

Annual Report

of Yeti GermanCo 1 GmbH 2019

Content

4 GROUP MANAGEMENT REPORT OF YETI GERMANCO 1 GMBH 2019

- 4 General Information about the Group
- 10 Economic Report
- 18 Forecast Report
- 20 Opportunities Report
- 21 Risk Report
- 25 Risk management
- 27 Events after the end of the reporting period

28 CONSOLIDATED FINANCIAL STATEMENTS OF YETI GERMANCO 1 GMBH 2019

- 28 Consolidated Balance Sheet
- 30 Consolidated Income Statement
- 31 Consolidated Statement of Comprehensive Income
- 32 Consolidated Statement of Changes in Equity
- 33 Consolidated Cash Flow Statement

34 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS OF YETI GERMANCO 1 GMBH 2019

116 Appendix

GROUP MANAGEMENT REPORT OF YETI GERMANCO 1 GMBH 2019

General Information on the Group

Overview of Messer Industries Group

Yeti GermanCo 1 GmbH ("Company") is a holding company based in Sulzbach/Taunus near Frankfurt am Main and with a business address in Bad Soden/Taunus. It acts as a Finance holding company and, together with its subsidiaries and associated companies, forms the Messer Industries Group ("Group").

Yeti GermanCo 1 GmbH was founded as a joint venture company by Messer Group GmbH and CVC Capital Partners, with the purpose of managing the American businesses ("Messer Americas") acquired from Linde and Praxair as of March 1, 2019, and the businesses in Western Europe ("Messer West-europa") brought in by Messer. In this context, as of March 1, 2019, Messer Group GmbH has brought into the joint venture the operative Western European activities in Spain, Portugal, Switzerland, France, Belgium, the Netherlands, Denmark, Germany and the company in Algeria as well as a right to use the "Messer – Gases for Life" for a ten year period. Yeti GermanCo 1 GmbH has its own subsidiaries in Western Europe, North and South America.

Founded in 1898, Messer currently ranks as the world's largest family managed specialist for industrial, medical and specialty gases. Products and services are offered in Europe, Asia and America under the 'Messer – Gases for Life' brand.

From acetylene to xenon, Messer Industries Group impresses with a complete industrial and medical gas product portfolio – the company produces industrial gases such as oxygen, nitrogen, argon, carbon dioxide, hydrogen, helium, welding shielding gases, as well as specialty gases, medical gases and many different gas mixtures.

In its own competence centers in France and the USA, Messer Industries Group develops application technologies, in particular for the use of gases in food technology.

Changes in the scope of consolidation in the financial year 2019

The scope of consolidation changed as follows during the financial year:

First-time consolidations

The following companies were brought in the past financial year or acquired:

- bECO2 BVBA, Belgium, 70 %
- Cliffside Helium LLC, USA, 26 %
- Cliffside Refiners LP, USA, 25.74 %
- East Coast Oxygen Company LLC, USA, 50 %
- East Coast Nitrogen Company LLC, USA, 50 %
- General Gases of the V.I. Inc., USA, 100 %
- GreenCO2, Belgium, 35 %
- Lida S.A.S., France, 21.50 %
- Limes S.A.S., France, 50 %
- Messer Algérie SPA, Algeria, 59.86 %
- Messer BV, Netherlands, 100 %
- Messer Belgium NV, Belgium, 100 %
- Messer Chile Ltda., Chile, 100 %
- Messer Columbia SA, Colombia, 100 %
- Messer Danmark A/S, Denmark, 100 %
- Messer Energy S.A.S. E.S.P., Colombia, 100 %
- Messer Energy Services Inc., USA, 100 %
- Messer France S.A.S., France, 100 %
- Messer Gas Puerto Rico Inc., Puerto Rico, 100 %
- Messer Gases Ltda., Brazil, 100 %
- Messer GasPack 2 GmbH, Germany, 100 %
- Messer Ibérica de Gases S.A., Spain, 100 %
- Messer Indústria de Gases Ltda., Brazil, 100 %
- Messer Industriegase GmbH, Germany, 100 %
- Messer LLC, USA, 100 %
- Messer Merchant Production LLC, USA, 100 %
- Messer North America Inc., USA, 100 %
- Messer Produktionsgesellschaft mbH Salzgitter, Germany, 100 %
- Messer Produktionsgesellschaft mbH Siegen, Germany, 100 %
- Messer Produktionsgesellschaft mbH Speyer, Germany, 100 %
- Messer Schweiz AG, Switzerland, 100 %
- MesserGas Distribuicao des Gases Industriais, Unip, Portugal, 100 %
- REMEO Medical SAS, Colombia, 100 %
- Soprogaz S.N.C., France, 50 %

Sale of shares with loss of control

With a contract dated July 19, 2019, Messer Industries GmbH sold all of its shares (100 %) in Danmark A/S, Denmark, to Christian Nielsen Strandmøllen A/S. The transaction was completed with effect of August 1, 2019. The company leaves the scope of consolidation of Yeti GermanCo 1 GmbH upon completion of the purchase contract. The deconsolidation results in a profit of K€ 794, which is recognized in other operating income.

Others

With purchase and transfer agreement dated August 23, 2019, Messer Industries GmbH sold 51 % and Messer Group GmbH 49 % of their shares in Yeti NewCo 0 GmbH with immediate effect to Messer Family NewCo GmbH. The company was subsequently renamed to Yeti Management Verwaltungs GmbH.

Financial performance indicators

The Messer Industries Group uses control parameters based on operating performance indicators to manage its business. The most important indicators are sales revenues, EBITDA as well as the key figures investments and net debt. Further explanations and the composition of the indicators are given in the context of the earnings situation or financial position.

Non-financial performance indicators

Safety, health, environmental protection and quality ("SHEQ") have been firmly embedded in Messer's guiding principles since its inception in 1898 and continue to take the utmost priority in the operations of the family managed company. Messer is aware that well-organized safety and quality guidelines form the basis for dealing safely with operational risks and improving operational performance. For this reason, safety and health of our employees and environmental protection are an integral part of global quality management, which is reflected in various standards of Messer Industries Group.

The following information on non-financial performance indicators relates to the entire group.

Occupational safety

Occupational safety is of great importance for Messer Industries Group. Messer safety guidelines reflect our position: "All work-related illnesses, injuries and accidents can be avoided."

Messer applies its management system to identify and control possible operational risks. The principles of this system are carefully documented in a SHEQ manual and cover all relevant safety-related areas, such as risk management, safety training, safety tests, personal protective equipment, communication safety and accident investigations. The SHEQ manual is part of the Compliance Management of Messer Industries Group and is updated and improved regularly.

In order to measure the success of the safety measures and initiatives, the following performance indicators are determined annually: work accidents with lost days and frequency of accidents (number

of work-related accidents with lost days per million working hours) and accident severity rate (missing days per million working hours).

In 2019, 18 work accidents with lost days were reported from America and 10 from Western Europe. The absenteeism rate of employees per million hours worked (accident frequency) stood at 1.6 in America in 2019 and 7.1 in Western Europe, while days lost (accident severity) were recorded at 21.6 per million hours in America and 186.4 in Western Europe.

	2018 America / WEU	2019 America / WEU
Working accidents with lost days	_	18 / 10
Accident rate *	_	1.6 / 7.1
Accident severity *	_	21.6 / 186.4
*per million hours worked		

Messer Western Europe is an active member of the European Industrial Gas Association ("EIGA") and Messer North America of the Compressed Gas Association ("CGA") and the American Chemistry Council ("ACC"). Our experts are actively exchanging experiences and knowledge in order to learn from incidents in the industrial gas industry.

Transport safety

The transport of gases and equipment on the road and customer deliveries are activities which involve the major risks in the gases industry. For this reason, Messer has signed the European Road Safety Charter and is committed to putting a special focus on the area of transport safety.

The majority of the driving staff working for Messer are employed by external transport companies. These companies are responsible for training the drivers in accordance with the ADR (European Agreement concerning the international carriage of dangerous goods by road). In 2019, the number of avoidable accidents when transporting our cylinder gases was two in Western Europe. For every million kilometers driven, this corresponds to a frequency rate of 0.29.

The number of avoidable accidents during the transport of liquefied gases was 120 in America and three in Western Europe; the frequency rate per million kilometers driven in 2019 stood at 0.17 in Western Europe.

Messer is endeavoring to reduce the number of accidents with the help of appropriate measures, including supplier management, information on defensive driving and securing loads. Messer has also created its own, modular driver training package, according to which the drivers are trained. The main topics covered by the training are:

- Statutory regulations (European and national regulations for the transport of dangerous goods by road)
- Technical aspects (hazards arising from product, vehicle and tank technology, vehicle checks, safety technology)
- Accident avoidance
- Defensive, safety-aware and cost-efficient driving

In addition, all drivers receive a manual specifically geared to their activity (bulk, bottle or service vehicles). This ensures that the drivers have all the important information about their work directly at hand at all times.

Digitization, IT security and data protection

Digitization is becoming increasingly important within Messer Industries Group. The tasks of the Group Digital Officer ("GDO") and the Group Security Officer ("GSO") are assumed by Messer Industries Group for Messer Western Europe. They implement the standards of Messer with a large number of projects and advise the central functions and national companies in these areas.

Messer Americas is constantly investigating the strategic possibilities of digitization and developing a framework concept for information services to enable the companies to grow continuously. Essential aspects that are examined in the context of this concept are business applications, technical infrastructure and Internet security as well as the management and organization of systems. Within the company applications and the technical infrastructure, applications such as SAP S/4HANA or GOLD Suite are promoted, cloud-based services are increasingly used and the efficiency in the areas of business processing, automation and data management is examined. Internet security is an integral part of risk management, while protecting sensitive data is a top priority. Our employees are therefore further sensitized to these topics through training courses. The management and organization are responsible for increasing the efficiency within the information services while ensuring excellent service at the same time.

Messer is committed to complying with the applicable data protection regulations. In order to emphasize this obligation, appropriate structures are created that are aimed at ensuring a high level of data protection at Messer on a permanent basis.

The Messer Group Privacy Officer ("GPO"), who is committed to continuing and optimizing data protection, is responsible for the strategic coordination of the central data protection department at Messer and also oversees the implementation of data protection by the national companies. Moreover, the GPO provides numerous templates and processes to ensure a uniform data protection standard.

At an HR meeting convened in the previous year, the HR managers of the national companies had already addressed the topic of "data protection" and "cybercrime". Through appropriate training, a very good understanding of these complex topics was gained and further implemented.

Environmental management

The environment must be protected in every respect and at all times. In order to meet this demand, Messer applies its global management system for environmental protection. The internal environmental protection guidelines are documented in the Messer Industries Group's SHEQ Manual. The environmental management systems of the Western European subsidiaries follow the international ISO 14001 standard, as well as recommendations of the European Industrial Gases Association (e.g. EIGA IGC Doc. 107 – Guidelines on Environmental Management Systems). In 2019, six of our subsidiaries from Western Europe had their environmental management systems certified externally.

The efficient use of energy is in Messer's own interest. Pursuing the main goal of reducing costs and conserving resources, energy management is an ongoing process that also contributes to curbing our CO_2 emissions. Our energy management system, for example, is certified according to ISO 50001 at all Messer production sites in Germany and Spain.

At its production sites, Messer uses atmospheric air and electricity as main raw materials for the production of nitrogen, oxygen and argon. Production by means of air separation plants accounts for over 75 % of total energy consumption. Consequently, particular emphasis is placed on the ongoing improvement of energy efficiency. As a result, Messer Group GmbH has commissioned a global energy manager ("GEO") specifically to increase the energy efficiency of the air separation plants. The GEO also assumes this task for the Western European companies of Messer Industries Group.

Through continuous monitoring of plant performance deviations in energy consumption can be detected and improvement potentials identified. In cooperation with local managers, projects to improve energy efficiency are continuously initiated.

Customer Satisfaction / Quality

Taking the opinions and satisfaction of our customers into account is self-evident for us as a responsible company, which is why we measure customer satisfaction in systematic surveys and integrate the results into our management processes. Customer satisfaction analyses are repeated every two years in every European national company.

In Western Europe, a customer satisfaction survey was conducted in France. The survey contacted a total of 3,600 customers in 2019. All in all, questionnaires from 303 customers were analyzed.

The results of the various surveys are summarized by region. On a scale of 1 for very dissatisfied to 10 for very satisfied, the overall performance of the Messer Industries Group in Western Europe achieved a rating of 8.0, unchanged from the previous year. All in all, the results stand at a high level. Improvement potential has been identified and implemented in France.

While no satisfaction analyses were performed in America in 2019, they are on the agenda for 2020.

Economic Report

General economic conditions

In addition to finding use in almost all industrial sectors, the various products involving industrial gases and the associated services and technologies also play a vital role in the food technology, medicine, research and science areas. Consequently, as a non-sector-specific, macroeconomic metric, gross domestic product (GDP) is a highly relevant indicator of the Messer Industries Group's performance.

The slowdown of global economic trends in 2019, which was already expected, has been more pronounced than predicted by leading economic institutes. Estimates by the International Monetary Fund (IMF)¹ and the World Bank indicate that global economic growth was down by around 0.6 % compared with 2018. According to the World Bank², real global GDP is expected to have grown by 2.4 % in 2019, down from 3.0 % in 2018. The pronounced economic slowdown was evident in developed industrialized countries, as well as in emerging and developing countries. Within developed industrialized countries, however, the slowdown in the Eurozone has been even more pronounced than in the US or South-Eastern Europe, where isolated dynamic growth was noticeable. With generally weakening level of growth, two different rates of GDP growth remain, estimated by the IMF at 3.7 % (2018: 4.5 %) for emerging and developing countries and 1.7 % (2018: 2.2 %) for developed industrialized countries for 2019.¹

In Europe, economic development in 2019 was marked by a significant slowdown in the pace of economic activity. According to the Organisation for Cooperation and Development (OECD)³, Eurozone GDP is expected to grow by 1.2 % in 2019, which would equal reduced growth momentum by a further 0.7 percentage points compared to the prior year, after slackening by 0.8 percentage points in the previous year. In this context, the continuation of tapering GDP growth in all major Western European economies such as Germany, France, Italy and Spain has to be mentioned.

In China, the GDP growth rate decelerated further in line with expectations in 2019. The World Bank projects a decline from 6.6 % in 2018 to 6.1 %. The Chinese government's aim to reduce export dependence by strengthening domestic demand with a corresponding focus on consumption and services is being further advanced, particularly in view of the intensifying trade conflict with the US. In this context, infrastructure projects are also being pushed forward by the government.

In the US, the expected slowdown in the pace of economic growth has been somewhat more pronounced than foreseen by economic institutions^{1,2}. The GDP growth rate is estimated at 2.3 % in 2019 instead of the expected 2.5 %, after an exceptionally strong 2.9 % in 2018. The slackening exceptional upswing stimulated by tax reductions, the gradual withdrawal of financial support through interest rate hikes by the end of 2018 and the intensifying trade conflict with China have left negative marks, especially in the manufacturing sector. By contrast, consumer sentiment remains at a high level, while the unemployment rate stands at a 50-year low. In Brazil, the GDP growth rate remains at a low level and is estimated by the OECD to remain at 0.8 % in 2019.

¹ World Economic Outlook, Update January 20, 2020

² Global Economic Prospects, January 2020

³ OECD Economic Outlook – Volume 2019 Issue 2

Business performance

Messer Industries Group was founded in the 2018 financial year and only commenced its economic activities with effect from March 1, 2019. Therefore, a comparison with the previous year is not possible. The first financial year of Messer Industries Group was satisfactorily concluded, generating revenues of K€ 1,687,608 and realized EBITDA of K€ 372,819.

Overall situation of Messer Industries Group

Results of operations

In the 2019 financial year, the Group generated worldwide sales of $K \in 1,687,608$ (previous year: $K \in 0$), which is distributed among the individual regions as follows:

Sales	Jan. 1 – Dec. 31, 2019	Aug. 1 – Dec. 31, 2018	Change in 2019
North America	1,142,224	_	100 %
Western Europe	296,249	-	100 %
South America	249,135	-	100 %
Total	1,687,608	-	100 %

Business activities in the various regions developed as follows:

North America

North America generated sales revenues of EUR 1,142 million. The positive development was supported by pricing and organic volume growth.

Western Europe

The sales revenues of the Western European companies amounting to EUR 297 million were mainly influenced by price increases. France, Switzerland and the Benelux companies contributed positively. The reasons for this are a successful increase in prices of bulk products in France and a favorable development of exchange rates in Switzerland. The sales revenues generated in Germany dampen the good performance of Western Europe as a whole, due to lower sales volume in the bulk sector.

South America

The South America division generated revenues of EUR 249 million, of which Brazil contributed a significant share at EUR 153 million. In the 2019 financial year, Brazil recorded sales growth in all business segments.

In the 2019 financial year, the Group achieved EBITDA of K€ 372,819 worldwide (previous year: K€ -1,825).

EBITDA	Jan. 1 – Dec. 31, 2019	Aug. 1 – Dec. 31, 2018
Operating profit / EBIT	80,215	(1,825)
Depreciation, amortization and impairment losses on intangible assets and property, plant and equipment	292,604	-
EBITDA	372,819	(1,825)
: Sales revenues	1,687,608	-
Margin:	22,1 %	-

The development of the operating result was mainly influenced by new business activities. As a negative effect, the operating result mainly includes costs of sales of K \in 871,564 (previous year: K \in 0), distribution costs in the amount of K \in 542,604 (previous year: K \in 0) and general administrative costs of K \in 169,558 (previous year: K \in 1,780).

EBITDA in the North America region amounts to EUR 250 million (EBITDA margin: 21.9 %) and was negatively impacted by transaction and unbundling costs associated with the acquisition of the Linde and Praxair activities.

Western Europe generated EBITDA of EUR 61 million, which corresponds to an EBITDA margin of 20.6 %. The reduction in the intra-group system for license and administrative fees, as well as the general improvement in the contribution margin through higher prices, has contributed positively. As a negative effect, EBITDA in Western Europe also includes corresponding transaction costs in connection with the contribution of Messer Westeuropa.

South America reported EBITDA of EUR 62 million and an EBITDA margin of 24.9 % in the 2019 financial year, which is characterized by an increase in sales volume and a solid price recovery despite cost pressure.

The financial result is burdened mainly by a negative interest result of $K \in 83,796$ (previous year: $K \in 0$). Financial debts amounting to EUR 2,526 million were mainly incurred to finance the Linde / Praxair transaction and were repaid in the amount of EUR 15 million already during the year.

In total, a consolidated net profit including the shares of other shareholders of K \in 3,209 (previous year: K \in 7,200) was achieved in the 2019 financial year. Of this amount, K \in 2,695 (previous year: K \in 7,200) is attributable to the shareholders of the parent company.

Financial position

Group Treasury is responsible for overall liquidity, interest rate and currency management. The most important objective of Group Treasury is to ensure that a minimum level of liquidity is always available to ensure solvency at all times. High levels of liquid funds help to improve our flexibility, security and independence. We can tap additional liquidity if needed through various other unused credit lines amounting to EUR 279 million (previous year: EUR 0 million).

Financing

Messer Industries Group is financed by a credit agreement with a banking consortium led by CITIBANK N.A., United Kingdom.

The loan agreement is used to partially finance the payment of the purchase price to Linde AG and Praxair Inc. for large parts of the activities put up for sale in North and South America as well as to finance the company's general financing needs.

The credit agreement contains three credit lines:

- "Facility B-1" amounting to USD 2,225 million as a long-term, fully-drawn loan with a maturity of seven years. The borrower is Messer Industries USA, Inc., Delaware. The loan will be repaid quarterly at 0.25 % of the original amount, starting on June 28, 2019. Full repayment of the balance will be made on March 1, 2026. The margin is 2.5 % p. a. or 1.5 % p. a. depending on the underlying refinancing base of the banks.
- "Facility B-2" amounting to EUR 540 million as a long-term, fully-drawn loan with a maturity of seven years. The borrower is Messer Industries GmbH. The loan is due on March 1, 2026. The margin is initially, until August 28, 2019, 2.75 % p. a. and is then subject to an adjustment mechanism based on the development of the ratio of first-class net debt to consolidated EBITDA.
- "Revolving Facility" of USD 450 million: Borrowers are Messer Industries GmbH and Messer Industries USA, Inc., Delaware, and any other company that secures the loan agreement as a guarantor. The line can be used for financing of working capital as well as for all general financing needs of the company on a revolving basis. There is no need to reduce the loan to zero at any point during the term. It is available until March 1, 2024. The margin until August 28, 2019 is 1.75 % p. a. or 0.75 % p. a., depending on the refinancing funding base of the banks, and is then subject to an adjustment mechanism based on the development of the ratio of senior net debt to consolidated EBITDA. On December 31, 2019, the facility is not utilized in the amount of EUR 279 million.

Guarantees provided by individual Group companies serve as collateral for the full amount of the financing arrangements:

Messer Industries GmbH, Messer Industries USA Inc., USA, Messer LLC, USA, Messer France S.A.S., France, Messer Canada Inc., Canada, and Messer Gases Ltda., Brazil.

The shares of the following companies are pledged to the banks: Messer Industries GmbH, Messer Industries USA, Inc., USA, Messer Gases Ltda., Brazil, and Messer France S.A.S., France.

The assets of the following companies are pledged to the banks: Messer Industries USA, Inc., USA, Messer Canada Inc., Canada, and Messer LLC, USA. The carrying amount of the companies' property, plant and equipment amounts to K€ 1,291,723.

The bank accounts of the following companies are pledged to the banks: Messer Industries GmbH, Messer Gases Ltda., Brazil, Messer France S.A.S., France and Yeti GermanCo 3 GmbH with a total carrying amount of K€ 157,159.

The receivables of the following companies are pledged to the banks:

Messer Gases Ltda., Brazil, and the intercompany receivables of Yeti GermanCo 3 GmbH, Messer Industries GmbH and Messer France S.A.S., France. The carrying amount of the pledged receivables amounts to K€ 58,412. Intercompany receivables with a nominal value of K€ 366,319 are also pledged.

As of December 31, 2019, net debt was K€ 1,948,833 (previous year: K€ -124) and is calculated as follows:

	Dec. 31, 2019	Dec. 31, 2018	Change in 2019
Financial debt	2,526,255	_	
Cash and cash equivalents	(577,422)	(124)	
Net debt	1,948,833	(124)	157.17 %

Messer Industries Group's net debt increased by $K \in 1,948,957$ in 2019 compared to the previous year. The ratio of existing financial debt ($K \in 2,526,255$) to total assets ($K \in 5,334,726$) stood at 47.4 % in 2019 (previous year: 0 %).

The change in gross financial debt is shown below:

Balance of gross financial debt as of January 1, 2019	-
Cash-relevant changes:	
New debt raised	2,525,907
Capitalized financing costs	(74,727)
Repayments	(25,267)
Non-cash-relevant changes:	
Additions to leasing liabilities	7,385
Changes due to currency translation	(3,288)
Change in scope of consolidation	91,154
Capitalized financing costs	5,091
Balance of gross financial debt as of December 31, 2019	2,526,255

Cash flow statement

The cash flow statement is as follows:

Short version in K€	Jan. 1 – Dec. 31, 2019	Aug. 1 – Dec. 31, 2018
Profit before taxes	(3,761)	7,200
Cash flow from operating activities	414,310	12
Cash flow from investing activities	(2,723,654)	-
Cash flow from financing activities	2,888,751	112
Changes in cash and cash equivalents	579,407	124
Cash and cash equivalents		
at the beginning of the period	124	-
Exchange rate impact on cash and cash equivalents	(2,109)	-
at the end of the period	577,422	124

The cash flow from operating activities was recorded at K€ 414,310 and reflects the operating results of the first financial year.

The development of cash flow from investing activities was impacted by the acquisition of the new business activities. Investments in participations and other non-current assets account for K€ 2,501,285 and investments in property, plant and equipment and intangible assets account for K€ 249,420.

The cash flow from financing activities shows a total cash inflow of K€ 2,888,751 (previous year: K€ 112). Deposits from long-term and short-term financial debts, mainly to finance new business activities, amounted to K€ 2,525,907 (previous year: K€ 0). Transaction costs and interest paid for the financing resulted in a cash outflow of K€ 74,727 (previous year: K€ 0) and K€ 95,125 (previous year: K€ 0).

As of December 31, 2019, liquid funds of Messer Industries Group amounted to K€ 577,422.

Also in the 2020 financial year, we will need additional capital to finance the steadily growing operating business, to carry out investments as planned, to repay loans and for interest as well as for tax payments. The medium-term planning continues to focus on the consolidation of net debt of our business activities in the USA. The funds will be generated out of cash flow from operating activities, available cash and unutilized credit lines.

The Messer Industries Group has committed to invest in the acquisition, construction and maintenance of various production facilities. Obligations under these agreements represent commitments to purchase plant and equipment at market prices in the future. Messer Industries Group is also party to long-term contracts which give rise to obligations. As of December 31, 2019, the commitments from orders and investment projects as well as long-term contracts amounted to K€ 325,469 (previous year: K€ 0).

Capital expenditure

Capital expenditure continues to be focused on safeguarding existing business and opening up attractive growth opportunities. In accordance with normal business principles, we invest primarily in projects that will secure supply capabilities and / or which offer opportunities for profitable growth. Furthermore, regular investments are made in the modernization of production plants and distribution channels.

Investments by the entire Messer Industries Group are explained below.

Messer Industries Group made investments in intangible assets and property, plant and equipment in the amount of around EUR 249 million. The investment ratio measured in terms of total sales corresponds to 14.8 % (previous year: 0.0 %).

Capital expenditure by region was as follows:

Capital expenditure in K€		Aug. 1 – Dec. 31, 2018
North America	179,190	-
Western Europe	52,501	-
South America	17,729	-
Total	249,420	-

In North America, investments in intangible assets and property, plant and equipment mainly related to the construction of a carbon dioxide plant in Keyes, California, USA, new air separation plants ("LZA") in Claymont, Delaware, USA and Indianapolis, Indiana, USA, as well as the investment in a joint operation in Glenmont, New York, USA. In addition, investments were made in sales equipment and maintenance, and investments were made to increase productivity.

Of the investments amounting to EUR 52.5 million in Western Europe, EUR 27 million are related to large-scale plant projects and EUR 25.5 million to operational business. The largest projects are the new air separation plant in Speyer (EUR 20.6 million), which is due to go live in August 2020, and the hydrogen plant in Castrop-Rauxel, which went into operation at the end of 2019. Investments in the operational area mainly relate to the inventory of cylinders (EUR 6.8 million), the vehicle fleet and investments in customer business (EUR 18.7 million).

In South America, investments totaling EUR 18 million were made in relation to the operational business and the maintenance of existing plants.

