Combined management report as at December 31, 2019

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).

Basic information on the STEAG Group

Business activities and corporate structure

Business activities

The STEAG Group operates in Germany and internationally. Based on its integrated business model, it provides solutions for its customers in the areas of power and heat generation.

Its core competencies include the planning, construction and operation of large power plants and distributed facilities, asset-based power trading, and technical services related to energy generation. The Group's power and heat generating capacities are based on fossil fuels, renewable energy sources and special fuels.

Conventional energy generation

In Germany, the STEAG Group operates large power plants at seven sites. As on of Germany's major electricity producers, as at December 31, 2019, the STEAG Group had total installed capacity of around 7,200 megawatts (MW) electric, including around 5,000 MW in Germany.

Internationally, the STEAG Group operates its own large power plants in Turkey, the Philippines and Colombia, based on close and long-term partnerships. The power plant in the Bay of Iskenderun in Turkey is the STEAG Group's largest power plant with installed capacity of 1,320 MW.

Blocks 6 and 7 in Lünen (Germany), with total generating capacity of 500 MW, were permanently taken out of service on December 31, 2018. With regard to the Weiher 3 and Bexbach blocks in the Saar region, which had been scheduled for provisional shutdown, the transmission network operator responsible for this grid sector, Amprion GmbH, decided that these two blocks, with total installed capacity of around 1,500 MW were systemically relevant and the capacity should be upheld. In August 2019, notification was received from Amprion GmbH that the two blocks are classed as systemically relevant for a further 24 months, until April 30, 2022, and may not be shut down in the foreseeable future.

Effective January 1, 2019, the STEAG Group acquired a 51 percent interest in the Bergkamen power plant from RWE Generation SE. Prior to this, STEAG GmbH and RWE Generation SE held joint stakes in the Bergkamen coal-fired power plant through Gemeinschaftskraftwerk Bergkamen A beschränkt haftende OHG.

STEAG Beteiligungsgesellschaft mbH and Siemens Project Ventures GmbH have agreed on turnkey construction and long-term maintenance of a state-of-the-art combined gas and steam power plant at the established site in Herne. This will have capacity to generate over 600 MW electric power and around 400 MW steam. Total efficiency of the natural gas used to fuel the plant will be over 85 percent. The investment will be realized with subsidies under the German Co-Generation Act (KWKG).

<u>Energy generation from renewables and at distributed facilities</u>

As at December 31, 2019, the STEAG Group had total installed capacity of around 800 MW based on renewables and distributed generating facilities. In Germany, the STEAG Group has more than 200 distributed facilities to generate energy from renewable resources and to serve industry and supply heat.

The STEAG Group generates electricity and heat from mine gas and is also active in the generation of heat from geothermal energy. Moreover, it is a major supplier of district heating and a contractor and operator of biomass plants in Germany.

In Romania, the STEAG Group operates the Crucea Nord wind farm with 36 wind turbines and total generating capacity of 108 MW in a region on the Black Sea. The STEAG Group also operates the Süloglu wind farm in Turkey with 20 wind turbines and total generating capacity of 60 MW.

<u>A competent trading partner</u>

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. It imports hard coal from the major producing nations for supply to STEAG power plants and third parties.

<u>A professional service provider</u>

Offering energy services is becoming increasingly important for the STEAG Group. Over the years the STEAG Group has accrued great expertise in modernizing energy generating plants and now has a reputation as a provider of 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 and through its companies in Brazil, Botswana, Spain, Turkey, the USA and India. Around 2,700 employees work on projects involving technologies from the areas of renewable energies, conventional energy, nuclear power and energy storage systems.

Through its subsidiary STEAG Power Minerals GmbH, the STEAG Group specializes in the reprocessing and marketing of by-products from hard coal power plants. For example, fly ash from hard coal can be used for a wide range of applications in the building supplies sector. Besides many technical advantages, this has ecological benefits. By marketing fly ash from hard coal as a substitute for natural raw materials or energy-intensive construction products for cement and concrete, the STEAG Group does not simply reduce the use of natural resources, it also contributes to the avoidance of more than 150,000 tonnes of CO_2 a year in Germany alone.

The STEAG Group is extending its offering in the field of district heating. STEAG Fernwärme Essen GmbH & Co. KG has commenced construction work on all three sections of the six kilometer long "east route" in Essen (Germany). The federal state of North Rhine-Westphalia and the European Union are providing subsidies of around € 8 million to extend the climate-friendly district heating network in Essen, which is the second largest city in the Ruhr region. In the next two years, STEAG Fernwärme Essen GmbH & Co. KG will be investing more than € 20 million to develop the network in the south-east districts of Essen. It is calculated that the new pipeline will distribute climate-friendly district heating to up to 20,000 households. The aim is to achieve CO_2 savings of around 11,000 tonnes a year.

Ownership structure

As at December 31, 2019, STEAG GmbH was wholly owned by KSBG Kommunale Beteiligungsgesellschaft GmbH & Co. KG (KSBG KG), Essen (Germany).

Integrated business model

STEAG GmbH, which is headquartered in Essen (Germany), is the parent company and head office 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 STEAG Group's divisions, i.e. the Power division (comprising the Generation, Trading & Optimization (T&O), District Heating, Power Minerals, 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).

Organizational changes

The STEAG Group is continuing to optimize its organizational structures in order to reduce administrative costs and improve the management of its business operations.

In 2019, the shares in STEAG Waste to Energy GmbH, Thermische Abfallbehandlung Lauta GmbH & Co. oHG and STEAG New Energies GmbH were transferred from STEAG GmbH to STEAG 2. Beteiligungs-GmbH through a capital contribution in kind in return for the granting of new shares. Inclusion in the Group's tax entity is ensured through the continuation of the control and profit and loss transfer agreements.

The optimization of the biogas and biomass portfolio was basically completed in December 2019 with the sale of the biomass facility in Buchen.

Significant new contracts

STEAG GmbH successfully placed an € 84 million bonded loan on the capital market with Bayerische Landesbank and HSBC Trinkaus & Burkhardt AG as joint lead arrangers.

Ruhr Oel GmbH, which is a member of the BP Group, operates a refinery in Gelsenkirchen with the BP sites in Horst and Scholven. STEAG GmbH is realizing the delivery, erection, start-up and maintenance of a new steam plant to secure future steam supply on the basis of an engineering, procurement and construction (EPC) contract.

The service portfolio of STEAG Energy Services GmbH has been extended to include solar technology following the acquisition of the international company Gildemeister energy solutions GmbH, which now operates as STEAG Solar Energy Solutions GmbH (SENS). This is an important move into the growing market for turnkey assembly of large-scale outdoor photovoltaic installations, including maintenance and operational management.

The Swiss energy and infrastructure company BKW Energie AG is using the joint expertise STEAG Energy Services GmbH and its project partner Kraftanlagen Heidelberg AG to plan the dismantling of the Mühleberg nuclear power plant near Berne. The power plant was taken out of service in December 2019 and is now being prepared for dismantling. The main task is dismantling the reactor pressure vessel internals.

On October 24, 2019, Fernwärmeschiene Rhein-Ruhr GmbH (FWSRR) received the formal zoning decision of the District Commissioner in Düsseldorf for the Rhine-Ruhr district heating route. In 2020, the partners in FWSRR will review the economic assessment of this project, taking into account changes in the basic conditions since submission of the zoning application.

Two important contracts were concluded for distributed energy supply. First, STEAG New Energies GmbH took over operation of the approximately 120,000 square meter central heating and cooling utility center at the former corporate headquarters of the Karstadt Group in Essen-Bredeney. Second, at the start of 2019, contracts were signed between STEAG New Energies GmbH and Michelin Reifenwerke AG & Co. KGaA extending the lease and service agreement for the energy generating facility at the site in Bad Kreuznach by a further five years.

At the Iskenderun power plant, the long-term agreement with the state-owned company Electricity Generation Company Elektrik Üretim A.S. on the provision of capacity and the coal delivery contract with a consortium comprising STEAG GmbH and Rheinbraun Brennstoff GmbH expired on November 21, 2019. Since November 22, 2019, the power has been marketed on the day-ahead market and the intraday market. In the future, the aim is to conclude mid-term power supply agreements on the wholesale market and with industrial customers. Coal will be supplied by STEAG GmbH and a subsidiary of Ordu Yardımlasma Kurumu (OYAK), the co-owner of the Iskenderun power plant. The corresponding agreements are currently being finalized by the parties. To fulfill its own share of the supply, STEAG GmbH has extended the long-term coal supply contract with CMC – Coal Marketing Company Ltd., by five years.

The long-term agreement with the state-owned energy utility GENSA S.A. E.S.P. on the provision of capacity at the coal-fired power plant in Termopaipa (Colombia) ended on January 6, 2019. Five-year supply contracts (up to the end of 2023) have been agreed for the sale of electricity to industrial customers and distribution companies. Long-term coal delivery agreements have been concluded with various producers in the Boyaca region. These provide for flexible volumes.

At STEAG State Power Inc. (Mindanao), the coal delivery agreements with suppliers ended on December 31, 2019. To secure the annual coal requirements for this power plant, three-year contracts have been signed with new suppliers. These contain agreements on flexible delivery volumes in order to respond to fluctuations in utilization of the power plant capacity.

