Combined management report as at December 31, 2021

This management report is a combined report on STEAG GmbH and the STEAG Group (STEAG GmbH and its subsidiaries). Business development at STEAG GmbH is reported in a separate chapter. The consolidated financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS) as applicable in the EU, while the individual financial statements have been drawn up in accordance with the provisions of the German Commercial Code (HGB) and the German legislation on limited liability companies (GmbH-Gesetz).

(1) Basic information on the STEAG Group

(1.1) Business model

Business activities

The STEAG Group operates in Germany and internationally. Based on its integrated business model, it offers customers solutions and services in key areas of the energy value chain.

Its core competencies include the planning, construction and operation of energy generating, renewable energy and distributed facilities, trading in electricity and fuels, and technical services related to energy generation. Alongside fossil fuels, energy is generated from solar power, wind energy, substitute fuels and special fuels.

Ownership structure

As at December 31, 2021, STEAG GmbH was wholly owned by KSBG Kommunale Beteiligungsgesellschaft GmbH & Co. KG (KSBG KG), Essen (Germany), a consortium of six German municipal utilities in the Rhine-Ruhr region.

Organizational structure of the STEAG Group

STEAG GmbH, which is headquartered in Essen (Germany), is the lead company in the STEAG Group. It holds the shares in the Group's subsidiaries, either directly or indirectly. STEAG GmbH is responsible for strategic and operational management of the STEAG Group's organizational units, which previously comprised the Power division (comprising the Generation, Trading & Optimization (T&O), District Heating, Power Minerals (divested effective May 31, 2021), Energy Services and Technical Service business units), and the Renewable Energies and Distributed Facilities division (New Energies, Waste to Energy and CHP Poland business units).

As a key outcome of the “FUTURE” project, in the light of changing market conditions and Germany's withdrawal from coal-fired power generation, STEAG has initiated the necessary transformation process and reorganized its structure into the strategic business units “**Renewables**” (renewable energy), “**Energy Solutions**” (energy solutions and services), “**Asset Management**” (facilities and equity investments”) and “**STEAG Verbundkraftwerke**” (exit route from coal-fired power generation at the power plants in Germany). The new strategic business units are supplemented by the “**Trading**” and “**Digital**” units and the management and support functions (internal processes and administrative functions). This structure will be used for reporting for the first time in fiscal 2022.

Products and services

Technology-independent energy generation

As at December 31, 2021, the STEAG Group still operated large power plants at four sites in Germany. As a consequence of the German Coal-Fired Power Generation Termination Act (KVBG), STEAG has already registered four power plant blocks for decommissioning through the auction process and will successively be taking further coal-fired power plants in Germany out of service, followed by final decommissioning.

In 2021, STEAG Beteiligungsgesellschaft mbH and Siemens Project Ventures GmbH drove forward the project for turnkey construction, operation and long-term maintenance of a state-of-the-art combined gas and steam power plant at the established site in Herne (Germany) (Herne 6). The new power plant is scheduled to come into service commercially in 2022.

Internationally, the STEAG Group operates its own large power plants in Turkey, the Philippines and Colombia, based on close and long-term partnerships. The investments in the Philippine and Colombian companies are currently being divested.

In Germany, the STEAG Group has around 193 facilities to generate energy from renewable resources, distributed facilities serving industry and local authorities, and heating plants.

In addition, the STEAG Group generates electricity and heat from mine gas and the incineration of domestic refuse. It is also active in the generation of heat from thermal energy. Furthermore, it is a major supplier of district heating and a contractor and operator of biomass plants in Germany.

A competent trading partner

Based on many years of experience in the power, coal and CO_2 business, the STEAG Group has a broad portfolio of products and services, and extensive expertise in trading. This includes the procurement and marketing of electricity, fuel and CO_2 emission allowances, along with marketing of capacity and of heat and steam energy. In addition, the STEAG Group is one of Germany's leaders in the import and marketing of hard coal.

A professional service provider

Offering energy services is becoming more and more important for the STEAG Group. Over the years the STEAG Group has accrued expertise in modernizing and optimizing energy generating plants and now has a reputation as a provider of all-round solutions for customized energy supply that is both environment-friendly and profitable.

The STEAG Group's competencies include engineering and operating solutions for every type of power generation. The experts at its subsidiary STEAG Energy Services GmbH work internationally through its companies in Brazil, Botswana, Spain, Turkey, Switzerland, the USA and India. This company is engaged in projects involving technologies from the areas of renewable energies, conventional energy, nuclear power and energy storage systems.

Organizational changes

The STEAG Group’s FUTURE project comprises the strategic restructuring of divisions and optimization of the Group's structures and workflows. An organizational realignment supports both planned administrative cost savings and improvements in the management of the operational business.

At the first decommissioning auction for hard-coal power plants on December 1, 2020, the Walsum 9 bid was accepted. For the STEAG Group, this decision meant that the Walsum 9 unit could no longer participate in the electricity market from January 2021. Final removal from the grid took place on July 1, 2021. The success of the Walsum 9 tender ensures that the employees affected by the shutdown have a legal claim to adjustment benefits (APG) for early retirement. STEAG also participated in the second decommissioning auction on January 4, 2021, but was not successful.

On February 2, 2021, STEAG notified the Federal Network Agency that it planned to permanently shut down its Weiher 3 and Bexbach power plant units in the Saarland region, which have been kept available as grid reserve plants since 2017. In response, Amprion applied to extend the systemic relevance of the plants beyond 2022, until March 31, 2025. The Federal Network Agency has already approved this application in a preliminary decision. Final shutdown of the two units is only permitted when they are no longer classed as systemically relevant.

On May 4, 2021, STEAG registered both units at the Völklingen-Fenne heating plant and the Bergkamen power plant with the Federal Network Agency for provisional closure. On July 14, 2021, the Federal Network Agency announced that in the third decommissioning auction STEAG's bid for decommissioning premiums for the shutdown of the Bergkamen power plant and the heating plant and model power plant in Völklingen had been accepted. The acceptance of the bid in the third decommissioning auction means that these three STEAG power plants may not generate any electricity from coal for commercial purposes from October 31, 2022. After examining the case over several months, in March 2022, the transmission network operator Amprion classified the plants as systemically relevant. The Federal Network Agency has not yet completed its assessment of this recommendation.

On December 23, 2020, STEAG and Societatea de Producere a Energiei Electrice în Hidrocentrale Hidroelectrica S.A. (Hidroelectrica) signed an agreement on the sale of STEAG's shares in its Romanian subsidiary Crucea Wind Farm S.A. (Crucea Wind Farm) and STEAG Energie Romania S.R.L. (STEAG Energie Romania). This transaction was closed on March 11, 2021.

On December 17, 2020, an agreement was signed on the sale of all shares in the Turkish wind farm STEAG Rüzgar Süloğlu Enerji Uretim ve Ticaret A.S. and the operating company STEAG Turkey Enerji Yatirimlari ve Hizmetleri. This transaction was closed on August 4, 2021.

On March 10, 2021 STEAG and EP Power Europe, a.s. (EPPE), a subsidiary of Energetický a průmyslový holding, a.s. (EPH), signed an agreement on the divestment of STEAG's shares in STEAG Power Minerals GmbH and its subsidiaries. This transaction was closed on May 31, 2021.

On September 24, 2021, STEAG Walsum 10 Kraftwerksbeteiligungsgesellschaft and EVN Kraftwerks- und Beteiligungsgesellschaft mbH (EVN) concluded a contract on the purchase and transfer of shares. Under this agreement, STEAG assumed EVN's 49 percent shareholding in the Walsum 10 power plant project, becoming the sole shareholder. The power supply agreement with EVN was terminated early in return for payment of compensation. The amounts received were mainly used to repay the project financing for the power plant.

On February 12, 2021, Carsten König was appointed to the Board of Management of STEAG GmbH as Chief Transformation Officer (CTO). Following many rounds of negotiation on the overall financing concept for STEAG and its owner KSBG and the improvement in company's economic situation, STEAG embarked on a new transformation phase with different priorities. As a consequence, there was a further change on the Board of Management at the start of August. Ralf Schmitz was appointed to the Board of Management of STEAG GmbH effective August 2, 2021 and Carsten König left the Board of Management. Dr. Heiko Sanders resigned from his position on the Board of Management of STEAG GmbH on September 15, 2021.

At year-end 2021, Joachim Rumstadt stepped down from his position as Chairman of the Board of Management of STEAG GmbH at his own request. Effective January 1, 2022, Dr. Andreas Reichel succeeded him as Chairman of the Board of Management of STEAG GmbH.

(1.2) Strategy

With a business model based on more than eight decades of experience in solving complex problems in the energy sector, the Board of Management is convinced that the STEAG Group will continue to create significant value for its customers in the future and gain access to promising growth areas for its business. The focus is on three aspects of the energy sector: services, digitalization and decarbonization.

The **Renewables** business unit will continue to expand the use of renewable energy sources through EPC projects and selective project development. While it will flexibly serve international markets in the PV sector, the development of wind power projects is concentrated on France. The marketing of PV facilities and wind farms will be complemented by marketing by Trading via green PPAs (long-term “green” power purchase agreements).

The **Energy Solutions** business unit mainly addresses the expansion and ongoing development of smart, end-to-end energy solutions for customers that harness the trends to decarbonization, digitalization and decentralization, together with market-oriented plant operation. In this way, STEAG is positioning itself as an all-round solution provider and investment partner for industrial and municipal decarbonization projects. Energy-related expertise plays a key role in the initiation, development and realization of projects, so this will be undertaken in collaboration with Trading. By utilizing its full expertise and experience to date, STEAG is continuing to position itself as a planning specialist in the growing market for energy projects of all types. The future focus will also include hydrogen and energy storage projects.

Asset Management ensures a holistic approach to the investments in large international power plants and national and international partnerships and is responsible for administration, valuation and optimization as well as for the procurement of asset services. This business unit pools the technical and business competencies required for STEAG's own investments and major plants and is developing a new understanding of asset management.

STEAG Verbundkraftwerke is responsible for the operation and maintenance of the German power plants and for preparing and implementing the decommissioning of the hard-coal power plants in the Ruhr and Saarland regions.

Trading is realigning the trading activities with a high degree of standardization and automation. The focus is shifting from managing the company’s hard-coal power plants in Germany to developing new marketing solutions for distributed facilities, flexibility and green PPAs (green power purchase agreements), also for third parties.

Digital is repositioning STEAG for the development and commercialization of digital business models. The focus is on developing a digital service platform that will bundle services and tools, primarily for performance monitoring, to ensure transparency on the status and economic feasibility of energy facilities, and optimized management of energy systems. This platform will be offered to a broad international customer base, both independently and through partnerships. In addition, STEAG is driving forward further initiatives for the digitalization of business models.

(1.3) Research and development

In 2021, as in previous years, the STEAG Group continued to focus on application-related research and development rather than basic research. The special significance of digitalization was driven forward by building up new digital business models. This applies to both central research and development at STEAG GmbH and research and development at its subsidiaries.

