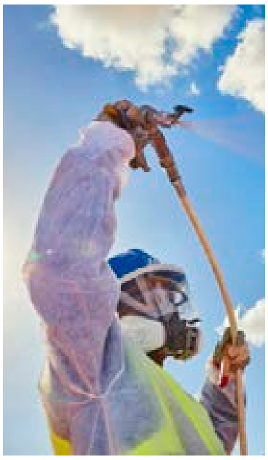
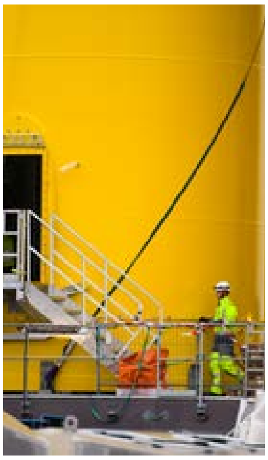
Muehlhan





Annual Report 2019

Our Services

Surface Protection

We protect your assets under the most severe conditions

Insulation

Professional solutions for heat and cold insulation

Scaffolding

Engineered solutions to fit your purpose

3,000+ Employees
30+ Subsidiaries
4 Business segments
3 Continents

Specialty Access

Special requirements need special solutions

Steel Construction

Competence and quality – first time right

Passive Fire Protection

Experienced specialists for all your projects

Vision

We continuously improve our technologies and services to remain the quality leader in our markets and to improve our position in the industry. Our customers, suppliers and employees value us as a professional and dependable partner.

Values

As a company, we are firmly rooted in our tradition of Hanseatic German values. Muehlhan stands for quality, integrity, reliability and respect.

The **Muehlhan Group** is one of a few full-service providers that offer their customers a broad spectrum of industrial services with professional industrial quality standards. Our customers benefit from our exceptional organizational skills, on-time delivery, the technical expertise that differentiates us from our competitors, and our more than 135 years of experience.

Our **Ship, Oil & Gas, Renewables** and **Industry/Infrastructure** business segments offer first-class solutions for surface protection, insulation, passive fire protection, access technology, and scaffolding and steel construction. With **more than 3,000 employees at over 30 locations** worldwide, we generated revenues of €295 million in 2019.

We will continue to focus our efforts on steadily improving our technologies and services while actively developing new markets in order to continue expanding our business going forward.

Group key figures

in kEUR		2019	2018
Results			
Revenues		295,269	267,799
Earnings from operations before depreciation and amortization (EBITDA)		24,505	18,394
Earnings from operations (EBIT)		12,400	10,220
Earnings before taxes (EBT)		10,513	8,608
Consolidated income attributable to shareholders of Muehlhan AG		6,323	5,003
Earnings per share from continuing operations	in EUR	0.33	0.26
Cash flow from operating activities		10,888	11,355
Investment in property, plant and equipment		8,129	9,238
Balance sheet		**12/31/2019**	**12/31/2018**
Total assets		175,370	151,114
Fixed assets[1]		68,634	62,856
Equity		71,761	68,258
Equity ratio	in %	40.9	45.2
Employees		**2019**	**2018**
Employees (annual average)	number	3,103	3,037

[1] Fixed assets: total of non-current assets less deferred tax assets

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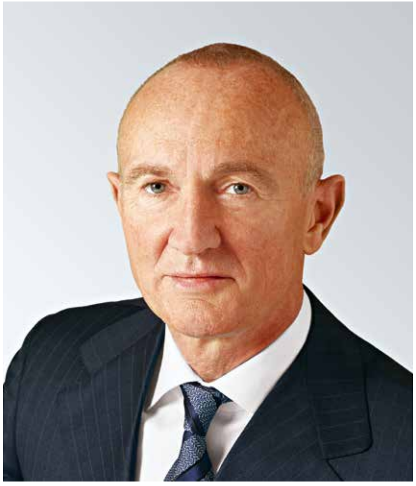
01 Management

Surface protection work on the Rio Vista Bridge, California, USA

Dear Shareholders,

The year 2019 joins the ranks of what is now proving to be a long period of stability with regular rises in income. We consider our moderate but profitable growth to be founded in our strategic focus on the energy sector markets in conjunction with our core business in the maritime sector and in infrastructure. This we complement with continuous improvements achieved on the basis of numerous operating parameters and business processes. The pleasing results confirm our conviction that we are on the right track and should continue in this direction.



Executive Board

Stefan Müller-Arends
Chairman of the Executive Board, CEO
Hamburg, Germany

Stefan Müller-Arends has a degree in business administration. Following positions as Controller and CFO, including at Rheinbraun AG and the French DMC Group, he served as CEO of packaging group Mauser AG for 11 years. Since 2011, he has been leading the Muehlhan Group as Chief Executive Officer.

Dr. Andreas C. Krüger
Member of the Executive Board, COO
Hamburg, Germany

Dr. Andreas C. Krüger has a doctorate in engineering. As a manager and chairman, he previously headed several German and foreign industrial companies, among them Friatec AG, Mannheim. In 2004, he became a member of the Executive Board in Muehlhan and is responsible for the operating business.

James West
Member of the Executive Board
Aberdeenshire, UK

James West is an engineer. Before he joined Muehlhan Surface Protection Ltd in Aberdeen as Managing Director in 2010, he worked in various positions in the international and British oil and gas industry. Mr. West is responsible for the Oil & Gas segment.

The Group's revenues rose by 10.3% to €295.3 million. EBIT of €12.4 million was 21.3% up on the prior-year value. Revenues and EBIT were therefore higher than forecast. The EBIT margin improved accordingly from 3.8% to 4.2%. Consolidated income increased by 13.2% to €6.3 million. After deducting minority interests, income of €6.3 million is attributable to Muehlhan's shareholders, which represents an increase of 26.4%. However, cash flow from operating activities fell short of our target figure at €10.9 million, in spite of the revenue growth.

We succeeded in increasing our revenues year-over-year without compromising our strict risk management and selective project screening standards. This – combined with other measures to improve operations, continuous expansion of the services we offer and our focus on our growth markets Oil & Gas and Renewables (wind power) – explains the steady improvement in earnings that Muehlhan has shown for the past eight years.

The Renewables segment was able to significantly boost its revenues, primarily due to the expansion of business in the area of wind turbine maintenance. Its EBIT was nonetheless negative due to delays in the construction of a large production facility and the costs these caused. The Oil & Gas segment recorded slightly lower revenues in a tough market environment. In contrast, its EBIT margin improved. Revenues and EBIT improved in both the Ship and the Industry/Infrastructure segment.

We continue to consider the energy sector – and therefore the Oil & Gas and Renewables segments – as being where our growth markets lie.

The market for renewable energy sources, in particular the offshore wind power segment, offers Muehlhan new growth areas in Europe, North America and other parts of the world. We are working to expand our position in the industry as a recognized specialist in surface protection and to leverage our position as a full-service provider for wind turbine manufacturers and offshore wind farm operators in order to benefit from growth in this market.

The situation remains challenging in the Oil & Gas segment due to the low price of oil. Nonetheless, we still believe we can further consolidate our position in this market.

As always, we concentrated on two areas: in addition to measures to systematically implement our strategy, we focused in particular on measures to improve operations. In 2019, we focused among other things on introducing new cost calculation principles to improve the allocation of costs to projects. This is just one of the many elements of project controlling, an area which is challenging but incredibly important in our industry. It serves as an example of the numerous measures that all have one thing in common – they cover all the aspects of the organization, they are mostly unspectacular, and they need time and a lot of management energy before they are sustainably established in the organization and have an effect.

At the time of this report being prepared, the world has been experiencing the COVID-19 pandemic for a number of weeks, with ever greater restrictions being imposed on public life and on business activities every day. While we hope things will take a turn for the better very soon, we fear that, like the majority of companies, Muehlhan will suffer greatly from the impact of the pandemic in the 2020 financial year.

We would like to thank our approximately 3,000 employees for their steadfast commitment in a challenging environment. We also want to thank our shareholders, partners and business associates, many of whom have placed their trust in us for many years. We hope that you will continue to accompany and support us on our journey, and we will do everything in our power to fulfill your expectations to the best of our abilities.

Hamburg, March 2020

Your Executive Board

Stefan Müller-Arends *Dr. Andreas C. Krüger* *James West*

Supervisory Board

Philip Percival
London, UK

Chairman of the Supervisory Board

Dr. Gottfried Neuhaus
Hamburg, Germany

Deputy Chairman of the Supervisory Board
Managing Partner of
Neuhaus Partners GmbH, Hamburg

Andrea Brandt (maiden name Greverath)
Hamburg, Germany

Member of the Supervisory Board
Managing Partner of
GIVE Capital GmbH, Hamburg

Muehlhan continued the positive performance of recent years in 2019. The majority of the internal targets were met and some were even exceeded. EBIT increased from €10.2 million to €12.4 million, with the EBIT margin increasing accordingly from 3.8% to 4.2%. At €10.9 million, cash flow from operating activities was down €0.5 million on the previous year's figure and therefore fell short of internal expectations in spite of strong growth in revenues once again. The **Oil & Gas** business segment was not always able to substitute concluded projects with follow-up orders, resulting in a decrease in revenues, albeit coupled with a slightly improved EBIT margin. The **Renewables** segment remained on the course of strong growth seen in recent years, in particular due to the expansion of the offshore service and maintenance business. However, the segment's income was significantly adversely affected by delays in the construction of a new production facility on Germany's North Sea coast and the costs this involved. The **Industry/Infrastructure** segment benefited first and foremost from increased spending on infrastructure projects. Its income more than doubled, in particular thanks to strong business in the USA. In the maritime segment (**Ship**) that includes ship newbuilding and repairs, revenues and EBIT increased again, following strong previous years.

All the business segments are expected to continue their positive performance despite the challenging market conditions, with the main opportunities continuing to be seen in the energy sector and therefore in the Oil & Gas and Renewables segments. As in the previous years, there are risks relating to political developments and, since the first quarter of 2020, the COVID-19 pandemic and the impact it is having on global trade and value chains.

Meanwhile, the strategic challenges remain largely unchanged from the previous years and will preoccupy the Executive Board and Supervisory Board again in the current financial year:

- The period of low oil prices that has been ongoing since 2014 has had a deep impact on the **oil and gas industry's** maintenance and investing activities. These have remained low since 2015 and there are no indications that there will be a turnaround. Nevertheless, as a long-standing full-service provider in this market, Muehlhan continues to believe it has the opportunity to further consolidate its position in this market.

- The **wind power market** will continue to develop very positively over the next few years according to market participants, with this then having a positive effect on Muehlhan's other business. This market opens up new growth areas for Muehlhan in Europe, North America and other parts of the world. Muehlhan is working on expanding its position as a recognized industry specialist in the area of surface coatings and the provider of a broad service portfolio and therefore on establishing itself as a partner both to wind turbine manufacturers and operators of offshore wind farms.

- In the Industry/Infrastructure segment, the Group has expanded the regional scope of its services in recent years and extended its service portfolio to be in a position to offer customers the range of services they require on-site.

- Since the 2008/2009 crisis, the maritime sector in Europe has been focusing on the construction of specialty ships, in particular megayachts, cruise ships and naval vessels, and on contracts from the wind power industry. The industry currently believes that shipyard capacity utilization is secured for the foreseeable future. As a highly specialized and professional service provider that is known for its exceptionally strong organizational skills, Muehlhan will be able to benefit from this environment.

Focal points of Supervisory Board deliberations

As in previous years, in financial year 2019 the Supervisory Board performed the duties assigned to it by law and the Articles of Association. It regularly consulted with the Executive Board and carefully supervised its work. The Supervisory Board and the Executive Board remained in close contact, even between meetings. For example, the Chairman of the Supervisory Board regularly exchanged information about current business performance and major transactions with the Chairman of the Executive Board.

In 2019, the Executive Board's regular written and oral reports to the Supervisory Board concerning business developments within the Muehlhan Group and at Muehlhan AG once again formed the core of the cooperation between the two management bodies. Special attention continued to be given to the direction of the Muehlhan Group and to making adjustments to adapt to the current and expected future market situation. The Executive Board also provided the Supervisory Board with comprehensive reports regarding the financial position, earnings performance, and short-term and medium-term business plans of Muehlhan AG and of its subsidiaries.

A total of six meetings were held in 2019 and attended by the Executive Board on February 6, March 19, May 14, July 16, October 22 and December 17, 2019. One Executive Board member was excused each from the conference call on February 6 and the meeting on March 19. Otherwise all the members of the Executive Board and Supervisory Board attended all the meetings. Regular topics of discussion at the Supervisory Board meetings included the trend in revenues, income and employment as well as the financial position and liquidity trend of Muehlhan AG and the Group.

The meetings also featured discussions of trends in the company's main business segments, taking into account the business situation in each of its international markets.

In cases where the Supervisory Board required further information, this was quickly supplied both verbally and in writing by the Executive Board. Regular exchanges of information and consultations between the Executive Board and the Supervisory Board, including between meetings, ensured that specific questions about important developments and business transactions at Muehlhan could be discussed and dealt with at any time.

In addition to the regular issues, the following topics, in particular, were discussed in detail at the 2019 meetings of the Supervisory Board:

At the Supervisory Board meeting on February 6, 2019, the preliminary business figures for 2018 were discussed.

The Supervisory Board meeting on March 19, 2019, dealt with the consolidated financial statements for 2018 and their auditing as well as business performance in the first two months of 2019.

At the meeting on May 14, 2019, the day before the Annual General Meeting, the latest results were discussed, preparations were made for the Annual General Meeting the next day and the delay in establishing the new site in Cuxhaven was explained.

The latest results and developments were discussed at the Supervisory Board meeting on July 16, 2019.

The Supervisory Board meeting on October 22, 2019, dealt with the latest results and developments.

The last Supervisory Board meeting of the year on December 17, 2019, discussed and approved the 2020 budget.

No committees were set up.

Separate and consolidated financial statements

The financial statements and the management report for Muehlhan AG were prepared in accordance with the requirements of the German Commercial Code (HGB), while the consolidated financial statements and the Group management report were prepared in accordance with International Financial Reporting Standards (IFRS) in conjunction with Article 315e HGB.

The Supervisory Board commissioned Warth & Klein Grant Thornton AG Wirtschaftsprüfungsgesellschaft, Hamburg, to audit the financial statements of Muehlhan AG and the Group pursuant to the resolution adopted by Muehlhan AG's Annual General Meeting on May 15, 2019. Warth & Klein Grant Thornton has audited the consolidated financial statements for the period ending on December 31, 2019, the Group management report for the financial year beginning on January 1 and ending on December 31, 2019, the financial statements of Muehlhan AG for the period ending on December 31, 2019, and the management report for Muehlhan AG for the financial year beginning on January 1 and ending on December 31, 2019, and has given them an unqualified audit opinion.

The audit focused on the following:

- The existence of the recognized revenues
- Valuation of receivables from construction contracts
- Valuation of trade receivables
- Specification of the consolidated Group
- Testing goodwill for impairment
- Accounting of leases

Pursuant to Article 317, paragraph 4 HGB, the auditors reviewed and found that the Executive Board has set up a monitoring system, that the statutory requirements for early detection of risks posing a threat to the company as a going concern have been met and that the Executive Board has taken appropriate steps to ensure that it can detect trends and avert risks at an early stage.

Muehlhan AG's financial statements and the consolidated financial statements, the management report for Muehlhan AG's financial statements, and the management report for the consolidated financial statements, the proposal for the use of retained earnings and the associated audit reports were sent to each member of the Supervisory Board for their independent review. At the meeting on March 24, 2020, the Supervisory Board once again thoroughly discussed and reviewed all the documents in the presence of the auditors. Upon completion of this review, no objections were raised.

Based on the final results of its reviews, the Supervisory Board has no objections to the financial statements for Muehlhan AG and the consolidated financial statements prepared by the Executive Board, or the results of the financial statement audits, and it approves Muehlhan AG's financial statements and the consolidated financial statements dated December 31, 2019. The financial statements are therefore adopted. The Supervisory Board agrees with the Executive Board's proposal regarding the appropriation of annual income.

Review of the affiliated companies report pursuant to Article 312, paragraphs 2 and 3 of the German Stock Corporation Act (AktG)

The auditors also reviewed the report on relationships with affiliated companies (affiliated companies report) prepared by the Executive Board pursuant to Article 312 AktG and issued the following opinion:

"We have duly examined and assessed the report and hereby certify that:
1. the information in the report is correct,
2. the payments made by the entity in the transactions listed in the report were not unduly high or the disadvantages were balanced out, and
3. there are no circumstances relating to the measures stated in the report that suggest an assessment that differs materially from that of the Executive Board."

The auditors submitted the audit report to the Supervisory Board. The Supervisory Board examined the affiliated companies report and the audit report for completeness and accuracy. Based on the final results of its examination, the Supervisory Board agrees with the results of the review by the auditors and raises no objections to the statement by the Executive Board at the end of the report, which is reproduced in the Group management report.

Acknowledgments and outlook

For the Muehlhan Group, financial year 2019 was another successful step on the road toward a stable and sustainably profitable business performance. The Executive Board worked to successfully stabilize business in the company's markets and regions, thereby establishing a good basis for addressing future challenges.

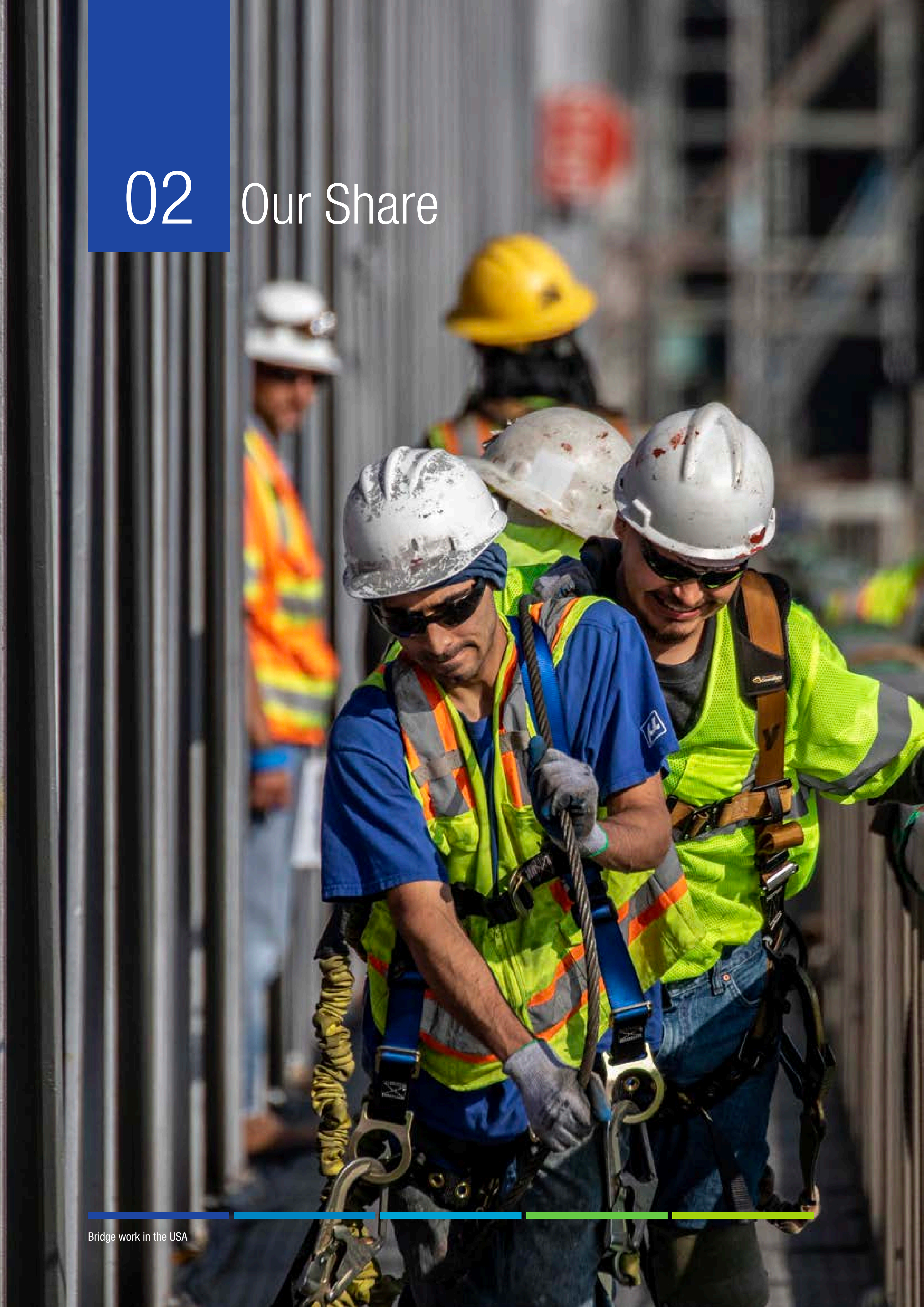
The Supervisory Board looks forward to continuing its support for the Executive Board's strategy to secure the future of the Muehlhan Group in a sustainable way. Like the economy as a whole, the company is currently facing some major challenges due to the COVID-19 pandemic. While there is no way of knowing how the situation will continue to develop, we have to assume that the pandemic will hit the 2020 financial year hard.

We thank the Executive Board and the Group's employees for their work and high level of commitment and we also would like to thank Muehlhan's customers and business partners for their continued confidence during the past financial year.

Hamburg, March 2020

Philip Percival
Chairman of the Supervisory Board of Muehlhan AG

02 Our Share



Bridge work in the USA

Muehlhan share performing well

The Muehlhan share performed well in 2019. In January, the share price jumped from its opening price and low for the year of €2.30 directly to €2.50 per share. Following a sideways trend due to fluctuating trading volume, the share price rose to €2.80 per share at the end of March 2019 after publication of the 2018 Annual Report.

The share stagnated due to poor trading volume in the second quarter, closing at €2.80 at the end of June 2019. The share price therefore climbed 21.7% in the first half of the year.

In the second half of the year, the Muehlhan share price initially moved within a corridor of €2.56 and €2.84 on the back of average trading volume. The share price and trading volume then rose significantly following publication of the third quarter results for 2019 on November 7, 2019. The €3.00 mark was passed on November 22 and a high for the year of €3.52 was hit on December 16 due to high trading volume. The price of the Muehlhan AG share yielded slightly up to the end of 2019, closing at a price per share of €3.20.

The price of the Muehlhan share rose significantly by 39.1% in the course of the year.

In spite of large trading volumes in November and December, the total number of Muehlhan shares traded in 2019 fell by 429,909 shares year-on-year to 1,777,611.

As of the editorial deadline, market capitalization stood at €40.6 million (March 24, 2020, XETRA closing price: €2.08) due to the current effects of the COVID-19 pandemic.

Key figures for the share

Nominal (accounting) value	No-par-value bearer shares
Number of shares issued	19,500,000
Initial listing	10/26/2006
Issue price	€5.80
High for 2019 (XETRA)	€3.52
Low for 2019 (XETRA)	€2.30
Designated sponsor	Pareto Securities AS, Frankfurt Branch
Coverage	M.M. Warburg Research, Hamburg
Share buyback handled by	Pareto Securities AS, Frankfurt Branch
Market capitalization as of December 31, 2019 (XETRA: €3.20)	€62,400,000

The Muehlhan share is listed on the Open Market of the Frankfurt Stock Exchange.

Shareholder structure as of December 31, 2019

There were no major changes to the shareholder structure as of December 31, 2019, in comparison with December 31, 2018. More than 50% of the shares remain in the possession of the family that founded the company. Management also holds shares.

