
Annual report 2022

LIEBHERR

The Group

Annual report 2022

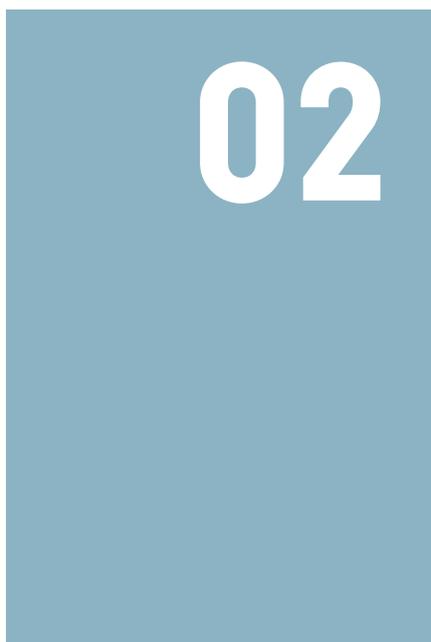


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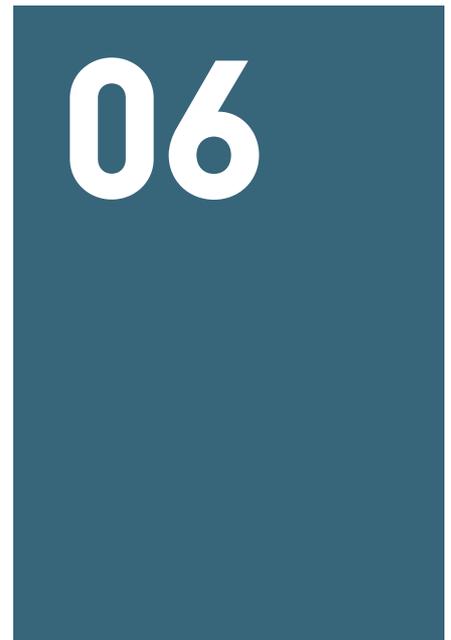
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Foreword from the family shareholders

Business year 2022

Dear readers,

We can now look back on a very eventful year. At the start of 2022, just as we were hoping that the world could gradually recover from the effects of the Covid-19 pandemic, the next crisis of global proportions emerged with the war in Ukraine. The pandemic and this terrible war have not only cost countless lives and created the need for massive humanitarian aid, but have also left a deep mark on the global economy. Sharp rises in raw ma-

terial and energy prices, huge increases in material and transport costs, lockdowns and bottlenecks in supply chains, these are just a few of the issues we've faced. And all this is overshadowed by the enormous challenge of taking effective measures against climate change, which humankind can only carry out together.

As an independent family-run company, we focus on our strengths in such

challenging times. In our almost 75-year history, we have often demonstrated our ability to react flexibly to all sorts of situations, and to venture down previously untrodden paths. We've shown that responsible action, proven reliability and a focus on the long term are essential in ensuring our success, both in the present and the future.

This mindset helped us deal with the numerous challenges worldwide over

In the interview, the Liebherr family shares their thoughts on the year 2022 and the current situation

The family shareholders active in the Group
(from left to right): Jan Liebherr, Stéfanie Wohlfarth, Sophie Albrecht, Philipp Liebherr, Patricia Rűf, Johanna Platt, Isolde Liebherr, Willi Liebherr



the past year, so that now we can look back on a good year for business overall. We received a high level of new orders and set a new turnover record of more than € 12.5 billion.

Over the past year, many Liebherr companies have been working on projects related to our corporate responsibility. In terms of technology alone, we made enormous progress in ensuring the environmental compatibility of our products in 2022. For instance, we achieved a quantum leap in energy efficiency for refrigeration and freezing by developing our new BluRoX vacuum perlite insulation model.

We've also made great progress with drives for construction machines, cranes, material handling machines and mining equipment. We are currently conducting research into the entire range of climate-neutral fuels and drive technologies, and we showcased numerous

examples at the Bauma exhibition in Munich in the autumn.

Given the difficult environment, we know that we can only break new ground if we have a strong team. That's why we'd like to take this opportunity to thank our employees worldwide, who now number more than 50,000. Their dedication and ideas make a significant contribution towards ensuring our future viability. We will continue to be a dependable and appreciative employer for them. And, of course, we'd also like to express our sincere thanks to our customers all over the world! Delighting them with our solutions and acting as a strong and steadfast partner will

continue to be our top priority, and that's not going to change.

We have appointed our children Jan and Stéfanie as the new presiding committee of the administrative board of Liebherr-International AG, effective 1 April 2023. This marks a further step towards establishing the next generation in the company's management. However, we are not leaving the company, but will remain members of the administrative board.

Our Group got 2023 off to a great start. We are optimistic about this coming year and Liebherr's fast-approaching 75th anniversary in 2024.

Dr. h. c. Dipl.-Kfm. Isolde Liebherr

Dr. h. c. Dipl.-Ing. (ETH) Willi Liebherr

Presiding committee of the administrative board of Liebherr-International AG (until 31 March 2023)





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Brief portrait of the Group

Brief portrait

The Liebherr Group

Founded in 1949, the Group today comprises over 140 companies on all continents and employs 51,321 people.

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-run company, long-term success, sustainable development, stability and reliability are what matters.

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.



12,589

€ m turnover



863

€ m investments

51,3

employees



> 40

production companies

> 140

companies

13

product segments



Self-concept

The Liebherr Group was founded in 1949 by Hans Liebherr, a man driven by passion and visionary ideas, who had a keen sense for future-looking technology. To this day, Liebherr has demonstrated stability and reliability, thanks to the personal commitment of its leadership and its tradition as an independent family-run company, and is known as a pioneer in forward-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 its activities. Thanks to its high equity ratio and broadly diversified product range, Liebherr has the flexibility to compensate for market-related economic fluctuations. The company's value-driven culture has ensured strong cohesion and trusting relationships 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.

Its employees are an elementary part of the company: they all contribute their unique ideas and are committed to creating great things – no matter how demanding the task at hand. Liebherr reacts flexibly to the requirements of its customers and offers custom-built solutions. 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 Liebherr's company culture. As descendants of the company founder, the shareholders are aware 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, guarantee the future of the Group.

Liebherr-International AG

Company information

Head office	CH-1630 Bulle / FR
Share capital	CHF 100,000,000
Shareholders	Liebherr family (100%)
Administrative board	Dr. h. c. Willi Liebherr, president Dr. h. c. Isolde Liebherr, vice-president Hubert Liebherr Sophie Albrecht Jan Liebherr Patricia Rűf Stéfanie Wohlfarth Johanna Platt Philipp Liebherr
Managing directors	Stephen Albrecht Dr. Rolf Geyer Steffen Günther Stephan Raemy Thomas Schuler
Auditors	Ernst & Young AG, Berne

The active shareholders of the Liebherr Group



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



Dr. h. c. Isolde Liebherr
Vice-president 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



Patricia Rűf
Member 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

From generation to generation

The Liebherr Group 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. The Group's chief decision-making and management body is the Board of Directors, which is also composed exclusively of family members. 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 the third-generation members Jan Liebherr, Stéfanie Wohlfarth, Sophie Albrecht, Patricia Rűf, Johanna Platt and Philipp Liebherr. They ensure that the Group will continue to be inextricably linked with the Liebherr family and run as an independent family-run company.



Compressor and turbine wheels are key parts of the turbomachinery used in aircraft air-conditioning systems. They provide the compression and expansion stages of the air cycle process.

The Group's business model

Value proposition

As a technology company, Liebherr has been synonymous with a wide range of products and services in many areas of technology for over 70 years. Liebherr provides tailored, technologically advanced and innovative products as well as 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.

Products and segments

The Liebherr Group offers a versatile product programme consisting of 13 product segments that is unique in its breadth and depth and helps shape technological advances across numerous 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 dump trucks. 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 portfolio includes mobile, crawler and electric material handling machines used in numerous applications such as scrap, timber and port handling as well as in recycling and waste management. In addition to these products developed for specialised use cases, Liebherr also offers modified versions of many models of its construction machines series for material handling. 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. For the mining industry, the Group's mining product segment includes powerful mining excavators, trucks and dozers that perform under the most extreme conditions. The Group also offers an extensive range of crane models of every system type, lifting 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 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.

With a versatile product range and innovative models, Liebherr also offers efficient material handling solutions for use in harbours and in the maritime and offshore industries. Products from the maritime cranes segment range from port equipment such as mobile harbour cranes or ship-to-shore container cranes to offshore cranes, ship cranes and floating transfer solutions. In the aerospace and transportation systems product segment, Liebherr offers high-precision components and custom-built system solutions for aircraft, rail vehicles and buses.

High-quality gear machines and automation systems as well as precision measuring equipment and engineering projects comprise the gear technology and automation systems product segment.

Liebherr also produces a vast array of refrigerators and freezers 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.

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. 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. Liebherr is highly committed to responding quickly, reliably and flexibly to its customers' requirements. 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-run company, 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 as

well as 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 spare part logistics and customer-centric services.

Liebherr is committed to mastering key technologies down to the last detail, which leads to a high degree of independence in technological terms. 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.

Financial performance 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

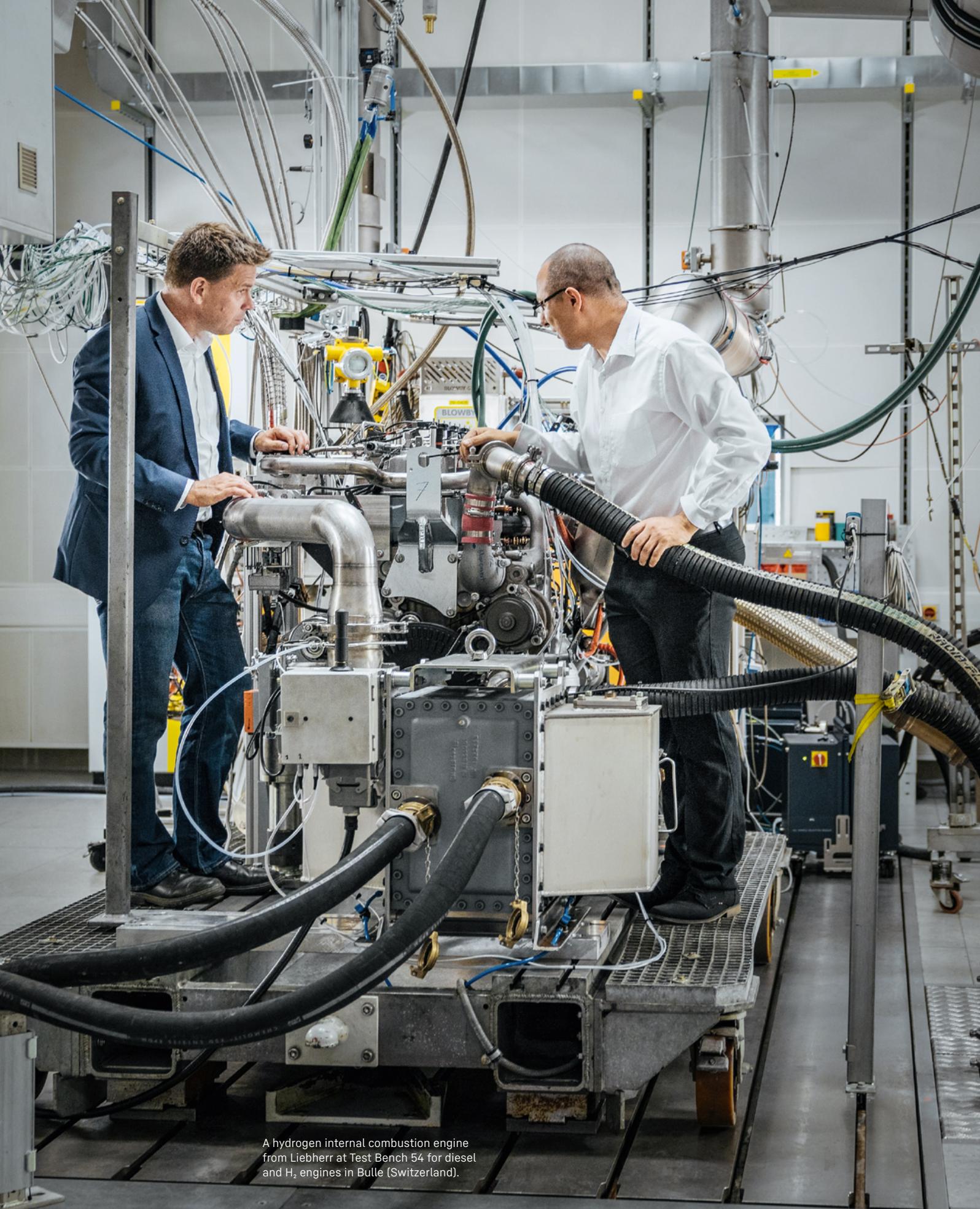
services to its customers. The Group can create synergies through its broad product range and mastery of key technologies, among other things. Its supply chain spans the entire globe.

With its 13 product segments, the Group pursues a strategy of diversification, which contributes to independence from economical fluctuations in individual 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 re-invested.

Organisational structure

The Liebherr Group has a decentralised structure. Its holding company is Liebherr-International AG, which exercises executive, coordinating and controlling functions. Independently operating divisional controlling 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.



A hydrogen internal combustion engine from Liebherr at Test Bench 54 for diesel and H₂ engines in Bulle (Switzerland).

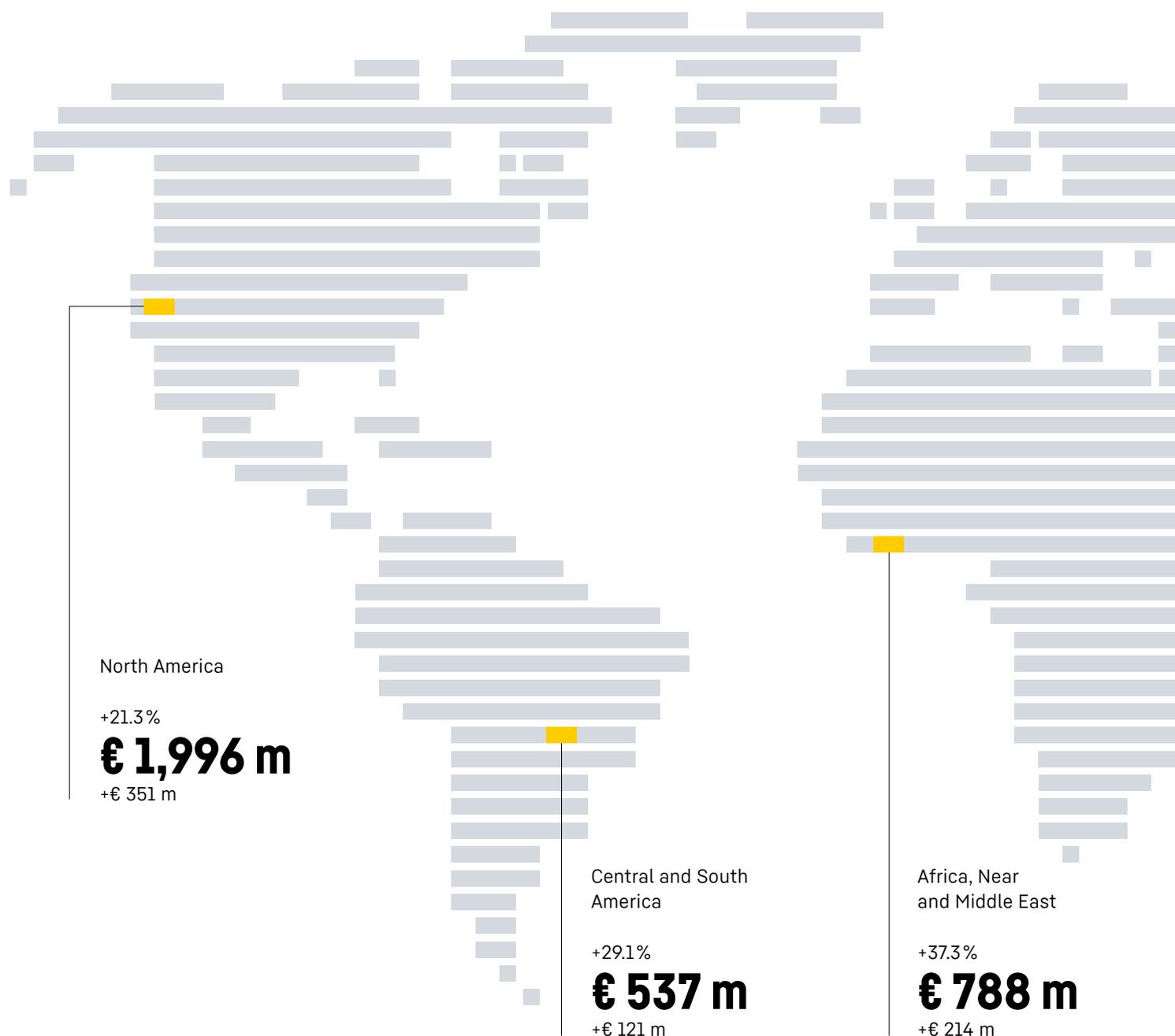
03

Development and outlook

Business performance

The Group in 2022

The Liebherr Group achieved total turnover of € 12,589 million in 2022. This represents an increase of € 950 million, or 8.2 %, compared to the previous year.