Net assets

The balance sheet total increased by K€ 5,317,071 in the reporting year and amounted to K€ 5,334,726 as of December 31, 2019. This was largely due to the addition of the assets of the companies acquired from Linde in the USA, Canada, Brazil and Colombia, the Praxair company in Chile and the incorporated Western European companies.

Non-current assets accounted for the largest share of total assets at 78.3 % (previous year: 0 %).

The largest item on the assets side, with 77.3 % of total assets, is fixed assets (property, plant and equipment, right-of-use assets and intangible assets), which rose by K€ 4,125,777 over the previous year. The increase resulted mainly from investments in the current financial year and from the addition of Western European, North American and South American business activities, as well as the purchase price allocation that led to disclosing hidden reserves.

The equity ratio (including minority interests) amounts to 24.6 % (previous year: 41.4 %).

Gross financial debt amounted to K€ 2,526,255 in the financial year and accounted to 47.4 % of total assets. We refer to our comments in the section on the Group's financial position.

Operating assets

Net working capital comprises the following:

Operating assets	Dec. 31, 2019	Dec. 31, 2018
Inventories	184,521	-
Trade receivables	276,407	1
Trade payables	(215,231)	(625)
Advance payments received	(18,583)	-
	227,114	(624)

The increase in operating assets by K€ 227,738 is attributable to the addition of the assets of the companies acquired from Linde in the USA, Canada, Brazil and Colombia, the Praxair company in Chile and the incorporated Western European companies.

The ratio of inventories (less down payments received) and trade receivables to trade payables is around 2:1. The ratio of business assets to sales revenues is 13.5 % (previous year: 0.0 %).

DSO (Days Sales Outstanding) is 59 (previous year: 0).

Overall statement on the Group's economic situation

Messer Industries Group's first financial year ended with sales revenues of K€ 1,687,608. The business activities in North America acquired from Linde made a significant contribution to this in the amount of K€ 1,142,224.

The EBITDA margin was recorded at 22.1 % in financial year 2019 (previous year: 0.0 %) and EBITDA was around EUR 373 million (previous year: EUR -2 million). The significant change compared to the previous year is due to the fact that the Group only started its economic activities on March 1, 2019.

Net debt rose strongly in the financial year 2019 by K€ 1,948,957 due to the financing of payment of the purchase price to Linde AG and Praxair Inc., USA. We refer to our comments in the section "Financing".

Messer Industries Group made investments in intangible assets and property, plant and equipment in the amount of around EUR 249 million. These concern mainly new plants and investments for the operational business.

The overall satisfactory business development is in line with expectations that were formed as part of the acquisition of the new business activities. Messer Industries Group has a global presence with its three main regions of Western Europe, North America and South America and is well diversified regionally in a large number of countries within these three core regions, so that restrained demand in individual markets or specific industry weaknesses can often be compensated for.

Forecast Report

On January 30, 2020, the World Health Organization (WHO) identified the coronavirus (COVID-19) as a public health risk and on March 11, 2020 declared the coronavirus epidemic a "pandemic".¹ The impact on the global economy is difficult to assess at present. Based on current scenarios, the for Economic Cooperation and Development (OECD) expects global growth to slow to around 1.25 %.² Due to the rapid development and the associated high level of uncertainty, we cannot reliably estimate the financial impact on our business activities. Accordingly, the following prognostic information does not take into account any possible effects of the coronavirus pandemic.

Macroeconomic development

A preliminary easing of the trade conflict between the United States and China, the renewed or continued, more expansive monetary policy by global central banks and the likely avoidance of a disorderly "Brexit" has caused leading economic institutes to believe that the nadir of weakening global growth dynamics has already been reached in 2019. With a look to 2020 and 2021, a moderate revival of the growth dynamics of global GDP is expected, which, however, no longer holds the prospect of reaching past levels of well over 3 %. For example, the World Bank³ or the International Monetary Fund (IMF)⁴ expect global GDP growth for 2020 of 2.5 % to 3.3 % compared to an expected 2.4 % to 2.9 % in 2019. The revival of global economic dynamics is largely expected from a once again growing GDP of the emerging and developing countries, whereas GDP growth rates of the developed industrialized countries will stabilize at best at a lower level. With regard to 2020, the IMF forecasts GDP growth of 1.6 % overall for developed industrial countries, after an expected 1.7 % in 2019, but GDP growth of 4.4 % for the emerging and developing countries, following on from 3.7 % in 2019. With regard to China it is expected that the ongoing transformation process to strengthen domestic demand through consumption and services, which is not dependent on exports, will lead to a continuation of the trend of slackening growth, albeit at a slower rate. IMF and World Bank expect GDP growth of 5.9 % to 6.0 % in 2020 compared to an estimated 6.1 % in 2019, as long as the trade conflict with the USA does not intensify. For the United States, the ongoing trade conflicts and import duties, as well as political uncertainties, are expected to weaken GDP growth despite a moderate interest rate level. The economic research institutes^{3,4} still expect a GDP growth rate of 1.8 % to 2.0 % for 2020 compared to an estimated 2.3 % for 2019. According to the World Bank, more favorable financing conditions and the implementation of economic policy reforms should lead to a moderate revival of economic growth in Brazil in 2020 with a GDP growth rate of 2.0 %.

The World Bank and IMF once again stress the significant forecast risks in their statements for 2020, which are seen above all in the intensifying nationalist tendencies and an escalation of global trade disputes. In addition, economic downturns from the current coronavirus pandemic, which are not included in the forecasts, may occur.

¹ WHO, Rolling Update 11. März 2020: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen

² BMWi, 20. März 2020: https://www.bmwi.de/Redaktion/DE/FAQ/Coronavirus/faq-coronavirus-01.html

³ Global Economic Prospects, January 2020

⁴ World Economic Outlook, Update January 20, 2020

Outlook of Messer Industries Group

The outlook for North America anticipates an increase in sales revenues by 5 % and of EBITDA by 6 % in the 2020 financial year. The commissioning of large plants will contribute to this development, such as the new carbon dioxide plant in Keyes, California, USA and the two new air separation plants in Claymont, Delaware, USA, which will replace the previous plants and increase the supply capacity.

In Western Europe, an increase in sales revenues of 5 % and a rise in EBITDA of 7 % is expected for the coming financial year. The main growth driver will be the commissioning of the new air separation plant in Speyer in the second half of 2020. In addition, further efforts to raise prices will contribute to growth despite the simultaneous rise in energy costs.

Our South American operations plan to increase sales by 4 % and EBITDA by 5 %, assuming continued sales growth in Brazil and intensified efforts for the pricing structure in Colombia.

The developments of the most important financial performance indicators of Messer Industries Group are planned for the following year as follows:

	2020 vs. 2019
Sales	Slightly rising
EBITDA	Slightly rising
Capital expenditure	Slightly rising
Net debt	Slightly rising

The negative effects of the current coronavirus pandemic have not been taken into account in the planning for 2020, as the extent of these cannot yet be reliably quantified. For the current financial year, we presently expect noticeable impairments in various areas of industrial gas demand, with a corresponding impact on sales revenues and EBITDA of Messer Industries Group.

Overall conclusion

In conducting our planning, we assumed that growth momentum in North America will decline in 2020. With regard to South America we expect a slight increase in market growth. In Western Europe, the overall forecast assumes a slight slackening of economic growth, while industrial manufacturing will, however, show slight growth. Overall, the global framework would still appear to be positive, but includes increasing risks and uncertainties in meeting the forecast of economic development. Risks or uncertainties that may affect the global economic situation relevant to Messer Industries Group are mainly based on the slowdown of global growth due to the coronavirus pandemic, global trade conflicts and increasing nationalistic trends worldwide, as well as the still unclear effects of "Brexit" for Europe. These potentially adverse factors could also be accompanied by unforeseeable negative news from current trouble spots, particularly the North African and Arab region.

Messer Industries Group continues to see itself well positioned to face the challenges ahead, but is generally cautious in terms of its short-term expectations.

Future investment decisions are made in line with the commensurate development of net debt of Messer Industries Group. The investment activities appropriate to this objective are selectively carried out to support a solid long-term earnings development of Messer Industries Group. There is currently an increasing number of investment opportunities in Spain and America.

Forward-looking assertions

The Forecast Report contains forward-looking assertions which are based on the management's current appraisal of future developments. These assertions are not to be interpreted as a guarantee that these expectations will in fact be met. Future business performance and earnings of Messer Industries Group are dependent upon a number of risks and uncertainties and may therefore diverge significantly from the forward-looking assertions made here.

Opportunities Report

As an international supplier of industrial gases, opportunities arise for Messer Industries Group from the multifaceted utilization of industrial gases in manufacturing products needed in all fields of life and in all countries of the world. With our investments, we seize suitable opportunities to realize new business potential and to maintain our market position or to expand it.

Specifically, the following opportunities in particular can be of significant importance for business development as well as net assets, financial position and results of operations:

Macroeconomic opportunities

The general economic environment plays an important role for our operations, our financial and earnings position as well as our cash flow. Our forecast for 2020 is based on the expectation that future macroeconomic conditions correspond to the description provided in the Outlook Report section of the management report. Should the global economy as a whole or in regions, resp. countries, relevant to our business develop better than shown in this forecast, our sales revenues and earnings could exceed the forecast.

Market opportunities

In our planning, we expect moderate market growth. A slight increase in market growth is expected for Brazil and Colombia. A sharp economic upswing could have a positive impact on revenue and earnings.

We anticipate slow growth in Europe and declining growth in the United States. A faster economic recovery in specific countries or a general economic upturn could have a positive impact on revenues and earnings.

Opportunities arising from industrial gases applications

Our products are used worldwide in a variety of production processes. In the field of application technology, Messer Industries Group continuously analyzes multifaceted processes in order to facilitate more efficient manufacturing processes for our customers through the use of industrial gases. New applications identified in this way may open up new business opportunities which could have a positive impact on revenue and earnings.

Opportunities arising from optimization measures

Where necessary, Messer Industries Group implements targeted optimization measures to support business performance. If various measures are implemented more quickly or more successfully, this could have a positive impact on revenue and earnings.

Opportunities through our employees

Messer Industries Group promotes idea management throughout the Group, to which our employees can contribute cross-border improvement proposals. In addition, targeted development of potential and use of our employees is supported by systematic personnel development programs and training offers. If we achieve better progress with these measures and methods than currently expected, this could have a positive impact on revenue and earnings.

Risk Report

As an international supplier of industrial gases, we are basically faced with risks that are inextricably linked to entrepreneurial activity. In addition to fluctuating demand for industrial gases and related products, future earnings development is also dependent on economic trends in individual countries which are beyond Messer Industries Group's control.

In particular, the following risks may adversely affect business development as well as net assets, financial position and results of operations:

Macroeconomic risks

The industrial gases business is subject to intense competition. The level of competition is increasing in conjunction with the process of globalization. This highly competitive environment could reduce Messer's earnings and cash flow in the future. Messer Industries Group operates globally, making it susceptible to local political, social and economic conditions and to the resulting risks arising in each market.

Market risks

We supply a wide range of industries and sectors (including steel production and metal processing, the chemical industry, the petrochemical, food and beverage sectors, as well as healthcare and the glass industry) on the basis of long-term supply contracts with a duration of up to 15 or 20 years in Europe or America. A significant reduction in market demand in any one of these key industries or sectors – particularly given the prevailing critical situation in the steel industry which is suffering from worldwide over-capacity – could adversely affect future earnings. We are currently classifying market risks as medium, and we are aware that with the entry of Messer into the American market, we may also be affected by any massive measures in the wake of a re-escalating trade conflict between the US and China in the future.

Health risks

We supply a wide range of industries that are now producing globally to a large extent. These global supply chains can be severely disrupted by infectious diseases in major manufacturing countries or a pandemic. In view of the current coronavirus epidemic in China and the resulting pandemic, we consider the corresponding risk of temporary economic impairment to be very high. With regard to health systems that are already well developed in large parts of the world, we classify the long-term economic risk in the medium risk category.

Cost risks

Regulatory or government-initiated changes or interventions in the energy sector can lead to rising energy prices in individual countries. The recurring crisis situations in oil-producing countries and the increasing energy demand of emerging countries, especially in China and India, tend to lead us to expect rising oil and energy prices with the corresponding impact on prices of the process materials as well as on the precursors required by Messer Industries Group. Purchasing prices for individual important products, such as helium, vary widely. Although Messer Industries Group can often pass on part of the cost increases to its customers through price sliding clauses in the supply contracts (especially electricity price increases) or mitigate them through long-term procurement contracts, price increases in energy and external procurement costs can weigh on the profitability of Messer Industries Group. We currently consider the cost risks to be high.

Selling price risks

The intense competition may lead in certain countries to disproportionate downward price trends which could have a negative impact on future revenues and earnings. We currently classify selling price risks as medium to high.

Operational risks

An operational interruption at our production facilities can lead to delivery failures for our customers. We endeavor to avoid this situation by regularly maintaining and monitoring our equipment. In the event of damage, we have emergency and contingency plans as well as tools in place to mitigate the financial consequences of an operational interruption for our customers. Messer Industries Group is working to improve the supply strength or flexibility in such a way that the security of supply of its customers is guaranteed even in emergency situations. The range and quality of our service depend on the availability of purchased hardware parts or production equipment used (e.g. cylinders and tanks) as well as the quality of service by suppliers and business partners. We currently classify operational risks as medium.

Acquisition risks

Messer Industries Group continues to develop strategically. As well as expanding and strengthening our existing business and continually optimizing our sourcing and logistics processes, we are intent on achieving growth both organically and through other means such as acquisitions and joint ventures. Our aim is to consolidate operations on existing markets and to divest non-core business operations. The sale of entities or business activities can, however, result in retrospective risks for the Group. Appropriate provision is recognized if a risk is probable. When deciding to make acquisitions or entering into new partnerships there is always a risk that future market potential and the feasibility of projects being put into action may have been wrongly predicted. Messer Industries Group therefore has internal committees which analyze the development potential of a project prior to its approval and work through any information that has a bearing on decisions which need to be made. In order to be as certain as possible that M&A projects have future development potential, due diligence investigations are carried out by experienced staff in specialist departments before any acquisitions are made in connection with M&A projects. Risk is also reduced by including relevant terms of agreement in purchase contracts. We currently classify acquisition risks as medium.

IT risks

The use of state-of-the-art information technology plays a decisive role in handling and securing business processes within Messer Industries Group. Our IT center situated in Germany provides the scope to create a modern and efficient infrastructure and to improve our business processes where necessary. This concentration does, however, mean that there is a greater risk of business interruption, cyber criminality and sabotage, caused by natural hazards or human error. In order to avoid this risk, our IT center applies its own IT risk management system, including ongoing testing of the system architecture. Particular attention is paid to the provision of IT infrastructure and services. Especially fail-safe and interference-free operations will be ensured. The integrity and confidentiality of data and important information are ensured through appropriate measures, services and systems. Most of Messer Industries Group's business processes are carried out by internal and external IT services. The security and compliance of the information systems are set out in the IT strategy objectives. On this basis, Messer Group GmbH constantly designs, implements and reviews measures to protect data, applications, systems and networks. This process takes both preventive and corrective measures into account. We currently classify IT risks as medium.

Financial risks

We also need debt capital for our growth and investments. We are dependent on a stable and, in particular, liquid financial sector. Messer Industries Group relies on cash from current business activities to settle borrowing obligations. This depends to a large extent on a positive operating cash flow.

The group has recognized goodwill. The application of IAS 36, i.e. carrying out impairment tests, may require goodwill to be written down if the market and business prospects of a subsidiary or associated company or of a cash-generating unit significantly deteriorate compared to the original valuation. In the event of necessary impairments, there may be significant negative strains on earnings and impacts on the balance sheet ratios. During planning, discernible uncertainties were taken into account by means of corresponding value adjustments on receivables and adjusted business assumptions.

In connection with financial or debt crises, worldwide economic collapses or slowdowns can occur. Messer Industries Group will closely monitor current developments in order to counteract with cost and investment saving programs if necessary. The possibly deteriorating creditworthiness of our customers implies the risk of bad debts as well as the delay of joint projects.

We need to make sure to comply with the assurances given in the loan agreement. In Messer Industries Group, financial risks can also arise from changes in exchange rates and interest rates. The management of interest rate, currency and liquidity risks is handled by the central finance department ("Group Treasury") based on the guidelines specified by management. Group Treasury determines and evaluates the financial risks and hedges against them. Messer Industries Group currently uses standard currency forwards and interest rate swaps as well as cross currency interest rate swaps as hedging instruments. The Treasury guidelines contain principles for general risk management as well as individual regulations in certain areas, such as exchange rate risk, interest rate risk, the use of derivative financial instruments and the investment of excess liquidity. The risks are constantly monitored and the scope of protection adjusted if necessary. We currently classify the impact of financial risks in a relevant extent as low to medium.

Currency risks

We largely hedge transaction risks that may arise when products are exported at the time of receiving an order. In the operational area of Messer Industries Group, the individual group companies mainly carry out their activities locally in their functional currency. The overall currency risk from transaction risks is therefore assessed as low. A number of group companies are, however, exposed to foreign currency risks in connection with operational transactions which are not denominated in their own functional currency. These mainly concern payments for product or service imports and are secured as far as possible. Like all market participants, we can be unexpectedly faced with the appreciation of a functional currency that weakens the country's international export competitiveness and our local activities. Translation risks which may arise when converting foreign currency exposures into Euro are classified as customary for the business. Exchange rate losses against the Euro can lead to a reduction in Group equity as a result of valuing our foreign currency-denominated net asset positions in the relevant countries. We currently classify currency risks as low.

Legal and contractual risks

Enterprises are confronted from time to time with allegations that they have infringed industrial rights or legal obligations, that defective products have been supplied or that environmental protection laws have not been adhered to. Regardless of their prospects of success, this type of claim can result in very high defense costs. In cases like these, Messer Industries Group defends itself energetically with the support of both in-house and external experts.

Our business activities in many countries are subject to country-specific environmental laws and regulations, for example on air emissions, groundwater pollution, use and treatment of dangerous substances as well as soil analysis and detoxification. This can give rise to liability risks in conjunction with either past or current operations. New environmental requirements, partially resulting from the adoption of EU directives in the new EU Member States, necessitate that our existing environmental standards are brought from time to time into line with the new requirements. This may result in higher production costs and modifications to the production process. The recent past shows, however, that the implementation of stricter environmental regulations often results in a more efficient production process and a higher quality product. We currently classify legal and contractual risks as medium.

Overall conclusion

The above-mentioned opportunities show that both internal and external potentials are involved. We endeavor to develop in-house potential on a targeted basis and will put external potential to good use whenever the opportunity arises. The risks presented above are not the only ones to which Messer Industries Group is exposed. Some risks, which have not yet been identified or which are not considered to be significant from today's perspective could have an adverse impact on Messer Industries Group if general business or economic conditions were to change. However, no risks were identified in 2019 either individually or in aggregate, which could have a material adverse impact on the going-concern status of Messer Industries Group. According to the current state of knowledge, these are no threats also in the foreseeable future. The main operational risks in the reporting period remain in the areas of market development and production. Organizational measures are in place to identify potential risks at an early stage. Our vigilant risk management system (described below) and pro-active management of risks enable us to reduce risk.

Risik management

The principles that dictate our approach to risk management are stipulated by the Executive Management. Risk management is directed at safeguarding the going-concern status of group entities and increasing the value of the business; for this reason, it plays a crucial role in all decision-making and business processes. The existing management structure and the reporting processes which are in place throughout Messer Industries Group ensure that not only developments that could jeopardize its going-concern status are reported regularly and in good time to the relevant levels, but also that other developments which pose a threat to the achievement of short-term performance targets (such as EBITDA or cash flow) are reported. This allows management to initiate measures at an early stage to mitigate any operating and / or financial risks. Risk managers have been designated at each of the subsidiaries with responsibility for ensuring the proper functioning of local reporting systems.

Messer Industries Group has taken out adequate insurance for potential damage and liability risks, which ensure that the possible financial consequences of occurring risks are kept within limits or are completely excluded. The scale of insurance coverage is continuously optimized in response to the specific situation of group companies.

The Group's Safety, Health, Environment, Quality (SHEQ) department continues to carry out audits and risk analyses in order to reduce the accident ratio even further.

State-of-the-art technologies are employed in the IT area in order to keep the risk from electronic data processing to a minimum. Unauthorized access to data and systems and a significant loss of data are ruled out to the greatest extent possible. The efficiency, operational availability and reliability of systems are constantly being monitored and improved. Messer's security concept also includes a detailed emergency plan. In order to minimize risks, the various technologies employed by the Messer Industries Group are regularly tested to ensure that IT-based business processes are safe.

Tax laws and competition regulations can also give rise to business risks. In order to mitigate these risks, the Company relies upon the advice of both in-house and external experts.

Income and operating cash flow are, to a large extent, unrelated to market interest rates, since the Group does not hold any significant interest-bearing assets. At the balance sheet date, derivative financial instruments had only been entered into with renowned international financial institutions.

Messer's Corporate Governance contains a large number of requirements and measures to prevent risks from occurring. The risk management of Messer Industries Group first and foremost includes a risk assessment. This risk assessment is conducted by the Group's corporate departments for the respective areas of responsibility and by each consolidated subsidiary for its own business. The assessment of risks is updated each year. The reports on this are channeled centrally to the Corporate Compliance Officer ("CCO") in America and Western Europe. The Compliance Department is managed by Messer Group GmbH for Western Europe. Training is organized and carried out as appropriate to cover identified risk areas and to highlight best practice for avoiding the occurrence of a risk as far as possible. Messer has issued binding compliance guidelines for its companies. These include in particular the Code of Conduct and the Group Guidelines. All managers of the first and second management levels of Yeti GermanCo 1 GmbH and its consolidated subsidiaries have confirmed receipt, knowledge of the content and compliance with the regulations contained therein. Furthermore, all employees have been informed of the content relevant to them and have also confirmed compliance. Management and staff are regularly informed about, and receive training on, the content of these guidelines, other policies and code of conduct rules.

On the basis of a matrix structure, the Compliance department cooperates closely with the SHEQ, Medical, IT, Audit, Legal and Insurance departments. Incidences of non-compliance are followed up and the appropriate actions taken where necessary. At the same time, any such incidences are used to reflect on how additional preventive measures could reduce the risk of non-compliance in the future.

Events after the end of the reporting period

The World Health Organization (WHO) has classified on January 30, 2020, the coronavirus (COVID-19) as a public health risk. The virus has recently developed into a pandemic with global effects, the full extent of which is not yet known or cannot be fully estimated. The measures to contain the pandemic are leading worldwide to temporary restrictions in everyday life and thereby also business life. At the present time, we expect noticeable impairments in various areas of industrial gas demand for the current financial year, which cannot be quantified sufficiently yet. The industrial gases business is local, there is no direct dependence on global supply chains and we do not expect any significant increases in costs due to staff shortages.

After December 31, 2019, there were no other reportable events of particular importance for the Group's net assets, financial position and results of operations.

Bad Soden/Taunus, April 9, 2020

Yeti GermanCo 1 GmbH

CONSOLIDATED FINANCIAL STATEMENTS OF YETI GERMANCO 1 GMBH 2019

Consolidated Balance Sheet

of Yeti GermanCo 1 GmbH, Sulzbach/Taunus, as of December 31, 2019 (in K€)

Assets	Notes	Dec. 31, 2019	Dec. 31, 2018
Goodwill	15	655,901	1
Right-of-use assets	15	84,182	_
Other intangible assets	15	1,162,332	_
Property, plant and equipment	16	2,223,363	_
Investments recognized using the equity method	17	5,894	_
Investments in other companies and financial investments	18; 19	1,494	_
Deferred tax assets	12	6,323	_
Other non-current financial assets		37,364	_
Non-financial assets		1,357	-
Non-current assets		4,178,210	1
Inventories	21	184,521	_
Trade receivables	22	276,407	1
Current income tax assets	12	20,926	_
Other current financial assets	24	42,319	17,406
Non-financial assets	24	54,921	123
Cash and cash equivalents	25	577,422	124
Current assets		1,156,516	17,654
Total assets		5,334,726	17,655

Consolidated Balance Sheet

of Yeti GermanCo 1 GmbH, Sulzbach/Taunus, as of December 31, 2019 (in K€)

Equity and liabilities	Notes	Dec. 31, 2019	Dec. 31, 2018
Subscribed capital	30	30	25
Capital reserves	30	1,329,973	75
Other reserves	30	-	_
Revenue reserves	30	4,298	7,200
Other components of equity	30	(28,357)	(1)
Equity attributable to shareholders of the parent company		1,305,944	7,299
Non-controlling interests	30	4,195	12
Equity		1,310,139	7,311
Provisions for employee benefits	26	49,708	_
Other provisions	27	51,067	_
Non-current financial debt	28	2,502,734	_
Deferred tax liabilities	12	529,505	_
Non-current liabilities		3,133,014	-
Other provisions	27	26,859	_
Current financial debt	28	23,521	-
Trade payables		215,231	625
Current income tax liabilities	29	283,166	-
Other current financial liabilities	29	33,176	8,600
Non-financial liabilities	29	309,620	1,119
Current liabilities		891,573	10,344
Equity and liabilities		5,334,726	17,655

Consolidated Income Statement

of Yeti GermanCo 1 GmbH, Sulzbach/Taunus, for the period from January 1 to December 31, 2019 (in K€)

	Notes	Jan. 1 - Dec. 31, 2019	Aug. 1 - Dec. 31, 2018
Revenues	4	1,687,608	_
Cost of sales	5	(871,564)	-
Gross profit		816,044	_
Distribution and selling expenses	6	(542,604)	_
Impairment loss from trade receivables and contract assets	32	(4,026)	_
General administrative expenses	7	(169,558)	(1,780)
Other operating income	8	28,637	_
Other operating expenses	9	(48,278)	(45)
Operating profit		80,215	(1,825)
Income from investments in companies accounted for using the equity method	17	326	_
Other investment result, net		(668)	_
Interest income	10	11,906	_
Interest expense	10	(95,702)	_
Other financial result	11	162	9,025
Financial result, net		(83,976)	9,025
Profit before taxes		(3,761)	7,200
Income taxes	12	6,970	_
Profit after tax		3,209	7,200
Group net profit for the year		3,209	7,200
of which attributable to:			
shareholders of the parent company		2,695	7,200
non-controlling interests		514	-

Consolidated Statement of Comprehensive Income

of Yeti GermanCo 1 GmbH, Sulzbach/Taunus, for the period from January 1 to December 31, 2019 (in K€)

	Jan. 1 – Dec. 31, 2019	Aug. 1 - Dec. 31, 2018
Group net profit for the year	3,209	7,200
Items which were or may be reclassified to profit or loss		
Change in translation adjustments relating to foreign subsidiaries	(26,766)	(1)
of which: Reclassifications of currency translation differences in conjunction with deconsolidations	-	_
Result from the net investment in a foreign business entity	6,708	_
Deferred taxes	(1,683)	_
Derivative financial instruments		
Change in fair value of derivatives employed for hedging purposes ¹	(9,367)	_
Reclassification to income statement	-	_
Deferred taxes	2,781	_
From associated companies accounted for using the equity method	-	_
	(28,327)	(1)
Items which will never be reclassified to profit or loss:		
Remeasurement of net defined benefit obligation for pension plans and other employee benefits		
Change in remeasurement of the net defined obligation for pension plans	(7,735)	_
Deferred taxes	2,138	-
	(5,597)	-
Other comprehensive income	(33,924)	(1)
Total comprehensive income for the year	(30,715)	7,199
of which attributable to:		
shareholders of the parent company	(31,258)	7,199
non-controlling interests	543	-

¹ gains / losses on financial instruments in effective hedging relationships

For further explanations on equity, see the following Consolidated Statement of Changes in Equity and item 30 "Equity" of the notes to the consolidated financial statements.

