years (nominal: €1,000.0 million) on the Euro MTF market segment of the Luxembourg Stock Exchange on 14 September 2022. As described above, the interest rate for the five-year bond is nominally 3.450% and for the ten-year bond nominally 3.971%. As at 31 December 2022, the nominal total volume of all outstanding bonds amounts to €2,600.0 million.

The portfolio of fixed-interest promissory note loans and registered bonds with final maturity amounts to a nominal value of €880.0 million as at 31 December 2022. The agreed nominal interest rates, which depend on the term, range between 0.900% and 1.869% for the promissory note loans and between 1.322% and 2.512% for the registered bonds. In addition, there is a long-term fixed-interest syndicated loan agreement (development loan) with two banks, including a development bank, with a nominal amount of €200.0 million, a nominal interest rate of 1.710% and a total term of 15 years until June 2033. This syndicated loan agreement includes a financial covenant that is customary in the market and whose annual compliance is monitored as at 31 December. The financial covenant was complied with as at 31 December

2022. In order to continue financing the planned investments, further long-term borrowing on the capital and banking markets is planned for 2023.

Amprion GmbH was again rated by the two independent rating agencies Moody's Investors Service and Fitch Ratings in the financial year. In the annual review of the mandated ratings, Moody's Investors Service confirmed the rating for Amprion at "Baa1", and the outlook was raised from "negative" to "stable". Fitch Ratings confirmed last year's rating of "BBB+" with a stable outlook. Both ratings remain in the solid investment grade range.

As part of the bond issue, the green dual-tranche bond was rated "Baa1" by Moody's in the financial year.

The commercial paper programme has been affirmed by Moody's with a short-term rating of "Prime-2".

For the first time, Amprion GmbH was given an ESG risk rating of "12.8" by the ESG rating agency Sustainalytics in the financial year. This is in the low-risk range.

The Group's off-balance sheet financial obligations result primarily from order commitments, which increased from €593.4 million to €9,841.2 million in the course of the year and mainly relate to the *Offshore Grid Connections* segment. This increase is largely due to the contracts awarded in 2022 for the construction and maintenance of several offshore converter systems (DoIWin4 and BorWin4 as well as BalWin1 and BalWin2). In addition, there are off-balance-sheet financial obligations from electricity forward contracts (forwards) concluded as part of grid loss management, from leases, ground leases and land purchase contracts that have been concluded but are not yet in progress, as well as from service contracts that are not yet in progress that were concluded in connection with securing reserve capacities. The total financial obligation resulting from these contracts amounted to €2,014.3 million as at 31 December 2022.

Investments

The demands on the transmission grid have increased significantly in recent years, especially against the background of the tightening of the medium-term climate targets until 2030. The governing coalition has decided that the share of renewable energies in gross electricity consumption should increase to 80% by 2030. This is 15 percentage points higher than the previous target set by the former Federal Government. The increasing feed-ins of renewable energies as well as changes in the power plant park cause an increased electrical output to be transported over ever greater distances. In addition, trade-related energy transports have increased significantly throughout Europe as a result of the liberalisation of the European energy market.

The fixed shutdown dates for nuclear power plants, the decommissioning of lignite and hard coal power plants and the expansion of renewable energies are driving the need for grid expansion. Despite the restrictions caused by the Covid-19 pandemic and the tense political situation due to the war in Ukraine, Amprion GmbH carried out major investment measures in the financial year to increase transport capacity and stabilise the transmission grid in order to be able to guarantee system security. The north-south axes of the transmission grid are continuously being expanded in order to integrate the increasing feed-in of renewable energies and to be able to provide the required transmission capacities after the shutdown of all nuclear power plants. In the financial year, the largest investments were in the Ultranet, Kruckel-Dauersberg, A-North and Bürstadt-Kühmoos projects, as well as in reactive power compensation measures.

In 2022, public law permits for more than 200 line-kilometres were issued by the permitting authorities. However, the situation in transmission line construction is tense due to the current market situation, the cost development and the availability of raw materials and assembly resources. Nevertheless, the early commissioning of installation services and appropriate stock management resulted in only minor restrictions.

Of particular note is the construction of a new 380 kV extra-high-voltage line from Ganderkesee via St. Hülfe to Wehrendorf, which Amprion GmbH is planning in cooperation with TenneT. Amprion GmbH is responsible for the approximately 33-kilometre section from St. Hülfe to Wehrendorf. The commissioning of the entire line is planned for 2023.

Another example of the high level of construction activity can be found in the Kruckel-Dauersberg project. While sections A1 and D are already well advanced or largely completed, construction work on section B has begun.

Major station construction projects include the conversion of the Bürstadt, Herberlingen and Maximiliansau stations as well as the new construction of the Leipheim switchgear to connect the special technical grid operating facilities Leipheim. Commissioning of the gas-fired power plant is planned for 2023. Further projects are located at the Gersteinwerk, Opladen, Meppen, Sankt Peter, Hanekenfähr, Rheinhausen and Oberzier stations. The measures for the construction of the Merzen station have started in the fourth quarter of 2022. Completion is planned for 2025.

Together with the southern Ultranet project from Osterath to Philippsburg, the A-North direct current connection from Emden-East to Osterath forms the western German direct current corridor A from Lower Saxony via North Rhine-Westphalia and Rhineland-Palatinate to Baden-Württemberg. The application documents are to be submitted to the **Federal Network Agency** in March 2023. In parallel, intensive consultations are taking place with the Federal

Network Agency and the Federal Ministry of Economics and Climate Protection on further acceleration of the process. Furthermore, preparatory work is being carried out in parallel along the entire route (site investigation, explosive ordnance clearance, archaeological prospection). The acquisition of land use rights has begun in Lower Saxony. In addition, regional construction partners for underground engineering have been selected to realise the project relying on integrated project delivery (IPD) methods.

In the Ultranet direct current project, the federal sectoral planning decisions for planning section E (Rommerskirchen-Weißenthurm) were fully completed in February 2022 and for section D (Weißenthurm-Riedstadt) in May 2022. For the remaining four of a total of six planning approval sections, the procedures were applied for with the Federal Network Agency. This was followed in summer 2022 by four application conferences to enter into the plan approval procedures. In the preliminary planning approval section A1 (Ried-Wallstatt), the Federal Network Agency held the hearing in July 2022 as the penultimate milestone before the planning approval decision. The application documents pursuant to Section 21 NABEG for Section C (Osterath-Rommerskirchen) are in progress. The immission control approval procedure for the construction and operation of the converter in Meerbusch-Osterath was completed by the responsible Rhein-Kreis Neuss at the end of November 2022 with the issuing of the approval notice.

As additional transport capacity from the North Sea coast to North Rhine-Westphalia, Corridor B will be realised as HVDC over a total length of 710 km, primarily as an underground cable. Commissioning is expected to take place in 2032. Corridor B with the two projects Wilhelms-haven-Hamm and Heide-West-Polsum was already included in the Federal Requirements Plan Act (Bundesbedarfsplangesetz, **BBPIG**) last year. This year, the section 6 application for federal sectoral planning was submitted for seven of eleven sections and the completeness was confirmed by the Federal Network Agency. The application will be submitted in sections and staggered from September 2022 to February 2023. The application conferences for four sections took place in November and December 2022 in accordance with Section 7 of the NABEG. The final application conference is planned for March 2023.

So-called reactive power is indispensable for voltage regulation in the transmission grid. Until now, this power has mainly been provided by the generators of the large power plants. In the course of the energy transition, many of the large power plants are going off the grid, so that their potential for controllable reactive power is no longer available to ensure a stable voltage. In addition, the utilisation of the transmission grid is increasing, especially due to the transport of offshore wind power to the south, which raises the need for reactive power as a whole. In order to enable the unhindered transport of the supply-dependent RE feed-in and flexible electricity trading in the future system, sufficient reactive power compensation plants, some of which are controllable, are required in Amprion's control area to keep the voltage stable in

any situation. In the current financial year, construction of the rotating phase shifter at the Hoheneck site has well advanced for this purpose. Commissioning is planned for 2023. Furthermore, the construction of a plant with two generators was started in Meppen. This is to be operated as a rotating phase shifter. A total of six projects for static synchronous compensators (STATCOM) are currently being implemented. In Opladen, commissioning was started in November 2022. The Gersteinwerk, Rheinau and Polsum plants are under construction. In Bürstadt, construction will start at the beginning of 2023. Furthermore, planning is underway for the construction of two phase-shifting transformers in the Hanekenfähr station. The commissioning of the phase-shifting transformers in the Oberzier station is planned for the end of 2023.

With regard to offshore investments, the first two projects DolWin4 and BorWin4 were awarded horizontal directional drilling (HDD) contracts on Norderney and in Hilgenriedersiel, with the first drilling operations on Norderney being successfully realised in 2022 in accordance with the requirements of the planning approval for the coastal sea. The successful awarding of the stations (offshore platform as well as HVDC shore station) in summer 2022 and the cable lots in autumn 2022 enabled the necessary capacities for the projects to be secured at an early stage. Within the framework of the awards, an accelerated implementation of BorWin4 with planned completion in 2028 could also be contractually enabled. The BalWin1 and BalWin2 projects were previously known as LanWin1 and LanWin3 and were renamed as part of the current land development plan. For the accelerated implementation of the projects, the manufacturing capacities for the first 2 GW offshore platforms and shore stations were secured at an early stage by awarding the respective station lots at the end of 2022.

The investment volume for the Group in the financial year totalled €1,452.2 million. Of this amount, €1,373.4 million was attributable to the *Transmission System Operation* segment (Amprion GmbH) and €78.8 million to the *Offshore Grid Connections* segment (Amprion Offshore GmbH). Compared to the previous year, investments increased by about 15%. The Group's investment obligations resulting from contracts for the acquisition of property, plant and equipment totalled €8,199.7 million as at 31 December 2022.

The investment volume in non-current assets determined on the basis of the annual financial statements of Amprion GmbH and Amprion Offshore GmbH under HGB – in contrast to the Group investments determined on the basis of IFRS – amounted to €1,479.7 million. The difference to the Group investments is mainly due to the payment of €24.0 million by Amprion GmbH into the capital reserves of Amprion Offshore GmbH in the financial year 2022, which was fully consolidated as an intra-Group transaction when preparing the consolidated financial statements. In addition, differences result from the deviating capitalisation of borrowing costs under HGB and IFRS and from the different valuation of property swap transactions. Of the total investment volume determined on the basis of the HGB annual financial statements of the two companies,

€1,402.5 million was attributable to the *Transmission System Operation* segment (Amprion GmbH), whereby this amount was below the forecast level in the 2021 Management Report of Amprion GmbH, and €77.2 million was attributable to the *Offshore Grid Connections* segment (Amprion Offshore GmbH). In addition, the total investment volume breaks down into €1,229.3 million related to expansion investments and €250.4 million to replacement and other investments.

Assets and liabilities

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ASSETS

in € million	31 Dec. 2022	31 Dec. 2021	Change
Non-current assets	8,024.0	6,752.9	1,271.1
Current assets	6,562.4	4,951.9	1,610.5
Total ASSETS	14,586.5	11,704.9	2,881.6

LIABILITIES AND EQUITY

in € million	31 Dec. 2022	31 Dec. 2021	Change
Equity	3,318.8	3,395.1	-76.3
Non-current liabilities	4,464.8	2,680.2	1,784.6
Current liabilities	6,802.9	5,629.7	1,173.3
Total LIABILITIES AND EQUITY	14,586.5	11,704.9	2,881.6

At 52.6% (previous year: 55.8%), property, plant and equipment made up the major part of the Group's assets. It mainly included **overhead lines** with voltages of 220 and 380 kV as well as primary and secondary technology in the transformer stations.

Assets from the **EEG** compensation mechanism amounting to €5,172.9 million (previous year: €4,241.6 million) made up 78.8% (previous year: 85.7%) of current assets. These were mainly liquid funds from credit balances at banks from the EEG compensation mechanism. This was set against borrowed capital in the amount of €5,168.7 million (previous year: €4,237.2 million). This mainly relates to the higher liability from the EEG compensation mechanism due to the lower expenses for market and management premiums.

The equity ratio as at 31 December 2022 was 22.8% (previous year: 29.0%). The decrease compared to the previous year resulted from the increase in non-current and current liabilities as well as a slight overall reduction in equity, which is due to the pro rata distribution of the previous year's result to the shareholders and the negative consolidated net income realised in 2022.

The increase in non-current liabilities in the current financial year is largely characterised by the first-time issuance of a green dual-tranche bond in the amount of €1,800.0 million on the international capital market.

The increase in current liabilities is mainly the result of the EEG compensation mechanism and the other apportionment processes. In accordance with IAS 1.70, trade payables and other liabilities amounting to €6,542.0 million are reported under current liabilities. Of this amount, €2,580.4 million were due later than twelve months after the reporting date.

Overall statement on the development of business and the financial situation

The Management Board of Amprion GmbH assesses the business performance and the economic situation of the Group as positive on the basis of the key financial performance indicators for Amprion. Overall, the Group's financial position can be described as solid and provides the basis for further investments in the transmission grid.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS OF AMPRION GMBH UNDER HGB

Amprion GmbH prepares its annual financial statements in accordance with the provisions of the HGB. The financial statements are submitted to Bundesanzeiger Verlag GmbH and published in the Bundesanzeiger. They are also made available on the Amprion website.

Balance sheet of Amprion GmbH

HGB balance sheet

ASSETS

in € million	31 Dec. 2022	31 Dec. 2021	Change
Non-current assets			
Intangible assets	41.0	37.0	4.0
Property, plant and equipment	7,370.3	6,298.9	1,071.4
Financial assets	56.3	32.4	23.9
Total non-current assets	7,467.6	6,368.3	1,099.3
Current assets			
Inventories	81.4	63.9	17.5
Receivables and other assets	1,122.3	1,318.6	-196.3
Cash and cash equivalents	5,544.6	3,576.4	1,968.2
Total current assets	6,748.3	4,958.9	1,789.4
Prepaid expenses	5.6	3.9	1.7
Total ASSETS	14,221.5	11,331.1	2,890.4

LIABILITIES AND EQUITY

in € million	31 Dec. 2022	31 Dec. 2021	Change
Equity			
Subscribed capital	10.0	10.0	0.0
Jouissance rights capital	28.1	24.2	3.9
Additional paid-in capital	1,403.0	1,403.0	0.0
Retained earnings	963.5	909.9	53.6
Net profit	213.4	183.6	29.8
Total equity	2,618.0	2,530.7	87.3
Special items	25.3	26.6	-1.3
Provisions and accruals	623.5	904.5	-281.0
Liabilities	10,302.3	7,300.3	3,002.0
Deferred income	369.2	358.0	11.2
Deferred tax liabilities	283.2	211.0	72.2
Total LIABILITIES AND EQUITY	14,221.5	11,331.1	2,890.4

Income statement of Amprion GmbH

HGB income statement

in € million	2022	2021	Change
Revenue	11,941.6	12,502.3	-560.7
Change in inventory of work in progress	5.5	0.3	5.2
Other own work capitalised	153.1	99.8	53.3
Other operating expenses	37.0	34.8	2.2
Cost of materials	-11,003.7	-11,619.2	615.5
Personnel expenses	-286.4	-256.6	-29.8
Depreciation and amortisation	-258.9	-243.5	-15.4
Other operating expenses	-186.2	-153.7	-32.5
Financial result	-83.2	-100.3	17.1
Profit before taxes	318.8	263.9	54.9
Income taxes	-105.4	-80.3	-25.1
Profit after taxes (net profit)	213.4	183.6	29.8

Assets and liabilities

Amprion GmbH's total assets amounted to €14.2 billion as at 31 December 2022 (previous year: €11.3 billion). Liabilities have increased significantly. This increase in the current fiscal year is mainly due to the first-time issue of a green dual-tranche bond in the amount of €1,800 million on the international capital market. In addition, there are higher liabilities from the EEG compensation mechanism. The items property, plant and equipment and cash and cash equivalents also increased significantly.

Financial position

Cash and cash equivalents at 31 December 2022 amounted to €5.5 billion (prior year: €3.6 billion). The increase in the current fiscal year is mainly due to the EEG compensation mechanism and the raising of long-term debt capital on the international capital market. Investments in the transmission grid had an opposing effect.

Earnings position

The net income of Amprion GmbH amounted to €213.4 million in 2022 (previous year: €183.6 million). The improvement in the result of €29.8 million compared to the previous year is primarily due to higher income from capital costs for investment measures as a result of the high level of investment activity as well as the first-time recognition of a regulatory claim from negative balances in the regulatory account. The activation of the regulatory entitlement offset the increase in costs for system services. The first-time capitalisation of interest on borrowed capital also supported the result.

OUTLOOK, OPPORTUNITIES AND RISK REPORT

Outlook

Grid business

In 2023, the fifth and final step in the unification of national grid charges at the transmission grid level will take place. Thus, they will be fully harmonised from 2023 onwards.

In its decision of 20 December 2018, the **Federal Network Agency** set the revenue cap for the third regulatory period from 2019 to 2023 on the basis of 2016 costs. Amprion GmbH filed an appeal against the decision on 25 January 2019. The OLG Düsseldorf dismissed the appeal in its decision of 13 May 2020. Amprion GmbH appealed against this decision to the Federal Supreme Court.

The fixed starting level and the development of the permanently uncontrollable costs and the overall consumer price index as well as the general productivity factor and the individual efficiency value are the basis for the network charges that were published on 14 December 2021. The revenue cap 2023 increased due to the following developments:

- Higher costs for system services due to rising prices,
- Contracting of a special network technical resource and rotating phase shifter,
- Higher costs from approved investment measures due to the ongoing grid expansion.

Counteracting effects are:

- Removal of individual lignite-fired power plants from the security reserve and falling costs for the capacity reserve.

The aforementioned changes are not or only partially within Amprion's sphere of influence and lead to an increase of approx. 6.9% in the grid charges in the extra-high-voltage grid level in the usage hour range between 5,000 and 8,760 hours, which is relevant for the majority of customers. The only slight increase in grid fees compared to the previous year is mainly due to the inclusion of a federal subsidy to relieve the transmission grid fee.

System services

Amprion GmbH continues to procure balancing power jointly with the other German TSOs in accordance with the requirements of the Federal Network Agency. It is assumed that expenses will increase.

The tender for the long-term component for loss energy has been fully completed for the year 2023. Significantly higher expenses are expected due to increased prices and volumes.

Significantly increasing expenses for congestion management from redispatch and grid reserve measures are expected for 2023. The main reasons are high fuel prices and high unavailability of nuclear power plants in France.

Investments

The national network development plan Netzentwicklungsplan, **NEP** is the basis for the project planning of the four German TSOs. The projects included in the NEP confirm the energy industry necessity and their urgent need. The final confirmation of the current NEP 2035 (version 2021) was made by the Federal Network Agency on 14 January 2022, which specified important new offshore grid connection systems and HVDC projects from northern Germany to the load centres for Amprion. These grid expansion measures support the German government's goals of further accelerating the expansion and grid integration of renewable energies.

Currently, the German TSOs are working on the first draft of the NEP 2037 (version 2023), which is expected to be published at the end of the first quarter of 2023. The NEP 2037 covers the time horizons 2037 and 2045 with a total of six scenarios and takes into account the current energy policy goals of the German government. The long-term scenario 2045 is particularly focused on the goal of climate neutrality for Germany. Here, two transformation paths on the way to a climate-neutral energy system in 2045 are considered: on the one hand, the increased use of hydrogen in the energy system (scenario A) and, on the other hand, direct electrification with different levels of efficiency potential (scenarios B and C). Compared to the NEP 2035 (version 2021), the installed capacities for renewable energies in the long-term scenario increase to up to approx. 700 GW. The expected load increase due to sector coupling and the decarbonisation of the industrial sector is also mapped in the scenario framework. Overall, gross electricity consumption increases by 2.5 times to 1,300 TWh in scenario C2045 compared to the previous year. The TSOs plan to publish the second draft of the NEP 2037 (version 2023) on 8 June 2023.

In addition, the update of the area development plan at the beginning of 2023 will reflect the new legislative targets for offshore expansion for 2030, 2035 and 2040. The offshore project portfolio of Amprion Offshore GmbH will be updated accordingly with regard to the completion dates and expanded to include further grid connection systems up to the climate-neutral grid in 2045. This will then in turn be taken into account in the **NEP** 2037.

Overall, expansion in both the onshore and offshore sectors will accelerate in the coming years.

At European level, Amprion is contributing to the Ten-Year Network Development Plan (TYNDP). This determines the need for cross-border network expansion. The results of the process are integrated into the German network development plan, which is incorporated into legislation and defines Amprion's investments in the long term. In addition, the TYNDP identifies Projects of Common Interest (PCI) to optimise overall European welfare. In December 2021, the 5th PCI list was published based on the TYNDP 2020. The scenarios for the TYNDP 2022 with the planning horizon 2025-2050 were finalised in January 2022. Preparations for the next PCI cycle are underway via the EC/ACER/ENTSO-E cooperation platform. In this context, the already known Amprion projects are also proposed again for the 6th PCI list: Ultranet (together with TransnetBW), A-North and Corridor B.

The planned investment volume for the property, plant and equipment of Amprion GmbH until 2027 consists of expansion and replacement investments and amounts to around €10.5 billion.

Amprion Offshore GmbH plans to invest around €7.1 billion by 2027. This includes the award of contracts for the DolWin4 and BorWin4 projects as well as BalWin1 and BalWin2.

Thus, the total investment volume planned for the Group for the period 2023 to 2027 adds up to around €17.6 billion.

Revenue and net income

For the revenue performance indicator, we expect revenue in the HGB annual financial statements of Amprion GmbH for the 2023 financial year to be at the level of the previous year. Revenues from the grid business will increase, primarily due to the refinancing of the higher costs for system services. Conversely, the revenue from the renewable energy business, which has no impact on Amprion's earnings, will fall in line with the EEG expenses.

In the HGB annual financial statements of Amprion GmbH, we expect net income for the 2023 financial year to be slightly above the level of the previous year.

Overall statement on the future development of the Group

Due to the regulatory framework conditions, the Management Board of Amprion GmbH assumes that business will continue to develop positively and that the Group's net asset, financial and earnings positions will remain stable in 2023.

Opportunities and risk report

Group-wide risk management system

Amprion's group-wide risk management is an integral part of the group-wide early warning system. In addition to the risk management system, it consists of the internal audit, the internal control system and the compliance management system. Group-wide risk management includes comprehensive process and structural organisational measures and records all relevant risks from the various divisions directly or via interfaces.

The purpose of group-wide risk management is to identify, assess, control, record in a standardised manner, report and monitor risks at an early stage that could have an impact on earnings and liquidity and subsequently affect the asset, financial and earnings situation or even jeopardise the Group's continued existence. The risk management committee, which consists of the Management Board, the heads of the organisational units of the second reporting level and the chairperson, is responsible for the control and monitoring of the group-wide risk management.

The Group-wide risk management serves as an information base for the Management Board, the Supervisory Board and the shareholders to assess the overall risk situation of the company. In addition to regular reporting, individual cases are reported immediately to the decision makers in the event of significant negative changes. The risk management process is intended to strengthen risk awareness, enable early detection of all risks and thus create transparency about the overall risk situation.

The term “risk” is generally defined as a deviation from a projected value that can negatively influence the future development of the Group’s economic situation. Particular focus is placed on risks aimed at ensuring solvency at all times, maintaining an economically appropriate equity base and generating a stable annual HGB result.

Risk identification includes a structured inventory of potential risks in all operational processes and functional areas. These are analysed, evaluated and differentiated according to their effect into profit and liquidity risks. In addition, operational risks are considered where a measurable financial impact cannot be quantified directly and/or indirectly. In the risk assessment, causes are determined and early warning indicators, risk control and prevention measures, damage amounts and probabilities of occurrence of the risks are analysed. The goal of risk management is to reduce the amount of damage or the probability of occurrence of existing risks or – as far as possible – to avoid risks.

The principles, processes, responsibilities and procedural descriptions of the risk management process are documented in rules and regulations and are made available to all employees. The risk management process is regularly analysed and adjusted if necessary.

Significant opportunities and risks

The main opportunities and risks to which Amprion is exposed are described below. Due to the regulated business and legal requirements, the opportunity and risk profile is limited.

Regulation and legislation

Regulatory risks arise from European and national legislative changes that can have a significant impact on the net assets, financial and earnings positions. Amprion follows and accompanies the legislative processes in order to take advantage of possible opportunities for the economic stability of the regulated grid business and to limit burdens for the Group.

Grid fees are subject to regulation by the **Federal Network Agency**. The approvals or decisions of the Federal Network Agency can have a positive or negative impact on the net assets, financial and earnings positions. This includes, in particular, the determination of the equity interest rate, which has a significant influence on the economic development, as well as the determinations of the productivity factors. A central point is the approval practice for the cost audits, as this determines the basis of the grid charges for a regulatory period. The determination of the grid charges is based on forecast sales volumes. In the event of an unplanned deviation in quantities due to external factors (e.g. weather, economic situation, decentralised generation), additional or reduced revenues arise which are to be recorded in the regulatory account and taken into account in the future grid charges. The forecast costs can deviate from the costs actually incurred in the current year and thus influence the earnings and liquidity situation. Long-term risks and opportunities from these deviations are limited due to the regulatory norms and do not generally have a lasting impact on Amprion's earnings and liquidity situation.

Further risks can arise if investment measures are only partially recognised by the Federal Network Agency, because these can lead to lower calculatory costs and thus lower revenues from grid charges. This risk is counteracted by cost control and cost verification of the investment measures vis-à-vis the Federal Network Agency.

Investments and grid operation

The Group is implementing a large number of projects for the expansion and maintenance of the transmission grid, which require high levels of investment. These projects can give rise to risks for the Group. Postponements of projects, unscheduled higher costs or changes in technical requirements can have an impact on the Group's financial position, financial performance and cash flows. Amprion counters these risks through comprehensive project risk management.

Amprion fulfils its legal mandate to operate a safe, reliable and efficient transmission grid. Accordingly, the asset portfolio and the processes for developing and planning, projecting, constructing and operating the transmission grid are reviewed regularly and, in particular, on an ad hoc basis to determine whether there are any relevant technical risks. On the basis of a well-founded analysis, technical risks are managed in an appropriate and technically and economically optimised manner.

Market price risks

Market price risks arise from changes in market prices and include energy, capital and commodity markets. For example, energy price risks can result in costs for system services that are higher than planned and calculated in the grid fees. Interest rate risks can have a negative impact on the valuation of balance sheet items and thus also negatively affect the earnings situation.

Commodity price risks can materialise, for example, in a higher need for financial resources for maintenance and investments.

Liquidity risks

Amprion is exposed to liquidity risks in connection with its short-term financial obligations. For Amprion, these consist of not being able to meet its upcoming payment obligations in full or on time. A key objective is therefore to ensure full solvency at all times through centralised group-wide liquidity management.

With the accounting separation of the EEG and grid business, liquidity management and liquidity risks are also considered separately. In order to control and monitor liquidity risks, the planned liquidity development for the EEG and grid business is determined and subjected to a stress test with various risk scenarios. For the liquidity risk from the grid business, the risks at company level are used for this purpose. For the liquidity risk from the EEG business, the stress test is carried out using a risk scenario whose parameters are specified by an independent expert. The liquidity trends subject to the stress tests are compared with the available liquid funds and credit lines. This makes it possible to identify liquidity bottlenecks at an early stage.

Financing

Amprion has a permanent funding requirement for its onshore and offshore investment projects in the coming years. There is a risk that the liquidity required for this may not be available either at attractive conditions or through external – public or private – financing channels. Events with negative effects on the national and international capital markets may have a negative impact on the general availability of funds and the financing costs for Amprion.

Default risks

Default risks arise when a business partner does not fulfil its payment or delivery obligations or does not fulfil them sufficiently, which results in a financial loss. At the same time, the default risk of business partners is partially limited due to contractual regulations in that appropriate securities or advance payments can be demanded in justified cases. Default risks are largely avoided through credit checks, continuous receivables management and the collection of collateral. In addition, the vast majority of grid fees are collected by the distribution grid operators, who are also subject to regulation, which means that the associated default risk is currently considered to be low.

Other significant risks

Other risks of a general nature can arise from natural disasters, pandemics and similar events. In extreme cases, emergency plans and precautionary measures help to maintain safe network operations and avert dangers for the Group, customers and employees.

Risks from the area of information security and from the IT environment are monitored via specialised risk management systems. The Group operates an information security management system (ISMS), which also includes the assessment of risks to the information security of processes. As Amprion's processes are increasingly supported by information technology (IT), specialised IT risk management is required to ensure the stability of the processes. For this purpose, the relevant IT risks are identified, treated with appropriate and economically reasonable measures and permanently monitored.

In the course of further growth and in view of the demanding tasks in the Group, the need for qualified personnel is also increasing in order to be able to achieve the company's goals. Measures to increase employer attractiveness are intended to counter the risk of not being able to recruit the necessary number of qualified personnel.

Overall statement on risks

In the 2022 business year, there were no discernible risks that could individually or collectively jeopardise the continued existence of the Group. From today's perspective, there are also no risks that could threaten the existence of the Group in the foreseeable future.

ACCOUNTING-RELATED INTERNAL CONTROL AND RISK MANAGEMENT SYSTEM

The aim of the accounting-related internal control and risk management system is to ensure that the accounting process complies with legal requirements and generally accepted accounting principles. Amprion's accounting-related internal control and risk management system (ICS) defines principles, procedures and measures that ensure the integrity of the (group) accounting process. The system is based on the international standard "Enterprise Risk Management – Integrated Frameworks" of the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and the COSO model named after it.

The regulations are summarised in a guideline, which is supplemented by work instructions. In addition, the specific accounting-related risks are presented in a control matrix with the fields of action and responsibilities as part of the guideline. This is regularly reviewed to ensure that it is up to date. Risk identification and risk assessment are carried out in consideration of the accounting processes and the risk management system with the involvement of all operative units of the accounting department.

One or more specific manual and/or system controls are assigned to each of the identified risks. The quantitative (materiality per balance sheet item) and qualitative (complexity and discretionary scope) assessment of the risks determine the intensity of the controls. Some of these controls serve the purpose of ex-post verification – namely, ensuring the accuracy and completeness of the financial statements (ex-post controls). Other control activities, however, have a preventive character in order to secure risky processes in advance and to reduce the system's susceptibility to errors (ex-ante controls). The combination of ex-post and ex-ante controls ensures a robust accounting process overall.

Important control measures of the accounting-related internal control and risk management system are:

- Four-eyes principle applied throughout,
- Separation of functions and assignment of responsibilities,
- Graduated release strategies,
- Use of standard business software for accounting with a comprehensive authorisation concept to avoid fraudulent actions,
- IT access restrictions based on the principle of separation of functions to prevent unauthorised access to data.

The accounting-related internal control and risk management system includes the central documentation of control activities and reporting to the Head of Accounting, who is responsible for initiating further measures if necessary. In addition, there is a regular exchange with the internal control system officer and with Amprion's risk management.

DECLARATION OF AMPRION GMBH ON CORPORATE GOVERNANCE PURSUANT TO SECTION 289F (4) HGB

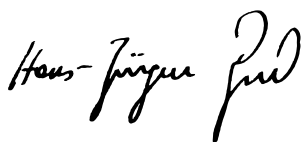
The target quotas for the proportion of women to be achieved by 30 June 2022 were set in 2017 at 0.0% for the Management Board of Amprion GmbH and 6.7% for the two management levels below the Management Board. These target quotas have been achieved within the implementation period.