Europe

+3.5%

€ 7,441 m

+€ 249 m

European Union

+4.5%

€ 5,910 m

+€ 254 m

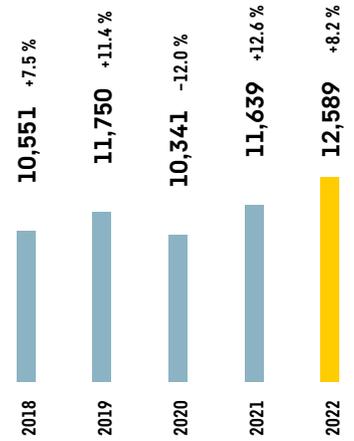
Non-EU countries

-0.3%

€ 1,531 m

-€ 5 m

Turnover worldwide € m



Asia and Oceania

+0.8%

€ 1,827 m

+€ 15 m

Discover the Liebherr Group's highlights of 2022



Overall economic performance

According to the International Monetary Fund, the global economy grew by 3.4% in 2022. The main reasons for the noticeable global slowdown in economic growth in the business year were the war in Ukraine, the resulting rise in raw materials and energy prices, and increasing price pressures. These factors also had a negative impact on the inflation rate, which further accelerated due to soaring food and fuel prices. The ongoing Covid-19 pandemic and the associated regional lockdowns also weighed on economic growth, but the global economy nevertheless recorded slight growth in the business year. With growth of 3.9%, emerging and developing countries grew more than industrialised countries. The developed nations were only able to post an increase of 2.7%. Economic growth in the USA was just 2.0%. The eurozone, however, saw growth of 3.5%, which was slightly above the international average. The volume of international trade increased by 3.5% according to the World Trade Organisation's autumn forecast. According to the WTO, particular growth impulses came from Africa and the Middle East.





An HS 8200 duty cycle crawler crane in operation in Kempen (Germany). The Dutch company Dieker Overslag B.V. is using the model there for gravel extraction. With a digging depth of 23 m, the duty cycle crawler crane moves 350 t of material per hour.

Turnover performance by product segments

In the 2022 business year, the Liebherr Group achieved increases in turnover, some of them significant, across all product segments with the exception of tower cranes, gear technology and automation systems as well as components. As a result, the record year 2019 was exceeded for the first time. However, difficult business conditions such as increased raw material and energy prices, higher manufacturing costs and ongoing supply chain difficulties also affected the Liebherr Group. The shortage of skilled workers in various sectors was also a challenge.

Liebherr recorded a turnover of € 8,561 million in construction and mining machines, representing an increase of 6.9% on the previous year. This includes the product segments earthmoving, material handling technology, deep foundation machines, mining, mobile and crawler cranes, tower cranes, and concrete technology. In the other product segments – maritime cranes, aerospace and transportation systems, gear technology and automation systems, refrigerators and freezers, components, and hotels – the Group achieved a total turnover of € 4,028 million. This represents healthy growth of 11.0% on the previous year.

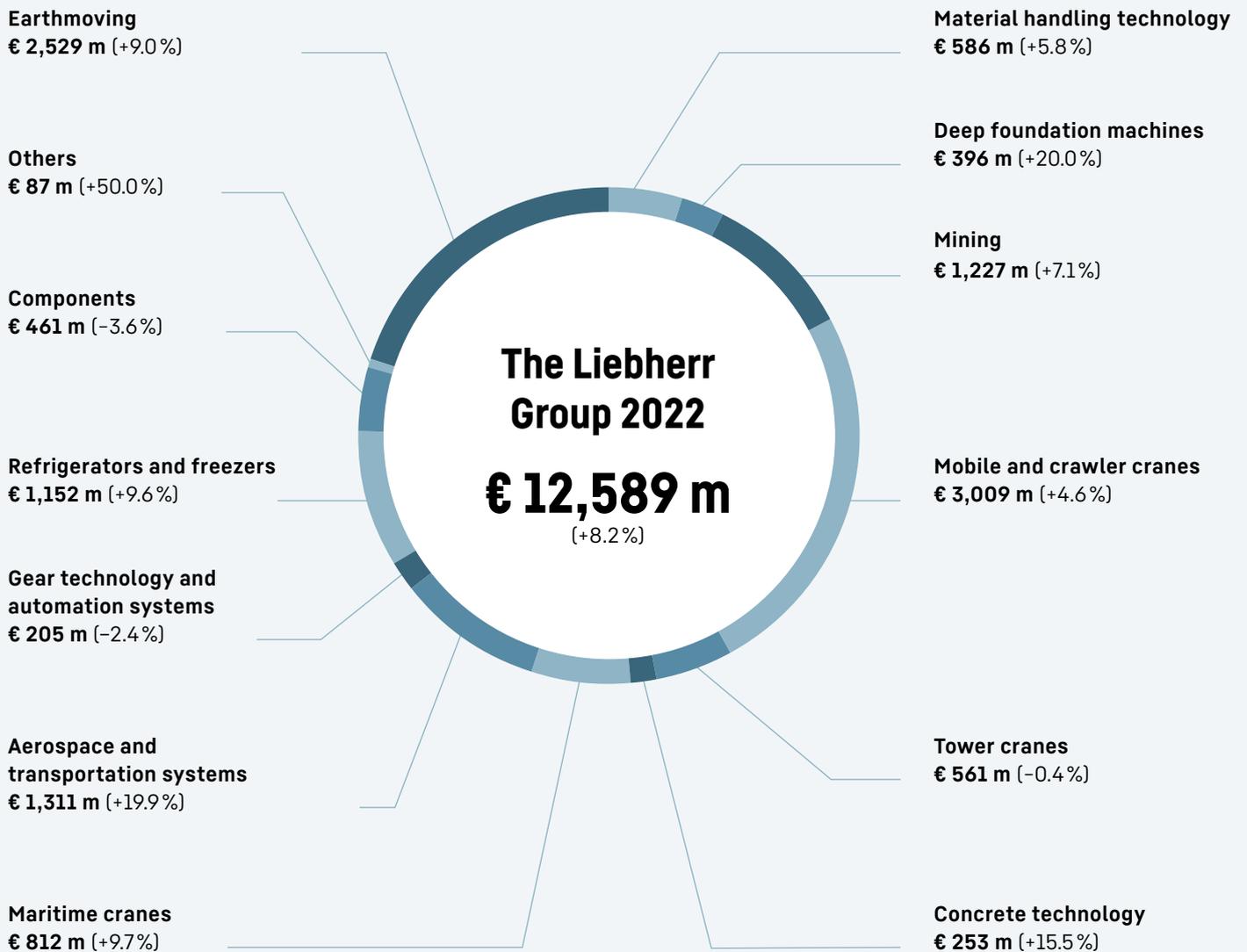
Turnover performance by region

In the 2022 business year, the Group's turnover developed positively in almost all sales regions. In the European Union, traditionally Liebherr's strongest market, turnover increased slightly. Growth rates varied in the individual EU markets, with business developing particularly well in the Netherlands and Italy. Turnover in non-EU countries showed a negligible decline. North America, in contrast, saw an extremely positive development, which can primarily be attributed to the USA and Canada. Thanks to an increase in Brazil and Panama, Liebherr was also able to achieve a strong increase in Central and South America. The region Africa, Near and Middle East also recorded an encouraging increase, with Saudi Arabia and the United Arab Emirates proving to be particular drivers. Turnover in Asia and Oceania was slightly above the previous year's level.

Net income for the year

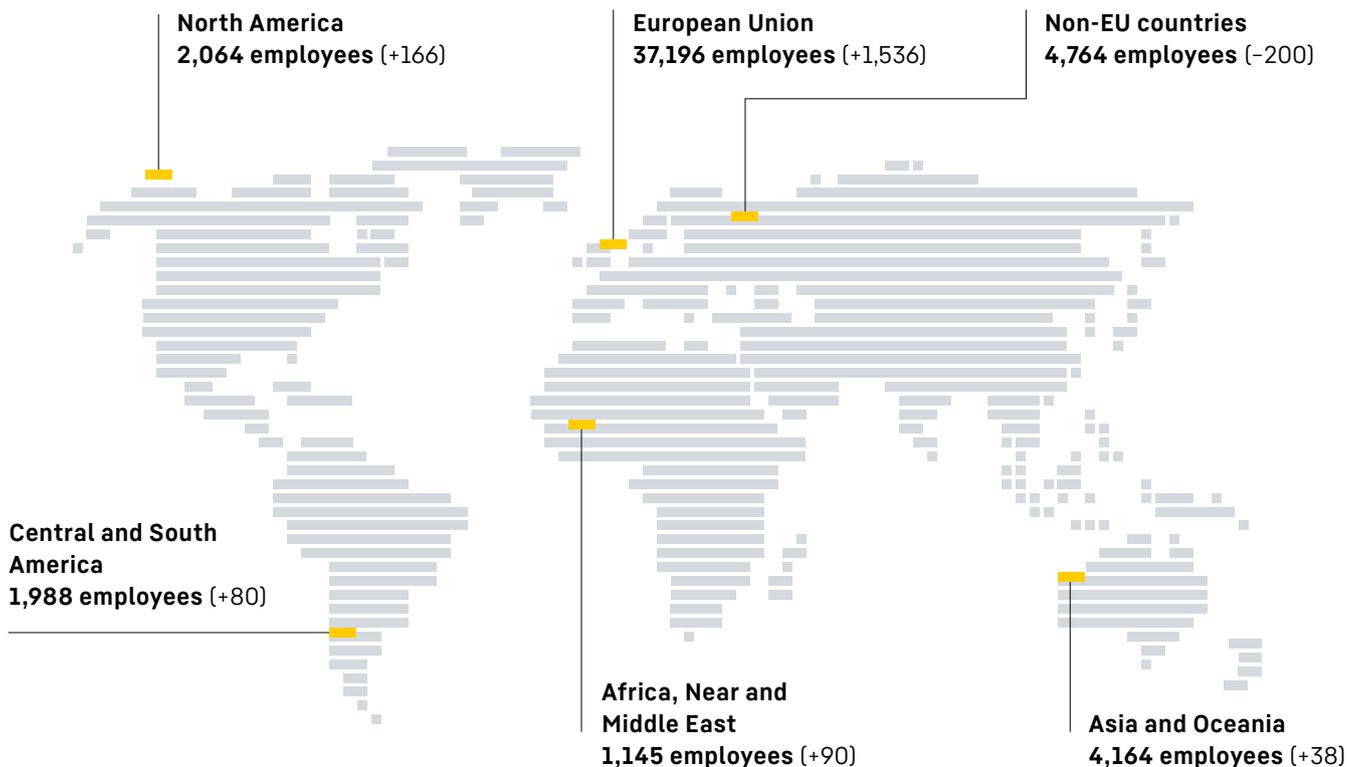
The Liebherr Group achieved a net income of € 2 million in 2022. The operating result decreased strongly compared to 2021 and the financial result also fell significantly below the previous year's level.

Turnover by product segments



(variation compared to the previous year in %)

Employees by regions compared to previous year



Employees

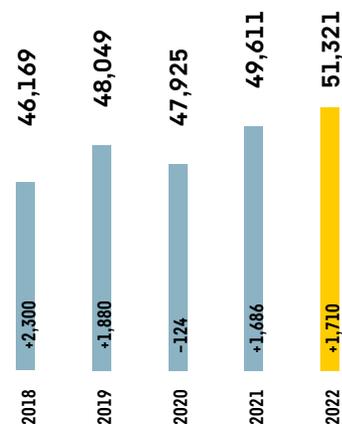
Its employees are key to the success of the Liebherr Group. Their qualifications, commitment and determination to produce first-class results for the Group's customers mean that they are the ones who decisively shape the company. As a family-run company, Liebherr is an employer with a strong tradition of partnership and teamwork based on reliability, fairness, respect and autonomy.

The number of employees in the Group increased again in the business year. At the end of 2022, Liebherr employed 51,321 people worldwide, an increase of 1,710 or 3.4 %. The European Union saw the largest increase in the number of employees, followed by North America.

However, Liebherr also saw an increase in Asia and Oceania, the Africa, Near and Middle East region, as well as in Central and South America. In the non-EU countries, the number declined slightly.

The Group is regarded as an attractive and reliable employer. Liebherr offers its employees exciting professional challenges and opportunities for their passion for fascinating, innovative products and technologies to flourish in the diverse tasks they perform in their day-to-day work. A whole host of opportunities await employees starting their working life, ranging from apprenticeships to dual study to a final thesis or traineeship opportunities.

Employees worldwide



Sustainability

The Group aspires to generate sustainable value for its employees, customers and suppliers, and for society as a whole. As an independent family-run company with a long-term focus, Liebherr is aware of its responsibilities and is committed to sustainable development. Its products, processes and infrastructure are geared to the minimum possible consumption of resources. The focus in all areas is on safety, efficiency and environmental sustainability. Last year, a large number of the Group's companies worked on projects concerning social, environmental and economic aspects of sustainability. The many activities in these areas will be incorporated into an overall concept for corporate responsibility, which is currently being developed at Group level.

Research and development

As a high-tech company, Liebherr aims to play a major role in advancing technological innovation. Last year, the Group invested € 588 million in research and development activities. A large proportion of this amount went into new product development. In addition, the Group initiated and continued numerous research projects with universities, colleges and research institutes. The Group's research activities continued to focus on digitalisation and alternative drive systems. Another focus was on the topic of autonomy. At the same time, the Group continued to develop existing technologies and add numerous new machines, components and solutions to its product programme.

In 2022, Liebherr continued its work on various alternative drive concepts to further advance product decarbonisation. The Group pursues a technology-neutral approach so it can cover the widest range of applications and product requirements of customers worldwide.

In the business year, Liebherr presented the R 9XX H₂, a ground-breaking innovation in crawler excavators. It is powered by Liebherr's H966 hydrogen combustion engine and emits almost no CO₂ during use on construction sites. The model received the Bauma Innovation Award in the climate protection category. The business year also saw the Group further pursue the use of hydrotreated vegetable oils (HVO) as a renewable energy source. HVO can now power a large proportion of Liebherr construction machines, cranes and mining machines. Liebherr also continued its research into fuel cell systems for the aviation industry. The first of these systems was successfully put into operation during the current business year. The company is making a contribution to the decarbonisation of the aviation industry with this future-oriented technology. Liebherr has added six new electric drive models to its unplugged range. The unplugged portfolio consists of battery-powered, locally emission-free crawler cranes as well as piling and drilling rigs up to 400 t. The new LTC 1050-3.1E compact crane is equipped with an electric motor as well as a conventional drive. Another new product from Liebherr is the Liduro Power Port (LPO) mobile energy storage system for construction site supply. LPO can operate or charge hybrid or all-electric construction machines and systems.

Digitalisation was another key topic in the business year. The new LICCON3 crane control in the LTM 1110-5.2 and LTM 1100-5.3 models laid the cornerstone for a new, digitalised generation of mobile cranes. In gear technology, LiTool, a design and simulation program for increased tool quality, was further developed. Liebherr implemented various digital solutions for components, including camera monitor systems and all-round vision solutions.

The business year saw the start of development of control technology software for the collection and processing of data for concrete technology process optimisation.

The LiReCon teleoperation unit for tower cranes and earthmoving machines is another future project in the field of digitalisation. LiReCon stands for Liebherr Remote Control System and will enable safe and convenient remote crane control. In addition, Liebherr has expanded its mining truck assistance system range to include the Trolley Guidance and Crusher Guidance systems. These innovations provide better operational efficiency and safety.