On Java, the main island in Indonesia, the STEAG Group and a local partner are developing a geothermal power plant with net capacity of up to 242 MW_{el}. The present forecast net capacity is 122 MW_{el}. The agreement with the previous local partner was terminated in 2019. The former partner's shares were taken on by a new co-owner. Further necessary project steps are now being taken. These include, firstly, an application to suspend or extend the exploration phase which was authorized up to June 2020 as part of the geothermal license, which is valid for a total of 35 years. Secondly, there are plans to take on a strategic partner to co-finance further exploratory drills and, following successful completion of the drilling phase, to drive forward the project together with STEAG and build and operate the geothermal power plant. The STEAG Group is engaged in talks on selling at least 50 percent of the shares held by STEAG to a strategic investor.

Strategy

The transformation of the German energy sector continued in 2019. A very important landmark for coal-fired generation was the work of the government-appointed Commission on Growth, Structural Change and Employment (KWSB), which submitted its final report at the end of January 2019, including extensive recommendations. The report contains detailed pointers on how and on what conditions the phased exit from coal-fired power generation in Germany by 2038 should be managed. It also contains many approaches that require far-reaching changes to the overall legal framework. The Cabinet draft of the legislation to implement the withdrawal from coal-fired power generation shows that the government does not intend to take over the commission's recommendations verbatim. There is currently an intensive political debate on this. The parliamentary process legislating the exit from coal-fired generation and the legal implementation of the commission's recommendations, including further, fundamental issues such as the modified design of the electricity market will therefore be key factors in the coming months. On January 16, 2020, the German government and the prime ministers of the federal states with lignite mines signed agreements detailing the procedure for the closure of lignite-fired power plants. No similar agreements have been reached on coal-fired power plants. The Cabinet draft of the legislation on ending coal-fired power generation provides for an auction of shutdown bonuses as an incentive for operators of hard-coal power plants to take them out of service by 2026. In addition, based on the present, controversial status, there could be a statutory ordinance on the closure of such plants from 2024 without any compensation. The provisions of the legislation will be extremely important for the STEAG Group. The legislation is to be adopted in the first half of 2020.

Like its peers throughout the energy sector, the STEAG Group has been confronted by a substantial drop in earnings as a result of the difficult market situation in recent years. The STEAG Group is continuing its proactive measures to adapt to the altered operating conditions with the STEAG 2022 program. In a nutshell, the aim of this program is to leverage efficiency potential throughout the Group, optimize the portfolio and enter new growth areas. STEAG 2022 defines six strategic areas of focus, which were then reviewed, fleshed out and documented as part of the extensive Dynamic project, taking into account current national and international market and industry trends and the Group's core competencies. In light of the altered market situation and Germany’s plans to exit coal-fired power generation, STEAG will be continuing the review of its business model, which started as part of “Dynamic”, and driving forward the necessary corporate organization. At the end of 2019, the STEAG Group therefore introduced the FUTURE transformation project. The aim of this project is to define the STEAG Group's future business portfolio and position STEAG with competitive solutions for attractive markets.

The STEAG Group's strategy takes a six-pronged approach. While the first two areas of focus outlined below refer to its established business activities, the other four focus on growth areas.

1. Efficient operation of company assets in a dynamic market environment

Based on more than 80 years' experience, and against the background of ongoing changes in the electricity market, the STEAG Group stands for efficient operation of its own assets.

An important focus of the strategic development of the STEAG Group will be future-proofing the business in Germany.

The Walsum 10 power plant operated by the STEAG Group is one of the most energy-efficient hard coal power plants and most of its output is still marketed on a secure basis through long-term supply agreements. Successful operation and marketing of thermal power plants is a key competence of the STEAG Group and will remain very significant in the future because thermal capacity will be vital to ensure permanent and reliable supply.

Diversification and openness to technology are key elements in the future viability of the STEAG Group on the German energy market. The growing waste-to-energy market, where STEAG operates through two waste incineration facilities, TA Lauta and IKW Rüdersdorf, continues to make a contribution to this.

As a service provider for industry and the construction sector, STEAG Power Minerals GmbH focuses on by-products from power plants, the production and supply of building materials, blasting agents and industrial minerals, and supplying secondary fuels and absorbents to power plants for flue gas scrubbing. The aim is to extend international business activities through partnerships in order to compensate for the decline in the fly ash business in Germany as a result of the shutdown of power plants. First steps include an equity investment in Vietnam. These comments also apply to the business with blasting agents.

2. Competitive advantage as an energy trader with its own generating base

STEAG's competence is that it can link its own generating capacity optimally with the requirements of the energy sector and energy trading. The key strategic factors are the procurement of fuels, marketing of power plants in Germany and abroad, and marketing of new facilities. STEAG's own trading platform is now up and running. Besides marketing domestic power plants, it is used for marketing of the Süloglu wind farm in Turkey and the Crucea wind farm in Romania. The STEAG Group also undertakes local marketing of the Termopaipa 4.1 power plant in Colombia and the Iskenderun power plant in Turkey.

Efficient pooling and marketing of distributed facilities is one of the challenges of the new energy policy. Virtual power plants are one possible solution, which the STEAG Group has been actively using for many years. Distributed generating facilities and facilities based on renewable energy resources are connected to conventional heat generating facilities and new technologies such as battery storage systems and managed jointly. Joint marketing with the STEAG Group's conventional power plants leverages additional synergies.

3. Developer and operator of distributed energy supply facilities

The focus is on extending distributed energy generation in Germany and Poland, principally planning, implementation and operational management of custom-tailored distributed solutions for industry, but also the development of districts for the supply of heat, power and cooling. The change in the energy sector is visible in the increase in distributed energy supply and the desire for self-sufficiency, combined with active management of energy costs and environmentally compatible local energy supply. Alongside local authorities that provide district heating, the main target group comprises industrial contractors for whom full, individual energy solutions are planned, financed and implemented.

Examples of successful new projects at STEAG New Energies GmbH are the operation of the energy utility at the former corporate headquarters of the Karstadt Group in Essen-Bredeney, which has already been mentioned, mobile heat supply in Dortmund-Bodelschwingh using a high-pressure hot-water heating facility, completion of the energy center at Darmstadt Technical University, and conversion of the Gröditz block heating facility to gas-powered engines. Another focus in Poland, a key European market, is the acquisition and operation of district heating companies and networks by STEAG's Polish subsidiary SFW Energia Sp. Z o.o., followed by optimization of the operating processes. The aim is to enter into partnerships, extend know-how through acquisitions, and successfully increase established business such as the supply of heat to Opel in Gliwice.

4. Specialist for the decommissioning and dismantling of nuclear facilities

The market for services for the safety and decommissioning of nuclear facilities offers enormous potential in Germany and abroad. There is high demand for general contractors and specialists to plan and perform the decommissioning of nuclear facilities in Germany, Switzerland, Sweden, Japan, France and the UK. The STEAG Group is already well-positioned here in Germany where it works, for example, for the nuclear power plant operator EnBW. To strengthen the Nuclear Technologies business unit, STEAG Energy Services GmbH acquired Krantz GmbH, a specialist in ventilation technology, which was integrated into the STEAG Group's portfolio within a short time.

5. Strengthening the national and international position on the energy services market

STEAG Energy Services GmbH has been established in the international services business for many years. In the future, it will be focusing especially on utilizing sales structures in West and East Africa, Asia, South America and Eastern Europe to step up growth. Decades of experience in the operation of its own plants enables the STEAG Group to offer customized energy services. Here, the STEAG Group is increasingly operating as a service partner for renewables and in the planing and realization of solutions to decarbonize municipal and industrial energy supply, both in Germany and abroad. A current example is the acquisition of SENS, an international business specializing in solar technology.

The contract for the BP refinery of Ruhr Oel GmbH in Gelsenkirchen-Scholven is a good example of the STEAG Group's position as a competent specialist service provider and industrial partner in Germany. The four steam boilers and one steam turbine that are to be built and subsequently maintained form an innovative system with the aim of significantly reducing environmental emissions and increasing the operational efficiency of the facility. Construction supervision and quality assurance at Stadtwerke Duisburg's two-zone district heating storage facility in the Wanheim district is an example of the collaboration with local authorities.

In addition, the service and licensing business for digital products is being extended. These mainly comprise plant monitoring, optimization, operational management and maintenance solutions based on extensive data and practical experience.

The proportion of renewables in the energy services portfolio is increasing steadily. The international activities are to be stepped up in the next few years. One example is the contract for draft planning of the ecological conversion and modernization of the Pljevlja power plant in Montenegro, one of the largest energy policy projects in this Balkan state, which was secured through a public tender process.

6. Selective asset investments in Germany and international markets

Realizing energy infrastructure projects in collaboration with strong project and financing partners has always been part of STEAG's strategy. This type of partner model was used for the successful realization of the three foreign power plants, Termopaipa (Colombia), Iskenderun (Turkey) and Mindanao (Philippines). The Herne gas and steam generator project is currently being driven forward with project partner Siemens Project Ventures GmbH with the aim of supplying district heat via the Ruhr network.

Furthermore, the STEAG Group will continue to develop decentralized projects jointly with local and international partners in certain regions in the future. The STEAG Group aims to acquire a stake in the facilities once they have been commissioned and possibly to remain involved as a service provider.

