

Integrated Report 2022

ABB



About ABB

ABB is a technology leader in electrification and automation, enabling a more sustainable and resource-efficient future.

The company's solutions connect engineering know-how and software to optimize how things are manufactured, moved, powered and operated. Building on more than 130 years of excellence, ABB's ~105,000 employees are committed to driving innovations that accelerate industrial transformation.

Key figures at a glance

- 1 For non-GAAP measures, see the chapter “Alternative performance measures” in the appendix of this report.
- 2 Constant currency (not adjusted for portfolio changes).
- 3 EPS growth rates are computed using unrounded amounts.
- 4 Proposed by the Board of Directors and subject to approval by shareholders at the Annual General Meeting on March 23, 2023, in Zurich, Switzerland.
- 5 Amount represents total for both continuing and discontinued operations.
- 6 Figures are adjusted for portfolio changes.
- 7 Percentages calculated using headcount data.

\$ in millions, unless otherwise stated	FY 2022	FY 2021	Change	Comparable ¹
FINANCIAL				
Orders	33,988	31,868	7%	16%
Order backlog (end December)	19,867	16,607	20%	29%
Revenues	29,446	28,945	2%	12%
Income from operations	3,337	5,718	-42%	
Operational EBITA ¹	4,510	4,122	9%	18% ²
as % of operational revenues	15.3%	14.2%	+1.1 pts	
Income from continuing operations, net of tax	2,637	4,730	-44%	
Net income attributable to ABB	2,475	4,546	-46%	
Basic Earnings per share (\$)	1.30	2.27	-43% ³	
Dividend per share (in CHF)	0.84 ⁴	0.82	0.02	
Cash flow from operating activities ⁵	1,287	3,330	-61%	
Cash flow from operating activities in continuing operations	1,334	3,338	-60%	
Net (cash) debt (end December) ¹	2,779	(98)		
ENVIRONMENTAL⁶				
Energy consumption (GWh)	1,417	1,505	-6%	
Renewable energy consumption (%)	52	33	+18 pts	
Own operations emissions scope 1 and 2 (kt CO ₂ e)	223	390	-43%	
Total waste sent to landfill (kilotons)	11.6	12.3	-6%	
SOCIAL AND GOVERNANCE				
Total number of employees (FTE)	105,100	104,400	0.7%	
Women in workforce (%) ⁷	28	27	+1 pts	
Women in senior management positions (%) ⁷	17.8	16.3	+1.5 pts	
Community spending	10.2	10.9	-6%	

ABB SUSTAINABILITY RATINGS 2022

- 1 Sustainability Yearbook Member (within the top 15% of industry).
- 2 Prime status.
- 3 Low risk exposure and management of material ESG issues is strong.

CDP CLIMATE CHANGE	CDP WATER	S&P GLOBAL ESG SCORE	ECOVADIS
A-	B-	69/100 ¹	Gold
ISS ESG	MSCI	SUSTAINALYTICS	
B- ²	AA	15.7 ³	

→ More information about our sustainability ratings can be found in our [Sustainability Report 2022](#).

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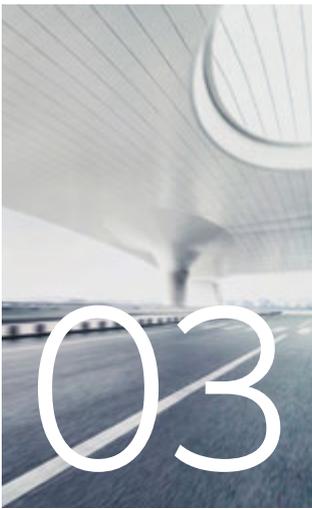
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About this report

ABB's Integrated Report highlights progress against our strategy and demonstrates how we create value holistically for our stakeholders in the short-, medium- and long-term.

As our primary report at Group level, this report is aimed at our shareholders, customers, suppliers, partners and employees. It integrates the most important material information about our company's financial and sustainability performance and is published in conjunction with our additional, separate reports. The scope of the data in this report covers our operations worldwide and provides an overview of financial and sustainability-linked performance for the full calendar year 2022 or reflects the status as of December 31, 2022.

Our Integrated Report contains five main sections:

- Value creation
- Risks and opportunities
- Performance
- Corporate Governance summary
- Compensation summary

As a global company with stock exchange listings in Switzerland, Sweden and the United States, we adhere to internationally recognized standards and frameworks. This Integrated Report is based on elements of the International Integrated Reporting Framework. Our financial statements are prepared in accordance with US GAAP. Sustainability information is provided in accordance with the GRI Standards and also covers the SASB

Standards, the TCFD (Task Force on Climate-Related Financial Disclosures) Recommendations, the EU Taxonomy and the 10 principles of the UN Global Compact.

In addition to performance measures prepared in accordance with recognized accounting standards, we use alternative (non-GAAP) measures deemed useful in evaluating ABB's operating results. Please refer to "[Supplemental Reconciliations and Definitions](#)" in ABB's Q4 2022 Financial Information.

In this integrated report, we cover topics that are relevant for ABB's value creation for our stakeholders, including our contribution towards broader societal targets as outlined, for example, in the UN Sustainable Development Goals. For a full picture of our performance and the value we have created, please consult our entire annual reporting suite on the [ABB website](#) as follows:

- Integrated Report 2022
- Financial Report 2022
- Corporate Governance Report 2022
- Compensation Report 2022
- Sustainability Report 2022
- Form 20-F (filed with US SEC, also in iXBRL format)

Our Integrated Report is translated into German (the original English version is binding). For environmental reasons, only a small number of copies of the Integrated Report are printed. All other reports are published as PDF only.

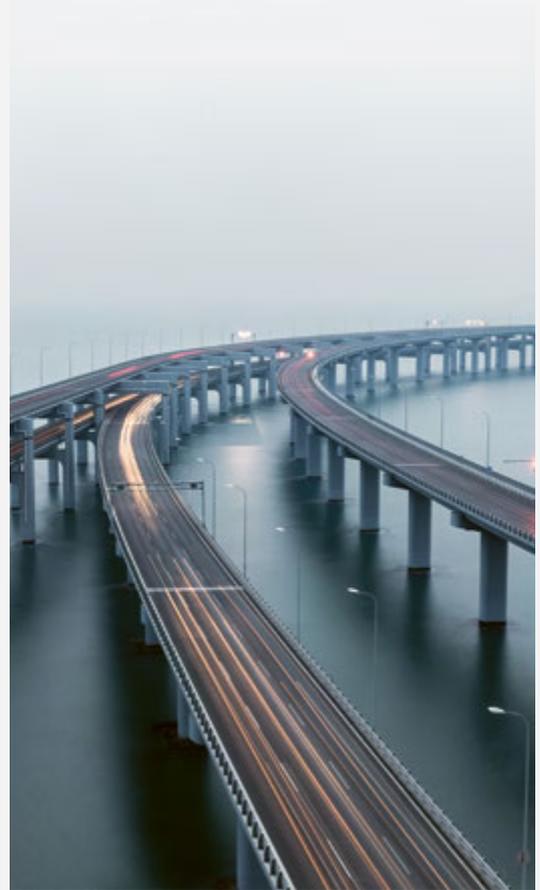


Important milestones in 2022

Acquired a controlling interest in InCharge Energy, strengthening **EV CHARGING** presence in the United States.