Following years of research, development and validation at the Liebherr Mining Technology Development Centre in the US, Liebherr Mining is currently in the process of delivering the first deployment of its fully integrated Autonomous Haulage Solution (AHS). The initial fleet of autonomous T 264 will be delivered to complete the final stage of AHS validation within a production environment, scheduled to commence in Australia in 2023.

Liebherr also reached a new milestone in energy efficiency and sustainability with its refrigerators and freezers. For insulation, a vacuum is used in conjunction with perlite, a finely ground lava rock. Perlite is a renewable raw material that can be reused easily. The technology is a world first and enables the production of devices that meet the highest energy standards.

Liebherr continues to work on 3D printed components for the aircraft of tomorrow. The 3D printing process can be used to produce even the most complex components. These are very lightweight, thus increasing the efficiency of the systems.



A battery-powered wheel loader is charged with green electricity for its next super-silent operation at Lake Wolfgang (Austria).

Learn more about Liebherr's technology-neutral approach

Investments

The Liebherr Group has traditionally emphasised the importance of continual investments in its production facilities and its global sales and service network. Liebherr invested € 863 million last year, increasing investments by € 121 million or 16.3% on the previous year. This was offset by depreciation amounting to € 528 million.

The Group expanded its sales and service activities on the French market during the business year and added a new branch to Liebherr Distribution et Services France SAS located in Taverny, near Paris. In the aerospace and transportation systems segment, Liebherr opened a repair workshop for heat exchangers in Singapore and applied for an expansion of the Campsas site near Toulouse (France) to increase the production of heat exchangers there. A large-scale expansion of the Ehingen (Germany) site has begun. As a first step, a new repair shop was opened in Ehingen-Berg. Outsourcing repairs improves the range of services for customers and creates new capacities. All measures are planned to be completed by 2024. In Oberopfingen (Germany), construction work began on a new hydraulic cylinder plant. In the tower cranes segment, Liebherr is also planning to expand the existing plant building at the Pune site (India).

In parallel, Liebherr began building a new remanufacturing workshop at the Jakarta site (Indonesia) to increase the reconditioning of used components, thus making an important contribution to resource conservation. At the Telfs site (Austria), Liebherr continued the construction of a new logistics centre. Most of the production material will be stored there in the future. Furthermore, the Group invested heavily in emission-reducing and energy-saving measures at various sites in the business year, such as photovoltaic systems, LEDs as a light source, and continuing efforts to lower in-plant traffic emissions through electric drives and the use of an alternative fuel made from hydrotreated vegetable oils (HVO).

Risk management and internal control system

In order to ensure that the Group's success continues to be sustainable, opportunities and risks are identified at an early stage for evaluation and control. 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.

All managers responsible for the risk management and internal control systems used in the individual Group companies are involved in ensuring the

integrated recording, analysis and evaluation of risks. 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 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, along with their expected impact on the Group's assets, financial position and financial performance. There were no events of special significance within the Liebherr Group after the close of the 2022 business year.

Outlook for 2023

In October 2022, the International Monetary Fund predicted weakened global economic growth of 2.7 % for 2023. This is the weakest forecast since 2001, excluding the global financial crisis at the height of the Covid-19 pandemic. At the beginning of 2023, the forecast was revised slightly upwards to 2.9%.

According to the International Monetary Fund, there are signs that the global economy will cool down again in 2023, albeit not by as much as initially feared. Nevertheless, inflation is at its highest level in decades, but will fall slightly in 2023 according to forecasts. The global economy is being weighed down by the increased cost of living, the impact of the war in Ukraine and the ongoing Covid-19 pandemic.

This is also confirmed by the World Bank.

The Euroconstruct research network indicated growth of 3% for the European construction industry in 2022. In contrast, a growth rate of just 0.2 % is predicted for 2023. All areas are expected to develop negatively, apart from deep foundation engineering. This is mainly due to lower demand in residential construction. A recovery is not forecast until 2025.

The International Air Transport Association (IATA) expects air traffic to continue recovering in 2023. According to forecasts, the industry could make a profit for the first time since the beginning of the Covid-19 pandemic. Nevertheless, the previously mentioned risks could also have a negative impact on the industry. In 2023, overall air traveller numbers are expected to be around 93% of 2019 levels.

The year 2023 is marked by uncertainty, especially in material supply and energy prices. However, at the beginning of 2023, the order volume was very healthy, which is why Liebherr is positive about the rest of the year, despite all the challenges.

Individual opportunities and risks

To describe individual opportunities and risks, similar types of risks and opportunities have been grouped together. In macroeconomic terms, the decline in increases in the rate of inflation may contribute to a reduction in uncertainty

and result in an increase in demand in various industrial sectors in which the Liebherr Group is active. Order intake is developing positively across all product segments.

At the same time, there are macroeconomic uncertainties with regard to how long pandemic-related restrictions will persist, as well as the effects of steep price increases for many goods and services, shortages of certain raw materials and labour, and bottlenecks in various supply chains. It is currently unclear whether and to what extent fiscal and monetary policy measures will ultimately affect the Liebherr Group.

With regard to the war in Ukraine, there is still great uncertainty as to whether and to what extent there will be a gradual easing of conditions, the sanctions will remain in force and a gas shortage, which would result in rationing, can be avoided. Against this background, negative effects on the activities of the Group cannot be ruled out.

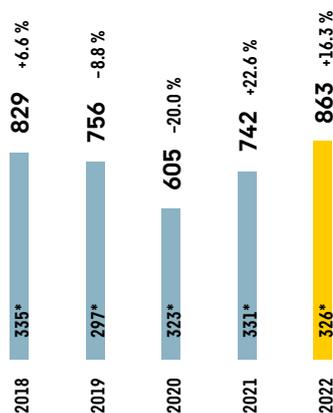
In terms of the corresponding risks, the Group faces changes in costs due to the shift in energy prices, which cannot always be compensated for by price indexation.

The chapters on each of the product segments contain detailed reports on relevant opportunities and risks. Market price risks could arise from ongoing business operations, in particular from currency and interest rate fluctuations triggered by monetary policy normalisation measures across the world.

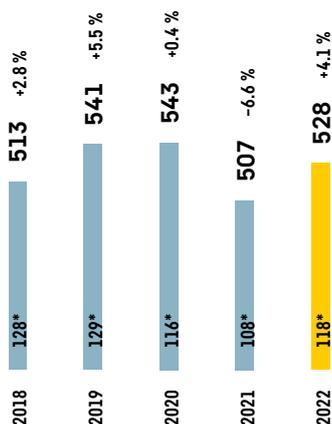
Liebherr monitors these risks continuously and uses appropriate financial instruments to hedge selected transactions. The Group enters into financial transactions only where these are linked to its operational business activity or for hedging. In principle, Liebherr does not conduct transactions of a speculative nature.

The global orientation of the Group's business activities, together with the Group's broadly diversified product base and the risk management system ensure that the relevant risks are kept under control. Based on currently available information, there are no further identifiable risks which could have a substantial detrimental effect on Liebherr's assets, financial position and financial performance in the 2023 business year, and threaten the survival of the Group as a whole.

Investments € m



Depreciation € m



* Of which rental fleet



04



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Earthmoving

In the earthmoving product segment, Liebherr achieved a turnover of € 2,529 million in the 2022 business year, representing an increase of € 209 million or 9.0 % compared to the previous year.

Continued growth

The earthmoving industry got off to a very strong start in 2022. However, demand was dampened over the course of the year by the geopolitical and economic situation and in some cases the prevailing pandemic, leading to a decline in the global market.

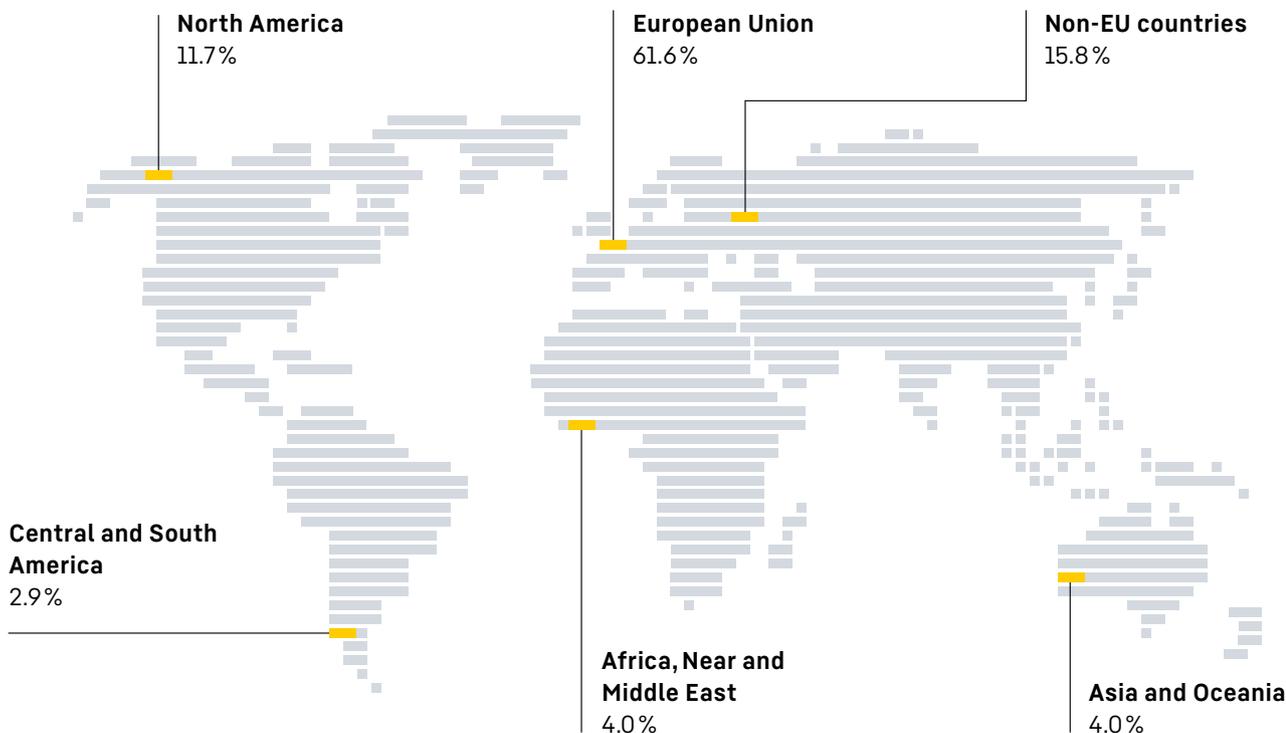
Contrary to the global market trend, Liebherr was able to increase turnover in the earthmoving segment in almost all of its sales regions. The strongest growth was in Central and South America, especially Chile and Brazil. Very encouraging growth was also observed in North America, primarily driven by positive developments in Canada and the USA. Liebherr recorded an increase in turnover in the Africa, Near and Middle East region, including Ghana and South Africa. The segment's traditionally most important market, the European Union, saw particularly strong growth stimuli from France, Germany and Finland. Growth was also achieved in non-European Union countries – most significantly Switzerland and Norway. Liebherr only recorded a decline in turnover in the Asia and Oceania region, mainly due to the downward trend in China and Australia.

Numerous innovations unveiled at Bauma

At Bauma 2022 in Munich (Germany), Liebherr presented its completely modernised series of compact loaders and medium-sized wheel loaders, among a number of other products. The new 70–100-tonne crawler excavators were unveiled, boasting optimised performance characteristics, new assistance systems and lower fuel consumption. Another highlight was the R 980 Demolition, Liebherr's largest demolition excavator. The PR 766 marked a new addition to Liebherr's Generation 8 of earthmoving crawlers with an operating weight of up to 55 t. It also presented a rail-road excavator with a hydrostatic drive concept for the very first time. The range was completed by attachments and quick coupling systems.

In 2022, research and development activities primarily focused on sustainability and digitalisation. Liebherr presented various alternative drive technologies at Bauma, including the first battery-powered wheel loader and telescopic handler, along with a study relating to a fuel-cell-powered wheel loader. The manufacturer's crawler excavator powered by a hydrogen combustion engine made its world debut and

Turnover by sales regions



received the Bauma Innovation Award in the climate protection category.

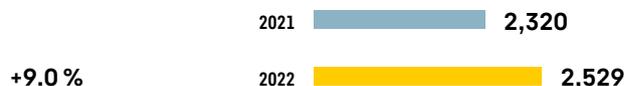
Turning to digitalisation, Liebherr and some of its lead customers provided insights into a joint project aimed at developing digital, machine-related solutions for the operational and strategic optimisation of machine fleets. Liebherr is also a member of the VDMA's Machines in Construction (MiC) 4.0 working group. This develops solutions for consistent, manufacturer-independent digital communication between attachments and construction machines and was awarded the Bauma Innovation Award in the digitalisation category.

By introducing a product configurator for earthmoving equipment, Liebherr has paved the way for digitalised sales processes. The tool enables configuration of the desired machine regardless of time or location.

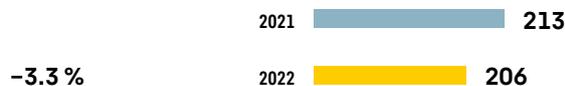
“With its wide array of new digital solutions and innovative machines, Liebherr is playing a key role in shaping technological progress in the construction industry.”

Liebherr is cautiously optimistic about the earthmoving segment in 2023. The current challenges are set to be counteracted by momentum from infrastructure expansion and projects relating to carbon reduction and digitalisation.

Turnover € m



Investments € m



Employees





Material handling technology

Liebherr recorded a total turnover of € 586 million in material handling technology in the 2022 business year, which represents an increase of € 32 million or 5.8 % on the previous year.

Material handling technology in high demand

Although the market for material handling technology did not grow as strongly in 2022 as in previous years, it remained stable and at a high level. The large potential of this market could not be fully harnessed in the fiscal year due to the global shortage of materials.

Turnover in the material handling technology product segment varied greatly between the individual regions. The European Union, one of the segment's main sales regions, saw a significant increase in turnover. The focus markets of France, Germany and Italy saw particularly strong growth. In Asia and Oceania, growth stimuli came primarily from China, Australia and Japan, while in North America the increase in turnover can be attributed to the USA market. Central and South America remained relatively constant. However, Liebherr recorded slumps in turnover in non-EU countries – particularly Russia and Turkey – and in Africa, Near and Middle East.

Focus on alternative drive concepts

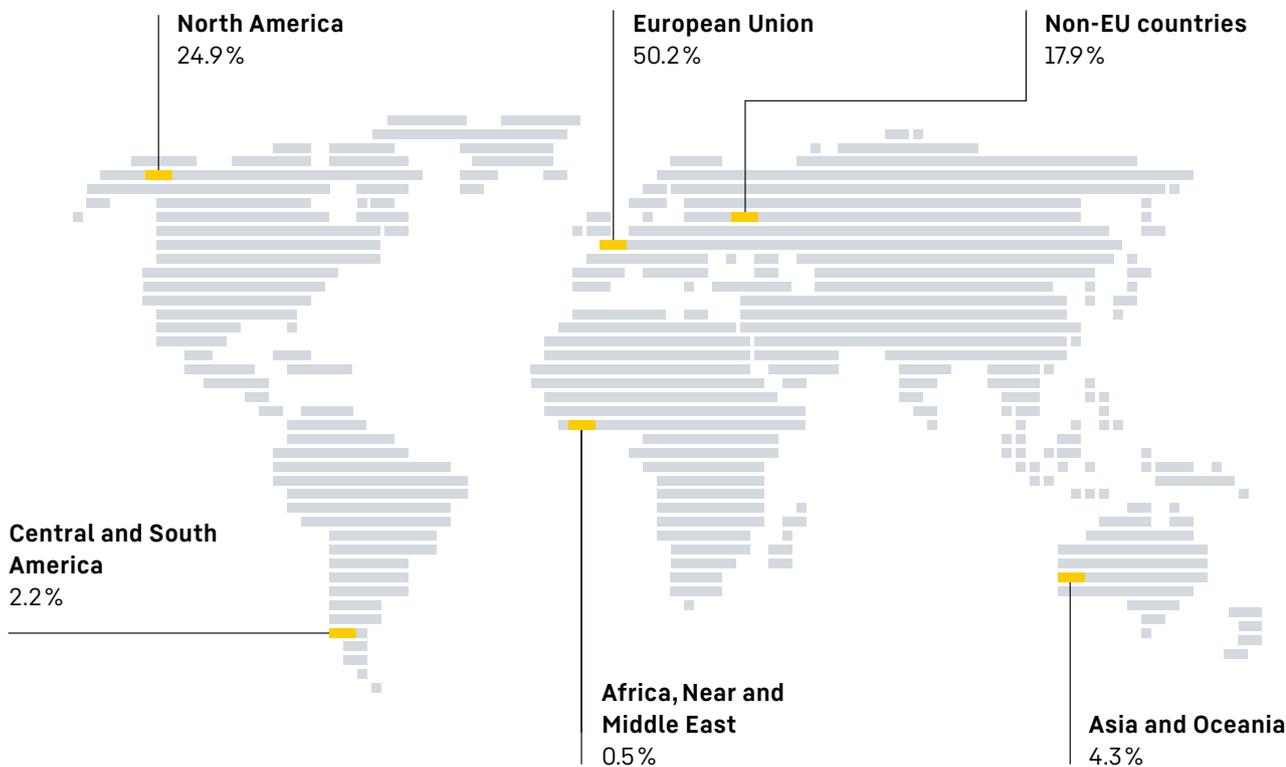
In the business year, Liebherr focused on enhancing and expanding its product portfolio. The Group introduced the

new LH 26 M Timber Litronic in the 25-tonne range to its range of timber trucks. It also presented a new multi-tine grab that is optimally tailored to customer needs and designed to cope with the toughest jobs in recycling and scrap processing. At Bauma 2022 in Munich, Germany, Liebherr presented other machines for a wide range of applications, including the LH 22 M Industry. When paired with the appropriate attachments, this can be used not only for recycling, but also for tree care and the timber industry.