The “Designnetz” project launched at the start of 2017 with a total of 46 partners was completed in March 2021. This project was part of the SINTEG initiative for smart digital energy applications established by the Federal Ministry for Economic Affairs and Energy to support the new energy policy. The SINTEG initiative developed and demonstrated sample solutions for reliable, economical and environmentally compatible energy supply, in some cases with 100 percent power generation from renewables, which can be upscaled for large-scale model regions. Along with other pilot projects, the electrode boiler erected at the Fenne site as part of this project and the district heating storage solution of Fernwärme-Verbund Saar GmbH have been connected to an overarching “system cockpit” via modern methods of data interchange (“Internet of Things”).

In 2019, the Federal Ministry for Economic Affairs and Energy invited entries for a competition called “Real labs for the energy turnaround". In July 2019, the Federal Minister for Economic Affairs and Energy announced that the HydroHub Fenne project outline for the erection of an electrolyzer at the Fenne site was one of 20 winners of this ideas-based competition. This project was continued with Siemens in 2021 with the aim of building up a cross-border hydrogen economy in the Saarland region, France and Luxembourg. Together with the project components contributed by Creos and Stahl-Holding-Saar, HydroHub was chosen in a national pre-selection process as an Important Project of Common European Interest (IPCEI) and is now in the pre-registration phase of the European Commission's funding approval process.

Digital business models will be key elements of the portfolio of tomorrow's companies. In 2021, STEAG therefore started to implement the concept drawn up in the previous year to realize and market a digital platform. This platform is designed as an operating system for the energy sector worldwide, as a single source of affordable and scalable software and services for the distributed renewable energy systems of the future. A letter of intent on expansion of the collaboration with a potential partner (Software AG) was signed in April 2021. Within this framework, a joint proof of concept for further development of the platform was drawn up in the period to October 2021. This partnership has since been terminated. New approaches for collaboration with potential partners are currently being developed.

Realization of the digital platform will be accompanied by establishing know-how in the use of artificial intelligence, especially in the context of renewable energies: in 2021, the “Digital Service Center” research project, which started in 2020, received further public funding as part of the “leading industrial innovation cluster” in the federal state of NRW. In this project, Mitsubishi Hitachi Power Systems, the STEAG Group and the Fraunhofer Institute for Intelligent Analysis and Information Systems are working on potential industrial applications of machine learning to make these methods usable for intelligent monitoring of relatively small distributed facilities in the future energy landscape. The project is scheduled to run until mid-2023. To complement this project, the STEAG Group is an associated partner in the ADWENTURE project of the Fraunhofer Institute for Energy Economics and Energy System Technology, which aims to develop an early warning system for malfunctions at wind energy installations.

(2) Economic report

(2.1) Economic background

General economic development[1]

The German economy is emerging from the pandemic more slowly than had been expected because recurrent flare-ups have repeatedly held back recovery, especially in the service sector. Despite full order books, industry is suffering from the global disruption of supply chains for key industrial starting products. As a result, exports have weakened considerably. Capital expenditure by companies has also been adversely affected by supply bottlenecks because capital goods producers have also been impacted by the supply bottlenecks for various raw materials and starting products as well as logistics problems. The labor market picked up slowly during the year. The number of workers on short time shot up to well over three million at times as a result of the lockdowns from November 2020, but has halved since spring 2021. As well as employees returning from short-time working to regular working hours, employment increased during the year. Inflation increased appreciably in Germany, driven by a sharp hike in energy prices and the end of the temporary reduction in value-added tax at the start of 2021. Overall, inflation increased significantly to 3.1 percent in 2021 (2020: 0.5 percent). In all, the gross domestic product grew by 2.8 percent in 2021, having contracted by 4.6 percent in the previous year.

Energy consumption and energy generation[2]

In 2021, primary energy consumption in Germany was 2.6 percent higher than in 2020. This was mainly due to the macroeconomic recovery and to cooler weather than in the previous year. All fossil fuels apart from oil were affected by the increase in energy consumption. For example, consumption of both hard coal and lignite increased by around 18 percent. The almost 4 percent rise in consumption of natural gas was mainly attributable to the far cooler and less windy weather in the first five months, which resulted in increased use of natural gas to generate both heat and electricity. Consumption of mineral oil was down 5.1 percent year-on-year in 2021, especially consumption of light heating oil, because consumers had filled their tanks in the previous year when prices were low. Use of nuclear power also increased significantly, by 7.2 percent. By contrast, there was only a slight drop of 0.2 percent in the contribution made by renewable resources to primary energy consumption. In 2021, renewables accounted for 16.1 percent of energy consumption in Germany (2020: 16.5 percent).

Power consumption

In 2021, overall consumption of electricity was 565.3 TWh, around 7.8 TWh higher than in 2020. Gross power generated increased by 1.9 percent (2021: 584.5 TWh vs. 2020: 573.6 TWh). The export surplus was 19.2 TWh (2020: 18.9 TWh).

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1 The comments in this section are based mainly on the economic reports published by the Kiel Institute for the World Economy (IFW) Kiel, no. 86 (2021/Q3) on the German economy, the weekly report by the German Institute for Economic Research (DIW) Berlin, no. 37/2021, and the REI economic report no. 72 (2021) vol. 3, joint economic forecast fall 2021, Joint Economic Forecast Group of the Leibniz Institute for Economic Research (RWI), Essen (Germany).

2 All data on energy generation and consumption and power consumption are provisional data from AG Energiebilanzen e.V. (as at December 2021).

Development of energy prices

A significant rise in prices was observed on some international commodity markets in 2021, especially in the second half of the year.

The average price of natural gas in the Net Connect Germany/Trading Hub Europe[3] market area rose by around 390 percent year-on-year to € 46.6 per MWh in 2021 (2020: € 9.5 per MWh). The sharp rise in the price of natural gas in 2021 was due to low storage levels following a long winter in 2019/2020. Moreover, gas storage levels only increased slowly in the summer, partly because the Nord-Stream 2 gas pipeline did not come into service and because of maintenance work on Europe’s gas infrastructure. The economic recovery led to a further demand-driven shortage. Rising demand for LNG in Asia resulted in lower LNG imports into Europe at times. The spot price for natural gas rose considerably during the year. In January, it was just under € 20 per Mwh; in the fourth quarter, it rose to highs of up to € 183 per MWh.

Compared with the previous year, the API#2, the price index for hard coal that is relevant for Europe, rose by around 142 percent as a result of the significant hike in gas prices and the related increase in demand for coal. Demand for coal was also driven by the rapid recovery of the global economy in the reporting period. Since supply did not keep pace with the hike in demand, e.g., in China, coal prices rose on the international markets, reaching historic highs of almost USD 300 per tonne. The average price of hard coal was US$ 50.4 per tonne in 2020. In 2021, it rose to $ 122.2 per tonne.

In European emissions trading, 2021 marked the start of the fourth trading period and the UK's exit from the European trading system. Driven by expectations of future shortages, prices for European emission allowances rose to a new high of almost € 90 per tonne in 2021. Prices of the EU allowances (“EUA”) were propelled upwards by lower supply, the announcement of tougher climate targets for the EU for 2030 and an influx of speculators. Furthermore, prices were driven by higher emissions from the power sector due to a renewed rise in coal-fired generation in 2021. All in all, the average price in 2021 was € 53.2 per tonne, which was considerably higher than the previous year’s level (€ 24.7 per tonne).

Following the downward trend in electricity prices in the previous years, a clear rise was recorded in 2021. The average spot price on the European electricity exchange EPEX rose by more than 217 percent year-on-year to € 96.9 per MWh (2020: € 30.5 per MWh). The peak contract also rose by around 221 percent to an average of € 105.2 per MWh (2020: € 32.8 per MWh). This price rise was mainly due to relatively low generation from renewable resources and the sharp rise in generating costs.

(2.2) Business performance

Business performance in 2021, as in 2020, was mainly dominated by one-time earnings effects. Fiscal 2020 was chiefly affected by the coronavirus pandemic, the adoption of the German Coal-Fired Power Generation Termination Act (KVBG) and the FUTURE transformation project. By contrast, in 2021, the one-time effects from the third decommissioning auction and the compensation payment by EVN for termination of the electricity supply agreement had a positive effect on earnings.

[3] The two previous gas market areas GASPOOL (GPL) and NetConnect Germany (NCG) were merged on October 1, 2021 to form a new nationwide gas market area, the Trading Hub Europe (THE).

The price of gas, coal and electricity rose significantly in the third quarter of 2021. This improved the margins at the German coal-fired power plants. Following the price rises, to limit the liquidity risks relating to clearing and margining under the Trading business unit's risk concept it was necessary to undertake counter-transactions to previously concluded forward agreements. As a consequence, the German power plants were marketed principally via the spot market, with the corresponding market opportunities and risks. These transactions, in particular, resulted in extraordinary expense of € 179.0 million from the valuation of unrealized derivatives and financial instruments in 2021. This will have a counter-effect until the end of the first quarter of 2022 and will be more than offset by higher revenue from the spot market.

(2.3) Business situation

(a) Earnings position

Performance in 2021

EBITDA and EBIT are used for internal management purposes and as indicators of the sustained earning power of the Group. As part of the realignment of the STEAG Group, the definitions of EBIT, EBITDA and the non-operating result were altered as at December 31, 2021. Income from investments, equity-method income and other financial income, which are included in the financial result, are no longer added to EBIT and EBITDA. In addition, the definition of the portion of earnings formerly designated as the "non-operating result" has been changed and will be referred to as the "extraordinary result" in future. EBITDA (earnings before interest, taxes, depreciation and amortization) and EBIT (earnings before interest and taxes) are both earnings parameters after adjustment for exceptional items (extraordinary result).

The earnings from ordinary activities stated in the income statement are adjusted for extraordinary effects that are material for an assessment of the earnings position but not an indicator of the company's operational value added, in order to calculate and disclose the underlying operating performance. These effects include, in particular, earnings due to changes in accounting policies, restructuring expenses, impairment losses/reversal of impairment losses, the results of other extraordinary business transactions, and unrealized effects resulting from the valuation of derivatives.

In the 2021 fiscal year, the STEAG Group's sales, EBITDA and EBIT developed as follows:

STEAG Group: EBITDA* and EBIT*

in € million	**2021**	2020	2020**	Change in %
Sales	2,766.5	2,018.4	2,018.4	37.1
EBITDA	376.8	370.5	368.0	1.7
EBIT	234.0	195.0	200.1	20.0
EBITDA margin in %	**13.6%**	**18.4%**	**18.2%**	
EBIT margin in %	**8.5%**	**9.7%**	**9.9%**	

* Using the STEAG definition 2021, adjusted for extraordinary effects
** Using the STEAG definition 2020, adjusted for non-operating effects

Sales increased by 37.1 percent to € 2.8 billion and therefore clearly exceeded the previous year's expectation that sales would rise to € 2.2 billion.

EBIT was € 234.0 million, which was € 86.0 million higher than budgeted and € 39.0 million above the figure of € 195.0 million reported for the previous year. It was therefore higher than had been forecast. The EBIT margin (EBIT/sales) declined from 9.9 percent to 8.5 percent.