Adopted the **UNITED NATIONS WOMEN'S EMPOWERMENT PRINCIPLES** to promote gender equality and women's empowerment in the workplace, marketplace and community.

Completed the share buyback program 2021–2022 and launched new share buyback program of up to **\$3 BILLION**.



Acquired a controlling interest in **NUMOCITY**, leading digital platform for electric vehicle charging in India.

Raised more than CHF 2.2 million in **EMPLOYEE AND GROUP DONATIONS** to support humanitarian aid efforts in Ukraine.

Announced the acquisition of Siemens' low-voltage **NEMA** motor business, to strengthen presence in North America.

Acquired **POWERTECH CONVERTER**, leading supplier of auxiliary power converter solutions for light rail vehicles and metros, headquartered in Berlin, Germany.

Completed the sale to Hitachi of ABB's remaining 19.9 percent equity stake in the **HITACHI ENERGY JOINT VENTURE** that was formed from ABB's Power Grids business in 2020.



SPUN OFF TURBOCHARGING DIVISION, creating a new public company, Accelleron; shares started trading on the Swiss stock exchange on October 3, 2022.

Acquired **ASKI ENERGY** of Austria, leading provider of energy optimization and control solutions that help customers reduce energy costs.

Announced a **NEW SUPPLY CHAIN EMISSIONS TARGET** covering main tier-one suppliers to achieve a 50 percent reduction in their emissions by 2030.

Achieved a 43% **REDUCTION IN SCOPE 1 AND 2 GHG EMISSIONS** compared to previous year, and 65 percent reduction compared to 2019 baseline.

Became the **OFFICIAL SUPPLIER OF FAST CHARGERS** to the ABB FIA Formula E World Championship.

E-MOBILITY BUSINESS raised approx. CHF 525 million in a private placement, completed in February 2023, to support growth journey.

Announced the full and final settlement with US, South African and Swiss authorities for the legacy **KUSILE PROJECT** awarded to ABB in 2015.



Performance highlights

Financial targets and performance

Revenue growth

4–7%

Target (annual average through economic cycle¹)

12%

2022 performance

Operational EBITA margin²

≥15%

Target (as from 2023)

15.3%

2022 performance

ROCE (Return on Capital Employed)²

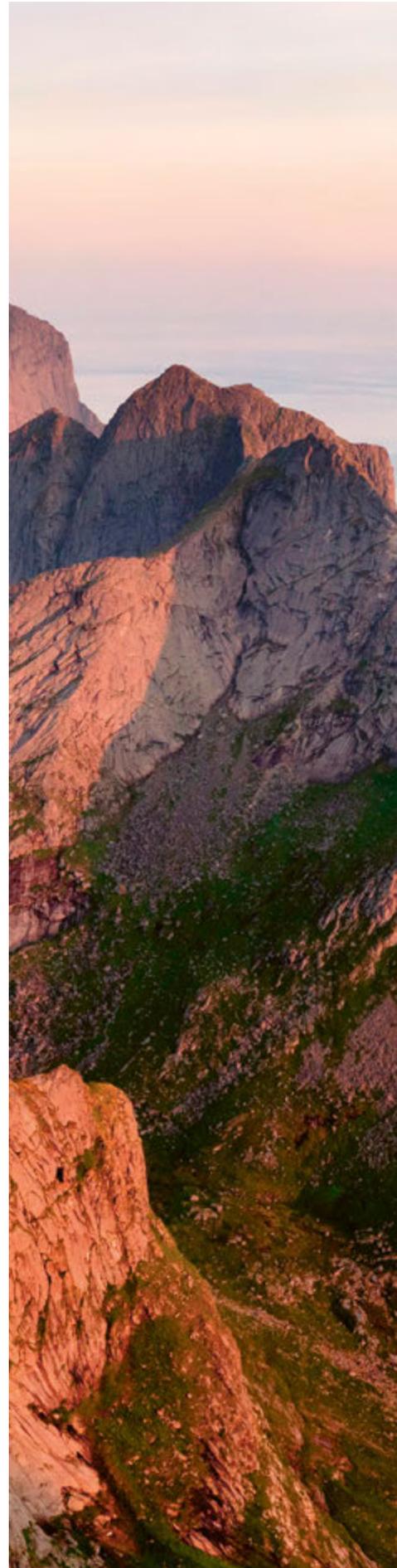
15–20%

Target

16.5%

2022 performance

- 1 Calculated to exclude FX impacts and transformational acquisitions and divestments, includes bolt-on acquisitions and divestments within divisions.
- 2 For non-GAAP measures, see the chapter [“Alternative performance measures”](#) in the appendix of this report.
- 3 Includes adverse impact from charges triggered by the exit of the legacy full-train retrofit business in non-core operations and the provision related to the legacy Kusile project in the current year as well as the impact of the book gain related to the divestment of the Mechanical Power Transmission in 2021.



—
FCF (free cash flow) conversion to net income²



—
Basic EPS (earnings per share) growth





**Selected
sustainability targets
and performance**

1 As we intend to have our targets validated against the Science Based Targets initiative's new Net-Zero Standard, we are no longer focusing on a limited amount of cases linked to the 100 megatons emissions' avoidance but rather on our complete portfolio of offerings.

We enable a low-carbon society¹

65%

reduction of own scope 1 and 2 GHG emissions since 2019

Target: Carbon neutrality in own operations and own scope 1 and 2 GHG emissions reduced by at least 80% by 2030 compared with baseline year 2019

**Target
established**

Target finalized and published in October 2022 and measurement of baseline and performance in progress

Target: Scope 1 and 2 GHG emissions of main tier-one suppliers covering 70% of our annual procurement spend reduced by 50% by 2030 compared to baseline year 2019

We preserve resources

32%

reduction of waste to landfill compared to 2019 baseline

Target: Zero waste to landfill by 2030, where compatible with local conditions

We promote social progress

42%

Target: Zero harm is caused to our people and contractors - yearly reduction in lost time from incidents (LTIFR value = 0 by 2030)

reduction in lost-time injury frequency rate (LTIFR) since 2019

17.8%

Target: Increase proportion of women in senior management roles to 25% by 2030

women in ABB senior management

76

Target: Reach a top-tier employee engagement score

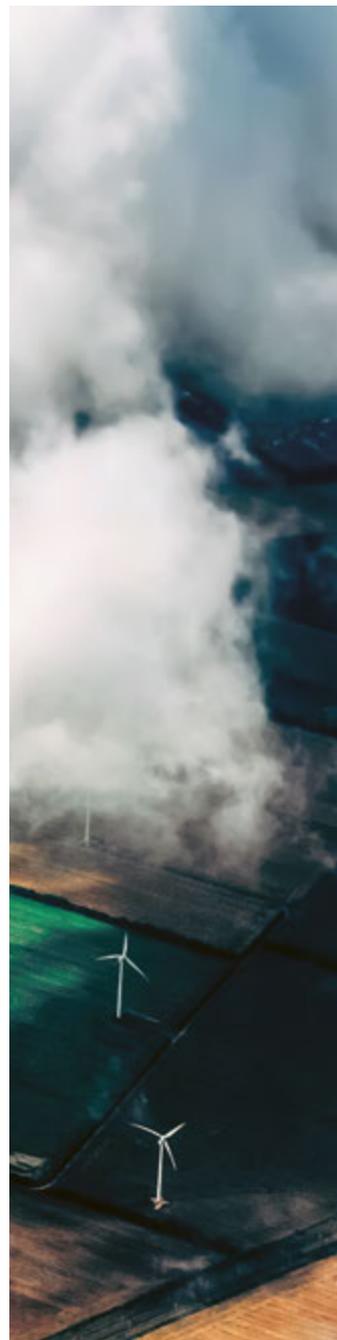
employee engagement score (out of 100)