A key focus in the development of material handling technology was the expansion of the availability and implementation of alternative drive concepts.

At Bauma, Liebherr presented its outlook for future-oriented solutions and presented concepts that are already available, such as the port material handler LH 150 M Port E with an electric drive system and new mobile gantry portal undercarriage, and the electric material handler LH 26 M Industry E, featuring a battery-powered mobility kit for temporary off-grid operation. Liebherr also presented three application optimised propulsion concepts for telescopic handlers: hydrotreated vegetable oils (HVO) as a low-emission coun-

Turnover by sales regions



terpart or additive to fossil fuels; a battery-electric drive; and a hybrid drive consisting of a combustion engine and an electric motor.

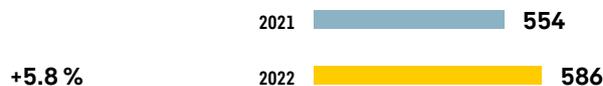
In 2022, Liebherr paved the way for digitalised sales processes when it introduced a product configurator for material handling technology. The tool enables configuration of the desired machines regardless of time or location.

Scarcity of raw materials and the trend towards sustainable steel production mean that the recycling sector, especially the scrap industry, is becoming increasingly important and that material handling technology is consequently in high demand. Despite the uncertainties caused by the geopolit-

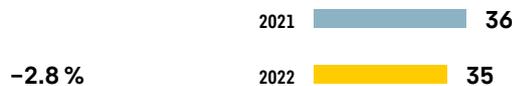
ical situation and the availability of materials, Liebherr is optimistic about the material handling technology segment in 2023, not least because its order books are well-filled.

“Cost-effective, reliable and efficient material handling technology plays an important role in the resource-saving circular economy. Liebherr is constantly expanding its product portfolio in line with customer and market needs.”

Turnover € m



Investments € m



Employees



Deep foundation machines

Liebherr achieved a turnover of € 396 million with deep foundation machines in the 2022 business year, which represents an increase of € 66 million or 20.0 % compared to the previous year.

Positive developments despite challenges

2022 was a good year overall for the deep foundation machines industry due to major investments in infrastructure and energy worldwide. However, such market-driving factors were held back by high inflation and ongoing material shortages.

Despite persistent difficulties in the supply chain, Liebherr was able to achieve significant turnover growth in the 2022 fiscal year. Business has gained rapid momentum and demand for deep foundation machines has reached record heights, especially in the USA. In the European Union, too, Liebherr recorded encouraging increases in turnover. The main driving forces behind this were France, the Netherlands and Belgium. In the non-EU countries, Liebherr recorded a significant drop in turnover, partly due to the downward trend in the exchange rate. The Africa, Near and Middle East region recorded a decline, although business progressed well in South Africa. The Asia and Oceania region saw an encouraging increase in turnover thanks to positive trends in Australia. Growth was achieved in Central and South America, thanks to the Brazilian market in particular.



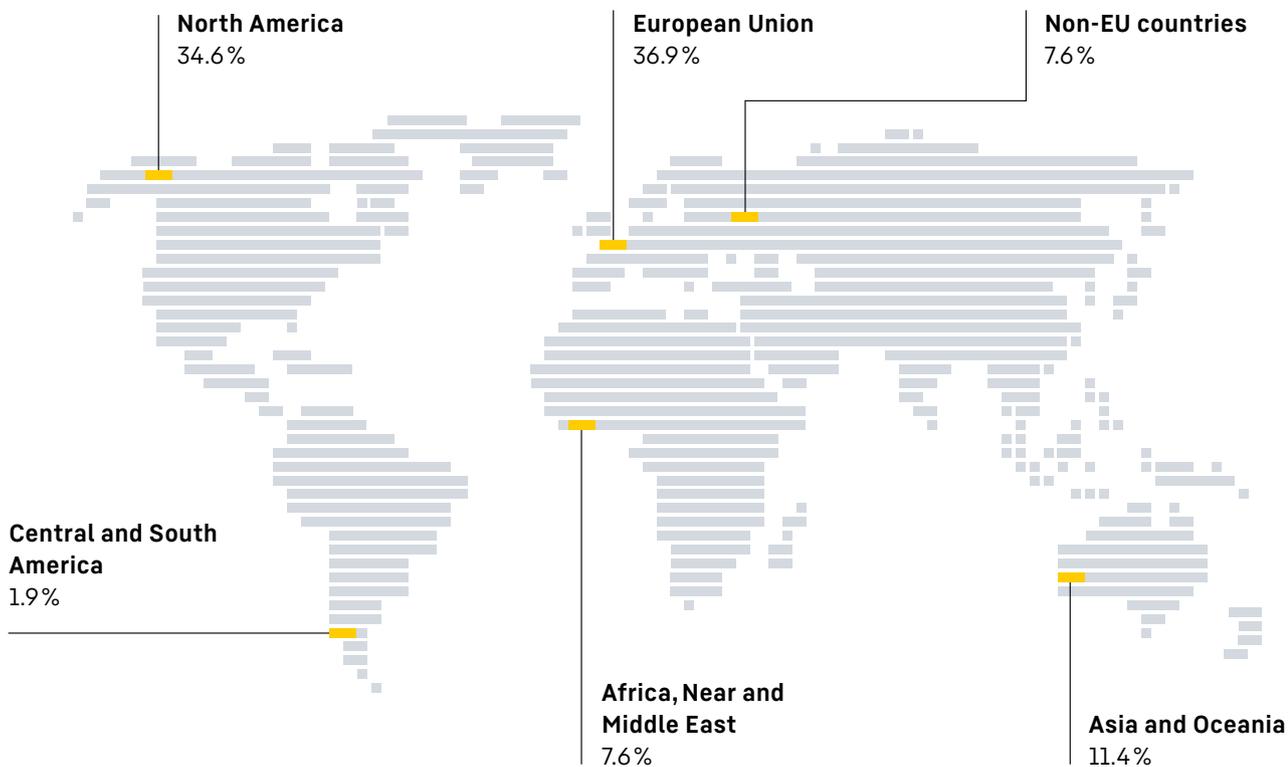
In 2022, Liebherr also recorded its highest-ever backlog in the deep foundation machines product segment.

Emission-free machines on the rise

Two emission-free drilling rigs, the LB 25 unplugged with 250 kNm torque and the LB 30 unplugged with 300 kNm, have been added to Liebherr's portfolio. They can be operated using the existing construction site electricity supply or powered wirelessly from a battery. The optional extension of the drilling axis allows the machines to handle drilling diameters of up to 3.4 m. The optional rear stabiliser and new design of the modular rear ballast ensure greater stability and a longer service life.

Two new unplugged piling rigs were also launched in 2022. The LRH 100.1 unplugged is based on the tried-and-tested LRH 100, while the LRH 200 unplugged is a completely new development. The new concept of the LRH 200 unplugged expands the range of applications and makes it even more versatile. Besides piling, the machine can be used for drilling with continuous flight auger, full displacement equipment or down-the-hole hammer, as well as for wet mixing.

Turnover by sales regions



The steadily growing demand for digital construction site solutions remained highly evident last year. Liebherr's My-Jobsite is a digital solution that records various process, machine, construction site and position data for analysis and evaluation. In the business year, the unplugged machines were integrated into MyJobsite, allowing customers to view the total energy consumption during work on the construction site.

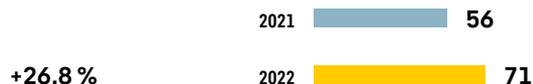
Given the high demand and positive order situation, Liebherr expects a further increase in turnover in the deep foundation machines product segment in 2023.

“Liebherr is actively shaping the requirements of the deep foundation machines industry with its electrification and digitalisation solutions.”

Turnover € m



Investments € m



Employees





Mining

Turnover in the mining product segment amounted to € 1,227 million in the 2022 business year, representing an increase of € 81 million or 7.1% compared with the previous year.

Growth in the face of adversity

The worldwide demand for raw materials, and the equipment needed to extract them, remained strong throughout 2022. This was despite the challenges presented by global inflation, the international energy crisis, and the war in Ukraine. The overall turnover of Liebherr's mining product segment varied in the different sales regions. In the EU and in non-EU countries, Liebherr recorded a moderate decrease in turnover. Thanks to the thriving Canadian and American markets, Liebherr saw encouraging growth in turnover in North America. In Middle and South America, Panama and Colombia were the driving forces behind Liebherr's increased turnover. In Africa, Near and Middle East, turnover also increased. In Asia and Oceania, however, Liebherr achieved a turnover slightly below the level of the previous business year.

Continuous innovation and improvement

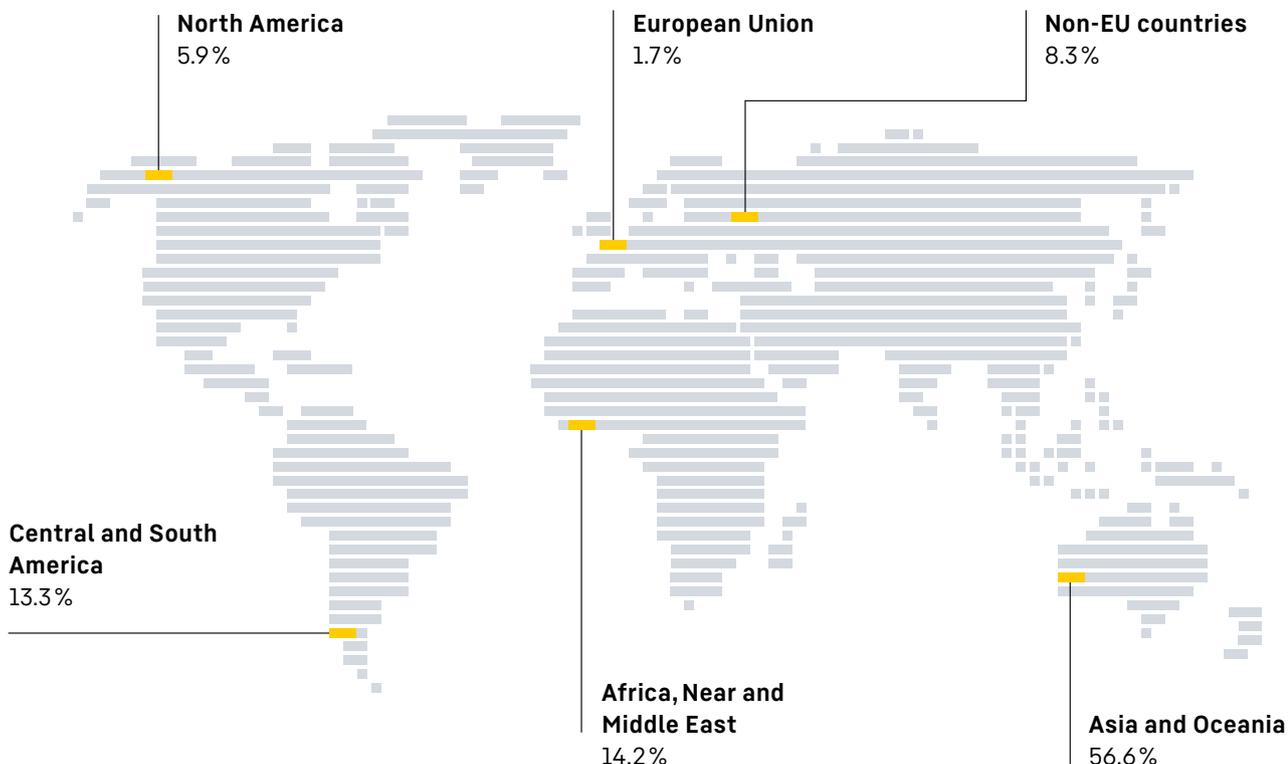
At Bauma 2022 in Munich (Germany), Liebherr unveiled its R 9300 Generation 8 excavator. The R 9300 has been furnished with the latest technology and can be adapted for future CO₂ emissions and automation requirements.

In the vertical integration space, Liebherr has made the R 9400, R 9600, R 9800, T 264, T 274 and T 284 all available with Liebherr engines, creating a single point-of-call for customers.

Within Liebherr Mining's technology product range, Assistance Systems for off-highway trucks were expanded to include both the Trolley Guidance and Crusher Guidance Systems. The development and integration of the Autonomy Ready Kits into the T 264, T 274 and T 284 was completed in 2022. Liebherr Mining's first fully autonomous off-highway trucks performed successfully on proving grounds in the past year. Based on these achievements, the first autonomous haulage fleet is now scheduled to start operating on a mine site in 2023.

Liebherr demonstrated its commitment to offering customers low emissions solutions for all its product range in 2022. All Liebherr trucks are now trolley-line compatible, which will help customers reduce their greenhouse gas emissions. These trucks have also been designed to be compatible with future electric battery technologies.

Turnover by sales regions



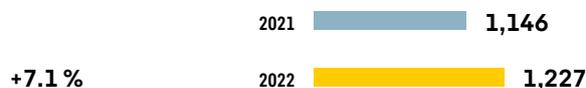
Liebherr also completed its Zero Emission Mining feasibility study in 2022, which investigated available technologies in order to determine how the company can effectively progress within the zero emission area in the future.

An important part of Liebherr’s commitment to decarbonising the mining industry was the signing of an integration and supply agreement with Fortescue Metals Group in June 2022. This agreement involves integrating electric battery and fuel cell systems into the T 264 off-highway truck. After an initial period with conventional manned and diesel T 264 trucks starting operation on Fortescue’s mine sites, the fleets will gradually be converted into battery powered trucks to allow Fortescue to achieve their ambitious Zero Emission Targets for heavy mobile equipment. To support

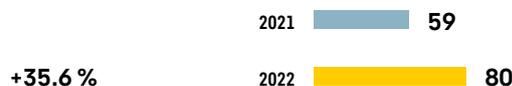
the increased off-highway truck production that is required to fulfil the future delivery requirements, Liebherr plans to further invest in, and grow, both the Colmar (France) and Newport News (USA) factories over the next few years.

“Liebherr has taken great strides in the decarbonisation space. Through internal developments, partnerships and thorough industry research, the company is determined to meet customer requirements as the need for zero emission solutions increases.”

Turnover € m



Investments € m



Employees





Mobile and crawler cranes

In the mobile and crawler cranes product segment, Liebherr recorded a turnover of € 3,009 million in the 2022 fiscal year. This represents a € 132 million or 4.6 % increase compared with the year before.

New production record

The market for mobile and crawler cranes continued growing in 2022. The reasons included major infrastructure projects and the expansion of renewable energies. Despite slight disruptions in the supply chain, Liebherr hit a new production record thanks to the increased demand. Never have so many mobile and crawler cranes been produced as in the fiscal year.