A target quota for the proportion of women on the Supervisory Board of Amprion GmbH of 25.0% has been set – to be achieved by 1 December 2025.

The number of women was set to one as the target for the proportion of women among the managing directors of Amprion GmbH to be achieved by 30 June 2027 in 2022. A target quota of 17.6% was set for the first management level below the Management Board and a target quota of 10.9% for the second management level. These are also to be achieved by 30 June 2027.

Dortmund, 27 March 2023

The Management Board



DR HANS-JÜRGEN BRICK



PETER RÜTH



DR HENDRIK NEUMANN

IFRS CONSOLIDATED FINANCIAL STATEMENTS

of Amprion GmbH, Dortmund,
for the financial year 2022

Note

This document is a translation of the German version. In case of uncertainty or conflict, the German version shall prevail.

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CONSOLIDATED INCOME STATEMENT FOR THE AMPRION GROUP

For the financial year ended 31 December 2022

in € million	Note	2022	2021
Revenue	[1]	3,512.6	2,571.8
Change in work in progress		0.0	0.0
Other own work capitalised		153.5	117.5
Other operating income	[2]	9.8	4.1
Cost of materials	[3]	-2,883.1	-1,611.8
Personnel expenses	[4]	-297.1	-268.0
Other operating expenses	[5]	-145.3	-124.7
Earnings before interest, taxes, depreciation and amortisation (EBITDA)		350.5	688.8
Depreciation and amortisation	[6]	-419.9	-473.4
Earnings before interest and taxes (EBIT, operating profit)		-69.4	215.5
Financial result	[7]	-10.9	-13.1
<i>of which financial income</i>	[7]	3.8	1.0
<i>of which financial expenses</i>	[7]	-14.8	-14.1
Earnings before taxes (EBT)		-80.4	202.4
Income taxes	[8]	19.9	-63.8
Consolidated net income		-60.4	138.6

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME FOR THE AMPRION GROUP

For the financial year ended 31 December 2022

After-tax figures

in € million	Note	2022	2021
Consolidated net income		-60.4	138.6
Revaluation of defined benefit pension obligation and similar obligations	[19]	114.1	32.2
Total income and expenses recognised in equity (other comprehensive income, OCI)	[19]	114.1	32.2
<i>Income and expenses recognised in equity, not to be reclassified through profit or loss</i>		114.1	32.2
<i>Income and expenses recognised in equity, to be reclassified through profit or loss in the future</i>		0.0	0.0
Consolidated comprehensive income		53.7	170.9

CONSOLIDATED BALANCE SHEET FOR THE AMPRION GROUP

As at 31 December 2022

ASSETS

in € million	Note	31 Dec. 2022	31 Dec. 2021
Non-current assets			
Property, plant and equipment	[9]	7,665.8	6,526.0
Right-of-use assets	[10]	141.3	184.5
Intangible assets	[11]	41.0	37.1
Financial assets	[12]	5.3	5.3
Net defined benefit asset	[20]	170.7	0.0
Deferred tax assets	[23]	0.0	0.0
Total non-current assets		8,024.0	6,752.9
Current assets			
Inventories	[13]	70.1	58.1
Trade receivables and other receivables	[14]	846.6	1,240.5
Other financial assets	[15]	23.0	1,461.3
Income tax claims	[16]	82.0	65.3
Other non-financial assets	[17]	7.2	5.2
Cash and cash equivalents	[18]	5,533.4	2,121.5
Total current assets		6,562.4	4,951.9
Total ASSETS		14,586.5	11,704.9

LIABILITIES AND EQUITY

in € million	Note	31 Dec. 2022	31 Dec. 2021
Equity			
Subscribed capital	[19]	10.0	10.0
Additional paid-in capital	[19]	1,403.0	1,403.0
Retained earnings	[19]	1,856.8	1,848.2
Accumulated other comprehensive income	[19]	109.3	- 4.8
Consolidated net income	[19]	- 60.4	138.6
Total equity		3,318.8	3,395.1
Non-current liabilities			
Provisions	[20]	33.1	72.1
Financial liabilities			
Financial debt	[21]	3,688.5	1,889.4
Other financial liabilities	[21]	73.9	44.6
Non-financial liabilities	[22]	48.9	53.4
Deferred tax liabilities	[23]	620.4	620.7
Total non-current liabilities		4,464.8	2,680.2
Current liabilities			
Provisions	[20]	111.9	82.2
Financial liabilities			
Financial debt	[21]	25.2	126.0
Trade payables and other liabilities	[24]	6,542.0	5,248.4
Other financial liabilities	[21]	73.5	144.5
Non-financial liabilities	[22]	50.4	28.6
Total current liabilities		6,802.9	5,629.7
Total LIABILITIES AND EQUITY		14,586.5	11,704.9

CONSOLIDATED CASH FLOW STATEMENT FOR THE AMPRION GROUP

For the financial year ended 31 December 2022

1. Operating activities

in € million	Note	2022	2021
EBIT (per income statement)		-69.4	215.5
Depreciation/amortisation	[6], [9], [10], [11]	419.9	473.4
Change in provisions	[20]	-8.2	-11.3
Income from disposals of non-current assets	[2], [5]	14.2	13.3
Other non-cash expenses/income	[28]	-5.4	4.0
Changes in assets and liabilities from operating activities			
Inventories	[13]	-12.1	11.6
Net value of trade receivables and trade payables	[14], [24]	1,685.4	5,170.2
Net value of other assets and liabilities	[14], [15], [17], [21], [22], [24]	22.4	-35.5
Income tax paid	[8], [16]	-49.9	-61.5
Operating cash flow		1,996.8	5,779.6
<i>of which from grid business</i>		<i>443.4</i>	<i>788.9</i>
<i>of which from EEG business</i>		<i>1,553.4</i>	<i>4,990.7</i>

2. Investing activities

in € million	Note	2022	2021
Investments in intangible assets and property, plant and equipment	[7], [9], [11]	-1,420.9	-1,237.9
Sales of intangible assets and property, plant and equipment	[2], [5], [9], [11]	31.8	25.8
Investments in other financial assets	[12]	0.1	0.1
Interest received	[7]	9.8	0.3
Dividends received	[7]	0.7	0.6
Inflows/outflows of cash and cash equivalents for short-term liquidity management	[15]	1,450.0	-1,450.0
Cash flow from investing activities		71.4	-2,661.2
<i>of which from grid business</i>		<i>-1,385.5</i>	<i>-1,211.2</i>
<i>of which from EEG business (cash inflows and outflows for short-term liquidity management)</i>		<i>1,457.0</i>	<i>-1,450.0</i>

3. Financing activities

in € million	Note	2022	2021
Interest paid	[7]	-49.4	-43.1
Dividends paid	[19]	-130.0	-123.2
Entering into financial liabilities	[21]	1,998.5	2,082.3
Redemption of lease liabilities	[10]	-158.1	-226.3
Redemption of financial liabilities	[21]	-200.2	-1,275.2
Cash inflow from capital increases	[19]	0.0	0.0
Inflows/outflows for short-term liquidity management	[21]	-116.9	-1,411.4
Cash flow from financing activities		1,343.7	-996.9
<i>of which from grid business</i>		<i>1,362.0</i>	<i>422.8</i>
<i>of which from EEG business (cash inflows and outflows for short-term liquidity management and interest payments)</i>		<i>-18.2</i>	<i>-1,419.7</i>
Net change in cash and cash equivalents		3,412.0	2,121.5
Cash and cash equivalents at start of period	[18]	2,121.5	0.0
Cash and cash equivalents at end of period	[18]	5,533.4	2,121.5
<i>of which from grid business</i>		<i>420.3</i>	<i>0.5</i>
<i>of which from EEG business</i>		<i>5,113.1</i>	<i>2,121.0</i>

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FOR THE AMPRION GROUP

For the financial year ended 31 December 2022

in € million	Subscribed capital	Additional paid-in capital	Retained earnings
As at 1 January 2021	10.0	1,403.0	1,536.9
Transactions with shareholders	0.0	0.0	-23.2
<i>of which cash inflows from share offerings</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>of which dividend distributions</i>	<i>0.0</i>	<i>0.0</i>	<i>-23.2</i>
Deposited net income for the previous year	0.0	0.0	334.5
Consolidated net income, current year	0.0	0.0	0.0
Other comprehensive income, current year	0.0	0.0	0.0
As at 31 December 2021	10.0	1,403.0	1,848.2
As at 1 January 2022	10.0	1,403.0	1,848.2
Transactions with shareholders	0.0	0.0	0.0
<i>of which cash inflows from share offerings</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>of which dividend distributions</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
Deposited net income for the previous year	0.0	0.0	8.6
Consolidated net income, current year	0.0	0.0	0.0
Other comprehensive income, current year	0.0	0.0	0.0
As at 31 December 2022	10.0	1,403.0	1,856.8

CONSOLIDATED FINANCIAL STATEMENTS CONSOLIDATED STATEMENT
OF CHANGES IN EQUITY

	Consolidated net income	Accumulated other comprehensive income (OCI)	Total equity
	434.5	-37.1	3,347.4
	-100.0	0.0	-123.2
	0.0	0.0	0.0
	-100.0	0.0	-123.2
	-334.5	0.0	0.0
	138.6	0.0	138.6
	0.0	32.2	32.2
	138.6	-4.8	3,395.1
	138.6	-4.8	3,395.1
	-130.0	0.0	-130.0
	0.0	0.0	0.0
	-130.0	0.0	-130.0
	-8.6	0.0	0.0
	-60.4	0.0	-60.4
	0.0	114.1	114.1
	-60.4	109.3	3,318.8

NOTES

to the IFRS consolidated financial statements 2022 of the Amprion Group

BASIS OF PRESENTATION

Amprion GmbH (“the company” or “the parent company”) is a German limited liability corporation headquartered at Robert-Schuman-Straße 7 in 44263 Dortmund. It is registered with the District Court of Dortmund under number HRB 15940. The company operates as an independent transmission system operator (TSO) in Germany in accordance with the Energy Industry Act (**EnWG**) and is therefore responsible for the security and stability of the German energy supply system. Accordingly, in line with its statutory mandate, it is responsible for the non-discriminatory operation, maintenance, demand-driven optimisation, reinforcement and expansion of a secure, reliable and efficient energy supply network. The object of the company associated with these tasks is, on the one hand, the construction, operation, acquisition, marketing and use of network facilities and other transport and distribution systems for electricity. On the other hand, it includes the procurement of control and loss compensation energy as well as the provision and marketing of services in these areas.

Amprion GmbH is the parent company of Amprion Offshore GmbH, which as the sole subsidiary together with Amprion GmbH forms the Amprion Group (hereinafter also referred to as “Amprion” or “the Group”). Amprion GmbH prepares its consolidated financial statements in accordance with Section 315e (1) of the German Commercial Code (Handelsgesetzbuch – HGB) and with the International Financial Reporting Standards (IFRS) as they are to be applied in the European Union (EU) at the reporting date. The mandatory interpretations of the International Financial Reporting Standards Interpretations Committee (IFRS IC) are taken into account in equal measure.

IFRS and interpretations of the IFRS IC already approved by the International Accounting Standards Board (IASB) but not yet endorsed by the EU are not applied. The IFRS consolidated financial statements of Amprion thus comply with those IFRS and interpretations adopted by the IASB and endorsed by the EU, the application of which is mandatory as at the reporting date. Furthermore, the requirements of Section 315e (1) HGB are also met.

These IFRS consolidated financial statements have been prepared by Amprion GmbH in full compliance with the IFRS required to be applied in the EU as at the reporting date (here and hereinafter 31 December 2022).

The consolidated financial statements were prepared under the going concern principle. This is based on the assumption that the company has sufficient resources to continue business operations for at least one year from the reporting date and that management intends to do so.

The consolidated financial statements have been based on historical costs for acquisition or production as the central measurement basis, unless specific IFRS require a deviation from this principle. The relevant details can be found in the chapter *Accounting policies – Significant accounting policies*.

The amounts in the consolidated financial statements are specified either in million euros (€million) or thousand euros (€thousand), whereby this is noted accordingly. Numbers are rounded to one decimal place, whereby rounding differences can occur for single values and totals due to the calculation methods applied.

The IFRS consolidated financial statements of Amprion are based on a separate presentation of the consolidated income statement and the consolidated statement of comprehensive income (*two-statement approach*), the consolidated balance sheet, the consolidated cash flow statement and the consolidated statement of changes in equity.

For the sake of clarity, individual items have been combined in the consolidated balance sheet and in the consolidated income statement. These are presented and explained separately in the notes to the consolidated financial statements.

The consolidated income statement is presented using the nature of expense method.

The consolidated financial statements are prepared as at the same date as the parent company's financial statements, with the parent company's fiscal year being the calendar year. It contains complete comparative information for the previous reporting period (1 January 2021 to 31 December 2021).

For a presentation of the Amprion Group's core activities, please refer to Note [26], *Segment reporting*.

The consolidated financial statements of Amprion GmbH for the financial year ending on 31 December 2022 were prepared on 27 March 2023 and released for publication by management resolution. Approval by the Supervisory Board is scheduled for 12 April 2023.

ACCOUNTING POLICIES

Applied accounting principles

The accounting principles presented below form the basis for recognition and measurement of business transactions and balance sheet items in the Group's consolidated financial statements. In addition, the significant assumptions, estimates and judgements associated with the accounting policies applied that had to be made in the preparation of the IFRS consolidated financial statements are described. Those accounting principles regarded by Amprion as immaterial for the fair presentation of assets, liabilities and financial and earnings positions of the Group are not described in the consolidated financial statements. From the Group's perspective, a matter is considered material if it is likely to affect the economic decisions of the primary users of the IFRS consolidated financial statements.

Principles and scope of consolidation

Investments in subsidiaries

The Amprion consolidated financial statements comprise the financial statements of Amprion GmbH and its sole subsidiary, Amprion Offshore GmbH, as at 31 December 2022. Amprion Offshore GmbH with its headquarters in Dortmund was founded by Amprion GmbH in 2019, which has since held 100% of the capital and voting rights in the subsidiary.

The qualification as a subsidiary requires the control of the investee, in this case Amprion Offshore GmbH, by the parent or the Group parent (Amprion GmbH).

Control is deemed to exist when the Group (the investor) is exposed to variable returns from its involvement with or interest in the investee and has the ability to use its power over the investee to affect those returns. In detail, the existence of control requires the cumulative fulfilment of three control criteria, according to which the investor

- has power over the investee by virtue of its rights to direct the relevant activities of the investee (i.e. those activities that significantly affect its returns),
- is exposed, or has rights, to variable returns from the investee,
- can influence the returns of the investee through its power over the investee.

Generally, a majority of voting rights held by the investor is accompanied by a rebuttable assumption of control over the investee. When assessing whether the investor can exercise power over the investee, the investor must also take into account all other control-relevant facts and circumstances. Examples of these include:

- Contractual agreements with others entitled to vote (e.g. voting trust agreements),
- Rights resulting from other contractual agreements,
- Voting rights and potential voting rights of the Group.

If such facts and/or changes in circumstances indicate that at least one of the three control criteria may have changed, the investor shall reassess whether it controls the investee.

A subsidiary is to be fully consolidated in the consolidated financial statements of the parent company (full consolidation) for the first time on the day on which the parent company obtains control over the subsidiary. When fully consolidated, the assets, liabilities, income and expenses of a subsidiary are recognised in the consolidated financial statements. The obligation to fully consolidate ends when the investor loses control over the subsidiary.

With regard to applied accounting principles, statements from subsidiaries are to be aligned with those of the Group. Accordingly, the statements included in the consolidated financial statements for both companies are based on the common, Group-wide accounting policies of Amprion.

All intercompany transactions (i.e. assets and liabilities, equity, income and expenses, and cash flows resulting from transactions between Group companies) are eliminated within the scope of full consolidation of investments, liabilities, income and expenses, and the elimination of intercompany profits and losses.

Changes in the ownership interest in a subsidiary that do not result in a loss of control by the parent or the Group parent are accounted for as equity transactions between owners. In case of loss of control over the subsidiary, the connected assets (including any goodwill), liabilities, non-controlling interests and other equity components are derecognised. A resulting profit or loss is reflected in the income statement as a result of deconsolidation. Any investment in the investee remaining at the time of loss of control is measured at fair value.

Investments in associates and joint ventures

An associate is an entity (investee) over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee without controlling it or managing it jointly with other parties. However, when an investee is managed jointly with other parties, it is considered a joint venture. The criteria to assess whether significant influence or joint control exists are similar to those required to determine control of subsidiaries.

Scope of consolidation

As at the reporting date and in the previous year, the scope of consolidation of the Amprion Group consists solely of Amprion GmbH as the parent company and the fully consolidated Amprion Offshore GmbH as its only subsidiary.

Associates, joint operations and joint ventures in which the Group has an interest

The Group did not hold any shares in associates or joint ventures as at the reporting date or in the previous year.

The Group is involved in joint arrangements, classified as joint operations, to operate shared lines. Amprion establishes shared lines that become the property of both the Group and third parties outside the Group in contractually defined proportions (fractional ownership). In connection with these jointly owned assets, the Group recognises its share of the assets, liabilities, expenses and income, which are accounted for in accordance with the relevant IFRS.

Usually Amprion bears sole responsibility for the construction of the joint lines in accordance with the contractual agreement. The Group is reimbursed by the third party for the construction costs incurred for the share that is transferred to the fractional ownership of the third party involved. Therefore, the Group recognises revenue from contracts with customers in accordance with IFRS 15 in the amount of the corresponding remuneration or cost reimbursement.

Companies with significant influence on the Amprion Group

M31 Beteiligungsgesellschaft GmbH & Co. Energie KG held 74.9% (previous year: 74.9%) of Amprion GmbH at the end of the reporting year. Its shareholders consist of a consortium of predominantly German institutional financial investors from the insurance industry and pension funds.

The remaining shares in Amprion GmbH amounting to 25.1% (previous year: 25.1%) as at the reporting date and in the previous year were held by RWE Aktiengesellschaft, a listed energy supply group headquartered in Essen.

Significant accounting policies

[a] Classification as current and non-current

An asset shall be classified as current if

- realisation of the asset is expected within the normal business cycle, or
- the asset is held for sale or consumption during this period, or
- the asset is held primarily for trading purposes, or
- realisation of the asset is expected within twelve months after the reporting date, or
- the asset is cash or cash equivalent and is not restricted from being exchanged or used to settle a liability for a period of at least twelve months after the reporting date.

In distinction to the preceding definition of current assets, all other assets are classified as non-current assets.

A liability is to be classified as current if

- fulfilment of the liability is expected within the normal business cycle, or
- the liability is held primarily for trading purposes, or
- fulfilment of the liability is expected within twelve months after the reporting date, or
- the company does not have an unconditional right to postpone fulfilment of the liability by at least twelve months after the reporting date.

In distinction to the preceding definition of current liabilities, all other liabilities are classified as non-current liabilities.

Deferred tax assets and deferred tax liabilities shall be reported as non-current assets or liabilities.

[b] Fair value measurement

The Group measures its equity shares in other companies at fair value at each reporting date. Financial instruments, i.e. financial assets and financial liabilities, are generally to be measured at fair value at initial recognition, whereby an adjustment for transaction costs is required depending on the relevant subsequent measurement method. In addition, the fair values of financial instruments that are not subsequently measured at fair value are required to be disclosed in the notes to the consolidated financial statements.

The fair value is the price between market participants that was/would be accepted in an orderly business transaction for the sale of an asset, or was/would be paid for the transfer of a liability. When measuring the fair value, it is assumed that the business transaction within which the asset is sold or the liability is transferred

- predominantly takes place on the principal market for the asset or the liability, or
- only if no principal market exists, is applied to the most advantageous market for the asset or the liability.

The prerequisite is that the Group has access to the principal market or to the most advantageous market.

Measuring the fair value of an asset or a liability is based on the assumptions that anonymous expert market participants would use when pricing the asset or liability, assuming that they act in their economic best interests.

If the fair value is determined for a non-financial asset, the most economically sensible and best possible usage is to be assumed. This perspective also includes the sale of the asset to another market participant, who would be able to put the asset to its most economically rational and best possible use to generate economic benefits.

To determine the fair value, the Group applies appropriate valuation techniques, for which sufficient data are available under the given circumstances. Principal attention is paid to observable input factors, followed by unobservable input factors, to determine the most objective market value possible.

The fair values determined for assets and liabilities or reported in the financial statements are to be classified within the fair value hierarchy below. Categorisation is based on the lowest-level input factor that is significant to the entire fair value measurement:

- Level 1: Immediate derivation of the fair value as quoted price (unadjusted) in an active market for an identical asset or an identical liability,
- Level 2: Determination of the fair value based on valuation procedures, whereby the lowest-level input factor that has significant influence on the fair value can be observed directly or indirectly on the market,
- Level 3: Determination of the fair value based on valuation procedures, whereby the lowest-level input factor that has significant influence on the fair value cannot be observed on the market.

Assets and liabilities measured at fair value on a recurring basis require the assessment as to whether these are to be assigned to another level in the fair value hierarchy at the end of each reporting period. This estimation is based on the lowest-level input factor that significantly influences the determination of the fair value. In addition, an analysis is performed at the reporting date to determine whether the fair values of assets and liabilities that are subject to reassessment in accordance with the Group's accounting policies need to be adjusted. In particular, the main value-determining input factors are examined to determine whether they have changed since the last valuation.

Disclosures regarding the fair value of financial instruments for which a fair value is determined or reported can be found in the following sections of the notes:

- Information on the Group's equity shares in external (non-Group), unlisted companies are contained in Note [12], *Financial assets*,
- Quantitative information on the measurement of the fair value by hierarchy level are provided in Note [25], *Reporting on financial instruments*.

[c] Revenue recognition from contracts with customers

As a regulated company, Amprion is responsible, in accordance with its legal mandate, for the non-discriminatory operation of a safe, reliable and efficient energy supply network as well as its maintenance, optimisation, reinforcement and expansion in line with demand (Section 11 (1) **EnWG**). The core activity of the Group is therefore the safe operation and demand-driven expansion of the German electricity transmission system. As a key service, the Group provides its customers with the transmission capacity required for electricity transport within the scope of grid usage. Additionally, system services are provided to comply with the obligation to operate a safe, reliable and efficient transmission system at all times.

The regulated business activities are usually based on standardised grid usage contracts concluded with Amprion's grid customers for an indefinite period of time. These give rise to regulatory and secured compensation claims for the Group in the amount of the grid fee to be paid for the electricity sector, which is calculated from the transport capacity used by the customer multiplied by the relevant regulatory tariff. In addition, the Group concludes standardised balancing group contracts with balancing group managers. On the basis of these contracts, Amprion processes the notified schedules and settles the balancing groups. As the system manager for the transmission system in its control area, Amprion is responsible in particular for the procurement and use of control energy (for a breakdown of revenue from contracts with customers, see Note [1], *Revenue*).

Revenue from contracts with customers is recognised when control of the contractually agreed services (goods, services) is transferred to the customer. It is recognised in the amount of the expected consideration, to which the Group is directly entitled in exchange for services rendered. Revenue reductions (e.g. in the form of price discounts) and variable considerations are to be taken into account. Value-added taxes and revenue from intercompany transactions are not reported as revenue in the consolidated income statement.

No economically relevant obligations from customer rights of return or guarantee obligations arise for the Group from the ordinary, regulated business model. Multi-component contracts are not concluded, so that the transaction price to be claimed can be allocated directly and uniquely to each separately identifiable performance obligation.

If a contractual consideration includes a variable consideration component, the Group determines the amount of consideration to which it is entitled for the fulfilment of its performance obligation(s). The variable consideration is to be estimated at contract inception. It may only be included in the transaction price if – as soon as the uncertainty regarding the amount of the variable consideration no longer exists – it is highly probable that the already realised cumulative revenue will not be cancelled.

The Group acts as principal in its revenue transactions – except for various levies – as it usually has power over the services to be provided before these are transferred to the customer.

With regard to various levies (EEG levy, KWKG levy, Section 19 StromNEV levy, etc.), the Group collects amounts on behalf of third parties and thus acts as agent. Therefore, levy amounts are not reported as revenue in the income statement, but are netted with the corresponding expenses.

As principal, the Group provides various services in the course of its ordinary business activities and, in exchange for the agreed consideration, enters into contractual performance obligations towards its customers (see Note [1], *Revenue*).

For short-term advance payments from customers, the Group applies the relevant practical expedient whereby the promised consideration is not adjusted for the effects of a significant financing component if the period between the transfer of the promised service and the payment of the agreed consideration does not exceed one year.

[d] Contract balances

CONTRACT ASSETS

Contract assets are recognised through profit or loss when the Group transfers goods or services to the customer before the customer settles its corresponding payment obligation, without an unconditional right to payment already existing at the time of the transfer to the customer.

In the course of revenue recognition from the construction of shared lines, the Group initially recognises a contract asset, as the receipt of the consideration is initially dependent on the successful and defect-free acceptance of the completed shared line. Since this is a time-period related performance obligation, revenue is recognised proportionally over the period of construction. After construction and acceptance by the customer, the amount recognised as a contract asset is reclassified to trade receivables.

TRADE RECEIVABLES

Receivables are recognised when the Group receives an unconditional right to consideration from its customers (i.e. the receivables automatically become due once a specified period of time expires). The accounting policies for financial assets, here in the form of trade receivables, are explained in section [m], *Financial instruments – initial recognition and subsequent measurement*.

CONTRACT LIABILITIES

Contract liabilities are recognised when a customer either makes a payment or the payment becomes due before the Group has fulfilled its contractual obligation to perform or transferred the agreed goods or services to the customer. Revenue is only recognised once the Group fulfils its contractual obligations, by transferring control of the contractually promised services to the customer.

The Group recognises contractual liabilities in particular from construction cost grants and connection cost contributions received from customers prior to the fulfilment of its performance obligation.

[e] Taxes

CURRENT INCOME TAXES

Current income tax assets and liabilities are measured at the expected amount to be recovered from or paid to the taxation authorities. The measurement of current taxes is based on the tax rates and tax laws that have been enacted or substantively enacted by the reporting date.

If actual taxes relate to items recognised directly in equity, these are not recognised in the income statement but also directly in equity. In addition, individual tax matters are regularly assessed to determine whether they are subject to uncertainties due to existing tax regulations and therefore have a scope for interpretation. In individual cases, this can lead to the recognition of tax provisions and the disclosure of a tax-related contingent liability or contingent asset.

DEFERRED TAXES

Deferred taxes are recognised using the liability method for all temporary differences between the carrying amount of an asset or liability in the IFRS balance sheet and the corresponding tax base as at the reporting date. This includes deferred taxes from consolidation processes.

Deferred tax liabilities result from future taxable temporary differences, deferred tax assets from future deductible temporary differences, unused tax losses and unused tax credits. The recognition of deferred tax assets also requires sufficient probability that taxable income will be available for offsetting in the future.

Deferred tax assets and liabilities do not include deductible or taxable temporary differences that arise from the initial recognition of an asset or liability in a transaction that is neither a business combination nor, at the time of the transaction, affects accounting profit before tax or taxable profit.

In individual cases, it may be necessary to assess whether it is probable that a tax authority will accept an uncertain tax treatment. If, in the Group's opinion, this is unlikely, it is required to consider the effect of the uncertainty when measuring its income taxes.

The measurement of deferred taxes is based on the tax rates that are expected to apply in the period in which the underlying asset or liability is realised. Accordingly, the tax rates and tax laws to be applied are those that are enacted or substantively enacted at the reporting date. The tax rate applied in the reporting year is 31.63% (previous year: 31.56%).

Deferred taxes resulting from items with no effect on income are also not affecting income. They are recognised analogously to the underlying transaction either in other comprehensive income or directly in equity.

Deferred tax assets and liabilities must be offset if the relevant conditions are met at the level of the individual companies or the tax group.

VALUE-ADDED TAX

Expenses and assets are generally recognised after deducting value-added tax from the gross amount. However, if the value-added tax incurred on the purchase of an asset or the use of a service cannot be recovered from the tax authorities, it is part of the acquisition costs of the asset or part of the expenses.

Receivables and liabilities from purchase and sales transactions on target are recognised including the VAT amount contained therein. The amount of VAT to be refunded by or paid to the tax authorities is in this case shown as a counter item in the balance sheet under receivables or liabilities.

[f] Foreign currency transactions and balances

Foreign currency transactions carried out by Group companies are translated into the functional currency at the spot rate applicable at the time the transaction is first recognised in the balance sheet. The functional currency for the Group companies is the euro. Where the Group has monetary assets or liabilities denominated in foreign currencies, these are translated into the functional currency at each reporting date using the spot exchange rate. Any resulting settlement or translation differences are recognised in profit or loss.

The Group had no monetary assets or liabilities in foreign currency at the reporting date or in the previous year. Foreign currency transactions were also insignificant.

[g] Non-current assets held for sale and disposal groups

If the carrying amount of a non-current asset or disposal group is recovered through a planned sale or exchange transaction rather than through continued use, the Group classifies the asset or disposal group as *held for sale*. In this case, the non-current asset or disposal group is measured at the lower of its carrying amount and fair value less costs to sell. Costs of disposal are incremental costs directly attributable to the disposal of the non-current asset or disposal group, excluding finance costs and income tax expense.

For a non-current asset (disposal group) to be classified as *held for sale*, its sale must be highly probable at the reporting date and it must be available for immediate sale in its present condition at the reporting date. Satisfaction of the probability criterion requires that it is unlikely, based on the actions necessary to complete the sale, that material changes will be made to the proposed sale. Similarly, it must also not be foreseeable that the decision to divest will be reversed. Rather, the Management must have decided to implement a planned sale. Furthermore, the sale has to be expected to take place within one year from the date of classification as *held for sale*.

If a non-current asset with a limited or limited determinable useful life is classified as *held for sale* in accordance with the preceding criteria, it is no longer depreciated or amortised. Assets and disposal groups (incl. associated liabilities) classified as *held for sale* are to be reported separately in the balance sheet as current items.

The Group did not have any material non-current assets or disposal groups *held for sale* as at either the current or the previous year's reporting date.

[h] Dividends

The company recognises a liability for the payment of dividends when the distribution has been approved by the shareholders' meeting and is therefore no longer at the discretion of the company. The amount to be distributed is recognised directly in equity.

[i] Property, plant and equipment

Property, plant and equipment are measured at cost less accumulated depreciation and accumulated impairment losses (see [o], *Impairment of non-financial assets*). In exchange transactions with economic substance, the cost of the acquired item of property, plant and equipment is determined either by the fair value of the consideration given or, if this can be determined more reliably, by that of the acquired item of property, plant and equipment. Any difference between the carrying amount of the transferred asset and the cost of the newly acquired item of property, plant and equipment is recognised in profit or loss and reported as other operating income or other operating expenses.

Scheduled depreciation for assets under construction is only incurred from the time of their completion or their transfer to the operational state. Scheduled depreciation, impairment losses and reversals of impairment losses are recognised in profit or loss.

Borrowing costs are capitalised as part of costs for acquisition or production for qualifying assets or long-term construction projects if they can be directly allocated to the acquisition or production and the recognition criteria are met.