EBITDA was € 376.8 million, which was € 102.0 million higher than budgeted and above the 2020 figure of € 370.5 million. The EBITDA margin (EBITDA/sales) was 13.6 percent, which was below the prior-year margin of 18.2 percent.

The following reconciliation from earnings before the financial result and income taxes to EBIT and EBITDA adjusted for extraordinary effects shows that in 2021 exceptional items again had a high impact on these earnings parameters.

Reconciliation of EBIT* and EBITDA* for the STEAG Group

in € million	2021	2020
Income before the financial result and income taxes	**349.9**	**-56.3**
Extraordinary effects from the KVBG	-105.0	158.7
Extraordinary restructuring provisions for KVBG and FUTURE	22.3	68.7
Extraordinary effects from termination of the agreement with EVN	-213.0	-
Extraordinary effects from the FUTURE transformation program and STEAG 2022	41.6	8.3
Other extraordinary impairment losses/reversal of impairment losses	-2.4	57.1
Extraordinary effects from commodity hedging	179.0	6.0
Extraordinary effects from portfolio adjustments	-27.8	-
Other effects	-10.6	-42.4
EBIT	**234.0**	**200.1**
Depreciation/amortization and impairment losses as in the income statement	386.8	393.9
Reversals of impairment losses as in the income statement	-5.1	-19.7
Impairment losses on investments recognized at equity	-	12.0
Reversal of impairment losses on investments recognized at equity	-	-
Plus extraordinary impairment losses/reversals of impairment losses	-238.9	-218.3
EBITDA	**376.8**	**368.0**

* Using the STEAG definition, adjusted for extraordinary effects

The extraordinary effects from the termination of the agreement with EVN comprise income from the compensation payment for termination of the energy supply agreement and the resulting extraordinary impairment losses on the Walsum 10 power plant.

The extraordinary effects relating to the KVBG mainly comprise impairment losses on property, plant and equipment and inventories at the German power plants, adjustments to provisions and revenue from decommissioning auctions.

The other extraordinary impairment losses and reversals of impairment losses are write-ups of financial investments. In the prior year they mainly comprised impairment losses on the geothermal project in Indonesia, the district heating activities, a joint venture in the USA and the loans granted to KSBG as well as reversals of impairment losses on a wind farm in Romania and a solar power plant in Spain.

Income statement for the STEAG Group

in € million	2021	2020
Sales	2,766.5	2,018.4
Change in inventories of finished goods	8.8	2.2
Other own work capitalized	1.4	1.2
Other operating income	1,197.5	298.8
Cost of materials	-1,964.7	-1,241.3
Personnel expenses	-387.9	-441.2
Depreciation/amortization and impairment losses	-386.8	-393.9
Other operating expenses	-884.9	-300.5
Income before the financial result and income taxes	**349.9**	**-56.3**
Interest income	15.3	12.8
Interest expense	-85.5	-71.2
Result from investments recognized at equity	2.2	-2.8
Other financial income	0.1	0.1
Financial result	**-67.9**	**-61.1**
Income before income taxes	**282.0**	**-117.4**
Income taxes	25.6	-52.9
Income after taxes	**307.6**	**-170.3**
Thereof attributable to		
Non-controlling interests	52.5	60.8
Shareholders of STEAG GmbH (net income)	255.1	-231.1

External sales by division

in € million	2021	2020	Change in %
Power	2,470.1	1,662.8	48.6
Renewable Energies and Distributed Facilities	296.4	355.6	-16.6
STEAG Group	**2,766.5**	**2,018.4**	**37.1**

Sales increased by 37.1 percent to € 2,766.5 million (prior year: € 2,018.4 million). The increase in revenues from the sale of goods was mainly due to a rise in electricity production in Germany and higher market prices. The increase in revenues from services mainly resulted from new projects. By contrast, revenues from construction contracts decreased.

Total volume sales of energy from the Group's own facilities and those operated on behalf of its customers declined by 2.8 percent year-on-year to 14,919 GWh_e[4] (prior year: 15,355 GWh_e). The decline in the volume of energy sold was mainly due to the reduction in power plant output marketed outside Germany to 8,634 GWh_e (prior year: 10,350 GWh_e). By contrast, the power plant output marketed in Germany increased to 6,285 GWh_e (prior year: 5,005 GWh_e).

Volume sales of heat by the Renewable Energies and Distributed Facilities division increased by 7.1 percent to 2,277 GWh_{th} (prior year: 2,127 GWh_{th}), while the volume of power sold by this division dropped by 20.0 percent to 2,082 GWh_{el} (prior year: 2,603 GWh_{el}).

The 16.6 percent drop in sales in the Renewable Energies and Distributed Facilities division was mainly due to the divestment of the wind farms in Turkey and Romania and the resulting lack of sales from these companies.

4 Energy sales in GWh_e comprise both electric and thermal energy; thermal energy has been converted into the equivalent amount of electric power.

The change in inventories of finished goods was € 8.8 million (prior year: € 2.2 million), which was € 6.6 million higher than the prior-year change; other own work capitalized was almost unchanged year-on-year at € 1.4 million (prior year: € 1.2 million).

The other operating income increased by € 898.7 million, from € 298.8 million in 2020 to € 1,197.5 million in the reporting period. The year-on-year increase was mainly due to a € 270.2 million rise in income from the valuation of derivatives (excluding interest rate derivatives) to € 400.0 million (prior year: € 129.8 million). The income from the reversal of provisions was € 6.5 million, a year-on-year decline of € 40.6 million (prior year: € 47.1 million). This was mainly due to the reversal of provisions in connection with the reduction in the obligation to maintain the Voerde power plant site in the prior year (€ 28.2 million). The income of € 5.1 million from the reversal of impairment losses mainly related to loans and other receivables. In the prior year, reversals of impairment losses mainly comprised € 19.7 million for the wind farm in Romania. The miscellaneous income of € 649.1 million comprises a wide range of operating income. For example, it includes the compensation payment for termination of the energy supply agreement with the Austrian utility EVN and revenues from the third decommissioning auction.

The increase of € 723.4 million in the cost of materials is connected to the rise in expenses for CO_2 emission allowances and higher capacity utilization at the power plants in Germany.

Personnel expenses declined by € 53.3 million to € 387.9 million (prior year: € 441.2 million). The average number of employees in the STEAG Group decreased from 6,148 to 5,754. The reduction in personnel expenses was mainly due to lower provisions for restructuring expenses in connection with the FUTURE transformation project and the shutdown of power plants due to implementation of the German Coal-Fired Power Generation Termination Act (KVBG), which amounted to € 22.3 million in the reporting period (prior year: € 68.6 million).

Depreciation, amortization and impairment losses totaled € 386.8 million (prior year: € 393.9 million) and included depreciation and amortization of property, plant and equipment, intangible assets and investment property amounting to € 135.8 million (prior year: € 161.6 million). The impairment losses of € 251.0 million comprised impairment losses of € 224.7 million on discontinued operations (prior year: € 232.3 million) and € 26.3 million on assets held for sale (prior year: € 0.0 million).

The other operating expenses increased by € 584.4 million from € 300.5 million in the prior year to € 884.9 million in the reporting period. The year-on-year increase was mainly due to higher expenses for the valuation of derivatives (excluding interest rate derivatives), which amounted to € 601.7 million (prior year: € 76.3 million). Consulting expenses increased by € 21.6 million to € 44.8 million, mainly due to the FUTURE project and the arrangement of refinancing.

Income before the financial result and income taxes improved by € 406.2 million year-on-year to € 349.9 million, mainly due the above one-off effects.

The interest income contained in the financial result increased by € 2.5 million in 2021. Interest expense rose by € 14.3 million in 2021, mainly due to higher expenses for financial liabilities.

The € 5.0 million rise in the result from investments recognized at equity had a positive impact on the financial result. As in the prior year, the impairment loss on a joint venture in the USA had a negative effect.

Income before income taxes increased from minus € 117.4 million to € 282.0 million, mainly due to the one-off effects already mentioned.

Income tax expense decreased by € 78.5 million, from € 52.9 million in 2020 to plus € 25.6 million in 2021. The change in income tax expense mainly resulted from the change of € 72.4 million in deferred taxes due to reversal of the impairment loss on net deferred tax assets in connection with positive future earnings expectations.

(b) Financial position

Financial risk management

The central objectives of financial management are to coordinate financing and liquidity requirements within the Group, guarantee financial independence, ensure sufficient liquidity at all times, and limit the refinancing risks for the STEAG Group.

STEAG GmbH manages borrowing, guarantees, sureties and guarantee facilities for Group companies centrally. It has sufficient means of meeting capital requirements for day-to-day business, investment and the repayment of financial debt.

Another important objective of financial management is ensuring that the covenants relating to STEAG GmbH's financing agreements and E-FET contracts (contracts that comply with the standards of the European Federation of Energy Traders) are met. The main covenants set out in the agreements comprise financial indicators to be calculated on the basis of the consolidated financial statements of STEAG GmbH. These comprise the net debt ratio, which is the ratio of net debt to adjusted EBITDA, and covenants in the E-FET contracts on tangible net worth and/or the equity ratio.

Debt restructuring agreement

Given the earnings performance in recent years and the tougher market and competitive situation resulting from the energy transition, a restructuring and recovery concept has been developed since 2019 within the framework of the FUTURE transformation project. This contains a variety of measures. The debt restructuring agreement presented below is a key element in this concept. At the end of September 2021, the guarantee providers, creditors of the bonded loans, creditors of a money market loan and the other financial creditors concluded a debt restructuring agreement with STEAG. This runs until December 31, 2023. It sets out the principal aspects of the contribution of the various creditor groups to the debt restructuring concept and the collateral, payments and restructuring contributions to be made by the companies in the STEAG Group.

A master credit guarantee agreement concluded at the same time sets out the terms for the old and new guarantees. All facilities now run until December 31, 2023. Use is based in each case on the bilateral credit guarantee agreements between STEAG GmbH (or Group companies) and the relevant guarantee provider.

The maturity of the restructured bonded loans and the money market loan was extended to December 31, 2023 as part of the debt restructuring agreement.

The debt restructuring agreement provides for cash margining on senior pledged and frozen accounts for the benefit of the guarantee providers as collateral for the guarantee facilities. The cash margining rises over time. In addition, further collateral, e.g., the assignment of shares in businesses, assignment of security, pledging of bank accounts, real estate liens and the assignment of revenue due from the Federal Republic of Germany as a result of decommissioning auctions, has been established as a collateral pool to secure the liabilities to the guarantee providers, creditors of the bonded loan and creditors of the money market loan and other financing creditors.

On the basis of the debt restructuring agreement, terms have been concluded on the financial conditions for STEAG until December 31, 2023 and the complete repayment of the restructured bonded loans and the money market loan.

Financing policy

STEAG GmbH provides funding for the companies in the STEAG Group and manages surplus liquidity on their behalf on market terms. To a certain extent, non-project companies also borrow funds directly from banks and invest surplus liquidity with banks. In these cases, borrowing is secured by STEAG GmbH. The projects companies' liability is secured through their cash flows and assets, and financing is generally non-recourse. In these cases, no recourse to the parent company STEAG GmbH is possible.