Consolidated Statement of Changes in Equity

of Yeti GermanCo 1 GmbH, Sulzbach/Taunus, for the 2019 financial year (in K€)

		Reserves Other components of equity		luity					
	Subscribed capital	Capital reserves	Revenue reserves	Currency translation reserve	Hedging reserve	Result from net investment	Equity attributable to shareholders of the parent company	Non- controlling interests	Total Equity
As of Aug. 1, 2018	_	-	-	_	_	_	_	-	-
Group net profit for the year	-	-	7,200	-	-	-	7,200	-	7,200
Other comprehensive income	_	-	_	(1)	-	-	(1)	_	(1)
Total compre- hensive income	-	-	7,200	(1)	-	_	7,199	-	7,199
Transfers to / from reserves	-	_	_	_	_	_	_	-	-
Dividends paid	-	_	-	-	_	-	-	-	-
Share capital increase	25	75	-	-	-	-	100	-	100
Capital reduction	_	-	-	-	-	-	-	-	-
Additions / disposals of non- controlling interests	-	-	-	-	-	-	-	12	12
Balance at Dec. 31, 2018	25	75	7,200	(1)	_	_	7,299	12	7,311
Balance at Jan. 1, 2019	25	75	7,200	(1)	_	_	7,299	12	7,311
Group net profit for the year	-	_	2,695	_	_	_	2,695	514	3,209
Other comprehensive income	_	_	(5,597)	(26,795)	(6,586)	5,025	(33,953)	29	(33,924)
Total compre- hensive income	-	-	(2,902)	(26,795)	(6,586)	5,025	(31,258)	543	(30,715)
Transfers to / from reserves	_	_	_	_	-	-	_	_	-
Dividends paid	-	_	_	-	-	-	-	-	-
Share capital increase	5	1,329,898	_	-	-	-	1,329,903	-	1,329,903
Capital reduction	-	-	-	-	-	-	-	-	-
Additions / disposals of non- controlling interests	-	-	-	-	-	-	-	3,640	3,640
Balance at Dec. 31, 2019	30	1,329,973	4,298	(26,796)	(6,586)	5,025	1,305,944	4,195	1,310,139

For further explanations on equity, see item 30 "Equity" of the notes to the consolidated financial statements.

Consolidated Cash Flow Statement

of Yeti GermanCo 1 GmbH, Sulzbach/Taunus, for the 2019 financial year (in K€)

	Notes	Jan. 1 – Dec. 31, 2019	Aug. 1 - Dec. 31, 2018
Group profit before tax		(3,761)	7,200
Income taxes paid		(88,311)	_
Depreciation, amortization and impairment losses on property, plant and equipment and intangible assets	15; 16	292,604	_
Losses / (gains) on disposal of fixed assets		(2,516)	_
Changes in investments in associated companies	17	(326)	-
Interest result	10	83,796	_
Other non-cash financial result	11	(24,953)	(9,021)
Changes in inventories		23,793	_
Changes in receivables and other assets		85,728	(123)
Changes in provisions		9,986	_
Changes in trade payables and other liabilities		38,270	1,956
Cash flow from operating activities		414,310	12
Purchase of property, plant and equipment and intangible assets		(249,420)	_
Purchase of investments and other non-current assets		(2,501,285)	_
Proceeds from the acquisition of subsidiaries		-	_
Proceeds from disposals of property, plant and equipment and intangible assets		17,240	_
Disbursement from disposals of subsidiaries and loans		(323)	_
Interest received		10,134	_
Cash flow from investing activities		(2,723,654)	-
Changes in capital by shareholders of Yeti GermanCo1 GmbH		557,883	100
Proceeds from non-current financial debt		2,525,732	_
Proceeds from current financial debt		175	
Repayments of non-current financial debt		(15,692)	_
Repayments of current financial debt		(187)	_
Payments of leasing liabilities		(9,388)	_
Transaction costs		(74,727)	_
Acquisition of minority interests		-	12
Interest paid		(95,125)	_
Other financial result		80	_
Cash flow from financing activities		2,888,751	112
Changes in cash and cash equivalents		579,407	124
Cash and cash equivalents at the beginning of the period		124	_
Exchange rate impact on cash and cash equivalents		(2,109)	_
at the end of the period		577,422	124

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS OF YETI GERMANCO 1 GMBH 2019

1. General Information

Yeti GermanCo 1 GmbH ("Company") is a holding company with business address Messer-Platz 1, 65812 Bad Soden/Taunus, and is based in Sulzbach/Taunus, Germany, registered at the district court of Frankfurt am Main under number HRB 111626. Messer Industries Group ("Group") produces and sells industrial gases (especially oxygen, nitrogen, argon, helium, carbon dioxide, hydrogen and rare and high-purity gases), processes for their use and systems located on the customer's property (on-site plants) for gas production. The main customers of Messer Industries Group include important companies from the manufacturing, chemical, steel-producing and pharmaceutical industries as well as the food industry and waste management.

Yeti GermanCo 1 GmbH was founded as a joint venture company by Messer Group GmbH and CVC Capital Partners ("CVC"), United Kingdom, with the purpose of taking over the management of Messer's business in Western Europe and America. In this context, as of March 1, 2019, Messer Group GmbH has brought into the joint venture the operative Western European activities in Spain, Portugal, Switzerland, France, Belgium, the Netherlands, Denmark, Germany and the company in Algeria as well as a right to use "Messer – Gases for Life" for a period of ten years. The requirements pursuant to Section 315e (3) HGB for the preparation of the Consolidated Financial Statements of Yeti GermanCo 1 GmbH in accordance with the International Financial Reporting Standards ("IFRS") are met.

The closing date for Yeti GermanCo 1 GmbH and almost all of the subsidiaries included in the Consolidated Financial Statements is December 31 of the calendar year. An exception to this is Messer Produktionsgesellschaft mbH Speyer with the closing date March 31.

The Consolidated Financial Statements of the company for the financial year ended December 31, 2019 will be forwarded to the Advisory Board of Messer Industries Group after management has prepared them. After consultation with the Advisory Board, the managing directors present the Consolidated Financial Statements to the shareholders for approval.

Messer GasPack 2 GmbH, Messer Industriegase GmbH, Messer Industries GmbH, Messer Produktionsgesellschaft mbH Salzgitter, Messer Produktionsgesellschaft mbH Siegen, Messer Produktionsgesellschaft mbH Speyer, Yeti GermanCo 2 GmbH, Yeti GermanCo 3 GmbH, all fully consolidated domestic subsidiaries, will use the exemption provisions in accordance with Section 264 (3) HGB and will therefore not disclose their annual financial statements for 2019, as well as the preparation of the (HGB) notes and management report to a large extent.

2. Accounting principles and policies

Basis of preparation

The Consolidated Financial Statements have been drawn up in Euro. Unless otherwise stated, all amounts are rounded to thousands (K€). Differences may arise due to rounding.

Statement of compliance with IFRS

The Consolidated Financial Statements for the year 2019 have been drawn up in accordance with International Financial Reporting Standards (IFRS) and the Interpretations of the IFRS Interpretations Committee (IFRIS IC), as applicable in the European Union (EU).

These Consolidated Financial Statements represent IFRS 1 Financial Statements. Because the top parent company was newly founded, a third balance sheet for the balance sheet date of the opening balance of the previous period was not shown. The group became economically viable only through the incorporation of the Western European companies and the acquisition of the former Linde/Praxair activities in the USA, Canada and South America as of March 1, 2019. Therefore, only comparative information as of December 31, 2018 is given.

The accounting and valuation methods on which the 2019 Consolidated Financial Statements are based have generally been applied consistently.

The Consolidated Financial Statements have been prepared on the basis of historical acquisition costs, amortized acquisition and production costs as well as the fair value from the market valuation of available-for-sale financial assets and financial liabilities (including derivative financial instruments).

The drawing up of consolidated financial statements in accordance with IFRS and the Interpretations issued by the IFRS Interpretations Committee, as applicable in the EU, requires the use of estimations. Moreover, the application of uniform Group accounting policies requires management to make judgments.

New financial reporting rules

The following new or revised standards or interpretations had to be mandatorily applied to the Consolidated Financial Statements for the first time on January 1, 2019:

- IFRS 16 "Leases"
- Amendments to IFRS 9 Prepayment Rules with Negative Compensation
- Amendments to IAS 28 Long-term Interests in associated companies and Joint Ventures
- Amendments to IAS 19 Plan changes, reductions, or compensation
- IFRIC 23 "Uncertainty regarding income tax treatment"
- Amendments to IFRS 3, IFRS 11, IAS 12 and IAS 23

IFRS 16 "Leases"

At the start of a contract, the Group assesses whether the contract establishes or includes a lease. This is the case if a contract bestows the right to control the use of an identifiable asset against payment of a fee for a certain period of time. In order to assess whether a contract includes the right to control an identifiable asset, the Group uses the definition of a lease in accordance with IFRS 16.

IFRS 16 introduces a uniform accounting model that requires leases to be recognized on the lessee's balance sheet. A lessee recognizes a right-of-use asset, which represents its right to use the underlying asset, and a lease liability, which represents its obligation to make lease payments. There are exceptions for short-term leases and leases of low-value assets.

The lessor's accounting is almost unchanged. This means that lessors continue to classify leases as finance or operating leases.

The standard has to be applied for the first time in the first reporting period of a financial year beginning on or after January 1, 2019.

A description of the new accounting policies is provided in the "Leases" section below.

Amendments to IFRS 9 – Prepayment Rules with Negative Compensation

The adjustments relate to a limited adjustment of the assessment criteria relevant for the classification of financial assets. Financial assets with a prepayment penalty ("prepayment feature with negative compensation") may, under certain conditions, be carried at amortized cost or at fair value through other comprehensive income instead of at fair value through profit or loss.

There are no significant effects on the Consolidated Financial Statements of Yeti GermanCo 1 GmbH.

Amendments to IAS 28 – Long-term Interests in associated companies and Joint Ventures

The amendments contain a clarification that IFRS 9 is to be applied to long-term shares in associated companies or joint ventures that are not accounted for using the equity method.

The changes have no material impact on the consolidated financial statements of Yeti GermanCo 1 GmbH.

IFRIC 23 – Uncertainty regarding income tax treatment

IFRIC 23 clarifies the application of the recognition and measurement requirements of IAS 12 if there is uncertainty regarding the income tax treatment. Estimates and assumptions must be made for recognition and measurement, e.g. whether an assessment is made separately or together with other uncertainties, whether a probable or expected value is used for the uncertainty and whether changes have occurred compared to the previous period. The detection risk is irrelevant for the accounting of uncertain balance sheet items. The accounting is based on the assumption that the tax authorities are investigating the matter in question and that they have all the relevant information.

There are no significant effects on the Consolidated Financial Statements of Yeti GermanCo 1 GmbH.

Amendments to IAS 19 - Plan changes, reductions, or compensation

In accordance with IAS 19, pension obligations in the event of plan changes, reductions and compensation are assessed on the basis of updated assumptions.

The change clarifies that after such an event, the service cost and net interest for the rest of the period must be recognized based on updated assumptions.

There are no significant effects on the Consolidated Financial Statements of Yeti GermanCo 1 GmbH.

Amendments to IFRS 3, IFRS 11, IAS 12 and IAS 23

The Annual Improvements to IFRSs (2015 - 2017) amended four IFRSs.

IFRS 3 clarifies that when a company gains control of a business in which it was previously involved in a joint operation, it must apply the principles for successive business combinations. The share previously held by the purchaser is to be revalued.

IFRS 11 stipulates that when a party obtains joint control in a business in which it was previously involved in a joint operation, it does not remeasure the portion previously held.

IAS 12 is amended so that all income tax consequences of dividend payments must be taken into account in the same way as the income on which the dividends are based.

Finally, IAS 23 stipulates that when determining the financing cost rate, if a company has generally borrowed funds for the procurement of qualifying assets, the cost of the loan specifically raised in connection with the procurement of qualifying assets is not to be recognized until their completion.

The amendments have no material impact on the consolidated financial statements of Yeti GermanCo 1 GmbH.

Newly issued accounting standards that have not yet been applied:

The application of the following new standards and changes to standards were not yet mandatory in the present consolidated financial statements and therefore did not apply, but have already been adopted by the EU and are binding from the 2020 financial year:

- Amendments to IAS 1 and IAS 8 Definition of "material"
- Amendments to references to the framework in the IFRS standards
- Amendments to IFRS 3 Definition of a business
- IFRS 17 insurance contracts (applicable from financial year 2021)
- Amendments to IFRS 10 and IAS 28 Sale or Deposit of Assets between an Investor and an associate company or a joint venture
- Amendments to IFRS 9, IAS 39 and IFRS 7 IBOR (Interbank Offered Rates) reform

The Group does not plan to apply the new or revised standards and interpretations, which are only mandatory in later financial years. Unless otherwise stated, the effects on the Consolidated Financial Statements of Yeti GermanCo 1 GmbH are currently being examined.

Consolidation principles

A complete list of the Group's investments can be found in the notes to these notes. Principal subsidiaries as of December 31, 2019 are:

Name and registered office of subsidiary	Country	Shareholding in per cent Dec. 31, 2019	Shareholding in per cent Dec. 31, 2018
Messer LLC Inc., Delaware	USA	100 %	0 %
Messer Canada Inc., Ontario	Canada	100 %	0 %
Messer Gases Ltda., Cubatão	Brazil	100 %	0 %
Messer France S.A.S., Suresnes	France	100 %	0 %

The Consolidated Financial Statements include the Financial Statements of Yeti GermanCo 1 GmbH and the Financial Statements of its subsidiaries as of December 31, 2019. The financial statements of the subsidiaries are therefore prepared using the same accounting and valuation methods with the exception of Messer Produktionsgesellschaft mbH Speyer on the same balance sheet date as the financial statements of the parent company.

a. Subsidiaries

Yeti GermanCo 1 GmbH and its subsidiaries controlled by Yeti GermanCo 1 GmbH are included in the Consolidated Financial Statements as of December 31, 2019. The Group controls a company if it is exposed to fluctuating returns from its involvement with the company or has rights to them and has the ability to influence those returns through its control over the company. Subsidiaries are included in the Consolidated Financial Statements from the date on which control is gained and until the date on which control ceases.

All receivables and payables, revenues, income and expenses arising in conjunction with intra-group sales of goods or services are eliminated in the Consolidated Financial Statements. Intra-group sales of goods or services are transacted on the basis of full cost transfer prices.

Subsidiaries are accounted for in accordance with the acquisition method. Acquisition costs correspond to the fair value of the transferred assets and the resulting or assumed debts and the equity shares issued by the purchaser at the time of the transaction. In addition, they include the fair value of any recognized assets or liabilities resulting from a conditional consideration arrangement. Assets, liabilities and contingent liabilities identified in conjunction with a business combination are measured as a general rule at their fair value on first-time consolidation at the acquisition date.

Acquisition-related costs are recognized as expense in the period in which they are incurred.

In the case of business combinations achieved in stages, any previously held equity interest of an entity is remeasured at its fair value on the new acquisition date. Any fair value gain or loss arising is recognized in profit or loss.

Goodwill is the value resulting from the amount by which the acquisition costs, the amount of non-controlling interests in the acquired company and the fair value of any equity interests previously held at the acquisition date exceed the Group's share in the fair value of Net assets. If the acquisition cost is lower than the fair value of the net assets of the acquired subsidiary, the difference is recognized directly in profit or loss after re-assessment.

b. Transactions with non-controlling interests where control is not lost

Transactions with non-controlling interests where control is not lost are treated in the same way as transactions with the Group's equity owners. Any difference arising from the acquisition of a non-controlling interest between the consideration paid and the relevant share in the carrying amount of the subsidiary's net assets is recognized in equity. Gains and losses that arise from the sale of non-controlling interests are also recognized in equity.

c. Disposals of subsidiaries

If the Group loses control of an entity, the Group's remaining interest is remeasured at its fair value and the difference recognized in profit or loss. In addition, all amounts reported in other comprehensive income relating to this entity are accounted for as would be required if the parent company had sold the related assets and liabilities directly. This means that a profit or loss previously recognized in other comprehensive income is either reclassified to profit or to retained earnings.

d. Associated companies, joint ventures and joint operations

Investments in entities, over which the Group has a significant influence, but which it does not control or manage jointly in terms of its financial and operating policies, and in joint ventures which the Group manages jointly, are accounted for using the equity method. These investments are initially measured at acquisition cost (including transaction costs). It is assumed that a significant influence is exerted if the Group holds 20 % or more of the voting rights but does not control the entity. The Group's share in earnings of equity method accounted investments is included in the line item "Result from investments accounted for using the equity investments are written off in the event of impairment. The Group's interest in associated companies includes goodwill arising on acquisition (net of accumulated impairment losses).

If the participation rate in an associated company has decreased although it remains an associated company, only the proportionate amount of the profits or losses is reclassified to profit or loss. The Group's share of gains and losses relating to associated companies is recognized in profit or loss as from the date of acquisition. Changes in reserves are recognized proportionately within Group reserves. Accumulated changes after acquisition are set off against the carrying amount of the investment. If the Group's share of the loss in an associated company corresponds to the Group's share in this company, including other unsecured receivables, or exceeds it, the Group recognizes no further losses unless it has entered into commitments for the associate company or has made payments for the associate company.

The Group reviews at the end of each reporting period, whether there are any indications that it should recognize any impairment losses on its investments in associated companies. In this case, the difference between the carrying amount and the recoverable amount is recognized as an impairment loss and reported in the income statement as part of the result from investments in associated companies.

To the extent that a Group entity is engaged in transactions with an associated company or joint venture, any unrealized gains or losses are eliminated on the basis of the Group's interest in the entity concerned.

Joint operations are characterized by the fact that the parties who exercise joint control over the agreement have rights to the assets attributable to the agreement and obligations for their debts. The associated assets and liabilities as well as income and expenses from joint activities are included in the Consolidated Financial Statements in accordance with the economically attributable portion. The Group records its direct rights to the assets, liabilities, revenues and expenses of joint operations and their share in any assets, liabilities, revenues and expenses jointly managed or created. These are included in the Financial Statements under the corresponding item names. Details of joint operations recorded in the Financial Statements can be found in Note 17 "Shares in other companies".

Currency translation

a. Functional currency and reporting currency

The Consolidated Financial Statements are prepared in Euro, the Group's reporting currency. The functional currency of individual foreign operations is determined on the basis of the primary economic environment in which the relevant entity operates. The items included in the Financial Statements of each entity are measured on the basis of this functional currency.

b. Transactions and balances

Foreign currency transactions are translated initially using the spot exchange rate, applicable at the date of the transaction, between the functional currency and the foreign currency. Monetary assets and liabilities denominated in a foreign currency are translated into the functional currency at the rate on the reporting date. All exchange rate differences are recognized in profit or loss. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction. Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rate at the date when the fair value was determined.

Foreign currency gains and losses from trade receivables and trade payables that are denominated in foreign currencies are included in the items "Other operating income" or "Other operating expenses".

c. Group companies

The functional currency of foreign operations not based within the area of the European Currency Union (ECU) is the relevant local currency in each country. At the balance sheet date, assets and liabilities of these subsidiaries are translated at the exchange rate on the reporting date into Messer Industries Group's reporting currency. Income and expenses are translated at the average exchange rate for each income statement presented. The resulting exchange differences are recognized through OCI and included in currency translation reserves within equity. Accordingly, they have no impact on profit or loss for the year. When a foreign business operation is deconsolidated, the cumulative amount recognized in equity for this foreign business operation is recognized in income.

		Average exchange rates		Exchange rates a	at reporting date
Selected currencies	ISO- Code	Jan. 1 – Dec. 31, 2019 1 €	Jan. 1 – Dec. 31, 2018 1 €	Dec. 31, 2019 1 €	Dec. 31, 2018 1 €
Brazilian Real	BRL	4.42	4.31	4.52	4.44
Chilean Peso	CLP	792.19	757.07	845.88	793.16
Canadian Dollar	CAD	1.49	1.53	1.46	1.56
Colombian Peso	COP	3,696.05	3,488.19	3,688.10	3,713.54
Swiss Franc	CHF	1.11	1.15	1.09	1.27
US Dollar	USD	1.12	1.18	1.12	1.15

The following summary shows the exchange rates used for the principal currencies:

Intangible assets and goodwill

The differences between the consideration transferred by Messer Industries Group for acquired companies and the fair value of the acquired assets and assumed liabilities as well as contingent liabilities are recognized in accordance with IFRS 3.32 et seq. The remaining goodwill is subjected to an impairment test in accordance with IAS 36 at least once a year. Any excess in the net fair values over the consideration paid for identifiable assets acquired, liabilities assumed and contingent liabilities is immediately recognized – after reassessment – in profit or loss (negative difference). The results of the subsidiaries acquired or sold in the course of the financial year are reported from the time control is acquired or included in the Consolidated Income Statement until loss of control.

The other intangible assets such as brands, patents, licenses, customer bases, software etc. are capitalized at cost when initially recognized. Patents, licenses, customer bases and software etc. are amortized on a straight-line basis over their expected useful lives of 3 to 47.5 years. The amortization expense on other intangible assets is included within the related expense line item, usually cost of sales or distribution and selling expenses. The amortization period and amortization method applied for intangible assets with a finite useful life is reviewed, at a minimum, at the end of each financial year.

Property, plant and equipment

Property, plant and equipment are capitalized initially at acquisition or manufacturing cost and depreciated over their estimated useful lives. Acquisition cost includes all costs directly attributable to an acquisition. The manufacturing costs of self-constructed assets include all directly attributable costs and an appropriate portion of overheads, including depreciation, and are therefore measured taking account of all cost components required to construct the assets. In the event that there is a statutory requirement to restore an item to its original condition, the manufacturing cost also includes the present value of future expected payments for disassembly and re-cultivation. In the case of major inspections, costs which satisfy the relevant recognition requirements are included in the carrying amount of the item of property, plant and equipment as a replacement in accordance with IAS 16.14.

Subsequent acquisition / construction costs are only recognized as part of the cost of the asset or as a separate asset, if it is probable that future economic benefits will flow to the Group and if the cost of the asset can be measured reliably.

Expenditure for repairs and maintenance, which does not represent significant replacement investment, is recognized as expense in the period in which it is incurred.

Gains and losses on disposal are determined as the difference between sales proceeds and the carrying amount of the asset and recognized in the Consolidated Income Statement.

Scheduled depreciation is computed using the straight-line method over the following useful lives:

Scheduled depreciation		
Buildings	10 - 50	
Plants and machinery	5 - 20	
thereof air separation units	15	
Other operational and office equipment	3 - 10	

Residual values and useful lives are reviewed at each reporting date and amended where necessary. If the carrying amount of an item of property, plant and equipment exceeds the estimated recoverable amount, it is written down immediately to that amount.

Borrowing costs are recognized as expense in the period in which they are incurred, except when they relate to qualifying assets. Within Messer Industries Group, these relate primarily to air separation plants. Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalized as part of the cost of that asset up to the date on which all work has been completed for it to be ready for its intended use or sale. A qualifying asset is an asset that necessarily takes a substantial period of time to prepare for its intended use or sale.

Leases

a. Leases in which the Group is a lessee

The Group rents various office and warehouse buildings as well as equipment and vehicles. Leases are generally for fixed periods of one month to ten years for movable assets and for one month to 50 years for immovable assets, but may have renewal options.

At the start of a contract, the Group assesses whether the contract establishes or includes a lease. This is the case if a contract entitles it to control the use of an identifiable asset against payment of a fee for a certain period of time. In order to assess whether a contract includes the right to control an identifiable asset, the Group uses the definition of a lease in accordance with IFRS 16.

Contracts can include both lease and non-lease components. The Group assigns the transaction price to these components based on their relative individual prices. Leases for land that the Group leases as a lessee are an exception. In these cases, the Group makes use of the option not to split the lease and non-lease components, but to account for the whole contract as a lease contract.

Rental terms are negotiated individually and include a variety of different terms. The leases do not contain any credit terms, except that the leased objects serve as security for the lessee. Leased assets may not be used as collateral for borrowing.

Since January 1, 2019, leases are recognized as a right-of-use asset and corresponding lease liability when the leased object is available for use by the Group. Assets and liabilities from leases are initially recognized at their present values. Lease liabilities include the present value of the following lease payments:

- fixed payments (including in-substance fixed payments) less any lease incentives received
- variable lease payments that are linked to an index or (interest) rate, initially valued at the index or interest (rate) on the date of provision
- expected payments of the Group from the use of residual value guarantees
- the exercise price of a call option, the exercise of which by the Group is reasonably certain
- penalties in connection with the termination of a lease, provided that the term takes into account that the group will exercise the termination option

In addition, lease payments arising from a sufficiently certain exercise of extension options, are taken into account in the valuation of the lease liability. Lease payments are discounted at the implicit interest rate on which the lease is based, provided that this is readily determinable. Otherwise – and this is usually the case in the Group – discounting takes place using the lessee's marginal borrowing rate, i. e. the interest rate that the respective lessee would have to pay if he had to raise funds to acquire an asset with a comparable value for a comparable term and with comparable security and under comparable conditions in a comparable economic environment.

The Group proceeds as follows to determine the marginal borrowing rate:

The individual lessee's financing raised from third parties is used as a starting point. Lessees are divided into regions according to geographical segments. The financing is divided into groups based on the remaining terms of the contracts (up to one year, up to two years, up to three years, up to four years, up to five years and longer than five years). The calculated average interest rates for each group and region are used in evaluating the right-of-use asset and lease liability.

The Group is exposed to possible future increases in variable lease payments, which may result from a change in an index or interest rate. These possible changes in lease payments are not taken into account in the lease liability until they become effective. As soon as changes in an index or interest rate affect the lease payments, the lease liability is adjusted against the right-of-use asset.