Share performance 2019

03 Group Management Report

Application of surface protection

Application of passive fire protection

I. Overview

Muehlhan once again satisfied the majority of its internal targets in 2019 and even exceeded them in some cases, with revenues rising by 10.3% to €295.3 million. EBIT went up by 21.3% from €10.2 million to €12.4 million, €0.2 million of which was attributable to the first-time recognition of leases in accordance with IFRS 16. The EBIT margin improved accordingly from 3.8% to 4.2%. Consolidated income increased by 13.2% to €6.3 million, compared with €5.5 million in the previous year. After deducting minority interests, income of €6.3 million is attributable to Muehlhan's shareholders, which represents an increase of 26.4%. However, considering factors including growth in revenues, cash flow from operating activities was merely satisfactory at €10.9 million.

A subsidiary in Greece that is available for sale represents a loss of €-1.2 million due to a tax liability to be recognized, following a loss on the previous year of €-0.3 million. Due to the impending sale, the company's results will be presented separately pursuant to IFRS 5 and the previous year's figures will be amended accordingly.

The improvements in earnings that the company achieved once again in the reporting year are testimony to the effectiveness of the strategic steps taken consistently and sustainably by management. A key reason for this success is additionally the company's steady work to improve numerous operating parameters.

Key strategic decisions taken in recent years include the focus on the two markets in the energy sector, Oil & Gas and Renewables, and expanding and completing the range of services, so that all the services that customers expect of Muehlhan can be offered in all markets. Acquisitions and the establishment of new companies are always subject to these strategic objectives at Muehlhan; this also applied to the establishment of Muehlhan Wind Service A/S in 2017, which achieved impressive growth once again in the reporting year with revenues of €19 million. There were no acquisitions in the reporting year. Instead, the focus was on implementing operating improvements within the existing companies.

At the operations level, management continues to work on numerous parameters. More precise selection criteria for projects and the strict application of risk management measures will help to avoid project losses. Improved, system-based project controlling will enable us to detect variations from the plan and so take countermeasures at an earlier stage.

The Oil & Gas business segment was not always able to substitute concluded projects with follow-up orders, resulting in lower revenues, albeit coupled with a slightly improved EBIT margin. As one of the long-standing full-service providers in this market, Muehlhan still has its sights set on growth and should profit from higher demand for all-round maintenance services.

The Renewables segment has moved onto a stable growth path. However, its income in the reporting year was negatively affected by a contingent loss provision that resulted from delays in the construction of a production facility on Germany's North Sea coast. As a full-service provider that supports both wind power station manufacturers and offshore wind farm operators throughout the entire lifecycle of the equipment, Muehlhan is exceedingly well positioned for continued growth in the various submarkets in the future. The expansion of service and maintenance business also reduced dependence on the offshore newbuild business, which is in long-term decline and more exposed to cyclical volatility.

Prior to the outbreak of the COVID-19 pandemic, the Muehlhan Group's upward trend had been expected to continue. Our confidence was based both on the greater resilience the Group has developed through strategic restructuring in recent years and on the increasingly wide range of services we offer. Additionally, from an operating standpoint, our strict risk management and continuous improvements contribute to the Group's success. Since the introduction of restrictions on day-to-day public life and on the business environment, however, it is assumed that the pandemic will leave its mark on the 2020 financial year.

II. Group Fundamentals

1. Group structure

Muehlhan AG (MYAG), Hamburg, is the holding company for a total of 34 directly and indirectly held companies in Europe, the Middle East, North America and the Rest of the World. Of this number, 30 companies are currently included in the consolidated financial statements.

Muehlhan AG is a listed corporation traded on the Open Market of the Frankfurt Stock Exchange.

As one of the few full-service providers in its industry, the Muehlhan Group offers its customers a broad spectrum of industrial services. Muehlhan combines very strong organizational skills, extensive technical expertise, more than 135 years of experience and exacting quality standards into a professional industrial approach that satisfies the highest quality demands of our customers.

The services we provide range from work on ships, offshore and onshore oil and gas installations, offshore and onshore wind power stations and industrial sites, to work on construction and infrastructure projects.

2. Services

The Muehlhan Group offers the following services:

Surface protection: Muehlhan provides surface protection services in all markets. These play a major part in protecting and maintaining maritime and industrial infrastructure.

They include:

- Cleaning and steel preparation
- A wide array of blasting processes, including ultra-high-pressure water jet blasting, dry blasting, ultra-high-pressure wet blasting and sponge jet blasting
- Surface metallization
- Using paint systems and adhesive films to coat surfaces

Passive fire protection: Passive fire protection has become increasingly important in recent years. Applications include industry, infrastructure and the oil and gas industry. Structures with static loads are protected using cementitious, intumescent materials that ensure their stability as long as possible in the event of fire. This keeps load-bearing structures with emergency exits, stairways and roof structures accessible to emergency teams and firefighters for a longer period of time, thereby saving lives.

Scaffolding and access technology: Scaffolding and access technology are key parts of the Group's activities since both services are closely linked to the expansion of the Oil & Gas and Renewables business segments. Accordingly, Muehlhan provides both onshore and offshore scaffolding and access technology services. Muehlhan is an important partner for construction companies involved in civil engineering and facade construction, for oil and gas exploitation companies, for companies in the wind power segment and for shipyards. Muehlhan is one of the few companies capable of satisfying the high technical demands placed on the construction of offshore transformer stations and foundations for offshore wind farms and provides special access technologies such as hydraulic lifts, hydraulic work platforms and rope-assisted access systems. In addition, Muehlhan has the know-how and the technical skills to install complex, customized scaffolding and tribune structures.

Steel construction: The company provides steel construction services for both shipyard and industrial/infrastructure customers. Steel construction services encompass welding work on ships, bridges and offshore facilities as well as installation work on wind turbines, smokestacks, ships, and other industrial facilities. As a result of its high skill level, Muehlhan also provides training programs and courses.

Insulation: Thermal insulation and soundproofing as well as full coating and insulation remediation are particularly important for industrial plants and construction projects and over the long term help to lower costs and to comply with environmental standards.

Through its Danish subsidiary Muehlhan Wind Service A/S, Middelfart, Denmark, Muehlhan offers a wide range of services for wind turbines. The company's portfolio includes assembly work, installation, services, electrical work and surface protection.

Servicing work at an offshore wind farm

III. Objectives and Strategy

In the past, the structural shift in the maritime markets and the resulting increase in competition prompted management to refocus its strategy on reducing dependence on the traditional ship newbuilding segment. The Group's earnings performance has shown that this strategy was correct, and the implementation process is now largely complete. The strategy includes the following elements:

1. Focusing on expanding the energy sector with the Oil & Gas and Renewables business segments

A key element of the strategy is to expand activities in the energy market with the Oil & Gas and Renewables (wind power) business segments. In spite of some brief price increases, a sustained period of low oil prices has really made its mark on the oil and gas industry's value chain and has resulted in a noticeable reduction in maintenance and investing activities which has been ongoing for years. This backlog was not resolved in the reporting year for reasons including oil prices which were lower year-over-year, raising the question as to how long this low level can be maintained. Muehlhan nonetheless still sees opportunities for expanding its own position in this market. The market for renewable energy sources, in particular the offshore wind power segment, offers Muehlhan new growth areas in Europe, North America and other parts of the world. Muehlhan is working to expand its position as a recognized specialist in surface protection and to leverage its position as a full-service provider – both for wind power station manufacturers and offshore wind farm operators – so that it can benefit from growth in this market.

2. Adjustment and expansion of the range of services offered

Expanding the Oil & Gas, Renewables and Industry/Infrastructure business segments requires adjusting and expanding the range of services offered. Clients in the maritime business generally want surface protection as a stand-alone service. By contrast, the energy markets and many industrial customers require a complete range of services comprising scaffolding, insulation, surface protection, fire protection, industrial cleaning and sometimes other services too. In order to satisfy these requirements, where it is possible and makes sense, Muehlhan is expanding its range of services, adapting them to meet customer needs and improving connections between individual services in order to provide customers with an optimal package. One example is our subsidiary Muehlhan Wind Service A/S in Denmark, which has enabled us to significantly expand the range of services Muehlhan offers in the area of wind turbines and which is an acknowledged service provider for the major wind turbine manufacturers and operators.

3. Profitability and leading market position

The Group's business primarily concentrates on Europe, the Middle East and North America. Every local commitment is measured against strict criteria such as profitability, cash generation, sustainability, portfolio range and minimum size. If these are not met over the long term, a site will be sold or shut down, or steps will be taken to meet these criteria once again. The goal is to increase profitability and, along with it, the Group's long-term shareholder value.

As in the previous year, Muehlhan grew organically in the reporting year and focused on developing and consolidating the existing companies.

The goal set by management and the Supervisory Board is for the company to achieve a market leadership position in every segment within five to seven years. In what is overwhelmingly a fragmented competitive environment, Muehlhan uses long-term investments in employee training and continuing education, reserve capacity that is available on short notice, technical innovations, higher quality and higher productivity as well as in the financial options available to a Group with international operations, to offset the structural cost advantages enjoyed by some smaller competitors.

4. Quality, safety and environmental protection

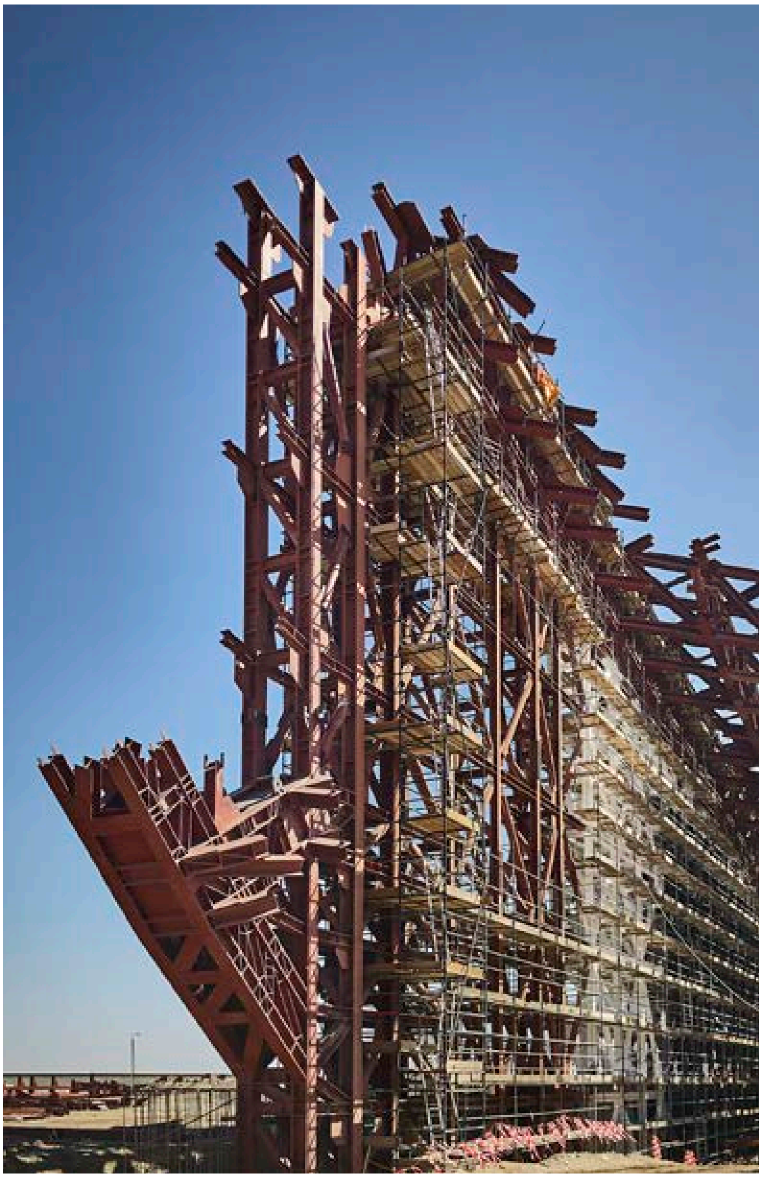
In addition to traditional customer requirements such as price, efficiency and productivity, short project turnaround times and reliable implementation, other increasingly important competitive criteria include comprehensive and proper documentation of the steps involved in implementing and completing a major project and compliance with all legal provisions regarding environmental protection and occupational safety. Muehlhan does everything in its power to ensure that it is always in compliance with all provisions regarding environmental protection and occupational safety and to reduce accidents to a minimum. These goals are accomplished through effective, regular training and a proactive approach in every segment.

Muehlhan tracks all of its business processes as well as the requirements and rules in the areas of organization, safety, environmental protection and quality in an integrated management system. This is certified on a regular basis by an external certification company in accordance with ISO 9001:2015 (Quality Management Systems), ISO 14001:2015 (Environmental Management Systems) and OHSAS 18001:2007 (Occupational Health and Safety Management Systems).

This systematic approach helps Muehlhan to satisfy constantly increasing worldwide customer demands and government regulatory requirements in the areas of quality, on-time delivery, occupational safety, accident prevention and sustainable environmental protection, and therefore also boosts its competitiveness. In addition, Muehlhan practices fair forms of communication in line with legal standards with its employees and subcontractors.

5. Financial stability and strong organizational skills

The key characteristics that distinguish the Group from its competitors are its financial stability, financial flexibility for growth initiatives, and strong organizational skills. The Group works hard to maintain a stable financial position at all times and to expand it over the long term. From our customers' standpoint, Muehlhan is therefore a reliable, financially stable partner that can be entrusted with one or more major projects. This allows us to constantly improve our strong organizational skills and to take full advantage of synergy and best-practice effects.



Application of passive fire protection to the Across Ages Museum, Nizwa, Oman

IV. Control of the Group

1. Financial and non-financial performance indicators

Muehlhan Group is managed by a three-member Executive Board. The Supervisory Board consists of three members. It advises and supports the Executive Board in its management of the company and regularly discusses major topics such as planning, strategy, business performance and opportunities and risks.

The Muehlhan Group is managed from the Group's Hamburg headquarters on the basis of traditional key financial, asset and earnings figures that are provided on a monthly basis. The main financial performance indicators are revenues, earnings from operations (earnings before interest and taxes; EBIT) and cash flow. The Group's operations management is handled primarily by region. Strategic management is carried out in business segments.

Within the Muehlhan Group, particular attention is paid to compliance with accident-prevention regulations, and therefore to avoiding accidents. One of the non-financial performance indicators used by Muehlhan is the accident rate, an internal accident statistic that is defined as the number of accidents per million working hours. Every month, all the operating companies report occupational accidents and the number of hours worked by employees and subcontractors to the Corporate Manager for SHEQ (Safety, Health, Environment and Quality) in Hamburg.

2. Regions

Muehlhan Group currently operates on three continents. The Group has 17 subsidiaries in **Europe**. In the **Middle East**, the Muehlhan Group has four operating companies in the United Arab Emirates, Qatar and Oman. In **North America,** Muehlhan operates mainly in the states on the West Coast. The **Rest of the World** region refers mainly to the two subsidiaries of MSI that are working on offshore oil rigs off the coasts of Brazil and Africa.

3. Business segments

The **Ship** segment encompasses both the Ship Newbuilding segment and the Ship Repair segment in Europe. The process of consolidation and contraction in this market has run its course. The remaining shipyards in Europe concentrate on building specialty ships, particularly megayachts, cruise ships and naval vessels, and on offshore wind turbines, transformer platforms and other components for offshore wind power stations. Muehlhan serves shipping companies and shipyards by applying high-grade surface coatings for newbuilds and provides a wide array of surface coating maintenance and renovation services, ranging from last-minute repair work on exterior walls to the complex restoration of water, ballast, fuel and cargo tanks.

The **Oil & Gas** business segment combines business with both offshore and onshore customers in the oil and gas industry. Muehlhan works as a partner to major companies in the offshore oil and gas and petrochemical industries. The Group is continuously expanding the high level of expertise in surface protection, fire protection, insulation and scaffolding it has acquired from its work in these areas.

Muehlhan provides surface protection services to the growing market for **Renewables** – i. e., renewable energy from offshore and onshore wind turbines – especially for wind turbines and transformer platforms. In recent years, the Group has become a specialist provider of surface protection for wind turbines and rotor blades and thus a coveted partner for leading wind turbine manufacturers. Since 2017, Muehlhan has been a full-service provider for the wind power market, offering a wide array of services including installation through Muehlhan Wind Service A/S in Denmark.

In the **Industry/Infrastructure** business segment, Muehlhan provides long-lasting coating solutions, steel work and scaffolding for industrial customers, for new bridge construction and renovation work, locks, water utility and transportation infrastructure projects and specialty machinery. In addition to working at customers' premises, Muehlhan also operates its own fixed blasting and coating facilities. Another service is passive fire protection, which is used in large steel structures such as airports, bridges, skyscrapers and industrial buildings.

V. Research and Development

Traditionally, the Muehlhan Group has been a pioneer in developing and applying innovative technologies and is one of the few companies operating in the surface protection segment that is actively engaged in research and development in this field. Its R&D work not only includes in-house projects on improving productivity and profitability, but also collaboration within international standard-setting organizations and cooperative arrangements with various research institutions.

Muehlhan views itself as a market leader in the area of surface protection technology. In addition to holding numerous patents, the Group is actively working on products and equipment aimed at further developing sustainable, environmentally friendly surface protection techniques. The Group has two employees working in this area on a full-time basis and brings in other employees when needed. In addition, the Group works closely with renowned research institutes and other specialized third-party companies. R&D expenses totaled €0.3 million and consisted mainly of personnel expenses.

VI. Economic Report

1. Macroeconomic conditions[1]

The global economy grew by approximately 2.9% in the reporting year and therefore grew less than in the previous year. The reasons for this included increasing uncertainty within the global economy, for example, regarding developments in the trade relations between the USA and China and the UK's withdrawal from the European Union.

China was again the main driver of the global economy, with GDP growth of approximately 6.1%. The eurozone reported growth of 1.2% and the United States 2.3%. As such, all the key markets fell short of the previous year's growth rates.

An increase in the global economy of 3.3% is still officially forecast for 2020 and 2021. However, actual growth is likely to be well below this mark due to the rapid spread of COVID-19 in the first quarter of 2020 and the impact that this has had on economic developments in China and therefore also in the rest of the world, with a recession not being ruled out.

Not taking into account the impact of the COVID-19 pandemic, as this cannot currently be precisely determined, a decline in growth from 2.3% to 2.0% had been forecast for the USA in 2020. In the eurozone, a slight increase in growth rates of 0.1% to 1.3% in 2020 and 1.4% in 2021 had been anticipated due to rising external demand. However, the forecasts for these two markets are likely to now be obsolete due to the pandemic. China's economic output is likewise expected to suffer greatly from the impact of the COVID-19 pandemic, as the country's buyer markets are being affected by the pandemic around two months later than China itself. Growth is now expected to fall well below the original forecast for 2020 and there may indeed even be a recession.

As in previous years, the forecasts are additionally subject to other uncertainties. Increasing geopolitical risks such as the simmering conflicts on the Arabian Peninsula and tensions between Iran and the USA, trade wars and the levying of tariffs may significantly influence future developments.

The effects of the financial crisis and great uncertainty about future developments have caused interest rates to remain at a historically low level. Monetary policy is gradually expected to return to normal in the United States and the UK, with moderately rising interest rates as a result. The European Central Bank is expected to continue to pursue its low interest policy in the eurozone in an attempt to compensate for the weak economic dynamic.

The price of oil was generally in the range of US$ 50–60 per barrel in 2019, which was below the previous year's average. The price of oil fell further at the beginning of 2020. Future price movements will be driven by increasing production capacities on the one hand and numerous (geo)political hotspots on the other.

2. Industry-specific conditions

In the **Ship** segment, the process of consolidation and the relocation of shipbuilding to Asia have mostly been concluded. The German shipyards have adapted to the structural changes by successfully establishing themselves as providers of specialty ships. This allows them to offset their Asian competitors' lower labor costs with higher added value. They mainly serve niche markets such as naval shipbuilding, cruise ships, roll-on/roll-off ships and megayachts, as well as customers in the wind power segment. The shipyards remain busy in particular thanks to high demand for more energy-efficient ships, naval vessels and cruise ships.

The performance of the oil price in 2019 was disappointing for all companies in the **Oil & Gas** segment. Challenges therefore remain significant for companies active in the oil and gas sector. Cost-cutting measures, including job cuts and the postponement of capital expenditure and maintenance work, increased pressure on margins throughout the value chain. These activities are now largely complete, however, and maintenance work and investment by the oil exploitation companies are slowly picking up again despite the recent slump in the oil price, partly because of the investment backlog. As a supplier to this market, Muehlhan has also adapted its organization to the realities of lower demand and higher cost pressures and believes that it is now well equipped to benefit from a resurgence in investment activity.

In the **Renewables** segment, wind turbines with a total capacity of more than 61 GW were installed in Germany in 2019. While the market for onshore wind turbines was challenging in particular because of new regulations, the market for offshore wind turbines continued to perform positively. Offshore wind farms contributed more than 7.5 GW, compared with 6 GW the previous year. Another 1 GW of offshore power is currently under construction. The sector is performing similarly well in other European countries.[2] The positive trend in the offshore sector is expected to continue in 2020. There is expected to be only a slight net increase in onshore capacity in the short term. This offers Muehlhan an opportunity to make use of its great experience in surface protection, scaffolding and steel construction. In addition, the establishment of Muehlhan Wind Service A/S will offer growth potential in the installation and service business.

The **Industry/Infrastructure** segment provides services to a variety of markets and customers. In the construction sector, Muehlhan has provided scaffolding and passive fire protection services, primarily in the Middle East and Europe. The Group's local subsidiary in the United States is benefiting from a multi-billion-dollar program to repair the steel bridges common there, which require new corrosion protection coatings.

[1] International Monetary Fund: Global Economic Outlook, January 2020

[2] Home page of the German Wind Energy Association (BWE), February 2020

3. Business performance

Below, we will discuss the business performance, including special developments and events, through reference to income, net assets and financial position.

3.1. Results of operations

3.1.1. Group's earnings performance

The Muehlhan Group's performance in 2019 was better than anticipated in its internal plans. Revenues for the reporting year totaled €295.3 million, which was 10.3% up on the previous year.

The cost of materials and purchased services went up by an above-average 15.2% from €85.9 million to €98.9 million for project-related reasons. Personnel expenses rose by 7.4% to €136.5 million. Muehlhan invests in human resources in order to maintain its high quality standards and to combat the shortage of skilled workers. Other operating expenses increased by €2.4 million to €42.8 million, resulting in an above-average increase of €6.1 million in EBITDA (earnings before interest, taxes, depreciation and amortization) in comparison to revenues from €18.4 million to €24.5 million, with €3.1 million of this being due to a change in the recognition of leases in accordance with IFRS 16. Depreciation and amortization rose by €3.9 million to €12.1 million, with the effect of the change in the recognition of leases amounting to €2.8 million here.

The result is an increase in EBIT (earnings before interest and taxes) of 21.3% from €10.2 million to €12.4 million, including an effect of €0.2 million relating to the recognition of leases. The EBIT margin increased accordingly from 3.8% to 4.2%. The increase in EBIT reflected the benefits to Muehlhan from the operating improvements introduced in recent years, the focus on growth markets, and from using more selective criteria to screen projects in order to reduce the risk of project losses. The €12.4 million in EBIT was significantly above the Executive Board's earnings outlook of €10.0 million to €11.0 million.

As anticipated, the financial result deteriorated by €0.3 million to €-1.9 million, likewise due to the changes in the recognition of leases. Without this effect, the financial result would have been virtually unchanged compared to the previous year.

Consolidated income from discontinued operations relates to MGR, a Greek subsidiary of Muehlhan AG, which is to be sold. In the previous year, the subsidiary's income totaled €-0.3 million. Income of €-1.2 million was recorded for the reporting year due to the recognition of a tax liability.