If significant parts or components of property, plant and equipment have to be replaced regularly, they are depreciated separately based on their economic useful life. Renewal and maintenance costs are capitalised in the carrying amount of the respective tangible asset if the recognition criteria are met. All other maintenance, servicing and repair costs are recognised immediately in profit or loss.

The acquisition and production costs of property, plant and equipment also include the estimated expenses for obligations in connection with their decommissioning and disposal as well as the restoration and recultivation of land. The corresponding payments are included at their present value in the acquisition or production cost of the corresponding asset if the recognition criteria for a provision are met.

Construction cost grants and contributions to building connection costs paid by customers, as well as investment grants and subsidies, are not taken into account to reduce acquisition costs, but are recognised as deferred income.

Depreciable tangible assets (i.e. other than land and rights equivalent to land) are depreciated on a scheduled basis in accordance with the expected useful life of their individual components. In the year of acquisition, this is carried out pro rata temporis. Depreciation is generally calculated on a straight-line basis, unless the expected consumption of future economic benefits is exceptionally better approximated by another depreciation method for the asset.

Scheduled depreciation is calculated on the basis of the following useful lives, which are based on the lower band in accordance with Annex 1 to Section 6 (5) StromNEV and are uniform throughout the Group:

Useful lives by asset group

	in years
Buildings	30-50
Operations buildings	30
Administrative and other buildings	30-50
Extra-high-voltage installations	20-40
Extra-high-voltage grid	40
Transformers	35
Extra-high-voltage switch panels	35
Station control system	25
Grid control system	25
AC/DC converter	20
Other installations and technical equipment	8-35
Operating and office equipment	3-23
Other assets	10-19

The useful lives and depreciation methods of property, plant and equipment are reviewed annually and adjusted prospectively, if necessary.

Property, plant and equipment is derecognised either on disposal (i.e. when control of the item passes to the transferee) or when no further economic benefits are expected from the continued use or disposal of the recognised asset. A derecognition gain is determined on derecognition as the difference between the net disposal proceeds and the carrying amount of the asset and is recognised immediately in profit or loss.

[j] Capitalisation of borrowing costs

Borrowing costs include interest and other costs arising from borrowing external capital funds. Borrowing costs directly attributable to the acquisition, construction or production of a *qualifying* asset are capitalised as part of its cost. An asset is considered to be *qualifying* if a substantial period of time is required (more than twelve months) to bring it to its intended condition for use or sale.

If debt financing is directly attributable to a qualifying asset, the actual borrowing costs incurred are to be recognised. The Group does not have any corresponding dedicated project financing, but only general funding. In the reporting year, the uniform average borrowing cost rate was 1.70% (previous year: 1.43%) throughout the Group. Borrowing costs of €31.2 million (previous year: €22.2 million) were capitalised in the reporting year.

Borrowing costs that are not directly related to the acquisition or production of qualifying assets are expensed as incurred.

[k] Leases

According to IFRS 16, a contractual agreement qualifies as a lease if it entitles a contractual partner to use an identifiable asset for a certain period of time in return for payment of a fee. Whether the respective agreement creates or contains a lease in accounting terms is to be assessed at the inception of the agreement. The Group has decided not to account for leases related to intangible assets as such under IFRS 16, but as intangible assets under IAS 38.

AMPRION AS LESSEE

In principle, the Group as a lessee recognises a liability to make lease payments (financial lease liability) and the right to use the underlying leased asset (right-of-use asset) for each contract that qualifies as a lease within the scope of IFRS 16. Short-term leases and low-value leases are exempt from this principle.

Right-of-use assets are capitalised at the date the leased asset is ready for use and are reported as a separate balance sheet item. They are measured at cost less accumulated depreciation and impairment losses and adjusted for any remeasurement of the related lease liability. The capitalisation amount comprises the amount of the recognised lease liability, the initial direct costs and the lease payments made up to the time of provision less any incentive payments received.

In subsequent measurement, right-of-use assets are amortised on a straight-line basis over the term of the lease. The terms of the leases for technical equipment are generally between two and ten years. The terms of leases for land and buildings can be up to 99 years due to agreements under hereditary building law. The usual duration bands are three to five years for vehicles and operating and office equipment.

In case of a triggering event for an impairment of right-of-use assets, these are to be tested for impairment by means of a quantitative assessment (see [0], *Impairment of non-financial assets*).

Lease liabilities are measured at the present value of the lease payments to be made over the term of the lease. This includes fixed or de facto fixed payments, variable lease payments linked to an index or (interest) rate, and amounts expected to be paid under residual value guarantees. The Group's purchase and termination options must also be taken into account if they are reasonably certain to be exercised. Lease incentive payments received are to be deducted from the amount. Lease liabilities are reported as part of current and non-current other financial liabilities (see Notes [10], *Leases and [21], Financial liabilities*).

Since the (implicit) interest rates underlying the leases cannot be determined, the present value of the lease payments is regularly determined using the Group's incremental borrowing rate at the date of provision. The following term-dependent incremental borrowing rates were used for newly concluded contractual agreements to be recognised as leases:

Lease interest rates applied: incremental borrowing rate

Maturities	31 Dec. 2022	31 Dec. 2021
Less than 5 years	0.65%-3.88%	0.00%-0.17%
5 to 10 years	1.64%-4.32%	0.07%-0.71%
10 to 15 years	2.07%-4.50%	0.53%-0.97%
15 to 20 years	2.37%-4.48%	0.81%-1.28%
More than 20 years	2.75%-4.48%	0.93%-1.39%

Lease liabilities are subsequently measured using the effective interest method. The lease liability is increased by the effective interest expense from compounding the liability at the Group's incremental borrowing rate and reduced by the lease payments made. Interest expenses from the periodic compounding of lease liabilities are recognised in the financial result.

The carrying amount of lease liabilities is remeasured if there is a change in the lease, its term, the lease payments or the assessment of an option to purchase the underlying asset.

For short-term leases (i.e. leases with a term of twelve months or less from the date of provision) and low-value leases, the Group recognises the lease payments as an expense on a straight-line basis over the term of the lease in accordance with the relevant exemption rule.

AMPRION AS LESSOR

Leases in which the Group acts as lessor but does not transfer substantially all risks and opportunities incidental to the ownership of the leased asset to the lessee are classified as operating leases. Consequently, the resulting rental income is to be recognised on a straight-line basis over the term of the lease and, due to its operating character, reported as miscellaneous revenues. The leased asset is reported as a tangible asset and is depreciated over its useful life and, if necessary, also unscheduled in the event of impairment in accordance with the relevant accounting regulations.

If the Group transfers substantially all the risks and rewards incidental to ownership of the leased asset to the lessee under a lease agreement, the lease is accounted for as a finance lease. In this case, the Group recognises a financial lease receivable in the amount of the net investment in the lease by derecognising the leased asset. In subsequent measurement, the lease receivable is amortised pro rata using the effective interest method, under which the lease payments are divided into an interest income and a redemption portion.

In its role as lessor and as in the previous year, Amprion only accounts for operating leases.

[I] Intangible assets

Intangible assets acquired for consideration are to be measured at acquisition or production cost upon initial recognition. Internally generated intangible assets are to be capitalised at the amount of their development costs, provided that the relevant recognition criteria are met. In particular, their recognition as an intangible asset requires the generation of documented future economic benefits and the reliable measurement of the development expenditures attributable to the intangible asset. Research expenditures and non-capitalisable development costs are expensed immediately in the period in which they are incurred. Subsequent capitalisation of research and development expenditures incurred before the recognition criteria were cumulatively met is not permitted.

In the course of subsequent measurement of intangible assets, their historical acquisition or production costs are reduced by accumulated scheduled amortisation and, if necessary, accumulated impairment losses. Scheduled amortisation is to be recognised corresponding to the consumption of the expected benefits over the economic useful life. If the pattern of consumption of benefits is unknown, the asset is depreciated on a straight-line basis.

After completion of the development phase, internally generated intangible assets are amortised on a scheduled basis over the period of the expected inflow of benefits from the start of usability. The production costs capitalised during the development phase have to be tested at least annually for impairment and additionally if there are indications of potential impairment (see [o], *Impairment of non-financial assets*). Both the amortisation period and the amortisation method shall be reviewed at least at the end of each reporting period.

The Group amortises its intangible assets on a straight-line basis over their individual useful lives. These are shown in the table below. Amortisation of intangible assets is reported in the income statement under amortisation expenses.

Useful lives by asset group

	in years
Rights and licenses	20
Patents	20
Software acquired against payment	3-5

The derecognition of intangible assets conceptually follows that of property, plant and equipment. Similarly, any gains or losses realised in the course of derecognising intangible assets are recognised immediately in profit or loss.

[m] Financial instruments - initial recognition and subsequent measurement

A financial instrument is a contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

FINANCIAL ASSETS

Upon initial recognition, financial assets are to be allocated to one of the three measurement categories *measured at amortised cost*, *measured at fair value through other comprehensive income* or *measured at fair value through profit or loss* for the purpose of subsequent measurement, depending on their characteristics and the company’s intentions or management.

The starting point for categorisation is the qualification of the financial asset as an equity or debt instrument.

Equity interests in other companies are generally categorised as *measured at fair value through profit or loss*. However, equity instruments may irrevocably be classified as *measured at fair value through other comprehensive income* upon initial recognition, provided they meet the equity definition in IAS 32 “*Financial Instruments: Presentation*” and are not held for trading purposes. This classification option can be exercised individually for each equity instrument. When the option is exercised, all gains and losses from changes in fair value are recognised in

other comprehensive income and are not subsequently reclassified to profit or loss at any time thereafter. Only profit distributions received by the Group from these investments are recognised directly as income in the income statement when the legal claim to payment arises. Equity instruments *measured at fair value through other comprehensive income* are not subject to impairment testing.

The Group has irrevocably applied the classification option to all its equity interests in companies that do not qualify as subsidiaries, joint ventures or associates. These are thus classified as *measured at fair value through other comprehensive income*. There was no active market at the reporting date for any of these investments generally measured at fair value, so that no public price quotations were available for them. In this case, the fair value is to be measured on the basis of the most recent observable market transactions or by means of an appropriate valuation method (e.g. discounted cash flow models). Since the relevant input parameters and thus also the fair value cannot be reliably determined, the Group measures the investments at cost as long as no appropriate fair value indications are available.

The categorisation of debt instruments at initial recognition depends on the characteristics of the contractual cash flows and the Group's business model for managing these debt instruments. Depending on this, the debt instruments are to be allocated for subsequent measurement to one of the three measurement categories: *measured at amortised cost*, *measured at fair value through other comprehensive income* or *measured at fair value through profit or loss*.

The classification of a debt instrument as *measured at amortised cost*, as well as an allocation to the measurement category *measured at fair value through other comprehensive income*, requires that the contractual cash flows of the financial asset qualify exclusively as interest and redemption payments on the outstanding amount (so-called cash flow condition). The corresponding assessment is made at the level of the individual financial instrument. If a debt instrument does not meet the cash flow condition, it must be *measured at fair value through profit or loss*. The same applies if the cash flows of a debt instrument exclusively represent interest and redemption payments on the outstanding amount, but the entity manages these with the objective of realising cash flows through the sale of the assets (business model: *sell*). If, on the other hand, the business model provides for the exclusive collection of contractual cash flows (business model: *hold*), the financial assets are to be subsequently measured at amortised cost using the effective interest method, provided that the cash flow condition is also met at the same time. If the business model at portfolio level consists of both *hold* and *sell* debt instruments, these assets are to be categorised as *measured at fair value through other comprehensive income*.

The Group generally holds its financial assets to maturity with the sole intention of collecting the contractual interest and redemption payments. Specifically, this concerns loans and advances, trade receivables, other (financial) receivables and lease receivables from operating leases. These are allocated to the measurement category *measured at amortised cost*. Trade receivables result primarily from contracts with customers.

Apart from trade receivables without a significant financing component, which are initially measured at transaction price in accordance with IFRS 15 “*Revenue from Contracts with Customers*”, the Group measures its financial assets at fair value plus transaction costs at initial recognition.

Financial assets carried *at amortised cost* are measured using the effective interest method and are also tested for impairment. Loans and borrowings of the Group bearing interest at market rates are subsequently carried at nominal value.

Income or expenses resulting from modifications, derecognitions or impairments/reversals are recognised in profit or loss.

As almost all financial receivables (trade receivables) have short residual terms and thus no financing component, their book values reported on the reporting date correspond to their fair value. This also applies to the other (financial) receivables reported under current assets (Note [25], *Reporting on financial instruments*).

IMPAIRMENT OF FINANCIAL ASSETS (DEBT INSTRUMENTS)

For all debt instruments that are not measured at fair value through profit or loss, an allowance for expected credit losses (ECL) is recognised in accordance with the three-stage impairment model of IFRS 9. Expected credit losses result from the difference between the contractually agreed payments and the total cash flows that the Group expects to receive. The corresponding amount is to be discounted with the original effective interest rate. The expected payments include cash flows from the sale of collateral held or other credit protection that is an integral part of the contractual terms.

For level 1 debt instruments, risk provisioning for the expected credit loss for the amount of the twelve-month loss is recognised at initial recognition. The twelve-month loss indicates the amount of the expected loss that would arise in relation to the respective financial instrument as a result of a default event within the next twelve months. As far as the *probability of default* (PD) has not increased significantly as compared to the time of addition, risk provisioning for the amount of the twelve-month loss is also to be recognised for the subsequent periods. For simplification purposes, it may be assumed that financial instruments with an *investment grade* credit rating have a low credit or default risk. In this case, there is generally no need to transfer such instruments to level 2. Where the Group holds debt instruments measured at amortised cost using the effective interest method, it applies this simplification for financial instruments with low credit risk.

If the creditworthiness of the debtor of the financial instrument in question deteriorates significantly compared to its date of acquisition (significant increase in the probability of default), it is to be allocated to level 2. Here, as in level 3, expected credit losses are recognised in the amount of the loss expected over the entire residual term of the financial instrument (lifetime expected credit loss). This indicates the amount of the total expected loss that would result from a default event within the entire term of the financial instrument (and thus regardless of when the specific default event occurs during the contract period). A significant increase in credit risk is assumed at the latest when the debtor is 30 days in arrears, unless the findings from the receivables management process suggest or require a different reclassification date. All reasonable and reliable information that is available without undue cost or time is used at each reporting date.

If the creditworthiness of the debtor is actually impaired or an actual default occurs, the financial instrument must be reclassified to level 3. This can be rebuttably assumed if the debtor is at least 90 days in arrears or overdue or if other internal or external events (e.g. the opening of insolvency proceedings) indicate that payment by the debtor is no longer probable. In contrast to levels 1 and 2, where the effective interest income is measured on the basis of the gross carrying amount of the financial instrument, any interest income in level 3 is determined by applying the original effective interest rate to the net carrying amount (i.e. after netting with the risk provision).

For its trade receivables and contract assets, the Group applies the simplified approach to calculate expected credit losses, regardless of their maturity. According to this approach, changes in credit risk do not need to be tracked over time. Instead, the allowance for credit losses is recognised at each reporting date in the amount of the lifetime-expected credit loss. To quantify the expected credit losses, the Group uses externally available – as far as possible customer-specific – credit report information and the associated probabilities of default. As current and future-related information is included in such credit report information, no additional corrections of the default probabilities are made.

A write-off of receivables becomes necessary if they are classified as irrecoverable. In this regard, relevant indicators can be, for example, an unsuccessful enforcement order or the filing of an application for insolvency proceedings or the rejection of the opening of insolvency proceedings due to a lack of insolvency assets.

Additions to the allowance for losses on loans from applying the expected loss model or the resulting impairment losses are presented net in the income statement under other operating expenses. Reversals of risk provisions are recognised as other operating income.

For further details on the impairment of financial assets, please refer to the following notes:

- *Significant assumptions, estimates and judgements in the application of the accounting policies*
- *[14], Trade receivables and other receivables*
- *[15], Other financial assets*
- *[25], Reporting on financial instruments*

FINANCIAL LIABILITIES

Financial liabilities are to be allocated to one of the two measurement categories *measured at fair value through profit or loss* or *measured at amortised cost* for subsequent measurement at the time of their initial recognition.

The former category includes financial liabilities held for trading (including derivatives that are not part of a hedging relationship) and financial liabilities designated as such at the time of initial recognition. The Group has not designated any financial liabilities as *measured at fair value through profit or loss*.

Financial liabilities categorised as *measured at amortised cost* are initially measured at fair value less directly attributable transaction costs. The Group assigns all current and non-current financial liabilities in the form of trade payables and other liabilities, other financial liabilities and credits and loans (incl. registered bonds, promissory note loans, commercial papers) including overdrafts to this category.

After initial recognition, interest-bearing financial liabilities are subsequently measured at amortised cost using the effective interest method. The effective interest expense, as well as any expense or income arising from derecognition, is recognised in profit or loss and reported as part of financial expenses. The effective interest expense is calculated by multiplying the carrying amount of the financial liability at the beginning of the period by the debt-specific effective interest rate. The latter is determined on the basis of the nominal interest rate, taking into account a premium or discount as well as directly attributable fees and/or (transaction) costs.

The fair values of the bonds listed on the unregulated capital market in Luxembourg is calculated as the product of the nominal value and its price quotation on the reporting date. The fair value of the fixed-interest financial liabilities not traded on the capital market is determined by discounting the contractually agreed cash flows with the term-equivalent market interest rate as at the reporting date. For current financial liabilities, the fair value approximates the reported carrying amount.

Trade payables and other (financial) liabilities are recognised at their repayment amount. As the other (financial) liabilities only have short residual terms, their fair value corresponds approximately to the carrying amount reported on the reporting date. With regard to non-current trade payables and other liabilities, the fair value is determined for disclosure purposes analogously to the financial liabilities by discounting the contractual cash outflows with the market interest rate on the reporting date.

For further information, please refer to Notes [24], *Trade payables and other liabilities* and [25], *Reporting on financial instruments*.

OFFSETTING OF FINANCIAL INSTRUMENTS

Financial assets and financial liabilities are offset and the resulting net amount is recognised in the consolidated statement of financial position when there is a present legal right to set off the recognised amounts and the Group intends to exercise that right. This is assumed to be the case if settlement is to be effected on a net basis or the Group intends to settle the associated financial liability with the realisation of the financial asset concerned.

In the reporting year as well as in the previous year, the Group did not offset any financial instruments to a significant extent in accordance with IAS 32. In addition, the Group has not recognised any significant financial instruments that were subject to netting agreements.

[n] Inventories

The Group accounts for inventories at the time of their recognition at acquisition or production cost (i.e. at the costs incurred to bring the inventories to their present location and condition). Raw materials and supplies are valued at moving average prices. They are then valued at the lower of historical cost and net realisable value. The net realisable value is determined by reducing the estimated selling price in the ordinary course of business by the estimated costs of completion and the estimated costs necessary for the sale.

[o] Impairment of non-financial assets

The Group assesses at each reporting date whether there are any *triggering events* for impairment of non-financial assets. If there are such indications, the recoverable amount of the potentially impaired asset or a potentially impaired cash-generating unit needs to be determined. The recoverable amount is the higher of *value in use* and *fair value less costs to sell*.

The recoverable amount shall be determined primarily for each individual non-financial asset that generates cash inflows that are largely independent of those from other assets or groups of assets. If an asset does not generate independent cash flows, it shall be included in the smallest identifiable group of assets (cash-generating unit) that together generate cash flows independent of those from other assets or cash-generating units.

If the recoverable amount is less than the carrying amount of the asset or cash-generating unit tested for impairment, the asset or cash-generating unit is impaired. Accordingly, the carrying amount of the asset or cash-generating unit is written down to the recoverable amount through profit or loss.

The value in use is to be determined on the basis of investment theory as the present value sum of the expected future cash flows before taking into account taxes and financing effects, whereby a discount rate before taxes is to be used consistently for this purpose. This discount rate must adequately reflect current market expectations with regard to the interest effect and the specific risks of the asset.

To determine the fair value less costs to sell, comparable recent market transactions are taken into account. If no such transactions are identifiable, the determination shall be made using an appropriate valuation model, taking into account valuation multiples, quoted market prices of shares in relevant comparable companies or other available (market) indicators of fair value.

As a basis for the quantitative impairment test, Amprion uses its most recent budget and forecast calculations, which are prepared for the individual cash-generating units of the Group.

Impairment losses are recognised in profit or loss in the expense category consistent with the function of the impaired asset in the entity.

For assets that have already been impaired, a review must be conducted at each reporting date to determine whether there is any indication that the previously recognised impairment loss no longer exists or has decreased. If the reason for a previous impairment no longer exists, a write-up is recognised in profit or loss. The upper value limit is the recoverable amount or, if lower, the original amortised carrying amount. This is the value in case the asset had not been impaired in the past and, if necessary, would have been depreciated according to schedule.

[p] Cash and cash equivalents

The balance sheet item cash and cash equivalents includes cash on hand, bank balances and short-term highly liquid deposits with an original maturity of three months or less, which can be converted into fixed cash amounts at any time and are only subject to an insignificant risk of fluctuation in value.

With regard to the definition of cash and cash equivalents for the cash flow statement, the relevant cash and cash equivalents include the items defined above. Bank overdrafts are not included in the Group's cash and cash equivalents.

[q] Other provisions

Provisions shall be recognised when

- a) the Group has a present obligation (legal or constructive) as a result of a past event,
- b) it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and
- c) the amount of the obligation can be reliably estimated.

Provisions are recognised at the settlement amount, whereby either the expected value or the amount with the highest probability of occurrence is used as the best possible estimate of the obligation amount. Debt-specific risks are taken into account when measuring the obligation amount.

If there is a material interest effect from discounting the obligation amount at a risk-free interest rate before tax on the reporting date, the provision shall be measured at the present value of the settlement amount. A significant interest effect is generally assumed for long-term provisions.

In subsequent measurement, the discounted provision amount is compounded with the risk-free interest rate, whereby the interest expense associated with the corresponding provision increase is recognised in the income statement as part of the financial expenses.

If there is a full or partial reimbursement right in connection with a recognised provision that will almost certainly lead to a cash inflow (e.g. in the case of an insurance contract), the reimbursement must be recognised as a separate asset without being netted. The expense arising from the recognition of a provision for which a reimbursement claim is virtually certain is reported in the income statement netted with the reimbursement amount.

If the Group is threatened with an economic burden from a pending legal transaction (onerous contract), the current contractual obligation is recognised and measured as a provision. However, before recognising such a provision for contingent losses, the carrying amount of any assets associated with the contract must first be written down.

A contract is considered to be onerous if the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it. The unavoidable costs reflect the minimum net costs of exiting the contract and are the lower of the contractual performance costs and any compensation or penalties resulting from non-performance.

[r] Provisions for pensions and similar obligations

According to IFRS, a distinction is to be made between *defined contribution plans* and *defined benefit plans* when accounting for pension obligations. While an external (pension) provider bears the actuarial risk in the case of defined contribution plans, this risk lies with the employer in the case of defined benefit plans, even if only to a small extent. Provisions for pensions and similar obligations are recognised for defined benefit plans.

The Group recognises provisions for pensions and similar obligations in connection with its defined benefit plans, which are measured using the *projected unit credit method* in accordance with IAS 19. This forward-looking valuation method takes into account the pensions and entitlements known on the reporting date as well as expected future salary and pension trends, mortality rates, fluctuation and other actuarial parameters. Changes in pension obligations as a result of adjustments to these parameters are recognised in full as actuarial gains and losses in the financial year in which they occur. They are reported as part of other comprehensive income and recognised directly in equity within retained earnings. These amounts are not subsequently reclassified to profit or loss.

The Group's pension obligations are secured by assets held in trust as part of a *contractual trust arrangement* (CTA). To cover its pension obligations, the Group makes regular payments to the trustee of the separately administered fund, which qualifies as plan assets within the meaning of IAS 19. Income from revaluation of plan assets (excluding amounts already included in net interest on the net defined benefit liability) is recognised analogously to actuarial gains and losses in other comprehensive income and thus directly in equity without being subsequently reclassified to profit and loss.

The provision or asset recognised in the balance sheet corresponds to the positive (underfunding) or negative (overfunding) balance of the pension obligation determined at the reporting date and the corresponding plan assets. The service cost (including past service cost and expenses and income from plan settlements) is recognised as part of personnel expenses. The net interest expense, which results from multiplying the relevant pension interest rate by the balance of the defined benefit obligation and the plan assets, is reported in the financial result.

[s] Contingent liabilities

Contingent liabilities only include possible but not probable obligations to third parties, as well as present obligations for which the outflow of resources is not probable or the amount of which cannot be quantified with sufficient reliability. Therefore, no provisions are recognised for contingent liabilities. A disclosure is merely required in the notes to the financial statements.

SIGNIFICANT ASSUMPTIONS, ESTIMATES AND JUDGEMENTS IN THE APPLICATION OF THE ACCOUNTING POLICIES

In the process of applying the accounting policies used in the preparation of Amprion's consolidated financial statements, management makes assumptions, estimates and judgements that affect the reported amounts of income and expenses as well as assets and liabilities. This concerns both the reported items in the financial statements and the related disclosures in the notes, including the disclosure of contingent liabilities.

Due to the inherent uncertainties in accounting estimates and assumptions, there is a significant risk that actual results and amounts realised in future periods could require material adjustments to the carrying amounts of the assets and liabilities affected.

Assumptions and estimates about future developments are based on parameters that were available to the Group at the time the consolidated financial statements were prepared, are not within the Group's control and are sometimes sensitive to changes in market movements and conditions. Since assumptions and estimates are uncertain and subject to change, they are reviewed on an ongoing basis, taking into account realised results and experience, trends, forecasts and assessments by experts, as well as other appropriate methods, and are adjusted as necessary. The Covid-19 pandemic, the Russia-Ukraine war and the related energy crisis as well as the associated substantial uncertainties are also included, where relevant, in the assumptions and estimates to be made. In the reporting period as well as in the previous year, however, there resulted no significant adjustments to the carrying amounts of assets and liabilities from the aforementioned facts and circumstances due to Amprion's specific business model.

The most important accounting items and financial statement items affected by discretionary decisions, assumptions and estimates from Amprion's perspective are shown in the following table. These are items for which there is a considerable risk that a significant adjustment to the carrying amount could result within the following financial year. In addition, further information on risks and uncertainties can be found in Notes [25], *Reporting on financial instruments*, [29], *Disclosures on capital management* and, with regard to sensitivity analyses in connection with pension obligations, [20], *Provisions*.

Accounting issue / financial statements item	Explanation under	Assumptions, estimates and judgements
Judgements		
Impairment of financial assets	(a)	Accounting judgement in applying an appropriate method for determining expected credit losses (incl. assumptions on the counterparty default risk)
Accounting for commodity futures as pending transactions	(b)	Accounting judgement in the application of the own use exemption in the context of the forward management of grid losses
Revenue recognition from congestion management	(c)	Accounting judgement regarding the timing of revenue recognition from congestion management
Assumptions and estimates		
Determination of the net pension obligation (pension provision)	(d)	Determination of actuarial assumptions (financial, demographic)
Lease contracts – measurement of right-of-use assets and lease liabilities: estimation of the lease interest rate	(e)	Estimates of the term-equivalent incremental borrowing rate used to capitalise future lease payments
Recognition and measurement of tax refund claims, tax liabilities and deferred taxes	(f)	Estimates in connection with the accounting of tax refund claims, the accounting of tax liabilities and the assessment of temporary differences between items in the IFRS financial statements and their tax base (formation of deferred tax assets and liabilities)
Accrual of expenses and liabilities from system services and grid operation	(g)	Estimates of compensation costs to be recognised as expenses and liabilities from system services and transmission volumes within the scope of grid operation
Accrual of revenues	(h)	Estimates of variable charges or transaction price components

The aforementioned judgements, forward-looking assumptions and estimation uncertainties made as at the reporting date are briefly explained below.

(a) Impairment of financial assets

To determine the impairment of financial assets, the default risk of the respective counterparty has to be determined. To calculate this risk and to quantify the related expected credit losses on financial receivables as well as on bank balances and cash investments, the Group uses its accounting judgement with regard to the valuation approach applied here. For this purpose, the Group uses credit ratings from credit agencies and external credit ratings from established rating agencies to derive customer- and bank-specific probabilities of default.

Alternatively, a provision matrix could have been used to quantify the expected credit losses on trade receivables. However, the Group has decided to use external credit ratings and external bank ratings because established credit agencies and rating agencies usually base their external ratings on information that reflects the current company and market situation or industry situation and also – as required by IFRS 9 – includes forward-looking information.

Further information on the expected credit loss model can be found in the corresponding notes on financial instruments in the section *Accounting policies – significant accounting policies*.

(b) Accounting for commodity futures as pending transactions

In case of commodity futures transactions (forward purchase of electricity) concluded by the Group as part of grid loss management, a decision must be made as to whether the corresponding futures transactions are to be accounted for as derivatives in accordance with IFRS 9 or as pending transactions in accordance with the provisions of IAS 37 under the *own use exemption*. With regard to the long-term component of its grid loss management, the Group only enters into forward or electricity supply transactions with purely physical delivery. These forward transactions serve exclusively to cover grid losses that inevitably occur in transmission system operations. Against this background, the Group considers the application requirements of the own use exception to be fully met and accounts for the forward transactions concluded as pending legal transactions in accordance with IAS 37.

(c) Revenue recognition from congestion management

Capacity bottlenecks exist at Germany's borders with various countries which, under EU law, require the auctioning of cross-border transmission capacity as part of a market-based, transparent and non-discriminatory congestion management procedure. Accordingly, daily, monthly and annual auctions are held at the German external borders for the allocation of transmission rights. The Group generates revenue from these auctions, which are subject to restrictions on use in accordance with EU law.

On this basis, the Group has decided, in accordance with the provisions of IFRS 15, to recognise revenue over the period in which it satisfies its performance obligation to the service recipient by providing the auctioned transmission capacity. This is the period over which the Group makes the auctioned transmission capacity available to the entitled party and thus transfers the service to the holder of the transmission right. The additional restriction on use represents a public law obligation of the Group that exists independently of the performance obligation to the holder of the auctioned transmission right and to this extent does not affect the timing and amount of the revenue recognition (for the scope of restricted funds, see Note [30], *Contractual guarantees, contingent liabilities and other financial obligations*).

(d) Determination of the net pension obligation (pension provision)

The expenses for defined benefit pension plans and the present value of the pension obligation are determined using an actuarial valuation method based on various actuarial assumptions. These include, among others, the pension interest rate used for discounting and compounding the pension obligation, future salary and wage trends, the assumed mortality rate as well as future pension trends. The estimated parameters will regularly deviate from their actual future development. Since the pension obligation qualifies as a very complex and very long-term obligation to be valued, the defined benefit obligation reacts very sensitively to changes in actuarial assumptions. This applies in particular to the actuarial interest rate, which the Group determines using the "RATE Link" method. Further details on pension obligations and the sensitivity of the defined benefit obligation to changes in actuarial assumptions can be found in Note [20], *Provisions*.

**(e) Lease contracts – valuation of right-of-use assets and lease liabilities:
estimation of the lease interest rate**

For the purpose of initial measurement of the right-of-use asset and the lease liability as well as subsequent measurement of the lease liability, the lessor's interest rate implicit in the lease should be determined. As the Group is unable to determine the lessor's interest rate, it draws on its estimated incremental borrowing rate instead. This is the interest rate that the Group would have to pay to finance an asset comparable to the right-of-use asset in an economic environment similar to that of the lease in terms of risk and maturity. The Group estimates the incremental borrowing rate using observable input factors (term-equivalent risk-free base rate) and expert estimates (risk premium on the base rate). In addition, observable market yields of maturity-equivalent listed bonds of the same rating category are used for validation purposes, if available.