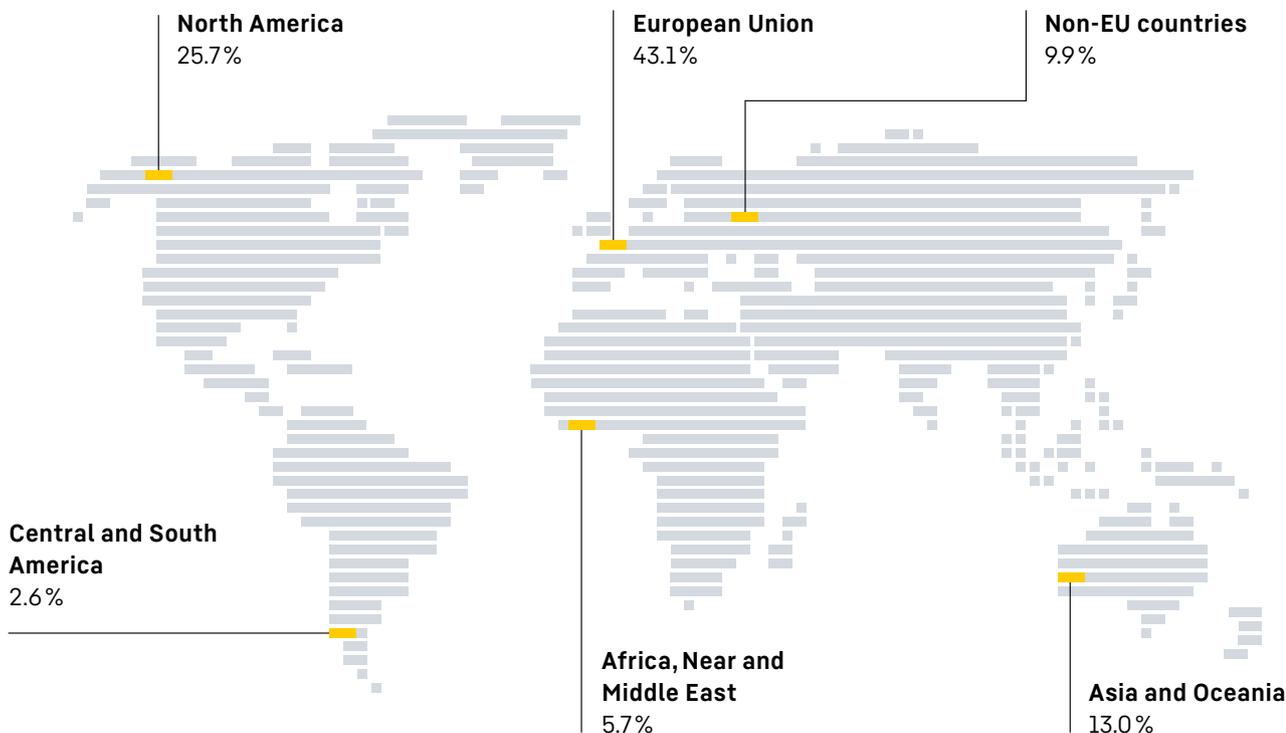
In terms of turnover by region, growth was particularly evident in North America and in the Africa, Near and Middle East region. The USA, Canada, Saudi Arabia and the United Arab Emirates were key drivers in these respective regions. Despite encouraging growth in Australia, turnover in the overall Asia and Oceania region declined slightly. The core market EU remained relatively stable at the previous year's level. In the non-EU countries, positive business, such as in the United Kingdom or Turkey, was not sufficient to offset the decline in Russia. Meanwhile, Central and South America saw a slight increase in turnover in this product segment.

Low-emission cranes and game-changing technology for future energy

Liebherr launched several energy-efficient solutions in 2022 in response to the rising demand for low-emission products. Crawler cranes LR 1130.1 unplugged and LR 1160.1 unplugged are battery powered on construction sites, making them emission-free and very quiet, without compromising on performance. Similarly, the LTC 1050-3.1E hybrid compact crane is electrically powered during operation. The LR 12500-1.0, which was launched in April, is a real game changer. With a lifting capacity of 2,500 t, this mega crane is designed for loading heavy goods like offshore wind power components in ports and for industrial applications. Another innovation is the LR 1100.1. It can be deployed rapidly using the tried-and-tested self-assembly system and is equipped with the latest assistance system, Gradient Travel Aid, which optimises safety when driving on inclines.

The LTM 1100-5.3 all-terrain crane was presented at Bauma 2022 in Munich (Germany). As it is only 2.55 m wide with axle loads of 9 t, it can be driven on roads worldwide without having to go through lengthy driving approval processes. It is

Turnover by sales regions

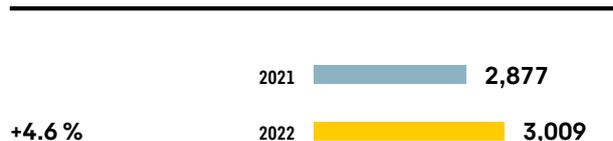


also equipped with the new LICCON3 crane control system. The LRT 1130-2.1 was also presented at Bauma, expanding the range of rough-terrain cranes upwards and setting new benchmarks for cost-effective transport and safety in this size class. Many customers at Bauma were able to access the online content on training, operational planning and crane operations through the many new applications on the MyLiebherr customer portal. MyLiebherr makes day-to-day operations easier for crane operators and facilitates more efficient and cost-effective crane operation.

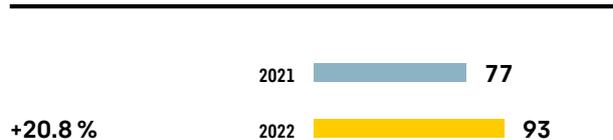
In the business year, Liebherr pressed ahead with the development of its logistics plant in Ehingen (Germany) and invested heavily in the restructuring of material flows. The newly opened repair centre in Ehingen-Berg now offers an expanded range of services for customers from its roughly 75,000 m² premises, and boasts even greater capacity.

Order volumes are currently high and Liebherr expects a slight increase in turnover for 2023 in the mobile and crawler cranes product segment.

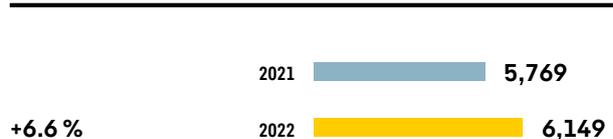
Turnover € m



Investments € m



Employees



“In 2022, Liebherr paved the way for a new generation of mobile cranes designed for the digital applications of the future.”



Tower cranes

In the 2022 business year, turnover in the tower cranes product segment remained at the previous year's level. At € 561 million, it was merely € 2 million or 0.4 % below the figure for 2021.

Germany remains the strongest sales market

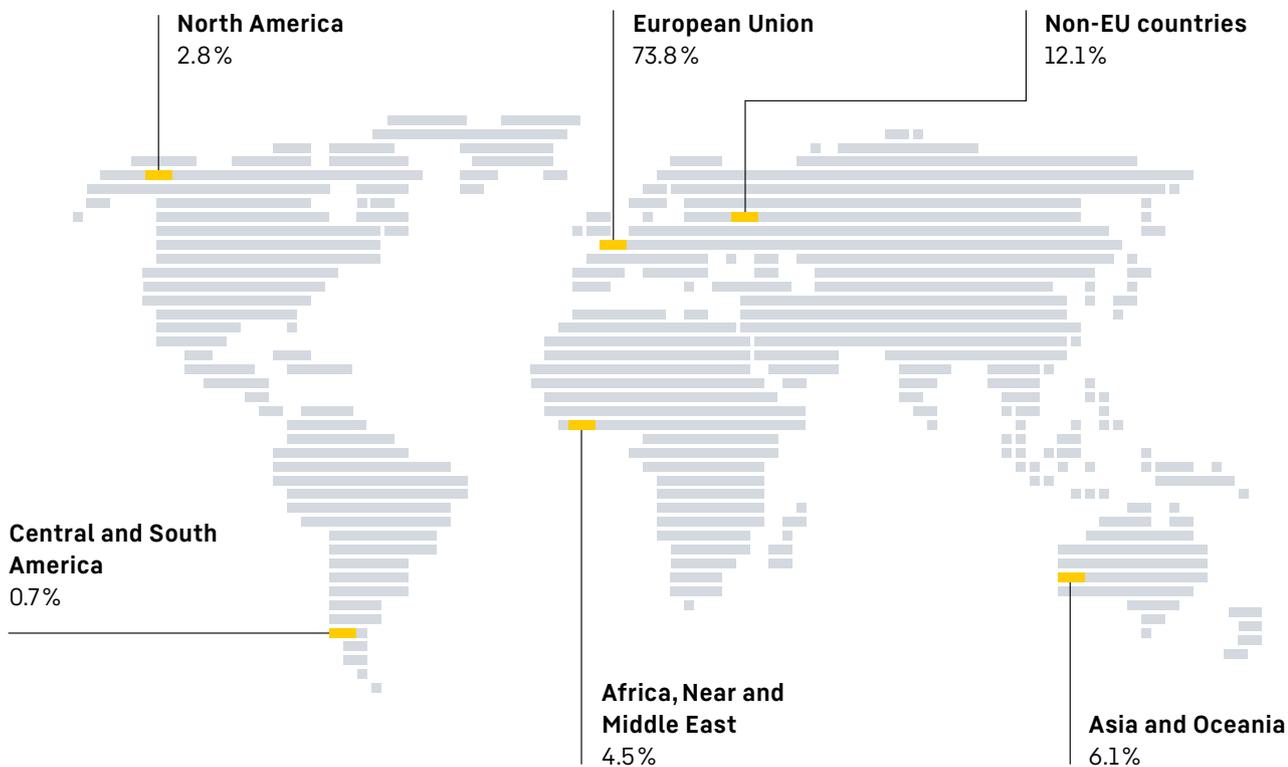
High inflation created considerable headwinds in the construction industry, particularly in the European market. This had a knock-on effect in the tower crane segment and was compounded by disruptions in the procurement market that caused delivery delays. In spite of the difficult general conditions, turnover in the tower cranes product segment remained at the previous year's level.

Liebherr achieved encouraging growth in Asia and Oceania as well as in Africa, Near and Middle East where Australia, Hong Kong, India, Egypt and Israel proved to be particularly strong drivers. North America also recorded an increase in turnover, with the individual markets of the USA and Canada providing impetus for growth. In the European Union and non-EU countries, Liebherr recorded declines compared to the previous year. Business in France declined significantly, mainly due to the sale of Liebherr's rental fleet to an external lessor. The slump in non-EU countries can mainly be attributed to the Russian market. Turnover also fell in Central and South America.

Expansion of the successful EC-B series

The 470 EC-B flat-top crane introduced in 2022 has a maximum load capacity of 16 or 20 t. The design process focused equally on performance, assembly and transport. The jib and counter-jib can be attached to the slewing platform easily, conveniently and safely. Only five trucks are required to transport it to the construction site, thus saving time and money and reducing transport-related emissions. Just in time for Bauma 2022 in Munich (Germany), Liebherr was ready to unveil the new 520 EC-B Fibre with fibre rope. This is the biggest new addition to the EC-B cranes and expands the series upwards. With a load capacity of up to 20 t, it can be used flexibly in residential, plant or bridge construction. Another milestone was fitting various large cranes outside the EC-B series with high-strength fibre rope for the first time. The 258 HC-L 10/18 Fibre, the 1188 EC-H 40 Fibre and the 370 EC-B 16 Fibre have been on the market since Bauma 2022. The new hydraulic luffing-jib crane 195 HC-LH 6/12 and the improved mobile construction crane MK 140-5.1 from the Liebherr plant in Biberach (Germany) were also showcased at the exhibition.

Turnover by sales regions



In the tower crane segment, research and development focused on networking construction sites and machinery. Particular emphasis was placed on the optimal use of cranes and a holistic approach to the construction site. With that in mind, Liebherr worked on digital solutions and developed optimisation strategies to support operators in their work on Construction 4.0.

Despite difficult market conditions, Liebherr is cautiously optimistic about the 2023 business year and expects a slight increase in turnover for tower cranes.

“The research and development work on tower cranes is focused on networking construction sites and machinery.”

Turnover € m



Investments € m



Employees





Concrete technology

In the concrete technology product segment, Liebherr recorded a turnover of € 253 million in the 2022 business year, representing an increase of € 34 million or 15.5 % year-on-year.

Visible economic effects

In the first half of 2022, Liebherr experienced a significant drop in demand in concrete technology. This was mainly due to global price increases and delivery bottlenecks in the construction industry. Nevertheless, thanks to highly positive business development in the second half of the year, the Group succeeded in building on the growth of the previous year.

Thanks to positive growth in Germany, Austria and France, turnover in the European Union developed positively. In the non-EU countries, turnover increases were recorded primarily in the United Kingdom and Switzerland. In the North, Central and South America regions, Liebherr achieved strong growth in Canada, the USA and Brazil. Thanks to good sales figures in Saudi Arabia, business development in the Africa, Near and Middle East region was also positive. In contrast, the continuing decline in the Chinese market was the main reason for the decline in turnover in Asia and Oceania.

Global turnover increased sharply, especially in concrete pumps and in sensor technology. Turnover with truck mixers

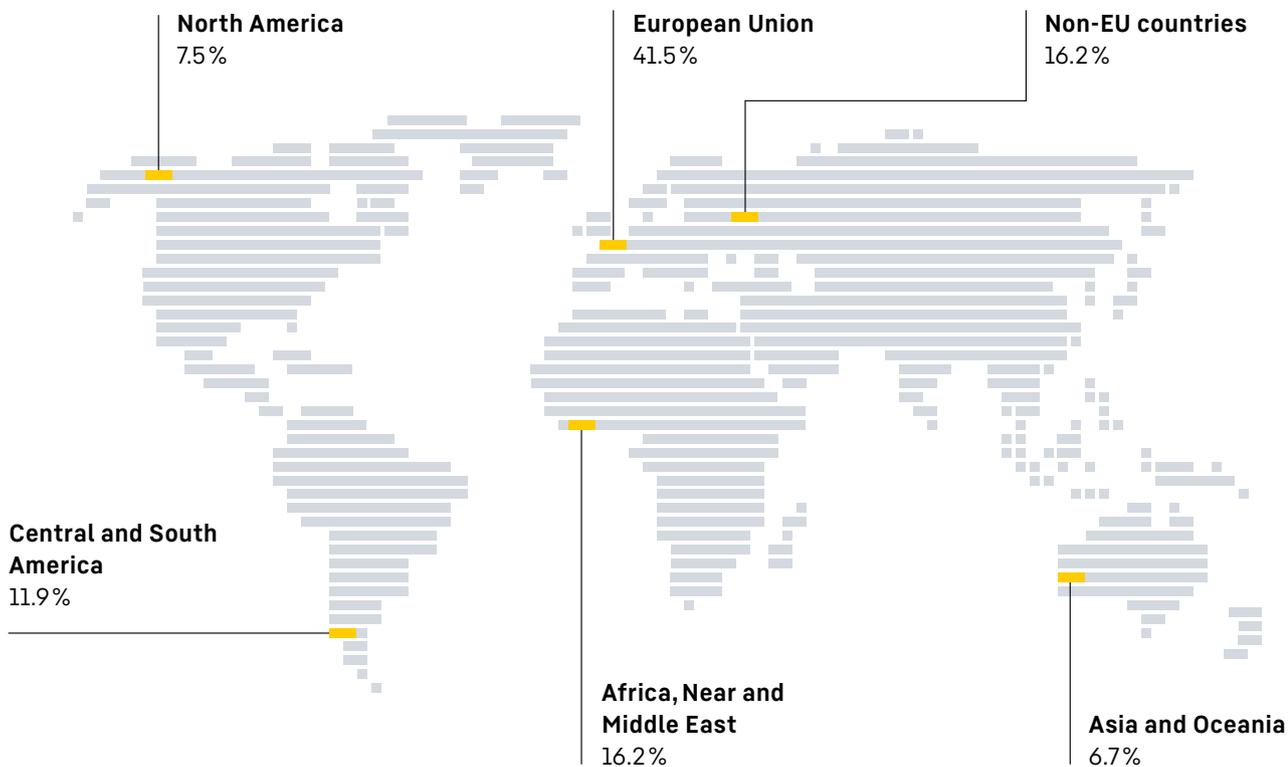
and mixing plants increased moderately compared to the previous business year.

Emission savings in focus

A highlight in the concrete technology segment was the pre-series production of the first hybrid truck mixer with conventional truck drive and battery-powered HTM body.

The presentation of the new generation of mixing plants at Bauma in Munich (Germany) was another milestone. The Betomix and Mobilmix series are based on an innovative modular system and replace several predecessor series. The modularity of the new mixing plants offers customers an individually tailored solution. The new editions also have improved drives, delivering energy savings of up to 30 %. They also have a higher dosing accuracy, which means that up to 7.5 kg of cement can be saved per m³ of concrete. In 2022, development activities focused on control technology. The main focus was on optimising systems and processes through data collection and processing. In addition, work was done on a hybrid drive for truck-mounted concrete pumps.