Consolidated income increased by 13.2% from €5.5 million to €6.3 million, of which €-0.1 million related to non-controlling interests (previous year: €0.5 million). As such, consolidated income attributable to shareholders of Muehlhan AG came to €6.3 million (previous year: €5.0 million), equating to an increase of 26.4%.

3.1.2. Results of operations by region

A regional review shows that revenues in **Europe** increased by 9.9% from €212.1 million to €233.3 million in the reporting year. Key factors in the increase were the successful expansion of wind service activities in Denmark and the securing of a major contract at a refinery in Greece. The successful completion of major projects and operating improvements led to an increase in profitability once again. EBIT increased from €10.5 million in the previous year to €10.8 million in the reporting year, but was burdened in the reporting year by the recognition of a contingent loss provision. This was due to delays in the construction of a production facility for the Renewables segment on Germany's North Sea coast.

In the **Middle East,** which for Muehlhan's purposes includes the United Arab Emirates, Qatar and Oman, revenues remained constant at €22.9 million. The planned market entry in other countries in the region did not occur in 2019 and this put a burden on the region's results. There was also impairment of receivables and inventories in Qatar. One-time income from the liquidation and deconsolidation of an intermediate holding company in the United Arab Emirates that was no longer needed had an offsetting effect. This region's EBIT fell marginally from €1.9 million to €1.7 million.

In **North America,** business improved year-over-year, with revenues up by €2.3 million to €24.4 million in the reporting year. A key revenue driver was the refurbishment of the Rio Vista Bridge in the San Francisco area. EBIT increased almost twofold from €1.8 million to €3.5 million for project-related reasons.

In the **Rest of the World,** oil and gas projects off the coast of Brazil and Africa and a project in Poland generated revenues of €14.8 million (previous year: €10.8 million) and EBIT of €1.6 million (previous year: €1.2 million).

3.1.3. Results of operations by business segment

In the **Ship** business segment, the previous year's slight decline was followed up in the reporting year with a significant increase in revenues of €15.1 million to €69.4 million. There was an above-average increase in EBIT of €3.5 million to €7.6 million for project-related reasons.

The **Oil & Gas** segment posted revenues of €78.3 million, down by €5.2 million due to low oil prices and a correspondingly difficult market environment. EBIT increased from €5.2 million to €6.1 million for project-related reasons and due to revenues from a claim for compensation.

In the **Renewables** business segment, revenues increased by €12.0 million to €45.5 million, primarily due to the expansion of business in the area of wind turbine maintenance. In contrast, EBIT fell by €4.7 million to

€-1.0 million. The main reason for this negative EBIT were project losses due to delays in the construction of a production facility for the Renewables segment on Germany's North Sea coast and the resultant recognition of a contingent loss provision.

The **Industry/Infrastructure** business benefited from rising investments in maintenance and infrastructure projects and recorded an increase in revenues of €5.6 million to €101.9 million. EBIT increased significantly, rising by €1.3 million to €3.8 million. This was mainly due to successful bridge projects in the USA and the absence of the project losses which had been a burden in the previous year.

3.1.4. Orders on hand

Orders on hand as of the reporting date increased year-over-year from €207 million to €219 million. One important component was the framework agreement signed in 2017 with the oil and gas production company Total S.A. (formerly Maersk Oil) for a fabric maintenance program, which still has three years to run and represents orders of €68.7 million as of the reporting date.

3.1.5. Employees

The average number of employees was 3,103, a slight increase on the previous year (3,037 employees).

3.1.6. Accident rate

One of the non-financial performance indicators used by Muehlhan is the accident rate, an internal accident statistic that is defined as the number of accidents per million working hours. The working environment and the demands on Muehlhan's employees are not without risks; consequently, while Muehlhan can apply a broad set of measures to reduce occupational accidents, it cannot eliminate them entirely. During the reporting year, 44 accidents were reported, yielding an accident rate of 4.8 (previous year: 7.1). Compared to other companies with similar working conditions and risks, these figures are low.

3.2. Net assets and financial position

3.2.1. Capital structure

The table below provides an overview of changes in the capital structure:

	2019		2018	
	In € million	In % of total equity and liabilities	In € million	In % of total equity and liabilities
Equity	71.8	40.9%	68.3	45.2%
Borrowings	34.2	19.5%	33.3	22.0%
Trade payables, contract liabilities and other liabilities	55.0	31.3%	43.2	28.7%
Total equity and liabilities	175.4	–	151.1	–

The Muehlhan Group's financing is supported by its strong equity base. The positive consolidated income resulted in a €3.5 million increase in equity in spite of the dividend payment in 2019.

Borrowings consisted mainly of the syndicated loan agreement in the amount of €30.9 million, €5.0 million of which is current and €25.9 million of which is non-current. The non-current portion of the syndicated loan agreement and other bank loans comes to €26.3 million.

After deducting cash and cash equivalents, net debt totaled €24.2 million (previous year: €23.4 million.)

The company was in compliance with the financing terms at all times during the past year.

3.2.2. Capital expenditure

During the reporting year, Muehlhan invested €8.2 million in intangible assets and property, plant and equipment (previous year: €9.3 million). Capital expenditure was mainly for the purchase of scaffolding materials in Germany and the Netherlands.

3.2.3. Liquidity

The Muehlhan Group's financial management is handled centrally by the holding company. Financial management includes managing liquidity, arranging financing and managing financial risks. Since the local operating units often are required to undergo a prequalification process for major projects, sufficient liquidity and bonding capacity must be maintained on the reporting date, including at individual company level, especially in the United States.

At €10.9 million, the Group's cash flow from operating activities was below the previous year's figure of €11.4 million. This was due to strong growth in the fourth quarter of 2019, long-term payment obligations in the Middle East and organizational weaknesses at the subsidiary Muehlhan Wind Service A/S, which had grown strongly since being founded in 2017. Management is focusing heavily on both of these areas in order to achieve sustainable improvements here.

During the financial year, Muehlhan invested a total of €8.1 million in property, plant and equipment (previous year: €9.3 million). Cash flow from financing activities amounted to €3.1 million (previous year: €1.9 million). On the reporting date, cash and cash equivalents stood at €10.0 million and were therefore virtually unchanged against the previous year (€9.9 million). Unutilized overdraft and guarantee facilities totaled €114.7 million on the reporting date (previous year: €115.5 million). In 2019, the Muehlhan Group was therefore in a position to satisfy its payment obligations at all times.

3.2.4. Net assets

As of the reporting date, non-current assets (excluding deferred tax assets) totaled €68.6 million, compared with €62.8 million the previous year. The increase came from the recognition of right-of-use assets as part of the changed recognition of leases. Property, plant and equipment including right-of-use assets amounted to €45.0 million (previous year: €37.7 million not including right-of-use assets), which represents a ratio of fixed assets to total assets of 25.7% (previous year: 24.9%), including scaffolding with a carrying amount of €21.0 million (previous year: €20.7 million). Non-current assets (excluding deferred tax assets) accounted for 39.1% of total assets (previous year: 41.6%). On the reporting date, trade receivables and contract assets stood at €73.2 million (41.8% of total assets) and were therefore €13.4 million higher than in the previous year (€59.7 million; 39.5% of total assets).

3.2.5. Overall statement on the Group's situation

To summarize, business was positive during the reporting year. The strategic and operating measures implemented in recent years resulted in an improvement in consolidated income and a balanced asset and capital structure once again in 2019. Cash flow from operating activities was satisfactory, given the revenue growth achieved based on the limitations.

Application of passive fire protection

VII. Forecast and Report on Opportunities and Risks

1. Forecast report

The following forecasts for the different regions and business segments were prepared before taking the effects of the COVID-19 pandemic into account. Due to the constantly changing situation, it is not possible to provide forecasts that include the effects of the pandemic.

1.1. Forecast by region

In **Europe,** we expect a slight increase in revenues in 2020. An increase in EBIT is planned in comparison to the 2019 figure, which was negatively affected by extraordinary items. The risks relating to an existing project on Germany's North Sea coast had been anticipated in 2019.

Profitability which is appropriate to the risks and to capital commitment coupled with falling revenues is expected in the **Middle East** due to the planned concentration on demanding projects. A slight increase in EBIT is planned, based on a focus on high-margin projects.

In **North America** we expect a slight increase in revenues to be accompanied by lower EBIT. The expected fall in EBIT is attributable to the completion of projects with above-average margins in 2019. Since Muehlhan regularly participates in tenders for bridge construction and renovation projects, winning a contract may lead to substantial changes in the original budget and may affect EBIT accordingly.

In the **Rest of the World,** revenues and EBIT are expected to decline as a special non-recurring project was concluded in 2019.

1.2. Forecast by business segment

In the **Ship** business segment, operating measures and more selective project screening criteria have been implemented. The market has consolidated, so revenues and EBIT are expected to be on a par with the 2019 levels.

In the **Oil & Gas** segment, market uncertainty and the weakness of the price of oil are expected to reduce revenues and EBIT. Because this segment is highly dependent on the price of oil, a significant change in the oil price can result in significant deviations from the plan.

Revenues in the **Renewables** segment should increase significantly once again, especially due to the expansion of service activities. EBIT is likely to increase significantly and go clearly into the black in comparison to the 2019 figure, which was negatively affected by extraordinary items. In this fast-growing market, however, major orders and new projects can have a negative impact on earnings in the short term due to capital expenditure – as was the case in the reporting year – but these should result in significant improvements in earnings over the medium term.

In the **Industry/Infrastructure** business segment, revenues and EBIT are expected to remain unchanged compared with 2019.

1.3. Acquisitions and capital expenditure

As in the past, acquisitions and cooperative arrangements will continue to be an option for advancing and implementing our strategic objectives. However, we will apply strict standards in measuring the appropriateness of the purchase price and the strategic and cultural fit.

The main investment planned continues to be a new production facility for the Renewables segment on Germany's North Sea coast.

1.4. Group forecast

In summary, the Executive Board and the Supervisory Board expect profitability to improve further in 2020. Management expects Group revenues to remain unchanged at around €300 million, with Group EBIT increasing slightly to between €12.0 million and €13.5 million. This forecast does not include the potential impact of the COVID-19 pandemic. It is not currently possible to make reliable forecasts regarding the consequences of the pandemic.

The accident rate, a non-financial performance indicator, should be better than in the reporting year.

As a project business service provider, Muehlhan cannot completely eliminate exposure to risks that reduce earnings. These may be operating or strategic risks. Operating risks are an unavoidable part of our business. We counter such risks through an appropriate risk management system. Strategic risks result from changes in external factors to which we did not respond properly in a timely manner in the past or to which it was impossible to respond. We counter such risks by taking decisive corrective actions; however, such actions may entail non-recurring expenses. Possible project losses are operating risks, whereas strategic risks could be the development of the shipyard market in Asia, for instance, specifically as with Muehlhan's withdrawal from Singapore in 2015. Based on currently available information, we do not expect any further significant strategic corrective actions to be necessary in the future. However, one should keep in mind that the company may need to make further adjustments if the economic environment in specific markets should deteriorate.

This outlook contains forward-looking statements that do not describe past events but rather reflect our assumptions and expectations. These statements are based on plans, estimates and forecasts currently available to the Executive Board of Muehlhan AG. As a result, the statements are subject to risks and uncertainties. Actual results and performance may deviate significantly from the assumptions made by us today. We assume no obligation to update such statements to take into account more recent information or future events.

2. Risk management system

2.1. No risks that could threaten the Group as a going concern

From the company's perspective, there are no risks that could threaten its existence as a going concern. Even in light of the current restrictions on day-to-day public life and business activities, we believe Muehlhan is well equipped to survive this extraordinary situation.

Listed below are risks that could have a material influence on the Group's net assets, financial position and results of operations. Both our organization and our control systems are designed to optimize the way we deal with existing risks and to address newly emerging risks in a timely manner.

2.2. Maintaining a functioning risk management system

In accordance with Section 91, paragraph 2 of the German Stock Corporation Act (AktG), the Executive Board must take appropriate steps to set up and/or manage a monitoring system that will identify in a timely manner any risks that might threaten the company as a going concern. The company must have an adequate reporting system for this purpose that reports directly to the Executive Board and is continuously expanded and updated.

The Executive Board regularly notifies the Supervisory Board about the company's ongoing business activities and significant risks.

Muehlhan's risk management process consists of a standardized risk identification and reporting system at individual company level. The reported risks are aggregated and consolidated at Group level and presented to the Executive Board. Any material changes from previously reported and/or identified risks are also reported separately, i.e., outside of the regular reporting schedule. The Executive Board evaluates and controls risks on this basis. The risk management process includes deciding, on a case-by-case basis, whether the risk must be avoided, reduced, transferred to others or accepted.

3. Discussion of major risks and opportunities

3.1. Market and competitor risks and opportunities

Our company is subject to general market risks that may arise from changes in our markets, the introduction of new technologies and coating processes, changing customer needs or increasing competition from market players from related industries or service sectors. In recent years, in particular, our business has also been affected by general economic trends. The Executive Board systematically monitors the relevant markets around the world with risks in mind. The local managing directors and regional managers support the Executive Board in these efforts.

As a service provider, Muehlhan has a relatively high commitment to its existing sites and their economic environment. Negative changes in the economic environment can influence the profitability of a location or company with possible effects on existing goodwill.

Generally speaking, however, it is possible to follow markets to any geographic region at short notice, to set up sites there within a short period of time and to provide flexible support to customers using our own resources, even at the new sites. In turn, this is an opportunity for Muehlhan to generate additional business.

The creation of new sites entails the fundamental risks that exist with any building project such as delays or an unexpected increase in the investment volume. Such a delay resulted in considerable expenses in the reporting year.

The COVID-19 pandemic is currently significantly affecting the entire market, and Muehlhan is not immune to this. It is possible that other pandemics, military conflicts and other extraordinary events may pose risks in the future, but there are opportunities for Muehlhan to gain new business once this pandemic abates.

3.2. Risks and opportunities of strategic importance to the company

In the past, the permanent shift to Asia of large-scale shipbuilding and the bulk of the ship repair market represented a strategic risk for the Muehlhan Group. The Group responded to this and other processes of structural change by closing or decommissioning sites and by expanding regional focal points, developing niche markets and diversifying the range of services it offers. Muehlhan combines its own very strong organizational skills and extensive technical expertise into a professional industrial approach that increases the Group's opportunities for developing new markets in specific countries and products.

3.3. Risks and opportunities associated with economic performance

By increasing reliability, further improvements in coating materials will lead to longer surface maintenance intervals, giving rise to the basic risk of a declining demand for surface protection work. On the other hand, due to ship size, the number of ships and the safety equipment installed (e.g., double-hulled ships), there is an opportunity in the fact that the volume of steel surfaces in the maritime business segments will increase. The same applies to the industrial segments. In particular, the additional public funding forecast for the maintenance and repair of transport infrastructure projects in Europe and the United States, especially for steel bridge construction, should stimulate this market.

Where technically feasible, Muehlhan uses steel grid for surface-preparation blasting. Muehlhan would be directly affected by an increase in the price of this process material, but even here only to a very limited extent, since this material can be recycled. There would continue to be a price advantage over a non-reusable material such as copper slag. A risk exists if defective materials are used. The Group has implemented various preventive measures and controls to minimize such risks.

Muehlhan has an advanced inventory of equipment that was developed in the past with the help of only a few manufacturers. In principle, there is a risk that one of these manufacturers might cease production. In this case, Muehlhan can find new solutions on short notice. As we worked closely with our suppliers on the development of the equipment in the past and performed a significant share of our own development work, we also have a high degree of in-house expertise. This means that we can produce equipment that is compatible with our existing inventory of equipment within a short period of time, even with new suppliers.

Surface protection is quite labor-intensive. However, energy is also required for air conditioning in large steel structures while work is being performed, for running air compressors that transport abrasives and for powering pumps to generate high-pressure water. Accordingly, Muehlhan is directly affected by higher energy costs. The only way we can counter such developments is by increasing prices for our own services. However, Muehlhan uses environmentally friendly and energy-saving technologies, so a price increase for energy tends to improve our competitiveness.

3.4. Personnel risks and opportunities

Competition for qualified executives and quality-conscious technical employees continues to be high in the industries in which Muehlhan is active. Experience from previous financial years has demonstrated that the submarkets in which Muehlhan operates are "people businesses" in which individual employees can affect the success of the Group. Our future success therefore depends in part on the extent to which we are successful over the long term at competing with other industries to recruit the required technical professionals from outside the company, integrating them into existing work processes and retaining them over the long term. One approach of our strategy to ensure that we recruit qualified young talent is our participation in academic training programs at universities in Hamburg, Germany, and in Gdansk, Poland.

At the same time, we intend to take advantage of our employees' already high level of identification with our company and its services and to systematically prepare suitable employees from our own ranks for strategically important assignments within the company.

3.5. Financial risks

The companies of the Muehlhan Group also work at fixed prices and sometimes carry out a large portion of their services in advance of payment. Our customers expect this type of (pre)financing, which has developed into a major component of the services we offer. When the financial crisis started, customers began increasingly to exceed our already generous payment terms, especially in the Middle East; such customer credits have remained at an unacceptably high level ever since.

Muehlhan operates in the project business. With major projects, there is always a risk that the contractor will suffer a loss and become insolvent. In Muehlhan's case, this especially affected shipyards in the past. Muehlhan has therefore implemented precise criteria for its project selection and stringently applies various risk management measures. Muehlhan carefully reviews its customers' liquidity situations before accepting orders and manages receivables in a regular and systematic way. It also insures credit risks on a case-by-case basis, to the extent they are insurable. Improved, system-based project controlling will moreover enable us to detect deviations from the plan and thus enable us to take countermeasures at an earlier stage. We plan to continue this practice in the future. Generally speaking, however, defaults – including large losses – cannot be ruled out.

Short-term overdrafts pay interest at floating rates and are subject to the normal risk of interest-rate fluctuations.

The master syndicated loan agreement renewed in July 2017 entails the risk that future variable-rate interest payments will change, with corresponding negative effects on the company's cash flow. Muehlhan countered the risk by entering into an interest rate cap with the same maturity that limits negative effects on cash flow to a certain amount. The interest rate cap covers almost all the non-current portion of the syndicated loan facility and the associated risks. Failure to comply with the ratios ("covenants") contained in the master syndicated loan agreement would also entail risks. Failure to comply with the ratios ("covenants") defined in the master syndicated loan agreement would also entail risks. Due to the COVID-19 pandemic, and the resulting effects, which will also impact Muehlhan, there is a risk that it will not be possible to comply with these covenants. The banks were involved at an early stage in order to find joint solutions to these unusual circumstances, such as the suspension of obligations. The solid financing strategy with the long-term syndicated loan agreement, early communication of implemented countermeasures, government support programs, and, last but not least, the sound business model in case of comparatively mild financial effects from the crisis mean there is a very low risk of damage for Muehlhan in the event of possible non-compliance with the current covenants.

Loans to and from subsidiaries outside of the euro area are subject to a basic exchange rate risk which, where possible, is countered by measures aimed at equity financing.

Tax risks have been adequately covered in the consolidated financial statements. Nevertheless, additional tax claims could emerge if the tax authorities' opinion of the law differs from that of the taxed company in particular cases. This applies in particular to the situation of a Greek subsidiary.

Appropriate liquidity planning systems are used to deal with risks from cash flow fluctuations at an early stage.

3.6. Company-specific risks and opportunities

Muehlhan Group companies primarily offer surface protection application services on a project basis. These are often provided in conjunction with other technical work and frequently under considerable time pressure. In some cases, the full scope of the services to be provided only emerges after the work has begun. Muehlhan protects itself from these contingencies by assessing the likelihood of additional costs, such as those resulting from a change in the services required or a change in scope, even in the early stages of the contract negotiations. This assessment is taken into consideration in determining the price for the quotation and subsequently in preparing the final contract documents.

At the same time, the local project managers can count on capable support from the holding company. In many projects, the deployment of Group specialists to address technical, business or legal issues has proven its worth, enabling the company to respond more quickly and in a more personalized manner to the respective customer's needs than would have been the case with external support.

3.7. Legal and litigation risks

As a company working on international projects and/or as a group of companies with international operations, Muehlhan is aware that claims by or even against Muehlhan may require a court settlement. Muehlhan has taken legal action against other market players, including customers, in the past and is currently involved in litigation against customers and suppliers. In the reporting year, a court case in the Netherlands against a supplier of contaminated abrasive was settled out of court.

The company has no knowledge of any legal risks that could threaten the continued existence of the Muehlhan Group.

VIII. Legal Disclosures

1. Existing branch offices

The Polish subsidiary Muehlhan Polska Sp. z o.o., Szczecin, maintained branch offices in Germany, Belgium, France and Denmark in 2019.

The Cypriot subsidiary Muehlhan Cyprus Limited, Limassol, had an independent branch office in Greece and a branch office in Ghana.

The Danish subsidiary Muehlhan A/S, Middelfart, had branch offices in Slovakia and the UK.

The Danish subsidiary Muehlhan Wind Service A/S, Middelfart, maintained branch offices in Germany, the UK and Taiwan in the reporting year.

2. Relationships with affiliated companies

Pursuant to Article 312 of the German Stock Corporation Act (AktG), the Executive Board has prepared a report on relationships with affiliated companies that includes the following closing statement:

"We declare that Muehlhan AG and its subsidiaries received appropriate consideration for all the legal transactions listed, in accordance with the circumstances known to them on the date when the legal transactions were entered into."

3. Basic features of the compensation system for the Executive Board and the Supervisory Board

The Executive Board's compensation consists of a fixed component and a variable component. The variable compensation consists of short-term and long-term components and is based on increases in the corporate value (change in equity value) of the Group. The short-term component is based on the year-over-year increase in the corporate value (change in equity value) and payment is made in the form of a cash bonus. The long-term component is based on a sustainable increase in the corporate value (sustainable change in equity value) and payment is made in shares.

The Supervisory Board's compensation consists of a fixed compensation component and a variable component that depends on the level of consolidated earnings achieved.

4. Disclosures on treasury shares

With regard to information according to Section 160 sentence 1 (2) AktG, we refer to the explanations in the notes to Muehlhan AG's separate financial statements published December 31, 2019.

Hamburg, March 24, 2020

Executive Board

Stefan Müller-Arends *Dr. Andreas C. Krüger* *James West*

04 Consolidated Financial Statements

Corrosion protection work

CONSOLIDATED BALANCE SHEET

ASSETS in kEUR	Notes	12/31/2019	12/31/2018
Non-current assets			
Intangible assets	1	18,233	19,548
Property, plant and equipment	1, 2, 3	45,043	37,696
Financial assets	24	166	33
Other non-current assets	4	5,192	5,579
Deferred tax assets	5	1,954	3,269
Total non-current assets		**70,588**	**66,125**
Current assets			
Inventories	6	6,169	4,840
Trade receivables and contract assets	7	73,232	59,787
Cash and cash equivalents	8	9,999	9,900
Other current assets	9	14,862	10,462
Total current assets		**104,263**	**84,989**
Assets and disposal groups held for sale	10	519	0
TOTAL ASSETS		**175,370**	**151,114**

Rounding differences may occur.

EQUITY AND LIABILITIES in kEUR	Notes	12/31/2019	12/31/2018
EQUITY	11		
Subscribed capital		19,500	19,500
Capital reserve		14,178	13,826
Treasury shares		-679	-537
Other reserves		3,747	4,902
Retained earnings		32,260	27,788
Non-controlling interests		2,755	2,779
Total equity		**71,761**	**68,258**
NON-CURRENT LIABILITIES			
Pension provisions and similar obligations	12	879	816
Other non-current provisions	15	1,389	0
Non-current borrowings	13, 14	26,285	15,114
Other non-current liabilities		5,897	0
Deferred tax liabilities	5	300	752
Total non-current liabilities		**34,749**	**16,683**
CURRENT LIABILITIES			
Current provisions	15	4,871	4,679
Current borrowings	13, 14	7,912	18,141
Trade payables and contract liabilities	16	27,312	25,131
Other current liabilities	17	27,648	18,223
Total current liabilities		**67,743**	**66,174**
Liabilities directly associated with non-current assets and disposal groups classified as held for sale	10	1,117	0
TOTAL EQUITY AND LIABLITIES		175,370	151,114

Rounding differences may occur.