We create a culture of integrity and transparency

22%

Target: At least 80% of spending on high-risk suppliers in focus countries covered by Sustainable Supply Base Management (SSBM) by 2025

of spending on high-risk suppliers in focus countries covered by Sustainable Supply Base Management (SSBM)



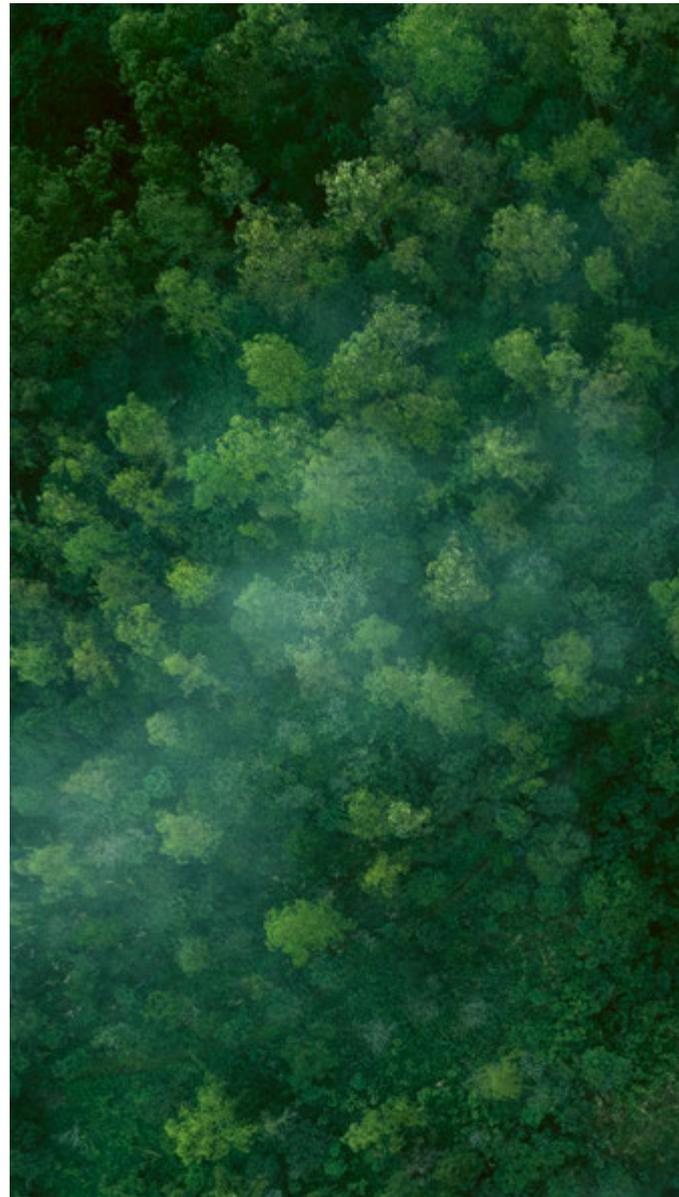
Chairman's letter

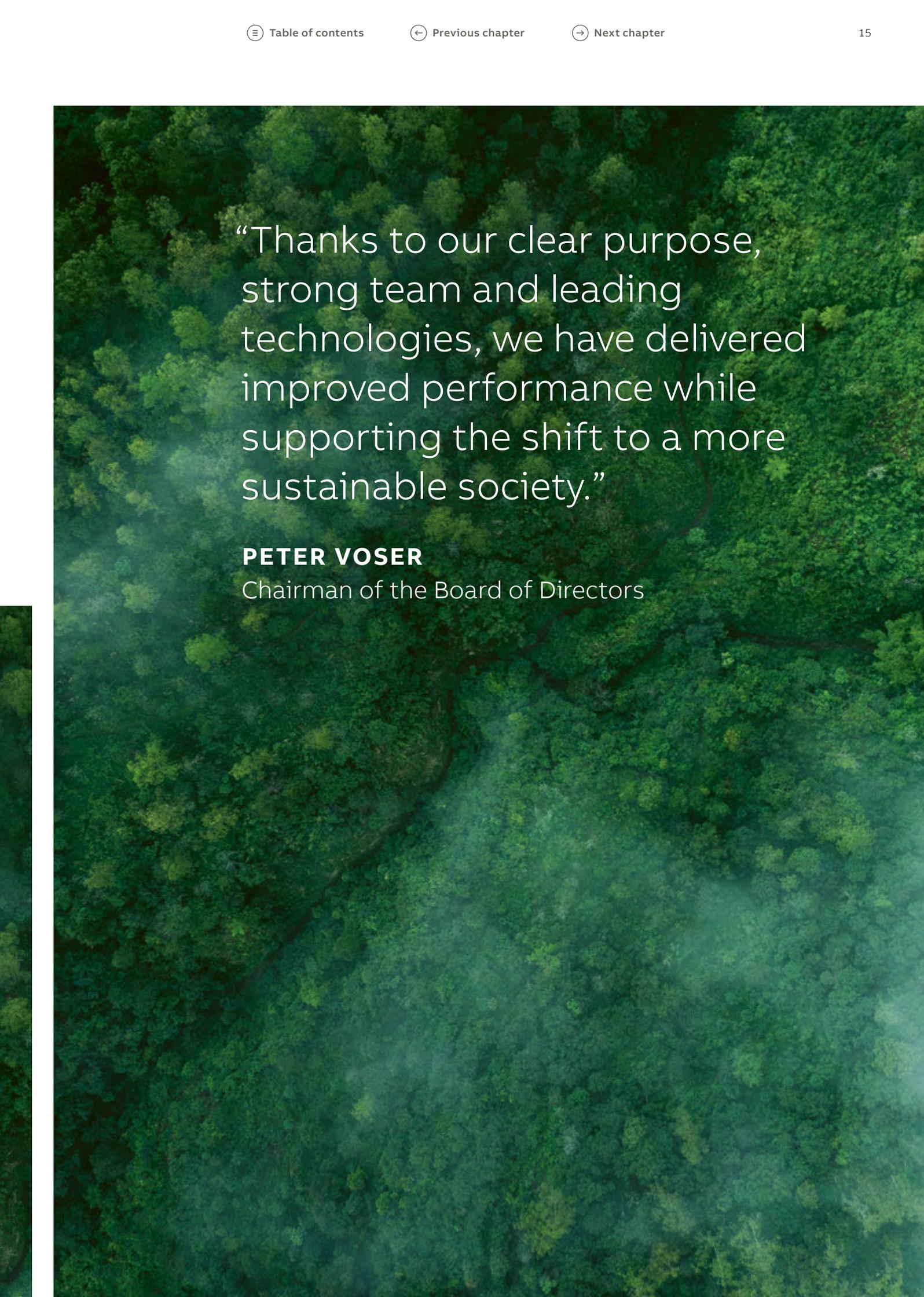
| Delivering performance
through purpose

Dear shareholders,

I am pleased to present ABB's first integrated report, which explains how our company purpose enables us to drive performance and create value for our stakeholders. The report shows how the various parts of our global company fit together to deliver improved financial results while contributing to a more sustainable society. It also provides an overview of the external environment in which we are operating and how we intend to meet our targets in the short-, medium- and long-term. Naturally, the report also covers our performance over the past year and it is these achievements that make me most proud and confident in our team's ability to deliver on our ambitious financial and sustainability targets in the years ahead.