The local networks, flexibility and proximity to the market resulting from the development of projects in selected countries and markets enable scope for new projects to be identified at an early stage and generate competitive advantages.

Research and development

In 2019, as in previous years, the STEAG Group continued to focus on application-related research and development rather than basic research. This is true for 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 as part of the Federal Economics Ministry's SINTEG initiative for smart digital energy applications to support the new energy policy is entering the final phase. The SINTEG initiative is developing and demonstrating 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. 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 other pilot projects via modern methods of data interchange ("Internet of Things") to create an overarching "system cockpit". "Live operation" scenarios for the electricity market of the future will be tested in 2020. In particular, these will include examining how the generation of district heating in conjunction with storage capacity could provide additional flexibility for the electricity network across different sectors of the grid.

FlexiTes, a joint project to test extending the flexibility of thermal power plants, which STEAG GmbH is participating in, has been extended to mid-2020. The results to date show concepts, new technologies and specific technical designs for the integration of thermal storage capacity, which can increase the flexibility of thermal power plants on the electricity market. This joint project is funded by the Federal Ministry for Economic Affairs and Energy.

In November 2019, the STEAG Group founded a "leading industrial innovation cluster" together with Mitsubishi Hitachi Power Systems, RWE Generation, Siemens, thyssenkrupp, Ruhr:HUB, Essener Wirtschaftsförderungsgesellschaft and Zenit GmbH. Under the motto "Thinking the future together", this cluster offers companies a collaboration platform to drive forward the climate-protection transformation of industry and the energy supply system and strengthen the Ruhr region's industrial hub, value-added and jobs. The aim is to establish the Ruhr region as a center for internationally competitive industrial innovations. Another goal is the networking of knowledge owners in industry, politics and research. In the first year, the Ministry for Economic Affairs, Innovation, Digitalization and Energy of the federal state of North Rhine-Westphalia is providing funding of € 15 million for the cluster's projects. In subsequent years, funding will be based on the requirements of established and new projects.

The STEAG Group is contributing two initial cooperation projects to this cluster. In one of these initial projects, Mitsubishi Hitachi Power Systems, the STEAG Group and the Fraunhofer Institute for Intelligent Analysis and Information Systems will be examining possible industrial applications for machine learning and natural language processing (NLP). The aim is to make these methods usable for intelligent monitoring of smaller distributed facilities in the future energy landscape. The second initial project comprises building the open test platform designed in 2018 to develop Power-2-X technologies on the site of the Herne power plant. Alongside the STEAG Group, the participants in this project are Mitsubishi Hitachi Power Systems, Evonik Industries, Duisburg-Essen University and the Fraunhofer Institute for Environmental, Safety and Energy Technology (UMSICHT). The basis for this platform is the carbon capture facility that was relocated from Lünen to Herne in 2018. The partners want to use this platform to drive forward the development of various processes to produce synthetic gases for the manufacture of synthetic fuels or basic materials for the chemical industry. Approval of funding by the project owners and the start of the projects are expected in the second quarter of 2020.

In 2019, the Federal Ministry for Economic Affairs and Energy called for entries in a competition called “Real labs for the energy turnaround". These real labs will use a holistic approach to test new technologies and business models under real conditions and gather experience that can subsequently be used as the basis for new statutory rules. In addition, the aim is for them to support energy and industrial policy perspectives for energy regions affected by structural change.

In July 2019, the Federal Minister for Economic Affairs and Energy announced that the HydroHub Fenne real lab was one of 20 winners of this ideas-based competition. The funding awarded could cover around 30 percent of the investment cost of about € 53 million for this project. The remainder will be funded equally by the project partners, STEAG and Siemens. The application for funding should be submitted in the first quarter of 2020. A decision on realization is expected in the second half of 2020.

In view of the rising significance of digitalization, a Digital Office was set up in 2019 as part of the STEAG Group's research and development organization. This will coordinate and drive forward digitalization issues in the STEAG Group. For example, STEAG Fernwärme GmbH, STEAG Energy Services GmbH and the T&O business unit at STEAG GmbH have activities linked to digitalization. STEAG Fernwärme GmbH continued the load optimization activities initiated in 2018 to avoid peak loads by using building mass as a storage buffer. It also continued to test smart metering. STEAG Energy Services GmbH investigated big data methods of machine learning and integrated them into existing software products to support predictive maintenance. T&O and STEAG Energy Services GmbH have combined artificial intelligence and mathematical optimization methods with the aim of reducing the operating costs of large-scale battery systems.

In the area of process technology, the ventilation and climate specialist Krantz GmbH has developed a modular mobile exhaust gas facility for regenerative afterburning. The turnkey “SmaRTO facility (regenerative thermal oxidizer), which can be extended by heat recovery components, is designed for rapid, space-saving use in industrial plants. In addition, STEAG New Energies GmbH investigated ways of improving the availability and efficiency of distributed energy supply facilities, while STEAG Power Minerals GmbH investigated materials that could be used as substitutes for the declining volume of fly ash.

Economic report

Economic background

General economic development[1]

The German economy slowed considerably as a result of the cooling of the global economy and the uncertainty relating to Brexit. Support came from fiscal policy impetus and the development of the labor market, which remains buoyant, benefiting consumer spending. The construction sector also continued to thrive. However, exports suffered considerably from weak global demand and the heightened uncertainty affected capital spending by the corporate sector. Inflation was 1.4 percent in 2019, slightly lower than in 2018 (1.8 percent) due to a further drop in oil prices. Overall, German economic growth slowed considerably to 0.6 percent. In the previous year, the economy grew by 1.5 percent.

Energy consumption and energy generation[2]

Primary energy consumption in Germany declined considerably in 2019, with a drop of 2.3 percent compared with the prior year. This was mainly attributable to higher energy efficiency, changes in the energy mix, and a cyclically driven drop in consumption by energy-intensive industries. The reduction in energy consumption was cushioned by a rise in the population. Consumption of mineral oil increased by 1.7 percent year-on-year in 2019, while consumption of natural gas was 3.6 percent higher. The increase in the consumption of natural gas was due to higher demand for heating in spring 2019 and, above all, a rise in electricity generation. By contrast, consumption of lignite and hard coal fell by 20.7 percent and 20.5 percent respectively as a result of a sharp drop in their use by power plants. Use of nuclear power also fell by 1.1 percent. In total, renewables increased by 4 percent compared with the prior-year period. In 2019, renewables accounted for 14.7 percent of energy consumption in Germany.

Power consumption

In 2019, overall consumption of electricity was 574.9 TWh, around 20 TWh lower than in 2018. Gross power generated decreased by 5 percent (2019: 611.5 TWh vs. 2018: 643.5 TWh). The export surplus was 36.6 TWh (2018: 48.7 TWh).

Development of energy prices

A significant drop in prices on the international commodity markets was observed in 2019. The price of CO_2 in the EU-ETS emissions trading system was considerably higher than in the previous year.

The average price of natural gas in the Net Connect Germany market area fell by 39 percent year-on-year in 2019 to € 13.96 per MWh. The sharp drop in the price of natural gas in 2019 was a result of high stor-

1 The comments in this section are based principally on the economic reports published by the Kiel Institute for the World Economy (IFW) Kiel, no. 57 (2019/Q3) on the global economy, no. 59 (2019/Q3) on the German economy, and no. 58 (Q3/2019) on the euro-zone economy, the weekly report by the German Institute for Economic Research (DIW) Berlin, no. 37/2019, and the REI economic report no. 70 (2018) vol. 3, joint economic forecast fall 2019 , 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 2019).

age levels following a mild winter in 2018/19, both in Europe and in Asia, and considerable global oversupply of liquid natural gas (LNG), not least due to the sharp expansion of LNG export capacity in the USA and Australia. Increased use of natural gas in European power plants was not sufficient to halt the price erosion.

Compared with the previous year, the API#2, the price index for hard coal that is relevant for Europe, fell by around 34 percent. The average price of hard coal was US$ 91.83 per tonne in 2018. In 2019, the average price for the year dropped to US$ 60.85 per tonne.

Following several years of negotiation, at the end of February 2018 the reform of European emissions trading was adopted for the fourth trading period (2021-2030). The principal components of the reform aim to strengthen European emissions trading so that it regains its function as a key tool in EU climate protection policy. Therefore, the linear reduction factor, which reflects the annual reduction in the emissions ceiling, has been raised from 1.74 percent to 2.2 percent. In addition, the withdrawal rate for the market stability reserve will be increased from 12 percent to 24 percent in the period 2019 to 2024. This should bring a faster reduction in the present oversupply of allowances. The number of allowances in the market stability reserve will be limited to the previous year's auction volume and any allowances above this level will be permanently withdrawn. In addition, individual countries can voluntarily withdraw allowances from the auction total through additional national measures when facilities in the energy sector are decommissioned. As well as strengthening EU emissions trading, the aim is to maintain the competitiveness of energy-intensive industries in the EU. To achieve this, measures include a 3.5 percent increase in the proportion of CO_2 allowances allocated free of charge. In addition, sectors exposed to a serious risk of a carbon leakage will receive up to 100 percent of their CO_2 allowance requirement free of charge. Since adoption of the reform, there has been a sharp rise in prices, with the price even exceeding € 30 per tonne at times. Reasons for this included the security it gave new investors, which attracted speculators to the market. Demand for CO_2 allowances probably also increased because many industrial companies that had banked on CO_2 prices remaining low purchased allowances when they became aware of the sharp price rises. The average price for 2019 was € 24.87 per tonne, around 56 percent higher than in 2018 (€ 15.95 per tonne).