CONSOLIDATED INCOME STATEMENT FOR FINANCIAL YEAR 2019

in kEUR	Notes	2019	2018
Revenues	18	295,269	267,799
Other operating income	21	7,369	3,963
Cost of materials and purchased services	19	-98,853	-85,856
Personnel expenses	20	-136,509	-127,093
Other operating expenses	21	-42,770	-40,419
Earnings from operations before depreciation and amortization (EBITDA)		**24,505**	**18,394**
Depreciation and amortization of intangible assets and property, plant and equipment	1, 2, 3	-12,105	-8,174
Earnings from operations (EBIT)		**12,400**	**10,220**
Financial result	22	-1,887	-1,611
Earnings before income taxes (EBT)		10,513	8,608
Income tax result	23	-3,042	-2,759
Consolidated income from continuing operations		7,471	5,850
Consolidated income from discontinued operations		-1,221	-329
Consolidated income		**6,250**	**5,521**
Consolidated income attributable to non-controlling interests		-73	518
Consolidated income attributable to shareholders of Muehlhan AG		**6,323**	**5,003**
EARNINGS PER SHARE IN EUR	25		
Shares number		19,236,738	19,289,339
from continuing operation			
basic		0.33	0.26
diluted		0.33	0.26
from discontinued operations			
basic		-0.06	-0.02
diluted		-0.06	-0.02

Rounding differences may occur.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

in kEUR	Notes	2019	2018
Consolidated income	26	**6,250**	**5,521**
Recyclable items			
Currency translation differences (legally independent entities abroad)		-2,092	52
Currency translation differences reclassified to the consolidated income statement		1,524	7
Future cash flow hedge (effective cash flow hedge)		23	65
Non-recyclable items			
Remeasurement of defined benefit plans		-17	-70
Other comprehensive income		**-562**	**54**
Income taxes on other comprehensive income		-7	-20
Other comprehensive income after taxes		**-569**	**34**
Total comprehensive income		**5,681**	**5,556**
of which attributable to non-controlling interests		-21	469
Shareholders of Muehlhan AG		**5,702**	**5,087**
Total comprehensive income from continuing operations		5,681	5,556
Total comprehensive income from discontinued operations		0	0

Rounding differences may occur.

CONSOLIDATED CASH FLOW STATEMENT

in kEUR	Notes	2019	2018
Consolidated income attributable to shareholders of Muehlhan AG		6,323	5,003
Depreciation of fixed assets	1, 2, 3	12,105	8,244
Loss from the disposal of fixed assets	1, 2, 3	483	196
Non-cash expenses/income from the allocation of gains/losses to non-controlling interests		-73	518
Other non-cash expenses/income		-3,876	1,405
Decrease/increase in provisions	12, 15	-155	618
Cash flow		**14,807**	**15,983**
Increase in inventories, trade receivables, contract assets and other assets	6, 7, 9	-19,636	-3,877
Increase in trade payables, contract liabilities and other liabilities	16, 17	17,772	1,528
Income taxes paid	9, 17, 23	-2,054	-2,279
Cash flow from operating activities		**10,888**	**11,355**
from discontinued operations		-46	14
Proceeds from disposals of fixed assets			
in property, plant and equipment		959	226
Capital expenditures			
in intangible assets	1	-60	-26
in property, plant and equipment	2	-8,129	-9,238
Interest received	22	144	101
Cash used in investment activities		**-7,086**	**-8,937**
from discontinued operations		0	0
Payments to shareholders and non-controlling shareholders (dividends)	Changes in Group equity	-1,971	-1,623
Cash flow from repayment of/taking up borrowings under current financial liabilities*	27	-10,176	398
Cash flow from taking up non-current borrowings*	27	10,903	964
Interest paid		-1,857	-1,597
Cash used in financing activities		**-3,101**	**-1,858**
from discontinued operations		-214	27
Currency, scope of consolidation and valuation-related changes in cash and cash equivalents		-601	574
Total changes in cash and cash equivalents		100	1,133
Cash and cash equivalents at the beginning of the period	8	9,900	8,766
Cash and cash equivalents at the end of the period	8	**9,999**	**9,900**

* Proceeds and payments are shown on a net basis. Unnetted amounts are explained in the notes to the consolidated financial statements.

Cash and cash equivalents correspond to the balance sheet item “Cash and cash equivalents”.

Rounding differences may occur.

CONSOLIDATED STATEMENT OF CHANGES IN GROUP EQUITY

	Equity applicable to equity holders of the parent company					
	Subscribed capital	**Capital reserve**				**Other reserves**
in kEUR			Profit reserves	Conversion reserve	Cash flow hedge reserve	Adjustment from currency translation
As of 01/01/2018	**19,500**	**13,694**	**6,574**	**589**	**-61**	**-686**
Carryover from changes to accounting standards				-680		
Changes in treasury shares			-165			
Contribution to share-based payment		132				
Withdrawal from profit reserves			-753			
Dividends paid						
Other changes						
Total comprehensive income			-70		44	110
As of 12/31/2018	**19,500**	**13,826**	**5,586**	**-91**	**-17**	**-576**
Changes in treasury shares			-112			
Changes in non-controlling interests						
Contribution to share-based payment		157				
Withdrawal from profit reserves			-525			
Withdrawal from retained earnings		190	104			
Dividends paid						
Other changes		5				
Total comprehensive income			-17		15	-620
As of 12/31/2019	**19,500**	**14,178**	**5,036**	**-91**	**-2**	**-1,196**

Rounding differences may occur.

			Non-controlling interests	Equity
Retained earnings	Treasury shares	Equity		
23,630	**-355**	**62,885**	**2,386**	**65,271**
		-680		-680
	-182	-348		-348
		132		132
753		0		0
-1,548		-1,548	-75	-1,623
-50		-50		-50
5,003		5,087	468	5,555
27,788	**-537**	**65,479**	**2,779**	**68,258**
	-142	-254		-254
		0	44	44
		157		157
525		0		0
-294		0		0
-1,924		-1,924	-47	-1,971
-158		-153		-153
6,323		5,701	-21	5,679
32,260	**-679**	**69,006**	**2,755**	**71,761**

Notes

I. Company

Muehlhan AG (hereinafter "MYAG" or "the company") and its subsidiaries operate in the Ship, Oil & Gas, Renewables and Industry/Infrastructure sectors, where they provide surface protection, passive fire protection, scaffolding and access technology, steel construction and insulation services.

The company is headquartered at Schlinckstrasse 3, 21107 Hamburg, Germany, and is recorded in the Commercial Register at the Hamburg Municipal Court under HRB 97812.

Application of corrosion protection

II. Application of IFRS

The consolidated financial statements of MYAG as of December 31, 2019, were prepared in accordance with the International Financial Reporting Standards (IFRS) promulgated by the International Accounting Standards Board (IASB), as adopted by the European Union, including the interpretations of the International Financial Reporting Interpretations Committee (IFRIC) and the complementary provisions of German commercial law applicable under Article 315e, paragraph 1 of the German Commercial Code (HGB).

The consolidated financial statements follow all IFRSs adopted as of the reporting date whose application is mandatory in the European Union. Compliance with the standards and interpretations ensures that the financial statements present a true and fair view of the Group's net assets, financial position and results of operations.

By preparing the consolidated financial statements in accordance with International Financial Reporting Standards (IFRS), MYAG availed itself of the option stipulated in Article 315e, paragraph 3 of the HGB to prepare the consolidated financial statements in accordance with internationally recognized accounting principles and simultaneously to forgo preparing a set of consolidated financial statements in accordance with the accounting principles set forth in the HGB.

III. General comments

In preparing the consolidated financial statements, assets and liabilities are shown at amortized cost, with the exception of certain financial instruments which are measured at fair value. The consolidated income statement within the statement of comprehensive income is prepared using the total cost method. Assets and liabilities are broken down by maturity.

The consolidated financial statements were prepared in euros in accordance with the going-concern principle.

As the calculations of the individual items included are presented in full figures, rounding differences may occur where amounts are shown in millions or thousands of euros.

IV. New accounting standards

The consolidated financial statements covering the period ending on December 31, 2019, are in compliance with all the mandatory IFRS and IFRIC interpretations adopted by the EU Commission for which application is mandatory as of the reporting date.

These are listed below:

Standard/Interpretation	Note	Effective date	Effect
IFRS 16 Leases	New lease accounting standard affecting recognition, presentation and disclosures in the notes. In contrast to IAS 17, IFRS 16 will result in the recognition of all lease assets and liabilities on the balance sheet, with the exception of leases with a lease term of twelve months or less and leases of low-value assets. In the income statement, depreciation and interest will be shown instead of other operating expenses from leases.	01/01/2019	detailed description below this table
Amendments to IFRS 9 Financial Instruments	Amendments and/or clarifications on prepayment features with negative compensation	01/01/2019	no material effect
Amendments to IAS 28 Investments in Associates and Joint Ventures	Amendment and/or clarification that long-term investments in associates or joint ventures which are not recognized using the equity method are to be measured in accordance with IFRS 9	01/01/2019	no material effect
Amendments to IAS 19 Employee Benefits	Amendments regarding changes in the conditions of defined benefit plans which result in past service cost or gains or losses resulting from settlements	01/01/2019	no material effect
Annual Improvements to IFRS 2015–2017 Cycle	Amendments and/or clarifications on IAS 12 Income Taxes, IAS 23 Borrowing Costs, IFRS 3 Business Combinations and IFRS 11 Joint Arrangements	01/01/2019	no material effect
IFRIC 23	Uncertainty concerning income tax treatment	01/01/2019	no material effect

The following new, amended and/or revised published standards and interpretations adopted by the EU Commission had not yet been applied during the reporting year:

Standard/Interpretation	Note	Effective date	Expected effect
Amendments to IFRS 3 Business Combinations	Amendment to the definition of a business	01/01/2020	no material effect
Amendments to IAS 1 Presentation of Financial Statements and IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors	The amendments relate to the definition of “material” and standardize this within the IFRS	01/01/2020	no material effect
IFRS Conceptual Framework	Amendments to references to the conceptual framework in IFRS	01/01/2020	no material effect

The following new, amended and/or revised published standards and interpretations, which have not yet been adopted by the EU commission, had not yet been applied during the reporting year:

Standard/Interpretation	Note	Effective date	Expected effect
IFRS 17 Insurance Contracts	Accounting for insurance contracts	01/01/2023	no impact

The IASB has adopted additional (amendments to) accounting rules not listed here which have not been applied and which will not affect the presentation of Muehlhan's net assets, results of operation and financial position.

First-time application of the respective standards is planned for the date when they go into effect. The Group has decided not to avail itself of the right to apply the standards and interpretations earlier.

The following standards were applied for the first time in the reporting year:

IFRS 16 Leases

IFRS 16 replaces IAS 17 Leases and three related interpretations. Under IFRS 16, all rental and lease agreements that satisfy the criteria set forth in the standard are recognized as right-of-use assets and lease liabilities on the balance sheet.

Muehlhan used the modified retrospective approach for first-time application. The comparative information for 2018 was not modified and continues to be represented pursuant to IAS 17 and the related interpretations.

Previously, Muehlhan determined whether an arrangement contained or constituted a lease pursuant to IFRIC 4 at the beginning of the contract. Since January 1, 2019, Muehlhan has assessed whether a contract contains or constitutes a lease on the basis of the definition of a lease. This is the case if a contract allows the use of an identified asset to be controlled for a specific period on payment of a charge. Muehlhan uses the definition of a lease as per IFRS 16 to determine whether a contract includes the right to control an identified asset.

On switching to IFRS 16, Muehlhan decided to apply the simplification provision concerning retention of the assessment regarding which transactions are leases. The Group applies IFRS 16 exclusively to contracts previously identified as leases. Old contracts were thus not reviewed to ascertain whether there was a lease as per IFRS 16.

Upon transition, the lease liabilities for the lease agreements were measured at the present value of the remaining lease payments less the incremental borrowing rate as of January 1, 2019.

As a lessee, Muehlhan leases assets such as land, properties, passenger vehicles and trucks, and IT equipment. To date, Muehlhan has almost exclusively categorized leases as operating leases, as all the risks and opportunities associated with ownership of the underlying asset were generally not transferred to the Group. Pursuant to IFRS 16, Muehlhan recognizes right-of-use assets and lease liabilities for the majority of these lease agreements and as such they are recognized on the balance sheet.

Muehlhan apportions the contractually agreed charge on the basis of the relative unit prices on the provision date or upon a contract containing a lease component being amended.

Right-of-use assets are measured in the amount of the lease liability adjusted for advance or deferred lease payments. Muehlhan tested its right-of-use assets for impairment on the date of transition and came to the conclusion that there were no indications of impairment of its right-of-use assets.

Muehlhan used an array of simplification provisions in its application of IFRS 16 to leases categorized as operating leases pursuant to IAS 17. Specifically, Muehlhan:

- recognized neither right-of-use assets nor lease liabilities in the case of leases with terms ending within 12 months of first-time application,
- recognized neither right-of-use assets nor lease liabilities (e.g., IT equipment) in the case of leases with low-value underlying assets,
- did not take into account the initial direct costs when measuring the right-of-use assets on the date of first-time application, and
- determined the term of leases with retroactive effect.

The effects of the first-time application of IFRS 16 Leases on the consolidated financial statements are as follows:

in kEUR	01/01/2019
Right-of-use assets	9,015
Deferred tax assets	2,815
Lease liabilities	8,988
Deferred tax liabilities	2,840
Profit reserves	0

When measuring the lease liabilities from operating leases, Muehlhan deducted its incremental borrowing rate from the lease payments as of January 1, 2019. The weighted average rate is 4.0%.

in kEUR	01/01/2019
Liabilities from operating leases as of 12/31/2018, as reported in the consolidated financial statements pursuant to IAS 17	14,169
Less incremental borrowing rate as of 01/01/2019	4.0%
Lease liabilities as of 01/01/2019	8,988

Liabilities from operating leases as of December 31, 2018, include a leasehold agreement with a residual term of 91 years and resultant payment obligations of €5.7 million. The liability will be discounted as of January 1, 2019, as per IFRS 16.

The covenants the Group has to satisfy under the loan agreements will continue to be calculated at the level prior to the introduction of IFRS 16 using retroactive accounting.

Application of passive fire protection

V. Consolidated Group and reporting date for the consolidated financial statements

Consolidated Group

The consolidated financial statements include the financial statements of the parent company, MYAG, and the 30 subsidiaries it controls (previous year: 31). MYAG has control if it controls rights at these companies that give it the ability to direct the relevant activities of these companies in order to influence the companies' earnings. Control further requires MYAG to be exposed to variable returns from the subsidiaries and to have the ability to affect those variable returns through its decision-making power. Subsidiaries are included in the consolidated financial statements (full consolidation) from the date on which control is established over the subsidiary and until the date on which control over the subsidiary ends. Accordingly, the results of operations of the subsidiaries acquired or sold during the year are included in the consolidated income statement and in the Group's other comprehensive income from the date of acquisition and/or until the date of disposal.

The consolidated Group changed as follows against December 31, 2018:

The company Muehlhan Surface Protection Middle East L.L.C. (MME), Dubai, UAE, was deconsolidated and wound up at the end of October 2019. The deconsolidation effect totaled €1,524 thousand and is included under other operating income.

The company Muehlhan India Private Limited (MIND), Chennai, India, was founded in 2019. Muehlhan Middle East Holding Limited, Dubai, UAE, holds 99.99% of the shares in the company. The company has no business activity and will not be consolidated.

The first-time consolidations and deconsolidations will not limit comparability with prior-year financial statements.

The list of shareholdings as of December 31, 2019, is presented below. In addition, each company is assigned to a cash-generating unit (CGU) and a geographic segment, as well as to the business segments and services.

Symbol	Company	Shareholding in %	Shareholding in %	Held by	CGU
		2019	2018		
MYAG	Muehlhan AG, Hamburg, Germany	Parent company	Parent company		–
AJS	Allround Job Services Sp. z o.o., Szczecin, Poland	100	100	MPL	MPL
CCC	Certified Coatings Company, Fairfield, CA, USA	100	100	MSPU	MCC
GMH	Gerüstbau Muehlhan GmbH, Hamburg, Germany	100	100	MYAG	GMH
MBL	Muehlhan Bulgaria Ltd, Varna, Bulgaria	75	75	MYAG	MD
MCA	Muehlhan Canada Inc., Windsor, Ontario, Canada	100	100	MYAG	–
MCC	Muehlhan Certified Coatings Inc., Fairfield, CA, USA	100	100	MSPU	MCC
MCL	Muehlhan Cyprus Limited, Limassol, Cyprus	51	51	MYAG	MCL
MD	Muehlhan Deutschland GmbH, Bremen, Germany	100	100	MYAG	MD
MDK	Muehlhan A/S, Middelfart, Denmark	100	100	MYAG	MDK
MDQ	Muehlhan Dehan Qatar W.L.L., Doha, Qatar	100	100	MYAG	MDQ
MES	Muehlhan Equipment Services GmbH, Hamburg, Germany	100	100	MYAG	–
MF	Muehlhan S.A.R.L., Saint-Nazaire, France	100	100	MYAG	MF
MGB	Muehlhan Industrial Services Ltd., Aberdeen, Scotland, UK	100	100	MYAG	MGB
MGR	Muehlhan Hellas S.A., Athens, Greece	51	51	MYAG	MCL
MIF	Muehlhan Industrial France S.A.R.L., Le Havre, France	100	100	MF	MF
MIS	Muehlhan Industrial Services Inc., Fairfield, USA	100	100	MSPU	–
MMEH	Muehlhan Middle East Holding Limited, Dubai, UAE	100	100	MYAG	–
MMF	Muehlhan Morflot OOO, St. Petersburg, Russia	70	70	MYAG	MMF
MNL	Muehlhan B.V., Vlaardingen, Netherlands	100	100	MYAG	MNL
MOM	Ruwad Al Athaiba International LLC, Muscat, Oman	100*	100*	MMEH	PRA
MPL	Muehlhan Polska Sp. z o.o., Szczecin, Poland	100	100	MYAG	MPL
MRO	Muehlhan S.R.L., Galati, Romania	51	51	MYAG	MCL
MSI	Marine Service International AS, Drøbak, Norway	100	100	MYAG	MSI
MSIB	MSI do Brasil Serviços Marítimos Ltda. Brasil, Rio de Janeiro, Brazil	99.8	99.8	MSI	MSI
MSIS	MSI Coating Services PTE Ltd., Singapore	100	100	MSI	MSI
MSPU	Muehlhan Surface Protection Inc., Fairfield, CA, USA	100	100	MYAG	–
MWS	Muehlhan Wind Service A/S, Middelfart, Denmark	51	51	MDK	MWS
MWY	Beschichtungswerk Wyhlen GmbH, Wyhlen, Germany	100	100	MD	MD
PRA	Procon Emirates L.L.C., Abu Dhabi, UAE	100*	100*	MMEH	PRA
PRD	Procon Emirates L.L.C., Dubai, UAE	100*	100*	MMEH	PRA

* 49% each of the shares in PRA and PRD are held directly or indirectly via a subsidiary and 51% are managed for the Group by a trustee. 70% of the shares in MOM are held indirectly via a subsidiary and 30% are managed for the Group by a trustee.

As a rule, companies were assigned to CGUs and to the geographic segments based on geographic criteria.

The Group took advantage of its exemption from the disclosure requirement pursuant to Section 264, paragraph 3 of the German Commercial Code (HGB), in conjunction with Section 325 of HGB for Muehlhan Deutschland GmbH, Bremen, Muehlhan Equipment Services GmbH, Hamburg, Beschichtungswerk Wyhlen GmbH, Wyhlen, and Gerüstbau Muehlhan GmbH, Hamburg.

Geographic segment	Business segment	Service
Holding company	–	–
Europe	Ship, Renewables, Oil & Gas, Industry/Infrastructure	Surface protection, scaffolding, steel construction
North America	Renewables, Oil & Gas, Industry/Infrastructure	Surface protection
Europe	Ship, Renewables, Industry/Infrastructure	Scaffolding
Europe	Ship, Renewables, Oil & Gas	Surface protection
North America	–	–
North America	Renewables, Oil & Gas, Industry/Infrastructure	Surface protection
Europe	Ship, Renewables, Oil & Gas, Industry/Infrastructure	Surface protection, scaffolding
Europe	Ship, Renewables, Oil & Gas, Industry/Infrastructure	Surface protection
Europe	Renewables, Oil & Gas, Industry/Infrastructure	Surface protection, scaffolding
Middle East	Ship, Industry/Infrastructure	Surface protection, scaffolding, fire protection
Holding company	–	–
Europe	Ship, Renewables, Oil & Gas, Industry/Infrastructure	Surface protection
Europe	Oil & Gas, Industry/Infrastructure	Surface protection, scaffolding, fire protection
Europe	Ship, Renewables, Oil & Gas	Surface protection, scaffolding
Europe	–	–
North America	–	–
Middle East	–	–
Europe	Ship, Oil & Gas, Industry/Infrastructure	Surface protection, fire protection
Europe	Ship, Renewables, Oil & Gas, Industry/Infrastructure	Surface protection, scaffolding
Middle East	Industry/Infrastructure	Fire protection
Europe	Ship, Renewables, Oil & Gas, Industry/Infrastructure	Surface protection, scaffolding, steel construction
Europe	Ship, Renewables, Oil & Gas, Industry/Infrastructure	Surface protection, scaffolding
Rest of the World	Oil & Gas	Surface protection
Rest of the World	Oil & Gas	Surface protection
Rest of the World	Oil & Gas	Surface protection
North America	–	–
Europe	Renewables	Wind service
Europe	Industry/Infrastructure	Surface protection
Middle East	Industry/Infrastructure	Fire protection
Middle East	Industry/Infrastructure	Fire protection

The following companies are not included in the consolidated financial statements:

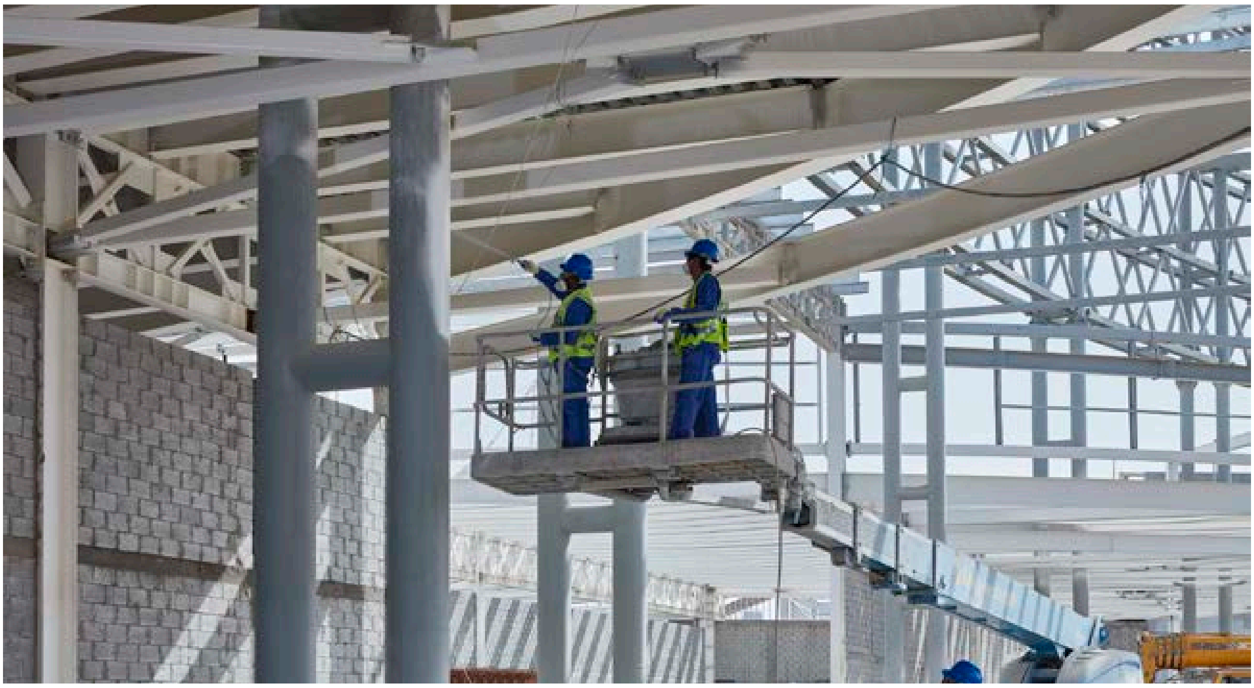
Symbol	Company	Shareholding in %		Equity in kEUR		Results in kEUR	
		12/31/2019	12/31/2018	12/31/2019	12/31/2018	2019	2018
MFP	Muehlhan Grand Bahama Ltd., Nassau, Bahamas	100	100	0.1	0.1	0.0	0.0
MPM	Muehlhan Project Management GmbH, Hamburg, Germany	51	51	37.1	37.1	33.5	-55.9
MKSA	Muehlhan Saudi Arabia LLC, Riyadh, Saudi Arabia	100	100	116.0	116.0	-335.0	0.0
MIND	Muehlhan India Private Limited, Chennai, India	99.99	–	12.6	–	-92.7	–

As in previous years, Muehlhan Grand Bahama Ltd., Bahamas, and Muehlhan Project Management GmbH, Hamburg, are not included in the consolidated Group. The two companies are immaterial for an assessment of the net assets, financial position and results of operations of the Group since the balance sheet and income statement items for these entities, both individually and in aggregate, comprise less than 1% in the consolidated financial statements of Muehlhan AG. Muehlhan Saudi Arabia LLC, Saudi Arabia, was founded in the previous year and is as yet without business activity. Muehlhan India Private Limited, India, was only founded in the reporting year and is as yet without business activity.

