Annual Report 2020
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Dear readers,

2020 was a year unlike any other. The coronavirus pandemic affected us in ways we could never have imagined and presented us with many unprecedented challenges. How does one evaluate such a year from an entrepreneurial perspective and measure success in times like these?

We could perhaps start by examining the usual key figures from our balance sheet or the Profit & Loss statement. However, economic success seems to pale in significance at a time when people’s wellbeing is the main priority. Health is and remains the most important consideration. This is why over the past year, our top priority has been to minimise the risk of infection among our employees, their families and our business partners, whilst ensuring that the business continues to run smoothly. This required an enormous effort and demanded a great deal from our employees.

We would like to take this opportunity to thank our employees in particular. We would not have withstood the challenges of the past year without the outstanding efforts of our nearly 48,000 employees. They have shown incredible commitment under the most difficult circumstances and have demonstrated a huge amount of creativity and loyalty. We would therefore like to thank everyone at Liebherr for their contribution during these times, which are also challenging on a personal level. In view of this, we feel even more proud to report that the Group’s total
turnover has exceeded well over €10 billion. So how should we put this year into perspective? Sales inevitably fell after three years of strong growth, which affected some of our product segments more than others. We were even forced to introduce HR policy changes in one part of our business. However, the impact of the pandemic on the Group as a whole was significantly less than we had originally thought it would be at the outset. We could even close the year with a positive operating result. Our Group has proven its strength. In a time that is characterised by social distancing, we have managed to remain close to our customers, figuratively speaking. We maintain long-standing partnerships with many of them and we know that we owe our positive year-end results to the continuing trust our customers have placed in us. Therefore, we would like to express our sincere gratitude for their loyalty. We will ensure that they can continue to count on the quality of our products and services.

In 2020, we worked on numerous future-looking solutions to ensure that we continue to achieve the highest standards for our customers. For example, we have developed many new machines, components and technologies to drive forward energy-efficient innovations in building construction, transport, air travel and refrigeration. We are also developing new fuel cell systems and automation concepts for battery pack assembly. Our digital tools, such as the Crane Planner, MyJobsite and our Remote Service App have also ushered in new and sustainable ways of working and have allowed us to explore new ways of distributing our products and providing customer service. Today, we can therefore draw a positive overall conclusion from the year 2020. It has shown us that we will get through the pandemic together and it allows us to view the 2021 financial year with optimism.
Brief Portrait of the Group
The Liebherr Group is a technology company with a broadly diversified product programme. The company is one of the world’s largest manufacturers of construction machines, but also offers high-quality, user-oriented products and services in many other fields. The Group’s holding company is Liebherr-International AG, based in Bulle (Switzerland). All its shareholders are members of the Liebherr family. For the family company, long-term success, sustainable development, stability and reliability matter.

Liebherr develops and manufactures an enormous variety of fascinating products. They are renowned on world markets for their high precision, excellent design and particular durability. With its innovations and visionary technologies, the company strives to inspire its customers. In the process, the limits of what was previously possible are constantly being redefined, enabling Liebherr to frequently contribute to technological progress. Working together on these fascinating tasks creates a strong bond that Liebherr’s employees can rely on – across national borders and continents.
10,341 € m turnover

47,925 employees

> 40 production companies

13 product segments

605 € m investments

> 140 companies
Self-concept

The Liebherr Group was founded in 1949 by Hans Liebherr, a man driven by passion, visionary ideas and with a flair for future-looking technology. To this day, Liebherr has demonstrated stability and reliability, thanks to the personal commitment of the company’s owners and the self-concept as a family company, and is known as a pioneer of future-looking innovations with the highest-quality standards. Liebherr is and remains a wholly family owned business with a high degree of freedom of action and decision-making in all of its activities. A high equity ratio and diverse product portfolio allow the Liebherr Group to compensate for market-related economic fluctuations. The value-oriented corporate culture ensures a strong bond and a trusting relationship with partners and customers over years and decades – characterised by fairness and mutual respect. Maintaining integrity as a business partner and job security are important corporate directives.

An elementary part of the company are its employees: each individual contributes with personal ideas and commitment to create great things – no matter how demanding the task at hand. Liebherr reacts flexibly to the wishes of its customers and offers custom-built solutions. With innovative technologies, the limits of what is possible are constantly being redefined. The close customer relationships and the high value placed on customer benefit build the foundations of the Group’s success and form an important part of its tradition as a family company. As descendants of the company founder the family shareholders are conscious of their entrepreneurial responsibility. What matters are long-term success and sustainability as bases for future development and a solid financial standing – profits are reinvested and, by remaining within the company, thus guarantee the future of the Group.

### Liebherr-International AG

<table>
<thead>
<tr>
<th>Company Information</th>
<th></th>
</tr>
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<tbody>
<tr>
<td><strong>Head office</strong></td>
<td>CH-1630 Bulle / FR</td>
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<tr>
<td><strong>Share capital</strong></td>
<td>CHF 100,000,000</td>
</tr>
<tr>
<td><strong>Shareholders</strong></td>
<td>Liebherr family (100 %)</td>
</tr>
</tbody>
</table>
| **Administrative board** | Dr. h.c. Willi Liebherr, Chairman  
Dr. h.c. Isolde Liebherr, Vice-Chairman  
Hubert Liebherr  
Sophie Albrecht  
Jan Liebherr  
Patricia Rüf  
Stéphanie Wohlfarth  
Johanna Platt  
Philipp Liebherr |
| **Managing directors** | Andreas Böhm  
Dr. Rolf Geyer  
Stephan Raemy  
Uwe Rechtsteiner |
| **Auditors**        | Ernst & Young AG, Berne |
The family shareholders active in the Liebherr Group

Dr. h.c. Willi Liebherr  
Chairman of the administrative board of Liebherr-International AG

Dr. h.c. Isolde Liebherr  
Vice-Chairman of the administrative board of Liebherr-International AG

Jan Liebherr  
Member of the administrative board of Liebherr-International AG

Stéfanie Wohlfarth  
Member of the administrative board of Liebherr-International AG

Sophie Albrecht  
Member of the administrative board of Liebherr-International AG

Dr. h.c. Isolde Liebherr  
Vice-Chairman of the administrative board of Liebherr-International AG

Johanna Platt  
Member of the administrative board of Liebherr-International AG

Philipp Liebherr  
Member of the administrative board of Liebherr-International AG

Patricia Rüf  
Member of the administrative board of Liebherr-International AG

Brief Portrait of the Group

From generation to generation

Liebherr is an independent family-run business that is managed jointly by the second and third generations of the family. This continuity as well as a focus on long-term success, sustainable development, stability and reliability are the fundamental principles that guide all management decisions. Liebherr’s administrative board is composed exclusively of family members and is the company’s top decision-making body. It decides on all fundamental policies relating to corporate governance, business development, product policy, and financial and investment policies. In addition to the siblings Dr. h.c. Willi Liebherr and Dr. h.c. Isolde Liebherr, who represent the second generation of the Liebherr family, the board includes Jan Liebherr, Stéfanie Wohlfarth, Sophie Albrecht, Patricia Rüf, Johanna Platt and Philipp Liebherr, who represent the third generation. They ensure that the Group will continue to be inextricably linked with the Liebherr family and run as an independent family business.
The Liebherr Group is a family-owned, independent technology company that has been synonymous with a wide range of products and services in many different technical fields for over 70 years. Liebherr provides tailored, technologically advanced and innovative products and services with real added value to customers in many different industries all over the world. Thinking ahead with the necessary foresight, the Group is already addressing the challenges that customers around the globe will face tomorrow.

**User value**

The Group offers a diverse product programme of 13 product segments, which is unique in its scope and scale, enabling it to shape technological advances in many different industries. Within the Earthmoving product segment, Liebherr produces and distributes a broad portfolio of hydraulic excavators, crawler tractors and crawler loaders, wheel loaders, telescopic handlers as well as mining trucks.

With its Deep Foundation Machines, such as piling and drilling rigs and duty cycle crawler cranes, Liebherr offers a full spectrum of products to meet the modern industry’s needs.

**Products and customer segments**

The Group also offers an extensive range of crane models of every system type, load capacity and size class, to be used in the various areas of application. From all-terrain mobile cranes and telescopic crawler cranes to fast-erecting cranes, the products from Liebherr’s Mobile and Crawler Crane and the Tower Cranes product segments are used around the world, offering the right solution for any purpose.

The Group is also a full-service provider in the Concrete Technology product segment. Liebherr develops and produces truck mixers, mixing plants and concrete pumps, rounding out its portfolio with additional products.
such as mixing and control systems. Within the Material Handling Technology product segment, Liebherr specialises in a vast range of custom-built products and technologies capable of handling enormous volumes. The product programme includes mobile, crawler and electric material handling machines. In addition to the products specially developed for this purpose, Liebherr also supplies modified versions of many models of its construction machines for material handling.

For the mining industry, the Group’s Mining product segment includes powerful excavators, mining trucks and crawler excavators that perform under the most extreme conditions. Liebherr also offers efficient material handling solutions with a wide range of products and innovative models for use in harbours and in the maritime and offshore industry. Products from the Maritime Cranes segment range from mobile harbour cranes to ship and portal cranes as well as port equipment.

In the Aerospace and Transportation Systems product segment, Liebherr offers high-precision components and custom-built system solutions for aircraft, rail vehicles and buses. The Gear Technology and Automation Systems product segment includes high-quality gear machines and automation systems as well as precision measuring equipment and engineering projects. Liebherr also produces a vast array of refrigeration and freezing products for home and commercial use, which feature innovative technologies and modern designs. In the Components segment, the Group specialises in high-performance mechanical, hydraulic and electrical drive and control technology products used in a wide range of industries. Liebherr also operates six luxury hotels in Ireland, Austria and Germany. The Group’s products and services are sold through an international network of its own distribution and sales companies as well as partners with whom Liebherr maintains a long-standing and trusted business relationship.
Customer relations
The Group has worked closely with customers and business partners for years or even decades, and is continuously expanding its global presence to remain close to its customers. Liebherr is highly committed to responding quickly, reliably and flexibly to its customers’ wishes. The Group thrives on bundling its vast technical expertise and extensive knowledge from a wide range of fields and its ability to offer customised solutions. Liebherr strives to deliver excellence for its customers, while constantly redefining the limits of what is possible. As a traditional family business, the Group owes its success to close customer relationships and its strong focus on added value.

Key activities
The Liebherr Group develops, produces and distributes innovative products and services and is the driving force behind many key technologies.

Key resources/added value chain and key partnerships
Liebherr invests heavily in research and development. In this context, the Group also forms partnerships with universities and research institutes worldwide. Thanks to its network of over 40 state-of-the-art production facilities in 17 countries and long-standing partnerships with suppliers inside and outside of the Group, Liebherr is able to offer the highest-quality innovative products at competitive prices. The business model also includes well-organised replacement part logistics and customer-centric services.

Because of its extensive expertise in key technologies, Liebherr has a high degree of independence when it comes to its engineering needs.

Liebherr has a high equity ratio and operates on the principle that the Group’s growth should be predominantly organic, achieved through its own intrinsic strength. In certain cases, the Group is also open to appropriate partnerships and joint ventures.

Earnings and cost structure
Liebherr generates revenue through the sale and rental of products as well as the provision of services. In some product segments, the Liebherr Group benefits from lowering its unit costs by increasing production volumes. In other segments, however, the focus lies on developing custom-built solutions for individual customers. In those segments, Liebherr focuses on adding value, achieving a premium value proposition and offering highly personalised services to its customers. The Group can create synergies through its broad product range and mastery of key technologies, among other things. Its supply chain spans the entire globe.

With its 13 product segments, the Liebherr Group embraces a strategy of diversification, which helps to shield it from economical fluctuations in specific industries or markets. The decentralised corporate structure with clearly organised, independently operating business units also positions Liebherr to respond flexibly to market trends in the competitive global economy. Liebherr is dedicated to long-term success, sustainable development, stability and reliability. The Group’s core objective is to ensure that profits remain within the company, where they are reinvested.

Organisational structure
The Liebherr Group has a decentralised structure. Its parent company is Liebherr-International AG, which exercises executive, coordinating and controlling functions. Independently operating divisional parent companies are responsible for the operational management of the Group’s product segments. This means that research and development, production, marketing and sales for individual product segments are also decentralised. Country-specific activities are often managed within overarching sales and service companies.

This structure offers multiple advantages: on the one hand, it ensures a consistent approach to central corporate issues, while on the other hand, the flat hierarchies within its individual product segments allow Liebherr to respond quickly to the needs of the market, to adapt quickly to changes and swiftly put new ideas into practice.
Development and Outlook
In 2020, the Liebherr Group was unable to match its record performance from the previous year. Group-wide sales totalled €10,341 million, which represents a €1,409 million (12.0%) decline compared to 2019.
Restatement first-time adoption of IFRS 9/15/16

Europe

-11.8%
€ 6,339 m
€ - 847 m

European Union

-11.7%
€ 5,085 m
€ - 676 m

Non-EU countries

-12.0%
€ 1,254 m
€ - 171 m

Asia and Oceania

-4.3%
€ 1,638 m
€ - 73 m

Turnover worldwide € m

<table>
<thead>
<tr>
<th>Year</th>
<th>Turnerover</th>
<th>Change</th>
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<tbody>
<tr>
<td>2016</td>
<td>9,009</td>
<td>-25%</td>
</tr>
<tr>
<td>2017*</td>
<td>9,812</td>
<td>-8.9%</td>
</tr>
<tr>
<td>2018</td>
<td>10,551</td>
<td>+7.5%</td>
</tr>
<tr>
<td>2019</td>
<td>11,750</td>
<td>+11.4%</td>
</tr>
<tr>
<td>2020</td>
<td>10,341</td>
<td>+12.0%</td>
</tr>
</tbody>
</table>

* Restatement first-time adoption of IFRS 9/15/16
Overall economic performance
According to the International Monetary Fund, the global economy shrunk by 3.5% in 2020, less drastically than was assumed at the beginning of the coronavirus pandemic. Industrialised economies shrunk by 4.9%, whilst the economic downturn among emerging and developing nations was far less severe, with a decrease of only 2.4%. China was the only major economy to achieve modest growth (2.3%). The US economy shrunk by 3.4% compared with 2019. The pandemic affected the eurozone far more severely, where economic performance dropped by 7.2% compared with the previous year. The World Trade Organisation reported that international trade volume declined by 9.2%. Around the world, the sale of goods was disrupted, in some cases significantly, by nationwide lockdowns, travel restrictions and planning uncertainties caused by the pandemic.
The Liebherr Group 2020

€ 10,341 m 
(−12.0%)
Sales performance by region

There were significant regional disparities in terms of sales in 2020. There was a downturn in sales in the European Union, which has traditionally been the Group’s strongest sales region. This was primarily due to declining sales in Germany and France; by contrast, business grew in Austria and Poland. Sales in non-EU countries fell as well. The Group also saw a decline in sales in North America, as well as in Central and South America, Africa and the Near and Middle East, all of which reported significantly lower sales than the year before. Meanwhile, business was stable throughout the year in Asia and Oceania. This was thanks largely to strong demand from China and Australia.