(f) Recognition and measurement of tax refund claims, tax liabilities and deferred taxes

The capitalisation of tax refund claims, the recognition of tax liabilities and the determination of temporary differences between items in the IFRS financial statements and their tax base require estimates. For example, for recognising tax assets and tax liabilities, it must be *probable* that the forecasted payments will be received.

Deferred tax assets and liabilities are generally recognised when there are temporary differences between the tax base and the IFRS carrying amounts of items in the financial statements. The recognition of deferred tax assets is subject to the additional condition that the future tax benefits will be realised with sufficient probability or that corresponding deferred tax liabilities exist that offer a corresponding offsetting potential. Furthermore, the valuation of deferred tax assets that can be capitalised require estimates of the timing and the amount of the expected taxable income.

(g) Accrual of expenses and liabilities from system services and grid operation

In connection with the system services provided by the Group (see Note [1] Revenue), which comprise the measures taken by the Group to stabilise or secure the energy balance in the electricity grid, the associated expenses (balancing costs) must be recognised as a liability on an accrual basis as at the reporting date. In order to determine the amount of these balancing costs to be accrued in the balance sheet, they need be estimated as at the reporting date. The existing uncertainty results in particular from the total costs across control areas, which are not yet known, as well as from quantities not yet agreed with business partners as at the reporting date. Furthermore, in the course of normal grid operations, there are uncertainties regarding the actual volumes passed through in the most recent billing month, which are therefore also estimated as at the reporting date.

(h) Accrual of revenues

Accruals of revenues are mainly related to income from balancing group billing and grid charges for which the Group has already fulfilled its performance obligations. Uncertainties in this regard are usually caused by quantities that have not yet been agreed with business partners as at the reporting date and which therefore have to be estimated. The variability of the transaction price results directly from the uncertainty of the expenses incurred in the course of providing the service. Thus, on the respective reporting date, the Group must first estimate the expenses incurred in the course of fulfilling its performance obligation (see (g) *Accrual of expenses and liabilities from system services and grid operation*), which are then accrued as revenue on an accrual basis as a result of the compensation claim of the Group arising directly therefrom. By recognising revenue, the Group neutralises the expenses it incurs resulting from fulfilling its performance obligation as at the reporting date, based on the Group's direct legal claim to reimbursement of these costs.

CHANGES TO ACCOUNTING POLICIES

First-time application of amended accounting standards

The IASB had issued amendments to existing IFRS/IAS, which the Group had to apply for the first time for its financial year ending 31 December 2022 following their adoption into European law. This concerns the following IFRS/IAS amendments:

- Amendments to IAS 16 *“Property, Plant and Equipment: Proceeds before Intended Use”* (2020)
- Amendments to IFRS 3 *“Business Combinations: Updating a Reference to the Conceptual Framework”* (2020)
- Amendments to IAS 37 *“Provisions, Contingent Liabilities and Contingent Assets: Onerous Contracts – Cost of Fulfilling a Contract”* (2020)
- Annual Improvements to IFRSs 2018–2020 (2020)
 - Amendment to IFRS 1 *“First-time Adoption of International Financial Reporting Standards: Subsidiary as a First-time Adopter”*
 - Amendment to IFRS 9 *“Financial Instruments: Fees in the ‘10 per cent’ Test for Derecognition of Financial Liabilities”*
 - Amendment to IFRS 16 *“Leases: Lease Incentives”*
 - Amendment to IAS 41 *“Agriculture: Taxation in Fair Value Measurements”*

These regulations had no effect on the Group as at the reporting date.

Effects of IFRS accounting standards and IFRS IC interpretations published but not yet mandatory as at the reporting date

The amendments to IFRS standards that had been published by the time the consolidated financial statements were prepared but were not yet mandatory are presented below. The Group has not early-adopted any new or amended standards of the IASB or interpretations of the IFRS IC that have been published but are not yet effective as at the reporting date. It will apply these amended standards from the time of their mandatory entry into force, provided that they are relevant to the Group in terms of content.

New or amended IFRS/IAS standards of the IASB and interpretations of the IFRS IC	Time of mandatory application
Amendments to IFRS 17 “Insurance Contracts: Initial Application of IFRS 17 and IFRS 9 – Comparative Information” (2021)	1 January 2023
Amendments to IAS 12 “Income Taxes: Deferred Tax related to Assets and Liabilities arising from a Single Transaction” (2021)	1 January 2023
Amendments to IAS 1 “Presentation of Financial Statements and IFRS Practice Statement 2: Disclosure of Accounting Policies” (2021)	1 January 2023
Amendments to IAS 8 “Accounting Policies, Changes in Accounting Estimates and Errors: Definition of Accounting Estimates” (2021)	1 January 2023
IFRS 17 “Insurance Contracts” (2017) including Amendments to IFRS 17 (2020)	1 January 2023

The Group does not expect the application of the new regulations listed above, which had already been adopted into EU law at the time the IFRS consolidated financial statements were prepared, to have a material impact on Amprion’s consolidated financial statements. Only the amendments to IAS 12 (Amendments to IAS 12 “Income Taxes: Deferred Tax related to Assets and Liabilities arising from a Single Transaction”) are expected to have the following effects on the consolidated financial statements and the Group’s disclosure requirements in the notes to the consolidated financial statements:

The amendments to IAS 12 restrict the previous scope of application of the *Initial Recognition Exemption* under IAS 12.15(b) and 12.24. Accordingly, the currently existing exemption rule shall no longer apply to business transactions in which deductible and taxable temporary differences arise in the same amount upon initial recognition. In relation to the Group’s current accounting practice, this relates in particular to contracts to be accounted for as leases in accordance with IFRS 16. To date, the Group has accounted for deferred taxes on temporary differences between a recognised right-of-use asset and the corresponding lease liability resulting from the different (subsequent) measurement using the “*integrally linked*” approach.

The new accounting treatment does not result in any changes in the Group’s balance sheet and income statement, as deferred tax assets and liabilities are already recognised on a net basis. However, a separate presentation of the deferred tax asset and deferred tax liability to be recognised under the new approach will in future be reflected in the corresponding disclosures in the notes.

Subject to the pending EU endorsement, the amendments are effective for reporting periods beginning on or after 1 January 2023. They are to be applied to business transactions that occur on or after the beginning of the earliest comparative period presented. In case of temporary differences in connection with leases, the cumulative effects of the first-time application of the new regulations are – where relevant – also to be recognised as an adjustment to the opening balance sheet value of retained earnings or other equity components.

In addition to the amendments to standards that have already been adopted into EU law, further amendments are listed below, whose mandatory application is subject to their adoption into European law by the EU, which has not yet occurred at the time of preparation of these consolidated financial statements.

New or amended IFRS/IAS standards of the IASB and interpretations of the IFRS IC (at the time of preparation of the consolidated financial statements not yet adopted into EU law)	Time of mandatory application (subject to adoption into EU law)
Amendments to IAS 1 “Non-current Liabilities with Covenants” (2022)	1 January 2024
Amendments to IFRS 16 “Leases: Lease Liability in a Sale and Leaseback” (2022)	1 January 2024
Amendments to IAS 1 “Presentation of Financial Statements: Classification of Liabilities as Current or Non-current” (2020) and “Presentation of Financial Statements: Classification of Liabilities as Current or Non-current – Deferral of Effective date” (2020)	1 January 2024

According to current estimates and taking into account the current situation, the above-mentioned amendments to IFRS/IAS standards will not have any impact on the Group’s IFRS consolidated financial statements.

NOTES TO THE AMPRION GROUP CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME, CONSOLIDATED BALANCE SHEET AND CONSOLIDATED CASH FLOW STATEMENT

[1] Revenue

Breakdown of revenues

The table below shows the total amount of consolidated revenue from contracts with customers broken down by revenue source and timing of revenue recognition. Moreover, Group revenue is reconciled to the amounts presented in the segment reporting (Note [26], *Segment reporting*):

Breakdown of revenues

Financial year ended 31 December 2022

in € million	Segments			Total consolidated
	Transmission system operation	Offshore grid connections	Other/consolidation	
Revenue from grid fees and grid connection	2,120.3	0.0	0.0	2,120.3
Revenue from system services	857.2	0.0	0.0	857.2
Revenue from offshore grid business	3.3	0.0	0.0	3.3
Other revenues	73.3	0.0	0.0	73.3
Inter-segment revenue	36.5	3.6	-40.2	0.0
Total revenue from contracts with customers	3,090.7	3.6	-40.2	3,054.2
<i>of which control is transferred to a customer at a point in time</i>	172.3	0.0	0.0	172.3
<i>of which control is transferred to a customer over time</i>	2,918.4	3.6	-40.2	2,881.9
Miscellaneous revenues	458.5	0.0	0.0	458.5
Total revenue	3,549.2	3.6	-40.2	3,512.6

Breakdown of revenues

Financial year ended 31 December 2021

in € million	Segments			Total consolidated
	Transmission system operation	Offshore grid connections	Other/consolidation	
Revenue from grid fees and grid connection	1,787.3	0.0	0.0	1,787.3
Revenue from system services	533.2	0.0	0.0	533.2
Revenue from offshore grid business	4.9	0.0	0.0	4.9
Other revenues	39.8	0.0	0.0	39.8
Inter-segment revenue	26.1	4.8	-30.9	0.0
Total revenue from contracts with customers	2,391.3	4.8	-30.9	2,365.2
<i>of which control is transferred to a customer at a point in time</i>	92.2	0.0	0.0	92.2
<i>of which control is transferred to a customer over time</i>	2,299.2	4.8	-30.9	2,273.0
Miscellaneous revenues	206.6	0.0	0.0	206.6
Total revenue	2,597.9	4.8	-30.9	2,571.8

The significant year-on-year increase in revenue from €2,571.8 million to €3,512.6 million (+36.6%) resulted, on the one hand, from a €333.0 million volume-related rise in revenue from network charges. On the other hand, revenue from system services increased by €324.0 million, in particular as a result of the rise in revenue from redispatch and balancing measures. In addition, the increase in other revenue by a total of €251.9 million is mainly attributable to higher revenue from congestion management. The year-on-year increase in revenue from point-in-time control transfer is mainly attributable to higher revenue from the intraday management of grid losses.

The main types of contracts, performance obligations, transaction price determinations and revenue recognition methods are briefly outlined below.

REVENUE FROM GRID FEES AND GRID CONNECTION

The Group realises most of its revenue from electricity transmission by making the transmission system available to customers. Customers include regional distribution network operators, power plant operators and industrial firms. Amprion's main performance obligation with regard to grid usage consists in the provision of the electricity transmission system infrastructure and the associated possibility to transmit electricity at any time. The performance obligation and corresponding entitlement to consideration are based on standardised contracts and regulatory tariffs defined under German law and monitored by the regulator (**Federal Network Agency** – BNetzA). As Amprion provides its transmission services on a continuous basis and the benefit is consumed at the same time by customers as the service is provided, the Group recognises the corresponding revenue over time.

Agreements with customers to connect them to Amprion's transmission system form part of the grid usage fee contract. At the customer's request, the Group provides a physical interface to the transmission system for which the customer pays a fee contribution for the network connection (connection cost contribution, German abbreviation "AKB") and/or bears part of the investment cost for constructing, expanding and/or reinforcing the supply systems as necessary (construction cost contribution, German abbreviation "BKZ"). Even though this does not transfer control of the asset, the customer receives the right to direct access to the transmission system, which represents an economic benefit for the customer. The Group thus receives compensation in the form of non-refundable contributions made by the customer.

Since network usage and network access are inseparably linked as customers conclude a network usage contract simultaneously with receiving network access rights, granting network access and providing network usage do not represent separate performance obligations. Accordingly, this constitutes a single performance obligation. As customers receive the associated benefits at the same time as the service is provided, the corresponding revenues are recognised over time. Accordingly, the advance payments received are initially recognised as deferred income as a performance or contract liability. As the contracts with customers are concluded for an indefinite period of time, the revenue associated with BKZ or AKB is recognised pro rata temporis over the useful life of the related asset.

REVENUE FROM SYSTEM SERVICES (MEASURES TO MAINTAIN ENERGY BALANCE)

As a transmission system operator, Amprion is obliged to take the necessary measures to keep electricity feed-ins (supply) and electricity consumption (demand) in balance at all times, thus ensuring a secure supply of electricity. This requires keeping the frequency, voltage and power load in the electricity transmission system within specific limits at any time.

To fulfil its obligation to stabilise the grid and ensure energy balance at all times, ongoing corrective measures are required by means of various system services provided by Amprion:

- *Compensation for frequency stabilisation measures (balancing energy):* In principle, balancing group managers, who are financially responsible for balancing the supply and demand for electricity of the grid connections in their portfolios, have to jointly ensure a stable frequency in the transmission system. This involves keeping their responsible balancing groups (virtual energy volume accounts for electricity) in balance. If an imbalance nevertheless occurs, Amprion is responsible for stabilising the transmission system frequency and charges the balancing group manager for the costs incurred. The exchange of services is based on standardised balancing group contracts between Amprion and the balancing group managers. As Amprion's primary performance obligation is to continuously stabilise and secure the energy balance and to provide corresponding balancing services reliably on a permanent and continuous basis, revenue is generally recognised over time in the amount of the costs incurred by the Group for the measures taken in this regard.
- *Compensation for voltage support measures:* In addition to power frequency, power voltage also has to be kept within a specific technical range. To avoid voltage dips, Amprion has to take measures for the compensation of grid losses (loss energy) and to compensate for reactive power. The Group provides these services on an ongoing basis, thus satisfying the corresponding performance obligations over time. Accordingly, the corresponding revenues, derived from the costs of the measures taken, are also realised over the contractual service period.

- **Compensation for grid congestion management measures:** Grid congestion management is the practice of taking measures to avoid foreseeable, potential or existing grid congestion by geographically shifting electricity production as instructed by Amprion (redispatch). In addition, in the course of feed-in management, Amprion can, for example, shut down the power feed-in from renewable energy systems if sections of the transmission system are overloaded, risking grid stability. Amprion has to make compensation payments to the power generation plant operators affected by such measures, for which the Group is, in turn, compensated. Since Amprion's performance obligation is to maintain energy balance continuously at all times, revenue is recognised over time.
- **Compensation for reserve capacity:** To maintain the energy balance, Amprion enters into contracts that ensure the availability of reserve capacity to the Group at all times. The Group is compensated for the costs of contracting these reserve power plants. As the maintenance of the energy balance is provided on a continuous basis, revenue is recognised over time.

REVENUE FROM OFFSHORE GRID BUSINESS (OFFSHORE GRID LEVY)

Revenues from the offshore grid levy, which is billed as a surcharge on top of grid charges, compensate the transmission system operator for construction-related grid connection costs and for costs of operating the offshore grid connection. This levy also covers costs resulting from disruptions or delays affecting the connection to offshore wind farms. The underlying contracts and tariffs are determined via the regulatory mechanism.

OTHER REVENUES

- **Contractual services for third parties (construction of shared lines):** The Group realises revenue from the construction of shared lines used jointly by Amprion and the contracting party upon completion. These shared lines are fractionally owned by the respective parties. The purpose for constructing shared lines is to minimise the negative impact on people and the environment. In addition, within the framework of corresponding agreements, a contractually defined section of the constructed shared line becomes the sole property of the customer. An unconditional payment claim arises through transfer of the completed shared line into the customer's ownership upon successful acceptance by the customer as defect-free. Since the customer receives benefit from the construction work on an ongoing basis as the line is progressively completed, Amprion's performance obligation is satisfied over time. The customer reimburses the Group for the associated construction costs without a profit mark-up. Completion progress is measured on an input-basis according to costs actually incurred relative to total estimated cost (cost-to-cost method). Thus, the Group recognises revenue in the amount of costs actually incurred and billable to the customer within the respective reporting period.

- *Revenue from sales of inventory assets:* Occasionally, the Group sells inventory assets no longer required to external third parties. Corresponding revenue is realised at the point in time when goods sold are transferred to the customer.

INTER-SEGMENT REVENUE

Inter-segment revenue results from intra-group business relationships between Amprion GmbH and Amprion Offshore GmbH. These relate to transactions under the construction and usage agreement and the operating agreement concluded between the two companies. For details, please refer to Note [31], *Related party disclosures – transactions with related-party companies*.

MISCELLANEOUS REVENUES

The item *Miscellaneous revenues* includes income from ordinary business activities of the Group which do not fall within the scope of IFRS 15 and are therefore not revenues from contracts with customers. This mainly relates to contractual agreements classified as operating leases, which the Group has contracted as lessor (Note [10], *Leases*), as well as revenue from cross-border congestion management (congestion revenue).

Congestion revenues are related to cross-border capacity bottlenecks at the national borders between Germany and certain neighbouring countries. Transmission system operators are obliged under EU law to auction the limited cross-border transmission capacity across the various national borders via a market-based mechanism. Amprion recognises revenue from auction sales over time, as the performance obligation is satisfied over the period in which the auctioned transmission capacity is made available to the purchaser.

Revenue from outstanding performance obligations and fulfilled contract liabilities

As at 31 December 2022, current and non-current contract liabilities totalled € 67.2 million (31 December 2021: € 70.0 million), resulting, foremost, from (partially) unfulfilled performance obligations connected with construction cost contributions (BKZ) and connection cost contributions (AKB) (see Note [22], *Non-financial liabilities*). These items relate to non-refundable advance payments from customers that are deferred and released to income over remaining terms of six months to 33 years starting from the reporting date (previous year: three months to 32 years). In relation to the opening balance of BKZ and AKB of € 48.6 million (previous year: € 51.5 million) recognised as at 1 January 2022, € 2.5 million was realised as revenue in the reporting year (previous year: € 3.0 million).

The contract liabilities reported under non-financial liabilities correspond to the total estimated revenue from existing performance obligations partially or wholly unfulfilled as at 31 December 2022. A large amount of these unsatisfied performance obligations concerns contract liabilities for BKZ and AKB contributions reported under non-current non-financial liabilities. The majority of these will fall due in the long term due to the expected long release periods. Within the next financial year, revenues of € 2.2 million (previous year: € 2.4 million) are expected from this matter. Revenue from satisfied performance obligations with an original term of one year or less is not included here. Similarly, expected revenue in connection with performance obligations from (framework) contracts concluded with customers for an indefinite period of time is not taken into account.

The Group recognises receivables upon fulfilling its performance obligation or upon completion of the underlying performance period, as it receives an unconditional legal claim to the agreed consideration at this point in time at the latest. For details on the receivables recognised, please refer to Note [14], *Trade receivables and other receivables*.

In the reporting period, € 70.8 million (previous year: € 70.2 million) was recognised as revenue for performance obligations that were fully or partially fulfilled in previous periods. As at 31 December 2022, of this total amount of aperiodic revenue, € 21.0 million resulted from grid charges and grid connection revenue (previous year: € 16.5 million). The remaining € 49.8 million resulted from system service revenue (previous year: € 53.7 million).

[2] Other operating income

Other operating income

in € million	2022	2021
Income from disposal of assets	8.0	1.0
Miscellaneous	1.8	3.0
Total	9.8	4.1

Other operating income mainly includes income from disposals of property, plant and equipment.

[3] Cost of materials

Cost of materials

in € million	2022	2021
Grid usage expenses	350.2	319.2
System services	2,409.6	1,184.5
Purchased services	70.0	62.8
Materials and purchased goods	51.1	43.2
Other cost of materials	2.2	2.1
Total	2,883.1	1,611.8

Cost of materials from grid usage (*grid usage expenses*) in the reporting year mainly includes the expenses from passing on the nationwide uniform federal share of grid charges collected by Amprion. The amount passed on to other TSOs totalled €349.7 million (previous year: €320.1 million). This €29.6 million increase reflected the rise in the fixed nationwide portion from 60% to 80% in 2022.

Cost of materials from system services principally comprise expenses from the provision of control energy and network loss compensation as well as expenses from redispatch measures, feed-in management and reserve capacity. The increase in system service expenses resulted primarily from higher redispatch, grid loss and control energy expenses.

Cost of materials from purchased services primarily concern third-party plant operation and maintenance services.

The item *Materials and purchased goods* includes own consumption of raw materials and supplies as well as expenses from the resale of purchased goods and raw materials.

[4] Personnel expenses

Personnel expenses

in € million	2022	2021
Wages and salaries	211.1	187.5
Social security contributions	33.3	30.9
Pension expenses	52.7	49.7
Total	297.1	268.0

The increase in personnel expenses compared to the previous year is due to the continuing increase in personnel at Amprion. This is evident in the year-on-year change in average number of employees, shown below, which increased 6.75% in the reporting year.

Average number of employees

FTE	2022	2021
Senior executives	40	34
Employees not covered by collective agreements	460	419
Employees covered by collective agreements	1,761	1,665
Total	2,261	2,118

The preceding table refers to the average number of full-time-equivalent employees (FTE) during the financial year. Part-time employees were included proportionately to their regular weekly working hours.

[5] Other operating expenses

Other operating expenses

in € million	2022	2021
Auditing, legal and consulting fees	7.1	9.7
Service expenses	72.1	56.6
Other taxes	1.7	1.6
Fees, charges, contributions	7.1	5.6
Losses from disposal of non-current assets	22.1	14.4
Miscellaneous	35.1	36.8
Total	145.3	124.7

Auditing, legal and consulting fees included under other operating expenses relate in particular to commercial, technical and legal consulting services.

Service expenses include IT operating and support services.

Expenses recorded for fees, charges and contributions included, among other things, membership fees for the European Transmission System Operators Association ENTSO-E.

Losses from disposals of non-current assets consist primarily of book value losses due to scrapping of property, plant and equipment.

The item *Miscellaneous* mainly comprises expenses connected with partial retirement scheme obligations.

[6] Depreciation and amortisation

Depreciation and amortisation

in € million	2022	2021
Amortisation of intangible assets	12.7	12.5
Depreciation of property, plant and equipment	249.8	235.1
Amortisation of right-of-use assets from leases	157.4	225.8
Total	419.9	473.4

The overall decrease in depreciation and amortisation expenses in the reporting year compared to the previous year is due to the significantly lower amortisation of right-of-use assets. One of the reasons for this decline was that the operators of reserve power plants had the option under Sections 50a-50c of the German Energy Act (**EnWG**) to return their plants to the market for the temporary expansion of electricity generation capacity. Consequently, no lease was in place here as at the reporting date.

Depreciation of property, plant and equipment increased further year-on-year as a result of the ongoing grid expansion.

As in the previous year, no unscheduled depreciation or impairments according to IAS 36 were recognised on property, plant and equipment, intangible assets or right-of-use assets accounted for in accordance with IFRS 16 in the reporting year.

[7] Financial result

Financial income and expenses

Financial result

in € million	2022	2021
Interest and similar income	3.1	0.2
Negative interest from short-term financing	0.1	0.3
Income from investments	0.7	0.6
Total financial income	3.8	1.0
Financing interest expense	-50.8	-32.0
Capitalised borrowing costs (IAS 23)	31.2	22.2
Negative interest on bank balances	0.0	-0.4
Interest result from other provisions	5.5	0.4
Other interest and similar expenses	-0.7	-4.3
Total financial expenses	-14.8	-14.1
Financial result [+ income / - expense]	-10.9	-13.1

Interest and similar income mainly includes current account interest on positive bank balances amounting to €3.1 million (previous year: €0.0 million). The increase over the previous year is attributable to the significant rise in credit interest in 2022.

The item *Negative interest from short-term financing reported in 2021* relates to commercial papers issued during the comparison year at negative interest rates due to the negative short-term interest rate curve.

Income from investments consists exclusively of dividend income from the Group's equity interests measured at fair value through other comprehensive income (see Note [12], *Financial investments*).

Financing interest expense consists of interest expense from current and non-current financial liabilities plus related transaction costs (see Note [21], *Financial liabilities*), interest expense from lease liabilities (see Note [10], *Leases*) and net interest expense from the Group's pension accounting (see Note [20], *Provisions*).

Negative interest on bank balances relates to custody fees charged by banks for positive liquidity holdings and cash investments due to the negative short-term interest rate curve.

Interest result from other provisions relates to the effects of compounding and changes in interest rates. (see Note [20], *Provisions*).

The item *Other interest and similar expenses* mainly includes interest on arrears as well as interest on back tax payments in accordance with Section 233 German Tax Code (AO) in the amount of €0.7 million (previous year: €4.2 million).

Financing interest expense

Breakdown of financing interest expense

in € million	2022	2021
Interest expense on promissory note loans, registered bonds, bonds, credit and syndicated loans	45.0	23.1
Interest expense from jouissance rights	1.8	1.5
Net interest expense from pension obligations	0.4	0.9
Interest expense from lease liabilities	1.5	0.8
Other finance costs	2.1	5.7
Total	50.8	32.0

Financing interest expense includes effective total interest expense from subsequent measurement of non-current financial debt (without jouissance rights and lease liabilities) at amortised costs. The corresponding effective interest expense in the reporting year amounted to €44.0 million (previous year: €22.6 million) and resulted in particular from the subsequent measurement of promissory note loans, registered bonds and the bonds issued in 2022 and 2021 using the effective interest method mandated by IFRS 9.

[8] Income taxes

Income taxes recognised in the income statement

in € million	2022	2021
Current taxes on income [+ income/- expense]	-33.2	-40.2
Deferred income taxes [+ income/- expense]	53.1	-23.6
Total [+ income/- expense]	19.9	-63.8

Income taxes recognised in other comprehensive income

in € million	2022	2021
Deferred tax expense [-]/ tax income [+] from revaluation of defined benefit pension obligation	-59.7	-14.5
Deferred tax expense [-]/ tax income [+] from revaluation of plan assets	6.9	-0.3
Total [+ income/- expense]	-52.8	-14.9

The following reconciliation shows the relationship between the effective income taxes and the respective product of earnings before taxes and the applicable tax rate (expected income taxes) for the financial years 2022 and 2021.

The tax rate applied to determine the expected income taxes is derived from the applicable corporate income tax rate of 15% (previous year: 15%), the solidarity surcharge of 5.5% (previous year: 5.5%) and the average trade tax rate for the Group of 15.804% (previous year: 15.731%).

Tax reconciliation

in € million	2022	2021
Earnings before taxes (EBT)	-80.4	202.4
Expected tax rate	31.63%	31.56%
Expected income taxes [+ income/- expense]	25.4	-63.9
Tax effects from:		
Expenses not deductible for tax purposes	-0.3	-1.4
Trade tax add-ons/reductions	-2.6	0.1
Taxes relating to other periods	-1.1	1.3
Changes in tax rates	-0.5	-0.1
Other	-1.0	0.1
Effective income taxes [+ income/- expense]	19.9	-63.8
Effective tax rate	24.82%	31.51%

[9] Property, plant and equipment

Statement of changes in property, plant and equipment - reporting period

in € million	Land, land rights and buildings	Technical plant and machinery	Other equipment, factory and office equipment	Plants under construction and advance payments	Total
Historical cost					
Balance at 31 December 2021	850.6	9,242.1	89.5	903.2	11,085.4
Additions	41.7	710.1	10.6	671.6	1,434.0
Disposals	-17.6	-93.7	-1.5	-3.0	-115.8
Transfers	2.5	84.7	0.0	-87.3	0.0
Balance at 31 December 2022	877.2	9,943.2	98.6	1,484.5	12,403.6
Accumulated depreciation					
Balance at 31 December 2021	-202.5	-4,301.0	-56.0	0.0	-4,559.4
Additions	-13.4	-227.3	-9.0	0.0	-249.8
Disposals	1.4	68.5	1.4	0.0	71.4
Transfers	0.0	0.0	0.0	0.0	0.0
Write-ups	0.0	0.0	0.0	0.0	0.0
Balance at 31 December 2022	-214.4	-4,459.8	-63.6	0.0	-4,737.8
Carrying amount 31 December 2022	662.7	5,483.5	35.1	1,484.5	7,665.8

Statement of changes in property, plant and equipment – previous year

in € million	Land, land rights and buildings	Technical plant and machinery	Other equipment, factory and office equipment	Plants under construction and advance payments	Total
Historical cost					
Balance at 31 December 2020	762.9	8,366.5	79.4	724.3	9,933.1
Additions	69.8	735.2	11.4	422.1	1,238.4
Disposals	-23.1	-60.6	-1.3	-1.0	-86.1
Transfers	41.0	201.1	0.0	-242.1	-0.1
Balance at 31 December 2021	850.6	9,242.1	89.5	903.2	11,085.4
Accumulated depreciation					
Balance at 31 December 2020	-189.6	-4,132.6	-49.3	0.0	-4,371.5
Additions	-13.5	-213.7	-7.9	0.0	-235.1
Disposals	0.6	45.4	1.2	0.0	47.2
Transfers	0.0	0.0	0.0	0.0	0.0
Write-ups	0.0	0.0	0.0	0.0	0.0
Balance at 31 December 2021	-202.5	-4,301.0	-56.0	0.0	-4,559.4
Carrying amount 31 December 2021	648.1	4,941.2	33.5	903.2	6,526.0

Property, plant and equipment were not used as collateral to secure debts with banks or other third parties, neither in the reporting year nor in the previous year.

The Group capitalises borrowing costs for qualifying assets relating to plants under construction, network expansion investments and corresponding advance payments. Borrowing costs capitalised during the reporting year totalled €31.2 million (previous year: €22.2 million). To calculate capitalised interest on borrowings in the reporting year, a borrowing cost rate of 1.70% was applied (previous year: 1.43%). This rate represents the weighted average cost of debt, factoring in interest on all non-current and current Group-external financing, such as effective interest expense from financial liabilities (see Note [7], *Financial result*; for a breakdown of financial liabilities, see also [21], *Financial liabilities*), net interest expense from pensions (see Note [20], *Provisions*) and interest expense from leases (see Note [10], *Leases*).

In the reporting year, the Group recognised disposals of property, plant and equipment from decommissioning or scrapping and sales with a net carrying amount of € 44.4 million (previous year: € 38.9 million). Net income/expense realised from disposals was reported on the income statement as other operating income or other operating expense (see Notes [2], *Other operating income*, and [5], *Other operating expenses*).

[10] Leases

Amprion as lessee

The Group has entered into contracts qualifying as leases according to IFRS 16 for various technical equipment assets concerning transmission system operation, land and buildings, motor vehicles as well as operating and office equipment. The table below shows the development of the carrying amount of right-of-use assets during the reporting and the comparison periods broken down by the aforementioned asset categories.

Statement of changes in right-of-use assets

in € million	Technical plant and machinery	Land and buildings	Other equipment, factory and office equipment	Total
31 December 2020	383.3	17.7	1.4	402.5
Additions	7.3	0.0	0.5	7.8
Amortisation	-219.3	-5.7	-0.7	-225.8
Disposals	0.0	0.0	0.0	0.0
31 December 2021	171.3	12.0	1.2	184.5
Additions	140.9	14.3	0.7	155.9
Amortisation	-150.6	-6.1	-0.7	-157.4
Disposals	-39.2	-2.5	0.0	-41.7
31 December 2022	122.4	17.8	1.2	141.3

The increase in additions to right-of-use assets in the reporting year compared to the previous year is mainly due to newly concluded service contracts in the context of the provision of reserve capacities. Significant disposals of right-of-use assets in the reporting year related to a reserve power plant that has since returned to the market.