In Germany, cash pooling is managed by STEAG GmbH. To minimize external borrowing, surplus liquidity in Germany is placed in a cash pool at Group level which is used to optimize overall financing requirements in the Group.

Financing structure

The main components of financial assets are loans of € 206.1 million (prior year: € 180.0 million), receivables from finance leases of € 39.5 million (prior year: € 185.2 million) and receivables from derivatives of € 487.0 million (prior year: € 70.6 million). € 7.8 million, € 8.4 million and € 383.1 million (prior year: € 8.6 million, € 13.2 million and € 64.4 million) of these amounts are current receivables. Further, there are cash and cash equivalents totaling € 383.7 million (prior year: € 51.3 million) with restrictions on use in connection with margining for exchange-traded forward agreements and cash security for guarantee facilities.

As at December 31, 2021, STEAG had financial liabilities of € 1,727.8 million (prior year: € 1,371.8 million) and cash and cash equivalents of € 340.9 million (prior year: € 466.0 million). In addition, € 10.2 million (prior year: € 29.3 million) were held in short-term deposits.

The main components of the non-current financial liabilities of € 759.6 million (prior year: € 1,006.3 million) are liabilities to banks amounting to € 297.8 million (prior year: € 665.1 million), liabilities from non-banks amounting to € 174.6 million (prior year: € 140.3 million), lease liabilities (€ 139.3 million; prior year: € 148.0 million) and liabilities from derivatives (€ 132.8 million; prior year: € 34.4 million).

Current financial liabilities totaled € 968.2 million (€ 365.5 million) and comprise liabilities from derivatives of € 464.2 million (prior year: € 29.9 million), liabilities to banks of € 149.9 million (prior year: € 256.0 million), and liabilities for the profit transfer to KSBG of €134.9 million (prior year: € 0.0 million).

As at December 31, 2021, the STEAG Group had no material off-balance-sheet financing instruments that could have a material impact on its present or future assets, financial position and results of operations.

The financing and liquidity of the STEAG Group were always secure in the reporting period.

Capital expenditure

The STEAG Group uses selective investment projects to maintain its good competitive position and expand into business activities and markets where it sees potential for sustained profitable growth and opportunities to generate appropriate returns. Every project undergoes detailed strategic and economic analyses, including sensitivity analyses and scenario analyses to reflect major risks. Projects have to meet business-specific and risk-adjusted minimum return requirements.

Capital expenditure and financial investments

in € million	**2021**	2020	Change in %
Power	240.1	74.1	224.0
Renewable Energies and Distributed Facilities	54.3	44.5	22.0
Other	1.4	36.5	-96.2
STEAG Group	**295.8**	**155.1**	**90.7**

Capital expenditure totaled € 295.8 million (prior year: € 155.1 million), which was above depreciation, which amounted to € 135.8 million (prior year: € 161.6 million). In 2021, capital expenditure for property, plant and equipment increased by 10.5 percent to € 110.9 million (prior year: € 100.4 million).

49.9 percent of capital expenditure for property, plant and equipment was allocated to the Power division (€ 55.3 million; prior year: € 50.9 million). € 16.0 million of this amount was for the Iskenderun power plant in Turkey, € 15.1 million for STEAG Fernwärme and € 4.9 million for Krantz. A further 48.9 percent of capital expenditure for property, plant and equipment was allocated to the Renewable Energies and Distributed Facilities division (€ 54.2 million; prior year: € 44.4 million). € 48.5 million of this amount was allocated to STEAG New Energies.

The Group has commitments of € 28.8 million (prior year: € 30.6 million) to purchase property, plant and equipment.

Financial investments amounted to € 184.9 million in the reporting period (prior year: € 54.7 million). The increase mainly resulted from the acquisition of the 49 percent minority interest in the Walsum 10 power plant project.

Cash flow

Cash flow statement for the STEAG Group (condensed version)

in € million	2021	2020
Cash flow from operating activities	322.9	288.4
Cash flow from investing activities	180.7	-92.9
Cash flow from financing activities	-642.2	-114.6
Changes in exchange rates and other changes in the value of cash and cash equivalents	13.5	-28.8
Cash and cash equivalents as at December 31	**340.9**	**466.0**

The cash flow from operating activities was € 322.9 million, which was € 34.5 million above the prior-year level of € 288,4 million. It mainly comprised the change in trade accounts receivable and payable, inventories and changes in other provisions and miscellaneous assets and liabilities as at the reporting date. The outflow of cash and cash equivalents for interest payments increased by € 24.5 million year-on-year to € 69.5 million. Outflows for income taxes were € 52.9 million in 2021, which was € 13.6 million more than in the prior year (€ 39.3 million).

The cash flow from investing activities was € 180.7 million, which was above the outflow of € 92.9 million in the previous year. Cash outflows for investments amounted to € 97.4 million, which was € 18.8 million more than in the prior year. However, at the same time, cash inflows from the divestment of intangible assets, property, plant and equipment and shareholdings in companies were € 182.6 million higher than in the previous year due to the portfolio adjustments. Moreover, the balance of cash inflows and outflows for securities, deposits and loans increased by € 109.8 million. As at the reporting date, cash and cash equivalents totaling € 10.2 million were held in current fixed-term deposits (prior year: € 29.2 million).

The cash outflow for financing activities was € 642.2 million, which was far greater than the outflow of € 114.6 million in the previous year. The cash outflows for dividend payments to non-controlling interests declined from € 79.0 million to € 51.8 million. In the reporting period, cash inflows/outflows relating to the divestment of shareholdings without loss of control were € 131.0 million higher than in the previous year. The net balance of borrowing and repayment of financial debt was minus € 419.5 million in 2021, compared with net borrowing of € 43.8 million in the prior year. The high repayment of financial debt in the reporting period was mainly due to the complete repayment of the project financing for the Walsum 10 power plant in connection with the exit of EVN and further repayments in compliance with the terms of the debt restructuring agreement.

In all, cash and cash equivalents contracted by € 125.1 million year-on-year. In the prior year, cash and cash equivalents of € 29.3 million were included in assets held for sale.

The carrying amount of cash and cash equivalents pledged as collateral amounted to € 225.6 million (prior year: € 98.4 million).

(c) Asset structure

Structure of the balance sheet

Assets in € million	Dec. 31, 2021	%	Dec. 31, 2020	%	Difference
Non-current assets	1,912.5	42.6%	2,141.4	56.9%	-228.9
Current assets	2,578.4	57.4%	1,623.3	43.1%	955.1
Total assets	**4,490.9**	**100.0%**	**3,764.7**	**100.0%**	**726.2**

Equity and liabilities in € million	Dec. 31, 2021	%	Dec. 31, 2020	%	Difference
Equity	0.6	0.0%	-108.9	-2.9%	109.5
Non-current liabilities	2,255.5	50.2%	2,603.3	69.2%	-347.8
Current liabilities	2,234.8	49.8%	1,270.3	33.7%	964.5
Total equity and liabilities	**4,490.9**	**100.0%**	**3,764.7**	**100.0%**	**726.2**

Total assets increased by € 726.2 million from € 3,764.7 million as at December 31, 2020 to € 4,490.9 million as at December 31, 2021.

Non-current assets decreased by € 228.9 million to € 1,912.5 million (prior year: € 2,141.4 million). The decline was mainly due to impairment losses on intangible assets, property, plant and equipment and to the divestment-driven reclassification of non-current assets of the SFW Energia Group and STEAG State Power Inc. to assets held for sale. Non-current deferred taxes increased by € 130.2 million. This was mainly due to the reversal of the impairment loss on net deferred tax assets.

Capital expenditure was € 295.8 million (prior year: € 155.1 million), while depreciation and amortization of intangible assets, property, plant and equipment and investment property totaled € 135.8 million (prior year: € 161.6 million) and impairment losses were € 245.9 million (prior year: € 204.0 million).

Non-current assets accounted for 42.6 percent of total assets (prior year: 56.9 percent). Coverage of non-current assets by non-current capital was 118.0 percent (prior year: 116.5 percent).

Current assets totaled € 2,578.4 million (prior year: € 1,623.3 million), an increase of € 955.1 million compared with year-end 2020. The change mainly resulted from the increase in financial assets to € 814.7 million (prior year: € 169.3 million) due to the rise of € 318.7 million in receivables from derivatives and the increase of € 351.4 million in miscellaneous other financial assets.

Trade accounts receivable increased by € 229.9 million to € 587.8 million (prior year: € 357.9 million), mainly due to a rise in the amounts invoiced.

The increase of € 108.0 million in inventories from € 152.2 million to € 260.20 million was mainly due to higher inventories of coal. In addition, finished goods and merchandise increased by € 45.7 million to € 47.8 million due to higher inventories of merchandise.

Current assets exceeded current liabilities by 14.1 percent (prior year: 27.8 percent).

Equity increased by € 109.5 million to € 0.6 million (prior year: minus € 108.9 million). Minus € 235.8 million of this amount (prior year: minus € 469.2 million) comprised the equity attributable to shareholders of STEAG GmbH and € 236.4 million (prior year: € 360.3 million) comprised equity attributable to non-controlling interests. The equity ratio rose from minus 2.9 percent to 0.0 percent.

Non-current liabilities decreased by € 347.8 million or 13.4 percent to € 2,255.5 million (prior year: € 2,603.3 million). The € 367.3 million reduction in liabilities to banks was partly offset by the increase of € 34.3 million in loans from non-banks and the increase of € 98.4 million in liabilities from derivatives. Deferred tax liabilities decreased by € 12.7 million, while non-current provisions declined by a total of € 84.1 million.

Current liabilities increased by € 964.5 million to € 2,234.8 million (prior year: € 1,270.3 million). Financial liabilities increased by € 602.7 million to € 968.2 million (prior year: € 365.5 million) due to the price- and volume-driven rise of € 434.3 million in liabilities from derivatives. At the same time, other provisions rose by € 282.7 million to € 684.7 million (previous year: € 402.0 million), mainly due to the rise of € 297.8 million in the provision for obligations to surrender CO_2 emission allowances. Trade accounts payable were € 58.2 million higher than in the prior year at € 264.4 million and liabilities associated with assets held for sale increased by € 18.7 million.

(2.4) Performance of STEAG GmbH

STEAG GmbH, which is headquartered in Essen (Germany), is the parent company of the STEAG Group. It holds the shares in the Group's subsidiaries, either directly or indirectly. STEAG GmbH is responsible for strategic and operational management of the Group's business activities. In addition, it is the largest single company in the Group with sales of € 1,734.1 million and total assets of € 3,730.1 million. The main subsidiaries in Germany are linked to it through control and profit and loss transfer agreements.

The annual financial statements of STEAG GmbH have been prepared in accordance with the accounting principles set out in the German Commercial Code (HGB), in the version applicable for these financial statements, taking into account the German legislation on limited liability companies (GmbH-Gesetz).