Lease payments are divided into repayments of principal and interest payments. The interest component is recognized in the income statement over the term of the lease with the result that a constant periodic interest rate on the remaining amount of the liability results for each period.

Right-of-use assets are valued at acquisition costs, which consist of:

- the amount of the initial valuation of the lease liability
- all lease payments made during or before provision of the leased object less any lease incentives
 received
- all initial direct costs incurred by the lessee
- estimated costs incurred by the lessee in dismantling or removing the underlying asset, restoring the location where it is to be found, or restoring the underlying asset to the condition required in the lease agreement

Right-of-use assets are amortized on a straight-line basis over the shorter of the two periods, useful life and term of the underlying leasing contract. If the exercise of a call option is sufficiently certain from the Group's perspective, depreciation is applied over the useful life of the underlying asset.

Scheduled depreciation is computed using the straight-line method over the following useful lives:

Scheduled depreciation	Useful lives in years
Land	1 - 50
Buildings	1 - 30
Plants and machinery	1 - 10
Other operational and office equipment	1 - 5

Payments for short-term leases of technical equipment and machinery as well as vehicles and leases based on assets of low value, are recognized as an expense in profit or loss on a straight-line basis. Short-term leases are leases with a term of up to twelve months. Low-value assets essentially include IT equipment and other equipment.

A number of the Group's property and equipment leases include renewal and termination options. Such contractual terms are used to give the group maximum operational flexibility with regard to the assets used by the group. If there is sufficient certainty, these options are taken into account when evaluating right-of-use assets and lease liabilities.

The assessment is reviewed if an extension option is actually exercised (or not exercised) or the Group is obliged to do this. A reassessment of the initial assessment is made if there is a significant event or a significant change in circumstances that may affect the previous assessment – provided this is under the control of the lessee.

b. Leases in which the Group is a lessor

If the Group acts as a lessor, it classifies each lease as either a finance lease or an operating lease when the contract begins.

Leases in which a significant portion of the risks and rewards of ownership pass to the lessee are classified as finance leases.

In this case, a sale is assumed in the balance sheet at the beginning of the lease term and sales are recognized in the amount of the present value of the minimum lease payments attributable to the equipment. In return, a claim against the customer is recorded, which is reduced over the term of the contract. Interest income earned on finance leases is reported as other operating income.

No finance leases were identified within Messer Industries Group.

Lease arrangements, where a substantial part of the risks and rewards incidental to ownership remain with the lessor, are classified as operating leases. Payments made in conjunction with an operating lease are recognized as expense in the income statement on a straight-line basis over the term of the lease.

Impairment and reversal of impairment on intangible assets, goodwill, right-of-use assets and property, plant and equipment

An impairment test for goodwill, right-of-use assets, other intangible assets and property, plant and equipment involves comparing the recoverable amount of the asset with its carrying amount in order to determine whether an impairment loss needs to be recognized. In accordance with IAS 36, goodwill is allocated to the smallest cash-generating unit for which goodwill is monitored by management. The recoverable amount is defined as the higher of the asset's fair value less costs to sell and its value in use. Fair value less costs to sell is defined as the amount obtainable from the sale of an asset or cash-generating unit in an arm's length transaction between knowledgeable, willing parties, less the costs of disposal. Value in use corresponds to the present value of future cash flows which the Group expects to generate from using the asset and from its disposal at the end of its useful life. In the event of impairments, first, existing goodwill is reduced. If the impairment loss amount exceeds the carrying amount

of goodwill, the difference is normally spread proportionately over the remaining relevant non-current assets. With the exception of goodwill, reversals of impairment losses are carried out when the reasons for the impairment no longer exist. Impairment losses and required reversals are shown together with the scheduled depreciation in the Schedule of Assets within additions to accumulated depreciation and are shown and explained separately in the Notes.

Inventories

Inventories are measured at acquisition or manufacturing cost or lower net realizable value on the balance sheet date using the average cost method. Manufacturing cost includes all directly attributable costs and an appropriate portion of material and production overheads, including depreciation.

Trade and other receivables

Trade receivables are recognized from the time they arise. Items that do not contain a significant financing component are initially measured at the transaction price. The corresponding impairment allowance is measured at an amount equal to lifetime expected credit losses, based on an analysis of historical default data and forecasts of future economic conditions. Expected credit losses are a probability-weighted estimate of credit losses.

Non-current assets and disposal groups held for sale and discontinued operations

Non-current assets held for sale in accordance with IFRS 5 "Non-current Assets Held for Sale and Discontinued Operations" are classified as held for sale if the related carrying amount is to be recovered principally through sale rather than through continuing use. As a general rule, a sale must be planned and feasible with a high degree of probability within the next twelve months.

Immediately prior to initial classification as held for sale, the carrying amounts of the asset must be measured in accordance with the relevant IFRSs. At the date of reclassification, assets held for sale are measured at the lower of their carrying amount and fair value less costs to sell and reported separately in the balance sheet. Liabilities in conjunction with assets held for sale are also reported separately in the balance sheet.

An operation is accounted for as a discontinued operation in accordance with IFRS 5 if it is held for sale or has already been sold.

A discontinued operation is part of the group's business, the division and cash flows of which can be clearly distinguished from the rest of the group and which:

- represents a separate major line of business or geographical area of operations
- is part of a single coordinated plan to dispose of a separate major line of business or geographical area of operations
- · is a subsidiary acquired exclusively with a view to resale

If an operation is classified as discontinued, the income statement for the prior year is restated as if the operation had been discontinued from the beginning of that year.

A separate amount is shown in the Income Statement, which is the sum of the profit or loss after tax of the discontinued operation. A further breakdown of this separate amount and further additional information are given in the Notes.

In line with the usual consolidation procedure, intra-group income was eliminated in the selling or servicing division and the associated expenses eliminated in the receiving division.

Cash and cash equivalents

Cash and cash equivalents include freely available cash and demand deposits. Cash equivalents also include short-term liquid financial assets that can be converted into cash at any time.

Employee benefits

a. Pension obligations

The Group has both defined benefit and defined contribution pension plans. A defined contribution plan is a pension plan under which the Group pays fixed contributions into a separate non-Group entity (a fund). The Group does not have any legal or constructive obligation to pay any additional amounts if the fund does not have sufficient assets to meet the pension entitlements of all employees for the current and past financial years.

Typically, defined benefit plans set out an amount of pension benefits that employees will receive upon retirement and which is usually dependent on one or more factors (such as age, length of service and salary).

The company's obligations from defined benefit pension plans are determined separately for each defined benefit plan and according to actuarial principles. At first, the earned benefits in the current period and in earlier periods – in exchange for services rendered by the employees – are estimated. The calculation of the present value of the defined benefit obligation, the gross pension obligation is carried out by actuaries using the projected unit credit method. The plan assets are deducted from the gross pension obligation at their fair value. This results in the net liability to be recognized or the net asset value to be recognized.

The company determines net interest expense (net interest income) from net liability (net asset value) by multiplying net liability (net asset value) at the beginning of the period by the interest rate on which the defined benefit gross pension obligation is discounted at the beginning of the period.

The discount interest rate is determined by reference to market yields at each relevant period-end on high-quality, fixed-interest corporate bonds. The currency and term of the underlying corporate bonds correspond to the currency and expected terms of the post-employment obligations.

The calculation of the net liability (net asset) is based at each reporting date on an actuarial report drawn up by a qualified actuary.

If the deduction of plan assets from the defined benefit gross pension obligation results in a surplus, the amount of the net asset value is limited to the present value of the economic benefits associated with

the plan asset surplus, e.g. in the form of reimbursements from the plan or reduced future contribution payments if the company has control over these economic advantages. Control is assumed to exist if the Group can realize the economic benefits during the term of the pension plan or in order to settle pension plan liabilities.

The calculation of the present value of the economic benefits of plan assets surplus takes account of any minimum plan funding requirements.

The amounts arising on remeasurement comprise actuarial gains and losses arising on the measurement of the defined gross pension obligation on the one hand and the difference between the actual return on plan assets and the rate of return assumed at the beginning of the reporting period on the other. In the event that there is a surplus of plan assets, the amounts arising on remeasurement also include the change from applying an asset ceiling, to the extent that this has not been considered as part of the net interest component.

The Group recognizes all amounts arising on remeasurement in other comprehensive income (OCI), whereas other components of the net pension expense (service cost and net interest component) are recognized in profit or loss for the period. The interest component included in the pension-related expense for additions to the defined benefit provision is recognized as interest expense within the financial result.

If the present value of a defined benefit obligation changes as a result of a plan change or curtailment, the Group recognizes the resulting impact as past service cost in profit or loss for the period. The amounts are recorded when the change or curtailment takes place.

Defined benefit plans expose the Company to various risks. In addition to general actuarial risks such as longevity risk and interest rate risk, the company is exposed to currency risk as well as capital market and investment risk.

b. Obligations relating to bonus plans

Obligations for bonus payment are recognized as a liability and expense. A provision is recognized in the Consolidated Financial Statements in cases where there is a contractual obligation or a factual obligation arises based on past business practice.

Other provisions

Other provisions are recognized for present legal and constructive obligations arising from past events that are likely to result in a future outflow of resources of economic benefit, provided that a reliable estimate can be made of the amount of the obligations. Where the time value of money is material, provisions are discounted using a pre-tax rate that reflects, where relevant, the specific risks of the liability. Where a provision is discounted, any increase due to the unwinding of the interest over time is recognized as interest expense.

Public sector grants

Public sector grants are recognized when there is reasonable assurance that the conditions attaching to them have been complied with and the grants will be received. Expense-dependent grants are recognized systematically as income over the period necessary to match them with the related costs. If the grant relates to an asset, it is recognized as deferred income and released as income on a straight-line basis over the expected useful life of the asset.

Financial instruments: principles

A financial instrument is defined as any contract that gives rise to a financial asset at one entity and a financial liability or equity instrument at another entity. A distinction is made between derivative and non-derivative financial instruments.

Derivative financial instruments can be embedded in other financial instruments or non-financial instruments. In accordance with IFRS, an embedded derivative must be separated from the host contract and measured separately at its fair value if the economic characteristics of the embedded derivative are not closely linked to those of the host contract. Messer Industries Group had no embedded derivatives that required separation in the financial year. Hybrid financial instruments issued by the entity which contain both equity and debt components must be accounted for separately on the basis of the substance of the instrument. During the year under review, Messer Industries Group was not party to any hybrid or structured financial instrument. As a general rule, purchases and sales of customary market financial instruments are accounted for by Messer Industries Group on the basis of their settlement date, while derivatives are recorded on the basis of the trade date.

In general, financial assets and financial liabilities are recorded initially at their fair value, including transaction costs where relevant. The fair value of a financial instrument corresponds to the price that would be achieved between market participants on the measurement date for the sale of the financial instrument.

Financial assets are de-recognized fully or in part when the contractual rights to receive cash flows have expired or if control over the financial asset and the risks and rewards attached to the asset have been transferred to a third party. Financial liabilities are de-recognized when the contractual obligations have been settled, canceled or have expired.

The classes to be formed in accordance with IFRS 7 include the valuation categories shown below. In addition, liabilities from leases and hedging derivatives in the context of hedge accounting belong to the classes according to IFRS 7.

Financial assets

Financial assets are classified according to the following valuation categories of IFRS 9 and classes of IFRS 7:

a. Financial assets measured at amortized cost

Messer Industries Group measures its financial assets at amortized cost if both of the following conditions are met:

- the financial asset is held under a business model that aims to hold financial assets to collect contractual cash flows
- the contractual terms lead to cash flows that only represent repayments and interest payments on the outstanding principal

b. Financial assets measured at fair value through profit or loss

Messer Industries Group measures the following non-derivative financial assets at fair value through profit or loss:

- investments in debt instruments that are neither measured at amortized cost nor at fair value through OCI
- · investments in equity instruments held for trading
- investments in equity instruments for which the entity has elected not to recognize changes in fair value through other comprehensive income

The Group has not designated any non-derivative financial assets as "measured at fair value through profit or loss".

c. Financial assets measured at fair value through other comprehensive income

Financial assets at fair value through other comprehensive income comprise:

- Equity instruments that are not held for trading and which Messer Industries Group irrevocably elected at the date of initial recognition to classify to this category. This relates to strategic investments, for which the Group considers that this classification is of more informational value.
- Debt instruments for which the contractual cash flows solely represent payments of principal and interest on the principal amount outstanding and which are held under a business model whose objective is both to collect the contractual cash flows and to sell financial assets.

The results of measuring such investments in equity instruments are recognized directly in equity through other comprehensive income. At the sale of these financial investments, all related balances included in other comprehensive income are reclassified to revenue reserves.

Financial liabilities

a. Financial liabilities measured at amortized cost

Financial liabilities measured at amortized cost are non-derivative financial liabilities that are subsequently measured at amortized cost using the effective interest method. Any difference between the amount received and the amount repayable is recognized as income or expense over the term of the instrument. Transaction costs incurred are deducted from the relevant financial liabilities and amortized over the term of the underlying liability using the effective interest method. Within Messer Industries Group, this measurement category includes primarily debt, trade payables, non-derivative other current and noncurrent liabilities.

b. Financial liabilities measured at fair value through profit and loss

Financial liabilities measured at fair value are classified either as held-for-trading or – on first time recognition – measured at fair value through profit or loss. Derivative financial instruments with a negative fair value are also measured at fair value through profit or loss.

Subsequent to initial recognition, financial liabilities allocated to this category are measured at their fair value, with fair value gains and losses recognized as part of the net financial result in the income statement.

Derivative financial instruments and hedging

Derivative financial instruments are measured at their fair value on first time recognition, as determined at the contract date, and subsequently at their fair value at each relevant period end. The method of recording profits and losses depends on whether the derivative financial instrument has been designated as a hedging instrument and, if so, on the type of item hedged. With the conclusion of a derivative contract, Messer Industries Group either designates it

(1) as a hedge for the estimated recoverable amount of a reported asset or liability ("fair value hedge") or(2) as a hedge of a planned transaction or a mandatory payment obligation ("cash flow hedge").

Messer Industries Group only uses derivatives for hedging purposes if underlying transactions require hedging. This applies, for example, to risks from exchange rate fluctuations. Underlying transactions are the obligations entered into on a contractual basis to achieve the goals of Messer Industries Group, as well as receivables and anticipatory transactions. Derivative instruments are only used to safeguard Messer Industries Group's business success up to limits fixed in the Company's statutes. Macro hedging, i.e. the consolidation of individual positions in order to merely hedge the balance is not practiced.

Most of the transactions for which this type of hedging could be applied are hedged in full in terms of scope or amount, using a variety of financial instruments. The selection of individual instruments is always a decision of the management taking into account the risk profile, i.e. the income opportunity associated with the respective risk.

Hedge accounting is used for a large part of existing hedging transactions. Nevertheless, there are derivatives that have been contracted to hedge risks from underlying transactions, for which the formal requirements have not been fully met and which are therefore not recognized in the context of hedge accounting, but as "stand alone" derivatives at fair value in accordance with the rules of IFRS 9 through profit and loss.

The aim of hedge accounting is to largely record changes in the value of the hedging instruments and the hedged transactions. To avoid fluctuations in the Income Statement due to the different valuation of hedged items and hedging instruments, Messer uses hedge accounting in accordance with the provisions of IFRS 9 to show the hedging relationship.

On conclusion of a transaction, the Group documents the hedging relationship between the hedging contract and hedged item, the risk management objective and strategy for undertaking the hedge. At the inception of the hedge, and continuously thereafter, the Group formally documents its assessment of whether the derivatives included in the hedging relationship effectively offset the exposure to chang-

es in the hedged item's fair value or cash flows attributable to the hedged risk. Hedge accounting is only maintained as long as its effectiveness can be proven. Evidence of this effectiveness is determined by comparing the contract specifics, maturities and volumes ("critical term match") and by means of a regression analysis.

For those hedging relationships for which hedge accounting is used, the valuation result is broken down into an effective and an ineffective part. The effective part is the part of the valuation result that is an effective safeguard against the risk. For cash flow hedges, this is recognized in a separate equity item with no effect on income (other comprehensive income). The ineffective part, where essential, is immediately recognized in the consolidated income statement.

The fair value of financial instruments is determined in accordance with the regulations of IFRS 13. The fair value is derived from active listed financial instruments or calculated using current market valuation models (discounted cash flow method) from current market prices. If necessary, the market value provided by a bank can also be used.

a. Cash flow hedge

Changes in the fair values of derivatives, which are classified as cash flow hedge and are highly congruent with the underlying transaction, are recognized in equity. If the planned transaction or the mandatory obligation leads to the recognition of a non-financial asset or non-financial liability, the gains and losses previously recognized in equity are taken from equity and taken into account in the measurement of the cost of the asset or liability. In all other cases, the gains or losses previously recognized in equity are transferred to profit or loss in the same period as that in which the hedged planned transaction or firm commitment impacts the lncome Statement.

b. Fair value hedges

Changes in the fair value of derivatives that are classified as fair value hedge and have a high degree of congruence with the underlying transaction are reflected in the Income Statement together with the changes in the fair value of the hedged assets or liability that are attributable to the hedged risk.

When a hedging instrument expires or is sold, or when a hedging instrument no longer meets the criteria for hedge accounting in accordance with IAS 9 any cumulative gains or losses recognized up to that date through other comprehensive income remain there and are not removed until the planned transaction or firm commitment is recognized in profit or loss. However, cumulative gains and losses previously recognized through OCI are recognized as income or expense if it is no longer expected that the planned transaction or firm commitment will occur.

The fair values of the various derivative financial instruments are listed under item 32 "Other information on financial instruments".

As of the balance sheet date December 31, 2019, only cash flow hedges were in place.

Management of financial risks

In conjunction with its operating activities, Messer Industries Group is exposed to various financial risks, in particular credit, liquidity, interest and currency risk, which are described in more detail in item 32. The Group's risk management system takes account of the fact that financial market developments are not foreseeable and is set up to minimize any potential negative impact on the Group's financial position. The Group employs derivative financial instruments to hedge against specific risks.

Risk management is handled as a general rule by Group Treasury in compliance with guidelines approved by executive management. Group Treasury identifies, measures and hedges financial risks. The guidelines contain general principles applicable for risk management and detailed rules for specific areas, such as currency and interest rate risks, the use of derivative financial instruments and the investment of surplus cash.

Use of assumptions, estimations and judgments

The preparation of financial statements in conformity with IFRS requires management to make certain assumptions, estimations and judgments which affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the balance sheet date, as well as the reported amounts of revenues and expenses for the reporting period. The assessments and assumptions concern the future. As a result, actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed regularly. Changes to estimates are accounted for prospectively. If a change in an accounting-relevant estimate results in changes in assets or liabilities or relates to an item reported in equity, the changes in estimate are recognized by adjusting the carrying amounts of the corresponding assets, liabilities or equity items.

Judgments, future-related assumptions and sources of uncertainty due to estimation which could potentially have the greatest impact on these Consolidated Financial Statements were required in the following areas:

a. Allocation and impairment test of goodwill

The allocation of goodwill to the various cash-generating units and the performance of the impairment test pursuant to IAS 36 on the basis of expected future cash flows of these cash-generating units over the detailed forecasting period of four years are subject to estimates made at Group level. A change in the influencing factors that are used when testing the impairment of goodwill as well as other intangible assets or property, plant and equipment may lead to higher, lower or no impairments.

b. Assessment of the need to recognize and measure allowances on doubtful receivables

When making allowances for doubtful accounts, estimates are made regarding the creditworthiness of individual customers and market segments, as well as general economic forecasts for the different countries and the history of our bad debts.

c. Determination of useful lives of property, plant and equipment and assessing which cost components are eligible for capitalization

Group-wide uniform useful lives for items of property, plant and equipment are determined on the basis of past experience and regularly reviewed. As part of the process of assessing whether an item is eligible

for recognition as an asset and which components of the acquisition and manufacturing costs should be taken into account, we make assumptions with respect to the expected period over which the item will be available for use.

d. Measurement of pension obligations

Obligations from defined benefit pension commitments are determined on the basis of actuarial assumptions. These are mainly the discount rate, life expectancy and the development of pensions and wages. The discount factor is determined by reference to market yields at the period end on high-quality fixed-interest corporate bonds. Sensitivity analyses with respect to the discount factor used are provided in the Notes.

e. Recognition and measurement of other provisions

The recognition and measurement of other provisions is based on an assessment of the likelihood of outflows of economic resources in the future, past experience and circumstances prevailing at the end of the reporting period. The actual outflow of economic resources at a later date could be lower or higher than the amount recognized as a provision. The nature of estimates and judgments used differs for the various categories of provisions.

The recognition and measurement of provisions for legal disputes requires a high degree of judgment as to whether a current obligation exists and whether a future outflow of economic resources is probable and can be reliably estimated. As part of the process of assessing these matters, we obtain assessments from in-house and external attorneys. Changes in circumstances may result in adjustments to provisions.

Personnel-related provisions include provisions for bonuses and vacation entitlements. Recognition of these provisions is not subject to any significant element of uncertainty since the expected costs can be reliably determined.

f. Assessment of whether sole control, joint control or significant influence applies when Messer Industries Group holds less than 100 % of the voting rights

When assessing whether control, joint control or significant influence exists in companies in which Messer Industries Group holds less than 100 % of the voting rights, judgments can be exercised. Here it must be assessed whether there are other contractual rights or circumstances that can lead to the group having the decision-making power over the potential subsidiary, whether there is a common control or a significant influence. Conclusions are reassessed whenever contractual arrangements or circumstances change.

g. Assessing the point in time when items should be classified as "held for sale"

Non-current assets held for sale in accordance with IFRS 5 "Non-current Assets Held for Sale and Discontinued Operations" are classified as held for sale if the related carrying amount is to be recovered principally through sale rather than through continuing use.

As a general rule, a sale must be planned and feasible with a high degree of probability within the next twelve months. Assessing the point in time from which a transaction is highly probable, is subject to discretionary decisions.

Other areas of judgment, future-related assumptions and sources of estimation uncertainty:

- · Measurement of assets acquired and liabilities assumed in conjunction with business combinations
- Recognition and measurement of deferred tax assets
- Assessment of lease transactions, especially with regard to whether a lease exists and to renewal
 options

There are no assets in the 2019 financial year that are classified as held for sale.

Income taxes

The tax expense includes actual and deferred taxes. Actual taxes and deferred taxes are recognized in profit or loss, except to the extent that they are associated with a business combination or with an item recognized directly in equity or other comprehensive income.

The Group has determined that interest and penalties on income taxes, including uncertain tax items, do not meet the definition of income taxes and are therefore accounted for in accordance with IAS 37.

a. Actual taxes

Actual taxes are the expected tax liability or tax claim on the taxable income or loss for the financial year based on tax rates that apply on the reporting date or will shortly be applicable, as well as any adjustments to tax liability for prior years. The amount of the expected tax liability or tax receivable reflects the amount that is the best estimate, taking into account tax uncertainties, if any. Actual tax liabilities also include all tax liabilities that arise as a result of dividends being determined. Actual tax assets and liabilities are only netted under certain conditions.

b. Deferred taxes

Deferred taxes are recognized, in accordance with the balance sheet-based liability method, on temporal differences between the carrying amounts of assets and liabilities for group accounting purposes and their corresponding tax bases, and on tax losses available for carry-forward. In accordance with IAS 12.15 (in conjunction with IAS 12.21B), temporal differences relating to the first-time recognition of goodwill are not taken into account in the computation of deferred taxes. Deferred taxes are measured using currently enacted or substantially enacted tax rates which will apply when the temporal differences are expected to reverse. Deferred tax assets are recognized to the extent that it is probable that future taxable profits will be available against which the unused tax losses can be utilized and / or can be offset against taxable differences between the carrying amounts of assets and liabilities for accounting purposes and their corresponding tax bases.

Deferred tax assets and liabilities are only offset if they relate to taxes imposed within the same tax jurisdiction and the entity has a legal right to offset the tax assets and liabilities.

Income taxes relating to items that are recognized directly in other comprehensive income are also recognized in other comprehensive income and not in the Income Statement. Deferred taxes are recognized in other comprehensive income if the underlying transaction is also recognized in other comprehensive hensive income.

Revenue recognition

Net sales include sales of products and services as well as rental income, less settlement discounts and price deductions.

a. Revenue from on-site sales and pipeline sales

Customers requiring large volumes of industrial gases (typically oxygen, nitrogen, and hydrogen) and with a relatively constant demand are usually supplied by plants adjacent to or on their facilities. The capacities of these plants cover also, as a general rule, the liquid-gas requirements of the surrounding market. These plants are owned and operated by Messer Industries Group. The product supply contracts usually run for ten to 15 years and include agreements on minimum purchase volume or minimum prices as well as price escalation clauses. Revenues are recognized when the gas is delivered to the customer, which corresponds to the date of transfer of risk and passage of ownership of the industrial gases. If the customer does not take delivery of the minimum purchase requirements, the additional revenue is recorded generally up to the contractual minimum. The same conditions and accounting methods apply to sales via pipelines, with the only difference that customers are supplied via a pipeline.

Certain gas supply contracts, in particular those for the gas generation plants rented on a long-term basis, must be examined for the existence of a finance lease in accordance with IFRS 16 and, if necessary, classified as such. In the case of a finance lease in accordance with IFRS 16, a sale is assumed in the balance sheet at the beginning of the term of the lease and sales are recognized in the amount of the present value of the minimum lease payments attributable to the investment. Interest income earned on finance leases is reported as other operating income.

No finance leases were identified within Messer Industries Group.

b. Revenues from bulk supply sales

Liquid products are usually stored in the Group's own tanks, which are rented to customers on their premises. The gases are delivered to customers in tankers, tube trailers or rail cars from which the gases are transferred to the leased-out tanks. The agreements customary in the liquid products business typically have a two- to three-year term. Revenue is recognized on liquid product sales once the gases have been transferred to the tank. Income from the rental of tanks is recognized according to the terms of the lease agreements.

c. Revenue from cylinder sales

Customers who need small amounts of gas (especially for most special gases) receive the products in cylinders, which are usually owned by the Group and rented to customers. Cylinder gases are generally sold by individual purchase orders or by contracts, with terms ranging between one and two years. Revenues from gas sales are realized upon delivery to the customer. Income from the rental of cylinders is recognized according to the terms of the lease agreements.

d. Construction contracts

Depending on the type of contractual arrangement, revenues from long-term construction contracts in the Engineering division are recognized either on the basis of a point in time or over time. In accordance with IFRS 15, revenues from engineering projects are recognized over time if they meet the criteria of IFRS 15.35. In Messer Industries Group, this generally only applies to customer-specific air separation plants. For other engineering projects that do not meet the criteria mentioned, sales revenues according to IFRS 15 are recognized when the project is completed.