Net result for the year

The Liebherr Group achieved net profits of € 7 million in 2020. The operating result decreased compared to 2019, as did the financial result. In view of the year’s special challenges and difficult conditions, this can nevertheless be considered a success.

Sales performance by product area

Although the global economy had already begun to slow down modestly towards the end of 2019, Liebherr still closed out the year with a strong volume of orders which continued into the first quarter of 2020. Starting at the end of the first quarter, however, the coronavirus pandemic began to affect business activities in many markets. This also had an impact on the Group’s sales. With the exception of Refrigeration and Freezing, every product segment experienced a decline in sales. Sales in construction and mining machines reached € 6,848 million, 10.4% lower than in the previous year. This includes the Earthmoving, Material Handling Technology, Deep Foundation Machines, Mobile and Crawler Cranes, Tower Cranes, Concrete Technology and Mining product segments.

The other product segments, including Maritime Cranes, Aerospace and Transportation Systems, Gear Technology and Automation Systems, Refrigeration and Freezing, Components and Hotels, achieved total sales of € 3,493 million, a 15% decrease compared to the previous year.
Employees by regions compared to previous year

North America
1,757 employees (−160)

Central and South America
1,763 employees (−28)

Africa / Near
and Middle East
1,033 employees (−90)

European Union
34,751 employees (−294)

Asia and Oceania
3,900 employees (+30)

Non-EU countries
4,721 employees (+418)

Employees
The qualifications, enthusiasm and commitment of the Group’s employees make a key contribution to its business success. Liebherr’s long-term commitment to its employees is in keeping with its tradition as a family-owned company.

At the end of 2020, the Group employed 47,925 people worldwide. Despite a notable decline in sales, the number of employees decreased only slightly by 124, or 0.3%, compared to the previous year. The number of employees rose in Europe, Asia and Oceania. Meanwhile, there was a decrease in the number of Liebherr employees in North America, Central and South America, Africa, and the Near and Middle East.

Even during the Coronavirus pandemic, Liebherr maintained its reputation as an attractive employer. For instance, the training programme was continued despite the economic uncertainty. In 2020, 400 new trainees and apprentices started their careers at Liebherr locations in Germany, Austria and Switzerland alone.
Research and development

As a high-tech company, Liebherr pursues the goal of making a decisive contribution to shaping technological progress in sectors relevant to the Group. Liebherr invested € 512 million in research and development last year. The bulk of this was used in the development of new products. A large number of joint research projects with universities, other higher education institutions and research institutes were initiated and continued.

Throughout the year 2020, research and development activities focused heavily on the topic of alternative drivetrain technologies. The Liebherr product portfolio now includes multiple fully and partially electric machines and components in product segments such as Mobile and Crawler Cranes, Concrete Technology, Mining and Aerospace and Transportation Systems. These include the world’s first battery-powered crawler cranes, the LR 1250.1 unplugged and the LR 1200.1 unplugged, as well as Liebherr’s first fully electric truck mixers, the ETM 1005 and the ETM 1205.

Liebherr also worked with VA Erzberg to develop a trolley assist system for the T 236 diesel-electric mining truck. Aircraft manufacturer Aerion chose Liebherr as the developer and supplier for the air management system of its new AS2 supersonic business jet. One of the system’s key components will be an electrical air conditioning pack, which contributes to more efficient and greener aircraft operation.

Digitalisation was another focal point of R&D activities. With the help of the Liebherr Remote Service App, a mobile harbour crane of the LHM 420 type was assembled in Campana (Argentina) in May – remotely from Germany for the first time ever. Likewise, in the Refrigeration and Freezing product segment, digitalisation accounted for a major proportion of development activities. This included smart monitoring, in particular, which allows for the monitoring of appliances with a web-based dashboard in research and laboratories, among other things. Liebherr’s Refrigeration and Freezing product segment opened a new location in Ulm (Germany), from where the sales and service Germany and digitalisation departments operate. With its start-up atmosphere, the new Digital Hub is intended to appeal to the digital specialists of the future.

Liebherr is a founding member of the Center Construction Robotics project, which was granted a 10,000 m² plot by RWTH Aachen University in 2020 for a model construction site. Here, an interdisciplinary team of scientists from RWTH Aachen will work with a consortium of European industry leaders to study new construction processes, products, connected machines, robotics and software solutions as well as new training, working and communications concepts.
Investments

The Group has traditionally emphasised the importance of making regular investments in its production facilities and its global distribution and service networks. Last year, the Group invested € 605 million, a decrease of 20% or € 151 million compared to last year. Offset against this was depreciation of € 543 million.

One focus of investment in the year under review was the expansion and modernisation of company locations and the intensification of Liebherr’s global market presence.

In Panama City Liebherr Panama S.A. began building its new headquarters. The company focuses on mining. In Kempten (Germany) Liebherr-Verzahntechnik GmbH opened the “Liebherr Tech-Center”, where high-quality automation systems are tested and demonstrated in a 700 m² test hall.

In the Aerospace and Transportation Systems product segment, Liebherr-Transportation Systems (China) Co., Ltd. started operations at its new production site in Pinghu (Zhejiang Province), which develops, produces and services components and systems for rail transport in China and worldwide. Investments were also made in the Components product segment. To meet demand in the Asian market, a new factory for components is to be built in China. In addition, preparations are under way to begin the assembly of gears in India.
Risk management system and internal control system

In order to ensure the sustainable success of the Group, opportunities and risks are identified at an early stage to be evaluated and controlled. The Group has a continually optimised risk management procedure in place, and an internal control system to help it meet operational, market-related and legal requirements. To ensure the integrated recording, analysis and evaluation of risks, all managers responsible for the risk management and internal control systems used in the individual Group companies are involved. Risks are identified and assessed locally in the individual companies, then countermeasures to limit the risks are introduced and the impacts are evaluated.

This localised approach also makes it possible to identify and assess areas of opportunity efficiently. The information gained about market-related and technological developments is used in opportunities management to reach decisions about future areas of business and production processes. At the corporate level, the current risk situation is regularly reviewed and the effectiveness of the systems and processes used is assessed. The internal audit department monitors compliance with Group guidelines and the implementation of the risk management and internal control systems.
Supplementary report
Events of particular significance which occur after the reporting date should be recorded here, together with their expected impact on the Group’s assets, financial position and earnings. The Liebherr Group had no such events to report after the end of the 2020 business year.

Outlook: 2021
The International Monetary Fund predicts that the global economy will grow by 5.5% in 2021. This reflects the expectation of a vaccine-driven pick-up in economic activity later in the year along with additional stimulus programmes announced in several major economies.

The World Bank is similarly optimistic, predicting a global economic recovery with a growth rate of 4%, assuming that corona vaccinations will become increasingly available throughout the year. In its Global Economic Prospects study published in January 2021, the World Bank stressed that this recovery could be endangered if policymakers fail to get the pandemic under control and implement investment-friendly reforms.

The World Trade Organisation expects a 7.2% growth in global trade in 2021. According to the research network Euroconstruct, global construction volume declined by 7.8% in 2020 due to the coronavirus pandemic. A modest recovery of 4.1% is expected in 2021. In general, the construction industry is optimistic about the future. Following the heavy setbacks the industry suffered in 2020, the International Air Transport Association (IATA) predicts further uncertainty in 2021. Despite the worldwide launch of vaccination campaigns, the number of pre-booked flights at the beginning of the year was still 60% below last year.

In summary, it should be noted that due to the ongoing coronavirus pandemic and the many associated influencing factors, business development in 2021 will continue to be characterised by uncertainty for some time. However, it can be assumed that certain sectors will recover in the course of the year and in part approach the pre-pandemic level.

Individual opportunities and risks
In order to illustrate the individual opportunities and risks, similar types of risks and opportunities have been grouped together.

Overall economic opportunities arise from the aforementioned global recovery of certain industrial sectors. The Liebherr Group is active in many of them, and order intake has already developed favourably across various product segments in the first quarter of 2021.

At the same time, there is still uncertainty about the speed of economic recovery, as it is still too early to tell how the pandemic and its macroeconomic impacts will continue to develop. For instance, it is unclear whether international trade will pick up or continue to decline, or whether the economic policies implemented by many governments can prevent debt from spiralling.

The sections on each of the product segments contain reports on the opportunities and risks relevant to that division. Specific cost variations due to increasing macro-economic uncertainty or business cycles that cannot be directly passed on through contractual price indexation may pose risks that affect the Group’s performance.

Market price risks arise from the operating business, in particular due to exchange rate and interest rate fluctuations. Liebherr monitors these risks continuously and uses appropriate financial instruments to hedge selected transactions. This means that the Group enters into financial transactions only when they are linked to its operational business activity or for hedging purposes. As a matter of principle, Liebherr does not engage in transactions of a speculative nature.

The global nature of our business activities, together with our broadly diversified product base and the risk management system in place in the Group, ensure that the relevant risks are controlled. Based on the currently available information, there are no further identifiable risks which could have a substantial detrimental effect on Liebherr’s assets, financial position and earnings in the 2021 business year and threaten the continuity of the Group as a whole.
**Restatement first-time adoption of IFRS 9 / 15 / 16**  
**Of which, rental fleet**

<table>
<thead>
<tr>
<th>Year</th>
<th>Investments € m</th>
<th>Depreciation € m</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>342**</td>
<td>322**</td>
</tr>
<tr>
<td>2017</td>
<td>751 0.0%</td>
<td>466 + 4.0%</td>
</tr>
<tr>
<td>2018</td>
<td>778 + 3.6%</td>
<td>499 - 7.1%</td>
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<tr>
<td>2019</td>
<td>829 + 6.6%</td>
<td>513 + 2.8%</td>
</tr>
<tr>
<td>2020</td>
<td>756 - 8.8%</td>
<td>541 + 5.5%</td>
</tr>
</tbody>
</table>

*Depreciation varies year over year due to differences in the size of the investment portfolio.*

**Investments include purchases of equipment and furniture for new, replacement and other purposes.**

**Depreciation includes fixed assets and certain intangible assets with recoverable amounts exceeding fair value.**

**Rentals fleet depreciation:**
- **2016:** 342**
- **2017:** 751 0.0%
- **2018:** 778 + 3.6%
- **2019:** 829 + 6.6%
- **2020:** 756 - 8.8%
Reports on the Product Segments

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Earthmoving

Liebherr’s Earthmoving product segment posted sales of € 2,008 million in 2020, representing a € 232 million or 10.4 % decrease compared with the year before.

UK market share stable despite Brexit
The coronavirus pandemic dominated the global markets during the reporting year, and its effects were apparent in nearly every market. The USA were particularly affected. In Europe, sales dropped significantly across the sector, with results varying from one country to another.

The Earthmoving product segment performed in line with these developments and experienced a downturn in sales in all regions. In the European Union, sales fell in France, Spain and Sweden, although the slowdown was not as pronounced in Germany, enabling Liebherr to maintain or even increase its market share. In the non-EU countries, the UK remained stable throughout the reporting period despite the ongoing Brexit negotiations. However, sales were down on the previous year in Switzerland and Norway. Russia developed favourably. In North America, growth slowed in the USA and Canada. In the Near and Middle East, sales continued on a positive trajectory, especially in Saudi Arabia. In Asia and Oceania, sales in Australia were significantly lower than in the previous year; India, however, recorded positive growth.

New products, digitalisation and sustainability
Liebherr launched several new earthmoving machines and technologies in 2020, including the first telescopic wheel loader, L 509 Tele. This versatile machine combines the lifting capacity and reach of a standard telescopic wheel loader with the handling capacity of a classic wheel loader. A highlight of the year was the world premiere of the new TA 230 Litronic articulated dump truck in October, which was unveiled in a dedicated online live stream.

Liebherr is working systematically on various digitalisation and sustainability projects. This includes a strategic partnership with Leica Geosystems, which was announced at the Conexpo trade show (USA). Through this partnership, 2D and 3D machine control systems will be installed into Liebherr’s sixth and eighth generation mobile and crawler cranes on an ex-works basis. Moreover, new assistance systems were introduced for generation 8 crawler excavators. The steadily growing Reman programme, which focuses on extensive recycling and subsequent reprocessing of components, contributes to the circular economy.
Despite the continuing uncertainty caused by the coronavirus pandemic, Liebherr expects to achieve a notable increase in sales in the Earthmoving product segment in 2021. Upcoming government infrastructure programmes, which focus for example on energy supply and e-mobility, are a reason for optimism.

“The launch of the new generation of articulated dump trucks now positions Liebherr as a full-line supplier in the earthmoving area.”
Decline in sales in key markets
A downturn in the global material handling technology market was already evident at the beginning of 2020. However, the situation was further exacerbated by the coronavirus pandemic and its negative impact on the global commodities sector. The material handling market collapsed by as much as 50% in some key regions and countries such as Western Europe, North America and Russia.

The effects of this were also felt at Liebherr. Sales were down in the European Union, primarily in Finland, Spain and Germany, although Austria posted an increase. In non-EU countries, sales growth was favourable in Turkey and Norway, but there was a decline in sales in Russia and Switzerland. The North America region was also affected, with the USA showing a significant drop in revenue and Canada reporting a moderate decline. At the same time, the results from Asia and Oceania were very positive, with growth recorded in Australia, Indonesia and Japan. The product segment also performed well in Central and South America, driven primarily by growth in Brazil.

World premiere of new all-round wheel loaders
The year 2020 was characterised by product innovation in the Material Handling Technology product segment. This included the world premiere of Liebherr’s new mid-range wheel loaders. The L 526, L 538 and L 546 all-round wheel loaders can now be fitted with the “parallel kinematics”

Revenue generated by Liebherr’s Material Handling Technology product segment amounted to € 477 million in 2020, representing a € 152 million or 24.2% decrease compared with the previous year.
industrial lift arm variants, which boast very high holding forces in the upper areas as well as parallel guidance. For the material handling machines LH 22 to LH 35 Industry Litronic, new equipment combinations were developed to provide even greater ranges when performing tasks in the arboricultural and timber industries.