The increase in power prices registered in 2018 did not continue in 2019. EPEX spot, the average spot price on the electricity exchange, was € 37.78 per MWh (2018: € 44.53 per MWh), a significant year-on-year drop of more than 15 percent. The peak contract fell by 16 percent in 2019 to an annual average of € 40.50 per MWh (2018: € 48.23 per MWh). The price drop was mainly due to weaker demand for power and lower generating costs.

Earnings position

Performance in 2019

EBITDA and EBIT are used for internal management purposes and as indicators of the sustained earning power of the Group. EBITDA (earnings before interest, taxes, depreciation and amortization) and EBIT (earnings before interest and taxes) are both earnings parameters after adjustment for exceptional items (non-operating earnings).

The earnings from ordinary activities stated in the income statement are adjusted for non-operating 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 2019 fiscal year, the STEAG Group's EBITDA and EBIT increased year-on-year in line with the budget.

STEAG Group: EBITDA and EBIT

in € million	**2019**	2018	Change in %
Sales	2,087.3	2,901.0	-28.0
EBITDA	372.5	307.1	21.3
EBIT	210.2	160.6	30.9
EBITDA margin in %	**17.8%**	**10.6%**	
EBIT margin in %	**10.1%**	**5.5%**	

EBIT was € 210.2 million, which was € 13.0 million lower than budgeted. As expected, it was above the 2018 figure of € 160.6 million. The EBIT margin (EBIT/sales) improved by 4.6 percentage points compared with the previous year.

EBITDA was € 372.5 million, which was € 19.2 million below the budget, but above the prior-year figure of € 307.1 million. The EBITDA margin (EBITDA/sales) was 17.8 percent, which was above the prior-year margin of 10.6 percent.

The main reason why EBIT and EBITDA were below the budget was the considerable drop in income from the marketing of the power plants in Germany.

The following reconciliation from earnings before the financial result and income taxes to EBIT and EBITDA shows that exceptional items had a higher impact on these earnings parameters than in the prior year. In the reporting period, unrealized effects from the valuation of derivatives were recognized in the non-operating result for the first time. In previous years, they were either recognized in other comprehensive income (OCI), if they were part of a hedge for the marketing of output from the company's power plants, or in EBIT. The hedging relationship was terminated in the reporting period because of the market situation, with high price volatility and declining contribution margins, and the related uncertainty with regard to the marketing of power plant output. The unrealized effects from the measurement of the related hedging instruments are therefore recognized in the non-operating result on the income statement.

Reconciliation of EBIT and EBITDA for the STEAG Group

in € million	**2019**	2018
Earnings before the financial result and income taxes	**280.0**	**134.9**
Non-operating effects from the STEAG 2022 transformation program	-23.4	-22.5
Other non-operating impairment losses/reversal of impairment losses	-22.9	40.4
Effects from commodity hedging	-27.1	-
Other effects	3.6	7.8
EBIT	**210.2**	**160.6**
Depreciation/amortization and impairment losses	175.7	187.7
Reversal of impairment losses	-44.7	-0.8
Impairment losses on investments recognized at equity	8.4	-
plus non-operating effects	22.9	-40.4
EBITDA	**372.5**	**307.1**

In 2019, the non-operating measures bundled in the STEAG 2022 transformation program mainly comprised the reversal of provisions for restructuring relating to the sale of the land at the Lünen power plant site that was decommissioned in 2018. In the previous year, the reversal of provisions for restructuring were mainly due to unplanned staff fluctuation and optimized realization of personnel measures.

The other non-operating impairment losses/reversal of impairment losses mainly comprise the reversal of impairment losses for the wind farms in Romania, Turkey and Poland.

Income statement for the STEAG Group

in € million	**2019**	2018
Sales	2,087.3	2,901.0
Change in inventories of finished goods	-5.5	-7.4
Other own work capitalized	1.2	1.4
Other operating income	411.1	877.4
Cost of materials	-1,329.9	-2,144.0
Personnel expenses	-371.3	-349.6
Depreciation/amortization and impairment losses	-175.7	-187.7
Other operating expenses	-337.2	-956.2
Earnings before the financial result and income taxes	**280.0**	**134.9**
Interest income	12.6	13.9
Interest expense	-92.8	-82.1
Result from investments recognized at equity	-0.2	18.6
Other financial income	0.9	0.9
Financial result	**-79.5**	**-48.7**
Income before income taxes	**200.5**	**86.2**
Income taxes	-68.6	-73.5
Income after taxes	**131.9**	**12.7**
Thereof attributable to		
Non-controlling interests	48.4	32.6
Shareholders of STEAG GmbH (net income)	83.5	-19.9

External sales by division

in € million	2019	2018	Change in %
Power	1,744.5	2,567.1	-32.0
Renewable Energies and Distributed Facilities	342.8	333.9	2.7
STEAG Group	**2,087.3**	**2,901.0**	**-28.0**

Sales declined by € 28.0 million to € 2,087.3 million (prior year: € 2,901.0 million). The drop in revenues from the sale of goods was mainly due to a reduction in electricity production in Germany. By contrast, revenues from services and construction contracts increased.

Sales and material costs resulting from optimization of marketing were netted for the first time in the reporting period due to the termination of hedge accounting for the marketing of output from the Group's own power plants. In the past, the optimized hedging instruments were part of the documented hedging relationship which was terminated in the reporting period. Netting allows continued correct presentation of the economic effect.

Total volume sales of energy from the Group's own facilities and those operated on behalf of its customers declined by 18 percent year-on-year to 15,657 GWh_e[3] (prior year: 18,983 GWh_e). The clear decline in the volume of energy sold was mainly due to the reduction in power plant output marketed in Germany.

Volume sales of heat by the Renewable Energies and Distributed Facilities division decreased by 3.1 percent to 2,173 GWh_{th} (prior year: 2,243 GWh_{th}), while the volume of power sold rose by 10.4 percent to 2,516 GWh_{el} (prior year: 2,279 GWh_{el}).

Overall, sales in the Renewable Energies and Distributed Facilities division were around the prior-year level.

The change in inventories of finished goods was minus € 5.5 million (prior year: minus € 7.4 million), which was €1.9 million higher than the prior-year change, while other own work capitalized declined by € 1.2 million (prior year: € 1.4 million).

The other operating income decreased by € 466.3 million, from € 877.4 million in 2018 to € 411.1 million in 2019. The year-on-year decline was principally due to lower income from the valuation of derivatives (excluding interest rate derivatives), which totaled € 195.3 million (prior year: € 774.7 million). The decline was partly due to the netting for the first time in the reporting period of other operating income and expenses from optimized marketing of output from the Group's power plants. Please see the comments on sales. As a counter-effect, the other operating income also contains one-off effects € 57.4 million from the initial consolidation of Gemeinschaftskraftwerk Bergkamen A beschränkt haftende OHG and € 36.2 million from the reversal of impairment losses on wind farms in Romania, Turkey and Poland. In addition, income of € 21.9 million comes from the reversal of provisions, mainly because the obligation to maintain the site in Lünen no longer applied as the site was sold in the reporting period.

The € 814,1 million drop in the cost of materials relates to the netting for the first time of sales and the material costs in connection with optimization of the marketing of output from the Group's own power

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

plants. Another reason was the reduction in power generation in Germany. Please see the comments on sales.

Personnel expenses increased by € 21.7 million to € 371.3 million (prior year: € 349.6 million). The average number of employees in the STEAG Group decreased slightly from 6,391 to 6,295. In the prior year, the net result of additions to and reversals of provisions for restructuring reduced personnel expenses by € 21.4 million. This was due to changes in the implementation of planned measures and higher staff turnover in the units affected. Taking this one-off effect into account, personnel expenses in the reporting period were on the same level as in the prior year.

Depreciation, amortization and impairment losses totaled € 175.7 million (prior year: € 187.7 million) and included depreciation and amortization of property, plant and equipment, intangible assets and investment property amounting to € 164.9 million (prior year: € 142.4 million). In 2019, a further impairment loss of € 6.6 million was recognized for the non-current assets of the geothermal project in Indonesia (prior year: € 25.6 million).

The other operating expenses decreased by € 619.0 million from € 956.2 million in the prior year to € 337.2 million in the reporting period. The year-on-year reduction was principally due to lower losses on the valuation of derivatives (excluding interest rate derivatives), which amounted to € 139.8 million (prior year: € 745.4 million). The decline was also partly due to the netting for the first time in the reporting period of other operating income and expenses from optimized marketing of output from the Group's power plants. Please see the comments on other operating income.

Income before the financial result and income taxes improved by € 145.1 million year-on-year to € 280.0 million, mainly due the above one-off effects.

The interest income contained in the financial result decreased by € 1.3 million in 2019. The interest expense contained in the financial result increased by € 10.7 million in 2019.

The € 18.8 million reduction in the result from investments recognized at equity further reduced the financial result. The impairment loss on a joint venture in the USA had a negative effect.

Income before income taxes increased from € 86.2 million to € 220.5 million, principally due to the one-off effects already mentioned.