The shareholding in MPM is held indirectly via MCL.

Reporting date for the consolidated financial statements

The financial year of the Group, the parent company and all subsidiaries included in the consolidated financial statements coincides with the calendar year.



Application of surface protection

VI. Consolidation methods

Consolidation of the subsidiaries

The equity of the subsidiaries is consolidated using the purchase method of accounting. The cost of the acquisition is measured at the fair value of the assets acquired and the liabilities incurred and/or assumed on the transaction date. In the initial consolidation, assets, liabilities and contingent liabilities identifiable within the scope of a business combination are recognized at the fair value on the acquisition date, irrespective of the size of any non-controlling interests. The excess of the purchase price of the acquisition over the Group's share in the net assets measured at fair value is reported as goodwill. If, upon remeasurement, the costs of acquisition are lower than the fair value of the net assets of the acquired subsidiary, the resulting difference is recognized directly in profit or loss. Acquisition-related transaction costs are expensed when they are incurred.

Elimination of intercompany accounts

Intragroup receivables and payables are eliminated. Any currency translation differences arising from such eliminations during the reporting period are recognized in profit or loss.

Expense and income consolidation and elimination of intercompany profit and loss

To eliminate intercompany profit and loss, intercompany sales and intragroup earnings are offset against the related expenses. Unrealized intercompany profits and losses are eliminated with a corresponding effect on net income.

Deferred taxes

Deferred taxes are recorded to reflect consolidation effects.

Preparation for corrosion protection work

Currency translation

Foreign currency transactions in the separate financial statements of consolidated Group companies are translated at the exchange rate applicable on the date of the transaction. On the balance sheet, non-derivative (monetary) items denominated in foreign currencies are translated at the mid-rate on the reporting date; exchange rate gains and losses are recognized as income or expenses on the income statement. Non-monetary items in a foreign currency that are measured at fair value are translated at the rate applicable at the time the fair value is determined. Non-monetary items measured at acquisition or production cost are converted at the exchange rate on the initial recognition date.

The assets and liabilities of foreign subsidiaries with a functional currency other than the euro are translated into euros at the mid-rate on the reporting date. Income and expenses are translated at average annual rates. Differences arising from the translation of net assets at exchange rates different from those in the previous year are recognized in other comprehensive income and are reported separately under equity in the currency translation reserve. When disposing of a foreign operation, all currency-translation differences aggregated under equity that are allocable to the Group from that operation will be reclassified to the income statement. The goodwill of foreign subsidiaries is shown in local currency. Differences arising from the conversion into euros are reported in the currency translation reserve.

Income statement items are translated into euros using the weighted average rate of exchange for the year.

The euro exchange rates for the main currencies are shown in the following table:

	ISO code	Exchange rate on reporting date	Average rate	Exchange rate on reporting date	Average rate
		12/31/2019	2019	12/31/2018	2018
United Arab Emirates dirham	AED	4.12	4.11	4.21	4.33
Brazilian real	BRL	4.52	4.41	4.42	4.33
Danish krone	DKK	7.47	7.47	7.47	7.45
British pound	GBP	0.85	0.87	0.90	0.89
Polish złoty	PLN	4.26	4.30	4.30	4.27
Qatari riyal	QAR	4.08	4.07	4.17	4.29
US dollar	USD	1.12	1.12	1.14	1.17

Other consolidation methods

The gain or loss and every component of other comprehensive income is allocated to the shareholders of MYAG and to the non-controlling interests. This applies even if it results in a negative balance for the non-controlling interests.

The separate financial statements of domestic and foreign companies included in the consolidated Group are prepared in accordance with accounting and valuation methods that are applied consistently throughout the Group.

The significant accounting and valuation methods applied during preparation of the consolidated financial statements are presented below. The methods described are used consistently, unless indicated otherwise.

Other amendments

The titles of a number of items on the balance sheet and income statement were changed. No changes in terms of content were made. Additional subtotals have also been included.

Specialty access and scaffolding

VII. Significant accounting and valuation principles

Financial instruments

A financial instrument is a contract that results in a financial asset for one entity and in a financial liability or an equity instrument for another entity. As a rule, financial instruments recognized as financial assets or financial liabilities are presented separately. Financial instruments are recognized as soon as Muehlhan becomes a party to the financial instrument.

Financial assets

Financial assets particularly include trade receivables, receivables and cash and cash equivalents. For market-standard purchases and sales of financial assets the trading date is used both for first-time recognition and derecognition.

Recognition and classification

Financial instruments are recognized for the first time at fair value. Transaction costs directly attributable to the purchase or the issue are included in the measurement of the carrying amount if the financial instrument is not measured at fair value through profit or loss.

Financial instruments are classified according to the business model for which they are held and their cash flow characteristics. For subsequent measurement, the financial instruments are assigned to one of the valuation categories defined in IFRS 9 Financial Instruments:

- Financial assets at amortized cost
- Financial assets at fair value through other comprehensive income
- Financial assets at fair value through profit and loss

The business model is determined at the portfolio level and depends on the intentions of management and on past transactions. Cash flows are examined at the level of the individual instrument.

a) Financial assets at amortized cost

Financial assets carried at amortized cost are non-derivative financial assets with contractual payments consisting solely of principal and interest on the nominal amount and which are held with the intention of collecting the contractually agreed cash flows, such as trade receivables or cash and cash equivalents (business model "held to collect"). Cash and cash equivalents particularly include cash in hand and checks. Cash and cash equivalents are the same as the item cash and cash equivalents in the consolidated cash flow statement.

After first-time recognition these financial assets are measured at amortized cost using the effective interest method, less any impairments. Gains and losses are recognized in consolidated income if the loans and receivables are impaired or derecognized. The interest effects of applying the effective interest method and translation differences are also recognized through profit or loss.

Muehlhan holds almost only financial assets at amortized cost.

b) Financial assets at fair value through other comprehensive income

Financial assets at fair value through other comprehensive income are non-derivative financial assets with contractual payments consisting solely of principal and interest on the nominal amount and which are held both with the intention of collecting the contractually agreed cash flows and for resale to achieve a defined liquidity objective (business model "held to collect and sell"). This category also includes equity instruments not held for trading and for which the option of recognizing fair value changes in other comprehensive income has been exercised.

After initial measurement, financial assets in this category are measured at fair value through other comprehensive income, whereby unrealized gains and losses are recognized in other comprehensive income. When debt instruments in this category are disposed of, the cumulative gains and losses from fair value measurement recognized in other comprehensive income are recycled through profit or loss. Interest received from financial assets measured at fair value through other comprehensive income is included as interest income and recognized in profit or loss using the effective interest method. Changes in the fair value of equity instruments measured at fair value through other comprehensive income are not recognized in profit or loss, but reclassified to profit reserves on disposal.

Impairment of financial assets

Every reporting date, impairment is recognized for financial assets not measured at fair value through profit and loss, which reflects the expected credit losses for this instrument. The expected credit loss approach uses three levels to allocate impairment:

Level 1: expected credit losses on financial assets not yet due

Level 1 generally includes new contracts and those for which payments are not yet due. The expected credit losses over the life of the instrument due to a default within the next twelve months are recognized.

Level 2: expected credit losses on due financial assets

A financial asset is classified in Level 2 if it is due or has seen a significant increase in credit risk since initial recognition, but is not credit-impaired. Expected credit losses over the full lifetime of the financial asset due to potential defaults are recognized as impaired.

Level 3: expected credit losses over the full lifetime – credit-impaired

A financial asset is allocated to Level 3 if it is credit-impaired or in default. Expected credit losses over the full lifetime of the financial asset are recognized as impaired. Objective indications that a financial asset is credit-impaired include a table of outstanding receivables by region and other information about key financial difficulties affecting the debtor.

Determining whether the credit risk for a financial asset has increased significantly is largely based on information about overdue payments. Estimates are also made of default probabilities, which use both external rating information and internal information about the credit quality of the financial asset.

A financial asset is transferred to Level 2 when it becomes due or its credit risk has increased significantly since its initial recognition date. The credit risk is estimated on the basis of the default probability. The simplified approach is used for trade receivables, whereby expected credit losses over the full lifetime are recognized on initial recognition.

In Levels 1 and 2 the effective interest income is determined on the basis of the gross carrying amount. As soon as the credit quality of a financial asset is impaired and it is allocated to Level 3, the effective interest income is calculated on the basis of the net carrying amount (gross carrying amount less impairment).

Measurement of expected credit losses

Expected credit losses are calculated using the following factors:

- Neutral, probability-weighted amount
- Time value of money
- Reasonable, reliable information (to the extent available without undue cost or effort) as of the reporting date about past events, current circumstances and forecasts of future economic conditions

Estimates of these risk parameters include all available relevant information. In addition to historical and current information about losses this also includes reasonable and reliable forward-looking information about these factors. The information includes macroeconomic factors and forecasts of future economic conditions.

Derecognition of financial assets

A financial instrument is derecognized when it can be reasonably assumed that a financial instrument is no longer recoverable in full or in part, e.g., once insolvency proceedings are over or following court decisions.

Significant modifications in financial assets (e.g., a change of 10% in the present value of contractual cash flows) result in their derecognition. If contract terms are renegotiated or modified and this does not result in derecognition, the gross carrying amount of the contract is recalculated and any difference recognized through profit or loss.

Effective interest method

The effective interest method is a method for calculating the amortized cost of a financial asset and allocating interest income to the relevant periods. The effective interest rate is the interest rate used to discount estimated future cash receipts (including all fees that are part of the effective interest rate, transaction costs and other premiums and discounts) to the carrying amount over the expected life of the financial instrument or a shorter period, if applicable. Income is recognized on an effective interest basis for debt instruments.

Financial liabilities

Financial liabilities particularly include trade payables, contract liabilities, borrowings to banks and other liabilities.

Financial liabilities at amortized cost

After initial recognition, the financial liabilities are measured at amortized cost using the effective interest method.

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading. Muehlhan does not hold such liabilities.

Derivative financial instruments

Embedded derivatives are separated from the underlying transaction and recognized separately. They are not separated if the underlying transaction is a financial asset, if the entire hybrid contract is measured at fair value through profit and loss or if the embedded derivative is closely linked with the host contract.

Derivative financial instruments are recognized at fair value on initial recognition and every subsequent reporting date. The fair value of listed derivatives is their positive or negative market value. If market values are not available they are calculated using acknowledged mathematical models, such as discounted cash flow or option pricing models. Derivatives are recognized as assets if their fair value is positive and as liabilities if their fair value is negative.

When the transaction is concluded, the Group documents the hedging relationship between the hedging instrument and the hedged item, the aim of its risk management, the underlying hedging strategy, the type of hedging relationship, the hedged risk, the name of the hedging instrument and the hedged item and an assessment of the criteria for the effectiveness of the hedge, which include the mitigation of economic risk, the effects of credit risk and the appropriate hedging ratio. IFRS 9 no longer requires a documented description of the method of measuring effectiveness.

Hedge accounting for an individual hedging relationship is to be ended prospectively when it no longer meets the criteria of IFRS 9. Possible reasons for ending hedge accounting include the absence of an economic relationship between the hedged item and the hedging instrument, the disposal or termination of the hedging instrument, or a change in the documented aim of risk management for a specific hedging relationship. Cumulative hedging gains and losses from cash flow hedges remain in reserves and are only derecognized on maturity if the hedged future cash flows are still expected. In other cases the cumulative hedging gains and losses are derecognized immediately through profit or loss.

Muehlhan only uses derivative financial instruments to hedge financial risks resulting from operating businesses or refinancing activities. One interest rate risk was hedged in the reporting year.

Muehlhan meets the criteria of IFRS 9 and designates the derivative financial instrument as a hedge against certain risks of fluctuating cash flows associated with a recognized liability (cash flow hedges).

The effective after-tax portion of changes in the fair value of the cash flow hedge is initially recognized in other comprehensive income.

Netting of financial instruments

Financial assets and financial liabilities are netted and the net amount reported in the consolidated balance sheet if an enforceable legal right to offset the recognized amounts currently exists and the intention is either to settle the net amount or to extinguish the corresponding liability at the same time as the asset is recovered.

Intangible assets with an identifiable useful life

Intangible assets with an identifiable useful life are recognized at cost and amortized on a straight-line basis over their useful lives. The useful life is usually between three and 17 years. The residual values and useful lives of intangible assets are reviewed at least on every consolidated reporting date. If expectations deviate from current estimates, any adjustments or impairment losses are accounted for as changes in accounting estimates in accordance with IAS 8. In order to determine whether there is a requirement to record the impairment of an intangible asset, the recoverable amount of the respective asset (the higher of the fair value less costs to sell and the value in use) is compared with the carrying amount of the asset. If the recoverable value is lower than the carrying amount, the difference is recognized as an impairment loss. If the reason for the recognized impairment no longer applies, a reversal of the impairment loss not exceeding the amortized cost is recorded.

If an intangible asset is disposed of or if no further benefit can be expected from use of the asset or its disposal, the carrying amount of the intangible asset will be derecognized. The gain or loss from disposal of the intangible asset is the difference between the net realizable value and the carrying amount and is recognized in profit or loss on the date of derecognition.

Goodwill and intangible assets with an indefinite useful life

The positive difference between the cost of acquiring a company and the fair value of the Group's interest in the net assets of the acquired company at the time of acquisition is defined as goodwill. Any goodwill arising from a company acquisition is recorded under intangible assets pursuant to IFRS 3 and, in accordance with IAS 38.107, is not subject to amortization.

An impairment test is carried out at least once a year and may lead to an impairment loss. For the impairment test, the acquired goodwill associated with a merger is allocated to the cash-generating unit or the group of cash-generating units expected to benefit from the synergies of the combination. Muehlhan AG determines a cash-generating unit's recoverable amount on the basis of the discounted cash flow (value in use). If the reason for the recognized impairment no longer applies, there is no reversal of impairment loss with respect to goodwill.

There are no other intangible assets with an indefinite useful life.

Property, plant and equipment

Property, plant and equipment is valued at the cost of acquisition or production less depreciation and, if applicable, impairment. The depreciation period is based on the useful life and within the Group depends on the type of asset:

Type of property, plant and equipment	Useful life
Buildings	5 to 50 years
Technical equipment and machinery	2 to 15 years
Other equipment, operating and office equipment	2 to 15 years

Depreciation is carried out on a straight-line basis unless another depreciation method would more closely reflect the actual future economic life.

If expectations deviate from current estimates, any adjustments are accounted for as changes in accounting estimates in accordance with IAS 8.

Property, plant and equipment is tested for impairment if there is reason to believe that the assets may be impaired. In order to determine whether there is a requirement to record the impairment of property, plant and equipment, the recoverable amount of the respective asset (the higher of the fair value less costs to sell and the value in use) is compared with the carrying amount of the asset. If the recoverable value is lower than the carrying amount, the difference is recognized as an impairment loss. If the reason for the recognized impairment no longer applies, a reversal of the impairment loss not exceeding the amortized cost is recorded.

If a fixed asset is disposed of or if no further benefit can be expected from use of the asset or its disposal, the carrying amount of the asset will be derecognized. The gain or loss from disposal of the fixed asset is the difference between the net realizable value and the carrying amount. It is recognized in profit or loss on the date of derecognition.

Repair and maintenance costs are expensed when incurred. Major renovations and improvements are capitalized if the criteria for the recognition of an asset are met.

Leases

The determination as to whether an agreement is or includes a lease is made on the date when the agreement is concluded, based on the economic substance of the agreement. It requires assessing whether the fulfillment of the contractual agreement is dependent on use of a specific asset or assets against the payment of a charge and whether the agreement grants a right to use the asset, even if this right is not expressly stated in the agreement.

The following notes relate to a lessee's recognition of leases. Muehlhan does not act as a lessor.

Right-of-use asset

The Group recognizes an asset for the right of use granted and a lease liability on the provision date. The right-of-use asset is initially measured at cost in the amount of the first-time measurement of the lease liability adjusted for payments effected on or before the provision date plus any initial direct costs and the estimated costs of dismantling or disposing of the underlying asset or of reinstating the underlying asset or site at which it is located, less any lease incentives involved.

The right-of-use asset is subsequently amortized on a straight-line basis from the provision date until the end of the leasing period unless ownership of the underlying asset is transferred to Muehlhan at the end of the lease term or the right-of-use costs take into account the fact that the Group will exercise its option to purchase the asset. In this instance, the right-of-use asset is amortized over the useful life of the underlying asset, this being determined on the basis of the provisions for property, plant and equipment. The right-of-use asset is additionally adjusted for impairment on an ongoing basis if necessary and for certain revaluations of the lease liability.

Lease liability

The lease liability is initially discounted at the present value of the lease payments not yet effected on the provision date using the effective interest method. Discounting is effected using the interest rate implicit in the lease or, if this cannot be readily determined, using Muehlhan's incremental borrowing rate. Muehlhan usually uses its incremental borrowing rate as a discount rate. Muehlhan uses the interest rates of various external financial sources to determine its incremental borrowing rate and makes certain adjustments to take into account the lease conditions and the type of asset.

Measurement

The lease payments taken into account in measurement of the lease liability comprise:

- Fixed payments, including de facto fixed payments
- Variable lease payments linked to an index or (interest) rate and initially measured using the index or (interest) rate applicable on the provision date
- Sums which are likely due on the basis of a residual value guarantee
- The exercise price of an option to purchase an asset if Muehlhan is reasonably certain it will exercise this option, lease payments for a renewal option if Muehlhan is reasonably certain it will exercise this option, and penalty payments for the early termination of a lease if early termination is reasonably certain

Short-term leases and leases for low-value assets

Muehlhan does not recognize right-of-use assets and lease liabilities for leases of low-value assets or for short-term leases. The payments resulting from leases are recognized as expenses on a straight-line basis over the lease term.

Recognition of leases prior to January 1, 2019

The determination as to whether an agreement is or includes a lease is made on the date when the agreement is concluded, based on the economic substance of the agreement. It requires assessing whether the fulfillment of the contractual agreement is dependent on use of a specific asset or assets and whether the agreement grants a right to use the asset, even if this right is not expressly stated in the agreement.

Leases are classified as finance leases if essentially all of the rewards and risks typically associated with ownership are transferred to the lessee. All other leases are classified as operating leases.

At the beginning of the lease term, finance leases are reported as an asset and a liability at the lower of the fair value of the asset and the present value of the minimum lease payments. The minimum lease payments must be divided into a financing portion and a principal repayment portion in order to produce a constant interest rate for the remaining liability. The asset should be depreciated over the shorter of the lease term or the useful life of the asset.

The Group has no finance leases.

With operating leases, the leased property is not capitalized. Instead, the lease payments are expensed on a straight-line basis over the lease term. The Group's main operating leases are for the rental of business offices, technical equipment and vehicles.

Inventories

Inventories are stated at the lower of acquisition cost and net realizable value.

If the net realizable value of inventories is lower than the carrying amount, inventories are written down to the net realizable value and an impairment is reported on the income statement. All impairment of inventories and all inventory losses are to be recognized as expenses in the period in which the impairment or loss occurred. If the net realizable value of previously impaired inventories rises, the resulting reversal of impairment loss is recognized as a reduction in the cost of materials or as an increase in inventories. Net realizable value is the estimated proceeds that can be obtained from sales in the ordinary course of business, less the estimated costs until completion and estimated disposal and selling expenses.

Income taxes

Income taxes include both current income taxes payable immediately and deferred taxes. Current and deferred taxes are recognized on the consolidated income statement unless they relate to items that are recognized either in other comprehensive income or directly in equity. In the latter case, the current and/or deferred taxes are also recognized in other comprehensive income or directly in equity.

Deferred taxes resulting from temporary differences in the amounts shown in the separate balance sheets prepared for tax purposes and the corresponding figures for the individual companies calculated in accordance with IFRS, as well as from consolidation entries, are netted separately for each taxable entity and shown either as deferred tax assets or liabilities. If separate netting for each taxable entity is not possible when making consolidation entries, the Group tax rate is applied. Moreover, deferred tax assets may also include claims for tax reductions deriving from the expected utilization of existing loss carryforwards in future years if there is sufficient certainty that they will be realized. Deferred taxes are calculated using the tax rates for reversal that apply and will enter into force or have been adopted in the respective countries on the reporting date. No deferred taxes are recognized for temporary differences relating to shares in subsidiaries if the date of reversal of the temporary differences can be controlled by the Group and it is likely that these will not be reversed in the foreseeable future. Deferred tax assets are recorded only to the extent that the respective tax benefits are likely to materialize. If this criterion is not met, impairment losses are recognized based on past earnings and business expectations for the foreseeable future.

Provided that the conditions set forth in IAS 12.74 have been met, deferred tax assets and liabilities are netted. Basically, this applies if the deferred taxes relate to income taxes that are levied by the same taxing authority and on the same taxable entity within the meaning of IAS 12.74 and current taxes can be netted against each other.

Other non-financial assets

Other non-financial assets are recognized at amortized cost. Non-financial assets are tested for impairment losses if there is reason to believe that the assets may be impaired. In order to determine whether there is a requirement to record the impairment of an asset, the recoverable amount of the respective asset (the higher of the fair value less costs to sell and the value in use) is compared with the carrying amount of the asset. If the recoverable value is lower than the carrying amount, the difference is recognized as an impairment loss. If the recoverable amount for the individual asset cannot be estimated, then the calculation will be carried out at the level of the cash-generating unit (CGU) to which the respective asset is allocated. The amount is allocated to the specific cash-generating units and/or to the smallest group of cash-generating units on a reasonable and consistent basis.