Income statement for STEAG GmbH

in € million	**2021**	2020
Sales	1,734.1	693.3
Change in inventories, own work capitalized	82.9	65.1
Other operating income	487.9	240.6
Cost of materials	-1,727.2	-689.4
Personnel expenses	-172.3	-161.4
Depreciation/amortization and impairment losses	-12.8	-71.6
Other operating expenses	-390.9	-237.3
Financial result	140.7	169.2
Income taxes	-5.7	-4.7
Income after taxes	**136.7**	**3.8**
Other taxes	-1.9	-3.8
Profit and loss transfer	-134.9	-
Net income	**-**	**-**

Sales grew by € 1,040.8 million year-on-year to € 1,734.1 million (prior year: € 693.3 million). The rise was mainly due to increased marketing of power output in Germany, higher market prices and higher sales from coal trading.

In the reporting period sales mainly comprised € 1,193.8 million (prior year: € 369.0 million) from the supply of energy and other media, € 351.2 million (prior year: € 174.7 million) from the supply of coal, € 3.1 million (prior year: € 5.1 million) from the gas business, and € 149.9 million (prior year: € 106.6 million) from operating and management fees. The revenues were from customers in Germany, other European countries and North and South America.

The change in inventories increased by € 17.8 million to € 82.9 million (prior year: € 65.1 million) due to project progress relating to a long-term customer order.

The other operating income increased by € 247.3 million year-on-year to € 487.9 million (prior year: € 240.6 million). This item mainly contains income from the realized fair values of derivatives that have been settled, which amounted to € 86.7 million (prior year: € 122.0 million). Other operating income also contains reversals of provisions amounting to € 48.4 million (prior year: € 65.2 million), principally due the reversal of provisions to cover future power marketing losses (€ 42.0 million). Furthermore, in the reporting period this item included income from disposals of non-current assets (€ 13.3 million) and from factoring (€ 11.1 million). The miscellaneous other income comprises a large number of operating items, including revenues from the third decommissioning auction.

The year-on-year increase in the cost of materials basically mirrored the rise in sales revenues.

Personnel expenses were € 172.3 million (prior year: € 161.4 million), which was roughly in line with the prior year. Analogously to the prior year, the personnel expenses included expenses for planned restructuring measures.

The considerable reduction in depreciation/amortization and impairment losses to € 12.8 million (prior year: € 71.6 million) is attributable to one-off effects in the prior year in connection with the phasing out of hard-coal power generation under the German Coal-Fired Power Generation Termination Act (KVBG).

The increase in other operating expenses to € 390.9 million (prior year: € 237.3 million) was mainly due to the increase in realized expenses from derivatives that have been settled, which amounted to € 184.0 million. Similarly, legal and consulting expenses were € 20.7 million higher, mainly due to the FUTURE project and the refinancing agreement. By contrast, expenses for additions to other provisions, especially for pending losses on power marketing and measures to safeguard the future of sites and decommissioning of power plant sites were € 39.2 million lower.

Furthermore, the other operating expenses comprise other selling and administrative expenses, currency losses on foreign exchange transactions, lease and rental payments, insurance premiums, transportation costs for trade transactions and expenses for the establishment of provisions for risks relating to pending transactions and pending losses in connection with financial derivatives.

The company's financial result was positive at € 140.7 million in the reporting period (prior year: € 169.2 million). This was mainly due to profit transferred under profit and loss transfer agreements amounting to € 209.3 million (prior year: minus € 195.2 million), especially the profit transfer of € 221.9 million from STEAG Walsum 10 Kraftwerksgesellschaft mbH, and income from investments of € 31.2 million (prior year: € 431.8 million). In the prior year, income from investments mainly comprised profit distributions resulting from withdrawals from capital reserves at STEAG 1. Beteiligungs-GmbH and STEAG 2. Beteiligungs-GmbH totaling € 358.4 million, which were recognized in profit or loss at STEAG GmbH. Further, the financial result was reduced by the negative interest result of minus € 70.8 million (prior year: minus € 66.1 million) – mainly due to accrued interest on pension obligations and other non-current provisions, and interest expense for non-current loans. The write-downs of financial assets and current loans totaling € 29.0 million (prior year: € 1.3 million) mainly comprised write-downs of shares in subsidiaries.

The income tax result of minus € 4.7 million (prior year: minus € 4.7 million) mainly resulted from non-deductible taxes and foreign withholding taxes.

Income after income taxes and other taxes of € 134.9 million for the reporting period will be transferred to KSBG KG under the profit and loss transfer agreement.

Balance sheet for STEAG GmbH

Assets

in € million	Dec. 31, 2021	Dec. 31, 2020
Intangible assets	8.7	12.1
Property, plant and equipment	67.9	72.0
Financial assets	1,502.5	1,767.7
Non-current assets	**1,579.1**	**1,851.8**
Inventories	361.4	161.7
Receivables and other assets	1,625.3	862.9
Cash and cash equivalents	161.4	237.2
Current assets	**2,148.1**	**1,261.8**
Deferred items	**2.9**	**2.7**
Total assets	**3,730.1**	**3,116.3**

Equity and liabilities

in € million	Dec. 31, 2021	Dec. 31, 2020
Issued capital	128.0	128.0
Capital reserve	77.5	77.5
Profit reserves	272.8	272.8
Equity	**478.3**	**478.3**
Special items	-	-
Provisions	**1,492.4**	**1,161.6**
Liabilities	**1,757.4**	**1,473.7**
Deferred items	**2.0**	**2.7**
Total equity and liabilities	**3,730.1**	**3,116.3**

Total assets of STEAG GmbH increased by € 613.8 million to € 3,730.1 million. Non-current assets declined by a total of € 272.7 million to € 1,579.1 million (prior year: € 1,851.8 million). Capital expenditure for intangible assets reported as non-current assets and for property, plant and equipment was € 3.5 million in the reporting period (prior year: € 5.0 million). Capital expenditure was below depreciation and amortization, which was € 5.1 million. In addition, write-downs of € 1.4 million were recorded. The ratio of depreciation and amortization on property, plant and equipment and intangible assets reported in non-current assets (cumulative depreciation and amortization relative to the historical cost of acquisition or production) was 95.6 percent (prior year: 95.2 percent).

Financial assets declined by € 265.2 million to € 1,502.5 million (prior year: € 1,767.7 million). The main reason for this was the divestment of the subsidiary Crucea Wind Farm S.A., which entailed corresponding derecognition of the carrying amount of the investment, which was € 48.2 million, and the derecognition of a non-current loan of € 78.9 million, which had been recognized in loans to affiliated companies. Furthermore, in the reporting period the shares in STEAG Rüzgar Süloglu Enerji Yatirim Üretim ve Ticaret A.S. were sold, there was a capital decrease at the subsidiary STEAG Walsum 10 Kraftwerksbeteiligungsgesellschaft mbH and the shares in STEAG State Power Inc. and STEAG Walsum 10 Kraftwerksbeteiligungsgesellschaft mbH were written down. This reduced shares in affiliated companies by € 128.3 million. In addition, there was a net decline of € 136.5 million in loans to affiliated companies. Alongside the derecognition of the shareholder loan to Crucea Wind Farm S.A. outlined above, this was attributable to the balance of repayments of principal and drawings on credit lines by subsidiaries and interest on the upstream loan granted by STEAG GmbH to its owner KSBG Kommunale Beteiligungsgesellschaft GmbH & Co. KG.

Current assets rose by € 886.3 million to € 2,148.1 million (prior year: € 1,261.8 million). Inventories increased by € 199.7 million to € 361.4 million (prior year: € 161.7 million). As well as price- and volume-driven changes in inventories of coal and merchandise in a net amount of € 126.4 million, the main factor here was the increase of € 82.9 million in work in progress to € 201.2 million (prior year: € 118.3 million) due to a long-term customer contract.

Receivables and other assets were € 762.4 million higher than in the previous year. The increase was mainly due to the rise of € 532.3 million in other assets to € 619.8 million (prior year: € 87.5 million). Other assets mainly comprise collateral from power marketing. Receivables from affiliated companies increased by € 108.0 million to € 716.3 million (prior year: € 608.3 million) and contain receivables from financial relationships and profit and loss transfer agreements. Trade accounts receivable also increased by € 121.2 million to € 288.1 million on the reporting date (prior year: € 166.9 million).

Deferred expenses were € 2.9 million, which was around the prior-year level. They comprised advance payment of retirement and surviving dependents' pensions and accruals relating to bonded loans, which are released over the term of the loans.

There was no change in equity compared with the prior year. As a consequence of the change in total equity and liabilities, the equity ratio is now 12.78 percent (prior year: 15.3 percent). Equity coverage of non-current assets is 30.3 percent (prior year: 25.8 percent).

Provisions rose by € 330.8 million to € 1,492.4 million (prior year: € 1,161.6 million). Provisions for pensions and other post-employment obligations increased by € 62.8 million to € 738.5 million (prior year: € 675.7 million), mainly because of higher interest accruals. Pension provisions accounted for

49.5 percent and thus the largest share of provisions (prior year: 58.2 percent). The other provisions increased by € 268.7 million compared with the prior year to € 750.9 million (prior year: € 482.2 million). This was mainly due to the € 305.6 million rise in provisions for the obligation to surrender emission allowances. Furthermore, provisions for dismantling obligations at power plant sites increased by € 11.4 million. The main countereffect was a net reduction of € 53.7 million in provisions to cover impending losses from future power marketing.

Liabilities increased by a total of € 283.7 million to € 1,757.4 million (prior year: € 1,473.7 million). The change mainly resulted from the increase of € 217.5 million in other liabilities to € 334.2 million (prior year: € 116.7 million), which was principally attributable to collateral received for energy products. The increase in advances received for orders (€ 243.2 million; prior year: € 150.4 million) related primarily to a long-term customer order. As at the reporting date, trade accounts payable were € 53.8 million higher at € 196.2 million (prior year: € 142.4 million). This was countered by the reduction in liabilities to banks (€ 197.8 million; prior year: € 292.3 million), which was due, among other things, to the repayment of bonded loans. Liabilities to affiliated companies rose by € 14.1 million to € 786.0 million (prior year: € 771.9 million). This included the liability of € 134.9 million (prior year: € 0.0 million) under the profit and loss transfer agreement with KSBG KG.

The reduction in deferred income was mainly attributable to the reversal of accruals recognized in the previous year for compensation payments in connection with a change in the clearing partner.

(2.5) Non-financial performance indicators

Employees

Headcount

At the end of December 2021, the STEAG Group had 5,689 employees. Worldwide, the proportion of female employees was 13 percent and the average age of the workforce was 44. 47 percent of the workforce was employed outside Germany.

The number of employees in the Group was 569 lower than in the previous year, mainly due to changes in the Power division (minus 445 employees). Within this division, the headcount was reduced, among other things, by 156 employees due to the divestment of the Power Minerals Group; there was also a reduction of 10 employees in the Trading & Optimization business unit, 55 employees in the Generation business unit, 19 employees at investments allocated to the Power division and 163 employees in Energy Services. The headcount in the Renewable Energies and Distributed Facilities division decreased by 42 and the number of employees in Administration decreased by 82 (thereof 48 apprentices).