Income tax expense decreased by € 4.9 million, from € 73.5 million in 2018 to € 68.6 million in 2019. The reduction in income tax expense was mainly attributable to lower current taxes at the subsidiary Iskenderun Enerji Üretim ve Ticaret A.S. (Turkey) as income before income taxes was lower than in the prior year. By contrast, there was a year-on-year increase in current income tax expense at the following subsidiaries: Compania Electrica de Sochagota S.A.E.S.P. (Colombia), STEAG State Power Inc. (Philippines) and STEAG-EVN Walsum 10 Kraftwerksgesellschaft mbH (Germany).

Financial position

Financial risk management

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

STEAG GmbH manages borrowing, guarantees and sureties for Group companies centrally. It has flexible 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 bonded loans and EFET 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 EFET contracts on tangible net worth and/or the equity ratio.

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 limited 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 project 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. For example, non-recourse financing has been agreed for the power plant in the Philippines and the Süloglu wind farm in Turkey.

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 receivables from finance leases totaling € 212.2 million (prior year: € 246.4 million). Current receivables accounted for € 17.5 million of this amount (prior year: € 44.6 million).

As at December 31, 2019, STEAG had financial liabilities of € 1,550.5 million (prior year: € 2,598.8 million) and cash and cash equivalents of € 413.9 million (prior year: € 495.4 million). In addition, € 10.0 million (prior year: € 70.1 million) were held in short-term deposits.

A considerable proportion of non-current financial liabilities amounting to € 1,097.2 million (prior year: € 1,287.4 million) comprises liabilities to banks, especially for the Walsum 10 power plant and project companies in Germany and abroad. In addition, liabilities include the bonded loan amounting to € 400.0

million taken out by STEAG GmbH in 2014. In 2019, tranches totaling € 140.5 million were repaid and new tranches of € 84.0 million were issued. STEAG GmbH has also arranged other credit facilities with banks to increase the available liquidity. These currently exceed needs.

€ 45.0 million of the € 453.3 million (prior year: € 45.0 million of the € 1,311.4 million) in current financial liabilities relate to the liability to KSBG KG under the profit and loss transfer agreement.

The STEAG Group has no off-balance-sheet financing instruments that could have a material impact on its present or future earnings, assets and financial position.

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	**2019**	2018	Change in %
Power	106.9	102.0	4.8
Renewable Energies and Distributed Facilities	26.7	67.2	-60.3
Other	3.3	4.5	-26.7
STEAG Group	**136.9**	**173.7**	**-21.2**

Capital expenditure totaled € 136.9 million (prior year: € 173.7 million), which was below depreciation, which amounted to € 164.9 million (prior year: € 142.4 million). In 2019 capital expenditure for property, plant and equipment decreased by 43.7 percent to € 92.9 million (prior year: € 164.8 million).

The largest share of capital expenditure for property, plant and equipment (72.4 percent) was allocated to the Power division (€ 67.2 million; prior year: € 93.3 million). The biggest investment was for the DeNOx plant for the Iskenderun power plant in Turkey. A further 24.2 percent of capital expenditure for property, plant and equipment was allocated to the Renewable Energies and Distributed Facilities division (€ 22.5 million; prior year: € 67.1 million).

Regionally, investment in property, plant and equipment in the STEAG Group was focused mainly on Germany, which accounted for 65.8 percent (€ 90.1 million; prior year: € 90.8 million) and Asia, which accounted for 18.8 percent (€ 25.8 million; prior year: € 57.2 million).

The Group has commitments of € 7.3 million (prior year: € 9.2 million) to purchase property, plant and equipment.

In the reporting period, financial investments amounted to € 44.0 million (prior year: €8.9 million). As in the previous year, they mainly comprised an investment in the gas and steam-fired power plant at the Herne site.

Cash flow

Cash flow statement for the STEAG Group (condensed version)

in € million	2019	2018
Cash flow from operating activities	225.8	121.8
Cash flow from investing activities	-7.3	-21.3
Cash flow from financing activities	-301.5	-55.1
Changes in exchange rates and other changes in the value of cash and cash equivalents	1.5	0.8
Cash and cash equivalents as at December 31	413.9	495.4

The cash flow from operating activities was € 225.8 million, which was above the prior-year level of € 121.8 million. The increase was mainly due to the following factors. Firstly, the purchase of emission allowances for the 2019 fiscal year (€ 86.8 million) was postponed to the following year. Secondly, trade accounts receivable at the subsidiary Iskenderun Enerji Üretim ve Ticaret A.S. (Turkey) fell by € 89.8 million year-on-year as a long-term power supply agreement ended and power production was marketed on the electricity market with short payment terms. In particular, the year-on-year change in inventories and trade accounts receivable contributed to the increase in the cash flow from operating activities.

The cash outflow for investing activities was € 7.3 million, which was below the outflow of € 21.3 million in the previous year. While there was a considerable reduction in cash outflows for investments in intangible assets, property plant and equipment and investment property compared with the prior year, this was largely compensated by a reduction in the sale of securities and in deposits and loans.

As at the reporting date, cash and cash equivalents totaling € 10.0 million (prior year: € 70.1 million) were held in short-term deposits. The year-on-year change of € 60.1 million is shown in the cash flow from investing activities in cash outflows relating to securities, deposits and loans.

The cash outflow for financing activities was € 301.5 million, which was above the outflow of € 55.1 million in the previous year. In the reporting period, cash inflows and outflows relating to the divestment of shareholdings without loss of control were € 32.3 million lower than in the previous year. Borrowing mainly comprised changes in bonded loans. Tranches totaling € 140.5 million were repaid and new tranches totaling € 84.0 million were issued.

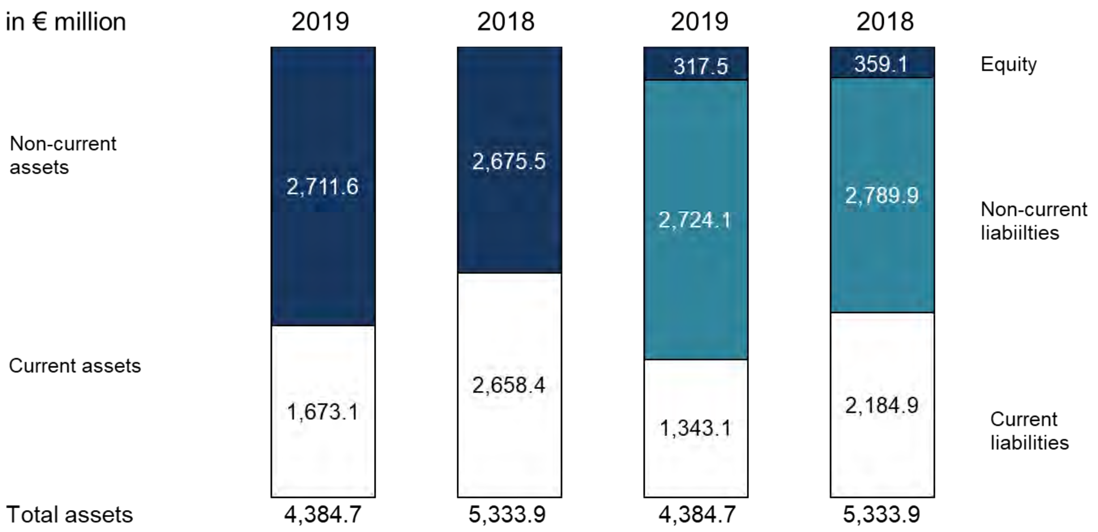
In all, cash and cash equivalents contracted by € 81.5 million year-on-year.

The carrying amount of cash and cash equivalents pledged as collateral amounted to € 70.3 million (prior year: € 102.0 million).

Asset structure

Structure of the balance sheet

STEAG Group: Structure of the balance sheet as at December 31



Total assets decreased by € 949.2 million from € 5,333.9 million as at December 31, 2018 to € 4,384.7 million as at December 31, 2019.

Non-current assets increased by € 36.1 million to € 2,711.6 million (prior year: € 2,675.5 million). € 133.9 million of the rise was due to the initial application of IFRS 16, the new standard on leases, which prescribes the recognition of right-of-use assets for leases. Depreciation, amortization and impairment losses exceeded capital expenditure.

Capital expenditure for property, plant and equipment was € 136.9 million (prior year: € 173.7 million), while depreciation and amortization of intangible assets, property, plant and equipment and investment property totaled € 164.9 million (prior year: € 142.4 million) and impairment losses were € 7.4 million (prior year: € 40.7 million). So far, investment in the geothermal project in Indonesia has totaled around € 79.0 million. Wells that cannot be used for production are presented in the consolidated financial statements as impairments. In the past financial year, impairment losses of € 6.6 million were recognized for this project (2018: € 25.6 million). As at December 31, 2019, assets of € 48.4 million were capitalized for this project. Further, there was a reversal of impairment losses on property, plant and equipment of € 38.6 million (prior year: € 0.2 million). € 36.2 million of this amount was for the wind farms in Romania, Turkey and Poland.

Non-current assets accounted for 61.8 percent of total assets (prior year: 50.2 percent). Coverage of non-current assets by non-current capital was 112.2 percent (prior year: 117.7 percent).