Cash and cash equivalents

Cash and cash equivalents include cash on hand, bank balances and other highly liquid financial assets with a maturity not exceeding three months. At the present time, bank balances not required immediately to finance current assets are invested for a term of up to three months. The carrying amount shown on the balance sheet for cash and cash equivalents is equal to their market value. The total amount of cash and cash equivalents, excluding current account liabilities, is equal to the total liquid assets shown in the cash flow statement. Utilized overdraft facilities are shown on the balance sheet under current borrowings.

Non-current assets and disposal groups held for sale

This item is recognized if specific non-current assets or groups of assets (disposal groups) are available for sale in their present condition and their sale within one year is highly probable. The prerequisite for the existence of a disposal group is that the assets be designated for disposal in a single transaction or as part of an overall plan. A discontinued operation is a business segment (component of an entity) that either has been disposed of or is classified as held for sale and both operationally and for financial reporting purposes can be clearly distinguished from the entity's other activities. Moreover, to qualify as a discontinued operation, the component must represent a separate, major line of business or a specific geographic business segment of the Group. Non-current assets designated for sale individually or as part of a disposal group or belonging to a discontinued operation are no longer subject to depreciation. They are stated at the lower of the original carrying amount or fair value less any costs of disposal that may yet be incurred. If the fair value is below the carrying amount, impairment occurs. The result from the fair-value measurement of business segments designated for sale, less any costs of disposal that may yet be incurred, and gains and losses from the disposal of discontinued operations, as well as the earnings from these business segments' normal operating activities, are reported separately as "Earnings from discontinued operations" on the Group's income statement. The prior-year figures in the income statement are modified accordingly. The relevant assets are reported in a separate balance sheet item. No adjustment is made to the prior-year balance sheet, however.

Pension provisions and similar obligations

In addition to defined contribution plans which, apart from current contributions, do not involve any further pension commitment, there are also defined benefit plans, for which the required provision in Germany relates exclusively to a pension commitment to a retired former managing director of a subsidiary. In addition, in some countries – for example, in France and Poland – there are statutory requirements to set up provisions for pension commitments. A defined benefit pension plan generally specifies the amount of pension benefits an employee will receive upon retirement; this amount depends on one or more factors, such as age, length of service or salary. Pension provisions are generally calculated by an independent actuary using the projected unit credit method. The amount recognized on the reporting date is the present value of the defined benefit obligation (DBO). This actuarial determination of the present value of accumulated plan benefits takes into account not only current pension payments and vested rights to future pension payments as of the reporting date, but also expected future increases in salaries and pensions.

Any effects from the remeasurement of defined benefit pension plans are recognized immediately in other comprehensive income.

The provision is reduced by the amount of any plan assets.

Current and past service costs are shown under personnel expenses, while net interest expense relating to interest payments on the defined benefit obligation and any plan assets is shown under financial expenses.

The present value of the defined benefit obligation (DBO) is calculated by discounting the expected future payments at the interest rate applicable to top-rated corporate bonds denominated in the currency in which payments have to be made and at maturities matching those of the pension obligations.

Contribution payments made under defined contribution plans are shown under personnel expenses; a provision or a liability is recorded only for the amounts outstanding on the reporting date.

Other provisions and contingent liabilities

In accordance with IAS 37, other provisions are set up for any risks discernible on the reporting date or obligations to third parties based on past transactions or events whose amounts or maturities are uncertain. The amounts reported under provisions are the best estimates of the settlement amounts; these amounts are not netted against positive performance contributions. Provisions are set up only if the Group has a legal or de facto obligation to a third party. They are also set up for onerous contracts. A contract is deemed to be onerous if the unavoidable costs exceed the benefit expected from the contract.

If the interest effect from discounting is material, non-current provisions are stated at their discounted settlement amount on the reporting date. Any increases in provisions resulting purely from the compounding of interest are recognized as interest expense on the income statement. The settlement value also includes cost increases that must be recognized on the reporting date pursuant to IAS 37.

Contingent liabilities are potential or current obligations for which an outflow of resources with economic benefits is unlikely or for which the amount of the obligation cannot be estimated with adequate certainty. Contingent liabilities are generally not recognized on the balance sheet.

Other non-financial liabilities

Other non-financial liabilities are recognized at amortized cost. Contract liabilities are recognized when one of the parties has fulfilled its contractual obligation.

Income recognition

Revenues are recognized when control of distinct goods or services is transferred to the customer, i. e., when the customer is able to determine the use of the transferred goods or services and essentially derives the remaining benefit from them. This is on condition that a contract with enforceable rights and obligations exists and that receipt of consideration is probable, given the creditworthiness of the customer. Revenues correspond to the transaction price to which Muehlhan expects to be entitled. Variable consideration is included in the transaction price if it is highly probable that a significant portion of revenues will not be returned as soon as the uncertainty concerning the variable consideration no longer exists. The amount of variable consideration is calculated using either the expected value method or at the most probable amount, whichever most accurately estimates the variable consideration. If the period between the transfer of the goods or services and the date of payment exceeds twelve months and either or both parties derive a significant benefit from the financing, the consideration is adjusted for the time value of money. If a contract covers several distinct goods or services the transaction price is allocated to the performance obligations on the basis of the respective individual transaction prices. If individual transaction prices cannot be observed directly, they are estimated. Revenues for every performance obligation are either recognized at a point in time or over time.

a) Revenues from providing services

Revenues are recognized on a straight-line basis over time, or if the performance obligation is not satisfied on a straight-line basis, according to the percentage of completion. Invoices are sent in accordance with the terms of the contract; payment terms are generally within 30 days of the invoice date.

The estimate of the percentage of completion is particularly important when this method is used; it may also entail estimates of the scope of delivery or performance necessary to satisfy the contractual obligations. These key estimates comprise estimated total costs, total revenues, contract risks – including technical, political and regulatory risks – and other relevant variables. Changes in estimates can increase or reduce revenues when the percentage of completion method is used. An estimate is also required of whether the continuation or termination of a contract is the most probable scenario. For this estimate all the relevant facts and circumstances are taken into account for each individual contract.

b) Revenue from the sale of goods

Revenues are recognized at the time control passes to the buyer, generally when the goods are delivered. Invoices are sent as of this date; payment terms are generally within 30 days of the invoice date.

c) Interest income

Interest is recognized as expense and/or income on an accrual basis. Interest expenses and income are recognized on a pro-rata basis, applying the effective interest method.

d) Dividend income

Dividends are reported on the date of the decision to make a distribution.

Share-based payment

The Group has granted a number of share-based payments to employees for settlement using equity instruments of the parent company. The recognition and measurement provisions as per IFRS 2 are to be applied to these compensation components. The basis of assessment is a sustainable increase in the enterprise value of the Group and its individual companies – referred to as the change in equity value.

When share-based compensation is granted that will be settled through equity instruments, the fair value calculated is expensed on a straight-line basis over the vesting period, with a corresponding increase in equity.

Research and development costs

Any intangible asset resulting from research is not recognized. The IAS 38 requirements for capitalizing development costs are not satisfied because it is generally impossible to separate research and development costs, because marketability and/or technical feasibility cannot be assumed and because there is no guarantee of a future economic benefit.

Expenses for research and development work are recognized in profit or loss in the period in which they are incurred.

Government grants

Government grants in property, plant and equipment are treated as deferred income and recognized as income over the expected useful life of the related asset.

Fire protection work at the Across Ages Museum, Nizwa, Oman

VIII. Notes to the balance sheet

1. Intangible assets

FIXED ASSET MOVEMENT SCHEDULE 2019

	Acquisition and production costs							
in kEUR	As of 01/01/2019	Additions	First-time application of IFRS 16	Disposals	Transfers	Reclassification under IFRS 5	Currency translation differences	As of 12/31/2019
Intangible assets								
Concessions, industrial property and similar rights and licences	2,954	60	0	0	0	-202	6	2,817
Goodwill	35,945	0	0	-874	0	0	226	35,296
Prepayments on intangible assets	0	0	0	0	0	0	0	0
	38,899	**60**	**0**	**-874**	**0**	**-202**	**232**	**38,113**
Property, plant and equipment								
Land, land rights and buildings including buildings on third-party land	11,186	399	0	-426	0	-15	187	11,330
Technical equipment and machinery	80,839	6,285	0	-5,686	474	-1,449	621	81,085
Other equipment, operating and office equipment	12,165	1,172	0	-532	-10	-281	101	12,616
Prepayments and equipment under construction	321	273	0	0	-417	0	5	184
Right-of-use assets	0	1,495	9,015	-554	-48	0	67	9,974
	104,511	**9,624**	**9,015**	**-7,199**	**0**	**-1,745**	**981**	**115,189**

Rounding differences may occur.

FIXED ASSETS MOVEMENT SCHEDULE 2018

	Acquisition and production costs					
in kEUR	As of 01/01/2018	Additions	Disposals	Transfers	Currency translation differences	As of 12/31/2018
Intangible assets						
Concessions, industrial property and similar rights and licences	2,934	26	0	0	-6	2,954
Goodwill	36,724	0	0	0	-779	35,945
	39,658	**26**	**0**	**0**	**-785**	**38,899**
Property, plant and equipment						
Land, land rights and buildings including buildings on third-party land	10,872	427	0	0	-113	11,186
Technical equipment and machinery	80,555	6,901	-3,556	-3,336	275	80,839
Other equipment, operating and office equipment	8,615	1,607	-1,410	3,336	17	12,165
Prepayments and equipment under construction	14	303	-2	0	6	321
	100,056	**9,238**	**-4,968**	**0**	**185**	**104,511**

Rounding differences may occur.

	Accumulated depreciation and amortization							Carrying amounts	
	As of 01/01/2019	Additions	Disposals	Transfers	Reclassification under IFRS 5	Currency translation differences	As of 12/31/2019	As of 12/31/2019	Previous year
	-2,667	-119	0	0	201	-6	-2,590	227	288
	-16,685	-1,200	874	0	0	-279	-17,290	18,007	19,260
	0	0	0	0	0	0	0	0	0
	-19,352	**-1,319**	**874**	**0**	**201**	**-285**	**-19,880**	**18,233**	**19,548**
	-6,107	-569	200	0	15	-52	-6,513	4,817	5,078
	-51,682	-6,004	5,132	-22	1,397	-470	-51,651	29,435	29,155
	-9,024	-1,369	499	-3	268	-86	-9,716	2,900	3,141
	0	0	0	0	0	0	0	184	323
	0	-2,844	554	24	0	-1	-2,266	7,708	0
	-66,813	**-10,786**	**6,385**	**0**	**1,680**	**-609**	**-70,145**	**45,043**	**37,696**

	Accumulated depreciation and amortization						Carrying amounts	
	As of 01/01/2018	Additions	Disposals	Transfers	Currency translation differences	As of 12/31/2018	As of 12/31/2018	Previous year
	-2,559	-114	0	0	6	-2,667	288	375
	-16,854	0	0	0	169	-16,685	19,260	19,870
	-19,413	**-114**	**0**	**0**	**175**	**-19,352**	**19,548**	**20,245**
	-5,175	-542	0	0	-390	-6,107	5,078	5,697
	-52,334	-6,349	3,514	3,336	151	-51,682	29,155	28,221
	-5,573	-1,239	1,133	-3,336	-9	-9,024	3,141	3,042
	0	0	0	0	0	0	323	14
	-63,082	**-8,130**	**4,647**	**0**	**-248**	**-66,813**	**37,696**	**36,974**

Goodwill

In accordance with IAS 36, an impairment test was performed in the reporting year. This involved allocating goodwill to cash-generating units (CGUs).

An overview of the allocation of the Group companies to CGUs and an allocation to geographic segments and services can be found under "Consolidated Group" in Section V.

Revenues and EBIT summarized by CGU and geographic segment are listed under note 18, "Revenues and segment reporting".

The following table shows the changes by geographic segment:

In EUR million	12/31/2019	Impairment/ additions	Currency translation differences	12/31/2018
Europe	15.9	-0.9	-0.1	16.7
Middle East	0.4	-0.3	0.1	0.8
Rest of the World	1.7	0.0	-0.1	1.8
TOTAL	18.0	-1.2	-0.1	19.3

Fire protection work at the Across Ages Museum, Nizwa, Oman

Local goodwill of the companies in Denmark (MDK) and the Netherlands (MNL) was fully impaired in the reporting year. Impairment of €0.6 million in Denmark relates to the goodwill of a dwindling business segment.
Impairment in the Netherlands totaling €0.3 million relates to goodwill arising from the acquisition of the business activity of a company in 2017.

Additionally, the goodwill of the PRA CGU was partially impaired in the reporting year due to the planned concentration of its activities in the Middle East.

The goodwill arising in connection with the acquisition of a foreign operation is presented in the functional currency in accordance with IAS 21.47 and translated at the exchange rate on the reporting date pursuant to IAS 21.39 and 42. The resulting translation differences are recognized through other comprehensive income and presented under equity as adjustment from currency translation.

Based on the carrying amount of the goodwill allocated to the CGUs, two major items stand out: the MD CGU, with €7.2 million of goodwill (previous year: €7.2 million) and the MPL CGU, with €5.6 million of goodwill (previous year: €5.8 million; change due to presentation in functional currency and the related translation difference). Together, the two CGUs accounted for 71% (previous year: 66%) of total goodwill as of December 31, 2019.

Goodwill for the respective units was tested for impairment by applying the DCF (discounted cash flow) method to the value in use based on four-year business plans (Level III valuation). The business plans were drawn up in the fourth quarter of 2019 and have been approved by the Executive Board and the Supervisory Board. The business plans are based on historical data, such as experience with existing customer relationships, and incorporate assumptions regarding market trends. To the extent possible, projections are based on expected revenues and income for each customer.

There are uncertainties regarding the underlying assumptions used in the CGU calculations, particularly with respect to growth of revenues during the budget period, the trend in the EBIT margin during the budget period, the discount factor (interest rate) and the growth rate on which the cash flow projections beyond the budget period are based.

The discount rate used in the calculations was the weighted average cost of capital (WACC) for each unit after taxes. The discount rates used for the units fell into the following ranges:

Region	2019	2018
Germany	7.8%	7.1%
Poland	10.3%	8.7%
Rest of Europe	7.9% – 12.7%	6.6% – 15.0%
Middle East	8.2% – 9.6%	9.7% – 10.8%
Rest of the World	8.5%	8.4%

The weighted average cost of capital rates reflect the current market estimates of the specific risks allocable to the respective cash-generating units. These were determined on the basis of the weighted average cost of capital customary for the respective industries. The interest rate was further adjusted to take into account market estimates of all risks specifically allocable to the CGUs for which estimates of future cash flows were not adjusted. We assumed perpetuity growth rates of 0.5% for Europe (previous year: 0.5%), 1.5% for the Middle East (previous year: 1.5%) and 0.0% for the Rest of the World (previous year: 0.0%). Only for Russia was a higher growth rate of 2.5% assumed (previous year: 2.5%). The growth rates are based on the nominal growth rates used and reflect long-term, market-specific inflation rates that were adjusted to reflect the specific business segments' expected trends.

Sensitivity of assumptions used

As part of a sensitivity analysis for CGUs to which substantial goodwill has been allocated, the particularly sensitive parameters – EBIT margin and discount rate (weighted average cost of capital/WACC) – were tested. A decrease in the EBIT margin of one percentage point or an increase in the WACC of one percentage point would result in an impairment loss at the MD CGU of €1.0 million and €0.7 million, respectively. A lower decrease in the EBIT margin and/or a lower increase in the WACC would not lead to any impairment loss. In the previous year, the threshold for an impairment loss was three percentage points of EBIT margin and four percentage points of WACC.

After careful consideration, management has concluded that the negative changes are unlikely to occur.

2. Property, plant and equipment

No impairment losses on property plant and equipment were recognized or reversed in the reporting year or in the previous year. Borrowing costs were not capitalized.

The gross carrying amount of prepayments and equipment under construction came to €0.2 million (previous year: €0.3 million) for property, plant and equipment under construction.

There were no order commitments in property, plant and equipment as of the reporting date (previous year: €0.0 million).

3. Leases

In the area of property, plant and equipment, right-of-use assets from leases are recognized for the first time pursuant to IFRS 16.

Right-of-use assets are spread across the following property, plant and equipment classes:

in kEUR	12/31/2019	01/01/2019
Land, land rights and buildings including buildings on third-party land	5,885	7,168
Technical equipment and machinery	283	196
Other equipment, operating and office equipment	1,540	1,597
TOTAL RIGHT-OF-USE ASSETS	7,708	9,015

Depreciation and amortization of right-of-use assets is spread across the property, plant and equipment classes as follows:

in kEUR	2019
Land, land rights and buildings including buildings on third-party land	1,797
Technical equipment and machinery	119
Other equipment, operating and office equipment	929
TOTAL DEPRECIATION OF RIGHT-OF-USE ASSETS	2,844

Interest expenses from the compounding of lease liabilities totaled €0.3 million in the reporting year. Muehlhan's incremental borrowing rate of 4.0% was used for discounting. Cash used for leases amounted to €3.2 million.

The undiscounted lease liabilities have the following maturities:

in kEUR	
Up to 1 year	2,172
Between 1 and 5 years	3,541
More than 5 years	8,741
TOTAL UNDISCOUNTED LEASE LIABILITIES	14,468

The material liability comes from a leasehold agreement for a site in the UK with a residual term of 91 years.

Construction of a steel bridge

Expenses for leases recognized as per IFRS 16.6 totaled €4.4 million in the reporting year. Muehlhan engages in project business and often rents/leases space, buildings, premises and technical equipment on a temporary basis for the duration of the projects.

4. Other non-current assets

Other non-current assets consist of financial and non-financial assets.

Other non-current financial assets almost exclusively consist of non-current project-related security deposits from customers.

5. Deferred tax assets and liabilities

The company's deferred taxes pertain to the following items:

in kEUR	Deferred tax assets As of 12/31/2019	Deferred tax assets 12/31/2018	Deferred tax liabilities As of 12/31/2019	Deferred tax liabilities 12/31/2018
Accumulated tax loss carryforwards	2,896	3,659	0	0
Intangible assets	0	12	212	0
Property, plant and equipment	237	394	2,293	737
Inventories	76	0	0	0
Trade receivables and contract assets	26	77	2,826	899
Other assets	0	26	4	1
Pension provisions and similar obligations	92	80	0	81
Borrowings	1,781	0	140	192
Other provisions	727	42	0	0
Trade payables and contract liabilities	1,190	70	0	0
Other liabilities	155	142	49	76
Netting acc. to IAS 12.74	-5,224	-1,234	-5,224	-1,234
TOTAL	**1,954**	**3,269**	**300**	**753**

In Germany, there were €13.6 million of trade tax loss carryforwards (previous year: €14.8 million) and €13.7 million of corporation tax loss carryforwards (previous year: €14.4 million) as of the reporting date. There were €7.4 million of tax loss carryforwards abroad (previous year: €13.8 million).

According to the medium-term forecasts of the companies involved, a tax benefit of €3.0 million (previous year: €3.7 million) will accrue over the next five years, which we have already capitalized since there is a high probability that the companies in question will have taxable profit against which the deferred tax assets can be utilized. Overall, in Group companies that reported a loss in the previous year or the current year, a surplus of deferred tax assets totaling €2.1 million was recognized (previous year: €2.0 million). The future use of these tax benefits depends exclusively on the generation of future taxable income. There is substantial evidence that this income will be generated, including long-term customer loyalty, detailed budgets and long-term contracts. In addition to the deferred tax assets recognized for loss carryforwards, there are also domestic corporation tax losses in the amount of €7.2 million (previous year: €7.9 million) and trade tax losses of €7.3 million (previous year: €8.4 million), the realization of which is not sufficiently certain and for which therefore no deferred tax assets have been recognized. Based on current laws, the loss carryforwards cannot expire. As of the reporting date, foreign loss carryforwards for which no deferred tax assets have been recognized totaled €2.3 million (previous year: €5.1 million) and in most cases may be utilized without restriction within three to 15 years.

There are taxable temporary differences relating to investments in subsidiaries (outside basis differences) totaling €1.7 million (previous year: €1.1 million) for which no deferred tax liabilities have been recognized in accordance with IAS 12.39 because there are no plans to either distribute profits or to dispose of the investments.

6. Inventories

Inventories may be broken down as follows:

in kEUR	12/31/2019	12/31/2018
Raw materials, consumables and supplies	6,045	4,762
Prepayments	124	78
TOTAL	6,169	4,840

Impairment in the amount of €0.2 million was recognized on raw materials, consumables and supplies (previous year: €0.0 million).

7. Trade receivables and contract assets

Trade receivables include the following items:

in kEUR	12/31/2019	12/31/2018
Trade receivables from services rendered	59,566	48,466
Trade receivables from construction contracts/contract assets	40,511	26,930
Prepayments received on work in progress	-26,844	-15,609
TOTAL	73,232	59,787

As a rule, trade receivables from services rendered are due and payable within 30 days. In exceptional cases, the time to maturity may be up to one year. Trade receivables from construction contracts have the same maturities.

Overdue trade receivables for which no impairment has been recognized totaled €20.7 million as of the reporting date (previous year: €16.5 million).

Regarding trade receivables that are due, trade receivables that are not due and trade receivables for which no impairment has been recognized, there is no evidence as of the reporting date that the debtors will not satisfy their payment obligations. Any change in creditworthiness since the payment terms were granted is taken into account when testing trade receivables for impairment. There is currently no significant concentration of the default risk.

The following table shows impairments on trade receivables that are recognized through profit or loss on the consolidated income statement:

in kEUR	2019	2018
Impairment – as of January 1	-3,163	-5,644
Additions (impairment)	-2,991	-805
Reversals (other operating income)	705	1,010
Derecognition of impaired trade receivables	610	2,867
First-time application of IFRS 9 (expected loss model)	0	-680
Currency translation differences	-103	90
Impairment – as of December 31	**-4,942**	**-3,163**

There were no changes year-over-year in the assumptions made regarding the volume of expected losses. Losses in the amount of 0.0% to 2.5% were expected on trade receivables from services rendered. The change in the gross carrying amounts of trade receivables and contract assets had an effect of €-0.2 million on the volume of expected losses, which is included in additions to impairments.

As of the reporting date, the company had credit insurance for €5.2 million of trade receivables (previous year: €4.3 million). There is no concentration of the default risk as Muehlhan is active in various markets on three continents with a variety of customers.

Muehlhan transferred trade receivables to a customer in exchange for cash and cash equivalents ("non-recourse factoring"). The receivables were derecognized as all the risks and opportunities – first and foremost the default risk – were transferred to the customer.

The receivables were held in a business model designed for the collection of cash flows.

8. Cash and cash equivalents

Cash and cash equivalents amounted to €10.0 million as of December 31, 2019, (previous year: €9.9 million) and, aside from available cash and sight balances, also included overnight deposits. Interest on overnight deposits averaged 0.1% on the reporting date (previous year: 0.1%). As of the reporting date, there were no drawing restrictions.

There are no relevant default risks as Muehlhan only works with banks which are regularly audited by, among others, the European Central Bank.

9. Other current assets

Other current assets consist of financial and non-financial assets.