Employees by division	Dec. 31, 2021	Dec. 31, 2020
Power	4,404	4,849
Renewable Energies and Distributed Facilities	956	998
Administration	329	411
STEAG Group	**5,689**	**6,258**
thereof in Germany	2,995	3,307
thereof in other countries	2,694	2,951

In 2021, the headcount reductions resulting from the decommissioning of power plants and from the FUTURE transformation program were again carried out in a socially acceptable manner, i.e. without dismissals for business-related reasons, on the basis of the agreed redundancy plan for the Group and the framework for the reconciliation of interests.

Occupational health and safety and environmental protection

Preventing accidents at work and avoiding environmental and health risks are corporate goals. Safety in the STEAG Group improved further thanks to our systematic policy of occupational health and safety and the related targets and measures. A certified workplace health and safety management system supports the health and safety goals. There were no fatal accidents. The lost time injury frequency (LTIF) indicator was 2.3 accidents per 1 million working hours in December 2021, continuing the downward trend of recent years.

The coronavirus pandemic did not result in any significant operational restrictions. The crisis management team for the Group – which includes management members and experts – and the local crisis management teams are continuing to monitor infection patterns closely and define suitable protective measures.

Declaration on corporate governance with regard to gender quotas

The German law on equal participation of men and women in management positions in the public and private sectors came into effect on May 1, 2015. Based on the provisions of this law, the Supervisory Board and Board of Management have defined the following objectives:

The target for the percentage of women on the Supervisory Board of STEAG GmbH has been set at a minimum of 10 percent by spring 2022 at the latest.

The target for the percentage of women on the Board of Management of STEAG GmbH has been set at 0 percent as at December 31, 2023. The target was achieved as at December 31, 2021.

For the first management level below the Board of Management at STEAG GmbH, the target is 19-22 percent women by June 30, 2022 at the latest, while the target set for the second management level is 18-21 percent women.

(3) Events after the reporting period

Following conclusion of the trust agreement between the municipal utilities that hold interests in STEAG GmbH through KSBG Kommunuale Beteiligungsgesellschaft GmbH (KSBG) and Atlantik Advisors GmbH & Co. KG and KSBGTH GmbH, there was a change on the Supervisory Board of STEAG GmbH: Guntram Pehlke, Chairman of the Board of Management of Dortmunder Stadtwerke AG – DSW21, who had been Chairman of STEAG's Supervisory Board since the beginning of 2013, resigned from his position at an Extraordinary Meeting of the Supervisory Board on February 9, 2022. As his successor, the Supervisory Board elected Gerhard Jochum, who has been member of the Supervisory Board since fall 2014.

On February 10, 2022, STEAG, SPC Power Corporation and Intrepid Holdings LLP signed an agreement on the sale of the 51 interest in the Philippine power plant company STEAG State Power Inc. This transaction is contingent upon the preemptive right of purchase of the co-owners Aboitiz Power Corp. and La Filipina Uy Gongco Corporation. The transaction is expected to be closed in the second quarter of 2022.

STEAG is embarking on another important stage in its transformation through the “Sunrise” project. On February 23, 2022, an option and feasibility study on the division of STEAG into a coal business and a growth business was sent to various target groups with different perspectives and interests. At the end of March, the stakeholders addressed took a basic decision to undertake further preparations for the separation. This provides for the coal activities in Germany and abroad (coal business) and the activities in the field of renewable energies, decarbonization of industry, hydrogen and storage technologies and digitalization (growth business) to be separated under the auspices of STEAG GmbH. This would entail an extensive separation, i.e., in terms of company law, organization and personnel. By separating these two business areas, STEAG is proactively taking the biggest step in its current transformation. This takes into consideration the future demands of the energy markets as well as tougher capital market requirements and the EU taxonomy, which make it increasingly difficult for companies with coal-related activities to gain banks, insurers and investors as partners. The separation of the coal and growth businesses under the umbrella of STEAG will pave the way for a significant increase in the value of the green growth business and improve scope for the refinancing of STEAG. To accompany this process, STEAG has embarked on a strategy review. A stress test will be performed on the corporate strategy developed in the FUTURE project in 2020 on the basis of the changes in external and internal parameters since then and the project will then be merged with the Sunrise process.

In his recent recognition of the separatist territories of Donetsk and Luhansk as independent states and the military offensive in Ukraine, President Putin of Russia broke off diplomatic efforts and started a war of aggression in Ukraine on the evening February 24, 2022. As a consequence, the USA, EU and some other countries have imposed massive sanctions, which are successively being tightened. The political situation is unclear and constantly changing. STEAG has analyzed the potential impact of these developments on the Group from the present perspective. As a result of Russia's invasion of Ukraine, STEAG is affected by market-induced factors, especially in respect of the supply of raw materials and market volatility. With regard to the procurement of raw materials, STEAG purchased a low proportion of coal from Russia so the embargo on coal from Russia adopted by the EU member states is not expected to have a material impact on the STEAG Group's business activities. The volumes can be offset by procurement from other countries. Based on the present assessment, for the STEAG Group the risk is not the supply of coal but the development of the price of coal on the world market. Moreover, there could be bottlenecks in domestic logistics, in other words, the transportation of coal from ocean ports to power plants. For 2023, most of the gas required for the gas and steam power plant in Herne, which is currently under construction, has been secured via the futures market. It remains to be seen what the future impact will be on the assets, financial position and results of operations of the STEAG Group as this cannot be quantified at present. Based on the analyses, the Board of Management does currently consider the continuation of the company as going concern to be in jeopardy.

On March 14, 2022, the transmission network operator Amprion submitted an application to the Federal Network Agency that both blocks of the Völkingen-Fenne heating power plant and the Bergkamen power plant should be declared systemically relevant until October 31, 2024. The decision by the Federal Network Agency is still pending.

On March 25, 2022, STEAG and EnBW Energie Baden-Württemberg AG (“EnBW”) signed an agreement on early termination of the existing contract on capacity and electricity sourcing rights. This agreement terminates the sourcing agreement by mutual agreement at the end of December 31, 2023. As compensation, STEAG is to receive a termination payment, payable in two installments on April 1, 2022 and July 5, 2023.

At the end of February 2022, the Ukraine crisis led to extreme turbulence on the energy markets with unusually high price volatility. As a result, market participants were required to make additional margin payments for existing hedging transactions. STEAG funded the short-term liquidity requirements resulting from this external shock from its own funds. However, since further exceptionally high market volatility cannot be ruled out in the coming months, in April 2022 STEAG signed a revolving credit line of € 400.0 million with KfW, Frankfurt am Main (Germany). This facility runs until October 31, 2022 and can be drawn to meet margining obligations under energy and commodity trading contracts concluded for non-speculative purposes.

(4) Opportunity and risk report and forecast

(4.1) Risk report

Risk strategy

Opportunities and risks constantly arise for the STEAG Group through its diverse business activities. Risk management is therefore a central element in the management of the company and is geared specifically to securing present and future potential for success, especially by avoiding and reducing risks and their consequences. Early identification and utilization of opportunities can heighten the success of the Group.

Due to its fields of activity, the STEAG Group is exposed to constantly changing political, social, demographic, legal and economic operating conditions. The resultant risks are addressed by monitoring and analyzing the entire operating environment and anticipating market developments. The findings are used to systematically develop STEAG's portfolio in accordance with the strategy for the Group.

Structure and organization of risk management

The basis of operational risk management in the STEAG Group is an internal, Group-wide management system that focuses equally on risks arising from potentially negative deviations from objectives and on positive deviations by highlighting opportunities.

The structure of the risk management is decentralized. The organizational units bear prime responsibility for the early identification of risks, estimating their implications, introducing suitable preventive and control measures and for the related internal communication of opportunities and risks. Risk officers in the organizational units are responsible for coordinating the relevant risk management activities. The Corporate Controlling department coordinates and oversees the processes and systems in the STEAG Group. It is the contact for all risk officers and is responsible for information, documentation and coordination at Group level. Further responsibilities include ongoing development of the methodology used by the risk management system. Alongside organizational measures and an internal control system, risk management is supported by the Audit department as a process-unrelated controlling body.

Risk management is a central element in controlling processes at all levels of the STEAG Group. That includes strategic and operational planning, preparations for investment decisions, monthly reporting and projections, and, from a certain level, immediate reporting of risks. The organizational units conduct an extensive annual inventory of opportunities and risks. The items are analyzed for a short-term period of one year and a mid-term period of at least five years. All relevant factors are systematically identified and documented and the probability of the risks occurring and the potential damage are evaluated. All organizational units are required to provide early warning indicators for the opportunities and risks identified in the risk inventory and these are monitored. A monthly opportunity and risk report is derived from the inventory. This documents changes in the items identified and any new items in the current year.

Overall risk assessment

Based on all identified risks (divided into strategic, operational, financial and other risks), as of the present date no risks to the position of either the STEAG Group or STEAG GmbH as a going concern could be identified – either on a stand-alone basis or taking into account interdependencies between risks and measures that are planned or have already been initiated. For details of the present uncertainties and measures taken by the management, please refer to the information in “(3) Events after the reporting date”.

Strategic risks

Changes in the present regulatory framework could have a significant impact on planned investments and the earnings position of the STEAG Group. In addition, the STEAG Group's business activities are exposed to strong and dynamic competition which causes volume and price risks.

Therefore, the withdrawal of coal-fired power plants from the market is not driven solely by the development of fuel prices (gas, coal and CO_2 allowances) and the demand-unrelated subsidization and prioritization of renewables; above all, it is due to the regulatory intervention of the German Coal-Fired Generation Termination Act (KVBG), which came into effect on August 14, 2020.

This legislation stipulates the complete withdrawal from coal-fired power generation in Germany by 2038 at the latest and sets an earlier deadline for the exit from hard-coal generation. The order in which plants are to be decommissioned between 2020 and 2027 is determined by an auction process with declining maximum prices.

The STEAG Group has participated in auctions under the KVBG. In the first auction, STEAG’s bid for the decommissioning of the Walsum 9 power plant was accepted and the plant was taken out of service at the end of 2020. The review of the systemic relevance of this power plant by the Federal Network Agency was negative, so the ban on coal-fired generation at the Walsum 9 power plant took effect at the start of July 2021. In the third auction, STEAG received approval to shut down the Bergkamen power plant, the Völkingen-Fenne model power plant and the Völkingen-Fenne heating plant. The ban on coal-fired generation at these plants takes effect at the end of October 2022 but the transmission network operator Amprion has submitted an application to classify them as systemically relevant until October 31, 2024. The other power plants will be taken out of service on the basis of the results of participation in past and possible future auctions, taking into account further economic factors and the threat of mandatory decommissioning. The decisions of the new German government, which ideally wants to end coal-fired power generation in Germany by 2030, also have to be taken into consideration.

The closure of the German power plants has had an extensive impact on the STEAG Group and is expected to have further far-reaching effects. Where necessary, these have already been taken into account to some extent in provisions. Positive effects come from the revenues from the auctions, the reduction in operating costs for these plants and scope for alternative use or sale of the power plant sites. The main countereffects are costs for the mandatory dismantling of certain power plants and for personnel reductions, which will be mitigated by government-funded adjustment benefits.