In 2022, we as a society faced many challenges – economic, environmental, political and social. The most extreme was of course the devastating war in Ukraine, which resulted in a mass exodus of refugees as well as terrible suffering in the country itself. Beyond Ukraine, the war triggered the energy crisis in Europe,



An aerial photograph of a dense, lush green forest, showing the intricate patterns of tree canopies and shadows. The image is used as a background for the text.

“Thanks to our clear purpose, strong team and leading technologies, we have delivered improved performance while supporting the shift to a more sustainable society.”

PETER VOSER

Chairman of the Board of Directors

food shortages in many of the world's poorest countries, and contributed to rising inflation, which is undermining economic growth as businesses' and households' spending power is reduced.

I am extremely proud of the way that our people at ABB supported those affected by the war through fundraisings and direct help on the ground. In response to the war and related international sanctions, we also took the decision to exit the Russian market. Here again, we did our utmost to support our Russian colleagues as we realigned our operations.

The resulting energy crisis is transforming global energy markets and has highlighted the need for a more secure and sustainable energy system. With our leading electrification and automation technologies, ABB is in a strong position to help our customers improve energy efficiency and support the transition to a sustainable and resource-efficient future, in line with our company purpose.

In spite of the war and ongoing supply chain challenges, we delivered strong order and revenue growth in 2022 and achieved our long-term margin target one year early. Orders were up by 16 percent, revenues rose by 12 percent and we increased our Operational EBITA to \$4.51 billion, delivering a margin of 15.3 percent. These results put us well on course to meet our 2023 financial targets. Our earnings per share declined by 43 percent to \$1.30, largely due to a book gain related to the divestment of the Mechanical Power Transmission business in 2021. In line with our policy of paying a rising sustainable dividend over time, we will be proposing a dividend of CHF 0.84 per share to be voted on at ABB's annual general meeting on March 23, 2023.

We also made significant progress in reducing ABB's environmental footprint and contributing to a more sustainable society. We reduced our own greenhouse gas (GHG) emissions by 43 percent in 2022 by sourcing more power from



renewables, improving energy efficiency at our sites and increasing the number of electric vehicles (EV) in our fleet. We continue to support our customers and suppliers in their effort to reduce their own emissions.

Longer-term, as a global technology company with operations in more than 100 countries, we at ABB have an important role to play in helping our customers and communities adapt to challenges and megatrends in our economy and society. The most pressing of these is climate change, but increasingly we are facing other environmental challenges such as waste disposal and resource depletion, which can only be solved by moving towards a circular economy. On top of that, the nature of work and production is being reshaped by demographics and technology as well as changing public

attitudes towards the role of corporations in society.

At ABB, these shifts have helped to determine our company purpose as well as our operating model and strategy. We put our purpose of enabling a more sustainable and resource-efficient future through our leadership in electrification and automation at the heart of everything we do. To drive a performance culture and strengthen our position in key markets and segments, operating decisions are made in the divisions close to the customer and we pursue a strategy of active portfolio management.

In 2022, we acquired strong companies that will improve our technology and market leadership in EV charging and low-voltage electric motors, as well as expand our presence in the rail segment. To further drive our leadership in EV charging, our E-mobility business raised approximately CHF 525 million in a private placement, the second and final part of which was completed in February 2023. We plan to list our E-mobility business on the Swiss stock exchange when market conditions are favorable, with ABB retaining a majority shareholding.

In line with our portfolio management strategy of divesting businesses that no longer fit with our strategic focus, we spun off our successful Turbocharging division, creating a new public company, Accelleron. The listing of Accelleron on the Swiss stock exchange enables our shareholders to realize the full value of that business while allowing ABB to focus on our core electrification and automation portfolio. Accelleron is a true gem of Swiss industry and will be able to play even better to its strengths as an independent company. Finally, and earlier than expected, we divested to Hitachi ABB's remaining 19.9 percent equity stake in the Hitachi Energy joint venture that was formed from our Power Grids business in 2020.

For me, a highlight of the year was inaugurating our "Learning Factory Industry 4.0" in Berlin with the German Chancellor, Olaf Scholz, last September. The new training center is equipped with the latest technologies and demonstrates ABB's commitment to prepare apprentices for the industry needs of tomorrow.

Looking ahead, as our financial targets show, we are aiming to increase our growth rates, profitability and returns to levels that ABB has not delivered before. We are also pursuing ambitious sustainability targets for 2030. Among them, we aim to be carbon neutral in our own operations and to help our customers and tier-one suppliers reduce their GHG emissions. In addition, we will cut waste by having at least 80 percent of our products and solutions covered by our circularity approach.

ABB's success has always been driven by our talented people and superior technologies. With our agile, high-performing divisions, strong focus on diversity and inclusion and engaged teams, I am certain that ABB will meet its targets and continue to go from strength to strength.

On behalf of the Board of Directors, I would like to thank our stakeholders for their continued trust and support. Together with our customers, employees, partners, suppliers and investors, we will continue to create superior value for all of our stakeholders by balancing the needs of society, the economy and the environment.

Best regards,



PETER VOSER

Chairman of the Board of Directors



CEO interview

**Delivering strong results
in the face of formidable
challenges**

ABB CEO Björn Rosengren talks to Sandra Wiesner, Corporate Communications, about ABB's performance during a challenging year and explains why ABB's decentralized business model is the right one for a global technology company operating in a fast-changing and uncertain world.

Björn, how would you describe the year 2022? Were you expecting a tough year?

2022 was a crisis year by any reckoning. In the wake of the COVID-19 pandemic, we had anticipated ongoing supply chain, logistics and labor challenges. But the war in Ukraine took us by surprise. Most shocking, of course, was the scale of devastation and human suffering in Ukraine itself. But the resulting energy crisis and rising inflation affected everyone and reminded us that the energy transition is long overdue.

I am extremely proud of the way our people responded to the humanitarian crisis caused by the war in Ukraine. Although we had no employees based there, our teams arranged safe passage out of the country for employees and their families who were in Ukraine at the time. Some of our employees also travelled to Ukraine's borders to transport people fleeing the country to a safe place, while others donated essentials like food and warm clothing to refugees through ABB-driven initiatives. In total, we raised more than CHF 2.2 million in employee and Group donations for the humanitarian effort of the International Committee of the Red Cross.

The war had little direct impact on our business, other than our decision to exit the Russian market, where we were present with 750 people and two production sites, and which accounted for about 1 to 2 percent of our revenues and little of our sourcing. We are in the process of reducing our presence and will complete the exit as soon as possible in compliance with applicable laws and sanctions.

How is ABB helping its customers address the energy crisis?

Our customers face two main challenges: energy sustainability, which is a long-term challenge for everyone, and energy security, which is a much more urgent concern. Some of our customers have had to deal with power outages;

others have seen their energy bills increase by 50 percent year-on-year.