The other current financial assets can be broken down as follows:

in kEUR	12/31/2019	12/31/2018
Security deposits	2,757	1,992
Receivables related to employees	843	441
Receivables due from damage claims/ insurance compensation payments	509	1,895
Credits with suppliers/bonuses	220	272
Creditors with debit balances	108	146
Sundry current financial assets	1,231	611
TOTAL	5,667	5,357

Other current non-financial assets can be broken down as follows:

in kEUR	12/31/2019	12/31/2018
Other tax receivables	5,805	1,249
Deferrals and accruals	1,502	1,466
Income tax receivables	1,337	936
Receivables related to employees	312	338
Sundry current non-financial assets	239	1,115
TOTAL	9,194	5,104

In the previous year, income tax receivables were recognized as a separate balance sheet item. In the reporting year, income tax receivables were included in other non-financial assets so the total for 2018 has been adjusted accordingly.

All other financial and non-financial assets are due within one year. For initial and subsequent measurement see note 24. Financial instruments.

During the reporting year, impairment of €0.1 million was recognized for other financial assets (previous year: €0.1 million). No additional impairment was necessary for financial or non-financial assets that were neither overdue nor impaired. There were no other significant financial or non-financial assets that were overdue but not impaired. Additions to and reversals of impairments are recognized through profit or loss in other operating income and expenses.

10. Assets and disposal groups held for sale

The decision was taken in the reporting year to sell the Greek business segment as represented by the subsidiary MGR together with all the existing assets and liabilities. Due to this decision, the company meets the criteria for being included in the "assets and disposal groups held for sale" classification within the meaning of IFRS 5 and will consequently be recognized as such as of December 31, 2019.

The company mainly has current assets. Its liabilities are due in the short term. The tax liabilities in the amount of €1.1 million are mainly due in one to five years.

The company did not generate any revenues in the reporting year or in the previous year. Its earnings from operations in the reporting year totaled €-73 thousand (previous year: €-63 thousand). Its earnings before income taxes totaled €-29 thousand (previous year: €-65 thousand). Due to the recognition of a tax liability, consolidated income from discontinued operations totaled €-1,221 thousand (previous year: €-329 thousand).

11. Equity

Subscribed capital

The authorized capital reported for the parent company is equal to the authorized capital reported for the Group. It is divided into 19,500,000 no-par-value bearer shares, each with a proportional amount of the authorized capital of €1.00 per share. The authorized capital is fully paid in.

Pursuant to the resolution adopted by the Annual General Meeting on May 24, 2016, the parent company's authorized capital amounts to €9,750 thousand (previous year: €9,750 thousand).

Capital reserve

The effects on the capital reserve relate to the compensation program for the Group's senior managers (see "Treasury shares") and to a withdrawal from/reclassification to retained earnings.

Treasury shares

Muehlhan AG's Annual General Meeting on May 19, 2015, passed a resolution again authorizing the Executive Board to acquire treasury shares with a nominal value of up to €1.95 million. A buyback of company shares started in May 2018. 210,158 treasury shares were purchased for €593,989 in the reporting year. In the previous year, 219,856 shares were purchased for €647,252.

In 2019, 164,074 shares (previous year: 171,860 shares) were transferred under the Employee Program. Treasury shares are shown separately in equity as deduction items totaling €679 thousand (previous year: €537 thousand). Treasury shares are measured at the average price on the reporting date.

In the reporting year, Muehlhan AG updated the compensation program for the Group's senior managers, which has been in place since 2010. The program still has two components: a performance bonus and a value bonus. In addition to other agreed criteria, eligibility for the performance bonus is the result primarily of a year-over-year increase in the corporate value (change in equity value) of the individual company in question and of the Group. Payment is made in the form of a cash bonus. In the previous year, a balanced scorecard was used to measure eligibility for the performance bonus. A cash bonus was likewise paid if various agreed criteria were met at the level of the company and the Group.

The amount of the value bonus is based on measurement of the sustainable increase in the corporate value (sustainable change in equity value) of both the respective company and the Group. Until 2018, the amount of the value bonus was based on measurement of the sustainable increase in the equity of both the respective company and the Group.

The beneficiary is allocated a virtual share portfolio, its value equal to the identified amount of the value bonus for previous years. The shares are transferred to the recipient of the bonus in four equal tranches in the years following the year of assessment. For any transfer to take place in subsequent years, the beneficiary must still be employed by the Group. Any future negative virtual share allocations will be netted against existing claims.
Like the previous agreement, the new agreement can be terminated annually.

In 2019, a tranche of 164,074 shares (previous year: 171,860 shares) with a value of €342 thousand (previous year: €299 thousand) was transferred to the bonus beneficiaries. The fair value of the shares to be issued is measured at the share price on the grant date. The total cost of the value bonus will be divided over the four periods from the grant date until the shares vest. In 2019, the Group recognized an associated expense of €541 thousand (previous year: €465 thousand). The issuance of rights to shares is recognized in equity under capital reserve. As of the reporting date, Muehlhan AG held 245,301 treasury shares (previous year: 198,566 treasury shares).

Other reserves

Other reserves are made up of profit reserves, conversion reserve, cash flow hedge reserve and currency translation adjustments.

Profit reserves changed in the reporting year due to the valuation of treasury shares, a reclassification to retained earnings, a reclassification from retained earnings and effects from the remeasurement of net debts from defined benefit obligations (after tax), which are recognized here without effect on income.

The conversion reserve results from the first-time preparation of IFRS consolidated financial statements and the first-time application of IFRS 9 in the previous year.

The cash flow hedge reserve results from an interest rate cap arranged in 2017. The change in the reporting year is the result of the current valuation.

The currency translation adjustment relates to foreign currency effects presented in equity.

Retained earnings

The main changes in retained earnings are the dividend payment in 2019, the 2019 consolidated income attributable to shareholders of Muehlhan AG and reclassifications to other equity items.

A dividend of €0.10 per share with dividend rights was distributed in 2019 for the financial year 2018. In the previous year, the distribution came to €0.08 per share.

Non-controlling interests

MMF, MGR, MCL, MRO, MBL and MWS had non-controlling interests as of the reporting date. Muehlhan AG holds a 75% stake in MBL, a 70% stake in MMF, and 51% stakes each in MWS, MGR, MCL and MRO. These equity interests were unchanged from the previous year. The assets and liabilities of MGR are reported as assets/liabilities held for sale.

The following table shows the items of the balance sheet and the income statement, including earnings after taxes, of the principal companies with non-controlling interests for the financial year, pursuant to IFRS 12:

in kEUR	MCL	MMF
	12/31/2019	12/31/2019
Non-current assets	3,522	325
Current assets	7,362	2,812
Equity	3,834	1,700
of which non-controlling interests	1,912	453
Non-current liabilities	137	138
Current liabilities	6,912	1,299
	2019	2019
Revenues	22,343	5,781
Earnings from operations (EBIT)	784	238
Earnings after income taxes	480	152
of which non-controlling interests	222	46
Earnings after income taxes, previous year	541	703
of which non-controlling interests	265	211

The earnings after taxes must be allocated to the other shareholders in accordance with their respective shareholdings. During the reporting year, €44 thousand of dividends were distributed to non-controlling interests (previous year: €75 thousand).

Loading of tripods for an offshore wind farm in Hooksiel

12. Pension provisions and similar obligations

Pension provisions and similar obligations totaled €0.9 million (previous year: €0.8 million). There are no plan assets.

Defined benefit pension commitments

There is a defined benefit pension commitment for a retired former managing director of a subsidiary in Germany. In addition, there are some minor defined benefit pension commitments in Poland and France.

The calculation of the provision for defined benefit retirement plans is based on the projected unit credit method, in accordance with IAS 19. The present value of the defined benefit obligation (DBO) is calculated by actuaries based on assumptions about life expectancy, increases in salary and retirement income, employee turnover, changes in the interest rate and other computational parameters. After deducting unrecognized service costs, the obligation is accrued under pension provisions.

Actuarial gains and losses based on empirical adjustments and changes in actuarial assumptions are recognized in equity under other comprehensive income in the period in which they occur, with no effect on the income statement. Past service costs are recognized in profit or loss.

The discount factor is an important parameter for calculating the amount of the provision for pensions and similar obligations. For pension obligations, it is determined based on the yields on senior fixed-interest corporate bonds observable in the financial markets on the reporting date.

Through the plans, the Group is normally exposed to the following actuarial risks:

Interest rate risk

A decline in the coupon rate will result in an increase in the plan liability.

Longevity risk

The present value of the defined benefit obligation under the plan is determined based on the best possible estimate of the expected mortality of the employee beneficiary, both during the employment contract and after it has ended. An increase in the life expectancy of the employee beneficiary will lead to an increase in the plan liability.

Salary risk

The present value of the defined benefit obligation under the plan is determined based on the future salaries of the employee beneficiaries. Therefore, increases in the salaries of the employee beneficiaries will lead to an increase in the plan liability.

Inflation risk

Some pension benefits are indexed to inflation and higher inflation will lead to an increase in the plan liability.

The present value of the defined benefit obligation under pension commitments was calculated based on the following actuarial assumptions:

in %	Germany		Poland		France	
	2019	2018	2019	2018	2019	2018
Discount rate	0.6	1.4	2.5	3.0	1.6	1.6
Future increases in salaries and pensions	0.7	0.7*	3.0	3.0	–	–
Inflation rate	–	–	2.5	2.5	2.0	2.0

* The previous year's figure of 2.0% related to a 2.0% increase in pension income every three years

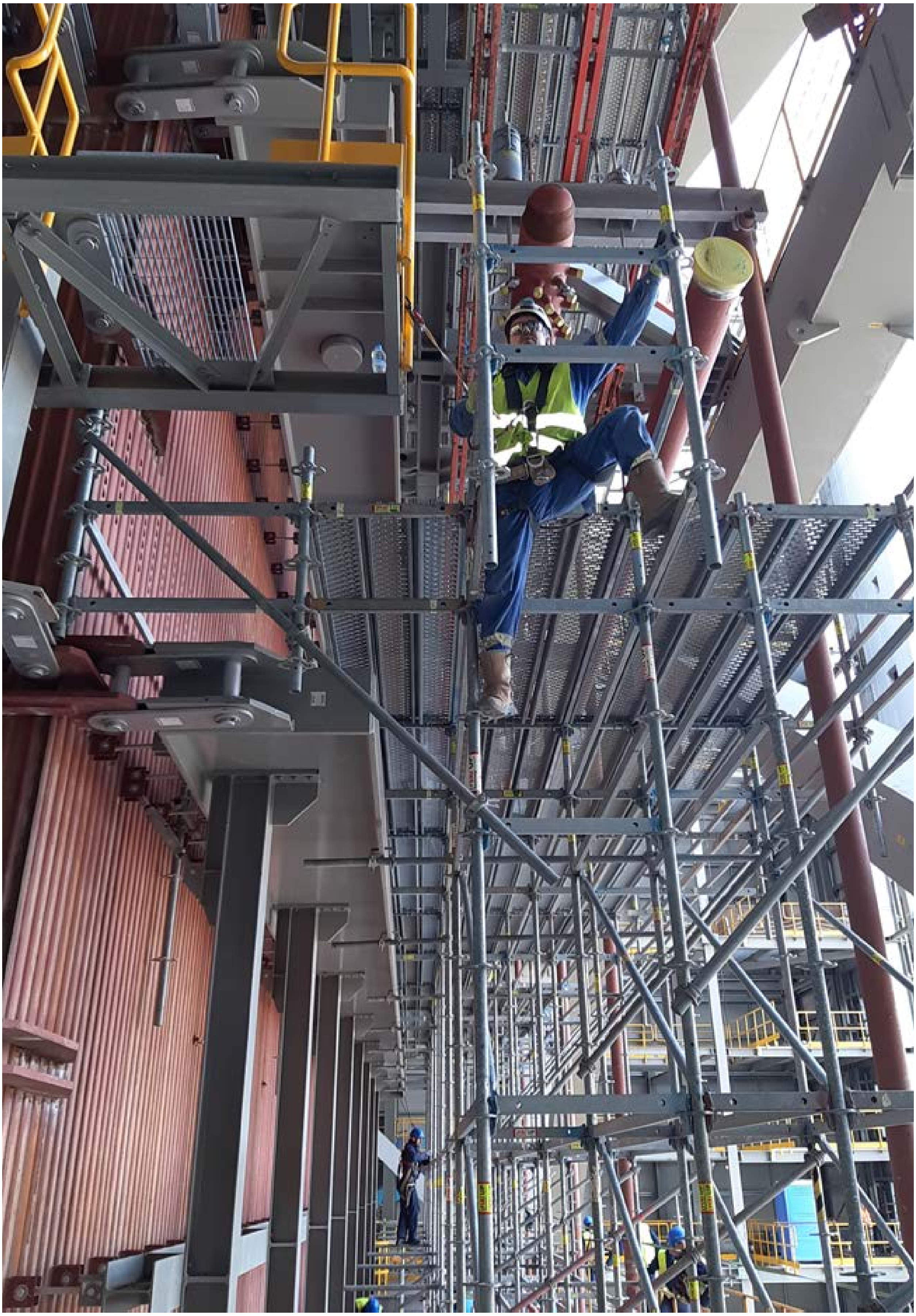
Employee turnover was taken into account.

The assumptions used to calculate the pension obligation in Germany are based on the "2018G Actuarial Tables" of Klaus Heubeck. A retirement age of 65 is assumed. The assumptions used to calculate the pension obligation in Poland are based on assumptions by Poland's Central Statistical Office (GUS) and the Government Social Insurance Agency (ZUS). The assumed retirement age is 65 for men and 60 for women.

Pension provisions and similar obligations developed as follows:

in kEUR	2019	2018
As of January 1	816	755
Current service cost	30	47
Interest expenses for vested pension entitlements	30	30
Pension benefits paid	-50	-82
Actuarial gains and losses	50	70
Exchange differences	2	-4
As of December 31	**879**	**816**

The actuarial gains and losses resulted from the change in financial assumptions.



Scaffolding

Sensitivity analyses

Holding the calculation method constant, a 1% change in the aforementioned actuarial assumptions would not result in any material change in the DBO. As a result, we will dispense with a detailed presentation of the sensitivity analysis.

Risk-balancing strategy

Since the amount of the obligation is low, Muehlhan AG has dispensed with a detailed risk management strategy for pension provisions, instead applying the general risk management concept.

Future payments

For 2020 and the following years, the pension payment is expected to be at the same level as in the reporting year.

Pension commitments under defined contribution pension plans and government pension plans

Aside from the ongoing contribution payment, defined contribution pension commitments will not lead to any additional pension obligations. Expenses for defined contribution pension plans in Germany did not exceed €50 thousand (previous year: did not exceed €50 thousand).

13. Borrowings

The carrying amounts of borrowings can be broken down as follows:

in kEUR	12/31/2019	12/31/2018
Non-current		
Borrowings	26,285	15,114
TOTAL	**26,285**	**15,114**
Current		
Borrowings	7,912	18,141
TOTAL	**7,912**	**18,141**

In July 2017, Muehlhan AG replaced its existing syndicated loan agreement for Group financing with a new syndicated loan agreement for a total credit line of €65.0 million, lead managed by Commerzbank AG. The loan is divided into three tranches. Tranche A is a term loan for €20.0 million maturing in 2022. Tranche B is a bullet loan for €20.0 million maturing in 2022 with a one-year renewal option. Tranche C (€25.0 million, with the option of increasing by up to another €25.0 million) is a revolving loan that is available until mid-2022 to finance working capital requirements, with the option of renewing until mid-2023. All the tranches pay interest at EURIBOR plus a margin of 2.0% to 3.5%, dependent on performance indicators. The main subsidiaries have provided guarantees to the banking syndicate as collateral for the loan. No tangible collateral was provided. Muehlhan AG has agreed to comply with terms and conditions for the financing. In addition to obligations to notify the banking syndicate, these primarily include compliance with an equity ratio, a net debt ratio and an interest coverage ratio. The financing terms and conditions were satisfied in the previous year and during the current financial year. The loans were measured at amortized cost after allowing for the transaction costs (€0.5 million). The loans totaled €30.9 million on the reporting date (previous year: €30.1 million). In addition, the subsidiaries had other non-current and current borrowings.

The Muehlhan Group has credit lines totaling €63.5 million (previous year: €66.4 million). These include loans with scheduled monthly payments of principal and interest, as well as freely available bank credit lines, some of which can also be used for guarantees. Additionally, it has guarantee facilities totaling €114.7 million (previous year: €112.8 million) from Euler Hermes Kreditversicherungs AG, Zurich Versicherung Aktiengesellschaft and Zurich Insurance Public Limited Company, USA. In addition to borrowings totaling €34.2 million (previous year: €33.3 million), guarantee credits totaled €29.2 million as of December 31, 2019 (previous year: €30.5 million). On the reporting date, aside from cash and cash equivalents, the company had at its disposal unutilized loan, overdraft and guarantee facilities in the amount of €114.7 million (previous year: €115.5 million). The effective interest rate on borrowings averaged 2.64% during the financial year (previous year: 3.50%). As the effective interest method was applied, the figures shown on the balance sheet were equal to the fair value.

Cash used for term loans will amount to €4.1 million in 2020 (previous year, for 2019: €4.1 million) and €4.1 million in 2021 (previous year, for 2020: €4.1 million). In the period thereafter (two to five years), cash used for term loans will total €2.2 million (previous year: €6.2 million; revised).

14. Derivative financial instruments

As a cash flow hedge, Muehlhan AG has entered into an interest rate cap transaction ("cap") to limit the variable interest rate on a portion of the syndicated loan. As of the reporting date, the fair value of the cap was €-2 thousand (previous year: €-24 thousand). The cap and the syndicated loan have matching maturities. In the consolidated statement of comprehensive income, the effect of the cap in the reporting year was €23 thousand (previous year: €65 thousand).

15. Other provisions

Other provisions developed as follows:

in kEUR	As of 01/01/2019	Utilization	Reversal	Addition	Currency translation effect	As of 12/31/2019
Employees	3,119	-1,082	-40	965	80	3,041
Anticipated losses	12	3	0	1,818	0	1,833
Warranty	910	-120	-167	73	0	696
Tax risks	491	-473	0	506	4	527
Other	77	-2	-17	27	7	92
Litigation	70	0	0	0	1	70
TOTAL	**4,679**	**-1,675**	**-224**	**3,389**	**92**	**6,260**

The other provisions have the following maturities:

in kEUR	As of 12/31/2019	Due < 1 year	Due 1–5 years	Due > 5 years
Employees	3,041	2,202	0	839
Anticipated losses	1,833	1,818	15	0
Warranty	696	175	521	0
Tax risks	527	513	14	0
Other	92	92	0	0
Litigation	70	70	0	0
TOTAL	**6,260**	**4,871**	**550**	**839**

16. Trade payables and contract liabilities

All liabilities have a term to maturity of one year or less. Trade payables include contract liabilities of €5.0 million (previous year: €3.4 million) and result from payments demanded and received without any obligations having been performed to date and from long-term warranty obligations for a completed project. With the exception of the warranty obligation, the performance obligations shown as contract liabilities will be satisfied in 2020. Income is allocated to contract liabilities using the percentage of completion method.

Scaffolding

17. Other current liabilities

Other current liabilities consist of financial and non-financial liabilities.

The other current financial liabilities can be broken down as follows:

in kEUR	12/31/2019	12/31/2018
Liabilities to employees	10,037	8,432
Liabilities from the purchase of property, plant and equipment	5,593	19
Sales bonuses/bonuses	699	172
Security deposits	232	45
Debtors with credit balances	39	6
Liabilities to non-controlling interests	0	126
Sundry current financial liabilities	3,023	986
TOTAL	19,624	9,786

Other current non-financial liabilities can be broken down as follows:

in kEUR	12/31/2019	12/31/2018
Liabilities attributable to other taxes	2,935	3,659
Liabilities attributable to social security	2,317	1,515
Liabilities to employees	1,379	1,378
Prepayments received	775	173
Income tax liabilities	495	764
Deferrals	41	509
Sundry current non-financial liabilities	81	439
TOTAL	8,024	8,437

Steel construction in Gdańsk, Poland

Construction of a steel bridge

IX. Notes to the income statement and the cash flow statement

18. Revenues and segment reporting

Muehlhan generates revenues by providing services in the areas of surface protection, passive fire protection, scaffolding and access technology, steel construction and insulation. For a more detailed description of the geographic segments, please refer to the comments in the Group management report. The overview in Section V, Consolidated Group, shows which services are provided by each geographic segment.

Segment reporting is based on the management approach, in accordance with IFRS 8. Management control and, therefore, internal reporting are both organized primarily by geographic region. The Group's activities are broken down into the geographic regions of Europe, the Middle East, North America and Rest of the World. Central functions and consolidation effects are shown separately in order to ensure that they are reconciled to the Group as a whole. The Muehlhan Group's internal reporting distinguishes the following business segments: Ship, Oil & Gas, Renewables, and Industry/Infrastructure. Reporting is broken down by external revenues and earnings from operations (EBIT) in line with the accounting and valuation methods discussed in these notes.

Assets and liabilities are not broken down by segment, as this information is not collected for internal reporting purposes. The same applies to income taxes paid and income tax refunds. The financial result is primarily allocated to the holding company.

Intersegment sales and revenues are always reported at prices that would also apply to arm's length transactions. Depending on where the respective companies are headquartered, external revenues come primarily from:

in kEUR	2019	2018
Denmark	77,891	65,510
Germany	54,800	53,390
Netherlands	28,211	26,897
USA	24,377	22,074
Poland	18,324	20,359
Other	91,666	79,569
TOTAL	**295,269**	**267,799**

Other countries each account for less than 10% of the Group's external revenues.

Breakdown by geographic segment

The MSI Group, which is allocated to Rest of the World, generally provides offshore services in international waters.

2019

in kEUR	Europe	Middle East	North America	Rest of the World	Holding company	Reconciliation	Group
External revenues	233,085	22,885	24,377	14,742	180	0	295,269
Intersegment revenues	259	0	42	95	8,197	-8,592	0
Revenues	**233,343**	**22,885**	**24,419**	**14,837**	**8,277**	**-8,592**	**295,269**
Earnings from operations before depreciation and amortization (EBITDA)	19,411	2,688	4,634	1,642	-3,870	0	24,505
Depreciation and amortization of intangible assets and property, plant and equipment	-8,656	-975	-1,116	-81	-1,277	0	-12,105
Earnings from operations (EBIT)	**10,754**	**1,713**	**3,518**	**1,561**	**-5,146**	**0**	**12,400**
Investment in property, plant and equipment	**7,286**	**262**	**29**	**3**	**549**	**0**	**8,129**

2018

in kEUR	Europe	Middle East	North America	Rest of the World	Holding company	Reconciliation	Group
External revenues	212,014	22,840	22,074	10,739	132	0	267,799
Intersegment revenues	126	0	0	30	4,087	-4,244	0
Revenues	**212,140**	**22,840**	**22,074**	**10,770**	**4,219**	**-4,244**	**267,799**
Earnings from operations before depreciation and amortization (EBITDA)	16,651	2,497	2,597	1,225	-4,575	0	18,394
Depreciation and amortization of intangible assets and property, plant and equipment	-6,161	-634	-830	-14	-535	0	-8,174
Earnings from operations (EBIT)	**10,490**	**1,863**	**1,767**	**1,211**	**-5,111**	**0**	**10,220**
Investment in property, plant and equipment	**7,988**	**252**	**784**	**5**	**209**	**0**	**9,238**

Breakdown by business segment

The following table provides a breakdown of external revenue and EBIT by business segment:

	External revenue		EBIT	
in kEUR	2019	2018	2019	2018
Ship	69,421	54,317	7,555	4,088
Oil & Gas	78,310	83,471	6,136	5,178
Renewables	45,548	33,582	-1,050	3,674
Industry/Infrastructure	101,909	96,311	3,808	2,510
Holding company/ consolidation	81	118	-4,049	-5,229
TOTAL	295,269	**267,799**	12,400	**10,220**

The companies are allocated to business segments and services based on their business activities during the reporting year. Knowledge and the necessary materials and equipment can be transferred quickly within the Group, meaning it is generally quite feasible to enter new business segments and to provide additional services. Such flexibility means we are well equipped to satisfy customer needs.