The existing product portfolio was continually expanded to meet market and legislative requirements. Numerous machines were converted to comply with the EU’s Stage V emissions regulation, and the availability of electric drive concepts was further expanded. The product segment also plays an important part in resource conservation by continuing to recycle and reprocess used components as part of the Liebherr Reman programme.

At present, it is difficult to make accurate projections about the future performance of the Material Handling Technology product segment. Current developments give reason for modest optimism and suggest that there may be an upturn in the important markets in 2021.
Deep Foundation Machines

Liebherr’s Deep Foundation Machines product segment posted sales of € 258 million in the 2020 financial year. This represents a € 53 million or 17.0% decrease compared with the year before.

Global market leader in duty cycle crawler cranes
2020 saw a decline in the deep foundation machines sector. This applied in particular to piling and drilling rigs, although the downturn was less pronounced for duty cycle crawler cranes. In general, the industry had to operate in a challenging market. In spite of this, Liebherr managed to maintain a stable market share in the deep foundation engineering sector and could hold its position as a global market leader in duty cycle crawlers.

Liebherr recorded a significant increase in sales in North America, the most important sales region for this product segment. This was driven by favourable growth in the USA. Sales revenues from non-EU countries increased, growth was recorded in Turkey compared to the previous year. There were bigger declines in the European Union, most notably in Germany and France. Business also declined in Asia and Oceania, Africa and the Near and Middle East, and Central America and South America.

A success story continues
Liebherr launched a number of new products in the Deep Foundation Machines product segment, with most of the launches taking place online for the first time. The unveiling of the new LRB 23 piling and drilling rig builds on previous successes in this product segment. The compact all-rounder model boasts a power output of 600 kW and a safety-enhancing assistance system. The HS 8070.1 was the first new generation duty cycle crawler crane to be unveiled. With a load capacity of 70 tonnes it offers a transport option that

“In future, construction machinery will be part of a digital world – this is why Liebherr continues to improve the digital integration of machines.”
enables a transport weight of less than 35 tonnes thanks to self-dismantling. Noise emissions and fuel consumption were lowered significantly.

Besides the development of various assistance systems, predictive maintenance and electrification were two further focal points of research. The MyJobsite service provided a major contribution to the digital integration of deep foundation machines. This digital tool documents and merges data on various machines and their surroundings. The data is then used to generate reports on quality, performance, costs and safety, assisting machine operators and fleet managers to reach the right decisions as they carry out their work. Over the reporting period, the product segment invested primarily in real estate as well as business and operational equipment.

Liebherr expects to achieve a noticeable increase in sales in the Deep Foundation Machines product segment in 2021.
Industry's resilience proves advantageous

Despite the industry's usual resilience, the global mining industry experienced a downturn in 2020. This resulted in losses in revenue and profits in the resources industry. It, however, also made the industry focus on future-looking trends, such as increased digitalisation autonomy, and automation.

The development of revenues in the mining product segment mirrored that of the global market. Business in the core region of Asia and Oceania remained stable, driven by the strong Australian market as well as Mongolia. Developments in Africa and the Near and Middle East were positive. The non-EU countries witnessed a decrease, following a decline in sales in Russia. Sales in North America and Central and South America went down.

T 236 truck goes trolley

Liebherr reached important milestones in the course of 2020. The crawler tractor business delivered the 100th unit. Liebherr also celebrated the production of the 1,000th mining excavator from the manufacturing facility in Colmar (France).

Research and development remained of high importance. New Tier 4 engine configurations were introduced for the PR 776 crawler tractor and for the R 9100B, R 9150B and R 9800 excavators, to match new emissions regulations standards. A new digital product suite, “Operational Excellence”, was introduced in the first ultra-class excavator model including truck loading assistant, performance monitoring, application severity and operational conformance features. The mining equipment portfolio also grew to include the HS 8300 dragline, one of which is already in operation in Brazil.

A highlight was the commissioning of the T 236 diesel-electric truck at the VA Erzberg iron ore mine (Austria). When connected
to the overhead power lines in trolley mode, the full power
capacity of the electric wheel motors of the T 236 can be
translated into speed on grade while the diesel engine idles,
thus reducing emissions and fuel consumption. The first
D9816 engine retrofit option will be commissioned in 2021
on a T 284 mining truck. The mining truck business also
developed a new 305 tonne truck, the T 274.

For 2021, Liebherr expects the mining industry to recover.
Major technology trends such as digitalisation, autonomy
and zero emissions will be a focus of research and develop-
ment activities.

“Thanks to its decentralised network of
suppliers, warehouses and Reman cen-
tres, Liebherr customers have enjoyed
a high level of availability of parts and
services throughout the year.”

Turnover by sales regions

North America 4.9%
Central and South America 9.2%
European Union 1.9%
Africa / Near and Middle East 16.1%
Non-EU countries 7.1%
Asia and Oceania 60.8%

Turnover in € m

- 9.8 % 2019 1,069
          2020 964

Investments in € m

+ 25.0 % 2019 32
          2020 40

Employees

- 3.6 % 2019 4,005
          2020 3,862
Mobile and Crawler Cranes

Revenue generated by the Mobile and Crawler Cranes product segment amounts to €2,504 million in 2020, representing a decrease of €127 million or 4.8% compared with the previous year.

Liebherr with high market share
There was a slight slowdown in growth in the global mobile crane market in 2020, which also created some sideways movement in the crawler cranes market. Demand for telescopic and crawler cranes grew to the many economic stimulus packages that were implemented around the world as well as due to the resurgence of the wind power sector, especially in Europe. Liebherr was able to maintain its share of over 50% in the global telescopic crane market. It also ranks among the top three manufacturers of crawler cranes.

Despite continuing difficulties across the sector, sales continued on a positive trajectory, but were slightly below the previous year. In the product segment’s key markets, the European Union region grew due slightly with highly favourable results in Germany. Sales in the non-EU countries and North America declined. Sales in Central and South America took a downturn, and there was a slight slowdown in growth in the Near and Middle East, although strong growth was recorded in the United Arab Emirates. The Asia and Oceania region remained stable and there was significant growth in South Korea in particular.

Maximum lifting capacity on four axles and Local Zero Emissions
Liebherr successfully presented a number of new products online in 2020. This includes the new LTM 1150-5.3 telescopic crane, which has a maximum load capacity of 150 tonnes and features a 66-metre telescopic boom. Among the other product launches were two of the first battery-powered crawler cranes in the world – the LR 1200.1 unplugged and the LR 1250.1 unplugged. The two cranes match the performance of conventional models whilst featuring electric motors and fulfilling the requirements of the Local Zero Emissions concept. They do not produce any emissions, generate considerably less noise and are CO₂-neutral when powered by sustainably generated electricity. Approximately 750,000 people attended these two online product launches.

Liebherr also set new standards in cost-effectiveness and performance with the LTM 1120-4.1, the most powerful 4-axle
mobile crane on the market. Thanks to its 66-metre boom and high lifting capacity of 120 tonnes, it can handle operations that previously could only be carried out by a 5-axle mobile crane. Research and development efforts sought to continuously optimise the product portfolio and to increase customer value. In terms of investment, the product segment focused primarily on infrastructure and logistics.

In view of the good order situation and the anticipated implementation of economic stimulus packages, Liebherr envisages that sales in the Mobile and Crawler Crane product segment will return to 2019 levels in 2021.

“The previous financial year saw the arrival of many product developments which set new standards in terms of performance, cost-effectiveness and environmental sustainability.”

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<td>North America 23.6%</td>
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Tower Cranes

Revenue generated by the Tower Cranes product segment in 2020 amounted to € 444 million, representing a € 101 million decrease or 18.5% compared with the previous year.

Push for growth in the USA
The global construction industry experienced a downturn in all markets, except for China.

Sales in Liebherr’s Tower Cranes product segment in 2020 consequently fell below the previous year’s figures, with a particularly sharp fall in the EU, the segment’s most important sales region. Among the non-EU countries, Switzerland saw the highest increase in sales. Business also performed very positively in North America, Africa and the Near and Middle East, driven by growth in the USA and Algeria. Sales declined in Central and South America, Asia and Oceania.

Development focus “Construction Site of the Future”
Following the launch of the new EC-B cranes in 2019, out of which three models were fitted with the new fibre rope, the first fibre rope cranes were successfully commissioned in 2020. Another highlight was the product segment’s involvement in the construction of the three-towered LYFE business complex in the Bnei Brak industrial zone (Israel). Working on this construction project, which began in 2018, are six external climbing Liebherr 190 HC-L 8/16 Litronic luffing tower cranes and a Liebherr high-top 280 EC-H 16 Litronic.

“The Construction Site of the Future” was a top research priority in the segment in 2020. Liebherr is a founding member of the Center Construction Robotics project, which was presented with an area of 10,000 m² to serve as a model.
An interdisciplinary team of scientists at RWTH Aachen is working alongside a consortium of European companies to develop the construction site of the future under real conditions. New construction processes and products, networked machines, the use of robots, software solutions as well as teaching, working and communication concepts are put to the test. The segment is also working on alternative drive concepts for mobile cranes.

Liebherr is cautiously optimistic about the year ahead and anticipates a slight increase in sales in the Tower Cranes product segment.
Concrete Technology

The Concrete Technology product segment recorded sales revenues of € 193 million for 2020. This represents a € 22 million or 10.2% decrease compared with the year before.

Growth halted in the concrete sector
The stable growth that the concrete industry had seen in recent years, was dampened in 2020. This was partially due to the disruption of supply chains caused by trade restrictions and bans imposed across international borders. Liebherr’s sales declined in almost all regions in the reporting period, although Africa and the Middle East were notable exceptions. Significant growth was recorded here, partly due to the continually strong performance in Saudi Arabia. The European Union experienced a slight decrease, with Germany and France growing. In the non-EU countries and North America, the decrease was more pronounced. Sales across the other sales regions of the world declined moderately.

Machinery and services of the future
One of Liebherr’s objectives is to become a full-service system supplier of concrete technology. As a result, research and development activities have focused on the machines and services of the future. In 2020, the first pre-series vehicles in the newly developed ETM range were delivered to customers in Europe. In actual use, the truck mixers with electric drum drive show a savings potential of 30% in both diesel consumption and CO₂ emissions. Orders have already been received for 2021. The first fully electric truck mixers were also delivered to customers. The transport vehicles are also all-electric. Each year, 130 tonnes of CO₂ can be saved per truck when powered by electricity from renewable sources. Another highlight of the year was the market launch of Liebherr’s new self-service concrete plant. It gives building material suppliers a uniquely flexible option for supplying their customers, such as small professional buyers or DIYers. Due to the adjustable concrete discharge, the concrete can be collected by anything from small trailers to large truck mix-
Numerous features were added to the Liebherr BCS II control system for this purpose. The customer can specify the quantity and quality of concrete required in advance and generate a QR code to start the mixing process. The pick-up terminal is also easy to operate, making it ideal for customers picking up small quantities of concrete.

For 2021 a moderate recovery of business activities is to be expected and with it an increase in new orders which will remain slightly below pre-pandemic levels.

“With the ETM series and the fully electric truck mixer, Liebherr is actively helping to reduce CO₂ emissions in its truck mixer fleets.”
Global market leader in mobile harbour cranes
The economic uncertainty also impacted the world market for maritime material handling equipment. The sector had to face many challenges, including restrictions on the flow of goods, as well as periodic disruptions in transport networks and supply chains.

In spite of this, Liebherr was able to maintain its position as world market leader in mobile harbour cranes. In the area of port equipment, a year-on-year sales growth in non-EU countries was achieved. The product segments' key market, the EU, remained stable. While demand for reachstackers and ship cranes declined significantly, demand for offshore cranes was slightly above the previous year.

Growth varied among the Maritime Cranes product segment's various sales regions during the reporting period. Significant growth was achieved in non-EU countries, particularly in Russia. Strong growth was recorded in Asia and Oceania, Australia and New Zealand developed well in particular. In the European Union, sales were below the previous year's level. This downward trend also extended to North America, Africa and the Near and Middle East, and Central and South America.

Driving forward digitalisation
Despite global travel restrictions, Liebherr successfully put numerous new cranes into operation throughout the year. A particular highlight was the assembly of an LHM 420 mobile harbour crane in Campana (Argentina) in May. It was the first time that Liebherr service technicians assembled a crane remotely from Germany using the new Liebherr Remote Service app. All customers had free access to the app until the end of 2020 as part of the extended test phase. The first external loading of monopiles for offshore wind turbines by the Liebherr portal crane TCC 78000 in the international port of Rostock (Germany) was another highlight.

Digitalisation topics were the fundamental research and
development focus throughout the reporting period. Work continued on assistance systems as well as on research into semi-autonomous cranes, with a focus on automated bulk material and container handling. The close collaboration with international universities and research institutes, such as ETH Zurich (Switzerland) and the Technical University (TU) of Dresden (Germany), was continued.

Despite the challenging market conditions in the maritime sector, Liebherr remains optimistic that the Maritime Cranes product segment will develop positively in the current financial year.

“The Liebherr Remote Service app is a service tool that uses visual information to support customers more effectively and helps them to avoid unnecessary downtimes.”
Global market situation impacts performance
The world experienced an abrupt decline in air traffic and to a lesser extent in railway traffic, generating serious consequences for operators, aircraft and railway vehicle manufacturers as well as for their suppliers. This also interrupted the product segment’s steady growth of the last years.

The Asia-Pacific aerospace market initially suffered but recovered during the year. The domestic market in China recovered to its pre-pandemic level in October 2020. The region Africa and the Near and Middle East saw a decline in sales. In the European Union, the non-EU countries and the Americas, sales dropped considerably, and recovery will take time.

Working on the transportation of the future
Liebherr supplies major systems and components, including the folding wing tip system, the first of its kind integrated in a civil aircraft, for the new Boeing 777X aircraft, which had its maiden flight in 2020. The all-new business jet Gulfstream G700™ also took off with Liebherr’s pneumatic component package for Rolls Royce’s Pearl 700 engine on board. Liebherr was also selected to develop and supply the integrated air management system for the new US-American AS2 supersonic business jet. Furthermore, Liebherr systems and components entered into service on board Airbus’ extra-large transport aircraft, the BelugaXL. The landing gear overhaul acquisition campaign was also fruitful. Contracts for the overhaul of Embraer E-Jet E1 landing gears were signed with several airlines.