At ABB, energy and resource efficiency are at the core of our company purpose and value proposition. Most of our products and solutions reduce energy consumption, including our digital and software offerings which help our customers make better use of their operational data to cut down on energy use and prolong the lifetime of their equipment. Our technologies also improve efficiency and productivity in the energy sector itself.

Overall, how did ABB perform in 2022?

I am very pleased and proud of ABB's performance in 2022. In an increasingly challenging market environment, we continued to win orders and overcame significant supply chain and logistical difficulties to fulfil our commitments to customers.

The proof of our performance can be seen in our high revenues and especially our Operational EBITA margin, where we hit our 2023 target of ≥ 15 percent one year early. Our strong margin performance shows that our ABB Way operating model, with higher transparency, accountability and speed, is delivering.

This strong performance, especially in such a challenging year, shows that we have the right team in place and that our businesses are focusing on the right market segments.

ABB announced some important portfolio and leadership changes over the course of the year. How are these working out?

In 2022, we stepped up our portfolio management activities to further strengthen our market and technology leadership in electrification and automation. We acquired controlling stakes in two electric-vehicle charging companies – InCharge Energy in the United States and Numocity in India – which

will significantly strengthen our E-mobility business in those markets. In a private placement completed in February 2023, we also raised approximately CHF 525 million to invest in our E-mobility business. As of 2023, E-mobility is being treated as a standalone business for managing and reporting purposes. We plan to list the business on the Swiss stock exchange, with ABB retaining a majority stake, once the market conditions are favorable.

In our Motion business area, we announced two important acquisitions. Our NEMA Motors division has agreed to acquire Siemens' low-voltage NEMA motor business, which will strengthen our presence in North America. And in the fourth quarter, our Traction division acquired PowerTech Converter, a leading supplier of auxiliary power converter solutions for light rail vehicles and metros, with operations in Germany and the United States. Finally, our Smart Power division acquired ASKI Energy, a leader in energy automation and control systems, with customers in Germany, Austria and Switzerland.

Part of our portfolio management strategy is to exit businesses that no longer fit with our strategic focus. In October, we spun off our Turbocharging division, creating a new public company, Accelleron, which was listed on the Swiss stock exchange on October 3, 2022. The spin-off allows ABB to focus on our core portfolio of electrification and automation while giving Accelleron the flexibility to operate as an independent company. And earlier than expected, we divested to Hitachi ABB's remaining 19.9 percent equity stake in the Hitachi Energy joint venture that was formed from our Power Grids business in 2020.

Over the course of the year, we had a number of changes in the Executive Committee. On April 1, 2022, Morten Wierod became President of our Electrification business area, succeeding Tarak Mehta, who assumed the leadership of our Motion business area from Morten.

Since then, the two business areas have improved their already strong performance and helped the Group reach our 2023 operational EBITA margin target a year early.

We also had two new colleagues join the Executive Committee in 2022: Andrea Antonelli became Group General Counsel and Company Secretary in April and Karin Lepasoon joined ABB in October as Chief Communications and Sustainability Officer. Both of them will help to drive forward our successful ABB Way operating model.

How is ABB progressing towards its 2030 sustainability goals?

Since the launch of our 2030 sustainability strategy in December 2020, we have made strong progress towards our goals of enabling a low-carbon society, preserving resources, promoting social progress and creating a culture of integrity and transparency along the extended value chain.

Among our many achievements in 2022, we reduced greenhouse gas (GHG) emissions from our own operations by 43 percent. And we continue to support our customers in their effort to reduce their own emissions.

We also took important steps to improve sustainability in our supply chain with a new target to help our main tier-one suppliers achieve a 50 percent reduction in their GHG emissions by 2030. And we launched the ABB EcoSolutions label, which provides transparency on the circular value and environmental impact of a product.

Last but not least, we are making good progress in building a safer and more inclusive working environment in which our people can succeed and develop. Since 2019, we reduced the amount of lost time caused by injuries by 42 percent. In 2022, we increased the number of women in senior management positions to 17.8 percent, up from 16.3 percent a year ago, in line with our goal of having

25 percent of senior management roles filled by women by 2030.

On December 2, 2022, ABB announced that it had settled with South African, Swiss and American authorities on the legacy Kusile project in South Africa. What led to this outcome and what has it meant for ABB's integrity program?

Since promptly self-reporting to the relevant authorities, ABB has fully cooperated with their investigations into what happened on the Kusile project. We have spent considerable time and effort in supporting their inquiries by providing access to information and the people needed for them to thoroughly complete their investigations. We have performed extensive remediation and enhancements across our operations and integrity program – including launching a new Code of Conduct, educating employees and implementing an enhanced control system, because we only accept business that is done with integrity and transparency. Our cooperation since these investigations commenced has been described as extraordinary, and this is reflected in the settlements announced on December 2, 2022.

Our work does not stop here as integrity is not a static concept. We will continue to work, innovate and enhance our integrity program to have controls, processes and a culture that are effective deterrents to bribery, corruption and improper behavior.

ABB has a clear purpose and a decentralized business model, which you introduced starting in 2020. How do these lead to superior value creation?

ABB's purpose is to enable a more sustainable and resource-efficient future with our technology leadership in electrification and automation. We can best achieve that through a decentralized business model in which we have clear accountabilities.

In our decentralized structure, our 20 divisions represent the highest level of operating decisions with full ownership and accountability for their respective strategies, performance and resources. This moves decision-making closer to the customer and allows our businesses to operate with speed, which is key to success in today's world.

Collaboration is crucial in our decentralized business model and our leaders are encouraged to cooperate and find synergies to create competitive advantages. We strongly believe that smart leaders collaborate.

Performance is measured through a transparent scorecard system and all divisions have the mandate to be the no. 1 or 2 position in their respective market segments. To get there, they must be stable and profitable before they focus on growth.

We drive profitable growth organically and through active portfolio management. This means strategically acquiring companies that will strengthen our core business and divesting or spinning off businesses that no longer fit with our portfolio.

What in your view sets ABB apart?

In two words – technology innovation. At ABB, we like to say that innovation is in our DNA because we have been innovating since the company was founded in the late 19th century. ABB pioneered many of the technologies that have made the modern world possible, from the first high-speed locomotive with a direct-drive system to the first microprocessor-controlled industrial robot.

Today, through our market and technology leadership in electrification and automation, we are helping to drive the shift from combustion fuels to electricity as well as reducing resource consumption and emissions in industry, buildings and transport, sectors that together account for three quarters of global

energy consumption. In 2022, we invested approximately 4 percent of our consolidated revenues in R&D activities in our continuing operations.

In December, we opened our most advanced robotics factory, complete with an R&D center, in Shanghai to serve the world's fastest-growing robotics market. The new facility uses artificial intelligence, digital connectivity and software to make robots smarter, more flexible, safer and easier to use. China accounts for more than half of all new robotics installations and we expect the global robotics market to grow from around \$80 billion today to \$130 billion in 2025.

Looking ahead – what can we expect from ABB in 2023?

Looking into 2023, we currently do not anticipate a major setback in demand, although the high inflationary environment adds uncertainty. We have a vast order backlog, which will keep revenues coming in, as well as the technologies and market-leadership position to take

advantage of growth opportunities as and when they arise.