3. Consolidated companies

In addition to Yeti GermanCo 1 GmbH, 36 (previous year: 12) domestic and foreign companies are fully consolidated in the Consolidated Financial Statements. Of these, 28 (previous year: 8) companies are based abroad. 4 (previous year: 0) associated companies from abroad are valued using the equity method and 2 (previous year: 0) companies from abroad are included proportionately in the Consolidated Financial Statements.

The scope of consolidation has changed compared to the previous year as a result of the following first-time consolidations and other events:

First-time consolidations

The following companies were brought in in the past financial year or acquired:

- bECO2 B.V.B.A., Belgium, 70 %
- Cliffside Helium LLC, USA, 26 %
- Cliffside Refiners LP, USA, 25.74 %
- East Coast Oxygen Company LLC, USA, 50 %
- East Coast Nitrogen Company LLC, USA, 50 %
- General Gases of the V.I. Inc., USA, 100 %
- GreenCO2, Belgium, 35 %
- Lida S.A.S., France, 21.50 %
- Limes S.A.S., France, 50 %
- Messer Algérie SPA, Algeria, 59.86 %
- Messer BV, Netherlands, 100 %
- Messer Belgium NV, Belgium, 100 %
- Messer Chile Ltda., Chile, 100 %
- Messer Columbia S.A., Colombia, 100 %
- Messer Danmark A/S, Denmark, 100 %
- Messer Energy S.A.S. E.S.P., Colombia, 100 %
- Messer Energy Services Inc., USA, 100 %
- Messer France S.A.S., France, 100 %
- Messer Gas Puerto Rico Inc., Puerto Rico, 100 %
- Messer Gases Ltda., Brazil, 100 %
- Messer GasPack 2 GmbH, Germany, 100 %
- Messer Ibérica de Gases S.A., Spain, 100 %
- Messer Indústria de Gases Ltda., Brazil, 100 %
- Messer Industriegase GmbH, Germany, 100 %
- Messer LLC, USA, 100 %
- Messer Merchant Production LLC, USA, 100 %
- Messer North America Inc., USA, 100 %
- Messer Produktionsgesellschaft mbH Salzgitter, Germany, 100 %
- Messer Produktionsgesellschaft mbH Siegen, Germany, 100 %

- Messer Produktionsgesellschaft mbH Speyer, Germany, 100 %
- Messer Schweiz AG, Switzerland, 100 %
- MesserGas Distribuicao des Gases Industriais, Unip, Portugal, 100 %
- REMEO Medical S.A.S., Colombia, 100 %
- Soprogaz S.N.C., France, 50 %

Summary of Acquisitions

Messer and the finance company CVC Capital Partners, United Kingdom have agreed on July 16, 2018 with Linde AG and Praxair Inc., USA, to take over the majority of Linde's gas business in the USA, the Linde companies in Canada, Brazil and Colombia, and to take over Praxair's activities in Chile. The transaction itself was subject to the successful completion of the merger between Linde AG and Praxair Inc. and approval from the relevant US antitrust authorities. On October 22, 2018, the Federal Trade Commission (FTC) gave its clearance for the merger between Linde AG and Praxair Inc. in accordance with the merger control law.

At the same time, as part of the transaction, Messer committed to contribute the Western European Messer companies to Yeti GermanCo 1 GmbH as well as other assets, such as the right to use the "Messer – Gases for Life" brand for a period of ten years at a fair value of K€ 772,000.

The acquisition of the shares from the sale of Linde AG and Praxair Inc. by Yeti GermanCo 1 GmbH was concluded with effect as from March 1, 2019. Overall, Yeti GermanCo 1 GmbH invested around K€ 3,460,560. As part of the acquisition, no contingent consideration has been agreed that would have to be provided by Yeti GermanCo 1 GmbH in the future.

With this strategic partnership, Messer is taking the opportunity to return to the North and South American market and create a global player in the industrial gases sector. The industry expertise and the strong engineering and application know-how as well as the operational competence of Messer should be used together with the global network of CVC to further expand the acquired companies. The acquired assets and liabilities of the North, South American and Western European companies were recognized at fair value as part of the purchase price allocation in accordance with IFRS 3. The overall impact of the acquisition was as follows:

	in K€
Intangible assets	1,228,811
Right-of-use assets	92,850
Property, plant and equipment	2,181,161
Other non-current receivables and assets	51,046
Deferred tax assets	31,227
Inventories	208,499
Trade receivables	310,077
Current income tax assets	9,850
Other assets	139,996
Cash and cash equivalents	187,255
Assets	4,440,772
Provisions for employee benefits	42,110
Other provisions	69,847
Financial liabilities	122,983
Lease liabilities	92,850
Trade payables	238,698
Deferred tax liabilities	599,398
Other current liabilities	464,618
thereof contingent liabilities	76,369
Liabilities	1,630,504
Acquired identifiable net assets	2,810,268
Goodwill	650,292
Net assets acquired / Purchase consideration	3,460,560

Significant influences from the purchase price allocation on the Balance Sheet and the Income Statement resulted from the adjustment of the intangible assets and property, plant and equipment to fair values. The intangible assets mainly include customer bases, brands, licenses and technologies / patents. Property, plant and equipment mainly consist of technical equipment and machinery, land, tanks and cylinders as well as the vehicle fleet. Fair value adjustments recorded as at the acquisition date in conjunction with the purchase price allocation are considered definitive.

There was a difference of K€ 650,292 between purchase price and fair values, which was shown as goodwill. This mainly results from expected synergy effects, which should arise due to the integration of the American and Western European business activities, as well as from the business opportunities of the acquired companies. The total amount of goodwill is not tax deductible.

Significant exercise of discretion: Contingent Liabilities

In connection with the acquisition of the North and South American and Western European companies, claims for compensation totaling K€ 61,414 and contingent liabilities of K€ 76,369 were recognized.

All compensation claims and the majority of the contingent liabilities (K€ 73,669) are attributable to Messer Gases Ltda., Brazil. The contingent liabilities mainly relate to obligations from pending tax law (K€ 40,465), antitrust (K€ 21,427) and labor law (K€ 11,099) proceedings. As at the time of acquisition, there were a total of approx. 342 outstanding matters in which claims with uncertain outcome were asserted against Messer Gases Ltda., Brazil.

Another contingent liability for dismantling obligations in the amount of K \in 2,700 was identified and accounted for as part of the purchase price allocation at Messer France S.A.S., France. This results from the obligation to seal a CO₂ source in a nature reserve near Montpellier (France), as no extraction permit is granted for this source. The potential non-discounted dismantling costs are estimated at K \in 1,000 to K \in 3,500 depending on the workload. The timing when the source will be completely sealed is uncertain.

As of December 31, 2019, the amount recognized in March 2019 as a contingent liability in the amount of K€ 2,602 was reduced, as some proceedings were completed in the course of the 2019 financial year.

Compensation claims exist against Linde Group in the event of unfavorable developments regarding outstanding tax and antitrust proceedings in Brazil. There are claims for compensation in the amount of K€ 21,427 relating to an antitrust case. In addition, a total of K€ 39,987 can be claimed by Messer for tax obligations. Messer can claim all individual tax obligations over K€ 44 incurred up until February 28, 2019 from the Linde Group if the total amount of the tax obligations exceeds K€ 4,380.

Acquired trade receivables

The fair value of trade receivables acquired is K€ 310,067. The gross amount of the contractual trade receivables due corresponds to K€ 352,561, of which K€ 42,494 is expected to be uncollectible.

Option for recognition of non-controlling interests

There is an option for recognition of non-controlling interests in an acquired company in accordance with IFRS. These can be recognized either at fair value or with the corresponding share of the non-controlling interest in the identifiable net assets of the acquired company in the balance sheet. Messer Industries Group recognizes all non-controlling interests in the acquired companies in the amount of their share in the identifiable net assets acquired.

Contribution to sales and earnings

The contribution of the acquired companies since belonging to the Group to sales revenues amounts to $K \in 1,687,608$ and to profit after taxes to $K \in (4,607)$.

Had the acquisition already taken place on January 1, 2019, consolidated pro forma sales revenues of K€ 2,006,786 and an after-tax profit of K€ 37,295 would have been reported for the financial year ended December 31, 2019. These amounts were calculated from the results of the acquired subsidiaries.

Transferred consideration

	in K€
Contribution of the "Western Europe" division	772,000
Payment	557,658
Debt	2,130,902
Total consideration transferred	3,460,560

Transaction costs of K€ 120,695 were incurred in connection with the acquisition of the North and South American and Western European companies. These were shown in the balance sheet in the amount of K€ 61,608 under non-current financial liabilities and in the amount of K€ 13,119 under current financial liabilities. In addition, transaction costs of K€ 45,969 were recorded in the "General administrative expenses" and "Other operating expenses" items in the Consolidated Income Statement. In the Cash Flow Statement, these costs are included in the cash flow from operating activities.

Sale of shares with loss of control

With a contract dated July 19, 2019, Messer Industries GmbH sold all of its shares (100 %) in Danmark A/S, Denmark, to Christian Nielsen Strandmøllen A/S. The transaction was completed with effect of August 1, 2019. The company leaves the scope of consolidation of Yeti GermanCo 1 GmbH upon completion of the purchase contract. The deconsolidation results in a profit of K€ 794, which is recognized in other operating income.

Other

With purchase and transfer agreement dated August 23, 2019, Messer Industries GmbH sold 51 % and Messer Group GmbH 49 % of their shares in Yeti NewCo 0 GmbH with immediate effect to Messer Family NewCo GmbH. The company was subsequently renamed to Yeti Management Verwaltungs GmbH.

Notes to the Consolidated Statement of Profit or Loss

4. Revenues

	Jan. 1 – Dec. 31, 2019		Aug. 1 - Dec. 31, 2018
From contracts with customers	1,491,719	88 %	-
From other revenue sources	195,889	12 %	-
Total	1,687,608	100 %	-

Revenues are generated primarily by the sale of bulk supply products, cylinder gases as well as on-site and pipeline supplies. Revenues for the 2019 financial year are distributed among the individual sales channels as follows:

	Jan. 1 - Dec. 31, 2019		Aug. 1 - Dec. 31, 2018
Bulk	1,033,803	61 %	_
Cylinder gases	374,652	22 %	_
Pipeline / on site	154,982	9 %	-
Hardware / other	124,171	8 %	_
Total	1,687,608	100 %	-

Revenues for the 2019 financial year are distributed among the individual regions as follows:

	Jan. 1 - Dec. 31, 2019		Aug. 1 - Dec. 31, 2018
North America	1,142,224	68 %	-
Western Europe	296,249	17 %	-
South America	249,135	15 %	-
Total	1,687,608	100 %	-

5. Cost of sales

Cost of sales comprises the cost of gases sold as well as the purchase cost of merchandise and hardware sold. Also included in cost of sales are directly attributable costs (such as energy, personnel and material costs) and attributable overheads relating to the production process, including depreciation of air separation plants.

	Jan. 1 - Dec. 31, 2019	Aug. 1 - Dec. 31, 2018
Goods purchased	28,893	_
Production costs		
Energy	213,647	_
Depreciation and amortization	137,158	_
Personnel expense	84,293	_
Maintenance	34,027	_
Taxes and other fees	16,231	_
Security and insurance	2,605	_
Other		
Raw materials and supplies	339,671	_
Hardware	3,479	_
Services	629	-
Other	10,931	-
Total	871,564	-

6. Distribution and selling expenses

Distribution and selling costs include all expenses which are related to the sale and marketing of a product. Distribution and selling costs also include the cost of all sales departments and logistics activities.

	Jan. 1 - Dec. 31, 2019	Aug. 1 - Dec. 31, 2018
Personnel expense	194,707	_
Depreciation and amortization	146,463	_
Transportation costs	111,496	_
Maintenance	28,946	_
Warehousing costs	5,400	_
Insurance	2,282	_
Advertising	864	-
Other	52,446	_
Total	542,604	-

7. General administrative expenses

General and administrative expenses include personnel and overhead costs of management and administrative areas to the extent not recharged as an internal service to other functions.

	Jan. 1 – Dec. 31, 2019	Aug. 1 - Dec. 31, 2018
Personnel expense	75,756	_
Depreciation and amortization	8,984	_
Insurance and audit services	7,918	-
IT services	6,201	_
Other	70,699	1,780
Total	169,558	1,780

8. Other operating income

	Jan. 1 – Dec. 31, 2019	Aug. 1 - Dec. 31, 2018
Exchange rate gains from operating activities	9,558	-
Gains on the disposal of non-current assets	3,696	-
Other income relating to prior periods	2,419	-
Derecognition of liabilities	1,322	_
Gains arising as a result of changes in scope of consolidation	794	-
Income from related parties	700	-
Insurance claims	38	_
Other reimbursements	36	_
Sundry	10,074	-
Total	28,637	-

9. Other operating expenses

	Jan. 1 – Dec. 31, 2019	Aug. 1 - Dec. 31, 2018
Legal and consulting expenses	33,703	44
Other taxes	3,599	_
Exchange rate losses from operating activities	3,320	_
Related party expenses	1,935	_
Losses on the disposal of non-current assets	857	_
Expenses relating to prior periods	598	-
Fair value gains / losses on derivatives recognized through	119	_
Bank charges	77	1
Sundry	4,070	-
Total	48,278	45

10. Interest result

Interest expenses for the financial year mainly include interest expenses for our bank financing. We refer to item 28 "Financial liabilities " in this regard. Interest income was generated primarily from bank deposits.

11. Other financial result

	Jan. 1 - Dec. 31, 2019	Aug. 1 - Dec. 31, 2018
Foreign currency exchange gains	10,560	-
Fair value gains / losses on derivatives recognized through profit or loss	9,232	9,025
Foreign currency exchange losses	(7,341)	_
Other	(12,289)	_
Total	162	9,025

For further information on derivatives, please refer to item 32 "Other information on financial instruments".

12. Tax result

	Jan. 1 - Dec. 31, 2019	Aug. 1 - Dec. 31, 2018
Current tax expense	(35,359)	-
Deferred tax expense / income	42,329	-
Total	6,970	-

Deferred income taxes related to items that were directly charged or credited to other comprehensive income:

	Jan. 1 - Dec. 31, 2019	Aug. 1 - Dec. 31, 2018
Balance of deferred taxes relating to fair value gains on hedging contracts	2,781	_
Balance of deferred income taxes on a net investment in a foreign operation	(1,683)	_
Balance of deferred taxes relating to remeasurement of net defined benefit obligation	2,138	_
Deferred tax assets / (liabilities) recognized in other comprehensive income	3,236	_

The following reconciliation summarizes the individual company-related determinations of the deferred taxes made with the respective country-specific tax rates, taking consolidation measures into account. The expected income tax is transferred to the effective tax income. To determine the expected income tax, the average group income tax rate of 30.00 % (previous year: —) applicable to the parent company in the 2019 financial year is multiplied by profit before tax.

	Jan. 1 – Dec. 31, 2019	Aug. 1 - Dec. 31, 2018
Tax rate	30.00 %	30.00 %
Profit before tax	(3,761)	7,200
Expected income tax / (charge)	1,128	(2,160)
Impairment losses on goodwill	-	-
Valuation allowance / non-recognition of deferred taxes on temporary differences	824	-
Valuation allowance / non-recognition of deferred taxes on tax losses available for carryforward	20,224	-
Effect of tax credits	148	_
Non-deductible interest expenses	-	-
Non-deductible withholding taxes / other taxes	(5,381)	-
Effect of changed tax rates	(231)	-
Equity method accounting for associated companies	677	-
Tax-exempt income from investments / tax-exempt gains on disposals of subsidiaries	-	-
Tax expense / (income) for prior years	(1,706)	-
Expenses not deductible for tax purposes / tax-exempt income	(9,358)	2,160
Tax rate differences at Group companies	551	_
Other	94	_
Effective tax income from operating activities	6,970	0
Effective tax rate	185.32 %	0 %

As of December 31, 2019, there were tax loss carry-forwards of K€ 262,758 (previous year: K€ 0) within Messer Industries Group, which can be carried forward in full without restriction.

In the case of Group companies that had losses in the current or previous period, a deferred tax claim of $K \in 74$ (previous year: $K \in 0$) was capitalized, the realization of which depends on future taxable results that are higher than the profit effects from the dissolution of existing taxable temporary differences. The recognition of deferred tax assets is justified in that its realization is probable on the basis of forecast results for tax purposes.

No deferred taxes were created for tax loss carry-forwards in the amount of K€ 198,553 (previous year: K€ 0) and on temporary differences of K€ 2,888 (previous year: K€ 0), since it seems likely – on the basis of forecast results for tax purposes – that it will not be possible to utilize the tax loss carry-forwards and temporary differences. The temporary differences of K€ 2,888 are to be regarded as non-forfeitable and the loss carry-forwards without deferred tax assets are also considered to be eligible for unlimited carry-forward.

In accordance with IAS 12.39, deferred taxes on the difference between the pro rata equity of a subsidiary recognized in the Consolidated Balance Sheet and the carrying amount of equity for that subsidiary must be included in the parent company's tax balance sheet (Outside Basis Differences) if it is expected to be realized. These differences are mainly due to retained earnings of German and foreign subsidiaries. No deferred taxes have been recognized on these retained earnings as they are re-invested indefinitely or are not subject to corresponding taxation. Distributions made by subsidiaries would be subject to dividend taxation. Distributions from abroad could also trigger withholding taxes. As of December 31, 2019, no deferred tax liabilities from Outside Basis Differences for planned dividend payments were taken into account on December 2019, as no realization is planned.

	Dec. 31, 2019	Dec. 31, 2018	Recognized in profit or loss	Recognized in other comprehensive income	Change in scope of consolidation
Deferred tax assets					
Tax losses and tax credits	20,917	-	(7,063)	-	27,980
Intangible assets and property, plant and equipment	200	_	(67)	_	267
Inventories	619	_	(209)	_	828
Trade receivables	5,107	-	(1,725)	-	6,832
Other current receivables and other assets	628	_	(212)	_	840
Provisions for employee benefits	17,297	-	(7,979)	2,138	23,138
Other non-current provisions	9,694	-	(3,274)	_	12,968
Other current liabilities	30,993	-	(10,467)	-	41,460
Sundry	23,679	-	(9,094)	1,098	31,675
Total	109,134	-	(40,090)	3,236	145,988
Deferred tax liabilities					
Intangible assets	(279,461)	-	36,867	_	(316,348)
Property, plant and equipment	(331,678)	-	43,780	_	(375,458)
Other non-current receivables and assets	(376)	-	50	_	(426)
Inventories	(14,282)	-	1,885	_	(16,167)
Non-current and current financial debt	(588)	-	78	-	(666)
Other current provisions	(3,200)	-	423	_	(3,623)
Sundry	(2,731)	_	361	_	(3,092)
Total	(632,316)	-	83,464	-	(715,780)
Deferred tax liabilities, net	(523,182)	-	43,374	3,236	(569,792)

Deferred taxes are attributable to the following balance sheet items as of December 31, 2019:

* exchange rate changes recognized with no effect on earnings: K€ 1,045

With regard to the changes in the scope of consolidation, we refer to our remarks in item 3 "Consolidated companies".

Deferred tax assets and liabilities, after offset at an individual company level, are made up as follows:

Deferred taxes	Dec. 31, 2019	Dec. 31, 2018
Deferred tax assets	6,323	_
Deferred tax liabilities	(529,505)	-
Deferred tax liabilities, net	(523,182)	-

Deferred tax assets and liabilities in the balance sheet and deferred taxes in the income statement can be reconciled as follows:

	Dec. 31, 2019	Dec. 31, 2018
Change in deferred tax assets in the balance sheet	6,323	_
Change in deferred tax liabilities in the balance sheet	(529,505)	_
Difference	(523,182)	_
of which:		
Recognized in the income statement	42,329	-
Change in the scope of consolidation	(569,792)	-
Offsetting with other comprehensive income	3,236	-
Translation differences	1,045	-

13. Personnel expense

Personnel expenses consist of wages and salaries as well as social security contributions and other employee benefits (e.g. pensions).

	Jan. 1 – Dec. 31, 2019	Aug. 1 - Dec. 31, 2018
Personnel expense	359,172	-

The above amount includes wages and salaries in the amount of K \in 266,035 (previous year: K \in 0), expenses for pensions and support in the amount of K \in 2,309 (previous year: K \in 0), social contributions in the amount of K \in 76,613 (previous year: K \in 0) and other personnel expenses in the amount of K \in 14,215 (previous year: K \in 0). Expenditure for defined contribution pension plans, which mainly relate to statutory pension insurance in Germany, amounted to a total of K \in 766 for the 2019 financial year (previous year: K \in 0).

14. Number of employees (annual average)

The average number of employees is broken down as follows:

By region	Jan. 1 – Dec. 31, 2019	Aug. 1 - Dec. 31, 2018
North America	2,838	-
South America	2,208	-
Western Europe	802	-
Total number of employees	5,848	-
By function	Jan. 1 – Dec. 31, 2019	Aug. 1 - Dec. 31, 2018
Production and filling	2,630	-
Logistics	1,509	-
Sales and marketing	949	-
Administration	632	-
Engineering	128	-
Total number of employees	5,848	_

Notes to the Consolidated Balance Sheet

15. Intangible assets

2019	Goodwill	Right-of-use assets	Other intangible assets	Total
Acquisition cost				
Balance at Jan. 1, 2019	1	-	-	1
Additions	_	7,385	326	7,711
Change in scope of consolidation	655,430	91,119	1,233,790	1,980,339
Transfers	_	-	1,234	1,234
Disposals	_	(754)	(2,859)	(3,613)
Translation differences	470	85	(1,394)	(839)
Balance at Dec. 31, 2019	655,901	97,835	1,231,097	1,984,833
Accumulated impairment losses				
Balance at Jan. 1, 2019	-	-	-	-
Additions	_	(13,977)	(68,819)	(82,796)
Change in scope of consolidation	-	(62)	-	(62)
Transfers	-	_	_	-
Disposals	-	396	_	396
Translation differences	-	(10)	54	44
Balance at Dec. 31, 2019	-	(13,653)	(68,765)	(82,418)
Net carrying amounts as of Jan. 1, 2019	1	-	_	1
Net carrying amounts as of Dec. 31, 2019	655,901	84,182	1,162,332	1,902,415

The changes to the scope of consolidation include the addition of the assets of the companies acquired from Linde in the USA, Canada, Brazil and Colombia, the Western European companies contributed and the company acquired from Praxair in Chile. In this respect, we refer to our remarks in item 3 "Consolidated companies".

2018	Goodwill	Right-of-use assets	Other intangible assets	Total
Acquisition cost				
Balance at Aug. 1, 2018	-	-	-	-
Additions	-	_	-	-
Change in scope of consolidation	1	_	-	1
Disposals	-	_	-	-
Translation differences	_	-	-	-
Balance at Dec. 31, 2018	1	-	-	1
Accumulated impairment losses				
Balance at Aug. 1, 2018	-	-	-	-
Additions	-	_	-	-
Change in scope of consolidation	-	-	-	-
Disposals	-	_	-	-
Translation differences	-	-	-	-
Balance at Dec. 31, 2018	-	-	-	-
Net carrying amounts as of Aug. 1, 2018	-	-	-	-
Net carrying amounts as of Dec. 31, 2018	1	-	-	1

Goodwill

Goodwill is subjected to an annual impairment test. In accordance with IAS 36, goodwill is allocated to the smallest cash-generating unit for which goodwill is monitored and tested for impairment at this level by comparing discounted expected future cash flow with the carrying amount of that cash-generating unit. The smallest identifiable group of assets that generate cash inflows from continued use, which are largely independent of the cash inflows of other assets or other groups of assets (cash-generating unit), were identified in principle by the companies operating in each country of Messer Industries Group. If individual production and distribution companies within a country complement each other economically, they are grouped into groups of cash-generating units for the purpose of monitoring goodwill. According-ly, for Belgium, Brazil, Germany, Colombia (further combined with the business activities in Chile), the Netherlands, Spain and the USA, various companies were combined in the context of the impairment test.

	Dec. 31, 2019	Dec. 31, 2018
Cash-generating unit USA	424,443	-
Cash-generating unit Canada	74,578	_
Cash-generating unit Germany	33,086	1
Cash-generating unit Brazil	31,046	_
Cash-generating unit France	23,043	_
Cash-generating unit Colombia	21,505	_
Cash-generating unit Switzerland	17,429	_
Cash-generating unit Spain	13,879	_
Cash-generating unit Belgium	9,623	_
Cash-generating unit Netherlands	3,649	_
Cash-generating unit Algeria	2,403	_
Cash-generating unit Portugal	1,217	_
	655,901	1

The following table shows the breakdown of goodwill as of December 31, 2019:

The recoverable amount for an individual operating company is based on calculations of its respective value ("value in use"). The value in use is the present value of the estimated future cash flows expected from continued operation of each company. The cash flow forecast is based on the most recent financial plans of the relevant cash-generating unit which have been authorized by management. Using analyses of past actual results as the starting point, values in use were calculated on the basis of detailed forecasts of sustainable cash flows through 2023. Cash flows for periods subsequent to the detailed forecasting period were based on the final period of the detailed forecasts (using the perpetual annuity model). Forecast cash flows were discounted to their present value at the valuation date using an appropriate, country-specific capitalization interest rate. This rate was determined, in turn, using the Capital Asset Pricing Model ("CAPM"), whereby the capitalization interest rate is broken down into the following components: base interest rate, risk premium and growth discount. The risk-free base interest rate was derived from yields on long-term government bonds and taking account of the relevant country rating ("Moody's"). The risk premium was obtained by multiplying the market risk premium by the beta factor that reflects the relative risk of a given stock compared with the overall market. The market risk premium was calculated for each country using the Damodaran model, taking into account the relevant country rating ("Moody's"). The beta factor was determined on the basis of an analysis of a peer group of stock market-listed companies comparable to Messer Industries Group. Country-specific rates used were as follows:

	Dec. 31, 2019	Dec. 31, 2018
Brazil	10.90 %	-
Colombia	10.20 %	_
Algeria	8.64 %	_
Portugal	8.27 %	_
Spain	7.44 %	_
USA	6.35 %	-
Canada	6.30 %	-
Belgium	6.10 %	-
France	5.95 %	-
Switzerland	5.33 %	_
Netherlands	5.31 %	-
Germany	5.29 %	_

The detailed forecasts up to 2023 used to determine the values in use of the cash-generating units are based i.a. on the assumptions for sales growth, development of the EBITDA margin and the sustained growth rate after the detailed planning period. These assumptions are as follows for the cash-generating units:

Entity	Carrying amount	Principal forecasting assumptions			
	Dec. 31, 2019		Revenue growth (CAGR)	Trend in EBITDA margin*	Growth rate **
Cash-generating unit USA	424,443	65 %	moderately rising	slightly falling	1.5 %
Cash-generating unit Canada	74,578	11 %	moderately rising	slightly falling	1.5 %
Cash-generating unit Germany	33,086	5 %	significantly rising	slightly rising	0.5 %
Cash-generating unit Brazil	31,046	5 %	significantly rising	stable	1.5 %
Cash-generating unit France	23,043	4 %	slightly rising	slightly rising	0.5 %
Cash-generating unit Colombia	21,505	3 %	moderately rising	slightly falling	1.5 %
Cash-generating unit Switzerland	17,429	3 %	moderately rising	stable	0.5 %
Cash-generating unit Spain	13,879	2 %	moderately rising	significantly rising	0.5 %
Cash-generating unit Belgium	9,623	1 %	slightly rising	stable	0.5 %
Cash-generating unit Netherlands	3,649	1 %	slightly rising	slightly rising	0.5 %
Cash-generating unit Algeria	2,403	0 %	slightly rising	slightly falling	0.5 %
Cash-generating unit Portugal	1,217	0 %	significantly rising	significantly rising	0.5 %
Total	655,901	100 %			

* end of the detailed forecasting period in comparison to the current financial year

** growth rate after the detailed forecasting period

The weighted average growth rate for extrapolation of cash flows outside the planning period is uniformly 0.5 % for Western European units (previous year: —). For American units, the average growth rate is uniformly 1.5 % (previous year: —).