Liebherr enlarged its footprint in the automotive sector. Its fuel cell air compressors are built into the new seven-seater SAIC’s Maxus EUNIQ 7 car, as well as into hydrogen-powered shuttle buses in China. The product segment entered space travel as a new market. Together with a partner and the French Centre National d’Études Spatiales it will develop thermal management capabilities for evaporators and condensers for a mechanically pumped loop cooling system for the next generation of telecommunication satellites. Within the European research project Safe4RAIL-2, Liebherr worked intensively with seven consortium partners on the development of the next generation Train Control and Monitoring System (TCMS). In August, the Liebherr-Transportation Systems (China) Co., Ltd. production site was opened in Pinghu.
(Zhejiang province), which develops, produces and services components and systems for rail transport in China and worldwide.

Liebherr anticipates a recovery period of several years for civil aviation and the aftermarket. For transportation systems, continuous growth in the automotive industry is expected, especially in China.

“In addition to the current crisis, aviation and the railway industry are facing major challenges with regard to climate-neutral travelling. New demands will be levied on the suppliers and Liebherr must prepare for them.”

Turnover by sales regions

- North America: 20.5%
- European Union: 50.6%
- Non-EU countries: 11.6%
- Central and South America: 2.5%
- Africa / Near and Middle East: 1.7%
- Asia and Oceania: 13.1%

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<th>Turnover in € m</th>
<th>% Change</th>
<th>2019</th>
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Germany remains the largest market
The already shrinking order intake and revenues of the machine tool industry developed negatively in the financial year. According to the German Machine Builder’s Association (VDW), international orders in particular fell sharply compared with the previous year. Liebherr saw a decline in sales of gear cutting machines and tools, which is in line with the situation across the sector as a whole. Sales remained stable in the automation systems area, with non-EU countries seeing growth, primarily driven by Switzerland and Turkey. Growth declined in the European Union. Revenues fell slightly in North America due to a weaker US market, with similar developments in Central and South America. Asia and Oceania remained just below the previous year’s level.

Focus on electro mobility
Liebherr was able to present a number of new products in the Gear Technology and Automation Systems product segment in the 2020 business year. During a virtual trade show, the gear technology product area showcased the high-precision LGG 500 gear-grinding machine that was developed for high precision and top performance in heavy-duty applications. Another novelty was the new standardised SECLA clamping system, Liebherr’s own solution for quality combined with short delivery times. In the automation product area, the spotlight was on the PHS all-round pallet handling system, designed for automated solutions from lot size one. Another highlight was the modular product kit for battery pack assembly, which is especially suited for high weight battery packs. This process solution includes linear and area gantries, storage solutions, (automated) transportation and conveyor systems as well as industrial robotics.

Research activities were carried out to develop uniform data interfaces for production facilities among other things.

Revenue generated by the Gear Technology and Automation Systems product segment amounted to € 213 million in 2020, representing a € 30 million or 12.3% decrease year-on-year.
Projects under development included the new LHStation control station and the LHMobile handheld terminal, which facilitates mobile programming and operation. Other development activities focused on automated e-mobility solutions. Investments were made in the maintenance of production sites and in a skiving machine for shaper cutters and hob cutters.

Liebherr expects order volumes to pick up in 2021 in the Gear Technology and Automation Systems product segment. Sales are predicted to be on a par with the previous year.

“Development projects automation focus on e-mobility. The aim is to develop process solutions for battery pack assembly and, above all, to serve technological requirements.”
Liebherr’s Refrigeration and Freezing product segment posted sales of €1,007 million in the 2020 financial year. This corresponds to an increase of €24 million or 2.4% year-on-year.

**Demand in Europe remains stable**

The global market for large home appliances saw a slight overall decline in the reporting year. In spite of this, sales of Liebherr refrigerators and freezers were up on the previous year’s level. Demand for appliances for private households increased slightly, especially due to the growth in demand for freezers. In the commercial sector, demand was down due to a lack of investment readiness. Meanwhile, demand from the laboratory services sector increased.

The Refrigeration and Freezing product segment achieved growth in Europe, with particularly favourable results in Germany, the Netherlands, Austria and Russia. However, there was a slight decrease in sales in Africa and the Near and Middle East. There was also a decline in Asia and Oceania, for example in India. On the other hand, the results from China were highly positive. Sales also declined, in some cases significantly, in North America, Central America and South America.

**World premieres and the “Digital Hub”**

In 2020, Liebherr unveiled an array of new technologies and products at the world’s largest kitchen trade show, “Küchenmeile”. The new generation of integrated refrigerators and freezers was showcased at the show under the product line “Fully Integrated”. The global debut of the new Bio-Fresh feature “HydroBreeze” was a highlight. The innovative technology produces a cold fresh mist every few seconds when the door is open so food stays fresh even longer. This concept was inspired by nature and is based on a weather phenomenon that occurs on the west coast of America in a fertile valley surrounded by desert. Furthermore, the Group launched its first ultra-low-temperature freezers, which are specially designed to be used in research laboratories to store samples and vaccines.

A significant amount of the development work over the reporting year was devoted to digitalisation, with smart monitoring a key area of focus. Investment was primarily directed at the production facilities and modernisation of the...
In October 2020, the new office building for Liebherr-Hausgeräte Vertriebs und Service GmbH was opened in Ulm (Germany) after one year of construction. It is also the home of the global digitalisation team, the “Digital Hub”. The team is responsible for driving forward a range of future-focused digital projects.

Liebherr expects to achieve moderate growth in sales in the Refrigeration and Freezing product segment in 2021.

“The close collaboration between the ‘Digital Hub’ and the sales and service department allows Liebherr to respond even more effectively to market changes and changing customer needs.”
Favourable growth in Asia
Sales in the Components product segment fell slightly in 2020. This mainly affected combustion engines used in decentralised energy systems and the agriculture and forestry sectors in Europe.

By contrast, Asia saw a significant increase in sales, primarily driven by the high demand in the wind energy sector. A key highlight was the delivery of 600 main bearings to a leading OEM to be used in the manufacture of wind turbines with a capacity of 4 MW. The components were delivered just under a year after production of the parts began. Liebherr also received a sizeable order to provide azimuth thrusters for gondola drives on wind turbines. The thrusters were manufactured in the Liebherr plant in Dalian, China. In addition, Liebherr main bearings were used in large tunnel construction projects all around the world. A future-oriented highlight on the way to low-emissions navigation was the serial delivery of what is currently the world’s largest worm slewing drive unit for sail hybrid drives.

Innovating and helping to shape megatrends
The product segment is actively helping to shape megatrends such as digitalisation and connectivity through the development of its own Internet of Things (IoT) solutions and by establishing strategic partnerships. In addition to the various services provided by the Test Centre for Electronics, Liebherr also offers electronic manufacturing services (EMS) to its customers. The new SMD manufacturing testing system and the implementation of new test concepts have produced quality improvements and reduced lead times in electronic component manufacturing.

Innovative hydraulic cylinder solutions for mobile cranes were also a standout feature of the year. The grant of a new patent enabled Liebherr to implement a cylinder piston design, which allows for the production of a hybrid version with carbon fibre reinforced plastic (CFRP). New simulators were also fitted with the friction-optimised cylinder solutions. For the first time, the Liduro frequency converter system was designed as a complete control system with integrated LES 300 energy storage for use with fuel cells. Furthermore, the development of alternative injection concepts to be used for green hydrogen and synthetic fuels began.

Components
Liebherr’s Components product segment, which produces individual components and system solutions for mobile and stationary machinery, recorded sales of €403 million in 2020, which corresponds to a €27 million or 6.3% decrease compared with the year before.
Work on a new components plant began in China to meet demand from the Asian market. In addition, preparations for gearbox assembly in India were initiated. Liebherr is also using new manufacturing technologies and equipment to continue rolling out the production of slewing bearings for high-output onshore and offshore wind turbines.

The product segment anticipates an upturn in future sales, partially due to a new partnership agreement on the supply of V12 gas engines for a prestigious global power company.

“Projects implemented in 2020 and upcoming projects boost our product segment’s global presence and focus on forward-looking, environmentally friendly technologies and solutions.”
Group Companies
The Group

Summary of Group Companies

Europe

Austria
Hotel Löwen Schruns GmbH
Schruns
InterAlpen-Hotel Tyrol GmbH
Telfs
Liebherr-Hausgeräte Lienz GmbH
Lienz
Liebherr-International Austria GmbH
Bischofshofen
Liebherr-MCCtec GmbH
Nenzing
Liebherr Österreich Vertriebs- und Service GmbH
Bischofshofen
Liebherr-Transportation Systems GmbH
Korneuburg
Liebherr-Transportation Systems GmbH & Co KG
Korneuburg
Liebherr-Werk Bischofshofen GmbH
Bischofshofen
Liebherr-Werk Nenzing GmbH
Nenzing
Liebherr-Werk Telfs GmbH
Telfs

Azerbaijan
Liebherr-Azeri LLC
Baku

Bulgaria
Liebherr-Hausgeräte Marica EOOD
Radinovo
Liebherr-Transportation Systems Marica EOOD
Radinovo

Czech Republic
Liebherr-Stavební stroje CZ s.r.o.
Brno

Denmark
Liebherr-Danmark ApS
Hedensted

Finland
Liebherr-Finland Oy Ab
Helsinki

France
Liebherr-Aerospace Toulouse SAS
Toulouse
Liebherr-Aerospace & Transportation SAS
Toulouse
Liebherr-Components Colmar SAS
Colmar
Liebherr-France SAS
Colmar
Liebherr-Grues à Tour SAS
Niederhergheim
Liebherr-Grues Mobiles SAS
Niederhergheim
Liebherr-Location France SAS
Niederhergheim
Liebherr-Malaxage & Techniques SAS
Niederhergheim
Liebherr-Mining Equipment Colmar SAS
Colmar
Liebherr-Mining Equipment SAS
Colmar
Liebherr-Nenzing Equipements SAS
Niederhergheim
Société de l’Aéroport de Colmar SAS
Colmar
Germany

**Hans Liebherr-Hilfe e. V.**  
Biberach an der Riss

**Liebherr-Aerospace Lindenberg GmbH**  
Lindenberg

**Liebherr-Aviation GmbH**  
Biberach an der Riss

**Liebherr-Baumaschinen Vertriebs- und Service GmbH**  
Kirchdorf an der Iller

**Liebherr-CMCtec GmbH**  
Biberach an der Riss

**Liebherr-Components GmbH**  
Biberach an der Riss

**Liebherr-Components Biberach GmbH**  
Biberach an der Riss

**Liebherr-Components Deggendorf GmbH**  
Deggendorf

**Liebherr-Components Kirchdorf GmbH**  
Kirchdorf an der Iller

**Liebherr-Elektronik GmbH**  
Lindau

**Liebherr-EMtecc GmbH**  
Kirchdorf an der Iller

**Liebherr-Ettlingen GmbH**  
Ettlingen

**Liebherr-Hausgeräte GmbH**  
Ochsenhausen

**Liebherr-Hausgeräte Ochsenhausen GmbH**  
Ochsenhausen

**Liebherr-Hausgeräte Vertriebs- und Service GmbH**  
Ochsenhausen

**Liebherr-Hydraulikbagger GmbH**  
Kirchdorf an der Iller

**Liebherr-International Deutschland GmbH**  
Biberach an der Riss

**Liebherr-IT Services GmbH**  
Kirchdorf an der Iller

**Liebherr-Logistics GmbH**  
Kirchdorf an der Iller

**Liebherr-MCCtec Rostock GmbH**  
Rostock

**Liebherr-MCCtec Vertriebs- und Service GmbH**  
Hamburg

**Liebherr-Mietpartner GmbH**  
Ludwigshafen am Rhein

**Liebherr-Mischtechnik GmbH**  
Bad Schussenried

**Liebherr-Purchasing Services GmbH**  
Biberach an der Riss

**Liebherr-Transportation Systems Mannheim GmbH**  
Mannheim

**Liebherr-Verzahntechnik GmbH**  
Kempten

**Liebherr-Werk Biberach GmbH**  
Biberach an der Riss

**Liebherr-Werk Ehingen GmbH**  
Ehingen (Donau)

**Liebherr-Wohnungsbau GmbH**  
Kirchdorf an der Iller

Hungary

**Liebherr-Építőipari Gépek Magyarország Kft.**  
Györ

Ireland

**Killarney Hotels Ltd.**  
Killarney

**Liebherr-Construction Equipment Ireland Limited**  
Rathcoole

**Liebherr Container Cranes Ltd.**  
Killarney
Europe

Italy
Liebherr-EMtec Italia S.p.A.
Lallio
Liebherr-Italia S.p.A.
Monfalcone
Liebherr-Utensili s.r.l.
Collegno

The Netherlands
Liebherr-Maritime Benelux B.V.
Amersfoort
Liebherr-Nederland B.V.
Amersfoort

Norway
Liebherr-Norge AS
Ingeberg

Poland
Liebherr-Polska sp. z o.o.
Ruda Śląska

Portugal
Liebherr Portugal, Lda.
Venda do Pinheiro

Romania
Liebherr-Romania S.R.L.
Bucarest

Russia
Liebherr-Aerospace Nizhny Novgorod OOO
Moscow
Liebherr-Aerospace Russland OOO
Moscow
Liebherr-Nizhny Novgorod OOO
Nizhny Novgorod
Liebherr-Russland OOO
Moscow

Sweden
Liebherr-Sverige AB
Västerås

Switzerland
Eglesia AG
Bulle
Liebherr-Baumaschinen AG
Reiden
Liebherr-Components AG
Nussbaumen
Liebherr-Component Technologies AG
Bulle
Liebherr-Export AG
Nussbaumen
Liebherr-Hotels AG
Bulle
Liebherr-Industrieanlagen AG
Bulle
Liebherr-International AG
Bulle
Liebherr-Intertrading AG
Bulle
Liebherr Machines Bulle SA
Bulle
Mariso Bulle S.A.
Bulle

Spain
Liebherr Iberica, S. L.
Azuqueca de Henares
Liebherr Industrias Metálicas, S. A.
Pamplona

Turkey
Liebherr Makine Ticaret Servis Limited Şirketi
Istanbul
Africa / Near and Middle East

Algeria
Liebherr Algérie, EURL
Algiers

Ghana
Liebherr-Ghana Ltd.
Accra

Morocco
Liebherr-Maroc SARL
Casablanca

Mozambique
Liebherr-Mozambique, Lda.
Maputo

Nigeria
Liebherr-Nigeria Ltd.
Abuja (90%)

Saudi Arabia
Saudi Liebherr Company Ltd.
Jeddah (60%)

South Africa
Liebherr-Africa (Pty) Ltd
Springs

United Arab Emirates
Liebherr Equipment Services Middle East L.L.C.
Dubai
Liebherr Middle East FZE
Dubai

Zambia
Liebherr Zambia Ltd.
Lusaka
North America

Canada
Liebherr-Canada Ltd.
Burlington, ON

Mexico
Liebherr Mexico, S. de R. L. de C. V.
Mexico City
Liebherr Monterrey, S. de R. L. de C. V.
Monterrey
Liebherr Servicios Monterrey, S. de R. L. de C. V.
Monterrey

USA
HL Farm, LLC
Newport News, VA
Liebherr Aerospace Saline, Inc.
Saline, MI
Liebherr-America, Inc.
Newport News, VA
Liebherr Automation Systems Co.
Saline, MI
Liebherr Gear Technology, Inc.
Saline, MI
Liebherr Mining Equipment Newport News Co.
Newport News, VA
Liebherr USA, Co.
Newport News, VA

Central and South America

Argentina
Liebherr-Argentina S.A.
Buenos Aires

Brazil
Liebherr Aerospace Brasil Eireli
Guaratinguetá
Liebherr Brasil Eireli
Guaratinguetá

Chile
Liebherr Chile SpA
Santiago de Chile

Colombia
Liebherr Colombia SAS
Bogotá D.C.