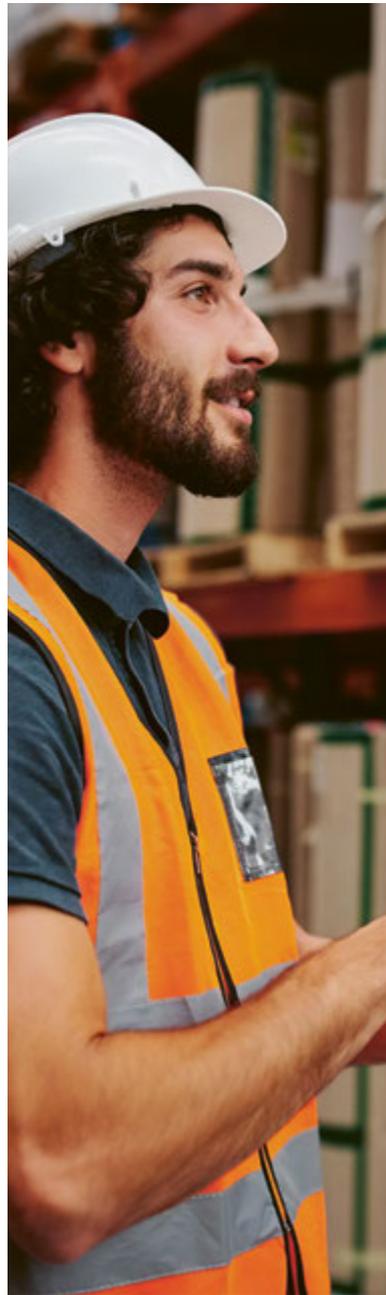
Energy efficiency and productivity are at the center of our value proposition and these are exactly what our customers need to manage the energy crisis and inflationary pressures. Our products and solutions are also oriented towards longer-term challenges like moving to resource-efficient operations and adapting to tighter labor markets.

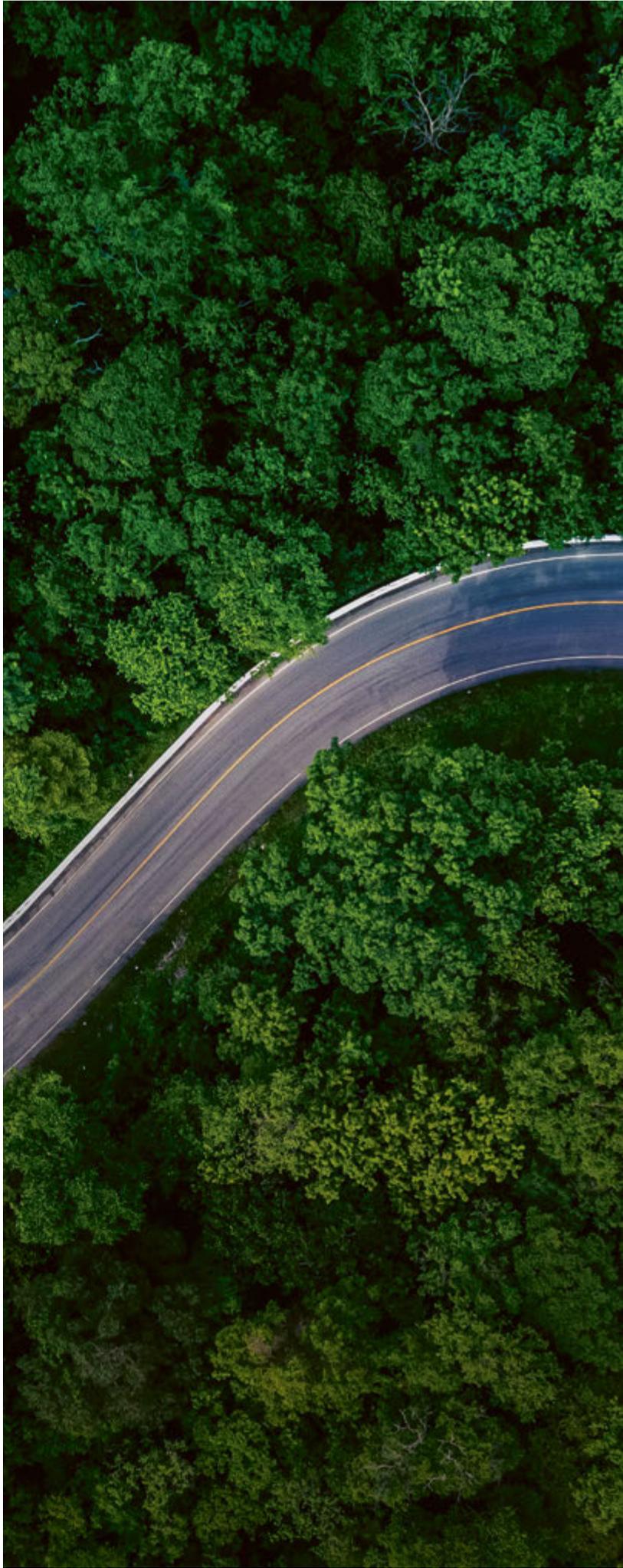
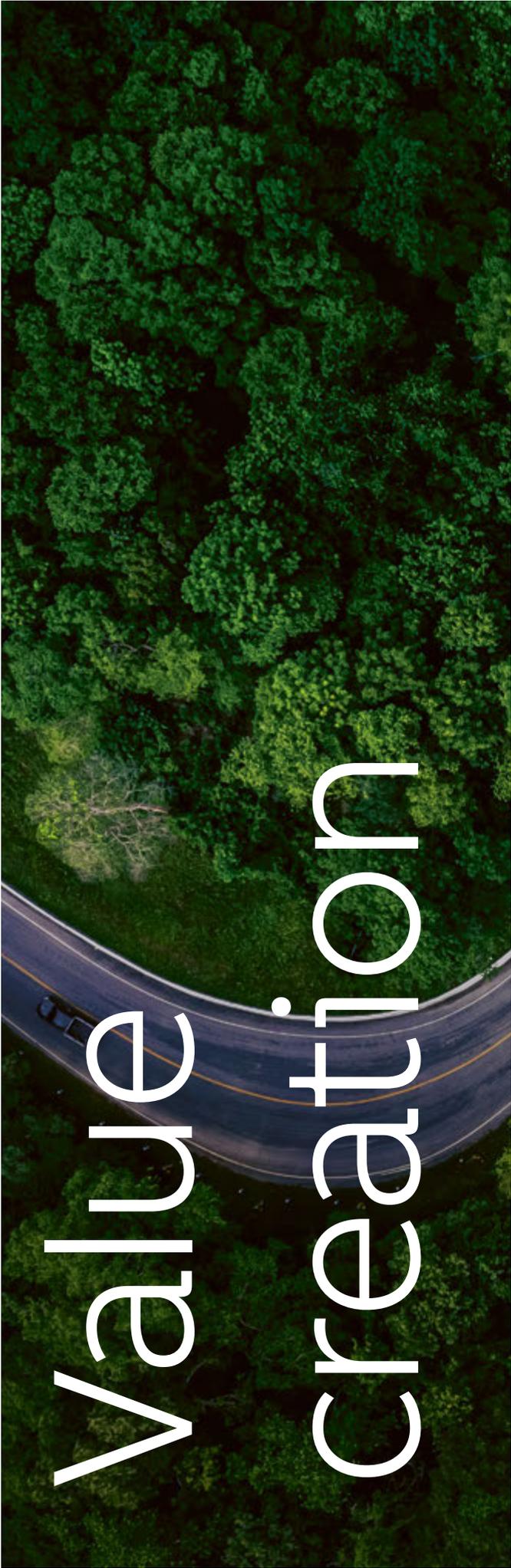
Most importantly, we have the right people in the right positions to drive our business forward. Over the past three years, our teams have improved ABB's performance despite huge challenges. That is truly an achievement and one that makes me confident that ABB has what it takes to succeed and support the transition to a sustainable society.