In the countries where STEAG operates its foreign power plants – in Iskenderun (Turkey), Mindanao (Philippines) and Termopaipa (Colombia) – political risks are secured through investment guarantees from the Federal Republic of Germany. For the Iskenderun power plant in Turkey, there is a guarantee issued by the Federal Republic of Germany, which runs to 2025. This means that loss of STEAG GmbH's capital investment is essentially excluded. A contract of sale has been signed for the Mindanao power plant. A process has been initiated to sell the Termopaipa power plant in Colombia. Both divestments are planned for 2022.

Operational risks

In the operation of large central power plants and distributed power and heating plants, preventive risk management is particularly important on commercial, societal, political, technological and environmental grounds. In view of the high capital intensity and long-term nature of the business, risks must be mitigated before undertaking such investments by careful analysis of the market conditions and general framework, the selection of high-quality technology, and ensuring acceptance of the facility by the local community. Open and transparent communication with customers, suppliers and partners also contributes to early identification and avoidance of risks in the erection of such facilities.

During the operation of central and distributed power and heating plants, the main risks to successful operation come from constantly changing market conditions. On the one hand, facilities are dependent on the development of prices on the electricity and commodity markets, which are also influenced by the global market. On the other hand, there are constantly rising statutory and technical requirements and costs relating to CO_2 emissions. The yields at the wind power installations in Germany, France and Poland are determined to a large extent by how windy it is. At the large central power plants in Germany, in particular, there is an economic risk arising from low utilization due to the shift to increasing use of renewables and gas-fired power plants. Furthermore, the German Coal-Fired Power Generation Termination Act (KVBG), which came into effect in August 2020, and regulatory changes relating to environmental and safety requirements have a significant influence on the success and ongoing operation of power and heating plants. The STEAG Group constantly monitors market changes and new and amended regulations to enable it to respond quickly and mitigate any risks. Other risks in the operation of energy generating facilities, apart from the risk of technical outages and fuel supply risks, are, in particular, societal risks such as the risk of IT hacker attacks, the risk of demonstrators gaining illegal access to technical facilities and the risk of vandalism.

With the exception of the German legislation on phasing out coal-fired power generation, the same risks apply to the operation of the foreign power plants. In most cases, however, economic policy developments are a further risk. The main focus here is on Turkey in view of its political situation and because it is the STEAG Group's most important foreign investment. The STEAG Group continuously monitors economic policy developments in Turkey. The depreciation of the Turkish lira has not had any direct impact on the STEAG Group's business activities because the power plant’s functional currency is the US dollar and the US dollar is also used for trading on the commodity markets. In 2021, the situation in this country was still adversely affected by the coronavirus pandemic. Moreover, there was a sharp drop in the exchange rate of the Turkish lira from mid-2021. The STEAG Group’s engagement in Turkey mainly comprises the Iskenderun hard-coal power plant, whose output is sold on the open market. In the middle of the year, the merit order for the power plant in Turkey developed detrimentally so operation was scaled back greatly. In particular, the decision taken by the state-owned gas company BOTAS to raise the gas price considerably in November 2021 had a positive effect on capacity utilization and earnings at the power plant. In the coming year, the main risks comprise a sharp rise in commodity prices, which could potentially lead to regulatory intervention on the Turkish power market. The development of the lira is not a direct risk factor because the relevant transactions are in US dollars. Only the time lag between the depreciation of the lira and adjustment of the electricity price in US dollars could have an effect.

Policies that are agreed internally provide a framework for managing financial risks relating to trading prices (commodity prices, exchange rates) and the related counterparty default and liquidity risks. Corresponding indicators such as position limits, loss limits and value-at-risk thresholds are used to remain within the limits set. While price risks relating to the use of derivatives can be managed with the aid of appropriate financial models, with regard to counterparty default risk the focus is on examining the creditworthiness of contractual partners, the appropriateness of the underlying master agreements, and continuous monitoring of the associated credit lines. In the trading business, all relevant indicators are monitored by the trading back office. The risk framework for trading activities is reviewed regularly and adjusted if necessary.

In connection with forward marketing, STEAG GmbH concludes trading agreements that include the obligation to provide collateral for credit, but which are contingent on fulfilling certain financial covenants. Some financial covenants agreed in E-FET contracts could not be met. In these cases, there is a risk that the contractual partner could require a cash margin as security. The resulting information obligations were met and the necessary collateral was provided. Some market participants took a critical view of the more difficult financing situation that arose at least temporarily in 2021. In the future, the conclusion of forward agreements will therefore depend on a stable financing situation at STEAG. As a consequence of the sharp rise in the wholesale prices of power and of CO_2 and commodities at the end of September 2021, and the related margining obligations, most of the related hedges had to be closed out. The corresponding transactions were therefore exposed to market risk. However, new marketing agreements were concluded in the remainder of the year to reduce the risk into 2022.

In view of their long-term nature and the large amount of capital involved, investment decisions involve multidimensional risks. In the early project phase, new projects are exposed to considerable uncertainty with regard to the estimates of future opportunities and risks. At the same time, commercialization may depend on uncertain future events that can currently only be estimated on the basis of a sound opportunity/risk assessment. The STEAG Group has therefore defined structured responsibilities and approval procedures for the preparation and implementation of such decisions.

The STEAG Group's business processes are supported by data processing systems. Security is ensured by high standards and regular software and hardware updates. As well as active vulnerability management and active monitoring of possible cyberattacks, this includes regular update management for software and hardware. Nevertheless, cyberattacks cannot be ruled out and could have detrimental effect on the STEAG Group's business processes.

Financial risks

To remain solvent and guarantee its financial flexibility at all times, the STEAG Group draws up a multi-year financial plan and rolling monthly liquidity plans for a period of 24 months. These form the basis for long-term credit facilities and other financing measures. Cash pooling and external financing are concentrated primarily at STEAG GmbH and special project companies. Cash pooling channels funds internally to companies in the Group as needed.

The STEAG Group has defined the minimum level of liquidity required for operational purposes to enable it to meet margining requirements. Margining requirements arise from hedging of trading based on forward prices and therefore determine future earnings and liquidity flows. As a result of the rise in commodity and electricity prices, which has been exacerbated by the war in Ukraine, prices have been very volatile and further price volatility is to be expected. Therefore, the STEAG Group has adjusted its marketing portfolio and reduced hedging transactions with margining requirements. To limit future earnings and liquidity volatility, for some power plant output alternative hedging transactions have been concluded with trading partners that do not impose any margining requirements on the STEAG Group. Moreover, a credit line has been concluded with KfW for a limited period of time. This can be used for margining. Margins are returned to STEAG when the hedge is realized.

Based on the present liquidity planning, over the entire 24-month planning period the STEAG Group should have sufficient liquidity in excess of the defined minimum level. Possible deviations from the defined debt restructuring plan are regularly validated by the restructuring appraiser Roland Berger.

The STEAG Group has various financial liabilities for financing purposes. In particular, the debt restructuring agreement concluded in 2021 requires the fulfillment of specific financial covenants, which are applicable from 2022. All covenants set out in the financing agreements were met as at December 31, 2021. Failure to comply with the covenants is not expected during the liquidity planning period.

The STEAG Group's earnings may be affected by fluctuations in interest rates and exchange rates.

Market interest rates affect refinancing costs and the assessment of the credit standing of the STEAG Group. This is also determined in part by the market situation for conventional power plants. The result could be a deterioration in the assessment of creditworthiness, making borrowing more difficult or more expensive. Banks and insurance companies increasingly use the EU's ESG taxonomy. This is reflected, for example, in revised environmental standards. Companies that no longer meet these standards will increasingly notice the impact in the future, e.g. with regard to the granting of loans.

The assessment of provisions is also affected by market interest rates. Declining interest rates increase the level of provisions and vice versa.

Foreign currency risks mainly relate to the procurement and pricing of fuel requirements. They are hedged using suitable financial instruments. For details of risk reporting on the use of financial instruments, please refer to the relevant section in the notes to the consolidated financial statements.

Planned dividend payments by the Group's foreign companies outside the euro zone are hedged in a structured manner against fluctuations in exchange rates.

In a letter dated March 2, 2021, the German Bundesbank classified STEAG GmbH as “not meeting the central bank eligibility criteria”.

Other risks

The STEAG Group is exposed to normal business risks arising from contractual relationships with customers and business partners, and technical risks relating to the operation of plants, especially large-scale plants. Adequate provisions are recognized for these risks where the relevant conditions are satisfied.

Risks relating to STEAG GmbH

As the parent company of the STEAG Group, STEAG GmbH, which is based in Essen (Germany), has control and profit and loss transfer agreements with most subsidiaries in Germany. It therefore manages the Group's principal risks in Germany. The risk situation for the STEAG Group outlined above therefore essentially applies to STEAG GmbH as well. For details of the present uncertainties and measures taken by the management, please refer to the information in “(3) Events after the reporting date”.

(4.2) Opportunity report

The STEAG Group is currently positioned nationally and internationally in conventional power generation, renewables, distributed energy generation and related services. In view of the massive change in market conditions and Germany's aim of phasing out coal-fired power generation through state regulation, the new strategic objective for the STEAG Group is to develop innovative energy solutions with a focus on industrial customers, renewables and distributed energy facilities.

In 2019, the FUTURE project initiated the entire transformation process to realize this strategic objective. As part of this project, new business models have been developed and existing structures realigned. This gives the STEAG Group the opportunity to reposition itself through its own efforts and to secure and improve the economic viability of the Group.

The business models defined as part of the FUTURE project utilize opportunities arising from the present trends to decarbonization, digitalization and decentralization. The STEAG Group is becoming a provider of end-to-end energy solutions, especially for decarbonization projects in industry. Here, the STEAG Group is providing all-round support for its customers in the design, planning and realization of energy facilities, up to and including operation and marketing of the energy output. Technically, the focus is on the use of renewable resources, distributed facilities and innovative supply solutions as well as, for example, the use of hydrogen. Using existing energy trading capacities and energy trading experience opens up the opportunity to gain a foothold in the development of new marketing solutions with a focus on green PPA.

Alongside the operation of facilities for third parties, the STEAG Group continues to operate its own power plants and other energy facilities. That enables it to maintain and expand its technical and commercial competence in plant operation and to continue to participate in the opportunities for power generation on foreign markets or in the areas of district heating and the incineration of refuse. In this context, the STEAG Group will be extending its portfolio of photovoltaic and wind power installations and offering services for the erection and operation of photovoltaic installations.

Another business model defined by the FUTURE project is the development of a digital service platform that will bundle services and tools, especially for performance monitoring, to ensure transparency with regard to the status and economic viability of energy facilities and the optimization of energy systems. This platform will be offered to a broad international customer base.

In this way, the STEAG Group is striving to utilize market opportunities and global trends in all areas of business, both in Germany and in an international context. In addition, structuring the management and support functions more efficiently will increase flexibility and speed up the response to market trends.