Panama
Liebherr Panama S.A.
Panama City

Peru
Liebherr Peru S.A.C.
Lima
Asia and Oceania

Australia
Liebherr-Australia Pty. Ltd.
Adelaide

India
Liebherr Appliances India Private Limited
Mumbai
Liebherr CMCtec India Private Limited
Pune
Liebherr India Private Limited
Mumbai
Liebherr Machine Tools India Private Limited
Bangalore (60%)

Indonesia
PT. Liebherr Indonesia Perkasa
Balikpapan

Japan
Liebherr Japan Co., Ltd.
Yokohama

Kazakhstan
Liebherr Kasachstan TOO
Almaty

Malaysia
Liebherr Appliances Kluang SDN. BHD.
Kluang
Liebherr Sales Kluang SDN. BHD.
Kluang

New Caledonia
Liebherr-Nouvelle-Calédonie SAS
Nouméa

PR China
Liebherr (China) Co., Ltd.
Shanghai
Liebherr (HKG) Limited
Hong Kong SAR
Liebherr LAMC Aviation (Changsha) Co., Ltd.
Changsha (50%)
Liebherr Machinery (Dalian) Co., Ltd.
Dalian
Liebherr Purchasing (Dalian) Co., Ltd.
Dalian
Liebherr Transportation Systems (China) Co., Ltd.
Pinghu
Xuzhou Liebherr Concrete Machinery Co., Ltd.
Xuzhou
Zhejiang Liebherr Zhongche
Transportation Systems Co., Ltd.
Zhuji (70%)

Singapore
Liebherr-Singapore Pte Ltd
Singapore

South Korea
Liebherr Mobile Cranes Korea Ltd.
Seoul

Thailand
Liebherr (Thailand) Co., Ltd.
Rayong
Consolidated Financial Statements

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## Consolidated Balance Sheet

<table>
<thead>
<tr>
<th>Assets in € m</th>
<th>Notes</th>
<th>31/12/2020</th>
<th>%</th>
<th>31/12/2019</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intangible assets</td>
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<tr>
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<td>1.2</td>
<td>196</td>
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<tr>
<td>Deferred tax assets</td>
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<td>236</td>
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<td>323</td>
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<tr>
<td><strong>Non-current assets</strong></td>
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<td><strong>29.2</strong></td>
<td><strong>4,372</strong></td>
<td><strong>30.6</strong></td>
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<tr>
<td>Inventories</td>
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<td>29.8</td>
<td>4,425</td>
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<tr>
<td>Receivables</td>
<td>4.2/4.3</td>
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<td>15.2</td>
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<td>16.0</td>
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<tr>
<td>Income tax receivables</td>
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<td>103</td>
<td>0.7</td>
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<tr>
<td>Current financial assets</td>
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<td>1,424</td>
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<td>1,377</td>
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<td>14.8</td>
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<td>12.1</td>
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<td><strong>Current assets</strong></td>
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<td><strong>70.8</strong></td>
<td><strong>9,916</strong></td>
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<tr>
<td><strong>Total assets</strong></td>
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<td><strong>14,288</strong></td>
<td><strong>100.0</strong></td>
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<tr>
<td>Equity and liabilities in € m</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Subscribed capital</td>
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<td>Revenue reserves</td>
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<td>0.5</td>
<td>62</td>
<td>0.4</td>
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<td><strong>Equity of Liebherr-International AG shareholders</strong></td>
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<td><strong>7,768</strong></td>
<td><strong>56.6</strong></td>
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<tr>
<td>Non-controlling interests</td>
<td>16</td>
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<td></td>
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<tr>
<td><strong>Equity</strong></td>
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<td><strong>7,884</strong></td>
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<td>Post-employment benefits</td>
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<td>60</td>
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<td>Other non-current liabilities</td>
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<td>82</td>
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<tr>
<td><strong>Non-current liabilities</strong></td>
<td></td>
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<td><strong>2,491</strong></td>
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<td>Current financial liabilities</td>
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<td>6.7</td>
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<td>Payments received in advance</td>
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<td>2.1</td>
<td>346</td>
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<td>Income tax liabilities</td>
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<td>112</td>
<td>0.8</td>
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<tr>
<td>Current provisions</td>
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<td>Other current liabilities</td>
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<tr>
<td><strong>Current liabilities</strong></td>
<td></td>
<td><strong>3,372</strong></td>
<td><strong>24.6</strong></td>
<td><strong>3,913</strong></td>
<td><strong>27.4</strong></td>
</tr>
<tr>
<td><strong>Total equity and liabilities</strong></td>
<td></td>
<td><strong>13,733</strong></td>
<td><strong>100.0</strong></td>
<td><strong>14,288</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
## Consolidated Income Statement

<table>
<thead>
<tr>
<th></th>
<th>Notes</th>
<th>31/12/2020</th>
<th>%</th>
<th>31/12/2019</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales revenue</td>
<td>11</td>
<td>10,341</td>
<td>95.2</td>
<td>11,750</td>
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<td>Increase or decrease of work in progress and finished goods</td>
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<td>-155</td>
<td>-1.4</td>
<td>7</td>
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<tr>
<td>Other own work capitalised</td>
<td></td>
<td>329</td>
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<td>Other operating income</td>
<td></td>
<td>344</td>
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<td>257</td>
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<tr>
<td><strong>Operating income</strong></td>
<td></td>
<td><strong>10,859</strong></td>
<td><strong>100.0</strong></td>
<td><strong>12,326</strong></td>
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<tr>
<td>Cost of materials</td>
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<td>-5,452</td>
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<td>Personnel expenses</td>
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<td>-26.2</td>
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<tr>
<td>Depreciation on non-current assets</td>
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<td>-543</td>
<td>-5.0</td>
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<td>-4.4</td>
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<tr>
<td>Other operating expenses</td>
<td></td>
<td>-1,601</td>
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<td>-1,903</td>
<td>-15.4</td>
</tr>
<tr>
<td><strong>Operating expenses</strong></td>
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<td><strong>-96.1</strong></td>
<td><strong>-11,723</strong></td>
<td><strong>-95.1</strong></td>
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<tr>
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<td><strong>3.9</strong></td>
<td><strong>603</strong></td>
<td><strong>4.9</strong></td>
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<tr>
<td>Finance income</td>
<td></td>
<td>617</td>
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<td>603</td>
<td>4.9</td>
</tr>
<tr>
<td>Finance cost</td>
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</tr>
<tr>
<td>At equity result</td>
<td></td>
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<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Finance result</strong></td>
<td></td>
<td><strong>-138</strong></td>
<td><strong>-1.3</strong></td>
<td><strong>145</strong></td>
<td><strong>1.2</strong></td>
</tr>
<tr>
<td><strong>Result before tax</strong></td>
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<td><strong>2.6</strong></td>
<td><strong>748</strong></td>
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</tr>
<tr>
<td>Taxes on income</td>
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</tr>
<tr>
<td><strong>Result after tax</strong></td>
<td></td>
<td><strong>7</strong></td>
<td><strong>0.1</strong></td>
<td><strong>429</strong></td>
<td><strong>3.5</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which shareholders of Liebherr-International AG</td>
<td></td>
<td>7</td>
<td>0.1</td>
<td>429</td>
<td>3.5</td>
</tr>
<tr>
<td>of which non-controlling interests</td>
<td></td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
</tbody>
</table>
## Consolidated Statement of Comprehensive Income

<table>
<thead>
<tr>
<th></th>
<th>31/12/2020</th>
<th>31/12/2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result after tax</td>
<td>7</td>
<td>429</td>
</tr>
<tr>
<td>Post-employment benefits</td>
<td>–6</td>
<td>–148</td>
</tr>
<tr>
<td>Deferred tax</td>
<td>–34</td>
<td>31</td>
</tr>
<tr>
<td><strong>Items not recycled to profit or loss</strong></td>
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<td><strong>–117</strong></td>
</tr>
<tr>
<td>Foreign exchange translation differences</td>
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<td>40</td>
</tr>
<tr>
<td>Changes of fair value in cash flow hedges</td>
<td>74</td>
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<td>Deferred tax</td>
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<td>7</td>
</tr>
<tr>
<td><strong>Items recycled to profit or loss</strong></td>
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<td><strong>26</strong></td>
</tr>
<tr>
<td>Other comprehensive income</td>
<td>–83</td>
<td>–91</td>
</tr>
<tr>
<td><strong>Comprehensive income</strong></td>
<td><strong>–76</strong></td>
<td><strong>338</strong></td>
</tr>
<tr>
<td>of which shareholders of Liebherr-International AG</td>
<td>–76</td>
<td>338</td>
</tr>
<tr>
<td>of which non-controlling interests</td>
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<td>0</td>
</tr>
</tbody>
</table>

## Consolidated Statement of Changes in Equity

<table>
<thead>
<tr>
<th></th>
<th>Subscribed capital</th>
<th>Value fluctuations on financial instruments</th>
<th>Foreign exchange translation differences</th>
<th>Other revenue reserve</th>
<th>Equity of Liebherr-International AG shareholders</th>
<th>Non-controlling interests</th>
<th>Group equity</th>
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<tbody>
<tr>
<td><strong>31/12/2018</strong></td>
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<td>40</td>
<td>–117</td>
<td>–91</td>
<td>0</td>
<td>–91</td>
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<tr>
<td><strong>Comprehensive income</strong></td>
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<td></td>
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<tr>
<td>Dividends</td>
<td></td>
<td>–22</td>
<td>–22</td>
<td>–22</td>
<td>–2</td>
<td>–24</td>
<td></td>
</tr>
<tr>
<td>Changes in shares of noncontrolling interests</td>
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<td>0</td>
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<td>0</td>
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<td>0</td>
</tr>
<tr>
<td><strong>31/12/2019</strong></td>
<td>62</td>
<td>–8</td>
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<td>7,775</td>
<td>7,869</td>
<td>15</td>
<td>7,884</td>
</tr>
<tr>
<td>Result after tax</td>
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<td>7</td>
<td></td>
<td>7</td>
<td>0</td>
<td>7</td>
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<tr>
<td>Other comprehensive income</td>
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<td>61</td>
<td>–104</td>
<td>–40</td>
<td>–83</td>
<td>0</td>
<td>–83</td>
</tr>
<tr>
<td><strong>Comprehensive income</strong></td>
<td>61</td>
<td>–104</td>
<td>–33</td>
<td>–76</td>
<td></td>
<td>0</td>
<td>–76</td>
</tr>
<tr>
<td>Dividends</td>
<td></td>
<td>–24</td>
<td>–24</td>
<td>–24</td>
<td>0</td>
<td>–24</td>
<td></td>
</tr>
<tr>
<td>Changes in shares of non-controlling interests</td>
<td>–1</td>
<td>–1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>31/12/2020</strong></td>
<td>62</td>
<td>53</td>
<td>–64</td>
<td>7,717</td>
<td>7,768</td>
<td>16</td>
<td>7,784</td>
</tr>
<tr>
<td>Description</td>
<td>31/12/2020</td>
<td>31/12/2019</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>------------</td>
<td>------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Result after tax</td>
<td>7</td>
<td>429</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation on non-current assets</td>
<td>543</td>
<td>541</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value fluctuations marketable securities (current assets)</td>
<td>7</td>
<td>–121</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gain / Loss on disposal of non-current assets</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change of provisions and post-employment benefits</td>
<td>88</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other non-liquid expenses / income</td>
<td>190</td>
<td>–16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change of stock</td>
<td>195</td>
<td>110</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change of receivables and other current assets</td>
<td>227</td>
<td>24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change of other liabilities</td>
<td>–289</td>
<td>–31</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change of rental fleet</td>
<td>–122</td>
<td>–19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net cash flow from operating activities</strong></td>
<td>848</td>
<td>973</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payment for investments in intangible assets</td>
<td>–10</td>
<td>–33</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payment for investments in tangible assets</td>
<td>–250</td>
<td>–402</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payment for investments in marketable securities in current assets</td>
<td>–112</td>
<td>–103</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proceeds from sales of intangible assets</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proceeds from sales of tangible assets</td>
<td>14</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proceeds from sales of marketable securities (current assets)</td>
<td>58</td>
<td>90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other proceeds from investing activities</td>
<td>15</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net cash flow from investing activities</strong></td>
<td>–285</td>
<td>–424</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividends paid, other distributions and equity capital repaid</td>
<td>–24</td>
<td>–24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proceeds from current or non-current financial liabilities</td>
<td>438</td>
<td>400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repayment of current or non-current financial liabilities</td>
<td>–643</td>
<td>–442</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change non-controlling interests</td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net cash flow from financing activities</strong></td>
<td>–228</td>
<td>–66</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net decrease / increase in liquid funds</strong></td>
<td>335</td>
<td>483</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign exchange translation difference on liquid funds at beginning of period and on cash flows</td>
<td>–27</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liquid funds at beginning of period</td>
<td>1,728</td>
<td>1,239</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Liquid funds at end of period</strong></td>
<td>2,036</td>
<td>1,728</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income tax paid and reimbursed</td>
<td>–184</td>
<td>–322</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest paid</td>
<td>–32</td>
<td>–38</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest received</td>
<td>27</td>
<td>56</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1 Corporate information and business activity
The company was founded in 1949 by Dr. Hans Liebherr. Currently, the family business has more than 47,000 employees working in more than 140 companies around the world. The share capital of Liebherr-International AG, Bulle (Switzerland) amounting to € 62 million (CHF 100 million) is held exclusively by the Liebherr family.