Turnover by sales regions



Plant investment activities focused on measures to improve energy efficiency. Photovoltaic systems and new heating systems were installed at various sites in order to reduce their energy consumption and CO₂ footprint.

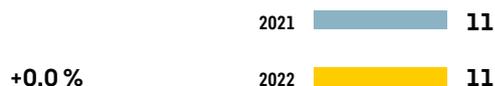
Thanks to its healthy order volume, Liebherr expects turnover in the concrete technology segment to increase in 2023. However, this primarily depends on a stable material supply.

“The configurable modular systems for mixing plants are based on standard components and ensure maximum customer benefit at lower overall costs.”

Turnover € m



Investments € m



Employees





Maritime cranes

In the 2022 fiscal year, Liebherr recorded a turnover of € 812 million in its maritime cranes product segment. This represents a year-on-year increase of € 72 million or 9.7%.

Upswing in maritime goods handling

The global maritime goods handling market is experiencing an upswing. Turnover in the segment – broken down by product area – reflected the general industry trend in the maritime sector. Liebherr experienced a slightly decreased turnover in mobile harbour cranes compared to the previous year. A modest year-on-year increase in turnover was achieved in the ship cranes and offshore cranes product areas. Container cranes saw a positive increase thanks to substantial orders in the core markets.

A breakdown of turnover by region in the maritime cranes product segment reveals significant growth in North America and Africa, Near and Middle East in particular. This encouraging result was driven primarily by business in the USA, Ethiopia and Tanzania. The non-EU countries as well as Central and South America also recorded an increase in turnover. Conversely, Liebherr experienced a declined turnover in the

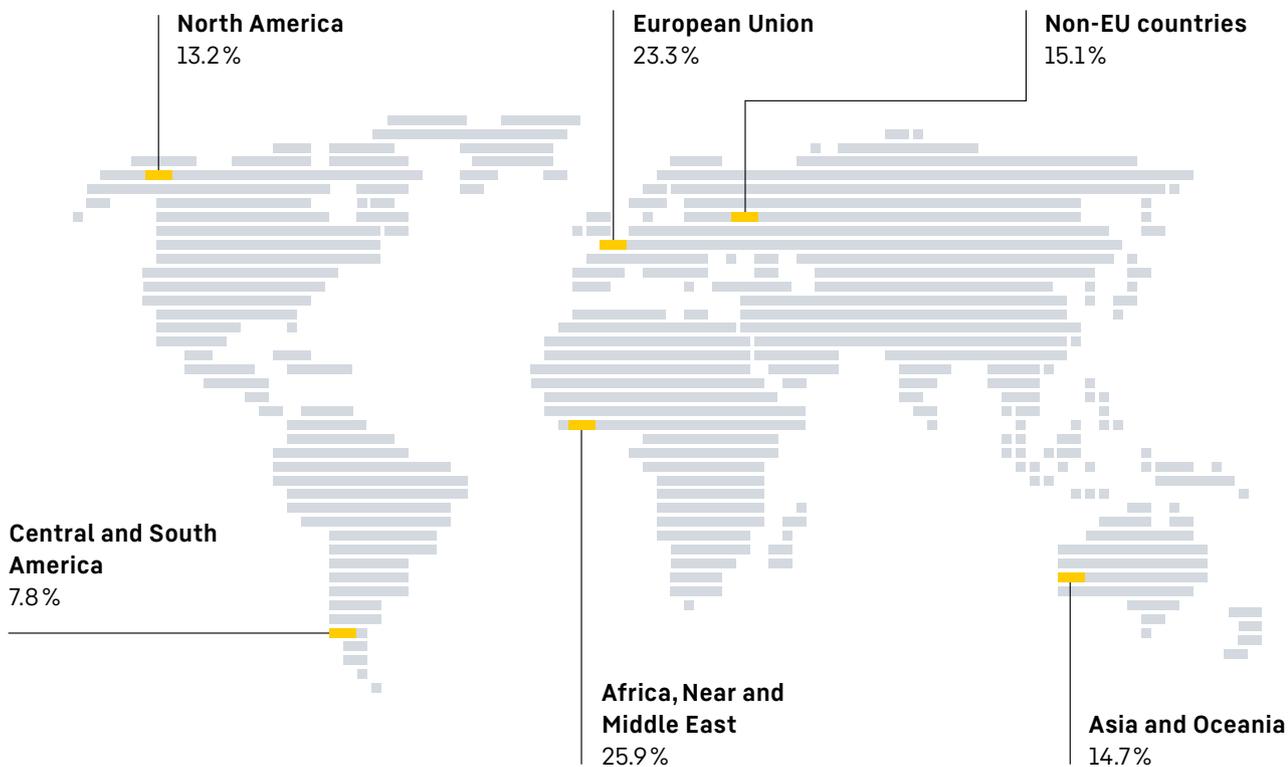
EU, which can be attributed in particular to the tense economic situation. There was also a slight downturn in turnover in Asia and Oceania.

Heavy Lift Crane 295000 successfully completes first assignments

One of the highlights of the fiscal year was the delivery of the Heavy Lift Crane 295000. This crane, the largest Liebherr has ever built, left the port of Rostock (Germany) on board the Orion at the end of March. The offshore installation vessel, in tandem with the crane, is regarded as the most innovative vessel in the offshore wind industry. Several assignments have already been successfully completed since then.

In the last business year, development activities centred on assistance systems with a focus on (partially) automated cranes for handling bulk goods and containers. A number of

Turnover by sales regions

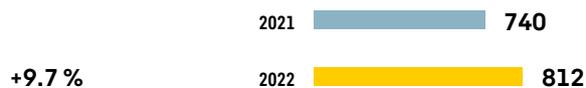


basic developments were successfully concluded in this context. Additional technologies were also implemented in the machine health area.

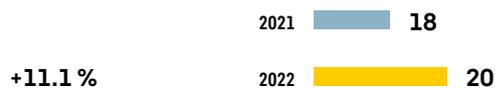
On the basis of its strong order situation, Liebherr anticipates a growth in turnover in the maritime cranes product segment in 2023.

“The last business year saw a strong emphasis on the development of assistance systems with a focus on (partially) automated cranes for handling bulk goods and containers.”

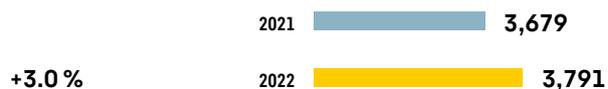
Turnover € m



Investments € m



Employees





Aerospace and transportation systems

In its aerospace and transportation systems product segment, Liebherr achieved a turnover of € 1,311 million in the 2022 business year, which represents an increase of € 218 million or 19.9% compared to the previous year.

Recovery of the global market quicker than expected

The upward trend in global air and railway traffic that emerged in 2021 has continued in 2022. Liebherr's overall turnover developed positively in all regions in 2022. While the aerospace product area achieved significant growth in the EU, a decline was recorded in transportation systems. In non-EU countries and North America, Liebherr achieved an increased turnover in both product areas. Aerospace further saw strong growth in Middle and South America as well as Africa, Near and Middle East. Turnover in Asia and Oceania developed very positively for aerospace, but greatly declined for transportation systems due to the stagnating Chinese market.

Innovating technologies for the future

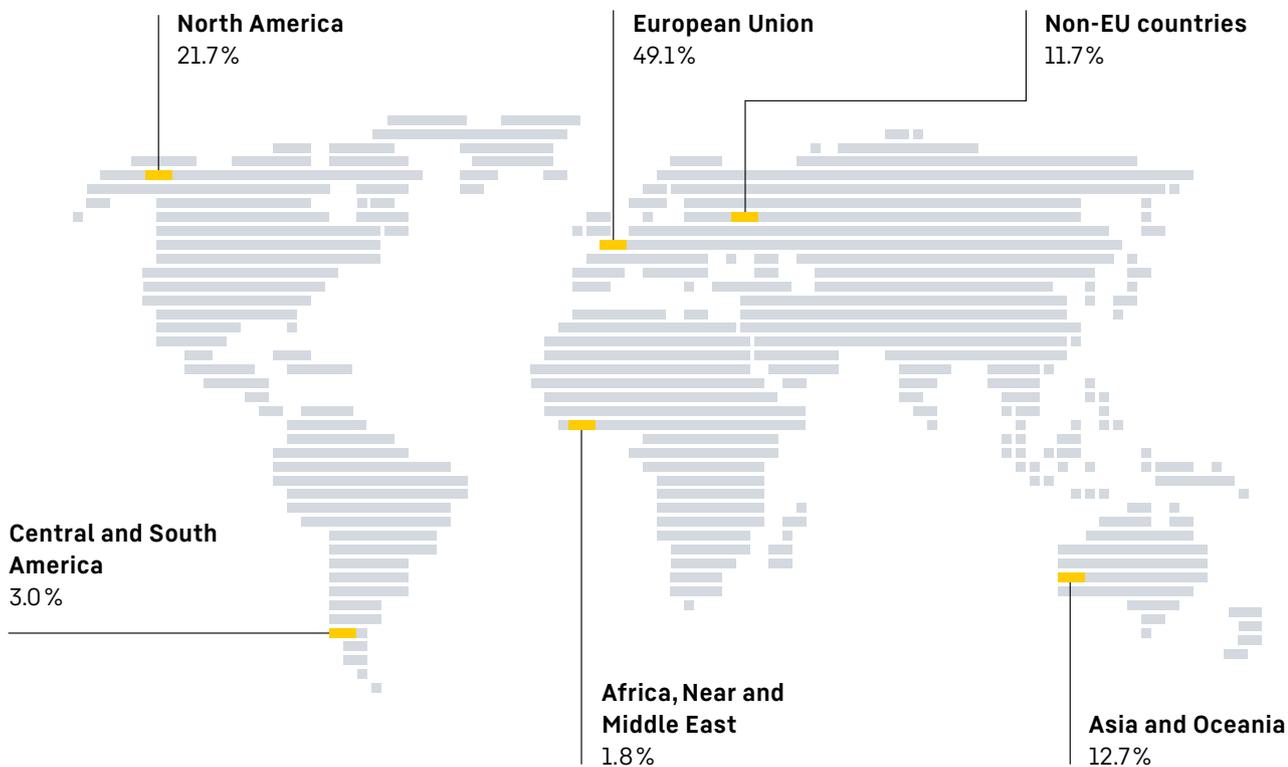
Airbus selected Liebherr to supply the lower cargo door actuator and valve for the A350. The complex valve will be produced using 3D printing technology. Furthermore, Rolls-Royce commissioned Liebherr to supply engine pneumatic

valves and anti-ice valves for the Pearl® 10X engine, powering Dassault Aviation's Falcon 10X business jet. Additionally, Liebherr was chosen by Deutsche Aircraft to develop and supply the flap and spoiler actuation system as well as the air management system for the D328eco™ aircraft, a platform paving the way towards a zero-emission flight objective.

On the railway market, Liebherr and Siemens unveiled the jointly developed Siemens Mobility air-free brake system and its essential component, the air-free brake actuator. Liebherr also obtained several orders to deliver, for example, 182 compact air-conditioning units for new Czech long-distance reversible trains on behalf of Siemens Mobility Austria. Furthermore, Liebherr's new generation of levelling systems went into passenger service on board the 7000 series rail cars produced by CRRC Sifang America and operated by Chicago Transit Authority.

In 2022, Liebherr focused its research on an array of topics, such as the integration of lightweight structures and

Turnover by sales regions



3D-printed equipment for providing weight and fuel improvement for next-generation aircraft. In addition, the company continued its research on fuel cell technology.

Based on the market development, Liebherr expects the turnover to reach the pre-pandemic level by 2023/2024, one year earlier than anticipated.

“Liebherr makes a significant contribution to a more viable world, lower emission aviation and rail transport, in particular by accelerating the deployment of technologies to drastically reduce CO₂ emissions.”

Turnover € m



Investments € m



Employees





Gear technology and automation systems

In the 2022 business year, turnover in the gear technology and automation systems product segment amounted to € 205 million, representing a slight decline of € 5 million or 2.4 % on the previous year.

Asia – the most important region

According to the German Machine Tool Builders' Association (VDW), order intake in the machine tool industry grew, with inflation having a noticeable impact. The Liebherr gear technology and automation systems product segment performed below the trend, with turnover slightly below the previous year's level. Inflation and material shortages had a significant impact on the high order volume.

Turnover in the EU declined, mainly due to downturns in Germany and Poland. There were also significant downturns in non-EU countries and Central and South America. Due to a sharp downturn in the USA, turnover also fell in North America. In contrast, turnover in Asia and Oceania rose strongly thanks to encouraging growth in China and India.

Product areas also saw different levels of performance. While turnover in automation systems fell, a moderate growth in gear technology was recorded.

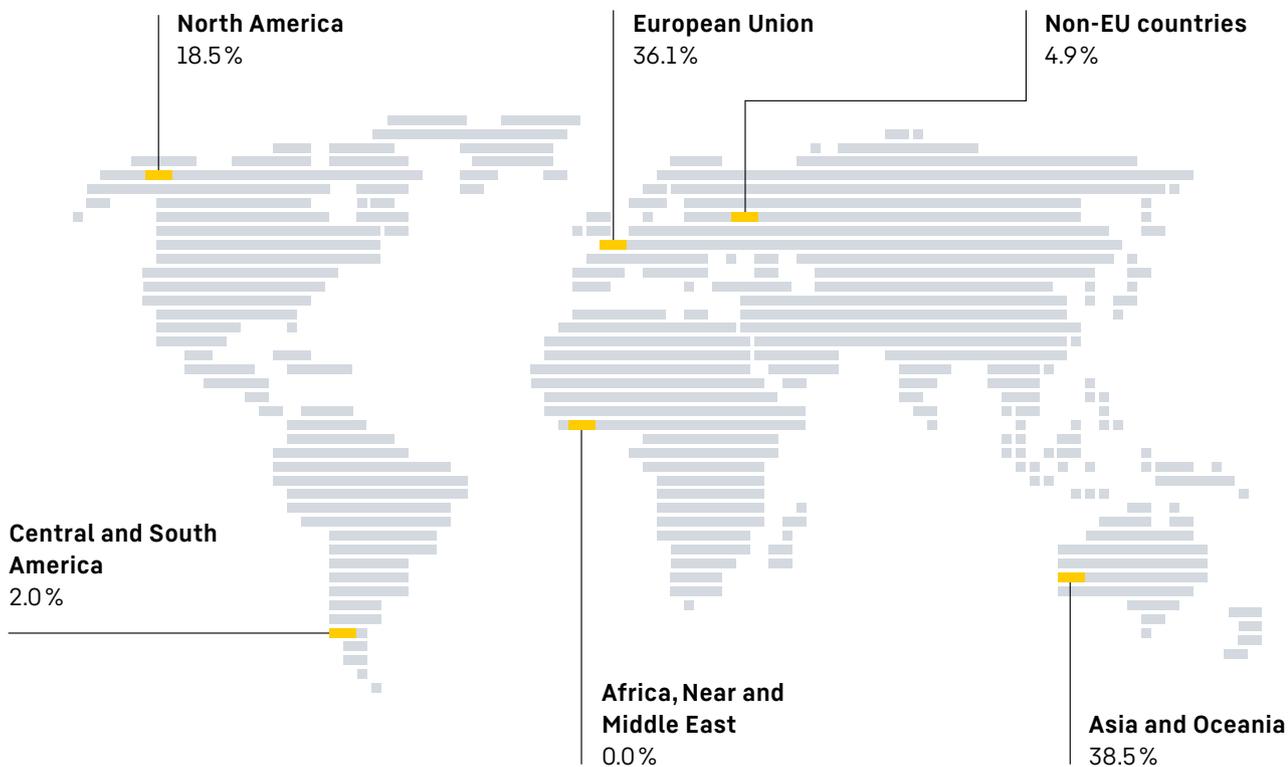
Renewed focus on battery systems

The year 2022 saw the presentation of the new LC 500 DC gear hobbing machine at the AMB trade show in Stuttgart (Germany) – a landmark for gear technology. The machine is part of Construction Set C and impresses with its stable hobbing, optimised chip removal and other features.

The series production of CBN profile grinding wheels with a grinding wheel diameter of just 25 mm was another milestone in the business year, as was the further development of LiTool, a design and simulation program for increasing the quality of tool manufacturing.