STEAG hopes that the planned separation of the coal business and the growth business (Sunrise project) will make the new strategic alignment more resilient. At the same time, this should make the growth business more attractive to the capital market.

Opportunities for STEAG GmbH

As the parent company of the STEAG Group, STEAG GmbH, which is based in Essen (Germany), has control and profit and loss transfer agreements with most subsidiaries in Germany. Therefore, STEAG GmbH has a significant role in identifying, evaluating and realizing material potential opportunities for the Group. The above presentation of the opportunities in the STEAG Group therefore also covers the main opportunities for STEAG GmbH.

(4.3) Outlook

General economic development[5]

The Russian war of aggression against Ukraine is clouding the outlook for the global economy and creating great political uncertainty. According to the updated economic outlook of the German Council of Economic Experts, economic growth will slow down considerably, especially in the European Union. Reliance on imports of Russian energy poses a particular risk for some member states. Moreover, cuts to supply or an embargo on imports from Russia cannot be ruled out.

Before the outbreak of the war, global economic development was robust. Consumer demand remains the main support of the macroeconomic recovery. On the supply side, the availability of starting products and repeated restrictions as a result of the coronavirus pandemic had an impact. Russia's war of aggression against Ukraine and the sanctions imposed in response are expected to exacerbate the disruptions of global supply chains and inflationary pressure will increase. The economic fallout from the repeated waves of the pandemic is fading and pandemic-related bottlenecks, at least, should play less of a role in the course of 2022.

The Council of Economic Experts expects German GDP to grow by 1.8 percent in 2022 and 3.6 percent in 2023. For the euro zone, it projects growth of 2.9 percent in both of these years. Its forecast for inflation rates in Germany 6.1 percent in 2022 and 3.4 percent in 2023, while for the euro zone it is forecasting inflation rates of 6.2 percent in 2022 and 2.9 percent in 2023. In these forecasts, the Council of Economic Experts assumes that energy prices will remain high but that Russian energy supply will not be halted. In addition, it points out that the heavy reliance on energy supply from Russia results in a considerable risk of a reduction in economic output or even a recession, accompanied by considerably higher inflation rates.

Development of the energy sector

The business performance of the STEAG Group is still dominated by energy policy and the economic framework, which affect both the German business and international business operations.

The transformation of the energy industry resulting from the socially and politically driven turnaround in energy policy in Germany is continuing under the new coalition government of the SPD, BÜNDNIS 90/DIE GRÜNEN and the FDP. The coalition agreement contains a clear acceptance of the 1.5 °C target and an exit from fossil fuels. The review phase for the phasing out of coal has been brought

5 Cf. the updated economic outlook of the German Council of Economic Experts for 2022 and 2023 on the macroeconomic development and the monthly report of the German Bundesbank March 2022

forward from 2026 to the end of 2022. “Ideally”,[6] coal-fired power generation should be halted by 2030. At the same time, the new government remains committed to phasing out nuclear power[7] and promises to speed up the expansion of renewables and the necessary networks. Solar power is given great significance. The aim is that all “suitable roof areas”[8] should be used for solar power in the future. Expansion of wind energy will also be accelerated. There are indications that electricity demand will outstrip supply in the coming years. The plan is to expand renewables and the network infrastructure to plug this gap. Moreover, the KVBG legislation, which came into force in 2020, will continue to have a strong impact on the development of the energy sector in the coming years.

Starting in the third quarter of 2021, wholesale prices for energy raw materials, electricity and CO_2 rose considerably. The outbreak of Russia's war of aggression and the economic sanctions imposed in response led to a further massive rise in the price of energy resources. Expansion of renewables and diversification of energy imports can help to reduce dependence on Russian energy supply. Moreover, coal-fired power plants make a significant contribution to ensuring reliability of supply.

Internationally, the impact of the Paris Climate Agreement on the expansion and restructuring of the global energy system needs to be monitored. This will depend on the extent to which the agreement is translated into national energy policy, especially in the G20 states, and on the extent to which the promises made about financing and technology transfer – especially for the energy-hungry developing countries and emerging markets – are kept. At the UN Climate Conference in Glasgow in 2021 the participating countries gave a far greater commitment to the goal of limiting global warming to a maximum of 1.5 °C compared with the pre-industrial era. The Glasgow Climate Pact calls on them to revise their climate targets by 2030. For the first time, the 197 parties at the climate conference signed a document setting out specific action to protect the climate. The community of nations aims to achieve a considerable reduction in the use of coal.

On April 29, 2021, Germany's Federal Constitutional Court ruled that parts of the government’s Climate Protection Act were unconstitutional. The 2019 Climate Protection Act therefore has to be revised; the measures to reduce emissions from 2031 were declared inadequate. With the amendment of the legislation, the German government has tightened its climate protection requirements and set out the goal of achieving greenhouse gas neutrality by 2045. By 2030, emissions should be cut by 65 percent compared with 1990. The amended law came into effect on August 31, 2021.

Strategic and operational challenges

The German energy market continues to be dominated by massive upheaval as a result of the need to reduce the heavy reliance on Russian energy supply, the Coal-Fired Power Generation Termination Act (KVBG), expansion of capacity for renewable energy and the adjustment of capacity at thermal power plants. The STEAG Group will support this transformation to the best of its ability through its asset portfolio and energy expertise.

In view of the massive and ongoing change in market conditions, the STEAG Group launched a far-reaching transformation process, known as the FUTURE project, at the end of 2019. This has initiated

[6] See the coalition agreement between the SPD, Bündnis 90/ DIE GRÜNEN and FDP: “Mehr Fortschritt wagen, Bündnis für Freiheit, Gerechtigkeit und Nachhaltigkeit” (*Dare more progress - an alliance for freedom, justice and sustainability*), p. 58.
[7] Ibid. p. 55.
[8] Ibid. p. 56.

extensive measures for a strategic refocusing followed by an organizational realignment of the entire Group.

In parallel with the phasing out of coal in Germany, the FUTURE project has driven forward new business models. The STEAG Group is speeding up its transformation to an integrated service-provider for end-to-end energy solutions, including the planning and operation of energy facilities and the marketing of energy output. The focus is on industrial customers, renewables and distributed energy solutions. In this context, it is also developing a digital service platform to provide bundled services and monitor and optimize energy facilities. To provide optimal support for the new business processes, the existing administrative and support functions are also being aligned to the new requirements. Far-reaching measures were implemented in 2021 and these should have a positive effect on the STEAG Group's earnings situation in the coming years.

In addition, the STEAG Group is continuing to operate its own energy facilities and is active in renewables and the supply of heating in order to utilize market opportunities and maintain and expand its expertise in plant operation. Therefore, it is also expanding the Renewables business area, which focuses on the development, construction and operation of photovoltaic installations and wind farms.

Operating performance

In the past fiscal year, sales amounted to € 2.8 billion. That was above the budgeted level (€ 2.2 billion). The significant rise in wholesale electricity prices from the third quarter had a particularly positive effect. Alongside the large power plants in Germany, this benefited the distributed facilities and refuse incineration plants. Moreover, there was a significant improvement in margins at the Turkish power plant in Iskenderun so the STEAG Group’s EBIT was well above budget at € 234.0 million. Systematic implementation of the measures developed in the FUTURE project also contributed to this.

Sales of € 2.1 billion are forecast for fiscal 2022. The considerable rise in the price of raw materials for energy generation and CO_2 allowances since the third quarter of 2021 have led to a significant rise in electricity prices, which mainly affects marketing of power plant output in Germany and the output of the Iskenderun power plant in Turkey. Consequently, sales are currently expected to rise considerably in 2022. Moreover, it is assumed that EBIT will be well above the budgeted level of € 157 million in 2022. Far higher margins were achieved in the first three months of 2022.

Capital expenditure of up to € 184 million is planned for 2022. Growth investments are focused on photovoltaics, wind energy and distributed facilities. Heat storage facilities are to be built for district heating in the Ruhr region to increase flexibility. In addition, selective investment in maintenance will be undertaken at various sites, taking into account the German legislation on phasing out coal-fired power generation, in order to ensure the already high availability and efficiency of plants at all (power plant) sites.

In connection with the FUTURE transformation project and the shutdown of power plants under the German Coal-Fired Power Generation Termination Act (KVBG), STEAG has announced that it will be shedding around 1,000 jobs in Germany by 2024. A considerable reduction in headcount was achieved in 2021.

General information on expected developments

As a result of Russia's invasion of Ukraine, STEAG GmbH is affected by market-induced factors, especially in respect of the supply of raw materials and market volatility. With regard to the procurement of raw materials, STEAG GmbH purchased a low proportion of coal from Russia so the embargo on coal from Russia adopted by the EU member states is not expected to have a material impact on the STEAG Group's business activities. The volumes can be offset by procurement from other countries. Based on the present assessment, for the STEAG Group the risk is not the supply of coal but the development of the price of coal on the world market. Moreover, there could be bottlenecks in domestic logistics, in other words, the transportation of coal from ocean ports to power plants. For 2023, most of the gas required for the gas and steam power plant in Herne, which is currently under construction, has been secured via the futures market. STEAG's business activities could be affected by the fallout from further sanctions or restrictions on the commodity markets, but this cannot be quantified at present. The developments on the commodity markets are being monitored so that further countermeasures can be taken in good time.

The increase in the price of energy raw materials has led to a significant rise in electricity prices. This has improved capacity utilization and margins at STEAG's power plants. On the financial side, the main risks relate to margining (collateral for forward transactions) as a consequence of increased market volatility, especially as a result of the Russian war of aggression. To reduce the resulting risk, the marketing portfolio has been adjusted and hedging transactions requiring margins have been reduced. To limit future earnings and liquidity volatility, for some power plant output alternative hedging transactions have been concluded with trading partners that do not impose any margining requirements on the STEAG Group. Moreover, a credit line has been concluded with KfW for a limited period of time. This can be used for margining.

The STEAG Group assumes that the opportunities arising from its new strategic focus and, in particular, the planned investment in growth areas will help it position itself successfully in the altered energy market. In parallel with this, the risks associated with the Group’s business environment and activities are systematically identified, managed and monitored through its risk strategy.

Expected development of STEAG GmbH

STEAG GmbH reported a profit after taxes in 2021, mainly because of one-time effects such as revenue from the third decommissioning auction and the compensation payment from EVN for cancellation of the power supply agreement. One-time effects on this scale cannot be expected in 2022 so lower but positive earnings are expected. However, we assume that the higher electricity prices will improve earnings. In view of the profit and loss transfer agreement, the earnings will be transferred to the sole shareholder, KSBG Kommunale Beteiligungsgesellschaft GmbH & Co. KG.

Essen, April 25, 2022
STEAG GmbH
Board of Management

Dr. Reichel Dr. Schiele Schmitz

This report contains forward-looking statements based on the present expectations, assumptions and forecasts made by the Board of Management and the information available to it. These forward-looking statements do not constitute a guarantee of future developments and earnings expectations. Future performance and developments depend on a wide variety of factors which contain a number of risks and unforeseeable factors and are based on assumptions that may prove incorrect.