For the construction sector and the mining industry, the Group develops, produces and distributes construction cranes, mobile cranes, crawler cranes, hydraulic excavators, material handlers, duty cycle crawler cranes, wheel loaders, crawler loaders and tractors, pipelayers, telescopic handlers, mining trucks as well as concrete mixing plants, concrete pumps and truck mixers worldwide. In addition, Liebherr develops, produces and distributes ship cranes, floating cranes, offshore cranes, container and mobile harbour cranes for the cargo handling industry worldwide. The activities range across machine tools, automation systems and engineering projects in the machine and plant construction industry, and landing gears, flight control and actuation systems as well as air management systems in the aerospace industry. Furthermore, Liebherr manufactures equipment for rail vehicles in the transportation technology area. For household and commercial refrigeration and freezing, Liebherr produces a variety of products with high benefits for the end users. In the component area the Group specialises in the development, design and manufacture of products in the mechanical, hydraulic and electric drive and control categories. Moreover, Liebherr operates six hotels in Ireland, Austria and Germany.

2 Accounting policies
2.1 General principles
The Group’s consolidated financial statements for the year ended 31 December 2020 are prepared following the standards of the International Accounting Standards Board (IASB) in London.

They are in accordance with all International Financial Reporting Standards (IFRS) and interpretations by the International Financial Reporting Interpretations Committee (IFRIC) applicable for annual periods beginning on or after 1 January 2020.

The accounting and reporting principles applied to these consolidated financial statements comply with Swiss Corporation Law as well as with IFRS. The prior year values are prepared in accordance with the same principles, insofar as newly applicable standards also apply to prior periods.

The annual financial statements are prepared according to the historical cost principle with transactions being recognised and reported in the period when they occur. Any divergence from this principle is specifically mentioned. The reporting period of Liebherr-International AG and its subsidiaries ends on 31 December. The functional currency is the euro, as it is the predominant currency in the Group.

The measures taken by individual governments and local authorities in connection with the spread of the coronavirus in Europe since the beginning of March 2020 have a differentiated impact on the Liebherr Group’s business activities and turnover. In preparing the consolidated financial statements, the increased uncertainties related to Covid-19, e.g. revenue recognition, inventory valuation or leases, were taken into account.

2.2 Published and newly applied standards, interpretations and amendments
The following new standards, interpretations and amendments were relevant for Liebherr in 2020.

IAS 1 and IAS 8
The IASB has issued amendments to IAS 1 and IAS 8 to sharpen the definition of “material” and to harmonise the various definitions in the framework and in the standards themselves. The amendments are effective for financial years beginning on or after 1 January 2020. Earlier application is permitted.
**IFRS 7 and IFRS 9**

The IASB has issued amendments to IFRS 9, IAS 39 and IFRS 7 as a first response to the potential impact of IBOR reform on financial reporting. The published amendments address financial reporting issues in the period before an existing reference rate is replaced with an alternative rate and address the impact on certain hedge accounting requirements in IFRS 9. In particular, the amendments affect certain hedge accounting requirements, whereby these amendments are applied on the assumption that the reference rate on which the hedged cash flows and the cash flows from the hedging instrument are based is not changed by the reform of the reference rate.

The amendments are effective for reporting periods beginning on or after 1 January 2020.

**Framework**

The IASB issued its revised framework in 2018. Together with the revised framework, the IASB also issued amendments to the references to the framework in individual standards and interpretations. Liebherr has applied the amendments as of 1 January 2020.

**IFRS 16 and Covid-19**

The IASB has taken measures around IFRS 16 to make it easier for lessees to account for leases during the coronavirus pandemic. Accordingly, the lessee is granted the right to choose whether to continue to revalue the contract or to apply simplification. Under simplification, for example, the lessee no longer has to assess whether a change related to the coronavirus pandemic also constitutes a modification of the lease, provided that certain criteria are met in the contract modifications. However, the Group does not exercise this option. These amendments are applicable for financial years beginning on or after 1 June 2020.

**2.3 Basis of consolidation**

The consolidated financial statements are prepared based on the individual financial statements of Liebherr-International AG and its subsidiaries, which are audited by independent auditors and prepared using consistent accounting policies. The consolidated financial statements include the annual financial statements of Liebherr-International AG as a parent company and of all subsidiaries in which Liebherr-International AG directly or indirectly holds a majority of voting rights, or otherwise controls according to IFRS 10.

The following company has been established during the financial year 2020:

- Liebherr Österreich Vertriebs- und Service GmbH, Bischofshofen (Austria).

Acquired companies are fully consolidated from the time when the Group has control according to IFRS 10. They are accounted for using the purchase method under which identifiable assets, liabilities and contingent liabilities are measured at fair value on the date of acquisition. Any remaining residual value is recorded as goodwill in the respective functional currency of the company acquired. Any goodwill is not systematically amortised, but is reviewed for impairment at least on an annual basis.

Sold companies are deconsolidated at the time the Group ceases to have control and any gain or loss is recognised in the income statement.

Investments for which the Group does not exercise control but a significant influence are classified as associates or joint ventures and accounted for using the equity method according to IAS 28 and IFRS 11. The Group’s share of net assets is presented in the balance sheet under shares at equity and the share of profit of joint ventures and associates is shown in the income statement under at equity result.

The consolidated financial statements include investments in joint ventures and associate companies. Material investments are as follows:

- Fors AG, Studen (Switzerland)
- Somatel-Liebherr Spa, Ain Smara (Algeria)
- OEMServices SA, Tremblay-en-France (France)
- Aerospace Transmission Technologies GmbH, Friedrichshafen (Germany)
2.4 Translation of foreign currency

Foreign currency transactions are converted at the spot rate as of the transaction date. Monetary assets and liabilities in foreign currency are translated at the balance sheet date exchange rate. All gains and losses are recognised in the income statement. Assets and liabilities in financial statements of subsidiaries are converted to euros using the balance sheet date exchange rate. For the translation of the income statement and the cash flow statement, the average exchange rate of the annual period is used. Exchange rate differences arising from the conversion of the income statement of affiliated companies are recognised separately in the other comprehensive income until disposal.

For the most significant currencies, the following exchange rates have been applied:

<table>
<thead>
<tr>
<th>Country</th>
<th>Currency</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switzerland</td>
<td>CHF 1</td>
<td>0.9258</td>
<td>0.9344</td>
</tr>
<tr>
<td>USA</td>
<td>USD 1</td>
<td>0.8149</td>
<td>0.8775</td>
</tr>
<tr>
<td>Great Britain</td>
<td>GBP 1</td>
<td>1.1123</td>
<td>1.1254</td>
</tr>
<tr>
<td>Australia</td>
<td>AUD 1</td>
<td>0.6291</td>
<td>0.6047</td>
</tr>
<tr>
<td>Russia</td>
<td>RUB 1</td>
<td>0.0109</td>
<td>0.0122</td>
</tr>
</tbody>
</table>

2.5 Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. Purchases and sales of financial instruments are recognised using the trading date.

Financial assets and liabilities are recognised when the Liebherr Group becomes a party to the contractual obligations of the instrument. Financial assets are derecognised when the contractual rights to receive cash flows are fully transferred to a third party or they have expired. In cases where the rights to receive cash flows are neither transferred nor retained, a derecognition is only relevant to the extent that control has been transferred. If the Group retains control, the Group continues to recognise the instrument to the extent of its continuing involvement. A financial liability is not derecognised until the liability is extinguished, i.e. when the obligation specified in the contract is discharged or cancelled or expires.

The adoption of IFRS 9 resulted in a change with respect to the classification and measurement of financial instruments. The initial and subsequent measurement of the various financial instruments used by the Liebherr Group depends on the business model and the cash flow structure. If the contractual details of the financial instrument give rise to cash flows that are solely payments of principal and interest on the principal amount outstanding, Liebherr will classify them as “Amortised cost” otherwise as “Fair value through profit or loss”. Thus, Liebherr recognises financial instruments that are recognised and measured differently depending on their allocation to the categories specified in IFRS 9.

Financial instruments at fair value through profit or loss (fvtpl)

This category includes financial assets and liabilities classified upon initial recognition at fair value through profit or loss and financial assets, inclusive of derivatives, i.e. derivatives held for trading and not held as a hedging instrument according to IFRS 9. All financial instruments in this category are measured at fair value with gains or losses arising from changes in fair value recognised in the income statement in the relevant period (finance income or finance cost). In general, the fair value of the financial instrument base on market prices (Level 1 Inputs and Level 2 Inputs of the fair value hierarchy). Valuation techniques (Level 3 Inputs) using non-observable input parameters are not applied. There
were no financial instruments whose fair values could not be determined with sufficient reliability.

**Amortised cost**
This category represents loans granted by Liebherr Group and accounts receivable trade. Financial assets within this category are recognised at fair value plus transaction costs that are directly attributable to the acquisition or issue of the financial asset upon initial recognition and subsequently measured at amortised cost. At each balance sheet date or under certain circumstances (e.g. significant financial difficulties of the debtor), the carrying amount of the financial instruments in this category are assessed for any impairment. Any impairment losses, which are determined by comparing the carrying value of the instrument to the fair value, are recognised in the income statement. If there is objective substantial evidence in subsequent periods that the impairment of an asset is no longer applicable, the previously recorded impairment loss is to be reversed. However, the reversal of the impairment loss may not create a carrying value that exceeds what the carrying value would have been if normal amortisation charges had been considered (not considering the impairment).

**Other financial liabilities**
Other financial liabilities comprise all financial liabilities with the exception of derivatives. Financial liabilities are recognised initially at fair value including transaction costs. They are subsequently measured at amortised cost using the effective interest method. In addition to actual interest payments, finance costs include annual compound interest and pro rata transaction costs.

**Financial guarantee contracts**
A financial guarantee contract is a contract that requires the issuer to make specified payments to reimburse the holder for a loss. This loss incurs when a specified debtor fails to make payments in accordance with the original or modified terms of a debt instrument. In some cases, the creditworthiness of customers is guaranteed by the Liebherr Group to the financing party, i.e. a financial guarantee contract is issued.
3 Non-current assets

3.1 Intangible assets

Intangible assets acquired separately are measured initially at acquisition costs. Internally generated intangible assets from which the Group expects to receive a future benefit and which can be measured reliably are capitalised at their corresponding production costs. The production costs include all costs directly attributable to the production process and a proportionate share of production-related overheads. Borrowing costs are not capitalised, as by definition intangible assets are not qualifying assets.

Development costs for new products are not capitalised, as the future economic benefit can only be demonstrated after a regulatory approval and a successful launch of the products in the market.

All intangible assets are amortised over the lower of their expected economic useful life or the contractual length using the straight-line method. Intangible assets with indefinite useful lives are not amortised but are tested for impairment annually.

The estimated useful lives of the major classes of intangible assets are as follows:

<table>
<thead>
<tr>
<th>Asset Type</th>
<th>Useful Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concessions</td>
<td>3 years</td>
</tr>
<tr>
<td>Industrial property rights and similar rights</td>
<td>3 years</td>
</tr>
<tr>
<td>Licences</td>
<td>3 years</td>
</tr>
<tr>
<td>Software</td>
<td>3–5 years</td>
</tr>
</tbody>
</table>

3.2 Tangible assets

Tangible assets are measured at costs less cumulative depreciation and cumulative impairment. As a depreciation method the straight-line method is used with a depreciation period corresponding to the useful life. Land is not depreciated on a systematic basis. Maintenance costs are capitalised when they extend the useful life or the production capacity of the asset. Other maintenance costs and repairs are recognised in the income statement as incurred.

Any gain or loss arising from the disposal of an asset is included in other operating income or expenses. The disposal of rental machines is recognised as revenue. The reversal of the related remaining book value from the disposal is treated as cost of materials. Tangible assets are derecognised upon disposal or when no future economic benefit is expected from their use.

Borrowing costs directly attributable to the purchase, construction or manufacturing of a qualified asset are capitalised during the period until the asset is brought into service and afterwards depreciated over the useful life of the asset. Other borrowing costs are treated as expenses.

The estimated useful lives of tangible assets are as follows:

<table>
<thead>
<tr>
<th>Asset Type</th>
<th>Useful Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buildings</td>
<td>20–40 years</td>
</tr>
<tr>
<td>Machinery and equipment</td>
<td>5–21 years</td>
</tr>
<tr>
<td>Furniture</td>
<td>13 years</td>
</tr>
<tr>
<td>IT</td>
<td>3–5 years</td>
</tr>
<tr>
<td>Vehicles</td>
<td>5–11 years</td>
</tr>
</tbody>
</table>
Development of tangible assets as at 31/12/2020:

<table>
<thead>
<tr>
<th>in € m</th>
<th>Land and buildings</th>
<th>Technical equip. and machinery</th>
<th>Other equip., factory and office equip.</th>
<th>Adv. paym., assets under construction</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition and production cost as at 1/1</td>
<td>3,523</td>
<td>2,686</td>
<td>1,684</td>
<td>209</td>
<td>8,102</td>
</tr>
<tr>
<td>Additions</td>
<td>45</td>
<td>361</td>
<td>90</td>
<td>99</td>
<td>595</td>
</tr>
<tr>
<td>Disposals</td>
<td>-21</td>
<td>-328</td>
<td>-61</td>
<td>-3</td>
<td>-413</td>
</tr>
<tr>
<td>Transfers</td>
<td>82</td>
<td>44</td>
<td>20</td>
<td>-148</td>
<td>-2</td>
</tr>
<tr>
<td>Foreign exchange differences</td>
<td>-84</td>
<td>-41</td>
<td>-33</td>
<td>-4</td>
<td>-162</td>
</tr>
<tr>
<td><strong>Acquisition and production cost as at 31/12</strong></td>
<td><strong>3,545</strong></td>
<td><strong>2,722</strong></td>
<td><strong>1,700</strong></td>
<td><strong>153</strong></td>
<td><strong>8,120</strong></td>
</tr>
<tr>
<td>Accum. depreciation and impairment as at 1/1</td>
<td>1,425</td>
<td>1,671</td>
<td>1,207</td>
<td>1</td>
<td>4,304</td>
</tr>
<tr>
<td>Depreciation of the year</td>
<td>144</td>
<td>215</td>
<td>143</td>
<td>0</td>
<td>502</td>
</tr>
<tr>
<td>Accum. depreciation on disposals</td>
<td>-17</td>
<td>-129</td>
<td>-53</td>
<td>0</td>
<td>-199</td>
</tr>
<tr>
<td>Impairment</td>
<td>16</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td>Transfers</td>
<td>0</td>
<td>1</td>
<td>-1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Foreign exchange differences</td>
<td>-30</td>
<td>-25</td>
<td>-22</td>
<td>-1</td>
<td>-78</td>
</tr>
<tr>
<td><strong>Accumulated depreciation as at 31/12</strong></td>
<td><strong>1,538</strong></td>
<td><strong>1,738</strong></td>
<td><strong>1,277</strong></td>
<td><strong>0</strong></td>
<td><strong>4,553</strong></td>
</tr>
<tr>
<td>Net book value 31/12</td>
<td>2,007</td>
<td>984</td>
<td>423</td>
<td>153</td>
<td>3,567</td>
</tr>
</tbody>
</table>
Other equipment, factory and office equipment include mainly computer equipment, furniture, vehicles, transportation equipment, tools and fixtures.