I want to thank the entire ABB team for their commitment and strong performance in 2022 and to thank our customers, partners, suppliers and shareholders for their continued trust and support.

“I am very proud of our great team and our achievements in what was an extremely challenging year. We protected our people, improved our performance and delivered on our commitments to our stakeholders.”

BJÖRN ROSENGREN
CEO





01

VALUE CREATION

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Who we are

Leading offering
in electrification
and automation

ABB has a history of innovation excellence stretching back more than 130 years. Today, we are a leading global technology company that enables a more sustainable and resource-efficient future with our technology leadership in electrification and automation.

Our strong heritage as a technology pioneer has led to long-lasting relationships with many of our customers and given us a deep understanding of market needs and the ability to anticipate and drive trends.

Our solutions connect engineering know-how and software to optimize how things are manufactured, moved, powered and operated. Building on our heritage of excellence, ABB's ~105,000 employees are committed to driving innovations that accelerate industrial transformation.





Our Electrification business area provides leading electrical distribution and management technologies, solutions and services to electrify the world in a safe, smart and sustainable way. The portfolio includes medium- and low-voltage electrical components, switchgear, digital devices, enclosures, breakers, power conversion products and charging solutions for electric vehicles, among others. With our products, solutions and services, we collaborate with customers to improve power delivery and security, and enhance energy management, efficiency and operational reliability, as we seek to enable a low-carbon society.

Our Motion business area keeps the world turning – while saving energy every day. We innovate and push the boundaries of technology to enable a low-carbon future for customers, industries and societies. With our digitally enabled drives, motors and services, our customers and partners achieve better performance, safety and reliability. We offer a combination of domain expertise and technology to deliver the optimum drive and motor solution for a wide range of applications in all industrial segments.

Our Process Automation business area is the leading supplier of integrated automation, electrical and digital solutions for the process, hybrid and maritime industries. It enables customers to operate some of the largest and most complex industrial infrastructure essential to modern life and run it more safely, intelligently and sustainably. The portfolio includes ABB's market-leading distributed control system, industrial software, advanced sensing, as well as industry-specific anchor products.

Our Robotics & Discrete Automation business area offers a comprehensive and integrated portfolio covering robots, autonomous mobile robots and machine automation solutions, designed and orchestrated by our value-creating software. The business area helps companies of all sizes and sectors – from automotive to electronics and logistics – become more resilient, flexible and efficient.

WHAT WE DO

WHAT: OFFERING



Products



Systems



Services and software



Electrification



Motion



**Process
Automation**



**Robotics
& Discrete
Automation**

FOR WHOM: CUSTOMERS



Utilities



Industry



**Transport and
infrastructure**

WHERE: GEOGRAPHIES



Europe



Americas



**Asia, Middle East
and Africa**

OUR GLOBAL PRESENCE

~105,000 EMPLOYEES IN MORE THAN 100 COUNTRIES

SEVEN CORPORATE RESEARCH CENTERS

ABB's corporate research centers develop new technologies and improve existing ones on behalf of the Group and its four business areas.

ELECTRIFICATION

Number of employees: ~52,300

MOTION

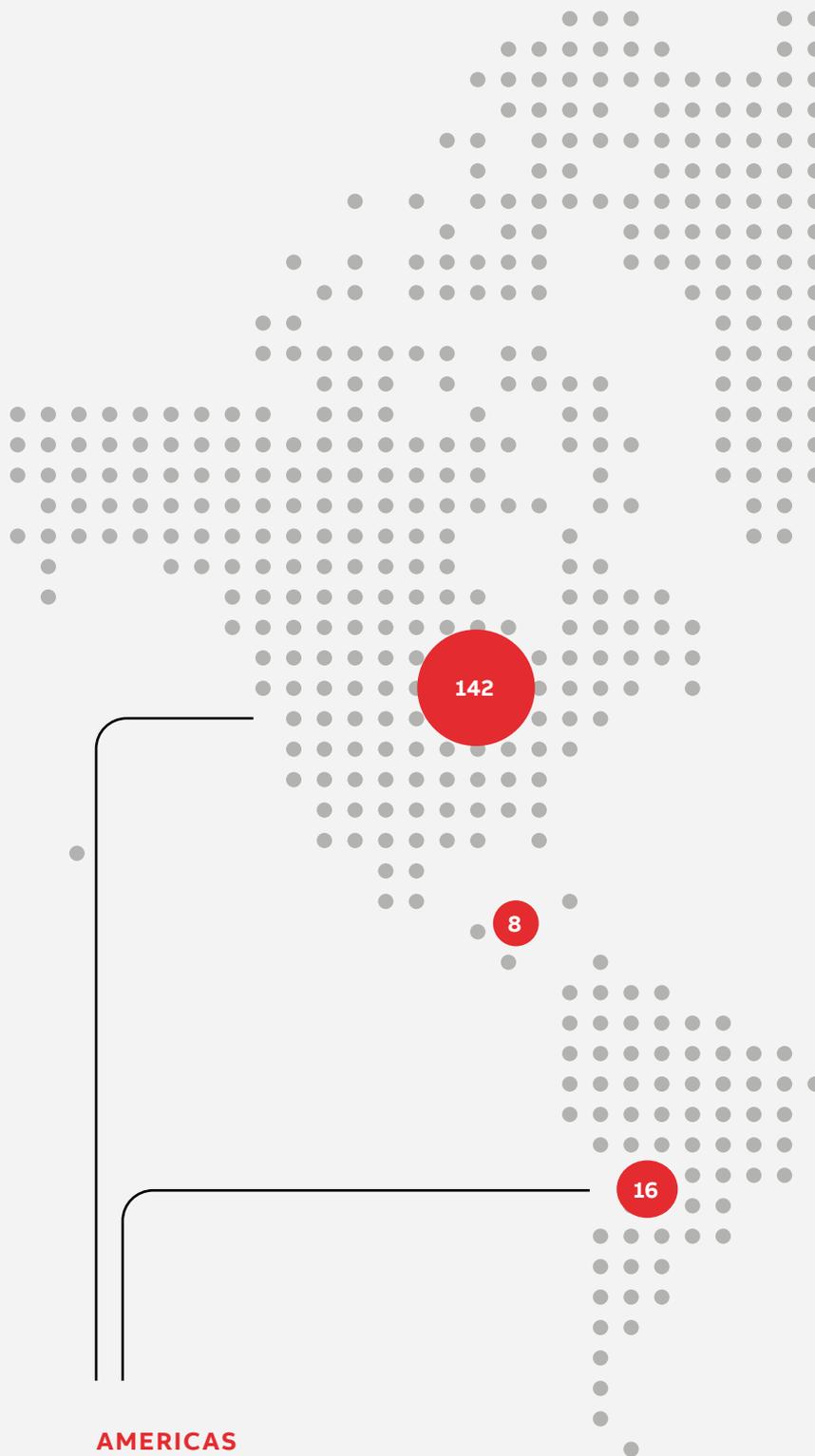
Number of employees: ~21,100

PROCESS AUTOMATION

Number of employees: ~20,100

ROBOTICS & DISCRETE AUTOMATION

Number of employees: ~ 10,700



AMERICAS

Number of sites:

Electrification: 114

Motion: 43

Process Automation: 50

Robotics & Discrete Automation: 19

Number of employees: ~26,400

→ Many ABB sites are home to more than one business area.