A highlight in automation systems was the further development of process automation in the area of manufacturing battery systems for electrically powered vehicles, focusing mainly on the dosing and application of thermal paste and adhesives.

Turnover by sales regions



Liebherr’s research activities focused on battery pack disassembly concepts. Various test grippers have already been developed and constructed for this purpose.

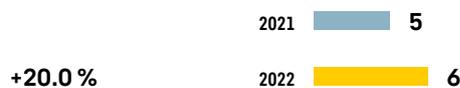
Thanks to the very healthy order volume, the product segment expects turnover to stabilise in 2023. However, this forecast should be viewed with caution, as the high material prices will persist initially.

“In the next few years, the focus will continue to be on product and portfolio management, increasing process efficiency and reducing product costs.”

Turnover € m



Investments € m



Employees





Refrigerators and freezers

Liebherr achieved a turnover of € 1,152 million with refrigerators and freezers in the 2022 business year. This represents an increase of € 101 million or 9.6% compared to the previous year.

Tense consumer climate in Europe

The world market volume for large electrical appliances fell slightly in 2022. The main strains on the industry were caused by delivery bottlenecks and cost increases, which also had an impact on the price of end products. Consumer behaviour in Europe reached a low due to high inflation, increased living costs and uncertainties over energy supply.

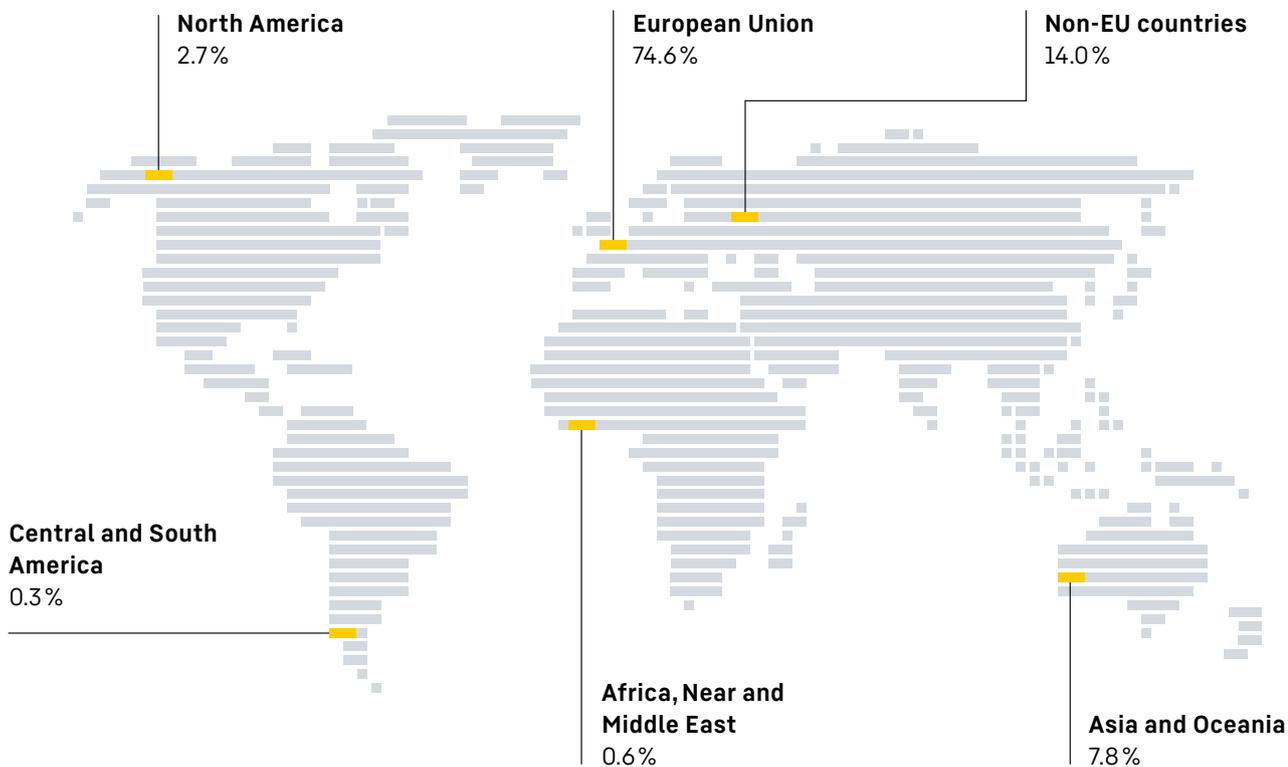
Nevertheless, Liebherr achieved overall turnover growth in the refrigerators and freezers product segment, with variations from region to region. In the European Union, an increase in turnover was recorded, primarily driven by the German and French markets. In non-EU countries, Liebherr increased turnover especially in Switzerland and the UK. The picture was similar in the Central and South America region, where impetus came primarily from Ecuador. Growth in Asia and Oceania proved particularly encouraging, with markedly positive trends in China and Australia. Growth in the USA offset a decline in turnover in Canada, leading to a slight increase in the North America region. However, Liebherr recorded a decline in turnover in the Africa, Near and Middle East sales region, where growth in individual markets was not sufficient to offset the downward trend.

A quantum leap in energy efficiency

In the 2022 fiscal year, Liebherr presented a number of new product developments and pioneering solutions in the refrigerators and freezers segment. This included the launch of new free-standing appliances that combine energy efficiency with intuitive operation, digital networking and sophisticated design. These appliances are notable for their innovative freshness technologies, such as the BioFresh Professional Fish & Seafood Safe. One outstanding highlight was the debut of a world first at the IFA 2022 in Berlin (Germany): Liebherr's unique solution combining a vacuum with finely ground lava rock to insulate refrigerators and freezers. This innovative, patented technology is based on ten years of research and, for the first time, opened the way for the company to manufacture freezers in classes A and B according to EU energy labelling.

In terms of digitalisation, Liebherr has enhanced its Smart-Device app with the unique AutoDoor function, which allows the doors of an appliance to be opened and closed independently by tapping lightly, giving a voice command, or activating them via the app.

Turnover by sales regions



In the business year, the company continued its research cooperation on refrigeration technology with the Karlsruhe Institute of Technology (Germany), which is set to run until 2025. Liebherr also entered into a research partnership with Silicon Austria LABS for printed electronic components.

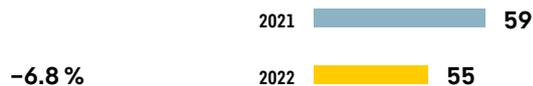
Although significant cost increases will continue to pose challenges, Liebherr expects further growth in the refrigerators and freezers segment in 2023.

“Through ongoing research and development, Liebherr is setting new standards with innovative technologies and revolutionising the field of refrigeration and freezing.”

Turnover € m



Investments € m



Employees





Components

Turnover in the components product segment amounted to € 461 million in the 2022 business year, representing a slight decline of € 17 million or 3.6% year-on-year.

America as the most important sales region

In the 2022 business year, Liebherr was unable to maintain its growth trajectory in the components product segment and achieved a total turnover slightly below the figure for the previous year. The product segment experienced uneven growth in the various regions. Turnover increases were achieved in North, Central and South America. The USA and Brazil were strong drivers. Despite some growth stimuli, especially from Italy, Switzerland and Turkey, Liebherr saw an overall decline within the European Union and non-EU countries. In Asia and Oceania, the decline in turnover was mainly due to the wind industry and developments in China. In the Africa, Near and Middle East region, Liebherr kept turnover relatively stable at the previous year's level. Looking at the individual product areas, turnover increased in the area of decentralised energy production in connection with the manufacture of diesel engines. The renewed increase in the wind and mining aftermarket is particularly noteworthy.

Focus on digitalisation and alternative drive concepts

Liebherr's development of a prototype hydrogen combustion engine for heavy-duty applications and a suitable hydrogen injection solution have made an important contribution to-

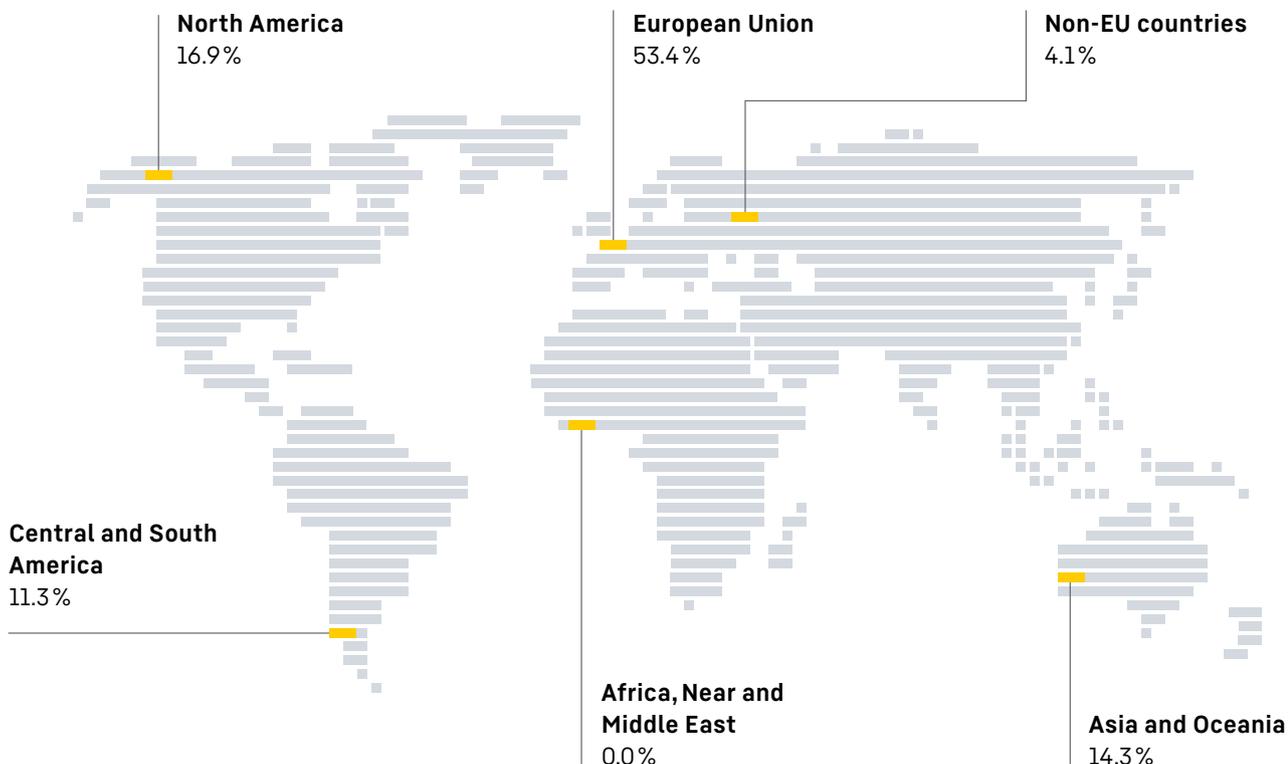
wards global decarbonisation. This kind of prototype engine powers the first hydrogen excavator from Liebherr, which won the Bauma Innovation Award 2022 in the climate protection category.

As part of its work to electrify work machines, Liebherr came up with new drive solutions, such as electric drive units, and adjustment systems for wind sails that are used for propulsion in shipping. During the business year, the Group also presented a mobile energy storage system for supplying decentralised construction sites.

Another area of focus was the digitalisation of work machines. Liebherr developed camera monitoring systems with 360° top-view solutions and digital status monitoring for combustion engines and unveiled an integrated wear measurement system for slewing bearings and a prototype force measurement sensor for hydraulic cylinders.

Hybrid cylinders made from a combination of steel and carbon-fibre-reinforced plastic (CFRP) were developed to save weight in mobile and stationary applications. The range of

Turnover by sales regions



axial hydraulic pumps and motors has been expanded to include new nominal sizes.

Main bearings are a key element of the machinery used in wind turbines. Therefore, Liebherr also added single-row tapered roller bearings to its portfolio. Moreover, the first mooring bearings were delivered for the self-alignment of floating offshore wind turbines.

Among other things, Liebherr invested in its new production site in China, expanded an assembly line for drive units in India, and set up a new production facility for hydraulic cylinders in Germany. The installation of photovoltaic systems at several production sites represents a significant step towards a CO₂-free future. By expanding its product portfolio, continually developing new technologies and serving as a re-

liable partner for a wide variety of industries, Liebherr is creating the conditions for growth in the components product segment over the coming business year.

Turnover € m



Investments € m



Employees



“Liebherr demonstrates its foresight by adopting a product development approach that is open to new technology, while paving the way for innovative and efficient components in future.”



05

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-Concrete Technology Marica EOOD
Radinovo

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 Distribution et Services France SAS
Niederhergheim

Liebherr-France SAS
Colmar

Liebherr-Location France SAS
Niederhergheim

Liebherr-Mining Equipment Colmar SAS
Colmar

Liebherr-Mining Equipment SAS
Colmar

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
Dettingen 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-Digital Development Center GmbH
Ulm
Liebherr-Electronics and Drives GmbH
Lindau
Liebherr-EMtec GmbH
Kirchdorf an der Iller
Liebherr-Ettlingen GmbH
Ettlingen
Liebherr-Hausgeräte GmbH
Ochsenhausen
Liebherr-Hausgeräte Ochsenhausen GmbH
Ochsenhausen
Liebherr-Hausgeräte Vertriebs- und Service GmbH
Ulm
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.
Győr

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.

Bucharest

Russia

Liebherr-Aerospace Nizhny Novgorod OOO

Nizhny Novgorod

Liebherr-Aerospace Russland OOO

Moscow

Liebherr Financial Services 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

United Kingdom

Liebherr-Great Britain Ltd.

Biggleswade

Liebherr-Rental Ltd.

Biggleswade

Liebherr Sunderland Works Ltd.

Sunderland

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

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 and Automation Technologies, 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 LTDA
Guaratinguetá

Liebherr Brasil LTDA
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
Aurangabad

Liebherr CMCtec India Private Limited
Pune

Liebherr India Private Limited
Mumbai

Liebherr Machine Tools India Private Limited
Bangalore (60%)

Indonesia

PT. Liebherr Indonesia Perkasa
Jakarta

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 Components (Dalian) Co., Ltd.
Dalian

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

Singapore

Liebherr-Singapore Pte Ltd
Singapore

South Korea

Liebherr Mobile Cranes Korea Ltd.
Seoul

Thailand

Liebherr (Thailand) Co., Ltd.
Rayong



06



Consolidated financial statements

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Consolidated balance sheet

Assets in € m	Notes	31/12/2022	%	31/12/2021	%
Intangible assets	3.1	29	0.2	29	0.2
Tangible assets	3.2	3,808	24.7	3,629	24.9
Investments accounted for using the equity method	3.5	8	0.1	7	0.0
Non-current financial assets	3.6	227	1.5	208	1.4
Deferred tax assets	8	222	1.4	256	1.8
Non-current assets		4,294	27.9	4,129	28.3
Inventories	4.1	5,662	36.8	4,447	30.6
Receivables	4.2 / 4.3	2,500	16.2	2,180	15.0
Income tax receivables	8	84	0.5	82	0.6
Current financial assets	4.5	1,394	9.1	1,565	10.8
Cash and cash equivalents	4.6	1,465	9.5	2,145	14.7
Current assets		11,105	72.1	10,419	71.7
Total assets		15,399	100.0	14,548	100.0
Equity and liabilities in € m					
Share capital		62	0.4	62	0.4
Other reserves and retained earnings	2.3 / 5	8,596	55.8	8,290	57.0
Equity of Liebherr-International AG shareholders		8,658	56.2	8,352	57.4
Non-controlling interests		16	0.1	19	0.1
Equity		8,674	56.3	8,371	57.5
Non-current financial liabilities	6	1,235	8.0	1,213	8.3
Post-employment benefits	9	678	4.4	996	6.9
Deferred tax liabilities	8	63	0.4	63	0.4
Non-current provisions	10	34	0.2	42	0.3
Other non-current liabilities	7	64	0.4	70	0.5
Non current liabilities		2,074	13.4	2,384	16.4
Current financial liabilities	6	1,101	7.2	823	5.7
Payments received in advance		665	4.3	427	2.9
Income tax liabilities	8	130	0.8	111	0.8
Current provisions	10	682	4.5	656	4.5
Other current liabilities	7	2,073	13.5	1,776	12.2
Current liabilities		4,651	30.3	3,793	26.1
Total equity and liabilities		15,399	100.0	14,548	100.0