The net book value of € 3,567 million (2019: € 3,798 million) corresponds to 43.9% (2019: 46.9%) of the historical cost. The recognised impairment loss relates to the rental equipment.

The carrying amount of land and buildings contains the capitalised borrowing costs amounting to € 4 million (2019: € 5 million).

### Development of tangible assets as at 31/12/2019:

<table>
<thead>
<tr>
<th></th>
<th>Land and buildings</th>
<th>Technical equip. and machinery</th>
<th>Other equip., factory and office equip.</th>
<th>Adv. paym., assets under construction</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition and production cost as at 1/1</td>
<td>3,334</td>
<td>2,696</td>
<td>1,567</td>
<td>252</td>
<td>7,849</td>
</tr>
<tr>
<td>Additions</td>
<td>80</td>
<td>350</td>
<td>115</td>
<td>179</td>
<td>724</td>
</tr>
<tr>
<td>Disposals</td>
<td>-22</td>
<td>-447</td>
<td>-74</td>
<td>-6</td>
<td>-549</td>
</tr>
<tr>
<td>Transfers</td>
<td>92</td>
<td>64</td>
<td>60</td>
<td>-218</td>
<td>-2</td>
</tr>
<tr>
<td>Foreign exchange differences</td>
<td>39</td>
<td>23</td>
<td>16</td>
<td>2</td>
<td>80</td>
</tr>
<tr>
<td><strong>Acquisition and production cost as at 31/12</strong></td>
<td><strong>3,523</strong></td>
<td><strong>2,686</strong></td>
<td><strong>1,684</strong></td>
<td><strong>209</strong></td>
<td><strong>8,102</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Land and buildings</th>
<th>Technical equip. and machinery</th>
<th>Other equip., factory and office equip.</th>
<th>Adv. paym., assets under construction</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accum. depreciation and impairment as at 1/1</td>
<td>1,287</td>
<td>1,605</td>
<td>1,101</td>
<td>1</td>
<td>3,994</td>
</tr>
<tr>
<td>Depreciation of the year</td>
<td>139</td>
<td>230</td>
<td>151</td>
<td>0</td>
<td>520</td>
</tr>
<tr>
<td>Accum. depreciation on disposals</td>
<td>-15</td>
<td>-169</td>
<td>-65</td>
<td>0</td>
<td>-249</td>
</tr>
<tr>
<td>Impairment</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Transfers</td>
<td>0</td>
<td>-9</td>
<td>9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Foreign exchange differences</td>
<td>14</td>
<td>12</td>
<td>11</td>
<td>0</td>
<td>37</td>
</tr>
<tr>
<td><strong>Accumulated depreciation as at 31/12</strong></td>
<td><strong>1,425</strong></td>
<td><strong>1,671</strong></td>
<td><strong>1,207</strong></td>
<td><strong>1</strong></td>
<td><strong>4,304</strong></td>
</tr>
</tbody>
</table>

**Net book value 31/12**

2,098

1,015

477

208

3,798
3.3 Leasing

Liebherr acts mainly as a lessor and only in cases a purchase is legally or economically not efficient, Liebherr Group is a (long-term) lessee. The adoption of IFRS 16 implies that Liebherr has to recognise both a right-of-use asset and a lease liability. The majority of cases in this context concern land and buildings, but also machinery. The lease liability is measured at the beginning of the lease term at the present value of the unpaid lease payments and discounting is based on the marginal borrowing costs.

The practical expedients given in IFRS 16 with respect to small ticket leases and short-term leases, implying that a recognition of a right-of-use asset and a lease liability is avoided, are interpreted and applied correspondingly at Liebherr. A short-term lease is defined as a lease that, at the commencement date, has a lease term of 12 months or less, does not include an option to purchase the underlying asset and refers mainly to warehouses at short notice and flats. Small ticket leases refer to leases for which the underlying asset is of low value, i.e. a low present value of the lease payments, and subsumes assets such as printers or other office equipment. Intangible assets are not within the scope of IFRS 16. In determining the lease liability both variable lease payments that depend on an index or a rate and amounts expected to be payable by the lessee under residual value guarantees are included.

The initial measurement of the right-of-use asset is based on the value of the initial measurement of the lease liability. Scheduled depreciation is carried out over the economic useful life if the asset is transferred to the lessee at the end of the term, or the lessee will exercise a purchase option with sufficient certainty. If the lease transfers ownership of the underlying asset to the lessee by the end of the lease term or if the cost of the right-of-use asset reflects that the lessee will exercise a purchase option, Liebherr depreciates the right-of-use asset from the commencement date to the end of the useful life of the underlying asset. Otherwise, depreciation is based on the right-of-use asset from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term. The right-of-use asset is regularly tested for impairment.

Liebherr Group is a lessor of self-made machines. IFRS 16, Leases, contains also provisions according to which a decision has to be made whether substantially all the risks and rewards incidental to ownership of an asset is transferred to the lessee. Depending on the extent of the transfer of risk and rewards, the lease is classified as finance lease or as operate lease. Self-constructed assets capitalised under tangible assets but leased out under an operate lease are recognised at production costs. All other leased-out equipment is recognised at acquisition costs. All rental equipment is depreciated using the straight-line method according to the asset’s useful life reflecting the lower of the market value or the calculated residual value of the asset. Lease income from operating leases is recognised in the income statement on a straight-line basis. With respect to financial leases, a receivable is recognised at an amount equal to the net investment in the lease. Lease payments are divided into interest and principal payments.

For sale and leaseback transactions, established at fair value, the corresponding profit or loss is recognised. Generally, a multistage lease contains a head lease and a sublease. In multistage leases, Liebherr Group is both lessor and lessee. Accounting for the head lease implies a recognition of a right-of-use asset and a corresponding lease liability. In subleases, Liebherr Group decides on the basis of the corresponding criteria for lessors in IFRS 16 and on the basis of the right-of-use asset of the head lease whether the sublease should be classified as a finance lease or as an operate lease.

3.4 Impairment of non-current assets

Impairment losses on intangible and tangible assets will be recognised at each reporting date if there are indications that, following an event or due to changing circumstances, the book value is overvalued. If the carrying amount of an asset exceeds the recoverable amount (value in use or fair value less costs to sell) the asset will be written down to this lower amount. If necessary, intangible and tangible assets are combined to cash-generating units.

3.5 Joint ventures and associated companies

Shares in joint ventures and associated companies are accounted for using the equity method of accounting.

3.6 Non-current financial assets

Non-current financial assets comprise non-current leasing receivables, loans and non-current marketable securities. Loans are classified as “Amortised Cost”. Marketable securities are measured at fair value through profit or loss.
Management of these financial assets is in accordance with a documented investment strategy and their performance is assessed based on the change in fair value.
4 Current assets

4.1 Inventories
Inventories are recognised at acquisition or production costs. Production costs includes costs directly related to the units of production and a systematic allocation of fixed and variable production overheads. The allocation of fixed production overheads is mostly based on the normal capacity of the production facilities; otherwise it is based on the actual level of production. Selling costs, administrative overheads and borrowing costs are not capitalised.

Inventories are recognised at acquisition or production costs. Production costs includes costs directly related to the units of production and a systematic allocation of fixed and variable production overheads. The allocation of fixed production overheads is mostly based on the normal capacity of the production facilities; otherwise it is based on the actual level of production. Selling costs, administrative overheads and borrowing costs are not capitalised.

<table>
<thead>
<tr>
<th>Raw materials and supplies</th>
<th>1,542</th>
<th>1,702</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work in progress</td>
<td>818</td>
<td>933</td>
</tr>
<tr>
<td>Finished goods and merchandise</td>
<td>1,729</td>
<td>1,782</td>
</tr>
<tr>
<td>Payments made in advance for inventories</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4,099</strong></td>
<td><strong>4,425</strong></td>
</tr>
</tbody>
</table>

Raw materials and merchandise are generally measured at acquisition costs. For raw materials, the acquisition cost reflects the lower of the last purchase price and the weighted average price. Sufficient allowances are recorded for risks with regard to obsolescence and surplus stock as well as for losses of pending transactions by depreciation or writing down to the net realisable value.

4.2 Construction and service contracts
For specific construction and service contracts, revenue is, more often than not, recognised over time. The dominating input-based approach to determine the stage of completion at Liebherr Group is the cost-to-cost method. The cost-to-cost method determines the stage of completion according to the ratio of the contract costs incurred up to the balance sheet date to the estimated total contract costs with the corresponding sales per period to be recorded. However, output methods can also be based on physical partial services or contractually defined milestones. Both the cost-to-cost method and the output-based method are established and applied at Liebherr resulting in an appropriate disclosure of the control transfer of services and products over time.

The IFRS 9 impairment approach for financial instruments is based on a three-step procedure. But regarding the impairment of accounts receivable without an underlying financing component, representing the vast majority of the cases at Liebherr, this three-step procedure may be avoided and instead, a simplified approach may be employed in order to calculate the lifetime expected loss. Furthermore, dependent on the different residual terms a provision matrix as a practical expedient for determining the expected loss on accounts receivables in the sense of stage allowances is calculated. The mentioned provision matrix specifies fixed provision rates depending on the number of days that a trade receivable is past due. It is assumed that these provision rates approximate the default probability of trade receivables in the sense of the lifetime expected loss approach. A single allowance for doubtful accounts is recognised when there is objective evidence that such receivables are not recoverable (e.g. due to bankruptcy, payment default or other financial difficulties of the debtor). The amount of the loss is measured as the difference between the asset’s carrying amount and the present value of estimated future cash flows. The allowance is based on internal Group guidelines, according to which individual allowances must be deducted first. The payment terms and outstanding receivables are regularly monitored locally by all subsidiaries. Furthermore, safeguards in the form of prepayments and down payments are established.

4.3 Accounts receivable
Receivables are initially recognised at the transaction price. Accounts receivable are classified as "Amortised Cost".

<table>
<thead>
<tr>
<th>in € m</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw materials and supplies</td>
<td>1,542</td>
<td>1,702</td>
</tr>
<tr>
<td>Work in progress</td>
<td>818</td>
<td>933</td>
</tr>
<tr>
<td>Finished goods and merchandise</td>
<td>1,729</td>
<td>1,782</td>
</tr>
<tr>
<td>Payments made in advance for inventories</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4,099</strong></td>
<td><strong>4,425</strong></td>
</tr>
</tbody>
</table>
4.4 Derivative financial instruments
Within the Liebherr Group, this position predominantly includes forward currency contracts, currency options, currency swaps, interest rate swaps and interest rate currency swaps to hedge its foreign exchange and interest rate risks. All derivatives, if they do not qualify for hedge accounting in accordance with IFRS 9, are classified as financial instruments at fair value through profit or loss.

To hedge the interest and foreign currency risks resulting from its operational activities, financial transactions and investments, the Liebherr Group makes use of derivative financial instruments. The goal is to reduce volatility in the income statement. A hedging relationship must fulfil various criteria relating to the documentation, the probability of occurrence, the effectiveness of the hedging instrument and the reliability of the measurement in order to qualify for hedge accounting in accordance with IFRS 9.

Under certain circumstances, a derivative financial instrument designated as a hedging instrument can be used to hedge the exposure to variability in cash flows that is attributable to a particular risk associated with a recognised asset or liability or a highly probable future transaction or the foreign currency risk in an unrecognised firm commitment. Exclusively in the aerospace division, Liebherr Group uses hedging instruments in cash flow hedges. Thereby the exposure to variability of future cash flows in foreign currencies which could have an effect on profit and loss is hedged. The effective portion of the gain or loss of the hedging instrument is recognised in other comprehensive income when the criteria for hedge accounting are fulfilled. These other comprehensive income amounts reflecting the cumulated value changes of the hedging instruments are, simultaneously, transferred to the income statement when the hedged transaction affects profit or loss or upon initial recognition of an asset or a liability. If the forecasted transaction is no longer expected to occur, the hedge is no longer effective and the amounts previously recognised in other comprehensive income are transferred to the income statement. The ineffective portion of the gain or loss of the hedging instrument is recognised directly in the finance result.

4.5 Current financial assets
The financial assets in these categories are classified, based on an internal risk management and investment strategy, as financial assets at fair value through profit or loss. The management of these assets is based on a written investment strategy and performance is measured on fair value.

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shares</td>
<td>391</td>
<td>418</td>
</tr>
<tr>
<td>Mutual funds</td>
<td>136</td>
<td>114</td>
</tr>
<tr>
<td>Fixed income securities</td>
<td>851</td>
<td>836</td>
</tr>
<tr>
<td>Other securities</td>
<td>40</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total securities and other financial assets at fair value</strong></td>
<td><strong>1,418</strong></td>
<td><strong>1,371</strong></td>
</tr>
<tr>
<td>Fixed deposits with a residual term more than three months</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,424</strong></td>
<td><strong>1,377</strong></td>
</tr>
</tbody>
</table>
4.6 Liquid funds
In addition to cash on hand and cash in banks, short-term deposits with an original maturity of three months or less are considered as liquid funds.

5 Equity
The share capital of Liebherr-International AG is divided into registered shares. The revenue reserve contains the legal reserve of Liebherr-International AG as well as the retained earnings of the other subsidiaries. Additionally, the balance includes the free reserves of Liebherr International AG as well as reserves and profits from previous years of the consolidated companies.