In addition to the leases shown in the table above, the Group holds low-value leases within the meaning of IFRS 16 for IT and communications hardware.

For accounting purposes, the Group utilises the practical expedients granted by IFRS 16, optionally applicable to short-term and low-value asset leases. Accordingly, the Group does not recognise any right-of-use assets and lease liabilities, but recognises the lease payments as expenses on a straight-line basis over the lease term.

The table below shows the development of the carrying amount of the lease liabilities reported on the balance sheet under current and non-current other financial liabilities (see Note [21], *Financial liabilities*).

Change in carrying amount of lease liabilities

in € million	
31 December 2020	404.2
Additions	7.8
Interest expense	0.8
Lease payments	-227.1
31 December 2021	185.8
Additions	155.9
Disposals	-42.0
Interest expense	1.5
Lease payments	-159.6
31 December 2022	141.5
<i>of which current</i>	<i>68.9</i>
<i>of which non-current</i>	<i>72.6</i>

The following table illustrates the effects of leases entered into by Amprion as lessee on the income statement.

Lease expenses recognised in the income statement

in € million	2022	2021
Expenses from leases for low-value assets	3.9	3.4
Expenses for variable lease payments not included in the measurement of lease liabilities	2.2	0.0
Amortisation of right-of-use assets	157.4	225.8
Interest expense incurred for lease liabilities (compounding)	1.5	0.8
Total	165.0	229.9

Low-value lease assets include IT and office equipment. Variable lease payments not included in the carrying amount of the lease liability arose for 2022 from a new service contract concluded in the reporting year.

In the cash flow statement, leases were recognised as follows:

Cash outflows from leases recognised in the cash flow statement

in € million	2022	2021
Lease payments	159.6	227.1
<i>of which redemption payments on lease liability</i>	<i>158.1</i>	<i>226.3</i>
<i>of which interest payments on lease liability</i>	<i>1.5</i>	<i>0.8</i>
Cash outflows from leases for low-value assets	3.9	3.4
Expenses for variable lease payments not included in the measurement of lease liabilities	2.2	0.0
Total	165.7	230.5

The redemption as well as the interest portion included in the lease payments are reported in the cash flow from financing activities. Expenses from low-value asset leases and variable lease payments are included in the operating cash flow.

Lease liabilities recorded under current and non-current financial liabilities had maturity profiles as follows as at the end of the reporting year and previous year, respectively, where the amounts reported reflect the nominal interest and redemption portions of the lease payments:

Maturity profiles of lease liabilities

in € million	31 Dec. 2022	31 Dec. 2021
Due in up to 1 year	71.8	143.0
Due in 1 to 2 years	48.6	33.4
Due in 2 to 3 years	10.6	1.8
Due in 3 to 4 years	5.7	0.6
Due in 4 to 5 years	1.0	0.6
Due after 5 years	12.9	12.0
Total	150.5	191.3

Single lease contracts – primarily for rented land and buildings – have limited extension and termination options which were not factored into initial measurement of the right-of-use assets and lease liabilities. The non-inclusion of these options is based on corresponding discretionary decisions of the Management, according to which their exercise was not classified as sufficiently probable. In individual cases, variable lease payments linked to a consumer price index have been contractually agreed, which were included in the carrying amount of the lease liability.

The Group's obligations under its leases are secured by the lessor's ownership of the leased assets.

Future cash outflows from lease contracts that have not yet commenced because the provision date for the leased asset lies in the future are disclosed in the notes on other Group financial obligations; see Note [30], *Contractual guarantees, contingent liabilities and other financial obligations*.

Amprion as lessor

The Group primarily leases transformers to customers as exclusive-use equipment in accordance with Section 19 (3) of the Electricity Network Charges Ordinance (StromNEV). Moreover, Amprion also leases shared rights of use to **substations** and overhead line masts. The Group, in its role as lessor, has classified all of its leases as operating leases, as not all material risks and rewards incidental to ownership of the leased asset have been transferred to the lessee. Income from operating leases amounted to €96.6 million in the reporting period (previous year: €86.0 million). This includes contracts for land and buildings in the amount of €1.2 million (previous year: €1.4 million), with original terms ranging between one month (previous year: one month) and 83 years (previous year: 15 years). Due to their minor significance for the economic situation of the Group, these are not reported separately under property, plant and equipment. The increase in the maximum original contract term from 15 to 83 years is due to a leasehold contract.

The following table contains the maturity profiles of outstanding undiscounted lease payments under operating leases as at the reporting date and the previous year's reporting date, taking into account the best estimate of the lease terms.

Maturity profiles of nominal lease payments from operating leases

in € million	31 Dec. 2022	31 Dec. 2021
Due in up to 1 year	91.6	79.4
Due in 1 to 2 years	25.8	24.1
Due in 2 to 3 years	23.8	22.4
Due in 3 to 4 years	0.4	3.2
Due in 4 to 5 years	0.4	0.2
Due after 5 years	15.1	0.5
Total	157.2	129.8

The increase in outstanding lease payments due after five years compared with the previous year results from a leasehold agreement.

[11] Intangible assets

Statement of changes in intangible assets - reporting period

in € million	Rights, licenses and patents	Software	Self-developed software	Advance payments	Total
Historical cost					
Balance at 31 December 2021	2.8	75.3	3.5	10.5	92.1
Additions	0.0	14.1	0.3	3.8	18.2
Disposals	0.0	0.0	0.0	-1.6	-1.6
Transfers	0.0	0.0	0.0	0.0	0.0
Balance at 31 December 2022	2.8	89.3	3.9	12.7	108.7
Accumulated amortisation					
Balance at 31 December 2021	-2.7	-50.2	-2.1	0.0	-55.0
Additions	0.0	-12.2	-0.4	0.0	-12.7
Disposals	0.0	0.0	0.0	0.0	0.0
Transfers	0.0	0.0	0.0	0.0	0.0
Write-ups	0.0	0.0	0.0	0.0	0.0
Balance at 31 December 2022	-2.7	-62.5	-2.6	0.0	-67.7
Carrying amount 31 December 2022	0.1	26.9	1.3	12.7	41.0

Statement of changes in intangible assets - reporting period

in € million	Rights, licenses and patents	Software	Self-developed software	Advance payments	Total
Historical cost					
Balance at 31 December 2020	2.7	59.8	3.0	5.0	70.5
Additions	0.1	15.5	0.6	5.6	21.8
Disposals	0.0	0.0	0.0	-0.2	-0.2
Transfers	0.0	0.0	0.0	0.1	0.1
Balance at 31 December 2021	2.8	75.3	3.5	10.5	92.1
Accumulated amortisation					
Balance at 31 December 2020	-2.7	-38.2	-1.6	0.0	-42.5
Additions	0.0	-12.0	-0.5	0.0	-12.5
Disposals	0.0	0.0	0.0	0.0	0.0
Transfers	0.0	0.0	0.0	0.0	0.0
Write-ups	0.0	0.0	0.0	0.0	0.0
Balance at 31 December 2021	-2.7	-50.2	-2.1	0.0	-55.0
Carrying amount 31 December 2021	0.1	25.0	1.4	10.5	37.1

Research and development expenses for financial year 2022, excluding the immaterial development expenses recognised as internally generated software under additions, totalled € 4.9 million (previous year: € 7.3 million). The IFRS criteria for capitalisation of development costs were not met for these.

[12] Financial assets

In the reporting period and in the previous year, financial assets included exclusively minority interests in other companies, as well as an insignificant amount of long-term loans to Group employees (employee loans).

Financial assets

in € million	31 Dec. 2022	31 Dec. 2021
Equity stakes held as financial investments (<20% equity share)	5.2	5.2
Loans	0.0	0.1
Total	5.3	5.3

All equity interests in other companies held as financial investment are *measured at fair value through other comprehensive income*. The Group carries loans *measured at amortised cost*.

The table below provides an overview of the minority interests the Group holds in other companies. The Group had no ability to exercise significant influence over these companies or control them jointly with other partner companies. These non-controlling interests are instead held as strategic investments. Thus, the Group permanently classifies these as equity instruments *measured at fair value through other comprehensive income*.

Carrying amounts of equity stakes held as financial investment

in € million	31 Dec. 2022	31 Dec. 2021
Equity stake in Joint Allocation Office SA (JAO), Luxembourg, Luxembourg	0.1	0.1
Equity share/shareholding	4.0%	4.0%
Equity stake in TSCNET Services GmbH, Munich, Germany	0.4	0.4
Equity share/shareholding	6.3%	7.1%
Equity stake in H.G.R.T. SAS, Paris, France	4.8	4.8
Equity share/shareholding	5.0%	5.0%
Total	5.2	5.2

Equity and net income of equity stakes held as financial investment*

in € million	31 Dec. 2022**		31 Dec. 2021***	
	Equity	Net income	Equity	Net income
Joint Allocation Office SA (JAO)	7.1	0.3	6.8	0.3
TSCNET Services GmbH	8.2	0.7	7.4	0.6
H.G.R.T. SAS	91.4	10.9	91.6	9.9

* The equity and net income figures of the investment portfolio companies for financial year 2022 were not available at the time of preparation of the consolidated financial statements.

** Equity and net income for financial year 2021.

*** Equity and net income for financial year 2020.

Equity interests held as financial investment are exclusively shares in unlisted companies, for which reason there are no price quotations in an active market (level 1 of the fair value hierarchy). The necessary input parameters being unavailable, fair value could not be reliably estimated, neither on the reporting date nor in the previous year, applying an appropriate measurement technique. Equity interests held as financial investments are thus carried at acquisition cost until new price information is available indicating that fair value is higher or lower. Such price information may, for example, become available from recent transactions of the shares in the investee.

In financial year 2022, the Group reported dividends from these investments totalling €0.7 million (previous year: €0.6 million) as financial income (Note [7], *Financial result*).

[13] Inventories

Inventories

in € million	31 Dec. 2022	31 Dec. 2021
Raw materials and supplies	70.1	58.1
Total	70.1	58.1

In the reporting period and in the previous year, inventory assets consisted exclusively of raw materials and supplies.

Inventory assets are carried at the lower of acquisition cost or net realisable value as at the reporting date. Impairments of €0.2 million were recorded on these assets in the reporting period (previous year: €0.1 million).

In the reporting period, €69.4 million (previous year: €65.2 million) was recognised in the cost of materials from the operational consumption of inventory assets.

[14] Trade receivables and other receivables

Trade receivables and other receivables

in € million	31 Dec. 2022	31 Dec. 2021
Trade receivables - grid	387.4	168.1
Trade receivables - EEG	38.4	640.4
Trade receivables - other	0.1	0.3
Receivables from companies in which an equity stake is held	0.8	5.4
Unbilled services	371.7	312.7
<i>of which from grid business</i>	352.5	286.0
<i>of which from EEG business</i>	19.2	26.7
Trade receivables	798.3	1,126.9
Other receivables from levies	13.0	74.1
Other tax receivables	35.3	39.6
Other receivables	48.3	113.7
Total	846.6	1,240.5

As at 31 December 2022, current trade receivables totalled €798.2 million (previous year: €1,126.7 million) while non-current trade receivables came to €0.1 million (previous year: €0.2 million).

The decrease in *trade receivables - EEG* compared to the previous year primarily reflects lower receivables of Renewable Energy Act (EEG) levies. The EEG levy for 2022 was 3.723 ct/kWh and was 6.500 ct/kWh in the previous year. The EEG levy was abolished with effect from 1 January 2023. In future, the promotion of renewable energies will be financed through the federal budget.

As at the reporting date, current other receivables totalled €48.3 million (previous year: €113.6 million) while non-current other receivables came to €0.0 million (previous year: €0.03 million).

The customary payment due period for billed grid charges and balancing group billing is 14 days from invoice receipt. Deviating from the above, however, the payment due period for the various levies varies from case to case between one day (daily clearing bank transfer of EEG marketing revenue) up to an invoice due date for corresponding annual invoices in year t+2 (value date 30 June). The payment due deadline for most levies is the 15th of the following month, based on the respective month of supply.

Trade receivables and other receivables are generally non-interest bearing.

In the reporting year, value allowances for expected credit losses of €0.3 million on trade receivables and other receivables recognised in the balance sheet under risk provisions were released to income (previous year: €1.6 million released to income). See Note [25], *Reporting on financial instruments* regarding default risks, write-downs and changes in expected loss provisioning for expected credit losses on trade receivables and other receivables.

[15] Other financial assets

Other financial assets

in € million	31 Dec. 2022	31 Dec. 2021
Contract assets	11.3	5.8
Receivables from margin requirements (initial margins) and collaterals	11.2	4.9
Loans	0.0	0.1
Money market investments and time deposits (maturity > 3 months)	0.0	1,450.0
<i>of which from grid business</i>	0.0	0.0
<i>of which from EEG business</i>	0.0	1,450.0
Other	0.5	0.5
Total	23.0	1,461.3

Contract assets were recognised on commissioned work for external third parties, primarily concerning the construction of (shared) lines that become the sole or partial property of the customer upon completion (fractional ownership).

Receivables from margin requirements and collaterals stemmed primarily from electricity exchange (EPEX Spot) transactions, which require the Group to put up initial margins as collateral. The exchange is only allowed to claim this collateral if the Group fails to meet its payment obligations from transactions on the relevant exchanges.

The recorded loans concern the short-term portion of loans to Group employees.

In contrast to the previous year, the Group held no cash investments with original maturities of more than three months as at the reporting date. The cash investments held in the previous year in the amount of €1,450 million were held by the Group for the purpose of settling obligations connected with the EEG equalisation mechanism.

Expected credit losses of €0.5 million were recorded on bank balances in the reporting year as part of expected loss provisioning (previous year: €0.9 million on money market investments and bank balances).

[16] Income tax claims

Income tax claims

in € million	31 Dec. 2022	31 Dec. 2021
Corporation tax refund claim	42.9	33.4
Trade tax refund claim	39.0	31.8
Other tax refund claims	0.1	0.1
Total	82.0	65.3

Due to advance tax payments made in the reporting year, the Group had a corporation tax refund claim of €19.7 million for 2022 (previous year: €23.2 million) and a trade tax refund claim of €16.0 million (previous year: €23.2 million). Final assessments from the tax authorities for previous-year periods were still outstanding in the reporting year, leading to a corporation tax refund claim of €23.2 million (previous year: €10.2 million) and a trade tax refund claim of €23.0 million (previous year: €8.6 million).

The Group companies forming a tax group pay income taxes in Germany. As in the previous year, the corporate income tax rate was 15.0% plus the solidarity pass-on charge of 5.5%. The trade tax rate was 15.804% (previous year: 15.731%). This resulted in an income tax rate of 31.63% (previous year: 31.56%).

Corporation and trade tax returns have been submitted for years up to and including the 2021 tax year. The returns for financial years 2018 and 2019 are currently being reviewed by the tax authorities.

[17] Other non-financial assets

Other non-financial assets

in € million	31 Dec. 2022	31 Dec. 2021
Advance payments	6.7	4.3
Other assets	0.5	0.9
Total	7.2	5.2

The increase in advance payments made as at 31 December 2022 mainly reflects payments for IT operation services.

[18] Cash and cash equivalents

Cash and cash equivalents consisted primarily of bank balances invested as fixed-term and overnight deposits. Having original maturities of less than three months, these are subject to only minimal value fluctuation risk and thus included as cash equivalents. As at the reporting date and for the previous year, cash and cash equivalents broke down as follows for the purposes of the cash flow statement:

Cash and cash equivalents

in € million	31 Dec. 2022	31 Dec. 2021
Cash	0.0	0.0
Bank balances	5,533.4	2,121.5
Total	5,533.4	2,121.5

Due to the need to keep funds on reserve exclusively for EEG financing, as at 31 December 2022 cash and cash equivalents in the amount of €5,113.1 million were subject to restrictions (previous year: €2,121.0 million), thus being unavailable to the Group for free disposal.

Bank balances earn interest at variable rates. These funds are callable on a daily basis. Short-term deposits have varying investment periods ranging from one day to three months, depending on the Group's cash requirements. They bear interest at the respective contractual short-term deposit rates.

[19] Equity

The development of equity is shown in the statement of changes in equity, taking into account the consolidated comprehensive income. A separate disclosure of the latter Group-relevant components can be found in the statement of comprehensive income.

Subscribed capital

As at 31 December 2022, Amprion GmbH had share capital of €10.0 million (previous year: €10.0 million), consisting of three shares (previous year: three) with nominal amounts of €2.5 million, €6.4 million and €1.1 million. All share capital is fully paid-in. In the reporting year and in the previous year, 74.9% of the shares were held by M31 Beteiligungsgesellschaft mbH & Co. Energie KG, Düsseldorf, and 25.1% by RWE AG, Essen.

Additional paid-in capital

Additional paid-in capital includes the difference between the nominal amount and the amount upon issuance of the shares of Amprion GmbH. Neither in the reporting year nor in the previous year amounts were transferred to additional paid-in capital.

Retained earnings

Retained earnings include, on the one hand, the equity effect from the recognition and measurement differences resulting from the transition from German GAAP (HGB) accounting rules to IFRS as at 1 January 2020. On the other hand, retained earnings are increased over time by accumulated retained amounts from realised consolidated net income and reduced by withdrawals from retained earnings.

By resolution of the Supervisory Board of 12 April 2022, a partial amount of €130.0 million (financial year 2020: €100.0 million) of the HGB net income of Amprion GmbH of €183.6 million (financial year 2020: €216.6 million) realised for the 2021 financial year was distributed to the shareholders. The consolidated surplus of €8.6 million for the financial year 2021 remaining after distribution (financial year 2020: €334.5 million) was transferred to consolidated retained earnings in the 2022 financial year.

Accumulated other comprehensive income

Accumulated other comprehensive income represents the cumulative total amount of those items that are recorded in other comprehensive income through the end of the reporting period. This concerns particularly changes in the fair value of equity interests in other companies held by the Group as financial investments, for which the OCI option has been irrevocably chosen, as well as remeasurements of pensions and similar obligations (including pension plan assets) and the corresponding deferred tax effects.

The equity interests held – consisting exclusively of shares in unlisted companies – were carried at acquisition cost, due to the lack of reliable determinability of their fair values. Therefore, the subsequent measurement of these investments did not result in any changes in value to be recognised in other comprehensive income, neither in the reporting year nor in the previous year.

Please refer to Note [20], *Provisions* regarding expenses and income from pension obligations and outsourced plan assets recognised in other comprehensive income in the reporting year and the previous year, as well as Note [8], *Income taxes* regarding corresponding tax effects.

The income and expenses from the above-mentioned items recognised in other comprehensive income, including the related tax effects, will not be reclassified subsequently to profit or loss at any time.

Consolidated net income

The consolidated net income is the balance of all expenses and income recognised in the consolidated income statement in a specific period. It represents – together with the amount recognised in other comprehensive income for the respective period – the net increase in the Group's net assets realised during the period that is not attributable to transactions with equity investors.

Paid and proposed dividends

By resolution of the Supervisory Board of 12 April 2022, a partial amount of €130.0 million of the net profit of €183.6 million (financial year 2020: €216.6 million) realised for the financial year 2021 by Amprion GmbH under HGB was distributed to shareholders (financial year 2020: €100.0 million).

Additionally, in the financial year 2021, a one-off distribution of €23.2 million was made to the shareholder RWE AG pursuant to a shareholder resolution of 26 March 2021. This distribution amount was withdrawn from other retained earnings.

For the appropriation of the 2022 net income of Amprion GmbH, the Management Board proposed a distribution amount of €130.0 million to the Supervisory Board in accordance with Section 16 (1) of the Articles of Association.

[20] Provisions

Other provisions

In the following, rather than addressing provisions according to expected maturity as shown on the balance sheet, provisions are presented and explained by the categories of *personnel provisions*, *energy provisions* and *miscellaneous provisions*.

The development of provisions in the reporting year and the comparative year is shown in the following tables:

Statement of changes in other provisions - reporting period

in € million	Personnel provisions	Energy provisions	Miscellaneous provisions	Total
Balance at 31 December 2021	76.2	10.1	34.5	120.8
Increases	38.5	12.0	29.6	80.2
Amounts used	-32.0	-7.6	-8.3	-47.9
Unused amounts released	0.0	-0.4	-2.2	-2.6
Accrued interest and discount rate changes	-5.6	0.0	0.0	-5.5
Balance at 31 December 2022	77.2	14.2	53.6	145.0
<i>of which current</i>	<i>47.7</i>	<i>14.2</i>	<i>49.9</i>	<i>111.9</i>
<i>of which non-current</i>	<i>29.4</i>	<i>0.0</i>	<i>3.7</i>	<i>33.1</i>

Statement of changes in other provisions – previous year

in € million	Personnel provisions	Energy provisions	Miscellaneous provisions	Total
Balance at 31 December 2020	64.6	14.8	26.7	106.1
Increases	42.0	4.4	19.6	66.0
Amounts used	-29.9	-6.2	-8.7	-44.9
Unused amounts released	0.0	-2.8	-3.1	-5.9
Accrued interest and discount rate changes	-0.5	0.0	0.0	-0.5
Balance at 31 December 2021	76.2	10.1	34.5	120.8
<i>of which current</i>	42.6	10.1	29.4	82.2
<i>of which non-current</i>	33.6	0.0	5.1	38.6

Personnel provisions mainly include obligations arising from partial retirement schemes, employee jubilee obligations, future bonuses and other one-off pay-outs, long-term working time accounts as well as vacation entitlements. The provisions for jubilee benefits and for partial retirement benefits are formed on the basis of actuarial calculations, taking into account company-specific adjusted Klaus Heubeck 2018 G mortality tables. Wage and salary increases of 2.75% and 3.50% p.a. (previous year: 2.75% and 3.50% p.a.) were, depending on the specific anniversary regulation, assumed for the anniversary obligations and 3.50% p.a. (previous year: 3.50% p.a.) for the partial retirement obligations. The relevant actuarial interest rates were 3.81% p.a. for the anniversary obligations (previous year: 0.84% p.a.) and 3.68% p.a. for the partial retirement obligations (previous year: -0.03% p.a.).

The obligations from partial retirement and long-term working time accounts are partially funded. The credit balances from the block model for partial retirement in accordance with Section 8a of the German Part-Time Retirement Act (AltTZG) and the credit balances on long-term working accounts in accordance with Section 7e of the German Social Security Code (SGB IV) are secured by assets held in trust within the framework of a Contractual Trust Arrangement (CTA), which qualifies as plan assets under IFRS. These were measured at fair value as at the reporting date and amounted to €12.6 million (previous year: €12.2 million). Based on this, the personnel provisions shown in the provisions table include the Group's net obligations from partial retirement and long-term working accounts remaining after offsetting against the plan assets.

The current portion of personnel provisions reported in the balance sheet corresponds to the outflows expected for 2023 (previous year: for 2022). We estimate that 72% of expected outflows for non-current personnel provisions (previous year: 71%) will be utilised between 2024 and 2027 (previous year: 2023–2026), and that 28% (previous year: 29%) will be utilised between 2028 and 2062 (previous year: 2027–2061). The wide maturity range of the expected outflows reflects the long-term forecast horizon of the employee jubilee obligations.

Energy provisions mainly concern set-off obligations between transmission system operators for the maintenance of security of supply. In addition, provisions were recognised for repayment obligations from settlements with electricity-intensive customers.

Miscellaneous provisions mainly comprise provisions for lawsuits (provisions for litigation costs). Provisions were also recorded for business document archiving and expected credit losses according to IFRS 9 (expected loss provisioning).

The current portion of other provisions carried reflects the outflows expected for 2023 (previous year: 2022). Based on the latest projections, we estimate that 52% of other non-current provisions will be utilised between 2024 and 2027 (previous year: 63% utilised between 2023 and 2026). We estimate that the rest of the non-current other provisions will be utilised between 2028 and 2032 (previous year: 2027–2031).

Pension provisions

The Group recognises provisions for pension obligations arising from defined benefit plans in respect of retirement, disability and surviving dependants' benefits. The following pension systems are in place, depending on when employees joined the company:

- Most employees hired before 2001 are in final salary-based retirement systems in which pension benefits are calculated based on years of employment and final pensionable income. The final-salary systems include comprehensive and decoupled pension plans. The pension commitments each define a specific pension target depending on the final salary.

- With comprehensive (or total retirement earnings) schemes, a specific pension level is guaranteed which includes the statutory pension. The employer thus fills the gap between the target pension and the amount of the employee's statutory pension.
- The decoupled pension schemes introduced later, which replaced the comprehensive pension schemes for new hires, involve pension commitments that do not factor in the statutory pension.

As at 31 December 2022, pension commitments from final salary schemes totalled €155.2 million (previous year: €220.6 million).

- For employees hired after 2001, pension commitments are based on a pension components system; benefits are accumulated as annual pension credits. In this system, a pay-based pension contribution is converted into a lifelong pension entitlement applying annuity factors. When benefits are to be drawn, the pension credits accrued each year are added up.

Fixed-amount commitments from pension settlements are converted into credits under the pension credit system as well. The pension amount is thus based on the underlying settlement amount.

Obligations under employer-funded pension credit plans totalled €47.2 million as at 31 December 2022 (previous year: €86.6 million).

- In addition to the employer-funded pension commitments, Group employees can also accrue pension credits by funding their own personal retirement accounts through deferred compensation. Pension credits accrue annually based on the same system as under the employer-funded credit-based pension plan. Deferred compensation contributed to the retirement account is converted into a lifelong pension entitlement applying annuity factors.

Obligations under deferred compensation retirement plans totalled €49.1 million as at 31 December 2022 (previous year: €85.8 million).

Other commitments totalled €8.2 million as at the reporting date (previous year: €11.0 million). These consist mainly of energy price concessions that became effective during the retirement period of employees hired before 2002 as well as deferred compensation plan pension commitments with pledged pension obligation insurance.

The breakdown of staff with prospective pension entitlements, departed employees with a vested pension entitlement and pensioners by the various employer-funded pension plans was as follows as at 31 December of 2022 and 31 December of 2021:

Number of employees

	31 Dec. 2022			31 Dec. 2021		
	Staff with prospective pension entitlements	Vested pension entitlement	Pensioners	Staff with prospective pension entitlements	Vested pension entitlement	Pensioners
Closed systems dependent on final salary	379	16	259	415	15	225
Pension components systems	2,029	108	14	1,826	88	10
Total	2,408	124	273	2,241	103	235

The pension provisions recognised were calculated via the *projected unit credit method* required under IAS 19 referencing actuarial reports.

The recognised amount of either the pension provisions or the net defined benefit asset corresponds to the balance of the present value of the expected future pension obligations and the plan assets formed exclusively to cover these obligations.

In the actuarial determination of the defined benefit obligation, the pro rata benefit entitlements acquired are measured at the respective reporting date. The measurement takes into account actuarial assumptions for, among other things, the discount rate, the compensation and pension trend, the fluctuation rate and life expectancy. The plan assets were recognised in accordance with IAS 19.8 and IAS 19.113-119 and are used exclusively to cover the Group's pension obligations. A *contractual trust arrangement* (CTA) is in place as legal framework model. This is a structured trustee agreement providing for the covering of direct pension commitments by separate assets held in trust outside of the company.

The primary objective of asset management is to cover the pension provisions through the outsourced assets held in trust (plan assets) while accepting low investment risks. In line with this, the investment strategy of the plan assets invested in MI-Fund 87 in the reporting period and in the previous year was to hedge 100% of the value of the pension entitlements recognised in the financial statements of Amprion GmbH under HGB. The pension entitlements determined in accordance with HGB serve as a value reference to fully cover the pension obligations recognised in the balance sheet. Accordingly, the Group's pension obligations are managed on the basis of their measurement in the separate financial statements of Amprion GmbH under HGB in such a way that they are fully funded at the end of a financial year (net pension obligation in the financial statements under HGB of zero). A funding shortfall measured in accordance with HGB is therefore closed at the end of a financial year by a corresponding addition to plan assets.

The pledged reinsurance policy in connection with the *deferred compensation* pension commitments from *deferred compensation* included under other commitments is a qualified reinsurance policy. In the event of insolvency, this serves exclusively to offset the *deferred compensation* pension obligation and therefore also qualifies as plan assets within the meaning of IAS 19. As a result of the resulting netting with the *deferred compensation* pension obligation, the status of a defined contribution plan is economically achieved.

As the valuation of pension obligations differs between HGB and IFRS, the capital management presented in the IFRS consolidated financial statements regularly does not lead to a congruence of plan assets and pension obligations of the Group. If – as in the reporting year – there is a surplus of plan assets over pension obligations as at the reporting date, this has to be recognised in full as an asset due to the fact that the reimbursement of a surplus at the end of the plan is not limited to a certain amount according to the trust agreement. Accordingly, the Group can reclaim any remaining surplus after all pension commitments under the pension plan have been fulfilled. The economic benefit from this refund and the corresponding asset to be recognised is realisable in full at the planned end of the pension plan and corresponds to the surplus determined in accordance with IAS 19.64 in conjunction with IFRIC 14.13 as at the reporting date.

As at 31 December 2022, the CTA plan assets and *deferred compensation* plan assets covered by pension obligation insurance totalled €430.3 million (previous year: €370.6 million).

The expected development of cash flows from the various pension plans is shown in the following table:

Cash flow development of the pension schemes

Cash flow development as at 31 Dec. 2022				
in € million	Closed systems dependent on final salary	Pension components systems	Other commitments	Total
2023	2.4	0.2	0.1	2.7
2024	3.2	0.2	0.1	3.5
2025	3.7	0.4	0.1	4.2
2026	4.6	0.5	0.1	5.2
2027	5.1	0.6	0.2	5.9
2028-2032*	7.1	1.4	0.2	8.7
2033-2037*	9.7	2.8	0.4	12.8
2038-2042*	10.8	4.8	0.4	16.0
2043-2047*	11.1	8.5	0.5	20.1
2048-2052*	10.6	13.8	0.5	24.9
2053-2057*	9.2	20.5	0.4	30.1
2058-2062*	6.8	24.3	0.4	31.5
2063-2067*	4.2	24.6	0.3	29.0
2068-2072*	2.1	23.5	0.2	25.7

* Five-year averages.

Cash flow development as at 31 Dec. 2021

in € million	Closed systems dependent on final salary	Pension components systems	Other commitments	Total
2022	2.1	0.1	0.1	2.3
2023	2.4	0.2	0.1	2.7
2024	3.2	0.3	0.1	3.5
2025	3.6	0.4	0.1	4.1
2026	4.5	0.5	0.1	5.1
2027-2031*	6.3	1.1	0.2	7.5
2032-2036*	9.1	2.3	0.3	11.6
2037-2041*	10.3	4.0	0.3	14.6
2042-2046*	10.6	7.2	0.3	18.2
2047-2051*	10.3	11.6	0.3	22.2
2052-2056*	9.1	17.3	0.3	26.7
2057-2061*	6.9	20.9	0.3	28.1
2062-2066*	4.4	21.3	0.2	25.9
2067-2071*	2.3	20.4	0.1	22.7

* Five-year averages.

The calculation for the reporting year was based on an average duration of 23.5 years (previous year: 28.3 years).