Consolidated income statement

in € m	Notes	31/12/2022	%	31/12/2021	%
Turnover	11	12,589	91.7	11,639	95.4
Increase or decrease of work in progress and finished goods		524	3.8	-24	-0.2
Other own work capitalised		328	2.4	333	2.7
Other operating income		289	2.1	261	2.1
Operating income		13,730	100.0	12,209	100.0
Cost of materials		-7,554	-55.0	-6,505	-53.3
Personnel expenses		-3,394	-24.7	-3,072	-25.2
Depreciation of non-current assets	3	-528	-3.8	-507	-4.2
Other operating expenses		-1,800	-13.1	-1,413	-11.6
Operating expenses		-13,276	-96.6	-11,497	-94.3
Operating result		454	3.4	712	5.7
Finance income		1,353	9.9	593	4.9
Finance cost		-1,562	-11.4	-493	-4.0
Share of net profit of associates and joint ventures accounted for using the equity method		1	0.0	0	0.0
Finance result		-208	-1.5	100	0.9
Result before tax		246	1.9	812	6.6
Taxes on income	8	-244	-1.8	-267	-2.2
Result after tax		2	0.1	545	4.4
of which shareholders of Liebherr-International AG		1	0.1	544	4.4
of which non-controlling interests		1	0.0	1	0.0

Consolidated statement of comprehensive income

in € m	31/12/2022	31/12/2021
Result after tax	2	545
Post-employment benefits	345	54
Deferred tax	-46	-10
Items that will not be reclassified to profit or loss	299	44
Foreign exchange translation differences	51	82
Changes of fair value in cash flow hedges	3	-74
Deferred tax	1	13
Items that may be reclassified to profit or loss	55	21
Other comprehensive income	354	65
Comprehensive income	356	610
of which shareholders of Liebherr-International AG	355	607
of which non-controlling interests	1	3

Consolidated statement of changes in equity

in € m	Share capital	Financial assets at OCI	Foreign exchange translation differences	Other reserves and retained earnings	Equity of Liebherr-International AG shareholders	Non controlling interests	Group equity
31/12/2020	62	53	-64	7,717	7,768	16	7,784
Result after tax				544	544	1	545
Other comprehensive income		-61	80	44	63	2	65
Comprehensive income		-61	80	588	607	3	610
Dividends				-23	-23	0	-23
Changes in shares of non controlling interests				0	0	0	0
31/12/2021	62	-8	16	8,282	8,352	19	8,371
Result after tax				1	1	1	2
Other comprehensive income		4	51	299	354	0	354
Comprehensive income		4	51	300	355	1	356
Dividends				-50	-50	0	-50
Changes in shares of non controlling interests				1	1	-4	-3
31/12/2022	62	-4	67	8,533	8,658	16	8,674

Consolidated cash flow statement

in € m	31/12/2022	31/12/2021
Result after tax	2	545
Depreciation of non-current assets	528	507
Fair Value changes in marketable securities (current assets)	209	-81
Gain / Loss on disposal of non-current assets	2	4
Change in provisions and post-employment benefits	40	41
Other non-cash items	-62	-69
Change in stock	-1,186	-278
Change in receivables and other current assets	-341	-181
Change in other liabilities	547	468
Change in rental fleet	-154	-118
Net cash flow from operating activities	-415	838
Payment for investments in intangible assets	-10	-9
Payment for investments in tangible assets	-500	-357
Payment for investments in marketable securities in current assets	-220	-236
Proceeds from sales of tangible assets	24	14
Proceeds from sales of financial assets	1	0
Proceeds from sales of marketable securities (current assets)	189	178
Other proceeds from investing activities	13	11
Net cash flow from investing activities	-503	-399
Dividends paid, other distributions and equity capital repaid	-50	-23
Proceeds from current or non-current financial liabilities	779	281
Repayment of current or non-current financial liabilities	-500	-598
Net cash flow from financing activities	229	-340
Net decrease / increase in cash and cash equivalents	-689	99
Effects of exchange rate changes on cash and equivalents	9	10
Cash and cash equivalents at beginning of period	2,145	2,036
Cash and cash equivalents at end of period	1,465	2,145
Income tax paid and reimbursed	-238	-288
Interest paid	-41	-28
Interest received	43	38

Notes to the consolidated financial statements

1 Corporate information and business activity

The company was founded in 1949 by Dr. Hans Liebherr. Currently, the family-run company has more than 50,000 employees working in more than 140 companies around the world. The share capital of Liebherr-International AG, Bulle, Switzerland, amounting to € 62 million (100 million CHF) 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, off-shore 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 December 31, 2022 comply with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB), 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 January 1, 2022.

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 based on a historical cost basis 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 December 31. The presentation currency is the euro, as it is the predominant currency in the Group.

In order to increase comprehensibility and relevance, some detailed disclosures required by IFRS are not published in these condensed consolidated financial statements. These disclosures are correctly disclosed in the audited consolidated financial statements according to IFRS.

Major uncertainties resulted from the ongoing Russia-Ukraine war on the balance sheet date. The sanctions imposed and their countermeasures restrict economic activities with Russia and have a negative impact on the business of the Liebherr Group's Russian companies.

Turkey meets the definition of a hyperinflationary economy in the 2022 fiscal year. In this respect, IAS 29 is to be applied. Accordingly, the relevant non-monetary assets and liabilities, equity and all income statement items have been adjusted for the effects of inflation using the consumer price index (Local Government Consumer Price Index with base year 2003 (Turkish Statistical Institute)). Afterwards, the balance sheet items as well as expenses and income are translated into the presentation currency, the euro, at the closing rate. However, the first-time application results in an effect in other comprehensive income (OCI) of no material significance for the Group.

2.2 Published and newly applied standards, interpretations and amendments

The following new standards, interpretations and amendments were relevant for Liebherr in 2022.

IAS 16

The published amendment to IAS 16 prohibits an entity from deducting from the cost of an item of property, plant and equipment any proceeds received from selling items produced while the entity is preparing the asset for its intended use. There are no material effects resulting from the application.

IAS 37

IAS 37 defines an onerous contract as one in which the unavoidable costs of meeting the entity's obligations exceed the economic benefits to be received under that contract. Unavoidable costs are the lower of the net cost of exiting the contract and the costs to fulfil the contract. The amendment clarifies the meaning of 'costs to fulfil a contract'. The amendment explains that the direct cost of fulfilling a contract comprises the costs of fulfilling that contract and an allocation of other costs that relate directly to fulfilling contracts. There are no material effects resulting from the application.

IFRS 1

IFRS 1 allows an exemption if a subsidiary adopts IFRS at a later date than its parent. The subsidiary can measure its assets and liabilities at the carrying amounts that would be included in its parent's consolidated financial statements, based on the parent's date of transition to IFRS, if no adjustments were made for consolidation procedures and for the effects of the business combination in which the parent acquired the subsidiary. The Board has amended IFRS 1 to allow entities that have taken this IFRS 1 exemption to also measure cumulative translation differences using the amounts reported by the parent, based on the parent's date of transition to IFRS. There are no material effects resulting from the application.

IFRS 9

The amendment to IFRS 9 addresses which fees should be included in the 10% test for derecognition of financial liabilities. Costs or fees could be paid to either third parties or the lender. Under the amendment, costs or fees paid to third parties will not be included in the 10% test. There are no material effects resulting from the application.

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.

No companies have been established during the fiscal year 2022.

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 Investments accounted for using the equity method and the share of profit of joint ventures and associates is shown in the income statement under Share of net profit of associates and joint ventures accounted for using the equity method.

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

- Fors AG, Studen, Switzerland
- 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:

			2022		2021	
			Year end rate in €	Average rate in €	Year end rate in €	Average rate in €
Switzerland	CHF	1	1.0155	0.9957	0.9680	0.9249
USA	USD	1	0.9376	0.9511	0.8829	0.8454
Great Britain	GBP	1	1.1275	1.1733	1.1901	1.1631
Australia	AUD	1	0.6372	0.6596	0.6404	0.6352
Russia	RUB	1	0.0128	0.0141	0.0117	0.0115

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 has retained 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 (fvtp)

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 based 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:

Concessions	3 years
Industrial property rights and similar rights	3 years
Licences	3 years
Software	3 – 5 years

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:

Buildings	20 – 40 years
Machinery and equipment	5 – 21 years
Furniture	13 years
IT	3 – 5 years
Vehicles	5 – 11 years

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Development of tangible assets as at 31/12/2022:

in € m	Land and buildings	Technical equip. and machinery	Other equip., factory and office equip.	Adv. paym., assets under construction	Total
Acquisition and production cost as at 1/1	3,714	2,788	1,779	189	8,470
Additions	95	375	142	241	853
Disposals	-33	-286	-84	-3	-406
Transfers	42	60	1	-108	-5
Foreign exchange differences	35	33	18	-1	85
Acquisition and production cost as at 31/12	3,853	2,970	1,856	318	8,997
Accum. depreciation and impairment as at 1/1	1,694	1,801	1,346	0	4,841
Depreciation of the year	151	207	147	0	505
Accum. depreciation on disposals	-19	-112	-79	0	-210
Impairment	5	2	0	1	8
Transfers	0	19	-19	0	0
Foreign exchange differences	14	20	12	-1	45
Accumulated depreciation as at 31/12	1,845	1,937	1,407	0	5,189
Net book value 31/12	2,008	1,033	449	318	3,808

Development of tangible assets as at 31/12/2021:

in € m	Land and buildings	Technical equip. and machinery	Other equip., factory and office equip.	Adv. paym., assets under construction	Total
Acquisition and production cost as at 1/1	3,545	2,722	1,700	153	8,120
Additions	93	367	122	152	734
Disposals	-18	-373	-95	-4	-490
Transfers	43	43	26	-113	-1
Foreign exchange differences	51	29	26	1	107
Acquisition and production cost as at 31/12	3,714	2,788	1,779	189	8,470
Accum. depreciation and impairment as at 1/1	1,538	1,738	1,277	0	4,553
Depreciation of the year	145	201	137	0	483
Accum. depreciation on disposals	-14	-158	-89	0	-261
Impairment	5	2	1	0	8
Transfers	0	0	0	0	0
Foreign exchange differences	20	18	20	0	58
Accumulated depreciation as at 31/12	1,694	1,801	1,346	0	4,841
Net book value 31/12	2,020	987	433	189	3,629

Other equipment, factory and office equipment include mainly computer equipment, furniture, vehicles, transportation equipment, tools and fixtures.

The carrying amount of land and buildings contains the capitalised borrowing costs amounting to € 4 million (2021: € 3 million).

The net book value of € 3,808 million (2021: € 3,629 million €) corresponds to 42.3% (2021: 42.9%) of the historical cost. The recognised impairment loss relates to the rental equipment.

3.3 Leases

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 payments and discounting is based on the incremental borrowing costs.

The practical expedients given in IFRS 16 with respect to low value asset 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. Low value asset 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 an existing 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 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 operating lease. Self-constructed assets capitalised under tangible assets but leased out under an operating 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

Investments 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. Raw

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

in € m	2022	2021
Raw materials and supplies	2,557	1,883
Work in progress	1,215	984
Finished goods and merchandise	1,871	1,569
Payments made in advance for inventories	19	11
Total	5,662	4,447

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.

4.3 Accounts receivable

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

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 used 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.

4.4 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.

in € m	2022	2021
Shares	398	488
Mutual funds	83	108
Fixed income securities	857	902
Other securities	4	65
Total securities and other financial assets at fair value	1,342	1,563
Fixed deposits with a residual term more than three months	52	2
Total	1,394	1,565

4.6 Cash and cash equivalents

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 cash and cash equivalents.

5 Equity

The share capital of Liebherr-International AG is divided into registered shares. The other reserves and retained earnings contain the legal reserve of Liebherr-International AG as well as the retained financial performance of the other subsidiaries. Additionally, the balance includes the free reserves of Liebherr-International AG as well as reserves

and earnings 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:

in € m	Current	Non-current	Total 2022	Current	Non-current	Total 2021
Bank liabilities	1,079	1,095	2,174	790	1,070	1,860
Liabilities from leases	21	140	161	32	143	175
Bank liabilities from discounted bills	1	0	1	1	0	1
Total	1,101	1,235	2,336	823	1,213	2,036

7 Other liabilities

The following table gives an overview of the other liabilities:

in € m	Current	Non-current	Total 2022	Current	Non-current	Total 2021
Liabilities from repurchase obligations	12	27	39	20	33	53
Accounts payable trade	1,032	0	1,032	861	0	861
Liabilities from personnel expenses and social security	396	0	396	358	0	358
Tax liabilities and customs	177	0	177	149	0	149
Derivative financial instruments	119	0	119	73	0	73
Contract Liabilities	186	0	186	167	0	167
Deferred income	19	0	19	16	0	16
Further liabilities	132	37	169	132	37	169
Total	2,073	64	2,137	1,776	70	1,846

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 jubilee payments and 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 provi-

sions 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.

Provisions 2022 in € m	Warranty obligation	Compensation and product liability	Expected loss from pending transactions	Other provisions	Total
Current provisions	445	14	140	83	682
Non-current provisions	0	0	16	18	34
Total provisions	445	14	156	101	716
Reconciliation					
31/12/2021	430	9	109	150	698
Increase	159	7	86	31	283
Usage	-111	-1	-55	-14	-181
Transfers	0	1	25	-25	1
Reversal	-36	-3	-9	-42	-90
Discounting	0	0	0	1	1
Foreign exchange differences	3	1	0	0	4
31/12/2022	445	14	156	101	716
Provisions 2021 in € m					
	Warranty obligation	Compensation and product liability	Expected loss from pending transactions	Other provisions	Total
Current provisions	430	9	92	125	656
Non-current provisions	0	0	17	25	42
Total provisions	430	9	109	150	698
Reconciliation					
31/12/2020	414	11	130	134	689
Increase	151	4	57	58	270
Usage	-105	-2	-73	-19	-199
Transfers	0	0	0	0	0
Reversal	-34	-3	-5	-24	-66
Discounting	0	0	0	0	0
Foreign exchange differences	4	-1	0	1	4
31/12/2021	430	9	109	150	698

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 issued 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.

12 Events after balance sheet date

There were no significant events at the Liebherr Group after the end of the business year of particular significance at the Liebherr Group.

Report of the statutory auditor

*To the Board of Directors of
Liebherr-International AG, Bulle
Berne, March 31, 2023*

Opinion

The summary consolidated financial statements of Liebherr-International AG, which comprise the consolidated balance sheet as at 31 December 2022, 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 selected notes, are derived from the audited consolidated financial statements of Liebherr-International AG for the year ended 31 December 2022.

In our opinion, the summary consolidated financial statements (pages 68 to 87) are consistent, in all material respects, with the audited consolidated financial statements in accordance with the basis described in note 2.1.

Summary consolidated financial statements

The summary consolidated financial statements do not contain all the disclosures required by International Financial Reporting Standards (IFRS). Reading the summary consolidated financial statements and the auditor's report thereon, therefore, is not a substitute for reading the audited consolidated financial statements and our auditor's report thereon.

The audited consolidated financial statements and our report thereon

We expressed an unmodified audit opinion on the consolidated financial statements in our statutory auditor's report to the annual general meeting dated 31 March 2023.

Board of Directors' responsibility for the summary consolidated financial statements

The Board of Directors' is responsible for the preparation of a summary of the complete audited consolidated financial statements in accordance with the basis described in note 2.1.

Auditor's responsibility

Our responsibility is to express an opinion on whether the summary consolidated financial statements are consistent, in all material respects, with the audited consolidated financial statements based on our procedures, which were conducted in accordance with International Standard on Auditing (ISA) 810, "Engagements to Report on Summary Financial Statements".

Ernst & Young Ltd

Christoph Michel
Licensed audit expert
(Auditor in charge)

Stefan Pieren
Licensed audit expert

Five-year summary

in € m	2018	2019	2020	2021	2022
Turnover	10,551	11,750	10,341	11,639	12,589
Investments	829	756	605	742	863
Depreciation	513	541	543	507	528
Non-current assets	4,433	4,372	4,011	4,129	4,294
Current assets	9,352	9,916	9,722	10,419	11,105
Equity	7,570	7,884	7,784	8,371	8,674
Liabilities	6,215	6,404	5,949	6,177	6,725
Result after tax	321	429	7	545	2
Personnel expenses	2,790	2,980	2,847	3,072	3,394
	2018	2019	2020	2021	2022
Employees	46,169	48,049	47,925	49,611	51,321