Current assets totaled € 1,673.1 million (prior year: € 2,658.4 million), a drop of € 985.3 million compared with year-end 2018. The reduction was due to a reduction of € 810.6 million in financial assets to € 294.2 million (prior year: € 1,104.8 million). The main factor here was the decline in receivables from derivatives, excluding interest rate derivatives. The change in the reporting period results from price changes and a reduction in the amount of collateral.

Trade accounts receivable decreased by € 52.1 million to € 560.1 million (prior year: € 612.2 million), principally because of a change in the mode of invoicing due to the transition from a long-term agreement on the provision of capacity to short-term marketing at the subsidiary Iskenderun Enerji Üretim ve Ticaret A.S. (Turkey).

The reduction of €39.2 million in inventories from € 279.1 million to € 239.0 million was mainly due to lower inventories of coal and CO_2 emission allowances. The reduction in emission allowances was due to the sale of allowances procured in 2019. The emission allowances required for surrender in April of the following year were repurchased as forwards at around the same time as the sale transaction.

Current assets exceeded current liabilities by 24.6 percent (prior year: 21.7 percent).

Equity contracted by € 41.6 million to € 317.5 million (prior year: € 359.1 million). By contrast, the equity ratio improved from 6.7 percent to 7.2 percent.

Non-current liabilities decreased by € 65.8 million or 2.3 percent to € 2,724.1 million (prior year: € 2,789.9 million). The decrease in liabilities from derivatives, which was mainly price-driven, was largely offset by the initial recognition of lease liabilities due to application of the new standard IFRS 16 in the reporting period. As at December 31, 2019, lease liabilities amounted to € 137.9 million.

Current liabilities decreased by € 841.8 million to € 1,343.1 million (prior year: € 2,184.9 million). Financial liabilities decreased by € 858.1 million to € 453.3 million (prior year: € 1,311.4 million) due to the price-driven drop in liabilities from derivatives. The change in the reporting period results from price changes and a reduction in the amount of collateral. At the same time, other provisions rose by € 20.3 million to € 332.2 million (previous year: € 311.9 million), mainly due to the rise in the obligation to surrender CO_2 emission allowances.

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 € 909.3 million and total assets of € 3,002.5 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.

Income statement for STEAG GmbH

in € million	2019	2018
Sales	909.3	1,657.1
Change in inventories, own work capitalized	48.7	4.8
Other operating income	245.4	47.7
Cost of materials	-889.3	-1,547.2
Personnel expenses	-134.5	-148.5
Depreciation/amortization and impairment losses	-11.1	-26.0
Other operating expenses	-223.7	-124.6
Financial result	100.2	184.0
Income taxes	1.5	-1.1
Income after taxes	**46.5**	**46.2**
Other taxes	-1.5	-1.2
Profit and loss transfer	-45.0	-45.0
Net income	**-**	**-**

In 2019, STEAG GmbH's sales decreased by € 747.8 million year-on-year to € 909.3 million (prior year: € 1,657.1 million). The reduction was principally due to the drop in the marketing of power output in Germany and to lower sales from coal trading.

As a result of the termination of the commercial hedge for the marketing of the output from the Group's own power plants, sales and material costs from the optimization of marketing were netted for the first time in the reporting period. In the past, the optimized hedging instruments formed part of hedging relationships which were terminated in the reporting period. The corresponding netting allows continued correct presentation of the economic effect.

In the reporting period, sales mainly comprised € 535.0 million (prior year: € 1,192.5 million) from the supply of energy and other media, € 204.9 million (prior year: € 282.5 million) from the supply of coal, € 7.3 million (prior year: € 7.4 million) from the gas business, and € 106.5 million (prior year: € 107.1 million) from operating and management fees. Revenues were generated with customers in Germany, other European countries and South America.

The change in inventories increased by € 43.8 million to € 48.4 million (prior year: € 4.6 million) due to project progress relating to a long-term customer order.

The other operating income increased by € 197.7 million year-on-year to € 245.4 million (prior year: € 47.7 million).

In the reporting period, the realized fair values of derivatives were recognized in other operating income and expenses for the first time. The resulting impact in other operating income was € 130.7 million in 2019. In the previous year, derivatives were included in a commercial hedge relating to future transactions in connection with marketing of output from the Group's own power plants and recognized in sales and cost of materials when the transactions were realized. Hedge accounting was terminated in the reporting period, resulting an a change in the recognition of the fair value of derivatives on their realization. In addition, as a result of the termination of the commercial hedge for the marketing of the output from the Group's own power plants, other operating income and expenses from the optimization of marketing were netted for the first time. Netting allows continued correct presentation of the economic effect.

Other operating income also contains reversals of provisions amounting to € 71.2 million (prior year: € 33.4 million), principally due to the reversal of the provision for site maintenance following the sale of the Lünen power power plant location, which was decommissioned in 2018 (€ 21.1 million), the reversal of provisions for risks relating to a pending transaction (€ 13.4 million), and effects from the modified parameters used in the measurement of pension obligations (€ 14.5 million). In addition, write-ups of € 31.1 million on financial receivables from affiliated companies were recognized in the reporting period.

The year-on-year drop in the cost of materials basically mirrored the reduction in sales revenues.

Personnel expenses declined to € 134.5 million (prior year: € 148.5 million), which was roughly in line with the year-on-year change in the number of employees.

The increase in other operating expenses to € 223.7 million (prior year: € 124.6 million) was mainly due to the initial recognition of derivatives in the amount of € 100.1 million in this item. The other operating expenses mainly comprise other selling and administrative expenses, legal and consulting fees, currency losses on foreign exchange transactions and expenses for the establishment of provisions for risks relating to pending transactions and pending losses in connection with financial derivatives. The other main items included in other operating expenses are rents and leases, trading-related transportation costs and insurance premiums.

The company's financial result was positive at € 100.2 million in the reporting period (prior year: € 184.0 million). This resulted principally from income from investments of € 153.7 million (prior year: € 182.3 million) and income from profit transfers of € 21.4 million (prior year: € 78.3 million). A counter-effect came the negative interest result of minus € 87.0 million (prior year: minus € 90.3 million) – mainly due to 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 € 3.6 million (prior year: € 2.5 million) mainly comprised the impairment losses on financial receivables from affiliated companies and write-downs of shares in a subsidiary in Turkey.

The income tax result of € 1.5 million (prior year: income tax expense of € 1.1 million) was due to the reversal of a provision for corporation and trade tax following completion of the tax audit for 2011.

Income after income taxes and other taxes of € 45.0 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, 2019	Dec. 31, 2018
Intangible assets	6.7	7.4
Property, plant and equipment	130.3	134.3
Financial assets	1,734.6	1,736.6
Non-current assets	**1,871.6**	**1,878.3**
Inventories	161.2	179.6
Receivables and other assets	787.2	894.2
Cash and cash equivalents	170.7	311.8
Current assets	**1,119.1**	**1,385.6**
Deferred items	**11.8**	**2.7**
Total assets	**3,002.5**	**3,266.6**

Equity and liabilities

in € million	Dec. 31, 2019	Dec. 31, 2018
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	0.0	0.0
Provisions	**1,122.4**	**1,112.3**
Liabilities	**1,364.2**	**1,670.6**
Deferred items	**37.6**	**5.4**
Total equity and liabilities	**3,002.5**	**3,266.6**

Total assets of STEAG GmbH contracted by € 264.1 million to € 3,002.5 million. Non-current assets declined by a total of € 6.7 million to € 1,871.6 million (prior year: € 1,878.3 million). Capital expenditure for intangible assets reported as non-current assets and for property, plant and equipment was € 7.8 million in the reporting period (prior year: € 9.0 million). Capital expenditure was below depreciation and amortization, which was € 10.9 million. 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 92.2 percent (prior year: 92.9 percent).

Financial assets declined by € 2.0 million to € 1,734.6 million (prior year: € 1,736.6 million). Shares in affiliated companies and investments decreased by a total of € 6.3 million, mainly due to the liquidation of Renova Enerji Üretim ve Ticaret A.S. By contrast, there was a net increase of € 4.2 million in loans to affiliated companies. As at December 31, 2019, this item contained loans of € 85.7 million to STEAG PE GmbH to finance the geothermal project in Indonesia. In addition to the € 18.7 million reversal of the impairment loss on the loan granted to Crucea Wind Farm S.A. and a payment of € 33.0 million as partial repayment of the upstream loan by the shareholder KSBG KG, the main changes comprised drawings on credit lines.

Current assets fell by € 266.5 million to € 1,119.1 million (prior year: € 1,385.6 million). Inventories decreased by € 18.4 million to € 161.2 million (prior year: € 179.6 million). Alongside the price- and volume-driven reduction in emission allowances (minus € 52.3 million) and coal inventories (minus € 7.5 million), there was an increase in work in progress as a result of a long-term order from a customer (€ 48.4 million).

Receivables and other assets were € 107.0 million higher than in the previous year. This decrease mainly related to receivables from affiliated companies amounting to € 119.0 million. These principally comprised receivables from loans and financial account agreements, and receivables in connection with profit and loss transfer agreements. The other assets declined by € 9.0 million to € 62.8 million and mainly comprised security for power marketing and receivables from tax authorities. By contrast, trade accounts receivable increased by € 23.7 million to € 344.0 million (prior year: € 320.3 million) due to reporting-date effects.