The company pensions are subject to an adjustment review obligation every three years in accordance with the Act on the Improvement of Company Pensions (Section 16 BetrAVG). In addition, some commitments grant annual pension adjustments that may be higher than the adjustment under the statutory adjustment obligation.

Comprehensive pension schemes may be affected by future reductions in the statutory pension level due to the statutory pension being factored into the guaranteed pension level, thus leading to potentially higher pension payments.

The following key actuarial assumptions were applied for calculation of pension provisions (average values):

Significant actuarial assumptions

in %	31 Dec. 2022	31 Dec. 2021
Actuarial interest rate	3.59	1.26
Future expected wage and salary increases	3.50	3.50
Future expected pensions increase	1.00 resp. 2.40	1.00 resp. 2.10

The actuarial interest rate is determined based on the yields on top-rated corporate bonds whose maturities correspond to the respective obligations. The Bloomberg Barclays Classification System (BCLASS) was utilised as a basis for determining the interest rate via the "RATE Link" method.

The mortality assumptions were based on the company-specific adjusted mortality tables 2018 G by Klaus Heubeck.

The salary increase rate includes expected wage and salary increases, which also take into account increases due to career developments.

An annual pension adjustment factor of 1.00% is stipulated in the pension plan regulations of pension credit schemes. With final salary pension schemes, pension adjustments are either tied to changes in the consumer price index or to collective bargaining pay indexing. Provisions are measured applying an average annual pension increase factor of 2.40% (previous year: 2.10%).

Potential changes in the actuarial assumptions would have the following simulated effects on the present value of the defined benefit obligation:

Sensitivity analyses for significant actuarial assumptions

in € million	31 Dec. 2022		31 Dec. 2021	
	Closed systems dependent on final salary	Pension components systems	Closed systems dependent on final salary	Pension components systems
Discount rate +/-50 basis points	-12.9/14.6	-13.6/16.5	-22.0/25.4	-28.3/35.1
Salary trend +/-50 basis points	3.7/-3.6	0.0/-0.0	9.1/-8.7	0.1/-0.1
Pension trend +/-50 basis points	10.8/-9.8	-/-	18.1/-16.2	-/-
Life expectancy +/- 1 year	4.5/-4.6	1.9/-2.0	8.4/-8.4	5.1/-5.0

The above sensitivity analyses reflect a change in one respective assumption, the other assumptions remaining unchanged in each scenario to avoid interactive effects. The methods used to calculate the aforementioned sensitivities and to calculate the pension provisions were applied consistently.

Expenses for pension and similar obligations broke down as follows for the reporting period and the previous year:

Breakdown of pension expenses

in € million	2022	2021
Current service cost	37.6	35.8
Past service cost	0.0	0.0
Interest income from plan assets	-4.7	-2.6
Interest costs	5.1	3.5
Recording in the income statement [+ expense/- income]	38.0	36.7
Income [-]/expense [+] from plan assets excluding interest income	21.9	-1.0
Actuarial gains [-]/losses [+] from changes in demographic assumptions	0.0	0.0
Actuarial gains [-]/losses [+] from changes in financial assumptions	-194.5	-51.0
Actuarial gains [-]/losses [+] from experience-based adjustments	5.7	4.9
Recording in other comprehensive income (OCI) [+ expense/- income]	-166.9	-47.1
Total [+ expense/- income]	-128.9	-10.4

Pension expenses on the income statement also include annual pension expenses to be reimbursed by the Group to RWE AG for obligations under warranty agreements (see Note [30], *Contractual guarantees, contingent liabilities and other financial obligations*). These totalled €15.1 million in the reporting year (previous year: €13.8 million).

The development of pension provisions or of a net defined benefit asset from overfunding is shown below, broken down into present value of the defined benefit obligation and fair value of plan assets.

Development of pension provisions

in € million	2022	2021
Defined benefit obligation at the beginning of the financial year	404.0	409.4
Current service cost	37.6	35.8
Interest cost	5.1	3.5
Benefits paid	-1.7	-1.4
Actuarial gains [-]/losses [-]	-188.8	-46.1
of which from changes in demographic assumptions	0.0	0.0
of which from changes in financial assumptions	-194.5	-51.0
of which from experience-based adjustments	5.7	4.9
Employee contributions	3.5	2.8
Past service cost	0.0	0.0
Reclassifications	0.0	0.0
Present value of the defined benefit obligation at the end of the financial year	259.7	404.0
Fair value of plan assets at the beginning of the financial year	370.6	303.8
Interest income	4.7	2.6
Appropriations to [+]/transfers from [-] plan assets*	76.9	63.5
Benefits paid	0.0	-0.3
Income [+]/expense [-] from plan assets excluding interest income	-21.9	1.0
Fair value of plan assets at the end of the financial year	430.3	370.6
Provisions for pensions and similar obligations [+] or net defined benefit asset from overfunding [-]	-170.7	33.5

* Applies almost exclusively to the employers' contributions.

Contributions to plan assets for the subsequent period starting after 31 December 2022 are forecast to total €45.1 million (previous year: €68.2 million).

Pension entitlements are secured by plan assets, which are primarily invested within the Eurozone in the fund MI-Fund 87. As at the individual reporting dates, the fair values of plan assets by asset class were as follows:

Composition of plan assets transferred to MI-Fund 87 based on fair values

in %	31 Dec. 2022	31 Dec. 2021
Fixed income securities (bearer instruments)	75.9	74.8
Pension funds	20.8	21.4
Cash and cash equivalents	2.9	3.5
Other	0.3	0.3
Total	100.0	100.0

The asset class *Fixed income securities (bearer instruments)* consists of bonds, mortgage certificates (Pfandbriefe) and public treasury notes. The asset class *Other* consists chiefly of equity index and bond futures. As at the reporting date, the fund equity ratio, which is the ratio of equity market exposure managed via equity futures to fund volume, was 0.6% (previous year: 20.4%). The asset class *Cash and cash equivalents* mainly comprises bank balances and money market investments in addition to initial and variation margins.

As at the reporting dates, the fair values of securities in the asset classes for *fixed income* were derived from market prices in active markets (level 1 fair values). The same applies for the equity index and bond futures included in the asset class *Other*.

In addition to the financial resources invested in the above-described special fund, the plan assets transferred to the CTA as at 31 December 2022 included uninvested cash and cash equivalents of €76.9 million (previous year: €63.5 million), which were transferred to the CTA as at the reporting date to fully cover the pension obligations calculated in accordance with HGB. This allocation took place in due time at the end of the reporting year.

[21] Financial liabilities

Financial liabilities measured at amortised cost as at 31 December 2022, compared with the previous year, were as follows:

Financial liabilities*

in € million	31 Dec. 2022	31 Dec. 2021
Financial debt - non-current	3,688.5	1,889.4
Other financial liabilities - non-current	73.9	44.6
Trade payables and other liabilities - non-current	2,580.4	4,148.1
Total financial liabilities - non-current	6,342.9	6,082.1
Financial debt - current	25.2	126.0
Trade payables and other liabilities - current	3,961.6	1,100.3
Other financial liabilities - current	73.5	144.5
Total financial liabilities - current	4,060.2	1,370.8
Total	10,403.1	7,452.9

* For detailed remarks on credit and liquidity risk, fair values and maturity profiles based on undiscounted cash flows, see Note [25], *Reporting on financial instruments*.

Financial debt

The following individual items of current and non-current financial debt were recognised as at 31 December 2022 compared with the previous year:

Financial debt

in € million	31 Dec. 2022	31 Dec. 2021
Promissory note loans – non-current	313.4	313.3
Registered bonds – non-current	564.9	564.9
Bank loans (syndicated loan) – non-current	199.7	199.7
Bonds – non-current	2,582.4	787.3
Jouissance rights – non-current	28.1	24.2
Total financial debt – non-current	3,688.5	1,889.4
Promissory note loans – current	0.0	0.0
Bank credit/overdraft lines – current	0.0	116.9
Terminated jouissance rights – current	0.1	0.0
Interest liabilities – current	25.1	9.0
Total financial debt – current	25.2	126.0
Total	3,713.7	2,015.4

The maturity profiles of non-current financial debt, excluding lease liabilities reported as other financial liabilities (see Note [10], *Leases*), were as follows at the end of the reporting year and the previous year. The amounts stated represent the contractually fixed nominal interest and redemption payments:

Maturity profiles of non-current financial debt (excluding lease liabilities)

in € million	31 Dec. 2022	31 Dec. 2021
Due in up to 1 year	90.7	24.3
Due in 1–2 years	114.8	34.4
Due in 2–3 years	94.6	36.7
Due in 3–4 years	895.0	27.3
Due in 4–5 years	167.4	27.8
Due after 5 years	3,165.7	2,130.5
Total	4,528.3	2,280.9

Promissory note loans

As at the reporting date and the end of the previous year, the Group held the following outstanding promissory note loans (Schuldscheindarlehen), all of which have a bullet repayment structure. All loans issued as at the reporting date are shown as non-current financial liabilities due to their maturities:

Promissory note loans (PNL)

in € million	Effective interest rate	Due date	Redemption	Carrying amount	
				31 Dec. 2022	31 Dec. 2021
1.397% PNL; €33 million	1.427%	12 Jul. 2027	at maturity	33.0	32.9
0.929% PNL; €9 million	0.965%	09 Dec. 2024	at maturity	9.0	9.0
1.377% PNL; €31 million	1.403%	08 Dec. 2027	at maturity	31.0	31.0
1.377% PNL; €8.5 million	1.402%	08 Dec. 2027	at maturity	8.5	8.5
1.100% PNL; €32.5 million	1.127%	25 Nov. 2030	at maturity	32.4	32.4
0.900% PNL; €27 million	0.933%	23 Nov. 2027	at maturity	27.0	26.9
1.100% PNL; €91.5 million	1.127%	25 Nov. 2030	at maturity	91.3	91.3
1.302% PNL; €31.5 million	1.321%	23 Nov. 2035	at maturity	31.4	31.4
1.588% PNL; €35 million	1.603%	23 Nov. 2040	at maturity	34.9	34.9
1.869% PNL; €15 million	1.880%	23 Nov. 2050	at maturity	15.0	15.0
Total				313.4	313.3

No new promissory note loans were issued in the reporting year. In contrast, the nominal total volume of newly issued promissory note loans in the previous year was €199.5 million.

Registered bonds

As at the reporting date and compared with the previous year, the Group held the following registered bonds (Namenschuldverschreibungen), all of which are classified as non-current financial liabilities due to their maturities:

Registered bonds (RB)

in € million	Effective interest rate	Due date	Redemption	Carrying amount	
				31 Dec. 2022	31 Dec. 2021
1.932% RB; €14 million	1.954%	12 Jul. 2032	at maturity	14.0	14.0
2.154% RB; €48 million	2.171%	10 Jul. 2037	at maturity	47.9	47.9
2.267% RB; €65 million	2.282%	10 Jul. 2042	at maturity	64.8	64.8
2.418% RB; €40 million	2.431%	10 Jul. 2047	at maturity	39.9	39.9
1.914% RB; €39 million	1.933%	08 Dec. 2032	at maturity	38.9	38.9
2.250% RB; €34.5 million	2.265%	08 Dec. 2037	at maturity	34.4	34.4
2.250% RB; €15 million	2.265%	08 Dec. 2037	at maturity	15.0	15.0
2.375% RB; €10 million	2.388%	08 Dec. 2042	at maturity	10.0	10.0
2.500% RB; €53 million	2.512%	09 Dec. 2047	at maturity	52.9	52.9
2.228% RB; €30 million	2.234%	10 Aug. 2038	at maturity	30.0	30.0
2.084% RB; €70 million	2.091%	11 Jan. 2039	at maturity	69.9	69.9
2.200% RB; €30 million	2.206%	11 Jan. 2044	at maturity	30.0	30.0
1.302% RB; €34 million	1.322%	23 Nov. 2035	at maturity	33.9	33.9
1.588% RB; €18 million	1.604%	23 Nov. 2040	at maturity	18.0	18.0
1.869% RB; €65.5 million	1.883%	23 Nov. 2050	at maturity	65.3	65.3
Total				564.9	564.9

Bank and syndicated loans

Bank and syndicated loans include a long-term, fixed-interest syndicated loan with two banks, one of which is a development bank. This syndicated loan is subject to compliance with a standard market financial covenant. As at the reporting date and in the previous year, the condition for compliance with this financial covenant was met.

In addition, a short-term syndicated loan agreement exists with a bank consortium, which is used for operational processing and interim financing of investments and was already renewed in 2021 (“grid” credit tranche). Until 15 March 2022, the “EEG” credit tranche existed here in addition to securing the liquidity required in connection with the EEG compensation mechanism, which expired contractually on the aforementioned date. The EEG credit tranche was not extended or renewed due to the positive EEG liquidity situation. It had already been reduced from the original €350 million to €100 million at the end of November 2021 and was not utilised as at the previous year’s reporting date. The interest rate was based on EURIBOR plus a maturity-dependent margin.

Bank loans and syndicated loans

in € million	Effective interest rate	Due date	Redemption	Carrying amount	
				31 Dec. 2022	31 Dec. 2021
1.710% syndicated loan €200 million	1.740%	30 June 2033	from October 2028	199.7	199.7
Total loans - non-current				199.7	199.7
Bank loans - current				0.0	116.9
Total loans - current				0.0	116.9
Total				199.7	316.6

The long-term syndicated loan in the amount of €200 million with a coupon of 1.71% had an original term of 15 years (remaining term as at the reporting date: 10.5 years), and is to be repaid quarterly on an annuity basis by the end of June 2033, starting October 2028.

The short-term syndicated loan, originally financed by a consortium of five banks, with a variable interest rate and an original term until March 2023 and a volume of €850 million, was terminated prematurely in October 2021. The loan was replaced by a new variable-rate syndicated loan agreement with a total of eight credit institutions and a total volume of €1,500 million, the original term of which was extended by one year to October 2026 in September 2022. There is an option to extend the agreement for a further year. The interest rate on the syndicated loan agreement is based on the EURIBOR reference rate plus a margin. As at the reporting date, the syndicated loan agreement was utilised exclusively through avals in the amount of €6.0 million (previous year: utilisation in the amount of €76.9 million).

As at 31 December 2022, the uncommitted short-term credit facilities amounting to €400.0 million (previous year: €400.0 million) were not used (previous year: €40.0 million utilised). An uncommitted credit line is a non-binding credit line agreement without a definite financing commitment. Credit decisions are made case-by-case per drawdown request, and the borrowing terms are as at the request date. No credit line fees are paid. The interest rate is based on internal bank reference rates.

Bonds

Bonds

in € million	Effective interest rate	Due date	Redemption	Carrying amount	
				31 Dec. 2022	31 Dec. 2021
0.625% bond; €800 million	0.767%	23 Sep. 2033	at maturity	788.3	787.3
3.450% bond; €800 million	3.523%	22 Sep. 2027	at maturity	797.4	-
3.971% bond; €1,000 million	4.012%	22 Sep. 2032	at maturity	996.6	-
Total				2,582.4	787.3

In September of the reporting year, Amprion GmbH placed a “green” dual-tranche bond with a total volume of €1,800 million on the “Euro MTF” market segment and thus on the unregulated capital market in Luxembourg under its newly established Green Finance Framework. The nominal values of the two tranches amount to €800 million (maturity: five years) and €1,000 million (maturity: ten years). The five-year bond bears a nominal interest rate of 3.450%, the ten-year bond 3.971%. In addition, a bond with a nominal value of €800 million and a maturity of twelve years was issued in the previous year. In contrast to the bonds issued in the reporting year, this bond had a discount of €10.1 million at the time of issue. The nominal interest rate here is 0.625%.

Jouissance rights

Company employees hold unsecured jouissance rights which are non-transferable. These can be terminated after a minimum holding period of at least five years and grant a limited claim to interest on the nominal value depending on company profits, which outranks shareholder entitlement to profits. They do not grant a share in the liquidation proceeds.

In the reporting period, interest expenses of €1.8 million (previous year: €1.5 million) were attributable to jouissance rights. At the end of the reporting year, the following tranches of jouissance rights were outstanding:

Jouissance rights (by tranches)

in € million	Effective interest rate	Due date	Redemption	Carrying amount	
				31 Dec. 2022	31 Dec. 2021
Jouissance rights 2011 tranche	7.0%	open-ended	upon termination	0.9	0.9
Jouissance rights 2012 tranche	7.0%	open-ended	upon termination	1.0	1.0
Jouissance rights 2013 tranche	7.0%	open-ended	upon termination	1.1	1.1
Jouissance rights 2014 tranche	7.0%	open-ended	upon termination	1.1	1.2
Jouissance rights 2015 tranche	7.0%	open-ended	upon termination	2.2	2.2
Jouissance rights 2016 tranche	7.0%	open-ended	upon termination	2.2	2.2
Jouissance rights 2017 tranche	7.0%	open-ended	upon termination	2.4	2.4
Jouissance rights 2018 tranche	7.0%	open-ended	upon termination	2.5	2.5
Jouissance rights 2019 tranche	7.0%	open-ended	upon termination	3.1	3.1
Jouissance rights 2020 tranche	7.0%	open-ended	upon termination	3.5	3.6
Jouissance rights 2021 tranche	7.0%	open-ended	upon termination	4.0	4.0
Jouissance rights 2022 tranche	7.0%	open-ended	upon termination	4.0	0.0
Total jouissance rights - non-current				28.1	24.2
Unsettled redemption amounts for terminated jouissance rights				0.06	0.04
Total terminated jouissance rights - current				0.06	0.04
Total				28.1	24.3

Jouissance rights terminated as at the reporting date are reported as current. Termination entitles the holder of jouissance rights to an unconditional payment claim which is due within one year. Untermated jouissance rights outstanding as at the reporting date are classified as non-current financial liabilities.

Group obligations to related parties under jouissance rights totalled €1.2 million as at the reporting date (previous year: €1.1 million).

As at the reporting date and for the previous year, untermated jouissance rights were outstanding in the following denominations and reported as non-current financial liabilities:

Jouissance rights – denomination

Jouissance right nominal amount	31 Dec. 2022		31 Dec. 2021	
	Number of	Amount (in € thousand)	Number of	Amount (in € thousand)
€180	150,858	27,154.4	129,402	23,292.4
€360	14	5.0	16	5.8
€720	278	200.2	284	204.5
€1,220	67	81.7	67	81.7
€1,720	361	620.9	363	624.4
Total	151,578	28,062.3	130,132	24,208.7

Commercial paper programme

In financial year 2020, the Group launched its first-ever commercial paper programme for short-term financing purposes with a maximum permissible issue volume of €900 million. This had neither been utilised as at the reporting date nor at the end of the previous year. The maximum utilisation during the reporting year was €180.0 million (previous year: €440.0 million). For further information on the commercial paper programme, see the discussion of risk management objectives and methods under Note [25], *Reporting on financial instruments*.

Other financial liabilities

Other financial liabilities

in € million	31 Dec. 2022	31 Dec. 2021
Lease liabilities - non-current	72.6	43.2
Other financing	1.4	1.4
Total other financial liabilities - non-current	73.9	44.6
Lease liabilities - current	68.9	142.6
Other liabilities	4.6	2.0
Total other financial liabilities - current	73.5	144.5
Total	147.4	189.1

The Group recognises obligations from rental, leasehold, service and leasing contracts as lease liabilities, provided that they qualify as leases under IFRS 16 and are not classified as short-term leases or as leases of low-value assets (see Note [10], Leases).

Other liabilities primarily relate to cash collateral, security deposits and initial margins for spot market electricity trading totalling € 4.4 million (previous year: € 0.7 million).

[22] Non-financial liabilities

Non-financial liabilities mainly include contract liabilities from construction cost contributions (BKZ) and connection cost contributions (AKB) (see Note [1], Revenue) and prepayments received in relation to contract work and deliveries of goods.

Contract liabilities from BKZ and AKB contributions were recorded in the total amount of €48.2 million as at 31 December 2022 (previous year: €48.6 million). Of this amount, €46.0 million (previous year: €46.2 million) were classified as non-current and €2.2 million (previous year: €2.4 million) as current at the end of the reporting year.

Other non-financial liabilities primarily comprise prepayments received for operating leases in which the Group is lessor and from cross-border congestion management. The significant increase in current other non-financial liabilities compared to the previous year is essentially due to increased income from congestion management in 2022.

Non-financial liabilities

in € million	31 Dec. 2022	31 Dec. 2021
Other non-financial liabilities - non-current	2.8	7.2
Contract liabilities - non-current	46.0	46.2
Non-financial liabilities - non-current	48.9	53.4
Other non-financial liabilities - current	29.2	4.8
Contract liabilities - current	21.2	23.9
Non-financial liabilities - current	50.4	28.6
Total	99.3	82.0

[23] Deferred taxes

Deferred taxes recognised resulting from temporary differences in the measurement of assets and liabilities recognised under IFRS compared with the tax base are composed as follows as at 31 December 2022 and in the previous year:

Breakdown of deferred taxes

in € million	31 Dec. 2022	31 Dec. 2021
Balance sheet effects		
Non-current assets	-507.4	-467.4
<i>of which regulatory claims</i>	40.7	0.0
<i>of which other non-current assets</i>	-548.1	-467.4
Current assets	7.5	5.9
Special tax items	8.8	8.0
Non-current liabilities	-111.0	-149.4
<i>of which pension provisions</i>	40.1	86.3
<i>of which other non-current liabilities</i>	-151.1	-235.7
Current liabilities	-18.2	-17.8
Net amount deferred tax assets [+]/deferred tax liabilities [-]	-620.4	-620.7
Effects on comprehensive income		
Non-current assets	-40.0	-80.0
<i>of which regulatory claims</i>	40.7	0.0
<i>of which other non-current assets</i>	-80.7	-80.0
Current assets	1.6	2.7
Special tax items	0.8	0.1
Non-current liabilities	38.3	36.2
<i>of which pension provisions</i>	-46.3	-5.7
<i>of which other non-current liabilities</i>	84.6	41.9
Current liabilities	-0.4	2.7
Deferred tax expense [-]/tax income [+]	0.3	-38.3

Deferred tax assets were carried in the amount of €147.8 million as at 31 December 2022 (previous year: €100.7 million), set off by deferred tax liabilities of €768.1 million (previous year: €721.4 million). Deferred taxes are offset at the level of the tax group, which is formed by Amprion GmbH as tax group parent along with Amprion Offshore GmbH (tax group company).

On the one hand, deferred taxes on non-current assets result to a large extent from temporary differences due to different depreciation methods and shorter useful lives for tax purposes for property, plant and equipment. On the other hand, a significant portion of the deferred taxes is due to the non-recognition of regulatory claims according to Section 21b (1) **EnWG** under IFRS that are recognised for tax purposes.

While deferred taxes in connection with other non-current liabilities mainly arise from the non-recognition of regulatory obligations under IFRS, temporary differences in pension obligations result in particular from differing discount rates and the non-inclusion of trend assumptions in the context of tax valuation. Furthermore, the valuation of the corresponding plan assets for tax purposes is - in contrast to their valuation at fair value under IFRS - limited to a maximum of the historical cost.

The development of the unnetted and netted carrying amounts of deferred taxes and their recognition in profit or loss and other comprehensive income in the IFRS statement of comprehensive income for the reporting year and the previous year are shown in the following table:

Deferred taxes recognised in the balance sheet

in € million	Deferred taxes		
	Deferred tax assets	Deferred tax liabilities	Net amount
Carrying amount as at 31 December 2020	104.8	-687.1	-582.3
Tax expense [-]/tax income [+] recognised in the income statement for the period	10.7	-34.3	-23.6
Tax expense [-]/tax income [+] recognised in other comprehensive income for the period	-14.9	0.0	-14.9
Carrying amount as at 31 December 2021	100.7	-721.4	-620.7
Tax expense [-]/tax income [+] recognised in the income statement for the period	49.3	3.8	53.1
Tax expense [-]/tax income [+] recognised in other comprehensive income for the period	-2.2	-50.6	-52.8
Carrying amount as at 31 December 2022	147.8	-768.1	-620.4

Tax expenses and income shown in other comprehensive income are exclusively attributable to the recognition of actuarial gains and losses and the remeasurement of plan assets in connection with pension provisions.

[24] Trade payables and other liabilities

Trade payables and other liabilities

in € million	31 Dec. 2022	31 Dec. 2021
Trade payables – grid	354.1	337.9
Trade payables – EEG	11.0	3.2
Payables to companies in which an investment is held	3.6	1.9
Unbilled services – grid	983.6	573.2
Unbilled services – EEG	5,123.7	4,216.6
Total trade payables	6,475.9	5,132.7
Other payables from levies	49.2	101.8
Other tax liabilities	7.2	6.3
Other personnel liabilities	9.5	7.2
Miscellaneous other liabilities	0.3	0.3
Total other liabilities	66.1	115.6
Total	6,542.0	5,248.4

As at 31 December 2022, non-current *trade payables* totalled €2,580.4 million (previous year: €4,148.1 million); current *trade payables* totalled €3,895.5 million (previous year: €984.7 million).

The total amount of *trade payables* as at the reporting date included €6,107.2 million in amounts owed from transactions not yet invoiced or outstanding invoices (previous year: €4,789.7 million). Of this amount, the vast majority was attributable to EEG compensation obligations in the reporting year.

All *other liabilities*, totalling €66.1 million, were due in the short term in relation to the respective reporting date (previous year: €115.6 million).

Trade payables and other liabilities are generally non-interest bearing.

Trade payables for investments and operational supplies are due within varying periods of up to 30 days from the end of the month of performance. In addition, depending on the underlying transaction, the due dates range from ten working days after the document is created, through due dates on the 15th of the month following the month of performance, to due dates in year t+2 with a value date of 30 June of the respective year (annual invoices).

[25] Reporting on financial instruments

Financial instruments include both primary and derivative financial instruments. Primary financial instruments within the scope of IFRS 9 and IFRS 7 include financial investments, other financial assets, trade receivables, other financial receivables and cash and cash equivalents. Financial instruments carried on the liabilities side include financial debt, miscellaneous financial liabilities, trade payables and other financial liabilities.

In the reporting year and in the previous year, the Group neither held any stand-alone derivatives or derivatives designated as hedging instruments nor any financial assets *measured at fair value through profit or loss*.

Fair value disclosures

The table contained in this section shows carrying amounts, fair values and fair value hierarchy levels of the financial instruments of the various categories recognised. This does not apply to financial assets and financial liabilities whose carrying amounts reasonably approximate or reflect their fair values at the respective reporting date.

In the opinion of the Group's management, the fair values of cash and short-term deposits, trade receivables, bank overdrafts and other current (financial) liabilities approximate their carrying amounts due to their short maturities.

The fair values of the bonds issued by the Group in 2022 and 2021 on the unregulated capital market in Luxembourg are based on quoted prices as at the reporting date (level 1 fair value).

To determine the fair values shown in the table, which are classified as level 3 of the fair value hierarchy, the Group applied the following approach and assumptions:

- The fair values of long-term promissory note loans, registered bonds, bank loans and non-current trade payables as well as other financial liabilities not traded on an active market are estimated using the discounted cash flow method.
- The discount rate applied is a debt interest rate determined for debt instruments of comparable terms and conditions, default risk and term to maturity. This rate reflects the issuer's borrowing interest rate at the end of the financial year. As in the previous year, default risk as at 31 December 2022 was classified as low in view of the Group's *investment grade* rating.
- The risk-free interest rate factored into the maturity-equivalent discount rates was determined from swap rates observed at the respective reporting date. The derived risk-free interest rate was then increased by a maturity- and risk-equivalent credit spread, the determination of which was essentially based on bank indications that were condensed to their mean value in the corresponding maturity bands.

Financial instruments: carrying amounts and fair values

in € million	Carrying amount		Fair value		Level of fair value hierarchy
	31 Dec. 2022	31 Dec. 2021	31 Dec. 2022	31 Dec. 2021	
Financial assets					
Financial investments and loans*	5.3	5.3	-	-	-
Trade receivables and other receivables**	846.6	1,240.5	846.6	1,240.5	-
Other financial assets**	23.0	1,461.3	23.0	1,461.3	-
Cash and cash equivalents**	5,533.4	2,121.5	5,533.4	2,121.5	-
Total	6,408.3	4,828.6	6,403.0	4,823.3	-
Financial liabilities					
Registered bonds	564.9	564.9	405.3	480.0	level 3
Promissory note loans	313.4	313.3	248.7	291.6	level 3
Bonds	2,582.4	787.3	2,332.4	765.5	level 1
Bank loans	199.7	316.6	163.8	306.5	level 3
Interest liabilities**	25.1	9.0	25.1	9.0	-
Jouissance rights**	28.1	24.3	28.1	24.3	-
Lease liabilities***	141.5	185.8	-	-	-
Trade payables and other liabilities	6,542.0	5,248.4	6,205.8	5,187.9	level 3
Other financial liabilities (excluding lease liabilities)**	6.0	3.3	5.7	3.3	-
Total	10,403.0	7,452.9	9,414.8	7,068.1	-

* Financial instruments measured at fair value through other comprehensive income are financial investments in equity instruments (investments) for which there is no quoted price in an active market (i.e. hierarchy level 1) and whose fair value cannot be reliably determined. Since the fair value of these investments cannot be reliably determined, no corresponding disclosure is required (IFRS 7.29).

** The carrying amount recognised at the reporting date is a reasonable approximation of fair value.

*** According to IFRS 7.29, disclosures on the fair value of lease liabilities are not required.

Financial instrument risk management objectives and methods

NOTES ON THE RISK MANAGEMENT SYSTEM

As at the reporting date, the Group had exposure to financial risks from financial instruments due to its operational business activities as a transmission system operator and in connection with bank balances and interim holdings of money market investments. Such exposure primarily includes default, liquidity and refinancing risk as well as, to an insignificant extent at present, market risks. Risk management is the responsibility of Group management. This includes both taking and monitoring suitable measures for the early detection of risks that could jeopardise the company's existence. The Management Board informs the Audit Committee and the Supervisory Board of Amprion GmbH about the overall risk situation.

The control and monitoring of the group-wide risk management process is the responsibility of the Risk Management Committee, which is formed by the Management Board and the department managers. The objective of the Group-wide risk management process is to identify risks at an early stage and to obtain information about them in order to be able to derive and take appropriate measures based on defined risk management strategies. In addition to a conscious acceptance of risks, further risk management measures in the form of limiting, avoiding or passing on risks can be considered within the framework of risk management.

The measures involved in managing the Group's financial risks are primarily designed to ensure solvency at all times, maintain a financially appropriate equity base and generate stable annual profits. The focus of financial risk management is therefore on earnings and liquidity risks as the primary management parameters. This relates to market price, liquidity and default risks. Appropriate risk management measures are designed to ensure that the Group is able to generate a return on equity in line with the market for its shareholders while maintaining business operations at all times.

The risk management process (risk identification, assessment, control, aggregation in connection with risk monitoring, reporting, decision-making, approval and information to the Supervisory Board) as well as the risk responsibilities are documented in an internal risk management guideline, which was adopted by the Management Board. Complementary to the risk management guideline, the risk management manual concretises the risk management process and presents the detailed business processes and procedures. The manual is updated on an ongoing basis by Risk Management and, in the case of substantial adjustments, adopted by the Risk Management Committee. In addition, the overarching objectives, general principles, tasks and responsibilities of Group-wide financial management are set out in an internal Group financial guideline adopted by the Management.