The following three scenarios were simulated for sensitivity analysis purposes:

- (a) Increase in the country-specific discount factors by 1 percentage point
- (b) The sustained growth rate after the detailed planning period was reduced by 0.5 %
- (c) The planned EBIT of the cash-generating units falls short of expectations over the entire planning period and the subsequent permanent forward projection of the last financial year 2023 by 10 % throughout

In these scenarios, there is no impairment requirement of goodwill for all companies:

Entity	Carrying amount	Sensitivity scenarios			
	Dec. 31, 2019		Discount rate +1 percentage point	Growth rate 0,0 % / 1,0 % *	EBIT -10 % Plan **
Cash-generating unit USA	424,443	65 %	_	_	_
Cash-generating unit Canada	74,578	11 %	_	-	-
Cash-generating unit Germany	33,086	5 %	_	_	_
Cash-generating unit Brazil	31,046	5 %	_	-	_
Cash-generating unit France	23,043	4 %	_	-	_
Cash-generating unit Colombia	21,505	3 %	-	_	_
Cash-generating unit Switzerland	17,429	3 %	_	_	-
Cash-generating unit Spain	13,879	2 %	_	_	_
Cash-generating unit Belgium	9,623	1 %	_	_	_
Cash-generating unit Netherlands	3,649	1 %	_	_	_
Cash-generating unit Algeria	2,403	0 %	_	_	_
Cash-generating unit Portugal	1,217	0 %	_	-	-
Total	655,901	100 %			

* sustainable growth rate after the detailed forecasting period

** for the whole of the forecasting period

Right-of-use assets

Right-of-use assets relate to assets capitalized under leases according to IFRS 16. These are comprised of the following:

2019	Land and buildings	Plants and machinery	Other operational and office equipment	Total
Acquisition or Manufacturing costs				
Balance at Jan. 1, 2019	-	-	-	-
Additions	1,732	5,628	25	7,385
Change in scope of consolidation	67,678	23,058	383	91,119
Disposals	(36)	(718)	_	(754)
Translation differences	118	(40)	7	85
Balance at Dec. 31, 2019	69,492	27,928	415	97,835
Accumulated impairment losses				
Balance at Jan. 1, 2019	-	-	-	-
Additions	(7,029)	(6,806)	(142)	(13,977)
Change in scope of consolidation	(19)	(40)	(3)	(62)
Disposals	36	361	(1)	396
Translation differences	(22)	12	_	(10)
Balance at Dec. 31, 2019	(7,034)	(6,473)	(146)	(13,653)
Net carrying amounts as of Jan 1, 2019	-	-	-	-
Net carrying amounts as of Dec. 31, 2019	62,458	21,455	269	84,182

Interest expenses amounting to K€ 4,563 were recorded in connection with leases. In addition, the following expenses were recorded, which were not taken into account in the valuation of right-of-use assets and corresponding liability:

	2019
Expenses for leases of a low-value asset	596
Expenses for short-term leases	6,363
Expense for variable lease payments	-
	6,959

Overall, leases resulted in cash outflows of K€ 22,206 in the year under review.

Other intangible assets

Other intangible assets consist mainly of customer bases, technologies / patents and licenses, whose net carrying amounts as of December 31, 2019 were K \in 775,389 (previous year: K \in 0), K \in 156,543 (previous year: K \in 0) and K \in 130,011 (previous year: K \in 0) as well as other intangible assets.

The customer bases result from the "Purchase Price Allocation", carried out on March 31, 2019 and will be amortized over a period of up to 47 years on a straight-line basis, remaining after December 31, 2019. The useful life of the customer bases is a maximum of 47.5 years and exceeds the original maximum contract term of 15 years, since the respective renewal clauses are most likely to be used by the customers. The amortization expense for the year is included in distribution and selling costs.

The item technology mainly includes patents in the segments software, oil & gas, energy, food and healthcare acquired from Linde Group. The net carrying amounts of the patents as of 31 December 2019 amount to K€ 133,576 (previous year: K€ 0) in the USA, K€ 9,835 (previous year: K€ 0) in Colombia, K€ 7,742 (previous year: K€ 0) in Canada and K€ 5,390 (previous year: K€ 0) in Brazil.

The licenses include the rights for the brands "Messer – Gases for Life" (K€ 127,838, previous year: K€ 0) and "REMEO" (K€ 2,173, previous year: K€ 0) and are amortized as planned over their useful life of ten years.

For all companies in the Group, the value in use determined in accordance with the principles described was above net fixed assets of the cash-generating units. As a result, there was no need for impairment of other intangible assets for the 2019 financial year.

2019	Land and buildings	Plants and machinery	Other operational and office equipment	Plants under construction	Total
Acquisition or Manufacturin	g costs				
Balance at Jan. 1, 2019	-	-	-	-	-
Additions	950	20,674	3,401	223,976	249,001
Change in scope of consolidation	207,038	1,618,943	178,887	194,953	2,199,821
Transfers	3,414	115,588	13,630	(133,866)	(1,234)
Disposals	(3,316)	(9,049)	(3,908)	(216)	(16,489)
Translation differences	(305)	(2,858)	(139)	(141)	(3,443)
Balance at Dec. 31, 2019	207,781	1,743,298	191,871	284,706	2,427,656

16. Property, plant and equipment

2019	Land and buildings	Plants and machinery	Other operational and office equipment	Plants under construction	Total
Accumulated impairment lo	sses				
Balance at Jan. 1, 2019	-	-	-	-	-
Additions	(6,532)	(168,295)	(34,981)	_	(209,808)
Change in scope of consolidation	_	11	5	_	16
Transfers	(2)	(10)	12	-	_
Disposals	641	3,427	1,237	-	5,305
Translation differences	4	200	(10)	-	194
Balance at Dec. 31, 2019	(5,889)	(164,667)	(33,737)	-	(204,293)
Net carrying amounts as of Jan 1, 2019	-	-	-	_	_
Net carrying amounts as of Dec. 31, 2019	201,892	1,578,631	158,134	284,706	2,223,363

The changes to the scope of consolidation include the addition of the assets of the companies acquired from Linde in the USA, Canada, Brazil and Colombia, the Western European companies contributed and the company acquired from Praxair in Chile. In this respect, we refer to our remarks in item 3 "Consolidated companies".

2018	Land and buildings	Plants and machinery	Other operational and office equipment	Plants under construction	Total
Acquisition or Manufacturin	ig costs				
Balance at Aug. 1, 2018	-	-	-	-	-
Additions	_	_	_	_	_
Change in scope of consolidation	_	-	_	-	-
Reclassifications	_	-	_	_	-
Transfers	_	-	_	-	-
Disposals	_	-	_	-	-
Translation differences	_	-	-	_	-
Balance at Dec. 31, 2018	-	-	-	-	-

2018	Land and buildings	Plants and machinery	Other operational and office equipment	Plants under construction	Total
Accumulated impairment los	sses				
Balance at Aug. 1, 2018	-	-	-	-	-
Additions	_	-	_	-	-
Change in scope of consolidation	_	-	_	_	-
Reclassifications	_	-	_	_	-
Transfers	_	-	_	-	-
Disposals	_	-	_	-	-
Translation differences	_	_	_	_	-
Balance at Dec. 31, 2018	-	-	-	-	-
Net carrying amounts as of Aug. 1, 2018	-	-	-	-	-
Net carrying amounts as of Dec. 31, 2018	_	-	-	-	-

In the financial year, borrowing costs for qualified assets amounting to K€ 6,876 (previous year: K€ 0) were capitalized. The average interest rate was 3.2 % (previous year: 0 %).

For all companies in the Group, the value in use calculated in accordance with the principles described in Section 15 "Intangible Assets" was above the net fixed assets of the cash-generating units. As a result, there was no impairment requirement for property, plant and equipment in the 2019 financial year.

In addition, property, plant and equipment includes technical equipment, including tanks and gas cylinders, from operating leases in which Messer Industries Group acts as a lessor. The minimum lease payments to be received from customers in the future from such operating leases are broken down as follows:

	Dec. 31, 2019	Dec. 31, 2018
due up to 1 year	2,605	-
due within 1 to 5 years	4,518	-
due later than 5 years	168	-
	7,291	-

Income in the amount of $K \in 7,001$ (previous year: $K \in 0$) from contingent rent payments from operating leases was recorded in the reporting period.

17. Shares of other companies

Investments recognized using the equity method

The following shares in associated companies were recognized at December 31, 2019 at the value of the proportionate equity of the investment:

	Shareholding	(in per cent)	Carrying amount	
Name and registered office of company	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018
Non-significant entities				
Limes S.A.S., Saint-Herblain	50	0	3,725	-
Cliffside Helium LLC, Bridgewater, New Jersey	26	0	47	-
Cliffside Refiners LP, Bridgewater, New Jersey	26	0	1,605	_
GreenCO2, Antwerp	35	0	517	-
			5,894	-

Investments in associated companies developed as follows:

	2019	2018			
Acquisition cost					
Balance at Jan. 1	-	_			
Group's share of results / additions	100	_			
Change in scope of consolidation	5,704	_			
Reclassifications	-	-			
Disposals	-	_			
Translation differences	90	_			
Balance at Dec. 31	5,894	-			
Accumulated impairment losses					
Balance at Jan. 1	-	-			
Additions	-	_			
Balance at Dec. 31	-	-			
Net carrying amount as of Jan. 1	-	-			
Net carrying amount as of Dec. 31	5,894	_			

The following table shows summarized financial information for the associated companies which are not individually material: Limes S.A.S., France, is a 50 % participation of Messer France SAS, France. bECO2 B.V.B.A., Belgium, has a 50 % stake in GreenCO2, Belgium. Messer LLC, USA, holds 26 % of Cliffside Refiners LP, USA, and 26 % of Cliffside Helium LLC, USA.

	Jan. 1 - Dec. 31, 2019	Aug. 1 - Dec. 31, 2018
Net profit for the year	401	-
Other comprehensive income	_	_
Total comprehensive income	401	-

Joint operations

Messer LLC, USA, holds a 50 % stake in joint agreements named East Coast Nitrogen Company LLC, Glenmont, USA, and East Cost Oxygen Company LLC, Bethlehem, USA, which were formed as partnerships with Air Products, USA, to produce liquid nitrogen, oxygen and argon for selected contractors of the joint agreement.

The associated assets and liabilities as well as income and expenses from joint activities are included in the Consolidated Financial Statements in accordance with the economically attributable portion.

The following table shows the summarized financial data of the individually immaterial joint agreements:

	Jan. 1 - Dec. 31, 2019	Aug. 1 - Dec. 31, 2018
Net profit for the year	(4,413)	-
Other comprehensive income	161	-
Total comprehensive income	(4,252)	-

18. Investments in other companies

The item "Investments in other companies" comprises equity investments in various entities that are not consolidated or accounted for using the equity method.

	2019	2018			
Acquisition cost					
Balance at Jan. 1	-	-			
Additions	-	-			
Change in scope of consolidation	1,285	-			
Reclassifications	-	-			
Disposals	-	-			
Translation differences	-	-			
Balance at Dec. 31	1,285	-			
Accumulated impairment losses					
Balance at Jan. 1	-	-			
Additions	-	-			
Change in scope of consolidation	-	-			
Reclassifications	-	-			
Disposals	-	-			
Translation differences	-	-			
Balance at Dec. 31	-	-			
Net carrying amount as of Jan. 1	-	-			
Net carrying amount as of Dec. 31	1,285	-			

The holdings are the companies Lida S.A.S., France, and Soprogaz S.N.C., France.

19. Other financial investments

Other financial investments developed as follows:

2019	Non-current loan receivables	Sundry other financial investments	Total
Acquisition cost			
Balance at Jan. 1, 2019	-	-	-
Additions	_	_	-
Change in scope of consolidation	_	209	209
Transfers	_	_	-
Disposals	_	_	-
Translation differences	_	_	-
Balance at Dec. 31, 2019	-	209	209
Accumulated impairment losses			
Balance at Jan. 1, 2019	-	-	-
Additions	_	_	-
Change in scope of consolidation	-	_	-
Transfers	-	_	-
Disposals	-	_	-
Translation differences	_		-
Balance at Dec. 31, 2019	-	_	-
Net carrying amount as of Jan. 1, 2019	-	-	-
Net carrying amount as of Dec. 31, 2019	-	209	209

2018	Non-current loan receivables	Sundry other financial investments	Total
Acquisition cost			
Balance at Aug. 1, 2018	-	-	-
Additions	_	_	-
Disposals	_	_	-
Translation differences	_	_	-
Balance at Dec. 31, 2018	-	-	-
Accumulated impairment losses			
Balance at Aug. 1, 2018	-	-	-
Additions	_	_	-
Disposals	_	_	-
Translation differences	_	_	-
Balance at Dec. 31, 2018	-	-	-
Net carrying amount as of Aug. 1, 2018	-	-	-
Net carrying amount as of Dec. 31, 2018	-	-	-

20. Other non-current receivables and assets

	Dec. 31, 2019	Dec. 31, 2018
Trade receivables	282	-
Other receivables	37,082	-
Financial assets	37,364	-
Accruals and deferred income	1,357	-
Non-financial assets	1,357	-
Total	38,721	-

21. Inventories

	Dec. 31, 2019	Dec. 31, 2018
Raw materials and supplies	27,233	-
Work in progress	3,797	_
Finished goods and goods for resale	153,491	_
Total	184,521	-

Of inventories recognized on December 31, 2019, K \in 17,288 (previous year: K \in 0) were measured at their net realizable value. There are impairments of K \in 14,834 (previous year: K \in 0) on the net realizable value. The impairments were recorded as cost of sales. The amount of inventories that was recognized as an expense in the reporting period amount to K \in 385,252 (previous year: K \in 0).

22. Trade receivables

	Dec. 31, 2019	Dec. 31, 2018
Trade receivables	314,754	1
Impairments of receivables	(38,347)	_
Total	276,407	1

23. Contract balances

Assets in conjunction with customer contracts are shown in the Group's balance sheet as follows:

	Dec. 31, 2019	Dec. 31, 2018
Receivables included in trade receivables	274,069	_

All work related to engineering contracts was billed during the financial year 2019 and the corresponding amounts recognized in trade receivables.

Performance obligations arising from contracts with customers

The following table shows the Group's performance obligations arising from long-term gas supply contracts with customers:

	Dec. 31, 2019	Dec. 31, 2018
due in 1 st year	104,598	-
due in 2 nd year	104,183	-
due in 3 rd year	99,833	_
due later than 3 years	491,759	-
Total	800,373	-

The amounts shown above mainly relate to contractually agreed fixed payments, take-or-pay installments. Variable obligations were not taken into account. Revenues are recognized as a general rule at the time of delivery of the gases.

24. Other current receivables and non-financial assets

	Dec. 31, 2019	Dec. 31, 2018
Sundry other receivables from operating activities	29,194	_
Derivative financial instruments (hedge relationship)	5,095	-
Receivables from related parties	4,731	-
Deposits and guarantees	388	-
Derivative financial instruments (no hedge relationship)	109	17,406
Receivables from employees	40	-
Sundry	2,762	-
Financial assets	42,319	17,406
Other tax receivables	44,563	123
Deferred expenses	9,449	-
Advance payments to suppliers	864	-
Sundry	45	-
Non-financial assets	54,921	123
Total	97,240	17,529

25. Cash and cash equivalents

	Dec. 31, 2019	Dec. 31, 2018
Cash, bank balances and checks	577,422	124
Cash equivalents	-	_
Cash and cash equivalents	577,422	124

26. Provisions for employee benefits

	Dec. 31, 2019	Dec. 31, 2018
Pension provisions	49,201	-
Provisions for other employee benefits	507	-
Provisions for employee benefits	49,708	-

Pension benefits are provided to employees in a number of countries through both defined benefit and defined contribution pension plans. The benefits vary according to legal, fiscal and economic circumstances in each country. Plan benefits are generally based on years of service and the level of employee compensation. Provisions for other employee benefits relate mainly to company or statutory severance benefits and early retirement benefits. Some of the obligations for defined benefit pension plans are covered by plan assets held in independent trust funds. Net assets of these funds are invested primarily in real estate, fixed-income securities and marketable equity securities.

The amount reported in the balance sheet is derived as follows:

	Dec. 31, 2019	Dec. 31, 2018
Present value of funded pension benefits	132,497	_
Present value of pension benefits covered by accounting provisions	18,787	-
Present value of all pension benefits	151,284	-
Fair value of plan assets of all funds	(102,083)	-
Net liability recognized	49,201	-

The present value of the funded pension commitments mainly relates to pension plans of Messer Canada Inc. in the amount of K \in 86,463 (previous year: K \in 0).

Messer Canada Inc. operates a funded pension plan that grants members benefits in the form of a guaranteed lifetime pension. The amount of this pension is based on average income and is linked to age and length of service. In Canada, the defined benefit component of the plan ("Defined Benefit – DB") has been closed for new entrants since January 1, 2005. Newcomers join a defined contribution plan ("DC"). In the defined benefit pension plan, future service for remaining employees will no longer be registered, with the final registration ending on June 30, 2021. The Canadian pension plan is managed by a pension committee, with the assets held in a pension fund that is legally independent of the company. The assets cannot be used for any purpose other than the payment of pension benefits and related administrative fees.

The minimum funding requirements in Canada require the company to make special payments to amortize any shortfalls in the assets of the plans in relation to the relevant funding objectives. Instead of these special payments, collateral in the form of letters of credit up to a maximum of 15 % of the actuarial liability used to determine the financing target is permitted. The company currently does not use letters of credit. In accordance with Canadian law, a balance remaining after the plan members have accrued benefits and after the plan has ended may be returned to the company. Pension legislation in Canada may require the company to make a proposal to members and beneficiaries regarding the allocation of excess assets. Part of this surplus can be used by the company to reduce future contributions or to pay reimbursable administrative expenses.

The company also offers a limited number of active employees and retirees employer-paid life insurance and post-retirement health plans. The post-retirement benefit plan is not funded.

Defined benefit plans expose the Company to various risks. In addition to general actuarial risks such as longevity risk and interest rate risk, the company is exposed to currency risk as well as capital market and investment risk. The risk exposures from the relevant plans are not materially different.

The following table shows the reconciled funding status of the defined benefit pension plans with the amounts recognized in the Consolidated Financial Statements as of December 31, 2019 / 2018:

	Dec. 31, 2019		Dec. 31, 2018	
	Pension benefits covered by accounting provisions	benefit obligations financed by funds	Pension benefits covered by accounting provisions	benefit obligations financed by funds
Change in the present value of the defined benefit	t pension plans			
Present value of all pension benefits at Jan. 1	-	-	-	-
Translation differences	(212)	2,317	_	_
Current service cost	223	1,320	-	-
Past service cost	(245)	-	-	-
Interest expense on obligations	981	2,754	_	_
Employee contributions	-	489	_	_
Actuarial losses (gains)	5,214	6,058	-	-
Pension payments	(784)	(4,614)	_	_
Change in scope of consolidation	13,610	124,173	-	_
Present value of all pension benefits at Dec. 31	18,787	132,497	_	_

	Dec. 3	1, 2019	Dec. 3	1, 2018
	Pension benefits covered by accounting provisions	benefit obligations financed by funds	Pension benefits covered by accounting provisions	benefit obligations financed by funds
Change in plan assets of all funds				
Fair value of plan assets of all funds at Jan. 1	-	-	_	_
Interest income / (losses)	-	2,123	-	-
Income / (losses) (excl. interest income / losses)	-	3,537	-	-
Contributions paid in - employer	-	2,264	-	-
Contributions paid in - employee	-	489	-	-
Pension payments	-	(4,466)	-	_
Unrecognized plan assets surplus	-	_	-	_
Change in scope of consolidation	-	96,387	-	-
Translation differences	-	1,749	-	_
Fair value of plan assets of all funds at Dec. 31	-	102,083	-	-

The changes in the scope of consolidation affect our subsidiaries in Western Europe and North and South America that were added as of March 1, 2019. In this respect, we refer to our remarks in item 3 "Consolidated companies".

The fair value of plan assets relates to the following asset classes. The amounts shown are weighted averages:

	Dec. 31, 2019 Fair value		Dec. 31, 2018 Fair value	
Shares & funds	46,218	45 %	_	-
Real estate	47,371	46 %	_	-
Bonds	4,235	4 %	_	-
Cash funds	2,727	3 %	_	_
Other assets	1,532	2 %	_	-
Total	102,083	100 %	-	-

All plan assets are held for the sole purpose of fulfilling defined benefit obligations. Setting aside funds in this way – based on statutory requirements in some countries and on a voluntary basis in others – represents a precautionary measure to enable Messer Industries Group to finance future cash flows. Due to the diversity of pension entitlements within Messer Industries Group, the interest rate is not hedged by using financial instruments. Following guidelines stipulated by local management, the bodies responsible for the various pension funds decide on the best possible investment strategy commensurate with the age of beneficiaries and the timing of future payments, in accordance with applicable legislation. Most of the plans do not aim for maximizing profit, but rather on ensuring optimal provision for the entities and employees concerned. Funds held to pay future benefits are invested responsibly.

	Jan. 1 - De	c. 31, 2019	Jan. 1 - Dec. 31, 2018		
	benefit obligations financed by provisions	benefit obligations financed by funds	benefit obligations financed by provisions	benefit obligations financed by funds	
Experience adjustments	1,566	(1,537)	_	_	
Change in financial assumptions	3,648	7,595	_	-	
Change in biometric assumptions	-	-	_	_	
Actuarial losses / (gains) arising on the reme- asurement of the present value of pension benefits	5,214	6,058	-	-	

Actuarial losses / (gains) arising on the of the present value of pension benefits comprise the following:

The following items were recognized in the year under review with profit / loss impact:

	Jan. 1 – Dec. 31, 2019	Aug. 1 - Dec. 31, 2018
Current service cost	1,543	-
Past service cost	-	-
Interest expense on obligations	3,735	-
Expected return on plan assets	(2,123)	-
Other	-	-
Total amounts recognized with profit / loss impact	3,155	-

The calculation of obligations and (in certain cases) the related plan assets is based on the following actuarial assumptions (reported as a weighted average):

	Jan. 1 – Dec. 31, 2019 (in per cent)	Aug. 1 - Dec. 31, 2018 (in per cent)
Discount rate	2.65	-
Expected rate of salary increases	1.66	-
Expected return on plan assets	0.42	-
Expected rate of pension increases	0.84	-

The CPM 2014 tables were used to measure pension obligations in Canada. The pension obligation in Switzerland was assessed on the basis of the BVG 2015 GT ("generation tables"). Country-specific mortality tables were used to measure the pension obligations for the other group companies.

	Dec. 31, 3	2019	Dec. 31, 2018	
Current employees	92,302	61 %	_	_
Ex-employees	17,697	12 %	_	-
Pensioners	41,285	27 %	-	_
Total	151,284	100 %	-	-

The present value of the defined benefit obligation relates to the following groups of beneficiaries:

The weighted average term of the defined benefit obligation as of December 31, 2019 is 15.1 years (previous year: 0 years).

An increase or decrease of the discount rate by 50 basis points would have had an impact on the present value of the pension obligations as of December 31, 2019 as follows:

Change in discount rate in basis points	- 50	+ 50	-/+ 0
Present value of all pension benefits	164,134	139,477	151,284

The sensitivity calculations are based on the average term of the pension obligations determined as of December 31, 2019. The calculation was made for the discount rate, the actuarial parameter classified as material. As the sensitivity analysis is based on the average duration of the expected pension obligations and consequently without consideration of the expected payment dates, they only lead to approximate information or tendency statements.

The Group expects contributions to the defined benefit plans of K€ 2,622 in 2019.

27. Other provisions

2019	Jan. 1, 2019	Allocated	Utilized	Reversed	Change in the scope of consoli- dation	Translation differences	Dec. 31, 2019
Non-current							
Dismantling obligations	_	2,350	(2,506)	_	27,807	(48)	27,603
Litigation	-	1,415	(119)	(2,198)	10,974	(187)	9,885
Environmental risks	_	133	(5,709)	_	12,689	(9)	7,104
Personnel	_	3,762	(1,940)	(2)	1,456	(2)	3,274
Sundry	_	500	_	_	2,701	-	3,201
Total	_	8,160	(10,274)	(2,200)	55,627	(246)	51,067

2019	Jan. 1, 2019	Allocated	Utilized	Reversed	Change in the scope of consoli- dation	Translation differences	Dec. 31, 2019
Current							
Personnel	_	4,555	(1,942)	(133)	8,206	(15)	10,671
Environmental risks	_	7,259	(3,411)	_	1,382	(5)	5,225
Dismantling obligations	_	3,624	(1,637)	_	1,539	69	3,595
Litigation	_	542	(210)	(43)	1,103	(8)	1,384
Sundry	_	5,158	(2,985)	(323)	4,185	(51)	5,984
Total	-	21,138	(10,185)	(499)	16,415	(10)	26,859

Contracts for which provisions have been recognized have a broad range of remaining terms of between one and ten years.

The provisions for contractually agreed dismantling obligations for existing plants mainly relate to Messer LLC, USA. Messer North America Inc., USA, accounted for a significant portion of the provisions for environmental risks which was formed for multi-year cleaning obligations of plants.

The provisions for litigation essentially relate to the areas of competition, personnel and civil litigation.

The provisions for personnel as of December 31, 2019 mainly relate to bonus payments and outstanding vacation.

Discounting non-current provisions amounts to K€ 2,116 (previous year: K€ 0).