On the asset side of the balance sheet, deferred items increased by € 9.1 million to € 11.8 million (prior year: € 2.7 million). The deferred items recognized for the financial year ensure that income and expenses from the related procurement and sales transactions and hedging instruments, which were affected by the change in a clearing partner for trading activities, could be posted in the same period.

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 15.9 percent (prior year: 14.6 percent). Equity coverage of non-current assets is 25.6 percent (prior year: 25.5 percent).

Provisions rose negligibly, by € 10.1 million, to € 1,122.4 million (prior year: € 1,112.3 million). Provisions for pensions and other post-employment obligations increased by € 32.6 million to € 642.8 million (prior year: € 610.2 million), mainly because of higher interest accruals. Pension provisions accounted for 57.3 percent and thus the largest share of provisions (prior year: 54.9 percent). The other provisions decreased by € 18.7 million compared with the prior year to € 475.5 million (prior year: € 494.2 million). € 28.9 million of this amount comprises provisions for maintenance of the Lünen site, € 20.1 million are provisions for restructuring, and € 14.0 million are provisions to cover pending losses from future marketing of power from the Walsum 10 project. The reduction was countered, in particular, by an increase in provisions for the obligation to surrender emissions allowances for own use (€ 34.3 million).

Liabilities contracted by € 306.4 million to € 1,364.2 million (prior year: € 1,670.6 million). The change was mainly due to the reduction in liabilities to affiliated companies, which dropped by € 206.4 million to € 514.7 million (prior year: € 721.1 million). In particular, this comprised lower liabilities from financial arrangements in connection with cash pooling activities. Liabilities for the profit and loss transfer agreement with KSBG KG were € 45.0 million, as in the prior year. In addition, there was a reduction in liabilities to banks (€ 332.3 million; prior year: € 404.4 million), mainly due to the repayment of bonded loans. There was also a reduction in other liabilities (€ 91.1 million; prior year: € 221.3 million). The reduction in other liabilities was mainly due to the drop in collateral for the conclusion of forward contracts. This was countered by an increase in trade accounts payable (€ 330.4 million; prior year: € 275.6 million) due to reporting-date effects, and an increase in advance payments received for orders (€ 95.7 million; prior year: € 48.2 million) which mainly related to one long-term customer order.

On the liabilities side of the balance sheet, deferred items rose by € 32.2 million to € 37.6 million in the reporting period (prior year: € 5.4 million). The comments on deferred items on the asset side apply analogously.

Non-financial performance indicators

Employees

Headcount

At the end of 2019, the STEAG Group had 6,378 employees, Worldwide, the proportion of female employees was 12 percent and the average age of the workforce was 43. Almost 47 percent were employed outside Germany.

The number of employees in the Group was 197 lower than in the previous year, principally due to changes in the Power division (minus 137 employees): In the Energy Services business unit, the headcount decreased by a total of 18, while the Technical Service business unit had 55 fewer employees and the headcount in the Generation business unit declined by 54.

Employees by division	**Dec. 31, 2019**	Dec. 31, 2018
Power	4,904	5,041
Renewable Energies and Distributed Facilities	1,026	1,048
Administration	448	486
STEAG Group	**6,378**	**6,575**

In 2019, the headcount reductions resulting from the decommissioning of power plants and from the STEAG 2022 transformation process 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. Occupational health and 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 occupational health and safety management system supports these goals. There were no fatal accidents. The lost time injury frequency (LTIF) indicator dropped from 3.5 accidents per 1 million working hours in 2018 to 2.5 accidents per 1 million working hours as at December 2019. That was a reduction of 28.6 percent. As a result, this accident indicator dropped to a record low level

Six companies and sites that did not report any accidents. They include the Mindanao power plant in the Philippines, where there has not been an accident for 13 years, the power plant in Iskenderun, where there have not been any accidents for three years, and Compania Electrica de Sochagota S.A.E.S.P - C.E.S, which has been accident-free for four years.

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 number for the percentage of women on the Board of Management of STEAG GmbH has been set at 0 percent as at June 30, 2020.

For the first management level 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.

Corporate governance, compliance and corporate responsibility[4]

Corporate governance refers to the responsible management and oversight of the company. In the STEAG Group, this includes observing the laws that are relevant for the Group and guidelines on day-to-day business activities, which are defined and compiled in the organizational handbook. Further, all external agreements and contractual obligations are observed. In addition to these provisions, STEAG observes its corporate responsibility and duty of care in accordance with internationally recognized standards such as the principles of the UN Global Compact. The central regulation that specifies that these objectives apply to the Group both internally and in external dealings, together with business scenarios, is the STEAG Code of Conduct.

STEAG takes as its guide, among other things, the latest version of the German Corporate Governance Code. The management plays a key role in this context as it is responsible for ensuring that all provisions of law and internal policies are complied with, and for endeavoring to achieve their compliance by the enterprise. This is what is meant by the term compliance in the German Corporate Governance Code.

The STEAG Group has a compliance management system that is implemented worldwide by a specialist department which is not subject to management instructions. In addition to the regulatory duty to prevent risks, this department is responsible for implementing and reporting on activities relating to corporate responsibility at STEAG. Many organizational units and companies play a part in achieving these targets by naming officers who support this specialist department.

Measures to identify and prevent the risk of corruption and asset-related crimes fall within the direct remit of this department. In addition, other organizational units such as Legal, Internal Audit, Data Protection and IT Security provide support in preventing and dealing with any violations or suspected violations. Besides routine reporting of compliance-related processes by the officers at Group companies to the Compliance department, in the reporting period task forces organized regular personal meetings and networking on specific issues such as combating cybercrime.

Areas of focus in 2019 included the content of the regular risk analyses. Here, business units and their risks are discussed and evaluated in open discussions. Further, surveys are being cascaded from company management level down to department level so the number of planned interviews is increasing and, depending on the relevance of the various risks, analysis rounds will be held throughout the coming reporting period.

Another core area of focus in recent years has been face-to-face compliance training for selected target groups. In the reporting period, the content of these training sessions was redesigned so compliance-related scenarios are now examined using practical, interactive case studies. These cover various issues and, for the first time, include the sphere of activity of STEAG's business partners to explain the preventive action that may be taken at this level in a manner that is close to reality.

In the reporting period, the review of new business partners and contacts, especially in the framework of joint ventures and M&A projects, started at an earlier point in time and the content was also extended. Moreover, the Compliance department introduced additional audit cycles with the involvement of external

[4] In accordance with German law, the content of this section has not been audited by the statutory auditors.

service providers, depending on the risk situation and country-specific circumstances. These supplement the assessments already carried out on aspects such as business law, respect for human rights and labor standards, and environmental protection.

The Compliance department engages in professional dialog on compliance and corporate responsibility with peers at other companies, organizes networking meetings and gives presentations at national conferences. In the context of the UN Global Compact, as a member of the German network, STEAG has taken responsibility for a workstream on implementing anti-corruption measures. This involves active involvement in meetings and designing information and training materials on this topic.

Events after the reporting period

On February 3, 2002, 26.01 percent of the shares in Arenales Solar PS S.L., were sold by Steag 1. Beteiligungs GmbH as seller to Fronterasol B.V. as purchaser.

Opportunity and risk report and forecast

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 in connection with the mid-term planning process. 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 details of action to be taken with regard to the opportunities and risks identified in the risk inventory and their implementation is monitored. The inventory, which looks at opportunities and risks over a short-term period of one year and a mid-term period of at least five years, is supplemented by monthly reports on changes in the opportunities and risk factors previously identified and newly identified opportunities and risks relating to 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.

Strategic risks

Changes in the present political and regulatory framework in Germany and abroad could have a significant impact on planned investments and the earnings position of the STEAG Group. The Group's business activities are exposed to strong and dynamic competition which cause volume and price risks.

The altered market conditions in Germany will result in a politically motivated decline in conventional power generating capacity. Alongside the development of costs for the international procurement of gas and coal and the development of carbon pricing, this is attributable to the promotion of renewable energies, which is unrelated to demand, and the priority given to feeding such power into the grid. The present subsidy regime hampers market and systems integration of renewable energies and, at the same time, drives out conventional power plants. In addition, there is a political debate about a fixed, date for ending coal-fired power generation in Germany as a contribution to countering global climate change, which will result in a statutory date for exiting coal-fired generation by 2038 at the latest.

The present legislative process in Germany harbors the risk that the country’s coal-fired power plants will not be permitted to operate for as long as had been planned. At present compensation for early decommissioning or for a marketing ban is planned for hard coal power plants on the basis of auctions for early decommissioning of such plants in the period up to 2026. After that, the reduction will be based on legislation. Based on the present controversial status, there could even be a statutory ordinance on the closure of such plants from 2024 without any compensation. In addition, there is presently a risk that, in addition to a marketing ban, network operators could be given access to STEAG sites. Key factors in obtaining compensation through the auction process for early decommissioning of power plants are the opportunity to participate in the auctions and the maximum price finally set for the auctions.

Political risks in the countries where STEAG operates its foreign power plants – in Iskenderun (Turkey), Mindanao (Philippines) and Termopaipa (Colombia) – are secured through investment guarantees from the Federal Republic of Germany. The Federal Republic of Germany has extended the guarantee for the Iskenderun power plant in Turkey by five years to 2025. This means that loss of STEAG GmbH's capital investment is essentially excluded.