Revenues are generated almost exclusively by providing services in the regions and business segments mentioned. Contracts with customers include both fixed prices and variable payments as work is completed. For contracts with variable payments the work completed is billed monthly. Payments on account are agreed for fixed-price contracts, especially if the performance obligation is satisfied over a longer period.

Work has begun on contracts for a total of €40.8 million. Income of €127.7 million is expected from these contracts, of which €110.3 million has been or is expected to be performed in 2020 but has not yet been billed. Contracts with forecast income of €12.4 million will be performed in 2021 and other contracts with a volume of €5.0 million will be performed after 2021.

Guarantees and warranty obligations exist for the statutory periods or those customary in the industry.

Application of surface protection

No costs have been capitalized for acquiring contracts. On the reporting date, costs in connection with the performance of customer contracts are reported under trade receivables and contract assets.

19. Cost of materials and purchased services

This item may be broken down as follows:

in kEUR	2019	2018
Cost of raw materials, consumables and supplies	-48,579	-42,511
Cost of purchased services	-50,275	-43,345
TOTAL	-98,853	-85,856

20. Personnel expenses

The average number of employees was as follows:

number	2019	2018
Europe (incl. holding company)	2,396	2,315
Middle East	591	602
North America	102	105
Rest of the World	14	15
TOTAL	3,103	3,037

Personnel expenses included:

in kEUR	2019	2018
Wages and salaries	-114,777	-107,127
Social security contributions, pension and other benefit expenses	-21,732	-19,967
TOTAL	-136,509	-127,093

Expenses for research and development, which consist mainly of personnel expenses, totaled €0.3 million for the financial year (previous year: €0.3 million).

21. Other operating income and expenses

Other operating income consisted of:

in kEUR	2019	2018
Income from the reversal of impairments of trade receivables and contract assets	705	1,010
Exchange rate gains	662	808
Income from the reversal of provisions	224	132
Sundry other operating income	5,779	2,014
TOTAL	7,369	3,964

Sundry other operating income includes compensation income of €1.7 million relating to the delivery of contaminated steel grit by a supplier in the Netherlands in 2017. Sundry other operating income additionally includes income from the deconsolidation of Muehlhan Surface Protection Middle East L.L.C. (MME), Dubai, UAE, in the amount of €1.5 million.

Other operating expenses consisted of:

in kEUR	2019	2018
Travel expenses	-7,986	-7,716
Consultancy fees	-4,529	-4,083
Expenses for short-term leases and for leases of low-value assets	-4,435	-6,034
Repairs	-3,860	-3,828
Motor vehicle expenses	-3,062	-4,000
Impairment losses on trade receivables and contract assets	-3,013	-805
Insurance	-2,411	-2,457
Training and other HR activities	-2,295	-1,872
Exchange rate losses	-923	-1,263
Sundry operating expenses	-10,255	-8,362
TOTAL	-42,770	-40,419

The aforementioned exchange rate gains and losses relate to exchange differences within the meaning of IAS 21.52a.

22. Financial result

The financial result included €0.2 million (previous year: €0.1 million) of interest income and total financial expenses consisting of interest expense and guarantee fees of €2.1 million (previous year: €1.7 million). The effect of the interest income and expenses for financial assets and liabilities as calculated using the effective interest method was €-0.2 million, with €-0.3 million resulting from the discounting of lease liabilities.

23. Tax result

Current income taxes for domestic Group companies were calculated at a corporate tax rate of 15.5% (previous year: 15.5%) and a trade tax rate of 15.8% (previous year: 15.8%). Foreign deferred tax rates ranged from 10.0% to 35.0% (previous year: 10.0% to 35.5%) and the domestic deferred tax rate was 31.5% (previous year: 31.5%).

Taxes on income may be broken down as follows:

in kEUR	2019	2018
Current income taxes	-2,785	-2,288
Deferred taxes	-257	-471
TOTAL	-3,042	-2,759

Reconciliation of theoretical and actual tax expense:

in kEUR	2019	2018
Earnings before income taxes from continuing operations	10,513	8,608
Theoretical tax expenses at MYAG's tax rate of 31.5%	-3,312	-2,712
Differing foreign tax rates	595	789
Tax-free income and non-deductible expenses	-1,014	-225
Impairment and/or non-recognition of deferred tax assets	-51	-231
Effects of impairment of goodwill	115	-29
Effects of changes in tax rates	9	-3
Effects of previously unrecognized deferred tax assets on tax loss carryforwards and temporary differences	519	56
Prior period tax income (previous year: expense)	113	-472
Withholding tax effects	86	0
Other	-101	68
Income tax expense for continuing operations recognized on the income statement	**-3,042**	**-2,759**
Effective tax rate	28.9%	32.1%

24. Financial instruments

Muehlhan carries financial assets and liabilities almost exclusively at amortized cost using the effective interest method, less impairments. Gains and losses are recognized in consolidated income if the loans and receivables are impaired or derecognized. The interest effects of applying the effective interest method and translation differences are also recognized through profit or loss.

Equity interests must be measured at fair value. Amortized cost is a reasonable estimate of fair value for the recognized equity interests, since there is not sufficient more recent information available to measure fair value.

Access technology on an oil platform

25. Earnings per share

Earnings per share are calculated as follows:

		2019	2018
Consolidated income from continuing operations	in kEUR	7,471	5,850
Consolidated income from discontinued operations	in kEUR	-1,221	-329
Consolidated income	in kEUR	**6,250**	**5,521**
Consolidated income attributable to shareholders of Muehlhan AG	in kEUR	-73	518
Consolidated income attributable to shareholders of Muehlhan AG	in kEUR	**6,323**	**5,003**
Average number of ordinary shares	number	19,236,738	19,289,339
Consolidated income per share from continuing operations	in EUR	**0.33**	**0.26**
Consolidated income per share from discontinued operations	in EUR	-0.06	-0.02

Since there were no potential ordinary shares as of the reporting date, basic and diluted earnings per share are identical.

26. Statement of comprehensive income

The item “Future cash flow hedge” amounting to €-2 thousand contains a tax component of €-7 thousand (previous year: €-20 thousand). As in the previous year, the item “Currency translation differences” does not contain a tax component. The currency translation differences reclassified and recognized in the consolidated income statement resulted primarily from the deconsolidation of Muehlhan Surface Protection Middle East L.L.C. (MME), Dubai, UAE.

27. Consolidated cash flow statement

The following table shows the reconciliation of the items in cash used in/cash flow from financing activities, in accordance with IAS 7.44A et seq.:

		Changes affecting cash flow		Non-cash changes		
in kEUR	**12/31/2018**	**Repayments**	**Borrowings**	**Currency translation differences**	**Change in fair value**	**12/31/2019**
Non-current borrowings	15,114	-4,076	14,979	27	241	26,285
Current borrowings	18,141	-23,488	13,312	-53	0	7,912
Total liabilities from financing activities	**33,255**	**-27,564**	**28,291**	**-26**	**241**	**34,197**

X. Other disclosures

28. Risk management

Capital risk management

The Muehlhan Group pursues the goal of securing the entire amount of shareholders' equity reported on the balance sheet for the long term, while generating a reasonable return on capital employed. At the same time, external minimum capital requirements are taken into account. In order to secure the equity shown on the balance sheet, the Group may, among other things, change dividend payments to shareholders (see note 11, Equity). The objectives, guidelines and procedures are the same as in the previous year. The Group pursues the goal of generating a reasonable return on capital by continually adjusting and expanding the range of services offered, through efficient corporate management and through organic growth and acquisitions.

As of December 31, 2019, the Group had an equity ratio of 40.9% (previous year: 45.2%). Every month, external minimum capital requirements are reviewed in connection with the syndicated loan agreement (see note 13, Borrowings).

Financial risk management

The parent company performs various treasury services for the Group companies. On the one hand, it prepares a liquidity forecast at regular intervals; on the other hand, a cash pooling system is used whenever it is structurally possible to do so. In addition, the parent company administers, monitors and issues loans and provides bonding capacity, both on its own and in cooperation with specialized outside companies. We assess the specific risk exposures as follows:

Default risk

Default or credit risks exist when contractual partners do not meet their obligations. Muehlhan regularly analyzes the creditworthiness of every major debtor and grants credit limits on this basis. As the Muehlhan Group operates worldwide and has a diversified customer base, there are no significant concentrations of default risk. The Muehlhan Group's maximum default risk is equal to the carrying amount of all financial assets plus the not yet invoiced portion of contract performance bonds issued minus receivables covered by credit insurance and prepayments received (see note 7, Trade receivables and contract assets).

Currency risk

More than 66% (previous year: more than 64%) of the Group's revenues is generated in euros or Danish krone, which scarcely fluctuates in relation to the euro. Basically, the remaining revenues generated in foreign currencies are offset by expenses in the same currencies, meaning that the currency risk from operations for the other Group companies is limited to the respective companies' contribution to income. This does not apply to the MSI Group, whose operating business has exposure to foreign currency risks involving the Brazilian real, the Norwegian krone, the US dollar and the euro. The Polish companies are exposed to currency risks between the Polish złoty and the currencies of the countries in which they operate. The issuance of intragroup loans from the holding company to foreign subsidiaries and vice versa also involves currency risks.

The Group generally does not hedge this risk. The Group posted an exchange rate loss of €0.3 million for 2019 (previous year: loss of €0.5 million).

IFRS 7 requires a sensitivity analysis of each type of market risk to which the company is exposed; in addition, the materiality principle must be observed, in line with IAS 1. Sensitivity analyses are used to determine which effects a change in the respective risk variables would have on profits/losses and on equity as of the reporting date. The periodic effects are determined by relating the hypothetical changes in the risk variables to the position on the reporting date. It is assumed that the position on the reporting date is representative of the entire year. The sensitivity analysis showed that there was no material exchange rate risk.

Liquidity risk

Liquidity planning systems ensure early detection of any risks from cash flow fluctuations. The new syndicated loan agreement concluded last year has effectively improved the Group's liquidity situation and provides flexibility for financing growth projects (see note 13, Borrowings).

Interest rate risk

Interest rate risk exists because of potential changes in the market rate of interest; such risk may lead to a change in the fair value of financial instruments with fixed interest and to fluctuating interest payments on financial instruments with variable interest. The Group has no fixed interest financial instruments. Financial instruments at floating rates of interest primarily include the syndicated loan (see note 13, Borrowings) and cash and cash equivalents. A portion of the syndicated loan is hedged against additional interest rate increases above a defined interest rate (see note 14, Derivative financial instruments).

The main variable interest rate risk positions are shown in the following table:

in kEUR	As of 12/31/2019	< 1 year	1–5 years	> 5 years
Cash and cash equivalents	9,999	9,999	0	0
Borrowings	34,197	7,912	26,285	0
Net risk position	**-24,198**	**2,087**	**-26,285**	**0**

The interest rate risk is shown by means of a sensitivity analysis in accordance with IFRS 7. This presents the effects of a change in market interest rates on consolidated profit.

An increase/decrease of 100 basis points/-50 basis points in the relevant interest rates would have changed consolidated profit as of December 31, 2019, as follows:

	12/31/2019	
in kEUR	+ 100 BP	- 50 BP
Effect on earnings	-303	161

The negative or positive effect of an increase/decrease of 100 basis points/-50 basis points in the base rate is mainly due to the discounting of non-current assets and liabilities.

29. Discretionary decisions and estimates

To fulfill our duties when preparing the consolidated financial statements, we sometimes have to make discretionary decisions, assumptions and estimates that affect the amounts of assets and liabilities, income, expenses and contingent liabilities reported, as well as how these are classified. Estimates and discretionary decisions are reassessed continually and are based on historical experience and other factors, including expectations about future events that appear reasonable given the circumstances. The Group makes assumptions and estimates about the future. Actual values may differ from the assumptions and estimates in particular instances. Adjustments are reported as gains or losses on the date that more information becomes available.

On the reporting date, management mainly made the following future-oriented assumptions and identified discretionary decisions and major sources of uncertainty relating to estimates which may give rise to a significant risk that a substantial adjustment will have to be made within the next financial year to the assets and liabilities shown:

- Testing goodwill for impairment: The impairment test for goodwill is based on forward-looking assumptions. The Group conducts these tests annually and more often if there is evidence that a goodwill impairment might have occurred. It entails measuring the recoverable amount for the cash-generating unit, which is the higher of fair value less costs of disposal and the value in use. Calculating the value in use involves making adjustments and estimates relating to the projection and discounting of future cash flows. Although management believes the assumptions used to calculate the recoverable amount are appropriate, any unforeseeable changes in these assumptions could result in impairment losses which could adversely affect the net assets, financial position and results of operations.

- Impairment of non-current assets: The Group tests its non-current assets for impairment. Above all, such a test involves making estimates of future cash flows. A future change in economic and financial circumstances may lead to lower cash flows and thus to an impairment.

- Impairment of current assets: The Group recognizes impairments for credit-impaired receivables to reflect expected losses due to customer insolvency. The Group bases its assessment of the appropriateness of impairments for credit-impaired receivables on the maturity structure of receivable balances and past empirical data on the derecognition of receivables, customers' creditworthiness and changes in payment terms. If the customers' financial situation deteriorates, the actual amounts that have to be derecognized could exceed expectations.

- Income taxes: The Group has a duty to pay income taxes in various countries. Key assumptions are therefore required to calculate the worldwide provision for income taxes. For some business transactions and calculations, the ultimate level of taxation cannot be determined conclusively during the normal course of business. If the ultimate level of taxation of these business transactions differs from the initial assumptions, this will affect actual and deferred taxes in the period in which the level of taxation is determined conclusively. Estimates are required in order to set up tax receivables and provisions and to assess the recoverability of deferred tax assets resulting from loss carryforwards. In particular, when judging the recoverability of deferred tax assets, there is uncertainty regarding the amount and probability of future taxable income.

- Deferred taxes: Deferred tax assets and liabilities are measured on the basis of statutory tax rates for the future financial years in which the Group expects the temporary differences to reverse. If the tax rate changes, the effect of the new tax rate on deferred tax assets and liabilities is recognized in profit or loss in the reporting period in which the tax rate change is enacted.

- Fair value of derivative financial instruments and other financial instruments: The fair values of derivatives and other financial instruments not traded in an active market are determined using appropriate measurement techniques selected from a wide variety of methods. The valuation parameters required to value the instruments on the reporting date are based as far as possible on available market terms and conditions and as little as possible on company-specific data. The Group uses the present value method to determine the fair value of financial assets available for sale that are not traded in active markets.

- Pension provisions and similar obligations: Pension obligations for benefits to employees are covered by plans that are classified and reported as defined benefit plans. Retirement pension expenses are calculated in accordance with actuarial methods based on assumptions about the interest rate, life expectancy, salary and pension trends, employee turnover and other calculation parameters. Changes in assumptions may affect the future amount of pension expenses.

- Other provisions: Other provisions are recognized on the date when an obligation to external third parties is probable and can be reliably estimated. The Group measured provisions in accordance with IAS 37. For other provisions, estimates are made regarding the amount and likely utilization.

- Revenue recognition: Some revenues from the provision of services are reported using the percentage of completion method. Here, the Group estimates the ratio of services already performed as of the reporting date to the total amount of services to be performed.

- Accounting for acquisitions: When acquiring equity stakes, estimates are required in order to determine the fair value of assets and liabilities.

- Useful life: The expected useful life of property, plant and equipment is based on assumptions and estimates.

30. Related party transactions

Transactions between affiliated companies have been eliminated upon consolidation and are not discussed in these notes. Transactions with related parties are conducted at terms that would also apply to arm's length transactions. Only a small number of transactions involved unconsolidated Group companies (revenues of unconsolidated companies with consolidated companies: €0.1 million; previous year: €0.1 million).

The composition of the Executive Board and the Supervisory Board is discussed in note 33, Executive Board, and note 34, Supervisory Board. Supervisory Board member Ms. Andrea Brandt (maiden name: Greverath) is also a related party within the meaning of IAS 24.9. Ms. Brandt and the companies controlled by her are referred to as "Greverath Property" in the following paragraphs. In 2019, the Group's expenses relating to Greverath Property totaled €261 thousand (previous year: €259 thousand) and consisted of rent, real estate taxes and Supervisory Board compensation (see note 34, Supervisory Board).

As of the reporting date, liabilities to Greverath Property totaled €11 thousand (previous year: €3 thousand).

31. Other financial commitments and contingent liabilities

On the reporting date, performance bonds issued entailed the customary contingent liabilities. There were no other financial obligations of material significance as of the reporting date.

32. Auditors' fees

The Annual General Meeting appointed Warth & Klein Grant Thornton AG Wirtschaftsprüfungsgesellschaft, Hamburg, to audit the consolidated financial statements for financial year 2019. In 2019, the auditors' total fees amounted to €125 thousand for financial statement auditing services (previous year: €125 thousand) and €59 thousand for other audit-related services (previous year: €28 thousand), bringing the total amount charged for all services to €184 thousand (previous year: €153 thousand).

33. Executive Board

The following persons were members of the parent company's Executive Board:

- Mr. Stefan Müller-Arends, Chairman of the Executive Board, St. Augustin
- Dr. Andreas C. Krüger, Member of the Executive Board, COO, Hamburg
- Mr. James West, Member of the Executive Board, responsible for the Oil & Gas segment, Aberdeenshire, UK

One Executive Board member may represent the company jointly with another Executive Board member or an authorized signatory (Prokurist), with the authority to enter into legal transactions with a third party on behalf of the company. The compensation for the Executive Board covered by Muehlhan AG totaled €1,636 thousand for the financial year, including €853 thousand of ongoing fixed compensation, €440 thousand of ongoing variable compensation and €342 thousand of expenses for the bonus program (previous year: €1,388 thousand, including €819 thousand of fixed compensation, €285 thousand of variable compensation and €285 thousand of expenses for the bonus program). Expenses relating to the bonus program constitute share-based compensation; other compensation consists of payments that are due in the short term.

34. Supervisory Board

During the reporting year, the following persons were members of the Supervisory Board:

- Mr. Philip Percival, London, UK (Chairman)
- Dipl.-Ing. Dr. Gottfried Neuhaus, Managing Shareholder of Neuhaus Partners GmbH, Hamburg (Vice Chairman)
- Ms. Andrea Brandt (maiden name: Greverath), Managing Partner of GIVE Capital GmbH, Hamburg

The Supervisory Board was paid €68 thousand for reimbursement of expenses for the financial year (previous year: €64 thousand). As in the previous year, €50 thousand of this is the fixed component, while the variable component accounted for €18 thousand (previous year: €14 thousand). Payments to reimburse expenses are payable within the short term.

35. Events after the reporting date

At the time these consolidated financial statements were being prepared, the COVID-19 pandemic had already had a massive impact on public life and on business activities in almost every part of the world. As it stands, it is highly likely that the 2020 financial year will suffer greatly from its consequences.

36. Approval of the financial statements

The consolidated financial statements and the Group management report of Muehlhan AG are published in the electronic version of the Federal Gazette (Bundesanzeiger). On March 24, 2020, the consolidated financial statements and the Group management report were approved for publication by the Executive Board.

Hamburg, March 24, 2020

Executive Board

Stefan Müller-Arends *Dr. Andreas C. Krüger* *James West*

Servicing work on an offshore wind turbine

05 Additional Information

Servicing work on a wind turbine

Muehlhan AG, Hamburg

INDEPENDENT AUDITOR'S REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS AND GROUP MANAGEMENT REPORT AS OF DECEMBER 31, 2019

Independent Auditor's Report

To Muehlhan AG, Hamburg

Audit Opinions

We have audited the consolidated financial statements of Muehlhan AG, Hamburg, and its subsidiaries (the Group), which comprise the consolidated balance sheet as of December 31, 2019, the consolidated statement of comprehensive income, the consolidated statement of changes in Group equity and the consolidated cash flow statement for the financial year from January 1, 2019, to December 31, 2019, as well as the notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the Group management report of Muehlhan AG, Hamburg, for the financial year from January 1, 2019, to December 31, 2019.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material aspects, with the IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Article 315e, paragraph 1 of the German Commercial Code (HGB) and, in compliance with these requirements, give a true and fair view of the net assets and financial position of the Group as of December 31, 2019, and of its results of operations for the financial year from January 1, 2019, to December 31, 2019, and
- the accompanying Group management report as a whole provides an appropriate view of the Group's position. In all material aspects, this Group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development.

Pursuant to Article 322, paragraph 3, sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the Group management report.

Basis for the Audit Opinions

We conducted our audit of the consolidated financial statements and of the Group management report in accordance with Article 317 HGB and in compliance with the German Generally Accepted Standards for Financial Statement Audits promulgated by the Institute of Public Auditors in Germany (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the Group entities in accordance with the requirements of German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the Group management report.

Other Information

The executive directors and Supervisory Board are responsible for the other information. The other information comprises the 2019 Annual Report with the exception of the audited consolidated financial statements and Group management report and our auditor's report.

Our audit opinions on the consolidated financial statements and on the Group management report do not cover the other information, and consequently we do not express an audit opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, the Group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Executive Directors and the Supervisory Board for the Consolidated Financial Statements and the Group Management Report

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material aspects, with the IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Article 315e, paragraph 1 HGB, and for ensuring that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the net assets, financial position and results of operations of the Group. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the Group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a Group management report that is in accordance with the applicable German legal requirements and to be able to provide sufficient appropriate evidence for the assertions in the Group management report.

The Supervisory Board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the Group management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatements, whether due to fraud or error, and whether the Group management report as a whole provides an appropriate view of the Group's position and, in all material aspects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and on the Group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Article 317 HGB and in compliance with the German Generally Accepted Standards for Financial Statement Audits promulgated by the Institute of Public Auditors in Germany (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this Group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and the Group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or the override of internal control.

- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the Group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.

- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.

- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the Group management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the net assets, financial position and results of operations of the Group in compliance with the IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Article 315e, paragraph 1 HGB.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities and business activities within the Group to express audit opinions on the consolidated financial statements and on the Group management report. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinions.

- Evaluate the consistency of the Group management report with the consolidated financial statements, its conformity with German law and the view of the Group's position it provides.

- Perform audit procedures on the prospective information presented by the executive directors in the Group management report. On the basis of sufficient appropriate audit evidence, we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Hamburg, March 24, 2020

Warth & Klein Grant Thornton AG
Wirtschaftsprüfungsgesellschaft

von Oertzen	*Pritsch*
Wirtschaftsprüfer	*Wirtschaftsprüfer*
[German Public Auditor]	*[German Public Auditor]*

CONTACT

Muehlhan AG
Schlinckstraße 3
21107 Hamburg, Germany
Phone +49 (0)40 752 71-0
Fax +49 (0)40 752 71-123
www.muehlhan.com

Investor Relations
Frithjof Dorowski
Phone +49 (0)40 752 71-166
investorrelations@muehlhan.com

FINANCIAL CALENDAR

April 30, 2020	Publication of results for the first quarter of 2020
pending	Annual General Meeting of Muehlhan AG
July 31, 2020	Publication of half-yearly report 2020
October 30, 2020	Publication of results for the third quarter of 2020

IMPRINT

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NOTES

The Annual Report is published in German and English. The German version is authoritative. For further information about the company, please visit www.muehlhan.com.

FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements regarding the future development of Muehlhan AG. These statements reflect the Management's current views and are based on the corresponding plans, estimates and forecasts. We would like to point out that the statements contain certain risks and uncertainties that may lead to the actual results differing significantly from those forecast. Although we are certain that the statements we have made are realistic, we cannot guarantee that future developments will match these statements.