28. Financial liabilities

On March 1, 2019, Messer Industries GmbH and Messer Industries USA, Inc., USA, as the borrower and Yeti GermanCo 3 GmbH as another party, signed a loan agreement with a banking group led by CITIBANK NA, United Kingdom.

The loan agreement is used to partially finance the purchase price payment to Linde AG and Praxair Inc., USA, for large parts of the activities for sale in North and South America and to finance the company's general financing needs.

The credit agreement contains three credit lines:

• "Facility B-1" amounting to USD 2,225 million as a long-term, fully drawn loan with a term of seven years. The borrower is Messer Industries USA, Inc., USA. The loan will be repaid quarterly at 0.25 % of the original amount, starting on June 28, 2019. Full repayment of the balance will be made on March 1, 2026. The margin is 2.5 % p. a. or 1.5 % p. a. depending on the underlying refinancing base of the banks.

- "Facility B-2" amounting to € 540 million as a long-term, fully drawn loan with a term of seven years, the borrower is Messer Industries GmbH. The loan is due on March 1. 2026. The margin is initially, until August 28, 2019, 2.75 % p. a. and is then subject to an adjustment mechanism based on the development of the ratio of senior net debt to consolidated EBITDA.
- "Revolving Facility" of USD 450 million: Borrowers are Messer Industries GmbH and Messer Industries USA, Inc., Delaware, and any other company that secures the loan agreement as a guarantor. The line can be used for financing of working capital as well as for all general financing needs of the company on a revolving basis. There is no need to reduce the loan to zero at any point during the term. It is available until March 1, 2024. The margin until August 28, 2019 is 1.75 % p. a. or 0.75 % p. a., depending on the refinancing funding base of the banks, and is then subject to an adjustment mechanism based on the development of the ratio of senior net debt to consolidated EBITDA.

Guarantees provided by individual Group companies serve as collateral for the full amount of the financing arrangements:

Messer Industries GmbH, Messer Industries USA Inc., USA, Messer LLC, USA, Messer France S.A.S., France, Messer Canada Inc., Canada, and Messer Gases Ltda., Brazil.

The shares of following companies are pledged to the banks: Messer Industries GmbH, Messer Industries USA, Inc., USA, Messer Gases Ltda., Brazil, and Messer France S.A.S., France.

The assets of the following companies are pledged to the banks: Messer Industries USA, Inc., USA, Messer Canada Inc., Canada, and Messer LLC, USA. The carrying amount of the companies' property, plant and equipment amounts to K€ 1,291,723.

The bank accounts of the following companies are pledged to the banks: Messer Industries GmbH, Messer Gases Ltda., Brazil, Messer France S.A.S., France and Yeti GermanCo 3 GmbH with a total carrying amount of K€ 157,159.

The receivables of the following companies are pledged to the banks:

Messer Gases Ltda., Brazil, and the intercompany receivables of Yeti GermanCo 3 GmbH, Messer Industries GmbH and Messer France S.A.S., France. The carrying amount of the pledged receivables amounts to K€ 58,412. Intercompany receivables with a nominal value of K€ 366,319 are also pledged.

The unutilized credit lines as of December 31, 2019 amount to € 279 million (previous year: € 0 million).

The loan balances and maturities as of December 31, 2019 are as follows:

Description	Interest rate p. a.	Credit line	Utilized	Maturity
million USD 2,225.0 Facility B-1	4.45 %	1,965,740	1,965,740	March 1, 2026
million USD 540.0 Facility B-2	2.50 %	540,000	540,000	March 1, 2026
million USD 263.1 Revolving Facility	0.00 %	234,200	_	March 1, 2024
million USD 13.0 RFA – Ancillary Facility ¹	0.00 %	923	_	March 1, 2024
million USD 45.0 RFA – Ancillary Facility ²	0.00 %	11,666	_	March 1, 2024
million USD 44.0 RFA – Ancillary Facility ³	0.00 %	16,566	_	March 1, 2024
million USD 39.9 RFA – Ancillary Facility ⁴	0.00 %	_	_	March 1, 2024
million USD 45.0 RFA – Ancillary Facility ⁵	0.00 %	15,756	_	March 1, 2024
Other Local Loans ⁶	1.50 %	841	841	various
Lease liabilities ⁶	6.06 %	89,212	89,212	various
		2,874,904	2,595,793	
Transaction costs			(69,538)	
			2,526,255	

1 K€ 10,649 was used as a guarantee for delivery and service obligations, foreign currencies were converted at the rate on December 31, 2019.

² K€ 28,391 was used as a guarantee for delivery and service obligations. Foreign currencies were converted at the rate on December 31, 2019.

³ K€ 22,601 was used as a guarantee for delivery and service obligations as well as securing credit lines. Foreign currencies were converted at the rate on December 31, 2019.

4 K€ 35,517 was used as a guarantee for securing credit lines. Foreign currencies were converted at the rate on December 31, 2019.

⁵ K€ 24,301 was used as a guarantee for delivery and service obligations as well as securing credit lines. Foreign currencies were converted at the rate on December 31, 2019.

⁶ weighted interest rate as of December 31, 2019, foreign currencies were converted at the rate as of December 31, 2019

Transaction costs relate to the arrangement fees paid to the financing banks and various legal and advisory costs directly attributable to the new financing. These costs are recognized as expense over the terms of the liabilities using the effective interest method in accordance with IFRS 9.

	Dec. 31,	2019	Dec. 31, 2018
Non-current			
Liabilities to banks	2,4	86,752	_
Lease liabilities		74,194	-
Sundry		-	-
minus Transaction costs	(5	58,212)	-
	2,5	02,734	-

The following table summarizes the Group's financial debt, measured on the basis of nominal amounts:

	Dec. 31, 2019	Dec. 31, 2018
Current		
Liabilities to banks	19,829	-
Lease liabilities	15,018	-
Sundry	-	-
minus Transaction costs	(11,326)	-
	23,521	-
Total financial debt, net	2,526,255	-
Liabilities with a fixed interest rate	90,053	_
Financial debt with variable interest rates (hedged)	-	-
Financial debt with variable interest rates (not hedged)	2,505,740	-
Total financial debt, gross	2,595,793	-
The weighted average nominal interest rates for debt		
to banks are:	4.03 %	-
Leases	6.06 %	-
Other loans	-	-

The average interest rate on debt was 4.10 % p. a. as of December 31, 2019 (previous year: 0.00 % p. a.).

Financial debt (excluding transaction costs) are due as follows:

	2,595,793
After 2024	2,443,330
2024	25,097
2023	28,248
2022	29,655
2021	34,616
2020	34,847

	2019	2018
Non-current financial debt at Jan. 1	-	-
Cash-relevant changes:		
New debt raised	2,525,732	-
Capitalized financing costs	(61,608)	-
Repayments	(25,074)	-
Non-cash-relevant changes:		
Additions to lease liabilities	7,385	-
Changes in maturities	(19,845)	-
Currency translation	67	-
Translation differences	(3,363)	-
Change in scope of consolidation	76,126	-
Capitalized financing costs	3,314	-
Non-current financial debt at Dec. 31	2,502,734	-

	2019	2018
Current financial debt at Jan. 1	-	_
Cash-relevant changes:		
New debt raised	175	-
Capitalized financing costs	(13,119)	-
Repayments	(193)	_
Non-cash-relevant changes:		
Additions to lease liabilities	-	-
Changes in maturities	19,845	-
Currency translation	27	-
Translation differences	(19)	-
Change in scope of consolidation	15,028	-
Capitalized financing costs	1,777	-
Current financial debt at Dec. 31	23,521	_

Under the credit agreement, the following key financial covenants must be complied with and calculated in each compliance certificate submitted:

• First Lien Net Leverage: Ratio of senior consolidated net debt to consolidated EBITDA. This Covenant applies exclusively to the Revolving Facility and will only be tested if it is drawn and the draw exceeds a utilization of 40 %. It must not exceed 8x the value. Non-compliance is an event of default, but it can only be realized by the lenders under the Revolving Credit.

The following covenants are only relevant for certain planned transactions and their compliance must be demonstrated on a pro forma basis before the transaction:

• Secured Net Leverage: Ratio of secured, consolidated net debt to consolidated EBITDA. The Covenant is to be tested if collateral is to be provided that is subordinate to the collateral of the credit agreement. The covenant must be less than or equal to 5.25:1.00.

- Total Net Leverage: The ratio of total net debt to consolidated EBITDA must be less than or equal to 5.25:1.00, 4.50:1.00 or 3.75:1.00, depending on the transaction at issue.
- Fixed Charge Coverage: The EBITDA ratio to interest paid (substantially) in cash must be greater than 2.0.

29. Current income tax liabilities and other current liabilities

	Dec. 31, 2019	Dec. 31, 2018
Derivative financial instruments with an effective hedging relationship	12,669	-
Other liabilities to customers	1,327	-
Deposits received for hardware	1,321	-
Interest payable	577	-
Liabilities to related companies	531	219
Derivative financial instruments without an effective hedging relations-	348	8,381
Sundry other liabilities	16,403	_
Financial liabilities	33,176	8,600
Deferred income and other deferred liabilities	132,509	1,119
Payroll liabilities	46,406	-
Other taxes payable	38,521	_
Advance payments received on orders	18,583	_
Liabilities to social security providers	13,543	-
Other financial obligations	60,058	-
Non-financial liabilities	309,620	1,119
Total	342,796	9,719

Derivative financial instruments with an effective hedging relationship include negative market values of existing electricity swaps and currency swaps.

The item "Deferred income and other deferred liabilities" includes liabilities for outstanding invoices amounting to K€ 65,663 (previous year: K€ 1,119). The income from the release of these items is reported in the income statement line item "cost of sales". The remaining amount is attributable to sales accruals amounting to K€ 23,493, deferred rental income for gas cylinders (K€ 6,690) and other accruals (K€ 36,663).

The item "Other obligations" includes contingent liabilities that have been recognized as part of the purchase price allocation. The majority of this is attributable to Messer Gases Ltda., Brazil, and relates to obligations arising from pending proceedings.

Current income tax liabilities

Current income tax debt of K€ 283,166 is attributable to the tax group in the USA in the amount of K€ 263,100. This is mainly due to the tax burdens associated with various share sales and measures under corporate law carried out in preparation for the acquisition of the US business of Linde and Praxair.

30. Equity

Subscribed capital

The share capital was increased by a resolution of the shareholders of March 29, 2019 by K 5. The subscribed capital thus amounts to K€ 30 (previous year: K€ 25) as of December 31, 2019 and is fully paid in.

Capital reserves

With a deposit contract dated February 25, 2019, Investments S.A. r.l., Luxembourg, has agreed with Yeti GermanCo 1 GmbH to make a capital contribution of K€ 225 into the company's capital reserve. The deposit was made in accordance with the "Payment Direction Agreement" of February 25, 2019 in the amount of K€ 75 by cash payment directly to Yeti GermanCo 1 GmbH and indirectly through payments to Yeti GermanCo 2 GmbH and Yeti GermanCo 3 GmbH in the amount of K€ 75 each.

With a loan agreement of February 25, 2019, Yeti Investments S.à.r.l., Luxembourg, granted Yeti GermanCo 1 GmbH a shareholder loan of K€ 557,657. Subsequently, based on a deposit contract of February 27, 2019, a capital deposit in the form of a deposit in kind was made by transferring the claim of Yeti Investments S.à.r.l., Luxembourg into the capital reserve of Yeti GermanCo 1 GmbH in the amount of K€ 557,657.

By agreement of February 27, 2019, Messer Group GmbH and Yeti GermanCo 1 GmbH decided to transfer receivables and liabilities from the Western European Messer companies as a mixed contribution in kind to the company's equity capital in the amount of K€ 150,207. Thereof K 89,549 relate to receivables, K€ 7,650 to liabilities and K€ 68,308 to the assignment of a purchase price claim by Messer GasPack GmbH against Messer GasPack 2 GmbH.

On February 27, 2019, Messer Group GmbH transferred its shares in Yeti GermanCo 2 GmbH in the amount of K€ 600,515 to the capital reserve of Yeti GermanCo 1 GmbH. On February 28, 2019, Messer Group GmbH made a contribution of K€ 16 to the capital reserve of Yeti GermanCo 1 GmbH in order to achieve the intended shareholding in Yeti GermanCo 1 GmbH.

Messer Group GmbH has committed in a deposit and assignment agreement of May 2/3, 2019, to assign the purchase price claim for a 11 % minority stake in Messer Industriegase GmbH to Yeti GermanCo 1 GmbH and subsequently to contribute to the free capital reserve of Yeti GermanCo 1 GmbH in the form of a deposit in kind. As a result, the capital reserve of Yeti GermanCo 1 GmbH increased by K€ 21,278.

As of December 31, 2019, the capital reserve amounted to K€ 1,329,973 (previous year: K€ 75).

Revenue reserves

Revenue reserves comprise the post-acquisition and non-distributed earnings of consolidated group companies as well as the impact of the re-measurement of the net defined benefit pension liability, net of deferred taxes.

Other components of equity

This item shows income-neutral changes in equity, in so far as they are not related to capital transactions with shareholders (e.g. capital increases or distributions). This includes the difference in currency translation (income-neutral currency translation), the result of net investment in a foreign operation, and changes in the measurement of the fair value of derivatives used for hedging purposes.

Non-controlling interests

This item comprises the portion of third-party shareholders' interest in the equity of consolidated subsidiaries. Minority interests are held by minority shareholders in Algeria and Belgium.

The dividend payments to other shareholders include distributions of the previous year's results.

		Shareholding in per cent		
Name and registered office of subsidiary	Country	Dec. 31, 2019	Dec. 31, 2018	
bECO2 B.V.B.A., Antwerp	Belgium	70 %	_	
Messer Algérie SPA, Alger	Algeria	59.86 %	_	

The following companies have insignificant shares of non-controlling interests:

Capital management

A strong capital base is an important prerequisite for Messer Industries Group in order to ensure the continued existence of the company. Equity corresponds to all line items reported within equity in the balance sheet. Other items which have the legal status of equity or other instruments similar in character to equity are not employed.

The owners of Messer Group GmbH, CVC, management in key positions and the Advisory Board ensure that the trust of the lending banks, creditors and the market in general in Messer Industries Group is main-tained through a strong capital base.

Management in key positions and the Advisory Board regularly review and report to lending banks on compliance with these and other targets.

31. Contingent liabilities

Guarantees

Obligations from issuing guarantees were as follows:

in € million	Dec. 31	, 2019	Dec. 31, 2018		
	Maximum potential obligation	Amount recognized as liability	Maximum potential obligation	Amount recognized as liability	
Guarantees	123	-	_	_	

Financial guarantees relate mainly to commitments to cover the contractual obligations of principal debtors. Pledges given to secure the liabilities of group companies were eliminated on consolidation and are thus not included in the above amounts.

Other financial obligations

Messer Industries Group has committed to invest in the acquisition, construction and maintenance of various production facilities. Obligations under these agreements represent commitments to purchase plant and equipment at market prices in the future. The Group is also party to long-term contracts which give rise to obligations. As of December 31 2019 the commitments from orders and investment projects as well as long-term contracts amounted to K \in 325,469 (previous year: K \in 0).

Litigation

Messer Industries Group is exposed to a wide range of legal risks, particularly in the areas of competition and antitrust law, civil law, tax law and environmental protection.

From today's point of view, the current legal proceedings do not have a material impact on the Group's financial or earnings situation.

Other legal matters

Companies of Messer Industries Group are parties or participants to legal and arbitral proceedings in various countries. Adequate risk provisions have been recognized for these proceedings, provided that the obligation is sufficiently specified.

32. Other disclosures relating to financial instruments

The following table shows the carrying amount and fair values of each financial asset and financial liabilities for each class of financial instruments as of December 31, 2019:

	Carrying	Subsequ	ent measurement	(IFRS 9)	Measurement		Fair value
in K€	amount Dec. 31, 2019	Amortized cost	Fair value through OCI	Fair value through profit or loss	in accordance with IFRS 16	Non-financial items	at Dec. 31, 2019
Assets							
Investments in other companies and financial investments	1,494	-	209	-	-	1,285	
Financial assets	209	-	209	_	-	-	209 ¹
Non-financial items	1,285	-	_	_	_	1,285	-
Other non-current receivables and assets	38,721	37,364	-	-	_	1,357	
Financial assets	37,364	37,364	-	-	-	-	37,364 ¹
Non-financial items	1,357	-	-	_	-	1,357	-
Trade receivables	276,407	276,407	-	_	-	-	
Financial assets	276,407	276,407	_	_	_	_	-
Other current receivables and other assets	97,240	37,115	5,095	109	_	54,921	
Financial assets	37,115	37,115	-	_	-	_	-
Derivatives not in effective hedging relationships	109	-	-	109	_	_	109 ¹
Derivatives in effective hedging relationships	5,095	-	5,095	-	_	-	5,095 ¹
Non-financial items	54,921	-	-	_	-	54,921	-
Cash and cash equivalents	577,422	577,422	_	_	_	_	
Financial assets	577,422	577,422	_	-	-	-	-

¹ Hierarchy Level 2

	Carrying	Subsequ	ent measurement	(IFRS 9)	Measurement		Fair value
in K€	amount Dec. 31, 2019	Amortized cost	Fair value through OCI	Fair value through profit or loss	in accordance with IFRS 16	Non-financial items	at Dec. 31, 2019
Equity and liabilities							
Non-current financial debt	2,502,734	2,428,540	-	-	74,194	-	
Financial liabilities	2,428,540	2,428,540	_	_	-	-	2,475,752 ¹
Lease liabilities	74,194	_	_	_	74,194	_	
Current financial debt	23,521	8,503	-	_	15,018	-	
Financial liabilities	8,503	8,503	_	_	-	_	-
Lease liabilities	15,018	-	_	_	15,018	-	-
Trade payables	215,231	215,231	_	_	-	_	
Financial liabilities	215,231	215,231	-	_	-	_	-
Other current liabilities	342,796	20,159	12,669	348	-	309,620	
Financial liabilities	20,159	20,159	_	_	-	-	-
Derivatives not in effective hedging relationships	348	_	_	348	-	_	348 ¹
Derivatives in effective hedging relationships	12,669	-	12,669	-	-	-	12,669 ¹
Non-financial items	309,620	-	-	-	-	309,620	-

¹ Hierarchy Level 2

The following table shows the carrying amounts and fair values of the individual financial assets and financial liabilities for each category of financial instrument at December 31, 2018 in accordance with IFRS 9:

		Subsequ	ent measurement	: (IFRS 9)		
in K€	Carrying amount Dec. 31, 2018	Amortized cost	Fair value through OCI	Fair value through profit or loss	Non-financial items	Fair value at Dec. 31, 2018
Assets						
Investments in other companies and financial investments	-	-	-	-	-	
Financial assets	-	_	_	-	-	-
Non-financial items	-	_	_	_	_	-
Other non-current receivables and assets	-	_	-	_	_	
Financial assets	-	_	-	-	_	-
Non-financial items	-	_	_	_	_	-
Trade receivables	1	1	_	_	_	
Financial assets	1	1	_	_	-	-
Other current receivables and other assets	17,529	-	-	17,406	123	
Financial assets	-	-	_	_	-	-
Derivatives not in effective hedging relationships	17,406	-	-	17,406	-	17,406 ¹
Derivatives in effective hedging relationships	-	-	-	-	-	-
Non-financial items	123	_	-	_	123	-
Cash and cash equivalents	124	124	_	_	-	
Financial assets	124	124	-	-	-	-

¹ Hierarchy Level 2

	Carrying	Subsequ	uent measurement			
in K€	amount Dec. 31, 2018	Amortized cost	Fair value through OCI	Fair value through profit or loss	Non-financial items	Fair value at Dec. 31, 2018
Equity and liabilities						
Non-current financial debt	-	-	-	-	-	
Financial liabilities	-	-	-	-	-	-
Lease liabilities	-	-	_	_	-	-
Current financial debt	-	-	_	_	-	
Financial liabilities	-	-	-	_	-	-
Lease liabilities	-	-	_	_	-	-
Trade payables	625	625	_	_	-	
Financial liabilities	625	625	-	-	-	-
Other current liabilities	9,719	219	_	8,381	1,119	
Financial liabilities	219	219	-	_	-	-
Derivatives not in effective hedging relationships	8,381	-	_	8,381	_	8,381 ¹
Derivatives in effective hedging relationships	-	-	_	_	-	-
Non-financial items	1,119	-	-	-	1,119	-

¹ Hierarchy Level 2

Messer Industries Group uses the following hierarchy of input factors to measure fair value:

- Level 1: Prices quoted in active markets accessible to the entity on the measurement date for identical assets or liabilities
- Level 2: Market prices other than those quoted at Level 1 that are observable, either directly or indirectly, for the asset or liability
- Level 3: Input factors that are not observable for the asset or liability

Non-consolidated participations which are classified as non-financial items are not measured at their fair value as a general rule. The fair value measurement of participations is based on the market value quoted in the relevant market.

Non-current receivables and other non-current assets, as well as non-current financial liabilities and trade payables, are discounted to the present value. For these purposes, the valuation model is based on interest rate curves and exchange rates for the respective maturities applicable at the end of the reporting period.

Due to their short remaining terms, the carrying amounts of current receivables, trade payables and cash funds corresponds to fair value. There is no requirement to disclose the fair values of non-financial items, since the items involved are not financial instruments as defined by IFRS 7.

Net gains and losses on financial instruments include the impact on earnings from financial instruments. These mainly include measurement results from currency translation, adjustments to fair value and impairments and recovery.

The following table shows net gains and losses from financial instruments by IFRS 9 measurement categories:

2019 in K€	From interest	at fair value	Currency translation	Impairment Iosses	from disposals
Financial assets and financial liabilities that are measured at fair value through profit or loss	(1,418)	9,113	(1,029)	_	-
Financial liabilities measured at amortized cost	(97,916)	_	2,627	_	1,322
Financial assets measured at amortized cost	8,579	_	6,841	(3,848)	_
Financial assets measured at fair value through OCI	_	_	_	_	_
Financial liabilities measured at fair value through OCI	280	_	_	_	_

The following table shows net gains and losses from financial instruments by IFRS 9 measurement categories in 2018:

2018 in K€	From interest	at fair value	Currency translation	Impairment Iosses	from disposals
Financial assets and financial liabilities that are measured at fair value through profit or loss	_	9,025	_	_	_
Financial liabilities measured at amortized cost	_	_	_	_	_
Financial assets measured at amortized cost	_	-	_	_	_
Financial assets measured at fair value through OCI	_	_	_	_	_
Financial liabilities measured at fair value through OCI	-	-	_	-	-

Derivative financial instruments

Messer Industries Group uses derivative financial instruments primarily to hedge currency and raw material exposures in order to reduce related risks. Foreign currency risks pertaining to transactions recognized in the financial statements are mostly hedged. Exposure for raw material hedges is determined from the planning of the need for production and future purchases required over the hedged period, which therefore have a high degree of certainty. Risk and assessment are continuously monitored. Messer Industries Group currently uses standard currency forwards, currency swaps, electricity swaps and gas swaps as hedging instruments.

Hedging transactions are only concluded with business partners with a good credit rating; any potential ineffectiveness resulting from them, should they be material, would be shown separately in the income statement.

The Group currently uses derivative financial instruments to hedge future payments for electricity and gas purchases in the United States, whereby only the hedging of electricity purchases is accounted for under the rules of hedge accounting in accordance with IFRS ("cash flow hedges"). The average hedging rate is USD 30.56 (€ 27.20) per megawatt hour. There are also currency hedges for future payments from foreign currency liabilities for which hedge accounting is used. The average hedging rate is USD / COP 3,120. In addition, cash flows are hedged mainly in the currencies USD, GBP, CHF and COP not as part of hedge accounting. Forward exchange transactions and currency swaps are used as instruments.

There are currently no derivative financial instruments in the Group that are qualified to hedge fair values ("fair value hedges") and net investments in foreign business operations ("net investment hedges").

In addition, hedges are entered into that are not accounted for according to the rules of hedge accounting. Nevertheless, from an economic point of view, these hedging relationships comply with the principles of risk management.

Assets	Dec. 31	, 2019	Dec. 31, 2018		
Financial derivatives in K€	Fair value (Carrying amount)	Nominal amounts	Fair value (Carrying amount)	Nominal amounts	
Currency swaps					
no hedge relationship	-	-	-	-	
as cash flow hedges	1,158	3,999	-	_	
Forward currency contracts					
no hedge relationship	-	25	17,406	536,475	
as cash flow hedges	-	_	-	_	
Electricity swaps					
no hedge relationship	-	-	-	-	
as cash flow hedges	3,937	16,213	-	-	
Gas swaps					
no hedge relationship	-	-	-	-	
as cash flow hedges	-	_	-	_	
Other transactions					
no hedge relationship	109	22,831	-	_	
as cash flow hedges	_	_	-	_	
Total	5,204	43,068	17,406	536,475	

Liabilities	Dec. 31	, 2019	Dec. 31, 2018		
Financial derivatives in K€	Fair value (Carrying amount)	Nominal amounts	Fair value (Carrying amount)	Nominal amounts	
Currency swaps					
no hedge relationship	-	-	-	-	
as cash flow hedges	259	10,845	-	-	
Forward currency contracts					
no hedge relationship	132	5,509	8,381	501,458	
as cash flow hedges	-	_	-	_	
Electricity swaps					
no hedge relationship	-	-	-	-	
as cash flow hedges	12,410	71,775	-	-	
Gas swaps					
no hedge relationship	144	631	-	-	
as cash flow hedges	-	-	-	-	
Other transactions					
no hedge relationship	72	19,930	-	_	
as cash flow hedges	_	_	-	_	
Total	13,017	108,689	8,381	501,458	

The nominal volume of derivative financial instruments consists of the sum of the nominal amounts of the individual contracts. The fair value, on the other hand, is calculated from the valuation of all contracts at the prices on the valuation date. It indicates how the result would have changed if the derivative contracts had been closed immediately on the reporting date.

The effective part of the changes in the value of derivative financial instruments, which was recognized in the OCI in the reporting period, is $K \in 13,863$. The amount that was reclassified from equity to the income statement as part of hedge accounting during the period was $K \in 4,496$ and is mainly reflected in other financial result. The ineffective part of the change in market value, on the other hand, is recognized directly in profit or loss.

No significant ineffective parts of the change in market value of the hedging instruments were identified in the financial year.

in K€	Fair value (carrying amount) December 31, 2019	Nominal Volume	up to 1 year	1 to 5 years	more than 5 years
Currency swaps					
Assets	1,158	3,999	3,999	-	_
Liabilities	259	10,845	10,845	-	_
Electricity swaps					
Assets	3,937	16,213	1,931	14,282	_
Liabilities	12,410	71,775	25,067	46,708	

The following table shows when the cash flow hedges occur and to what extent they affect the income statement:

Messer Industries Group enters into derivative instruments based on the International Swaps and Derivative Association (ISDA) Agreement. This agreement does not meet the criteria for offsetting in the consolidated balance sheet, since it only provides for offsetting rights in case of future events (such as default or insolvency of the Group or counter party). The following table shows the potential financial impact of offsetting pursuant to the agreement, irrespective of whether the items are offset in the Consolidated Balance Sheet in accordance with IAS 32.42.