Operational risks

Preventive risk management is particularly important in the power plant business on commercial, societal, political, technological and environmental grounds. In view of the high capital intensity and long-term nature of the business, careful analysis of market conditions and the general framework, astute management of the relevant risks through a balanced and systematic risk policy, the use of high-quality technology and acceptance of the facilities by the local community are central elements in proactive and sustained efforts to ensure that the company and the Group remain going concerns. Trustful, in other words, open and transparent, communication with customers, suppliers and partners, and operation of the plants in conformance with the highest environmental and safety standards are self-evident for the STEAG Group and form the basis for long-term success.

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. Not all agreed covenants were met as of December 31, 2019. The resulting information obligations were met and the necessary collateral was provided.

Risk factors for the STEAG Group arise from the regulatory framework for the operation of power plants. The environmental protection requirements for the operation of power plants are met in full. Further risks arise from the energy policy framework, which could affect the Group's business performance. General risks arise from the operation of large plants, including the risk of external penetration, for example, as a result of attacks IT hackers.

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. In the case of the geothermal energy project in Indonesia, the opportunities and risks relate to the presence of a geothermal system that is suitable for commercialization, the need to halt or extend the exploration phase at short notice, and the search for a strategic partner for the ongoing development of the project. As at December 31, 2019, assets of € 48.4 million were recognized for this project.

In Turkey, the STEAG Group is continuously monitoring both political and economic developments. Following the significant depreciation of the Turkish lira in the previous year, the inflation rate in Turkey was in the double-digit percentage range until the second half of 2019 and there was a significant drop in economic momentum. The STEAG Group's main involvement in Turkey is the Iskenderun hard coal power plant. The long-term power supply agreement for this plant ended in November 2019 and its output has been sold on the open market since then. In view of the rising demand for power on the Turkish market, the STEAG Group is confident that marketing of the power generated at Iskenderun from imported coal on the open market will meet the Group's return expectations in the future.

Financial risks

To remain solvent and safeguard 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 18 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 Group companies as needed.

The STEAG Group has defined the minimum level of liquidity required for operational purposes. To supplement the existing risk limits, further measures have been developed to safeguard liquidity. These can be used to counter any unexpected changes in liquidity. As well as further borrowing, the liquidity management measures comprise, for example, portfolio adjustments and changes in investments. Based on present planning, the liquidity of the STEAG Group is ensured.

The STEAG Group has various financial liabilities for financing purposes. In particular, STEAG GmbH's bonded loans require the fulfillment of specific covenants. All agreed covenants were met as at December 31, 2019.

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.

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.

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.

Opportunity report

The STEAG Group has positioned itself nationally and internationally in conventional power generation, renewables, distributed energy generation and related services. Its strategic goal is to build on this position.

Securing the future viability of the business operations in Germany is linked to a large extent to continuous optimization of the existing power plants to increase their technical and organizational flexibility.

Entrepreneurial approaches for the STEAG Group can be derived, in particular, from the final report by the Commission on Growth, Structural Change and Employment (KWSB), but also from the Cabinet draft of the legislation on exiting coal-fired energy generation. For example, from the viewpoint of the STEAG Group, it is advantageous that the KWSB sees heat and power co-generation technology and district heating supply by pipework as key elements for the success of the new energy policy. That also applies to hydrogen.

In Germany, distributed energy generation, waste incineration and extending the use of renewables are opening up new sources of revenue for the STEAG Group. Other opportunities are seen in the ongoing development of heat and power co-generation plants, district heating and, to some extent, in conventional energy generation as a basis for safeguarding supply in Germany.

Another aim is the ongoing development and expansion of trading activities in Germany and abroad, especially in Turkey.

The STEAG Group sees realization of high-earning foreign projects (conventional power plants and expansion of renewables) as a further opportunity to stabilize and improve its earnings position.

The above market-related initiatives will be accompanied by optimization programs focusing on internal structures, processes and systems. The STEAG 2022 optimization program launched a transformation to bring a sustained improvement in cost-efficiency. Large parts of this program have already been implemented. The focus is on measures to leverage efficiency and on portfolio and growth initiatives. This process will continue and will drive forward the realignment of the STEAG Group’s business activities.

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, evaluation 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.

Outlook

General economic development[5]

The German Bundesbank's latest macroeconomic forecast does not expect the German economy to slide into recession. The economic dip was principally due to a downward trend in export-driven sectors of industry and there are already positive signs that export-driven industries are stabilizing. In addition, the significant rise in domestic demand is continuing, although not as fast as in the preceding economic boom. Additional stimulus is coming from both fiscal and monetary policy. By contrast, the lower rise in real disposable incomes, which is principally due to the slowing employment momentum, is acting as a brake. In view of this, a calendar-adjusted rise in real German GDP of 0.6 percent is expected for 2020. The potential impact of a pandemic caused by the coronavirus (SARS-CoV-2) remains to be seen and could result in a deviation from this assessment.

Overall, the 2019/ 2020 annual report of the German Council of Economic Experts supports this assessment. It acknowledges that the German economy is particularly affected by the slowdown in global growth and is in a downward trend, which has fully impacted industry, in particular. The economy is only expected to pick up slowly in 2020. As a result of the deterioration in the global economic situation, foreign trade impetus is declining, held back by the ongoing uncertainty caused by considerable international risks. Risk factors for economic development could come from abrupt price corrections, especially on the real estate market, and from the financial system if there is a procyclical increase in the recessionary trend.

Development of the energy sector

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

Rising power generation from renewables in Germany and the related overcapacity at conventional generating facilities, which comprises many hours per year, as well as the “fuel switch” from hard coal to gas in 2019 are continuing to squeeze out hard coal power plants as a result of the pricing mechanism for wholesale power trading. Based on the expectations of analysts and traders, a change in the present margin situation is only expected in the mid term, as the plans to take nuclear power plants out for service in Germany mean that around 9 Gigawatts of base load will be taken off the market by 2022. Until then, the economic pressure on hard coal and gas-fired power plants will continue. Nevertheless, conventional power plants will remain vital for the foreseeable future to ensure reliability of supply and flexibly offset the fluctuating, weather-related supply of wind and solar power while keeping prices competitive internationally.

Internationally, the implications of the Paris Climate Agreement for the expansion and restructuring of the global energy system need 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 coun-

5 See the German Bundesbank’s monthly report of December 2019 and the 2019 annual report of the German Council of Economic Experts on the general economic development.

tries and emerging markets – are kept. The UN Climate Conference held in Madrid in December 2019 brought few new insights.

Strategic and operational challenges

The energy market in Germany is still dominated by considerable upheaval. As a result of the subsidized expansion of renewables, in particular, installed generating capacity in this sector has increased strongly in recent years and there has been a sharp drop in electricity prices on the wholesale markets. On the other hand, political decisions have a major influence on the profitability of generating facilities. Since margins have been falling for years, the operation of many thermal power plants is no longer viable. As a result of the challenging market conditions since 2011, the STEAG Group has been confronted by a significant drop in earnings from conventional energy generation in Germany.

For the STEAG Group as a whole, however, there are still attractive growth opportunities outside conventional energy generation. The Group has positioned itself in the competitive environment as a technology-friendly, innovative and agile supplier for the operation of energy generating facilities, energy services and trading in Germany and abroad. In future, attention needs to be focused less on long-term ownership of facilities and more on optimizing value followed by partial divestment of the assets. Services will become more important. Nevertheless, the Group will continue to drive forward its project business and undertake investments where the return on capital makes a lasting contribution to improving earnings.

Operating performance

Sales were € 2.1 billion in the reporting period, about 28.0 percent lower than in the prior year. The main reason for this was the considerable reduction in electricity generation in Germany. The STEAG Group's EBIT (earnings before interest and taxes) was therefore below expectations.

Sales are expected to increase to € 2.4 billion in 2020. The main driver is expected to be a price- and volume-driven rise in sales from the operation and marketing of the domestic power plant portfolio and marketing of the power generated in Iskenderun on the open market.

In 2020, the STEAG Group's earnings before interest and taxes expected to about 10 percent lower than in 2019. However, it should be taken into account that in fiscal 2019 a measurement effect in connection with the acquisition of the Bergkamen power plant had a significant effect on earnings. Without this effect, earnings in 2020 would be considerably higher than in 2019.

Capital expenditures of up to € 212 million are planned for 2020. Around € 120 million of this amount is for disposable growth projects. The main drivers here are planned acquisitions for strategic expansion of energy-related services and renewables, and the planned gas and steam turbine power plant in Herne to provide long-term security for the district heating activities in the Ruhr region. With regard to capital expenditure for existing infrastructure, the turbine retrofit at the Iskenderun power plant in Turkey is the largest individual project planned for the next two years. In addition, selective maintenance investments will be channeled to raising the operating efficiency of power plants that already ensure high availability.

General information on expected developments

The STEAG Group assumes that the opportunities arising from its strategic focus and, in particular, the planned investment in growth areas will help it retain its successful position in the 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

In 2020, STEAG GmbH is expected to post earnings in line with the prior-year level. 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, March 11, 2020
STEAG GmbH
The Board of Management

Rumstadt	Baumgärtner	Dr. Cieslik	Geißler

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.