The Group's approach to managing financial risks is presented in this section of the notes, taking into account specific disclosure requirements under IFRS. These disclosures include, for example, maturity analyses of financial liabilities based on undiscounted future cash flows, which include contractual interest and redemption payments.

The Finance department manages the Group's funding and liquidity risk in accordance with the requirements under the Group-internal risk management guideline, the risk management manual and finance policies. The implementation of appropriate (re)financing measures and the target-oriented management of financial risk are intended to contribute to the achievement of the company's financial and strategic objectives.

To date, the Group does not use derivative financial instruments for risk management purposes. Trading in financial instruments (including derivatives) for speculative purposes is currently not permitted as a result of internal Group regulations documented in the financial guidelines. Accordingly, only financial instruments approved by the CFO may be used for risk management purposes, with the corresponding list of approved financial instruments being managed by the Finance department.

There have been no significant changes since the previous year in the risks arising from financial instruments or in the methods used by the Group to measure and manage these risks.

MARKET RISK

Market price risk is the risk of fluctuations in the fair value or future cash flows of a financial instrument due to changes in market prices. It generally comprises interest rate risk, currency risk and the risk of other price changes (e.g. in the form of energy and commodity price risk).

Price risks for Amprion generally result from interest rate fluctuations on the money and capital markets as well as from commodity price fluctuations (especially electricity, coal and gas). Financial instruments exposed to such risks which could affect earnings and equity are limited on the asset side of the balance sheet to equity interests in other unlisted companies measured at fair value in other comprehensive income. On the liability side, these are limited to variable-interest current financial liabilities. Due to the immateriality of the above-mentioned items and their associated immaterial potential impact on equity and earnings, the sensitivities with regard to interest rate risks are not presented herein, as was the case in the previous year.

Any effects from changes in relevant market variables or financial actuarial parameters on the carrying amounts of pension obligations are outlined in Note [20], *Provisions*.

Interest rate risk

Interest rate risk concretises itself in changes in the fair value of future cash flows from a financial instrument due to fluctuating market interest rates. The Group is exposed to such interest rate risk, with potential effects on earnings and equity, through current variable-rate liabilities with banks. There was no significant utilisation of the corresponding syndicated loan as at the reporting date. The Group is only exposed to interest rate risks on positions denominated in euros.

Amprion's exposure to earnings risk due to interest rate changes was very minor as at the reporting date for the reporting period and the previous year due to measures taken to avoid and reduce interest rate risk to the extent possible. To meet this financial policy objective, the Group bases its portfolio of long-term financing on fixed-interest agreements to the greatest possible extent. In line with this, non-current financial liabilities as at 31 December 2022 consisted exclusively of fixed-interest debt instruments, as in the previous year.

As the Group was not exposed to any significant interest rate risks, neither at the reporting date nor in the previous year, the simulated effects of interest rate changes on profit before tax and equity are not presented here.

Currency risk

Currency risks generally result from changes in exchange rates and manifest themselves in exchange rate-induced fluctuations in the fair value or future cash flows of financial instruments. The Group is not exposed to any significant currency risks due to its operating activities being limited to the eurozone and seeks to invoice transactions exclusively in euros.

Energy and commodity price risk

Group operations can be significantly impacted by the volatility of energy and certain commodity prices. The Group has to purchase electricity to properly fulfil its legal responsibilities as transmission system operator – for example, to compensate for grid losses that inevitably occur. Accordingly, the Group is exposed to the risk of price fluctuations in its forecast electricity purchases. To hedge this price risk, the Group concludes forward contracts based on the forecast grid loss profile within the framework of weekly tenders. These forward contracts are exclusively for physical delivery in the context of the Company's usual purchase, sale or usage requirements. They are therefore not accounted for as financial instruments under IFRS 9 in application of the *own use exemption* and are therefore not taken into account with regard to the requirement to conduct sensitivity analyses in relation to price risks. With regard to these contracts, which are to be accounted for as pending legal transactions, and the future financial obligations associated with them, we refer to Note [30], *Contractual guarantees, contingent liabilities and other financial obligations*.

Price risk from unlisted equity instruments

Unlisted equity instruments held by the Group as financial investments (see Note [12], *Financial investments*) are subject to market price risk resulting from the uncertainty of the future performance of the shares. The Group holds these as long-term financial investments based on existing business relationships with the investees concerned. Therefore, the existing risk of price changes, which from the Group's point of view can be regarded as immaterial in terms of its magnitude, is of only minor importance for the economic situation of the Group. There is no active management and assessment of this risk.

As with their fair value, the sensitivities from price change risks cannot be reliably determined for these unlisted equity instruments, so no quantification is provided here. Subsequent measurement of these equity instruments classified as *measured at fair value through other comprehensive income* does not have any effect on profit or loss before tax. Any – in this case immaterial – price risks only affect other comprehensive income and consolidated equity.

Default risk

In the course of its operating activities, the Group is exposed to default risks from its financial receivables (in particular trade receivables), cash investments and bank balances and deposits with banks. For Amprion, default risk is the potential that a customer or business partner cannot or does not meet its financial obligations and that the Group incurs a financial loss from the partial or complete non-fulfilment of agreed services. Nevertheless, the risk of default by customers and business partners is limited to some extent by contractual provisions that allow the Group to demand appropriate collateral or advance payments in justified cases. This is supplemented by continuous receivables management. In addition, the vast majority of network charges are collected by the distribution network operators, who are also subject to regulation. Accordingly, the insolvency risk is still considered to be very low, despite a slight increase in the average default risk compared to the previous year.

With regard to some of the outstanding receivables that are subject to a significant risk of default, information on the creditworthiness of the business partners is regularly obtained and monitored in order to reduce the risk. This serves as a further basis for decisions on any measures to be taken (see notes below on the default risk of trade receivables).

Financial and money market transactions are only entered into with business partners who are approved under company finance policies and conform with defined investment limits thereunder.

The Group's maximum default risk exposure without taking into account corresponding securities is the total carrying amount of the individual financial assets (debt instruments) carried on the balance sheet as at the reporting date and also as at the beginning and end of the previous year. The items specifically concerned are loans reported under [12], *Financial investments* as well as [14], *Trade receivables and other receivables*, [15], *Other financial assets* and [18], *Cash and cash equivalents*. The total maximum amount at risk as at 31 December 2022 was €6,403.0 million (previous year: €4,823.4 million).

Trade receivables and other receivables

The default risk from receivables from network customers and balancing group managers is monitored on the basis of the Group's standardised default risk management procedures and controls. Bad debt insurance is not taken out due to the associated cost-benefit ratio. Instead, the creditworthiness of network customers and balancing group managers is assessed on the basis of regularly obtained external credit reports from an established credit agency or, if no credit report is available or if it is slightly below or above a relevant threshold, (additionally) on the basis of an individual credit assessment. Based on these credit assessments, a decision is then made on further measures that may need to be taken on a case-by-case basis.

Default risks exist in the context of balancing group settlement and on the grid customer side in the event of non-payment of receivables by a balancing group manager or grid customer. Appropriate security deposits may only be demanded in justified cases that are limited to ex ante recognisable or probable defaults on receivables (e.g. in the event of enforcement measures against the balancing group manager or grid customer, application for the opening of insolvency proceedings, or in the event of justified concern of non-performance of the contract due to insufficient creditworthiness as well as repeated, non-insignificant delay in payment). Comprehensive hedging of default risks by means of security is therefore not possible or permissible.

In connection with balancing group settlement, Amprion counters default risks by monitoring the schedule registration of the balancing group management in a timely manner and by demanding collateral on a case-by-case basis. In accordance with the provisions of the balancing group contract, the directly enforceable guarantee of a creditworthy third party as well as pledges and, if applicable, cash collateral can be considered as collateral. If the permissible trading volume of a balancing group manager is exceeded, an increase in the collateral to be deposited is usually requested.

To determine the need for impairment losses on receivables, the probability of default of the counterparty is calculated using the expected loss model required by IFRS 9 and external credit ratings. The lifetime expected credit loss is calculated by multiplying the exposure at default by the individual probability of default and the loss given default. The individual default rate is calculated as the share of the receivable amount reduced by the collateral deposited in the individual case in the total receivable amount. Interest effects are negligible due to the generally short-term maturity of the receivables. The Group applies the simplified impairment approach to these trade receivables, which do not contain a significant financing component.

The impairment loss determined in accordance with the approach described above is recalculated at each reporting date on the basis of updated parameter values. As the external credit assessments take into account past events, current circumstances and expected developments, the impairment loss requirement has not yet been further adjusted or calibrated.

As a result of the credit collateral deposited by balancing group managers as at the reporting date, the Group's expected credit losses from trade receivables and other receivables decreased by a total of €0.0 million as at the reporting date (previous year: €0.1 million).

Due to the nature and degree of diversification of the customer structure and business partners, the Group considers the risk concentration in trade receivables to be low, similar to the previous year.

Money market investments and deposits with banks and financial institutions

The risk of default on short-term deposits and on balances with banks and financial institutions is managed by the Finance department in accordance with the Group's financial guidelines. This includes the measurement, limit monitoring and management of counterparty risks, with a daily counterparty risk determination for banks.

As part of the management of counterparty default risks, risk diversification of bank balances and cash investments among various banks is ensured, taking into account economic aspects and compliance with limits. Risk limitation includes the definition of approved counterparties, on the one hand, and the establishment and, if necessary, adjustment of the limits applicable to the approved counterparties, on the other hand. External long-term deposit ratings from established rating agencies, the bank's equity base and current credit default swaps are used to assess bank limits. The counterparty limits are reviewed on a daily basis before any financial transactions are entered into. Transactions involving (potential) counterparty risk may only be carried out within the limits set for the respective counterparty.

Value adjustments and expected loss provisioning on receivables and other financial assets

The value adjustments on financial assets in the form of trade receivables, other receivables as well as cash investments and bank balances, which are each subsequently measured at amortised cost, developed as follows from the beginning of the previous year to the end of the reporting period:

Loss allowance for financial assets

in € million	Trade receivables and other receivables	Money market investments and bank balances	Total
As at 31 December 2020	3.4	0.0	3.4
Additions	0.9	0.9	1.8
Amounts used	0.0	0.0	0.0
Unused amounts released	-2.5	0.0	-2.5
As at 31 December 2021	1.7	0.9	2.7
Additions	0.9	0.9	1.8
Amounts used	0.0	0.0	0.0
Unused amounts released	-1.2	-0.4	-1.6
As at 31 December 2022	1.5	1.4	2.8

The significant increase in expected credit losses on money market investments and bank balances reflects the substantial rise in money market investment holdings in the reporting year. The high amount of expected loss provision reversals was primarily due to significantly reduced unbilled services connected with the EEG equalisation mechanism in the reporting period compared to the previous year. This was counteracted to an insignificant extent by the increased average counterparty default risk compared to the previous year.

LIQUIDITY RISK

Through its current financial obligations, Amprion is exposed to liquidity risks of potentially not being able to meet its payment obligations in full or on time. Therefore, a key objective of the Group is to ensure full solvency at all times through centralised liquidity management. To this end, measures are taken to ensure a continuous balance between the coverage of short-, medium- and long-term financial requirements and to maintain financing flexibility through the use of overdrafts, bank loans, promissory note loans, registered bonds, leasing contracts and financing via the public capital market. Against this background, Amprion GmbH launched its

first *Debt Issuance Program* (DIP) in 2021 with a total financing framework of €6,000 million. In the reporting year, the Group placed a “green” dual-tranche bond with a total nominal volume of €1,800 million on the “Euro MTF” market segment of the Luxembourg Stock Exchange. The first bond tranche has a nominal value of €800 million, a maturity of five years and a coupon of 3.450% (IFRS effective interest rate: 3.523%). The second tranche has a nominal value of €1,000 million, a maturity of ten years and a coupon of 3.971% (IFRS effective interest rate: 4.012%). The bond was given a “Baa1” rating by Moody’s.

In the 2021 financial year, Amprion GmbH had already successfully placed a bond with a total nominal value of €800 million (IFRS effective interest rate: 0.761%; coupon: 0.625%) on the unregulated capital market in Luxembourg for the first time. In addition, the Group has the option of obtaining short-term financing through its commercial paper programme launched in the 2020 financial year. The maximum permissible issue volume here is €900 million. The continued use of the public capital market, as planned for the future, significantly reduces the Group’s dependence on bank financing.

Amprion’s cash management includes the centralised execution of payment transactions, bank accounting, liquidity management and liquidity balancing, including cash pooling under a corresponding agreement with Amprion Offshore GmbH (see Note [31], *Related party disclosures*).

To monitor liquidity risk and avoid liquidity shortfalls, Amprion uses central liquidity planning tools and takes the measures described below:

Liquidity planning

Group liquidity planning is a set of processes building upon the primary objective of ensuring solvency at all times that are aimed at optimising the capital structure and the financial result. Achieving this requires not only determining the short-term liquidity trend, but also that of the forecast year as well as the liquidity trend within the framework of the long-term planning process.

The Group's short-term liquidity is planned and monitored on a rolling basis with a forecast time window that extends from the respective point in time under consideration to the end of the following financial year. Liquidity planning and the future liquidity trend are updated at regular intervals through integration in the general corporate planning process. Liquidity planning thus factors in actual figures, current and forecast data, market data and corporate planning. As Amprion GmbH operates a cash pooling system with Amprion Offshore GmbH, this is also included in the Group liquidity planning.

In addition to its responsibilities as transmission system operator (grid business), Amprion is also responsible for settlement of accounts for the EEG equalisation mechanism within its balancing area (EEG business). The associated clearing activity of Amprion has a significant impact on the short-term liquidity requirements for this, which need to be financed separately for regulatory reasons. Accordingly, in addition to the liquidity planning for the grid business, Amprion maintains a separate EEG liquidity planning based on monthly updated data for the current and, if necessary, the following financial year.

Monitoring liquidity risk and ensuring sufficient liquidity

With the accounting separation of the EEG and grid business, liquidity management and liquidity risks are also considered separately. To control and monitor liquidity risks, the planned liquidity development for the EEG and grid business is determined along with stress-test scenarios. For the grid liquidity risk, the risks at company level are used for the stress test. Stress testing for EEG liquidity risk is carried out under scenario risk parameters specified by an independent expert. The change in liquidity indicated in stress testing is compared against the available cash and cash equivalents and credit lines so as to identify a possible liquidity shortfall early in advance. Top- and second-level management and the Supervisory Board receive regular reporting on the liquidity situation and stress testing findings in order to assess the Group's liquidity risk.

Grid business

In order to reduce the liquidity risk and to maintain and secure its financial flexibility, the Group has concluded a syndicated loan agreement with eight credit institutions. Through the network credit tranche of this agreement, the Group had revolving committed credit facilities of €1,500.0 million (previous year: €1,500.0 million) as at the reporting date. In contrast to unconfirmed credit lines, committed credit facilities are contractually guaranteed credit lines with fixed credit margins that are available to the borrower at any time. The borrower usually pays a commitment fee for this.

The aforementioned credit facilities were available to the Group for free use within the scope of general corporate purposes or normal business activities. As at 31 December 2022, these were

drawn in the amount of €0.0 million (previous year: €76.9 million). There was only a utilisation through guarantees in the amount of €6 million.

As at 31 December 2022, the Group had a further €400.0 million (previous year: €400.0 million) in unconfirmed short-term credit facilities. These were not utilised as at 31 December 2022 (previous year: €40.0 million).

In 2020, Amprion gained access to the short-term public capital market for the first time by launching a commercial paper programme with a total financing framework of €900.0 million. In the reporting year, this was used for short-term interim financing with an interim maximum volume of €180.0 million (previous year: €440.0 million). As at 31 December 2022, Amprion had not issued any commercial paper, in line with the previous year's reporting date. The commercial paper programme was confirmed by Moody's in the reporting year with a short-term rating of "Prime-2" (P-2).

EEG settlement

In principle, the EEG settlement can result in liquidity risks for the Group. In this respect, the EEG levy abolished with effect from 1 January 2023 provided for a liquidity buffer accruing to the transmission system operators in order to avoid potential negative EEG account balances resulting from Amprion's clearing activities as well as additional short-term transitional financing.

Due to the high level of EEG liquidity held, there was no need to continue short-term confirmed credit facilities in the reporting year in order to reduce liquidity risk potentially resulting from the EEG settlement (previous year: €100.0 million EEG credit tranche of the syndicated loan agreement). Accordingly, the EEG credit tranche of the syndicated loan agreement, which expired on 15 March 2022, was not extended. The EEG credit tranche was already unused as at the previous year's reporting date.

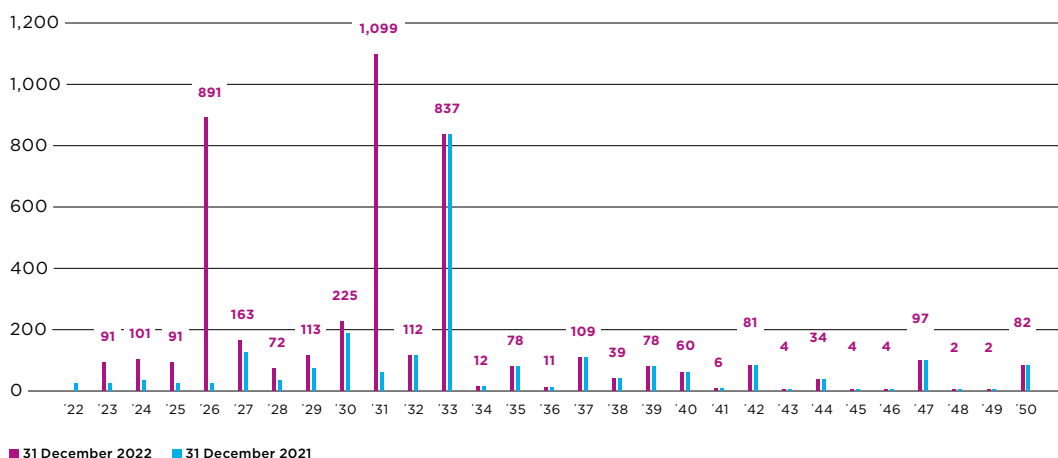
In 2021, Amprion received funding of €3,564 million from the Climate Protection Programme 2030 for EEG financing, which the Group used to finance the payments to be made to the EEG plant operators. In 2022, the four German transmission system operators waived the receipt of a further funds from the 2030 climate protection programme due to the clearly positive EEG account balance. Amprion's corresponding share was €1,073 million, which the Group should have received for EEG financing in three equal instalments in the months of October, November and December.

Ensuring a balanced liability maturity structure

The following chart illustrates the maturity profiles of the promissory note loans, registered bonds, the syndicated loan (promotional loan) and the bonds listed in Luxembourg shown in the consolidated balance sheet under non-current financial liabilities as at the reporting dates of the reporting year and the previous year. Presented is the sum of the contractually agreed, undiscounted interest and redemption payments. This does not include payment obligations from contracts recognised as leases under IFRS 16 or payment obligations connected with jouissance rights (see Note [10], Leases and [21], Financial liabilities).

Maturity structure of interest and redemption payments for promissory note loans, registered bonds, syndicated loans and bonds

in € million



The maturity profiles reveal a diversified maturity structure of non-current financial debt utilised for Group financing (see Note [21], Financial liabilities), which is beneficial for reducing both long-term liquidity and refinancing risks.

The table below shows the aggregated maturity structure of all recognised current and non-current financial liabilities and other liabilities, individually for each of the following five financial years and in total for financial years beyond that horizon.

Maturity profiles of financial liabilities (excluding lease liabilities)

in € million	31 Dec. 2022	31 Dec. 2021
Due in up to 1 year	4,077.5	1,250.5
Due in 1-2 years	2,695.4	4,182.5
Due in 2-3 years	94.7	36.8
Due in 3-4 years	895.2	27.4
Due in 4-5 years	167.5	27.9
Due after 5 years	3,191.6	2,131.5
Total	11,122.0	7,656.6

FINANCING RISK

The Group has significant funding requirements in the coming years to finance its onshore and offshore investment projects. There is a risk that the liquidity required for this might not be available either at attractive conditions or through external – neither public nor private – financing channels. Events having a negative impact on national and international capital markets can adversely affect the general availability of funds and the Group’s financing costs.

If Amprion were unable to procure the planned financing, it would be at risk of not being able to carry out the planned investments or not to the extent planned. The associated negative impact on the feasibility of the strategic plans could have an adverse effect on business, financial positions and net profit. If, in an extreme scenario, the capital markets were not available even for a longer period of time, sufficient access to external sources of financing might not be ensured. This would entail the risk for the Group of not being able to meet its financial obligations in full or on time.

In addition to debt financing, the considerable investment volume of the years to come will require additional equity capital in order to secure a stable credit rating in the investment grade range targeted by the Group. As a non-listed company, refinancing risks for Amprion result from the potentially limited possibility to sustainably finance itself through external equity injections. Therefore, the Group holds regular discussions with its shareholders about possible injections of additional equity and about the scope and timing of such injections. Nevertheless, the risk remains that equity may not be available in sufficient amounts or in a timely manner and that Amprion may not receive further equity commitments. This could adversely impact investment plans and thus the Group's business activities, financial situation, earnings as well as credit ratings.

Amprion takes the measures outlined below in managing its financing risk:

- (1) The Group pursues an active financing strategy to maintain an *investment grade* credit rating, striving to create and maintain an optimally sustainable capital structure based on long-term forecast investment portfolio.
- (2) Additional capital requirements for long-term investment projects are proactively coordinated with Amprion shareholders in a timely fashion to ensure sufficient available equity and debt capital at the times required, while adhering to the planned capital structure.
- (3) Amprion maintains a high degree of flexibility for securing financing for its long-term investment projects through diversification of its external financing instruments, including bank loans, promissory note loans, registered bonds and the open bond market in addition to equity financing sources.
- (4) In the reporting year, the Group published a Green Finance Framework for the first time, which defines the framework conditions for green financing and specifies project categories for which funds from green financing instruments can be used. In addition, Amprion was given an ESG risk rating of "12.8" in the low-risk range by the ESG rating agency Sustainalytics in the reporting year. This illustrates that the Group pursues a strict orientation towards sustainable business. This is considered indispensable in order to be able to continue to finance the financial resources required for the grid expansion to a sufficient extent and at attractive conditions via the public capital market.

- (5) Amprion remains in continuous dialogue with government to ensure that the regulatory system/framework provides an appropriate basis for the Group to completely fulfil its tasks and obligations as transmission system operator while generating a fair market return for existing and potential shareholders.

RISK CONCENTRATION

Risk concentrations can arise from significant transactions with individual clients or business partners or from transactions of a significant volume conducted with several business partners with similar economic characteristics. Such homogeneous groups may be impaired in their ability to meet their contractual obligations on time and in full due to changes in the economic or political situation as well as other – especially regulatory – (framework) conditions, which would expose the Group to concentrated default risks and thus also to liquidity risks.

Based on the existing receivables structure of the Group, a significant concentration of risk can be identified in the bundling of receivables with distribution grid operators. However, it should be noted that these distribution grid operators also operate within the regulatory framework and also have a large number of end consumers. Therefore, the Group assesses any default and liquidity risks from risk concentration as low as at the reporting date and in the previous year, due to the nature of its customers and the existing customer structure.

[26] Segment reporting

In line with corporate management structures, the Group is divided into the two segments *Transmission System Operation* and *Offshore Grid Connections*. These are distinguished as being subject to different regulatory regimes formed by different regulation systems, which significantly shape the economic framework conditions and business activities of the two segments and thus also of the Group as a whole.

The regulatory framework for the *Transmission System Operation* segment is derived from the legal requirements of the Energy Industry Act (**EnWG**), the Electricity Network Charges Ordinance (StromNEV), the Electricity Network Access Ordinance (StromNZV) and the Incentive Regulation Ordinance (**ARegV**). The revenues for the access to the transmission grid are collected by setting revenue caps by means of an incentive-based regulation. The regulatory framework for the *Offshore Grid Connections* segment is derived from the statutory obligation to construct and operate offshore grid connection systems pursuant to Section 17d (1) EnWG. The revenues from the apportionable network costs for the construction and operation of offshore connection lines are collected separately from the other network costs via the offshore network levy pursuant to Section 17f (1) sentence 2 EnWG.

Activities in the *Transmission System Operation* segment are conducted by Amprion GmbH as an independent legal entity while Amprion Offshore GmbH is the independent legal entity conducting operations in the *Offshore Grid Connections* segment.

Activities in the *Transmission System Operation* business segment revolve around the safe, reliable and efficient operation and provision of the transmission grid in the Group's balancing zone as codified in the Energy Management Act (EnWG). In addition to providing non-discriminatory access and ensuring system security at all times, the Company is also responsible for expansion of the transmission system as demand requires. Business activity is influenced by incentive regulations forming the legal framework.

Activities in the *Offshore Grid Connections* segment are likewise influenced by the regulatory framework, revolving around the construction, commissioning, maintenance, repair and intra-group leasing of grid connection systems lying outside the scope of the existing onshore transmission system.

No business segments were combined to form the two business segments reported.

Given the proximity to the calculatory standards of the incentive regulation, the net profit and revenues of Amprion GmbH determined in accordance with the accounting principles under HGB serve as the key internal management parameters and financial performance indicators of the Group. In addition, property, plant and equipment determined in the two business segments according to HGB as well as investments in non-current assets are reported as metrics with an indirect influence on these key performance indicators.

In the context of external capital market communication and the external ratings, *net debt* determined in accordance with IFRS is also utilised as a parameter within the framework of the Group's capital management. Due to the current centralised Group financing, financial debt to third parties outside the Group only arises at the level of the *Transmission System Operation* segment. Therefore, the segment key figure *net debt* corresponds to the Group-wide *net debt* figure. For the quantitative derivation of Group *net debt*, please refer to Note [29], *Disclosures on capital management*.

Based on the Amprion Group's internal management figures presented above, the following IFRS segment reporting reconciles the segment figures determined in accordance with HGB with the items reported in the IFRS consolidated financial statements. The classification of the segment figures determined in accordance with HGB already follows the IFRS structure, which forms the basis for the reporting of expenses and income in the consolidated income statement. In addition to the revaluation effects from the application of IFRS recognition and measurement rules, the table column *Revaluations and other reclassifications* includes individual reporting adjustments resulting from the different classification structures of the HGB annual financial statements and the IFRS consolidated financial statements.

Internal revenues are revenues generated between the two companies comprising the Group. These intercompany proceeds, which also reflect the transactions between the two segments, are eliminated in the consolidation of income and expenses along with the corresponding expenses and are shown in the Consolidation column. The intercompany settlements between the business segments do not include any intercompany profits.

Total property, plant and equipment relates to the assets reported in the statement of changes in property, plant and equipment. Their carrying amounts under HGB are reconciled to the values shown in the IFRS consolidated balance sheet.

Investments in non-current assets represent additions to property, plant and equipment as well as to intangible assets and financial assets. The amounts shown in the *Consolidation* column arise from the payments made by Amprion GmbH in 2022 and 2021 into the capital reserves of Amprion Offshore GmbH in the amounts of €24.0 million and €18.0 million, respectively. These amounts are eliminated as part of the reconciliation to the IFRS consolidated figures in the course of the capital consolidation.

Segment reporting – reporting period

Business segments	Transmission system operation	Offshore grid connections	Total for the business segments
Accounting system	German GAAP (HGB)		
in € million			
External revenue	11,911.9	0.0	11,911.9
intra-group revenue	36.5	3.6	40.2
Total revenue	11,948.4	3.6	11,952.0
Other income	188.7	0.0	188.7
Operating expenses	-11,476.3	-0.5	-11,476.8
Depreciation and amortisation	-258.9	0.0	-258.9
Investment result	3.5	0.0	3.5
Interest income	3.9	0.0	3.9
Interest expenses	-90.5	-0.3	-90.8
Income tax expense	-105.3	-0.9	-106.2
Expenses from profit/loss transfer	0.0	-1.9	-1.9
Result	213.4	0.0	213.4
Total property, plant and equipment	7,370.3	135.2	7,505.5
Investments in non-current assets	1,402.5	77.2	1,479.7

Segment reporting – previous year

External revenue	12,476.1	0.0	12,476.1
intra-group revenue	26.1	4.8	30.9
Total revenue	12,502.2	4.8	12,507.0
Other income	134.9	0.0	134.9
Operating expenses	-12,029.4	-2.9	-12,032.3
Depreciation and amortisation	-243.5	0.0	-243.5
Investment result	2.3	0.0	2.3
Interest income	-7.2	0.0	-7.2
Interest expenses	-95.5	-0.1	-95.6
Income tax expense	-80.3	-0.6	-80.8
Expenses from profit/loss transfer	0.0	-1.2	-1.2
Result	183.6	0.0	183.6
Total property, plant and equipment	6,298.9	58.0	6,356.9
Investments in non-current assets	1,222.8	33.2	1,256.0

	Remeasurements and reclassifications	Consolidation	Amprion Group
International Financial Reporting Standards (IFRS)			
	-8,399.2	0.0	3,512.6
	0.0	-40.2	0.0
	-8,399.2	-40.2	3,512.6
	-52.2	26.7	163.3
	8,137.9	13.4	-3,325.5
	-161.0	0.0	-419.9
	0.0	-2.8	0.7
	-0.4	-0.3	3.2
	75.7	0.3	-14.8
	125.3	0.9	19.9
	0.0	1.9	0.0
	-273.9	0.0	-60.4
	160.3	0.0	7,665.8
	-3.5	-24.0	1,452.2
	-9,904.3	0.0	2,571.8
	0.0	-30.9	0.0
	-9,904.3	-30.9	2,571.8
	-31.1	17.7	121.5
	10,014.6	13.3	-2,004.5
	-229.8	0.0	-473.4
	0.0	-1.8	0.6
	7.8	-0.1	0.5
	81.4	0.1	-14.1
	16.5	0.6	-63.8
	0.0	1.2	0.0
	-45.0	0.0	138.6
	169.1	0.0	6,526.0
	22.2	-18.0	1,260.2

Significant adjustments and revaluations resulting from the reconciliation of the amounts under HGB to the consolidated IFRS values presented in the segment reporting concern in particular

- the netting of regulatory levies required under IFRS,
- higher depreciation and amortisation due to the capitalisation of right-of-use assets within the scope of lease accounting under IFRS,
- the recognition of regulatory claims and obligations that is not permitted under IFRS,
- deviating interest expenses from the accounting of personnel and pension provisions and
- different amounts of capitalised borrowing costs.

The revaluation effect in investments in non-current assets is due to the different levels of capitalisation of borrowing costs under HGB and IFRS as well as the different valuation of property swap transactions.