		Dec. 31, 2019		Dec. 31, 2018			
in K€	Gross amounts of derivatives in the Consolidated Balance Sheet	Amounts from netting agreements		Gross amounts of derivatives in the Consolidated Balance Sheet	Amounts from netting agreements	Net amounts	
Derivative Assets	109	(37)	72	_	_	_	
Derivative Liabilities	72	37	109	_	_	_	

Management of financial risks

Messer Industries Group is exposed to various financial risks in the course of its activities, in particular credit risk, liquidity risk, interest rate risk and currency risk, which are explained in more detail below. The Group's risk management system takes account of the fact that financial market developments are not foreseeable and is set up to minimize any potential negative impact on the Group's financial condition. The Group employs derivative financial instruments to hedge against specific risks.

Risk management is handled as a general rule by Group Treasury in compliance with guidelines approved by executive management. Group Treasury identifies, measures and hedges financial risks. The guidelines contain general principles applicable for risk management and detailed rules for specific areas, such as currency and interest rate risks, the use of derivative financial instruments and the investment of surplus cash. Further comments on risk management are provided in the risk report section of the Group Management Report.

Credit risk

The default risk is the risk of financial loss if customers or the contracting party to a financial instrument do not meet their contractual obligations.

There are no value adjustments for other financial assets and financial investments such as bank deposits, securities and positive market values of derivatives, since the credit risk is classified as very low. Such risks are limited by the Corporate Treasury department by selecting counter parties with good credit ratings and by limiting the investment amounts.

Credit risk in Messer Industries Group arises mainly from trade receivables.

The corresponding impairment allowance is measured at an amount equal to lifetime expected credit losses, based on an analysis of historical default data and forecasts of future economic conditions. Expected credit losses are a probability-weighted estimate of credit losses.

The default risk in Messer Industries Group is primarily influenced by individual characteristics of the clientele.

For risk control purposes, each customer is first individually analyzed for creditworthiness before the relevant group company offers its standardized delivery and payment terms. The analysis includes – where available – annual financial statements, information from credit agencies, sector information and, in some cases, credit reports from banks. In general, specific limits are set individually for each customer. These represent the maximum outstanding amount that can be granted without the approval of the Risk Management Committee. The limits are reviewed at least once a quarter.

Due regard is also given to whether the customer is a natural person or a legal entity. Other factors taken into account are geographical location, market sector, age structure of receivables and the occurrence and duration of payment problems.

The expected credit loss over the total term of the respective receivables is taken into account in the valuation of the receivables. Messer Industries Group uses the simplified impairment model for this.

In order to assess the expected credit risk, receivables are grouped on the basis of the existing credit risk and maturity structure of the receivables concerned. Customers are also divided into groups to monitor the risk of default. The groups with comparable default risks to be taken into account for Messer Industries Group result from the business areas and the place of business of the respective clientele.

Messer Industries Group assumes a significant increase in credit risk if there are objective indications of the debtor's financial difficulties, impending insolvency or a breach of contract due to a default. As a general rule, a credit loss arises if it is unlikely that a debtor will be able to settle its liabilities in full.

Each company in Messer Industries Group therefore carries out an analysis to determine whether there are objective indications of impairment for customers, whose claims are overdue for a certain number of days,

indicating an increased credit risk. There is an increased credit risk at the latest when the overdue amount of the receivable is significantly above the average turnover rate. This can vary between 90 and 270 days depending on the company.

The following table contains information about the estimated default risk and the expected credit losses for non-current and current trade receivables as of December 31, 2019, which were calculated according to the default event:

		Default rate (in per cent)	Expected credit loss
Impairment allowance on individual basis	56,880	36.1	20,507
Impairment allowance on collective basis based on default event			
Days overdue:			
Not overdue	175,745	2.1	3,735
between 1 and 30 days	42,528	4.9	2,074
between 31 and 60 days	12,164	12.4	1,510
between 61 and 90 days	5,421	23.0	1,245
between 91 and 120 days	3,354	33.6	1,126
between 121 and 180 days	3,786	29.6	1,119
between 181 and 270 days	4,522	39.8	1,799
more than 271 days	10,636	49.2	5,232
	315,036		38,347

Impairment allowances on non-current and current trade receivables developed as following during the year under report:

	2019	2018
Balance at Jan. 1	-	-
Additional impairment allowance required as of January 1, 2019	-	-
Net change recognized through profit or loss	4,026	-
Net change recognized through OCI	(39)	-
Change in scope of consolidation	34,539	-
Translation differences	(179)	-
Balance at Dec. 31	38,347	-

The impairment allowance relates to trade receivables and was calculated exclusively on the basis of lifetime expected credit losses.

The following table contains the information on estimated default risk and expected credit losses for non-current and current trade receivables as of December 31, 2018:

	Receivables	Default rate (in per cent)	Expected credit loss
Impairment allowance on individual basis	1	0,0	_
Impairment allowance on collective basis based on default event			
Days overdue:			
Not overdue	-	_	_
between 1 and 30 days	-	_	_
between 31 and 60 days	-	_	_
between 61 and 90 days	-	_	_
between 91 and 120 days	-	_	_
between 121 and 180 days	-	_	_
between 181 and 270 days	-	_	_
more than 271 days	_	_	_
	1		-

Liquidity risk

The liquidity risk, i.e. the risk that Messer Industries Group cannot meet its financial obligations is limited both by creating the necessary financial flexibility and by effective cash management. In addition to cash funds, Messer Industries Group also has access to long-term, freely available credit facilities in order to safeguard liquidity. There are no indications that any of the credit facilities in place at the end of the reporting period are not fully available. Liquidity risks are regularly monitored and reported to management, in particular with respect to compliance with the financial covenants described in note 28 "Financial debt".

Trade payables and other current liabilities have remaining terms of less than one year. Information relating to the maturities of financial liabilities is provided in note 28 "Financial debt". Other non-current liabilities have remaining terms of more than one year and less than five years.

	Carrying	_	Cash Flo	ws 2020	Cash Flows 2	2021 - 2024	Cash Flows	from 2025
Description	amount Dec. 31, 2019	Expected cash flow	Interest	Repay- ment	Interest	Repay- ment	Interest	Repay- ment
Financial liabilities measured at amortized cost	2,672,433	(3,352,156)	(101,323)	(255,219)	(396,445)	(80,042)	(112,417)	(2,406,710)
Financial debt ¹	2,437,043	(3,116,766)	(101,323)	(19,829)	(396,445)	(80,042)	(112,417)	(2,406,710)
Trade payables	215,231	(215,231)	_	(215,231)	_	_	_	-
Other current liabilities	20,159	(20,159)	_	(20,159)	_	_	_	_
Financial liabilities measured at fair value through OCI	12,669	(12,669)	-	(8,306)	_	(4,363)	-	-
Financial derivatives	12,669	(12,669)	-	(8,306)	-	(4,363)	-	-
Financial liabilities at fair value through profit or loss	348	(348)	-	(348)	_	-	-	-
Financial derivatives	348	(348)	_	(348)	-	_	-	_
Lease liabilities	89,212	(119,714)	(4,600)	(15,018)	(12,926)	(36,837)	(12,976)	(37,357)

The following table shows the expected cash flows for financial liabilities:

¹ Capitalized acquisition costs for financing were already reported as cash outflows and are therefore not a component of future cash flows.

All instruments are included that were held at December 31, 2019 and for which payments have already been contractually agreed. Forecasted figures for future new liabilities are not included. Foreign currency amounts are converted using the relevant closing exchange rate at December 31, 2019.

	Carrying		Cash Flo	ows 2019	Cash Flows 2	2020 - 2023	Cash Flows	from 2024
Description	amount Dec. 31, 2018	Expected cash flow	Interest	Repay- ment	Interest	Repay- ment	Interest	Repay- ment
Financial liabilities measured at amortized cost	844	(844)	-	(844)	-	-	-	-
Financial debt 1	-	-	-	-	-	_	-	-
Trade payables	625	(625)	_	(625)	_	_	_	
Other current liabilities	219	(219)	_	(219)	_	_	_	
Financial liabilities measured at fair value through OCI	-	-	_	-	_	_	_	_
Financial derivatives	-	-	-	-	-	-	-	-
Financial liabilities at fair value through profit or loss	8,381	(8,381)	-	(8,381)	_	_	_	_
Financial derivatives	8,381	(8,381)	_	(8,381)	_	_	-	-
Lease liabilities	-	_	_	_	_	_	_	-

¹ Capitalized acquisition costs for financing were already reported as cash outflows and are therefore not a component of future cash flows.

Interest rate risk

Interest rate risk can arise when liabilities subject to interest are not hedged in terms of maturity or amount by either corresponding assets or derivative instruments. The objective is to optimize the net interest result and minimize interest risks. The company has hedged 3.5 % of its total financial debt against interest rate changes through fixed interest rate agreements.

Variable financial instruments are subject to a cash flow risk with regard to the uncertainty of future interest payments. The cash flow risk is measured using a sensitivity analysis. The sensitivity analysis assumes a shift in the yield curves for all currencies by +/- 100 basis points as of December 31, 2019.

In the case of variable financial liabilities and our financial investments, an interest rate level of 100 basis points higher (lower) as of December 31, 2019 would have resulted in a lower (higher) result of K \in 19,283 (previous year: K \in 0). As of December 31, 2019, the exposure to interest rate risk was K \in 1,928,318 (previous year: K \in 0).

Currency risk

Currency risk for Messer Industries Group arises from both financing and operating activities in an international environment. Foreign currency risks are hedged to the extent that they have a significant influence on group cash flows.

Foreign currency risks relating to financing activities result from foreign currency financial liabilities and loans for the financing of group companies. The Group Treasury department hedges these risks. Currency derivatives are used to convert financial obligations denominated in foreign currencies and intra-group loans into the functional currency of the group companies.

As far as operating activities are concerned, the individual group companies conduct their business for the most part in their own functional currency. Messer Industries Group's currency risk from operating activities is therefore considered as a whole to be small. A number of group companies are, however, exposed to foreign currency risks in connection with operational transactions which are not denominated in their own functional currency. This relates mainly to payments in conjunction with a long-term supply agreement and payments in conjunction with investments. Messer Industries Group also uses currency derivatives to hedge these risks.

Currency risks as defined in IFRS 7 result from financial instruments which are denominated in a currency other than the functional currency and which are monetary in nature; exchange rate differences arising from the translation of financial statements into the group currency are not taken into account.

The currency risk is measured on the basis of sensitivity analyses. For this purpose, it is assumed that all currencies could appreciate / depreciate by 10 % compared to the Euro.

If the Euro appreciates (depreciates) by 10 % against the major currencies, this would result in a hypothetical result of K \in 21,458 lower (higher) (previous year: K \in 0). The net currency risk from balance sheet exposures was as follows:

in K€ as of December 31, 2019	USD	CAD	CHF
Foreign currency risk from balance sheet exposures	(7,685)	290,923	(1,239)
Foreign currency risk from forecasted transactions	(63,914)	_	(6,500)
Transaction-related foreign currency exposures	(71,599)	290,923	(7,739)
Exposures hedged in economic terms by derivatives	_	_	3,000
Unhedged foreign currency exposures	(71,599)	290,923	(4,739)
Change in foreign currency exposures as a result of a 10 % appreciation in value of the Euro	(7,160)	29,092	(474)

33. Related parties

Transactions with the following entities and individuals are treated as transactions with related parties. Transactions with these entities and individuals are conducted as a general rule on an arm's length basis.

Related parties (entities)

The highest-level controlling party is Messer Industrie GmbH. Associated companies classified as related entities and non-consolidated subsidiaries are shown in the List of Investments.

The following entities qualify as other related parties:

• CVC Capital Partners VII (A) L.P., United Kingdom

CVC Capital Partners VII (A) L.P. holds as of December 31, 2019 94.51 % in Yeti Holdings Jersey Limited, USA.

• Greenbelt Ltd., British Virgin Islands and Hardtberg Grundstücks GmbH

Stefan Messer, director and co-shareholder of Messer Industrie GmbH, is also director and co-shareholder or sole shareholder of these companies.

• Messer Group GmbH (Messer Group)

Messer Group GmbH holds as of December 31, December 2019 54.46 % in Yeti GermanCo 1 GmbH and 58.02 % in Yeti Warehouse GmbH (formerly: Messer Family NewCo GmbH).

• Messer Holding GmbH

Messer Holding GmbH holds as of December 31, 2019 100 % in Messer Group GmbH.

• Messer Industrie GmbH

Messer Industrie GmbH holds as of December 31, 2019 100 % in Messer Holding GmbH.

• Messer Medical Home Care Holding GmbH (Home Care Group)

Since March 31, 2011, Messer Group has spun off its home care activities into an independent group. The parent company of this group, Messer Medical Home Care Holding GmbH, is wholly owned by MIG Holding GmbH, a sister company of Messer Industrie GmbH.

MIG Holding GmbH and Messer Eutectic Castolin Group (MEC Group)

A majority of the shares in MEC Global GmbH are held by MIG Holding GmbH, a fellow subsidiary of Messer Industrie GmbH. MEC Global GmbH, in turn, indirectly holds 94 % of the shares of MEC Holding GmbH.

- Yeti Americas Management Participation GmbH & Co. KG Yeti Americas Management Participation GmbH & Co. KG holds as of December 31, 2019 4.21 % in Yeti GermanCo 1 GmbH.
- Yeti Europe Management Participation GmbH & Co. KG Yeti Europe Management Participation GmbH & Co. KG holds as of December 31, 2019 1.98 % in Yeti GermanCo 1 GmbH.
- Yeti Holdings Jersey Limited, Jersey Yeti Holdings Jersey Limited holds as of December 31, 2019 100 % in Yeti Holdings S.à.r.l., Luxembourg.
- Yeti Holdings S.à.r.l., Luxembourg Yeti Holdings S.à.r.l., Luxembourg holds as of December 31, 2019 100 % in Yeti Investments S.à.r.l., Luxembourg.
- Yeti Investments S.à.r.l., Luxembourg

Yeti Investments S.à.r.l. holds as of December 31, 2019 41.95 % in Yeti Warehouse GmbH (formerly: Messer Family NewCo GmbH) and 39.35 % in Yeti GermanCo 1 GmbH.

• Yeti Management Verwaltungs GmbH (formerly: Yeti NewCo 0 GmbH)

Yeti Management Verwaltungs GmbH is as of December 31, 2019 the general partner (GmbH) of Yeti Americas Management Participation GmbH & Co. KG and Yeti Europe Management Participation GmbH & Co. KG.

• Yeti Warehouse GmbH (formerly: Messer Family NewCo GmbH)

Yeti Warehouse GmbH holds as of December 31, 2019 100 % in Yeti Management Verwaltungs GmbH. The Yeti GermanCo 1 GmbH employee participation program is bundled in Yeti Warehouse GmbH. The following transactions were executed with related entities:

	Jan. 1 – Dec. 31, 2019	Aug. 1 - Dec. 31, 2018
Revenue from sales to related entities		
Ultimate controlling party	_	-
Parent company	135	-
Associated companies	11	-
Non-consolidated subsidiaries	_	-
Other related entities	3,095	-
	3,241	-
Purchased goods and services		
Ultimate controlling party	-	-
Parent company	6,772	353
Associated companies	2,583	-
Non-consolidated subsidiaries	_	-
Other related entities	9,702	3
	19,057	356
Trade receivables		
Ultimate controlling party	_	-
Parent company	172	-
Associated companies	60	-
Non-consolidated subsidiaries	_	-
Other related entities	908	-
	1,140	-
Other receivables and other assets		
Ultimate controlling party	_	-
Parent company	161	-
Associated companies	4,379	-
Non-consolidated subsidiaries	96	-
Other related entities	95	-
	4,731	-
Trade payables		
Ultimate controlling party	_	-
Parent company	1,252	419
Associated companies	309	-
Non-consolidated subsidiaries	-	-
Other related entities	3,165	4
	4,726	423
Other liabilities and purchase rights		
Ultimate controlling party	_	-
Parent company	532	219
Associated companies	_	-
Non-consolidated subsidiaries	_	-
Other related entities	_	-
	532	219

Receivables from related entities result from service agreements and sales transactions with varying maturities. The receivables are not secured by collateral and do not bear interest. There were no impairment losses on receivables from related parties (previous year: K€ 0) and no uncollectible receivables from related parties recognized as an expense for the period (previous year: K€ 0). No loans were granted to related companies or were extended by them to the Messer Industries Group.

Related parties (individuals)

Members of Management in key positions

Management in key positions of Yeti GermanCo 1 GmbH included in the reporting period the following:

- Michael Beck, Managing Director Yeti GermanCo 1 GmbH
- Carsten Knecht, Managing Director Yeti GermanCo 1 GmbH
- Jan Desmeth, Managing Director Messer Belgium N.V., Belgium
- Jens Lühring, CEO Messer Industries USA, Inc., USA
- Gareth Parkin, CFO Messer Industries USA, Inc., USA

The total remuneration of the members of management in key positions of Yeti GermanCo 1 GmbH amounted to K€ 2,937 in the financial year (previous year: K€ 0).

Of this sum, fixed remuneration including benefits in kind and other fringe benefits amounted to $K \in 1,142$ (previous year: $K \in 0$). The total amount of variable remuneration amounted to $K \in 1,557$ (previous year: K 0) and is linked to the achievement of certain key targets. Benefits after termination of the employment relationship amount to $K \in 238$ (previous year: $K \in 0$).

Employee Participation Program Yeti GermanCo 1 GmbH

For employees in key positions and other senior employees of the Group as well as Messer Group GmbH, a management participation program was set up in management investment companies as a shareholder of Yeti GermanCo 1 GmbH. The management participation program enables management and other executives to invest in Messer Industries Group and, in the event of an exit of the current main shareholders (through sale or IPO), to participate in the expected increase in value. The management participation program gives participants the opportunity to indirectly acquire shares in Yeti GermanCo 1 GmbH through a predetermined structure. The participants' investment participate indirectly in the returns and performance of a particular geographically delimited business unit consisting of simple residual amounts and preferred interest-bearing equity instruments (VSLs). The VSLs are endowed with defined interest rates on the invested capital and are to be served before the residual amounts.

Since the companies of Messer Industries Group are not obliged to compensate for the share-based compensation themselves, it is in accordance with IFRS 2.43B (b) a share-based compensation with compensation through equity instruments.

The purchase prices for the transfer of shares to the participants of the management participation program were assessed on March 1, 2019, taking into account the value of the contribution by Messer Group GmbH and CVC Capital Partners Fund VII.

The participants can only sell the shares they have acquired to Yeti Warehouse GmbH (formerly Messer Family NewCo GmbH). If a participant leaves, Yeti Warehouse GmbH is entitled to repurchase his shares.

In the event of an early sale of shares or in the event of an exit from the Yeti GermanCo 1 Group as a "Good Leaver", participants receive a formula-based market value of the shares for a contractually determined portion of the portfolio, which is vested up to the date of leaving. For the non-vested part, the "Good Leaver" receives the lower amount of the formula-based market value and the purchase price less refunds received in the meantime. Five years after the specified date of entry, the "Good Leaver" will receive 100 % of the market value of the respective portfolio upon leaving. In the event of leaving as a "bad leaver", the employee will receive the lower amount of the formula-based market value and the purchase price.

The program provides that, after a defined exit event (which may include an IPO or a similar transaction in which all or substantially all of the Group's assets are disposed of so that current investors retain less than 50 % of the shares), the above-mentioned instruments will be served first by the VSLs and, finally, the Residual Amounts, from the proceeds of the sale after deduction of costs. The investors are obligated to cooperate in the exit event and participate in the proceeds of the sale in proportion to their holding.

In order to determine the period expense within the meaning of IFRS 2, the purchase prices to be paid by the participants were compared with the fair values of the share classes at the respective date of entry (date of grant). If it follows that the employees acquired the shares at a value lower than the fair value, the fair value of the benefit granted to the employees from the grant of the instrument is determined as the difference. Since the purchase prices to be paid corresponded to the fair value at the time of the grant, there was no difference that should have been accounted for as a "grant date fair value".

Advisory Board

- Dr. Hans-Gerd Wienands-Adelsbach, Chairman, Lawyer
- Ernst Bode, COO Europe Messer Group GmbH
- Stefan Messer, CEO Messer Group GmbH
- Dr. Alexander Dibelius, Managing Partner CVC Capital Partners, United Kingdom
- Dr. Daniel Pindur, Partner CVC Capital Partners, United Kingdom
- Lars Haegg, Principal CVC Capital Partners, United Kingdom

The Advisory Board received no remuneration from Group companies of Yeti GermanCo 1 GmbH for the financial year.

34. Events after the end of the reporting period

The World Health Organization (WHO) has classified on January 30, 2020 the coronavirus (COVID-19) as a public health risk. The virus has recently developed into a pandemic with global effects, the full extent of which is not yet known or cannot be fully estimated. The measures to contain the pandemic are leading worldwide to temporary restrictions in everyday life and thus also business life. At the present time, we expect noticeable impairments in various areas of industrial gas demand for the current fiscal year, which cannot be quantified sufficiently yet. The industrial gases business is local, there is no direct dependence on global supply chains and we do not expect any significant increases in costs due to staff shortages.

After December 31, 2019, there were no other reportable events of particular importance for the Group's net assets, financial position and results of operations.

35. Prior year's financial statements

The previous year's financial statements as of December 31, 2018 were not required to be audited and therefore do not require approval.

36. Costs of auditors

In the financial year 2019, the expense for auditors of the German Group companies was exclusively for auditing services and amounted to $K \in 634$ (previous year: $K \in 0$).

Bad Soden/Taunus, April 9, 2020

Appendix

List of shareholdings as of December, 31 2019

Country	Name	Domicile	Equity (in € thousands)	Direct / Indirect	Share- holding in percent	Net result after taxes (in € thousands)
Affiliated compa	nies included in the consolidated finan	cial statements				
Algeria	Messer Algérie SPA	Alger	3,474	I	59.86	2,173
Belgium	bECO2 B.V.B.A.	Antwerpen	32	I	70.00	41
	Messer Belgium N.V.	Antwerpen	22,885	I	100.00	2,670
Brazil	Messer Gases Ltda.	Cubatão	198,483	I	100.00	38,761
	Messer Indústria de Gases Ltda.	Cubatão	13,623	I	100.00	1,653
Canada	Messer Canada Inc.	Ontario	13,288	I	100.00	12,279
Chile	Messer Chile Limitada	Santiago	22,783	I	100.00	(226)
Colombia	Messer Energy S.A.S. E.S.P.	Atlantico	61	I	100.00	12
	Messer Colombia S.A.	Bogotá	70,935	I	100.00	2,662
	REMEO Medical S.A.S.	Bogotá	1,689	I	100.00	490
France	Messer France S.A.S.	Suresnes	86,829	I	100.00	3,522
Germany	Messer Industries GmbH	Sulzbach	1,093,017	I	100.00	-
	Messer GasPack 2 GmbH	Krefeld	3,562	I	100.00	3,538
	Messer Industriegase GmbH	Sulzbach	71,511	I	100.00	(591)
	Messer Produktionsgesellschaft mbH Salzgitter	Sulzbach	19,525	I	100.00	-
	Messer Produktionsgesellschaft mbH Siegen	Sulzbach	12,224	I	100.00	(1)
	Messer Produktionsgesellschaft mbH Speyer	Sulzbach	1,075	I	100.00	(415)
	Yeti GermanCo 1 GmbH	Sulzbach	1,328,882	-	100.00	79
	Yeti GermanCo 2 GmbH	Sulzbach	1,093,387	D	100.00	-
	Yeti GermanCo 3 GmbH	Sulzbach	1,093,282	I	100.00	-
Netherlands	Messer B.V.	Moerdijk	6,207	I	100.00	376
	Messer Industries B.V.	Moerdijk	321,424	I	100.00	754
Portugal	MesserGas Distribuicao des Gases Industriais, Unip	Lisbon	388	I	100.00	(264)
Puerto Rico	Messer Gas Puerto Rico Inc.	Cataño	(3,704)	I	100.00	1,951
Spain	Adamite Investments S.L.	Tarragona	6,242	I	100.00	(1)
	Leteira Investments S.L.	Tarragona	182,872	I	100.00	(1)
	Litadas Investments S.L.	Tarragona	47	I	100.00	(2)
	Messer Ibérica de Gases S.A.	Tarragona	18,572	I	100.00	3,616
	MG Industries Iberica S.L.	Tarragona	113,229	I	100.00	-
	Toubkal Investments S.L.	Tarragona	9,099	I	100.00	(1)
Switzerland	Messer Schweiz AG	Lenzburg	19,652	I	100.00	3,445
USA	General Gases of the V.I. Inc.	US Virgin Islands	6,838	I	100.00	1,435
	Messer Energy Services Inc.	Delaware	(1,601)	I	100.00	(654)
	Messer Industries USA Inc.	Delaware	423,349	I	100.00	(96,358)
	Messer LLC	Delaware	1,277,273	I	100.00	194,202

Country	Name	Domicile	Equity (in € thousands)	Direct / Indirect	Share- holding in percent	Net result after taxes (in € thousands)
Affiliated comp	anies included in the consolidated finar	ncial statements				
USA	Messer Merchant Production LLC	Delaware	13,735	I	100.00	(1,263)
	Messer North America Inc.	Bridgewater, New Jersey	108,770	I	100.00	497,883
Companies acc	ounted for using the proportional conso	olidation				
USA	East Coast Nitrogen Company LLC	Glenmont, New York	63,038		50.00	(3,388)
	East Coast Oxygen Company LLC	Bethlehem, Pennsylvania	6,192	I	50.00	(1,234)
Companies acc	ounted for using the equity method					
Begium	GreenCO2	Antwerpen	63		35.00	3
France	Limes S.A.S.	Saint-Herblain	4,902	I	50.00	1
USA	Cliffside Helium LLC	Bridgewater, New Jersey	62	I	26.00	14
	Cliffside Refiners LP	Bridgewater, New Jersey	2,405	I	25.74	389
Affiliated comp	anies not included in the consolidated	financial statement				
France	Lida S.A.S	St.Quentin Fallavier	-	I	21.50	_ 1
	Soprogaz S.N.C.	Beauvais	-	I	50.00	- 1

¹ affiliated companies not included in the consolidated financial statements owing to immateriality for the net assets, financial position and result of operations