Under this position, the effective portion of the gain or loss of the hedging instrument in a cash flow hedge is recognised in accordance to IFRS 9 in other comprehensive income (OCI) without being recorded in the income statement.

In equity, exchange differences arising from the translation of assets and liabilities from the individual closings of foreign subsidiaries into the presentation currency are included.

6 Financial liabilities
The following table gives an overview of the financial liabilities:

<table>
<thead>
<tr>
<th></th>
<th>Current</th>
<th>Non-current</th>
<th>Total 2020</th>
<th>Current</th>
<th>Non-current</th>
<th>Total 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank liabilities</td>
<td>887</td>
<td>1,233</td>
<td>2,120</td>
<td>1,129</td>
<td>1,199</td>
<td>2,328</td>
</tr>
<tr>
<td>Liabilities from leases</td>
<td>33</td>
<td>143</td>
<td>176</td>
<td>33</td>
<td>165</td>
<td>198</td>
</tr>
<tr>
<td>Bank liabilities from discounted bills</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>921</strong></td>
<td><strong>1,376</strong></td>
<td><strong>2,297</strong></td>
<td><strong>1,162</strong></td>
<td><strong>1,364</strong></td>
<td><strong>2,526</strong></td>
</tr>
</tbody>
</table>

7 Other liabilities
The following table gives an overview of the other liabilities:

<table>
<thead>
<tr>
<th></th>
<th>Current</th>
<th>Non-current</th>
<th>Total 2020</th>
<th>Current</th>
<th>Non-current</th>
<th>Total 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liabilities from repurchase obligations</td>
<td>19</td>
<td>43</td>
<td>62</td>
<td>50</td>
<td>37</td>
<td>87</td>
</tr>
<tr>
<td>Accounts payable trade</td>
<td>655</td>
<td>0</td>
<td>655</td>
<td>795</td>
<td>0</td>
<td>795</td>
</tr>
<tr>
<td>Liabilities from personnel expenses and social security</td>
<td>313</td>
<td>0</td>
<td>313</td>
<td>346</td>
<td>0</td>
<td>346</td>
</tr>
<tr>
<td>Tax liabilities and customs</td>
<td>108</td>
<td>0</td>
<td>108</td>
<td>143</td>
<td>0</td>
<td>143</td>
</tr>
<tr>
<td>Derivative financial instruments</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>54</td>
<td>0</td>
<td>54</td>
</tr>
<tr>
<td>Contract Liabilities</td>
<td>169</td>
<td>0</td>
<td>169</td>
<td>170</td>
<td>0</td>
<td>170</td>
</tr>
<tr>
<td>Deferred income</td>
<td>10</td>
<td>0</td>
<td>10</td>
<td>11</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Further liabilities</td>
<td>131</td>
<td>39</td>
<td>170</td>
<td>125</td>
<td>39</td>
<td>164</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,413</strong></td>
<td><strong>82</strong></td>
<td><strong>1,495</strong></td>
<td><strong>1,694</strong></td>
<td><strong>76</strong></td>
<td><strong>1,770</strong></td>
</tr>
</tbody>
</table>
8 Taxes
Taxes include both current and deferred taxes. Current income taxes (income or corporation tax, business tax and corresponding foreign taxes) are the amounts resulting from taxable income or loss to be paid to or recovered from the relevant tax authority.

Current income taxes for the actual period and prior periods are recognised as a liability to the extent that they have not yet been paid. If the amount already paid in respect of current and prior periods exceeds the amount due for those periods, the excess is recognised as an asset. The benefit relating to a tax loss that can be carried back to recover current tax of a previous period is recognised as an asset.

Current tax liabilities (tax assets) for the actual and prior periods are measured at the amount expected to be paid to (recovered from) the taxation authorities, using the tax rates (and tax laws) that have been enacted at the reporting date or that will be enacted in the near future. Current income taxes are recognised in the income statement, except current income taxes relating to items previously recognised in other comprehensive income.

Deferred tax assets and liabilities are recognised in accordance with IAS 12 for temporary differences between the carrying amount of an asset or liability in the balance sheet and its tax base. The deferred tax assets also include future tax reductions from the expected use of losses brought forward. Deferred tax assets are only recognised if there is sufficient probability that future taxable profit will allow the deferred tax asset to be recovered. Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled. The announcements of new tax rates (and new tax laws) by the government have been considered for the measurement of deferred tax assets and liabilities. The formal enactment is not relevant unless the temporary differences balance themselves under the old tax law.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred income tax asset to be recovered. Conversely, a previously unrecognised deferred tax asset is recognised to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Deferred taxes are charged or credited directly to other comprehensive income if the taxes relate to items that are credited or charged directly to other comprehensive income in the same or a different period.

Deferred income tax assets and deferred income tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current income tax liabilities and the deferred income taxes relate to the same taxable entity and the same tax authority.

9 Employee benefits
Employee benefits consist of pension obligations, commitments related to anniversary bonuses and partial retirement agreements. There are various employee benefit plans in the Group, which are individually aligned with local conditions in their respective countries. They are financed either by means of contributions to legally independent pension/insurance funds, or by recognition as employee benefit liabilities in the balance sheet of the respective subsidiaries.

The net periodic costs with regards to defined contribution plans to be recognised in the income statement are the agreed contributions of the employer. In case of defined benefit plans, the period costs are determined by means of actuarial valuations by external experts using the projected unit credit method which are prepared on a regular basis.

The calculation of net periodic costs and employee benefit liabilities implies that statistical methods and variables are employed. These variables include, for example, estimations and assumptions concerning the discount rate. Furthermore, actuaries use a wide range of statistical information for actuarial calculation of employee benefit liabilities which can deviate significantly from actual results due to changes in market conditions, the economic situation as well as fluctuating rates of withdrawal and shorter or longer life expectancy of benefit plan participants.
10 Provisions

Provisions are only recognised in the balance sheet if the Liebherr Group has an obligation to a third party that resulted from a past event, and if a reliable estimate of the obligation can be made. Possible losses from future events are not recognised in the balance sheet. Restructuring provisions will only be recognised if the respective costs can be determined reliably by reference to a plan and if there is a corresponding obligation resulting from a contract or notification.

<table>
<thead>
<tr>
<th>Provisions 2020 in € m</th>
<th>Warranty obligation</th>
<th>Compensation and product liability</th>
<th>Expected loss from pending transactions</th>
<th>Other provisions</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current provisions</td>
<td>414</td>
<td>11</td>
<td>116</td>
<td>102</td>
<td>643</td>
</tr>
<tr>
<td>Non-current provisions</td>
<td>0</td>
<td>0</td>
<td>14</td>
<td>32</td>
<td>46</td>
</tr>
<tr>
<td><strong>Total provisions</strong></td>
<td><strong>414</strong></td>
<td><strong>11</strong></td>
<td><strong>130</strong></td>
<td><strong>134</strong></td>
<td><strong>689</strong></td>
</tr>
</tbody>
</table>

Reconciliation

<table>
<thead>
<tr>
<th></th>
<th>Warranty obligation</th>
<th>Compensation and product liability</th>
<th>Expected loss from pending transactions</th>
<th>Other provisions</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>31/12/2019</strong></td>
<td><strong>448</strong></td>
<td><strong>9</strong></td>
<td><strong>81</strong></td>
<td><strong>110</strong></td>
<td><strong>648</strong></td>
</tr>
<tr>
<td>Increase</td>
<td>172</td>
<td>5</td>
<td>90</td>
<td>55</td>
<td>322</td>
</tr>
<tr>
<td>Transfers</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Reversal</td>
<td>–45</td>
<td>–2</td>
<td>–12</td>
<td>–13</td>
<td>–72</td>
</tr>
<tr>
<td>Discounting</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Foreign exchange differences</td>
<td>–4</td>
<td>0</td>
<td>0</td>
<td>–2</td>
<td>–6</td>
</tr>
<tr>
<td><strong>31/12/2020</strong></td>
<td><strong>414</strong></td>
<td><strong>11</strong></td>
<td><strong>130</strong></td>
<td><strong>134</strong></td>
<td><strong>689</strong></td>
</tr>
</tbody>
</table>

Provisions 2019 in € m

<table>
<thead>
<tr>
<th></th>
<th>Warranty obligation</th>
<th>Compensation and product liability</th>
<th>Expected loss from pending transactions</th>
<th>Other provisions</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current provisions</td>
<td>448</td>
<td>8</td>
<td>68</td>
<td>84</td>
<td>608</td>
</tr>
<tr>
<td>Non-current provisions</td>
<td>0</td>
<td>1</td>
<td>13</td>
<td>26</td>
<td>40</td>
</tr>
<tr>
<td><strong>Total provisions</strong></td>
<td><strong>448</strong></td>
<td><strong>9</strong></td>
<td><strong>81</strong></td>
<td><strong>110</strong></td>
<td><strong>648</strong></td>
</tr>
</tbody>
</table>

Reconciliation

<table>
<thead>
<tr>
<th></th>
<th>Warranty obligation</th>
<th>Compensation and product liability</th>
<th>Expected loss from pending transactions</th>
<th>Other provisions</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>31/12/2018</strong></td>
<td><strong>418</strong></td>
<td><strong>10</strong></td>
<td><strong>93</strong></td>
<td><strong>97</strong></td>
<td><strong>618</strong></td>
</tr>
<tr>
<td>Increase</td>
<td>182</td>
<td>2</td>
<td>41</td>
<td>49</td>
<td>274</td>
</tr>
<tr>
<td>Usage</td>
<td>–128</td>
<td>–1</td>
<td>–39</td>
<td>–12</td>
<td>–180</td>
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<td>Transfers</td>
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<td>0</td>
<td>0</td>
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<td>Discounting</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Foreign exchange differences</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td><strong>31/12/2019</strong></td>
<td><strong>448</strong></td>
<td><strong>9</strong></td>
<td><strong>81</strong></td>
<td><strong>110</strong></td>
<td><strong>648</strong></td>
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</table>
11 Revenue recognition and profit realisation

Liebherr adopts IFRS 15. The core principle of IFRS 15 is that an entity will recognise revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. This core principle is delivered in a five-step model framework helping to calculate the amount and to determine whether the revenue is to be recognised at a point in time or over a period of time. The five-step model requires the identification of the contract with a customer, the identification of the performance obligations, the determination of the transaction price, the allocation of the transaction price to the corresponding performance obligations and the recognition of revenue when the entity satisfies a performance obligation.

If partial invoices are created during the contractual term, revenue can be recognised during the contract period on the basis of the right-to-invoice approach, i.e. revenue is recognised in the amount of the invoiced amount.

Revenue recognition over time should reflect the transfer of control over the service to the customer according to the progress in fulfilling the underlying performance obligation. The dominating input-based approach to determine the stage of completion at Liebherr Group is the cost-to-cost method. The cost-to-cost method determines the stage of completion according to the ratio of the contract costs incurred up to the balance sheet date to the estimated total contract costs with the corresponding sales per period to be recorded.

If Liebherr has determined that the performance obligation is not fulfilled over time, revenue recognition in reference to a specific point in time is assumed. Revenue recognition in reference to a specific point in time is, more often than not, the rule.

Revenue from operating leases is recognised on a straight line basis over the lease term, unless another systematic basis is more representative of the time pattern in which the user benefit derived from the leased asset is diminished. As such, income from lease payments is recognised proportionally. The difference between payments received and income recognised is deferred.

Sales proceeds from rental equipment disclosed under non-current assets are not recognised until actual transfer of risks and rewards related to the assets occurs.
Report of the independent auditor on the summary consolidated financial statements

The accompanying summary consolidated financial statements of Liebherr-International AG which comprise the consolidated balance sheet as of December 31, 2020, the consolidated income statement, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated cash flow statement for the year then ended, and related summary notes to the consolidated financial statements, are derived from the consolidated financial statements prepared in accordance with International Financial Reporting Standards (IFRS) and audited in accordance with International Standards on Auditing (ISA). We expressed an unmodified audit opinion on those consolidated financial statements in our report dated April 1, 2021.

The summary consolidated financial statements do not contain all the disclosures required by IFRS. Reading the summary consolidated financial statements, therefore, is not a substitute for reading the audited consolidated financial statements of Liebherr-International AG.

Board of Directors’ responsibility

The Board of Directors is responsible for the preparation of a summary of the audited consolidated financial statements on the basis described in the notes to the summary consolidated financial statements.

Auditor’s responsibility

Our responsibility is to express an opinion on the summary consolidated financial statements based on our procedures, which were conducted in accordance with International Standards on Auditing (ISA) 810, “Engagements to Report on Summary Financial Statements”.

Opinion

In our opinion, the summary consolidated financial statements derived from the audited consolidated financial statements of Liebherr-International AG for the year ended December 31, 2020 are consistent, in all material respects, with those consolidated financial statements, on the basis described in the notes.
## Five-Year Summary

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017R*</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales revenue</td>
<td>9,009</td>
<td>9,812</td>
<td>10,551</td>
<td>11,750</td>
<td>10,341</td>
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<tr>
<td>Investments</td>
<td>751</td>
<td>778</td>
<td>829</td>
<td>756</td>
<td>605</td>
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<td>Depreciation</td>
<td>466</td>
<td>499</td>
<td>513</td>
<td>541</td>
<td>543</td>
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<tr>
<td>Non-current assets</td>
<td>4,089</td>
<td>4,190</td>
<td>4,433</td>
<td>4,372</td>
<td>4,011</td>
</tr>
<tr>
<td>Current assets</td>
<td>8,572</td>
<td>9,012</td>
<td>9,352</td>
<td>9,916</td>
<td>9,722</td>
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<tr>
<td>Equity</td>
<td>7,051</td>
<td>7,369</td>
<td>7,570</td>
<td>7,884</td>
<td>7,784</td>
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<tr>
<td>Liabilities</td>
<td>5,610</td>
<td>5,833</td>
<td>6,215</td>
<td>6,404</td>
<td>5,949</td>
</tr>
<tr>
<td>Result after tax</td>
<td>298</td>
<td>319</td>
<td>321</td>
<td>429</td>
<td>7</td>
</tr>
<tr>
<td>Personnel expenses</td>
<td>2,413</td>
<td>2,538</td>
<td>2,790</td>
<td>2,980</td>
<td>2,847</td>
</tr>
<tr>
<td>Employees</td>
<td>42,308</td>
<td>43,869</td>
<td>46,169</td>
<td>48,049</td>
<td>47,925</td>
</tr>
</tbody>
</table>

* Restatement first time adoption of IFRS 9/15/16