The following tables show – based on the respective totals of the segment amounts – the reconciliations of the revenue, the annual result and the property, plant and equipment determined under HGB to the corresponding IFRS consolidated financial statements:

Reconciliation of revenue

in € million	2022	2021
Total segment revenue (German GAAP [HGB])	11,952.0	12,507.0
Netting of levies	-7,978.0	-9,802.6
Regulatory items	-425.8	-105.1
Other provisions	0.4	4.1
intra-group-revenue	-40.2	-30.9
Reclassification effects and other	4.2	-0.7
Consolidated revenue (IFRS)	3,512.6	2,571.8

Reconciliation of earnings

in € million	2022	2021
Total segment earnings (German GAAP [HGB])	213.4	183.6
Regulatory items	-421.8	-124.4
Staff-related provisions	40.1	33.1
Property, plant and equipment	-8.7	17.3
Other provisions	-15.0	-3.3
Deferred taxes	4.8	12.9
Bond issue discount	125.3	20.5
Other	1.5	-1.2
Consolidated net income (IFRS)	-60.4	138.6

Reconciliation of property, plant and equipment

in € million	31 Dec. 2022	31 Dec. 2021
Total property, plant and equipment of the segments (German GAAP [HGB])	7,505.5	6,356.9
Cumulative measurement effect from different depreciation and capitalisation of borrowing costs as well as valuation differences from property swap transactions	160.3	169.1
Total consolidated property, plant and equipment (IFRS)	7,665.8	6,526.0

[27] Auditor fees

The table below shows the fees of the Group's auditor *BDO AG Wirtschaftsprüfungsgesellschaft* recognised as expenses, broken down by service type for the reporting year and the previous year:

Audit fees

in € thousand	2022	2021
Statutory audit services	262.2	357.5
Other assurance services	403.3	384.8
Tax advisory services	3.8	3.9
Total	669.3	746.2

BDO AG Wirtschaftsprüfungsgesellschaft audited the separate financial statements of Amprion GmbH and Amprion Offshore GmbH and the IFRS consolidated financial statements of Amprion GmbH. Non-statutory audit services were performed on financial information for quarterly reviews and an IT audit was performed as a result of the conversion to SAP New Ledger.

Other assurance services include, on the one hand, mandatory certification services in accordance with energy law regulations (**EEG**, KWKG, StromNEV, AbLaV, **EnWG**). On the other hand, these include non-statutory confirmation services for comfort letters provided in connection with the bond issues carried out by the Group on the unregulated market in Luxembourg.

[28] Notes on the cash flow statement

The cash flow statement is broken down into cash flow from operating activities, cash flow from investing activities and cash flow from financing activities, depending on the source and application of cash and cash equivalents. The overall balance from these three positions represents the change in the Group's cash and cash equivalents, which totalled €3,412.0 million at the end of the reporting period (previous year: €2,121.5 million).

Cash and cash equivalents consisted almost exclusively of bank balances, most of which were invested as time and overnight deposits with maturities of less than three months. They were therefore only subject to an insignificant risk of fluctuation in value.

Cash flow from operating activities, calculated applying the indirect method, came to €1,996.8 million for the reporting year (previous year: €5,779.6 million). Of this amount, €443.4 million (previous year: €788.9 million) stemmed from the Group's grid business and €1,553.4 million from EEG settlement (previous year: €4,990.7 million). The significantly higher EEG cash flow in the 2021 financial year compared to the reporting year was due to the receipt of funds from the 2030 climate protection programme in the amount of €3,564 million. Their purpose is to finance the payments to be made to the EEG plant operators. Income taxes paid by Amprion included in the operating cash flow amounted to €49.9 million in the reporting year (previous year: €61.5 million).

Other non-cash expenses [-] and income [+] relating to the operating cash flow are shown in the following table:

Other non-cash expenses and income

in € million	2022	2021
Income from the reversal of construction cost contributions	0.4	3.0
Recognition and reversal of impairments	5.4	-6.2
Other	-0.3	-0.7
Total	5.4	-4.0

The financial liabilities included in the cash flow from financing activities in the cash flow statement can be reconciled to the carrying amounts in the balance sheet as shown in the table below:

Reconciliation of financial liabilities included in cash flow from financing activities to their carrying amounts

in € million	Liabilities to banks	Bonds	Other financial debt	Lease liabilities	Total
As at 31 December 2020	2,602.7	0.0	20.4	404.2	3,027.3
Cash-effective changes	-1,423.0	787.5	4.6	-226.3	-857.2
Non-cash-effective changes	24.2	-0.2	0.7	7.8	32.4
<i>of which additions to accrued interest</i>	24.6	0.3	0.0	0.0	24.9
<i>of which additions to lease liabilities</i>	0.0	0.0	0.0	7.8	7.8
<i>of which other changes</i>	-0.5	-0.5	0.7	0.0	-0.3
As at 31 December 2021	1,203.9	787.3	25.6	185.8	2,202.5
As at 1 January 2022	1,203.9	787.3	25.6	185.8	2,202.5
Cash-effective changes	-141.2	1,795.1	3.2	-158.1	1,498.9
Non-cash-effective changes	40.5	0.0	0.7	113.8	155.1
<i>of which additions to accrued interest</i>	40.5	1.0	0.0	0.0	41.5
<i>of which additions to lease liabilities</i>	0.0	0.0	0.0	155.9	155.9
<i>of which other changes</i>	0.0	-1.0	0.7	-42.0	-42.3
As at 31 December 2022	1,103.2	2,582.4	29.5	141.5	3,856.5

Other financial liabilities stated in that table consist of the jouissance rights presented as financial liabilities and of other financing presented as other financial liabilities. Liabilities to banks include promissory note loans issued by the Group, registered bonds as well as bank and syndicated loans and borrowings.

The Group recognises interest and dividends paid within cash flow from financing activities, while interest and dividends received are recognised within cash flow from investing activities.

In the reporting year, the Group invested a total of €1,434.0 million in property, plant and equipment (previous year: €1,238.4 million). This investment amount was offset by depreciation of property, plant and equipment amounting to €249.8 million (previous year: €235.1 million).

[29] Disclosures on capital management

With regard to the Group capital structure, the Group pursues a policy of maintaining a balanced mix of debt and equity financing at all times. In this respect, the management of the capital structure (capital management) is primarily aimed at

- ensuring a solid equity base for the Group to buffer effects from changes in the regulatory environment as well as unpredictable economic fluctuations and events;
- generating a market-appropriate risk-adjusted target return on equity for shareholders. This is a key prerequisite for the Group to have sufficient equity capital available to implement the substantial investment programme and to maintain the target rating (investment grade) it is striving for;
- ensuring the Group's access to the organised capital market at favourable financing conditions in order to be able to implement the investment programme in full and on time. The publication of the Green Finance Framework, the issuance of the first "green" bond and the "low-risk" ESG risk rating by the ESG rating agency Sustainalytics in the reporting year are to be assessed as milestones in this regard. These events illustrate the Group's strategic orientation towards sustainable business and the associated anticipation of the requirements of the European Sustainable Finance Strategy. Only in this way can the financial resources required for the network expansion be financed in the long term to the necessary extent at attractive conditions via the public capital market.

The Group's capital structure is managed in accordance with existing regulatory requirements, amendments to the regulatory framework and the primary objectives mentioned above.

The majority of the Group's planned investment programme will be financed by borrowings in the form of bank loans, promissory note loans and registered bonds as well as bonds listed on the international capital market.

In order to ensure the necessary access to the public capital market while at the same time maintaining favourable financing conditions in the future, the Group's capital management is based on the three primary objectives of the Group, on the one hand, and on compliance with the following secondary conditions, on the other hand:

- (1) Maintaining an investment grade credit rating over the long term.
- (2) Ensuring that Amprion hits its key financials in order to maintain the target rating.
- (3) Compliance with financial covenants under existing credit agreements.
- (4) Maintaining a balanced maturity profile of Group financial liabilities to reduce financing risks.

(1) Maintaining an investment grade credit rating over the long term:

Amprion GmbH receives solicited external corporate ratings from the two internationally established rating agencies Moody's Investors Service and Fitch Ratings. As at 31 December 2022, Amprion GmbH had a long-term investment grade rating of Baa1 (Moody's) and BBB+ (Fitch Ratings), each with a stable outlook, in line with its capital management policy and target rating.

External corporate credit ratings

Rating agency	Forecast horizon	31 Dec. 2022	31 Dec. 2021
Moody's Investors Service	long-term rating	Baa1	Baa1
	short-term rating	P-2	P-2
	outlook	stable	negative
Fitch Ratings	long-term rating	BBB+	BBB+
	short-term rating	-	-
	outlook	stable	stable

(2) Ensuring that Amprion hits its key financials to maintain the target rating

In order to ensure the target rating in the investment grade area, Amprion GmbH takes into account the relevant rating requirements for the financial risk profile as part of its capital management. These requirements chiefly pertain to specific rating ratios which have to meet certain levels to earn an investment grade rating. *Net debt* is a ratio of key importance, as it is included in key financial ratios by rating agencies and is thus of great importance for the agencies' assessment of the financial risk profile.

In view of its practical relevance for Amprion, the Group attaches particular importance to the net debt figure relating to the grid business as part of its capital management. Its calculation is presented below for the reporting year 2022 and for the comparison year with regard to the Group's grid business (i.e. excluding the EEG business):

Net debt - grid business

in € million	31 Dec. 2022	31 Dec. 2021
Financial debt	3,713.7	2,012.9
+ Lease liabilities	141.5	185.8
+ Other financing	1.4	1.4
+ Pension provisions (net pension obligation) and similar obligations	24.2	60.1
- Cash and cash equivalents	-420.3	-0.5
= Net debt	3,460.4	2,259.7

The Group's pension obligations are managed on the basis of their measured value under HGB, so as to ensure that these are fully funded as at the end of the financial year (net pension obligation of zero in the HGB separate financial statements of Amprion GmbH). Accordingly, a coverage gap existing at the end of the financial year is completely closed by a corresponding allocation to the plan assets externally outsourced to a fund. This is structured as a Contractual Trust Arrangement (CTA) and is thus protected from access by the Group or other creditors. It serves exclusively to cover the pension claims of the employees.

Due to a different valuation of the pension obligations under HGB, they are valued significantly lower (previous year: higher) in the reporting year under IFRS than under HGB due to the use of a higher discount rate (previous year: lower discount rate). Accordingly, this significant increase in interest rates in 2022 resulted in a significant overfunding of the pension obligation by the plan assets as at the reporting date under IFRS, so that an asset from overfunding was recognised in the IFRS consolidated financial statements (see Note [20], Provisions). In contrast, the pension obligations measured in accordance with IFRS requirements in the previous year were not fully funded as at 31 December 2021 due to the comparatively very low actuarial interest rate at that time - in contrast to the measurement in the annual financial statements under HGB - and therefore showed a corresponding funding gap in the IFRS consolidated financial statements. A pension provision in the amount of this funding gap or net pension obligation was therefore recognised in the IFRS balance sheet as at 31 December 2021.

(3) Compliance with financial covenants under existing credit agreements

Based on the primary objectives set out above, the Group manages its capital on the secondary condition that it complies with all agreed financial covenants for interest-bearing debt. In the event of non-compliance with such agreements, the contracting counterparties may immediately terminate the credit agreement extraordinarily and declare the outstanding capital amount due and payable in its entirety at short notice. As with the rating, the net debt indicator is of particular importance in this context for the Group, and is therefore also taken into consideration with regard to compliance with financial covenants.

The syndicated loan agreement already concluded in October 2021 contains a margin grid. According to the agreement, the amount of the interest margin is contractually fixed depending on the rating classification.

In the reporting year and in the previous year, the Group complied with all covenants agreed in the context of interest-bearing loans.

(4) Maintaining a balanced maturity profile of Group financial liabilities to limit financing risk

In view of the considerable borrowing requirements resulting from the investment programme, the Group aims to keep the refinancing risk of the Group as low as possible by maintaining a balanced maturity profile of its long-term interest-bearing financial liabilities. For detailed information in this regard, see the remarks on Group liquidity risk management under Note [25], *Reporting on financial instruments*.

As at 31 December 2022, there had been no changes in the Company's capital management objectives, policies or processes vis-à-vis the previous year.

[30] Contractual guarantees, contingent liabilities and other financial obligations

The following information on contractual guarantees (contingencies) contingent liabilities and other financial obligations is based on nominal values.

Contingencies and contingent liabilities

Contingent liabilities are only entered into after a thorough examination of the associated risks and within the scope of the Group's business activities. Based on the information available up to the preparation of the consolidated financial statements, it is assumed that the liabilities underlying the contingent liabilities can be fulfilled by the respective principal debtors and that a claim is therefore not currently expected. Accordingly, no provisions were made for these liabilities as at the reporting date or in the previous year.

The Group's contingencies exclusively comprised obligations from warranty agreements in the total amount of €195.1 million (previous year: €270.6 million) whose occurrence cannot be completely ruled out. Of this amount, €189.1 million (previous year: €265.9 million) relates to the assumption of debt with transfer of fulfilment for pension obligations recognised by the shareholder RWE AG (*Schuldbeitritt mit Erfüllungsübernahme*). Amprion bears the economic burden and relief from these pension obligations by RWE AG. As in the past, a claim against Amprion by the pension beneficiaries is currently not expected and therefore does not qualify as a contingent liability under IAS 37. The same applies to the total amount of the Group's remaining contingent liabilities of €6.1 million (previous year: €4.7 million), which mainly relate to unlikely obligations of Amprion GmbH from various bank guarantees.

Due to the transfer of certain pension obligations of Amprion GmbH to RWE Pensionsfonds AG in previous years, the company has a statutory obligation to make additional contributions in its capacity as employer in the event of a future shortfall in the pension fund. As in previous years, there is currently no shortfall in funding. In view of the current level of coverage of the minimum coverage provision and the level of coverage realised in previous years, it is highly probable that such a shortfall will not occur, but it cannot be completely ruled out for the future.

The Group is not exposed to any significant risks in connection with contingent liabilities from lawsuits or passive proceedings that were ongoing as at the reporting date. Insofar as such obligations had already been sufficiently substantiated as at the reporting date, provisions were recognised for them, which in this case are reported under other provisions (Note [20], *Provisions*).

Financial collateral provided by the Group

The Group has deposited financial collateral (initial margins) as required to engage in electricity trading on EPEX Spot and trading on other exchanges. These security deposits are reported under other financial assets (Note [15], *Other financial assets*). As at 31 December 2022, the fair value of the margin funds provided as collateral was €11.2 million (previous year: €4.9 million). Margin collateral is released when the Group has met its payment obligations to fully and promptly settle exchange trades.

Other financial obligations

As at 31 December 2022, the Amprion Group had financial obligations from the forward purchase of electricity totalling €577.8 million in connection with over-the-counter electricity forward transactions (forwards) concluded as part of grid loss management (long-term component) and falling under the *own use exemption* for accounting purposes (previous year: €239.6 million). Of this total, €393.1 million (previous year for 2022: €128.7 million) is due in financial year 2023 and €184.7 million (previous year for 2023: €110.9 million) in the following year.

In November 2020, the Group concluded service agreements with RWE Generation SE and in February 2021 with Gaskraftwerk Leipheim GmbH & Co. KG for the provision and operation of two special technical grid operating facilities. These contracts are to be classified as leases in accordance with the provisions of IFRS 16 and recognised in the balance sheet from the date of provision by recognising right-of-use assets and lease liabilities.

The provision date of the special technical grid operating facilities from the contract with Gaskraftwerk Leipheim GmbH & Co. KG with the Leipheim location is scheduled for October 2023. The future payments from this non-cancellable contract total €291.0 million for the years 2023 to 2027 and €393.7 million for the period thereafter (2028 to 2033). The special technical grid operating facilities from the contract concluded with RWE Generation SE with a provision date of October 2022 at the Biblis site was not yet available for use by the Group as at the reporting date. Accordingly, neither a right-of-use asset nor a corresponding lease liability was recognised in the reporting year in accordance with IFRS 16. The future payments from this non-cancellable contract total €366.0 million for the years 2023 to 2027 and €347.7 million for the period thereafter (2028 to 2032).

Other financial obligations from leases that are contractually agreed but not yet in progress as at 31 December 2022 relate to future property rental payments and leasehold rights of €4.2 million for the years 2023 to 2027 and €5.9 million for the period 2028 to 2114.

Other financial obligations from service contracts for reserve power plants that have returned to the market in the meantime totalled €16.5 million as at the reporting date and relate in full to the year 2023.

Other financial obligations from purchase commitments totalled €9,841.2 million (previous year: €593.4 million) as at the reporting date and mainly related to obligations from the acquisition of property, plant and equipment in the amount of €8,199.7 million (previous year: €323.2 million). The significant increase in obligations from purchase commitments is mainly due to the contracts concluded in 2022 for the construction and maintenance of offshore converter systems (offshore platforms and shore stations) as well as the award of cable lots in connection with the offshore projects DolWin4 and BorWin4 as well as BalWin1 and BalWin2 (formerly ongoing under the project names LanWin 1 and LanWin3). The maturity profile of the future payments resulting from the Group's purchase commitments is as follows:

Maturity profiles of purchase commitments

in € million	31 Dec. 2022	31 Dec. 2021
Due in up to 1 year	2,858.6	243.9
Due in 1 to 2 years	1,144.1	133.1
Due in 2 to 3 years	1,058.0	181.6
Due in 3 to 4 years	1,318.3	2.6
Due in 4 to 5 years	1,023.2	3.6
Due after 5 years	2,439.1	28.7
Total	9,841.2	593.4

The total amount of other financial obligations from closed property purchase agreements, where the legal and economic transfer takes place after the reporting date, amounted to €11.4 million in the reporting year (previous year: €63.6 million).

There was no collateralisation of the Group's outstanding loans, neither in the reporting year nor in the previous year.

In connection with the management of cross-border grid constraints, the Group generates congestion income that is subject to restrictions on use in accordance with EU law. As at 31 December 2022, financial obligations under public law amounted to €99.0 million in this context (previous year: €97.5 million).

[31] Related party disclosures

Transactions with related party companies

During the reporting year, transactions in the form of distributed dividends were made between the Group and the shareholders of the Group parent company, M31 Beteiligungsgesellschaft mbH & Co. Energie KG and RWE AG. Nevertheless, transactions with companies of the RWE Group were carried out as part of Amprion's ordinary business operations. By resolution of the Supervisory Board of 12 April 2022, a partial amount of €130.0 million of the net profit for the financial year 2021 under HGB was distributed to shareholders (previous year: €100.0 million). In the previous year, by resolution of the shareholders on 26 March 2021, an additional special distribution of €23.2 million was made to the shareholder RWE AG. This distribution amount was withdrawn from other retained earnings.

As part of its grid and **EEG** businesses, the Group recognised income and expenses with RWE Group companies totalling €41.1 million (income) (previous year: €50.3 million) and €408.1 million (expenses) (previous year: €450.8 million). In the reporting year, RWE AG charged Amprion €8.8 million for pension settlements in connection with the assumption of debt for pension obligations recognised by the shareholder RWE AG (previous year: €8.6 million). As at 31 December 2022, there were outstanding trade receivables of €8.8 million (previous year: €1.8 million) and outstanding trade payables of €9.7 million (previous year: €7.4 million) between the Group and the RWE Group companies.

Amprion GmbH maintains business relations with Amprion Offshore GmbH under various agreements governing the contractual and legal rights and obligations between the parties. These include a construction and usage transfer contract between the two companies, an operational management agreement, a control and profit and loss transfer agreement and a cash pooling agreement. In addition, Amprion GmbH issued hard letters of comfort for Amprion Offshore GmbH

in connection with the two converter systems DolWin4 and BorWin4 in the reporting year. According to this, Amprion GmbH, as patron, ensures that Amprion Offshore GmbH has sufficient financial resources at all times to meet its contractual obligations towards the DolWin4 Offshore Consortium and the BorWin4 Offshore Consortium.

Transactions with related party individuals and their total remuneration

The Management and Supervisory Board members of Amprion GmbH were classified as related parties for the financial year 2022 and the previous year in view of the key governance positions they hold in the Amprion Group. The following information is provided in fulfilment of the disclosures of total remuneration paid to such parties required under IAS 24 and of the Group's receivables and liabilities from/to these individuals.

The table below shows total remuneration paid to Management Board members of Amprion GmbH expensed in the reporting year and the previous year, broken down by remuneration component:

Remuneration of the Management Board

in € thousand	2022	2021
Short-term remuneration	2,043.2	1,537.0
Long-term remuneration	466.8	443.2
Post-employment benefits (service cost)	188.9	427.2
Total	2,699.0	2,407.5

Interest expense from jouissance rights held by Management Board members amounted to €84.8 thousand for the reporting year (previous year: €78.8 thousand).

As at the end of the reporting year, the Group's obligations to (former) managing directors and their surviving dependants in the form of pension claims and jouissance rights totalled €9.5 million (previous year: €7.0 million).

In the reporting year, Supervisory Board members received a fixed total remuneration of €360.0 thousand for their respective duties (previous year: €356.7 thousand).

[32] Events after the reporting period

In the period between the reporting date and the preparation of the IFRS consolidated financial statements, the total volume of the syndicated loan agreement was increased by €500.0 million to €2,000.0 million.

Dortmund, 27 March 2023

The Management Board



DR HANS-JÜRGEN BRICK



PETER RÜTH



DR HENDRIK NEUMANN

INDEPENDENT AUDITOR'S REPORT

To Amprion GmbH, Dortmund

Audit opinions

We have audited the consolidated financial statements of Amprion GmbH, Dortmund, and its subsidiary (the group), which comprise the consolidated statement of financial position as at December 31, 2022, the consolidated income statement and consolidated statement of comprehensive income, the consolidated statement of changes in equity, and the consolidated statement of cash flows for the financial year from January 1, 2022 to December 31, 2022 and notes to the consolidated financial statements, including a presentation of the recognition and measurement policies.

In addition, we have audited the group management report of Amprion GmbH for the financial year from January 1, 2022 to December 31, 2022. In accordance with the German legal requirements, we have not audited the content of parts of the group management report as specified in section **“other information”**.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to § 315e (1) HGB [Handelsgesetzbuch: German Commercial Code] and give a true and fair view of the assets, liabilities and financial position of the group as at December 31, 2021 and of its financial performance for the financial year from January 1, 2021 to December 31, 2022, and
- the accompanying group management report as a whole provides an appropriate view of the group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our opinion on the group management report does not cover the content of those parts of the group management report listed in section **“other information”**.

Pursuant to § 322 (3) sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements.

Basis for the audit opinions

We conducted our audit of the consolidated financial statements in accordance with § 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW).

Our responsibilities under those requirements and principles are further described in the **“auditor’s responsibilities for the audit of the consolidated financial statements and the management report”** section of our auditor’s report. We are independent of the Group entities in accordance with the requirements of German commercial and professional law, and we have fulfilled our other German professional responsibilities in compliance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and the group management report.

Other information

The executive directors are responsible for the other information. The other information comprises:

- the statement on corporate governance pursuant to Sec. 289f (4) of the German Commercial Code (HGB);
- the other parts of the annual report, except the audited consolidated financial statements, the Group management report and our audit opinions.

Our audit opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

If, based on our work, we conclude that there has been a material misstatement of such other information, we are required to report those facts. We have nothing to report in this regard.

**Responsibilities of the management and the supervisory board
for the consolidated financial statements and the group management report**

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with the requirements of IFRS as adopted by the EU and that the consolidated financial statements, in compliance with German Legally Required Accounting Principles, give a true and fair view of the assets, liabilities, financial position and financial performance of the group. In addition, the executive directors are responsible for such internal controls as they, in accordance with German Legally Required Accounting Principles, have determined as necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting, provided no actual or legal circumstances conflict therewith.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The supervisory board is responsible for overseeing the group's financial reporting process for the preparation of the consolidated financial statements and the group management report.

Auditor's responsibilities for the audit of the consolidated financial statements and the group management report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the group's position and in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with § 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and the group management report.

During the audit, we exercise professional judgement and maintain professional skepticism throughout the audit. Furthermore, we

- identify and assess the risks of material misstatement of the consolidated financial statements whether due to fraud or error, design and perform audit procedures responsive to those risks and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery and intentional omissions, misrepresentations or the override of internal controls;

- obtain an understanding of internal control relevant to the audit of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems;
- evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures;
- conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the group to cease to be able to continue as a going concern;
- evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315 (1) HGB;
- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express audit opinions on the consolidated financial statements and the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion;

- evaluate the consistency of the group management report with the consolidated financial statements, its conformity with [German] law, and the view of the group's position it provides;
- perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence, we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Düsseldorf, 27 March 2023

BDO AG
Wirtschaftsprüfungsgesellschaft

Signed Reese	Signed Dirks
Wirtschaftsprüferin	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

GLOSSARY

ARegV

The Ordinance on Incentive Regulation (Anreizregulierung – ARegV) is an official instrument for the regulation of monopolistic markets. As grids are seen as natural monopolies, grid operators theoretically have no incentive to maintain their efficiency and thus keep the costs of their services low. The Federal Network Agency therefore sets a revenue cap for network operators via the Incentive Regulation which is stipulated on the basis of the efficiency ratings of the least expensive grid operator. Within this framework, grid operators are allowed some leeway – for example, for investments in the grid. The difference between the revenue cap and actual revenues is placed in a regulatory account by the Federal Network Agency. The revenue cap is implemented through the transmission charges. If revenues exceed the cap by more than 5%, the transmission charges must be adjusted.

BBPIG

The Federal Requirement Plan Act (Bundesbedarfsplangesetz, BBPIG) 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 projects.

🌐 www.netzausbau.de

EEG

The Renewable Energy Sources Act (Erneuerbare-Energien-Gesetz, EEG) regulates the preferential feed-in of electricity from renewable sources such as wind, sun, water or biomass into the German electricity grid. This is intended to enable the operation of regenerative generation facilities on a financially sustainable basis. According to the EEG, grid operators are obliged to accept electricity from these facilities and market it on the spot market on the electricity exchange. The law also lays down fixed rates of remuneration for electricity from renewable sources. The difference between the remuneration and the price achieved on the spot market is balanced out via the EEG allocation.

EEV

The Renewable Energies Regulation (Erneuerbare-Energien-Verordnung) regulates the marketing of electricity generated from renewable sources. This electricity must be sold at the level of transmission grid operators and no longer has to be purchased from energy utilities which supply end customers. In addition, the EEV contains provisions on calculating the EEG allocation.

EnLAG

The Power Grid Expansion Act (Energieleitungsbaugesetz, EnLAG) 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.

EnWG

The Energy Industry Act (Energiewirtschaftsgesetz, EnWG) contains fundamental regulations on the law on powerline-based energies. The objective of EnWG, amongst others, is to ensure a “best possible secure, affordable, consumer-friendly, efficient and environmentally sustainable” energy supply to the general public. This includes safeguarding effective and transparent competition on the energy market. The law also contains regulations on the supervision of grid operations by the regulatory authorities.

Federal Network Agency (FNA)

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

Overhead lines

Overhead lines – also known as overhead transmission lines – are electrical lines whose conductor cables – unlike underground cables – are insulated by the surrounding air. For the foreseeable future, overhead lines will continue to be the most economical form of power transmission, particularly over long distances.

NEP

The Power Grid Development Plan (Netzentwicklungsplan, NEP) 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-year cycle as of 2017.

Substation

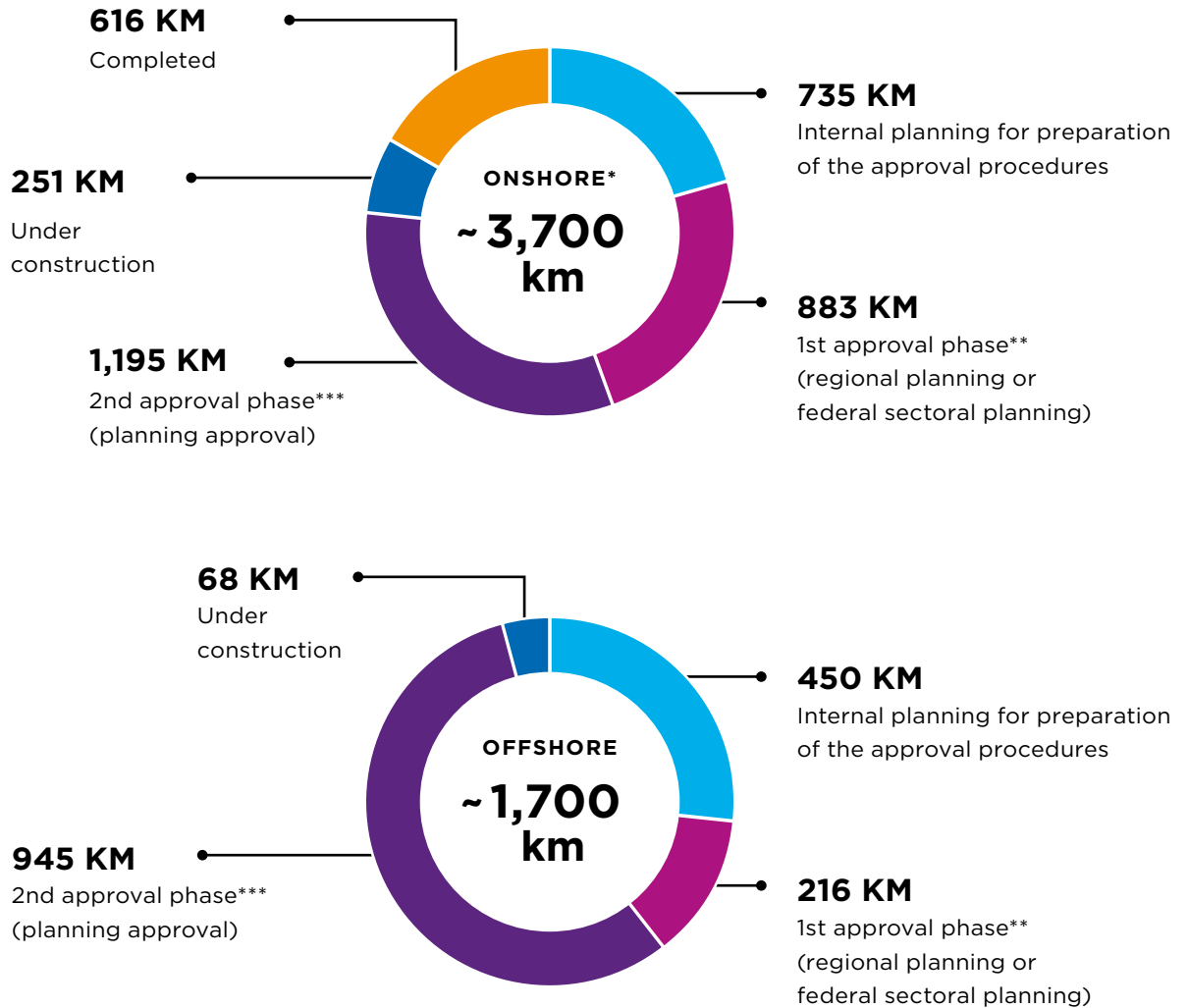
This is a junction in the electricity grid. Several high-voltage and extra-high-voltage transmission lines converge at a substation. In these facilities, individual electricity circuits can be selectively switched on or off. It is also possible to direct the electricity via the transformers – voltage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

Underground cables

The use of underground cables is widespread amongst lines for supplying towns and in regional electricity grids. On the other hand, in sections with 380 kilovolts, underground cables are unusual. Since 2015, however, the German government has been focusing increasingly on underground cables for grid expansion. In the future, the major direct current connections are to be designed primarily as underground cables. In the field of alternating current, the cable technology is being tested in pilot projects. Cabled sections are essentially more cost-intensive than overhead lines. The additional costs are passed on to the consumer through grid use charges.

GRID EXPANSION AT AMPRION

Amprion is expanding and converting 5,400 kilometres of onshore transmission grid and offshore grid connections. This is how we are paving the way for a sustainable energy system.



Route kilometres per procedural phase. Status: February 2023.

* Only includes projects that are stipulated in the EnLAG and BBPlG.

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

*** The 2nd approval phase results in the determination of the exact route within the route corridor.

IMPRINT

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