EUROPE

Number of sites:

Electrification: 211

Motion: 150

Process Automation: 177

Robotics & Discrete Automation: 140

Number of employees: ~49,700

ASIA, MIDDLE EAST AND AFRICA

Number of sites:

Electrification: 160

Motion: 145

Process Automation: 130

Robotics & Discrete Automation: 105

Number of employees: ~29,000

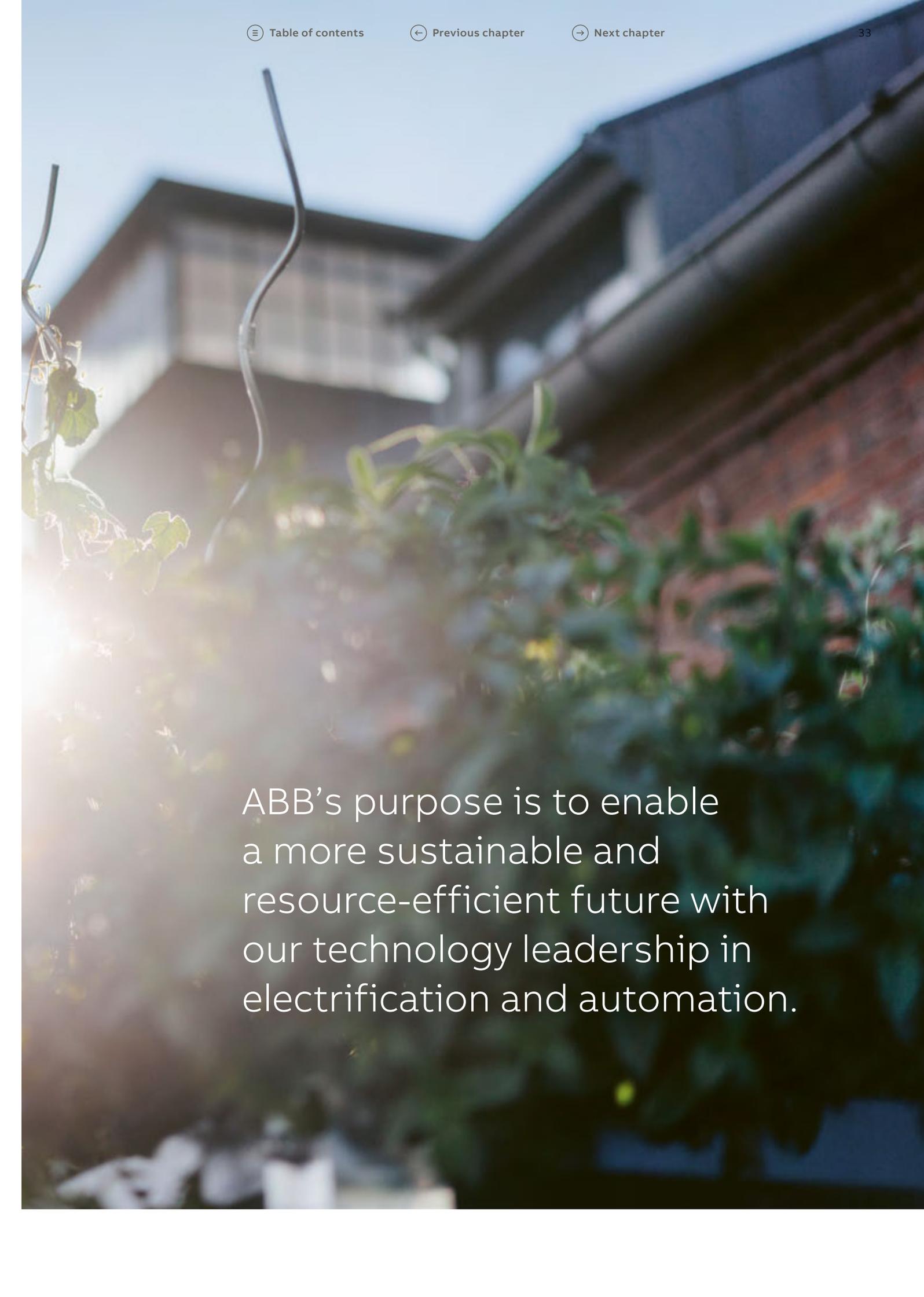
ABB's purpose is to enable a more sustainable and resource-efficient future with our technology leadership in electrification and automation.

Our purpose is why we are in business and the guiding star for ABB's direction and strategy. Through our technologies and responsible business practices, we aim to make our stakeholders and society more successful and sustainable.

Our purpose is based on five themes that capture the essence of what ABB stands for, what we aspire to and how we make an impact. We seek to address the world's energy challenges, transform industries and embed sustainability in everything we do.



Our purpose



ABB's purpose is to enable
a more sustainable and
resource-efficient future with
our technology leadership in
electrification and automation.



Creating success

At ABB, we are passionate about creating success. This starts with our customers – we enable them to reach new levels of performance. Their success translates into success for all our stakeholders: employees, partners and shareholders. Our people make the difference. Their domain knowledge and experience are why customers come to us with their biggest challenges.

Addressing the world's energy challenges

As pioneers in electrification and automation, we help to address the world's energy challenges. We are enabling the world's data growth, mobility expansion and urbanization while preserving the environment. Our solutions make homes, offices, factories and transport more energy-efficient and safer, and energy more affordable.



[← Previous chapter](#)

[→ Next chapter](#)

Transforming industries

We envision a future where the physical and digital worlds merge. Together with our customers, we are turning this vision into reality. We provide electrification, automation and motion solutions that fulfill today's needs while bringing the physical and digital worlds together. We make operations safer, more intelligent and more productive and work towards a more prosperous and sustainable future.

Embedding sustainability

For us, sustainability is both the right thing to do and a business opportunity. We strive to embed sustainability in everything we do. Our solutions reduce harmful emissions and preserve natural resources. We champion ethical behavior and human rights to contribute to better lives for people across the globe.

Leading with technology

If there is one thing that ABB is recognized for, it's our world-class technology. Innovation has been in our DNA since we were founded more than 130 years ago to take advantage of a new technology called electricity. This is one of the main reasons why customers and others turn to us for help with their biggest challenges. Together, we continuously push the frontiers of technology to make things possible that were not possible before.

Our strategy and objectives

ABB's strategy is deeply rooted in our purpose and designed to accelerate profitable and sustainable growth by capitalizing on global megatrends like sustainability, digitalization, electrification and automation.

Introduced in 2020 and based on our ABB Way operating model, our strategy has the overarching objective of creating superior value for all our stakeholders. To achieve this, we set clear strategic priorities for the development of the entire Group, including our business areas and divisions:

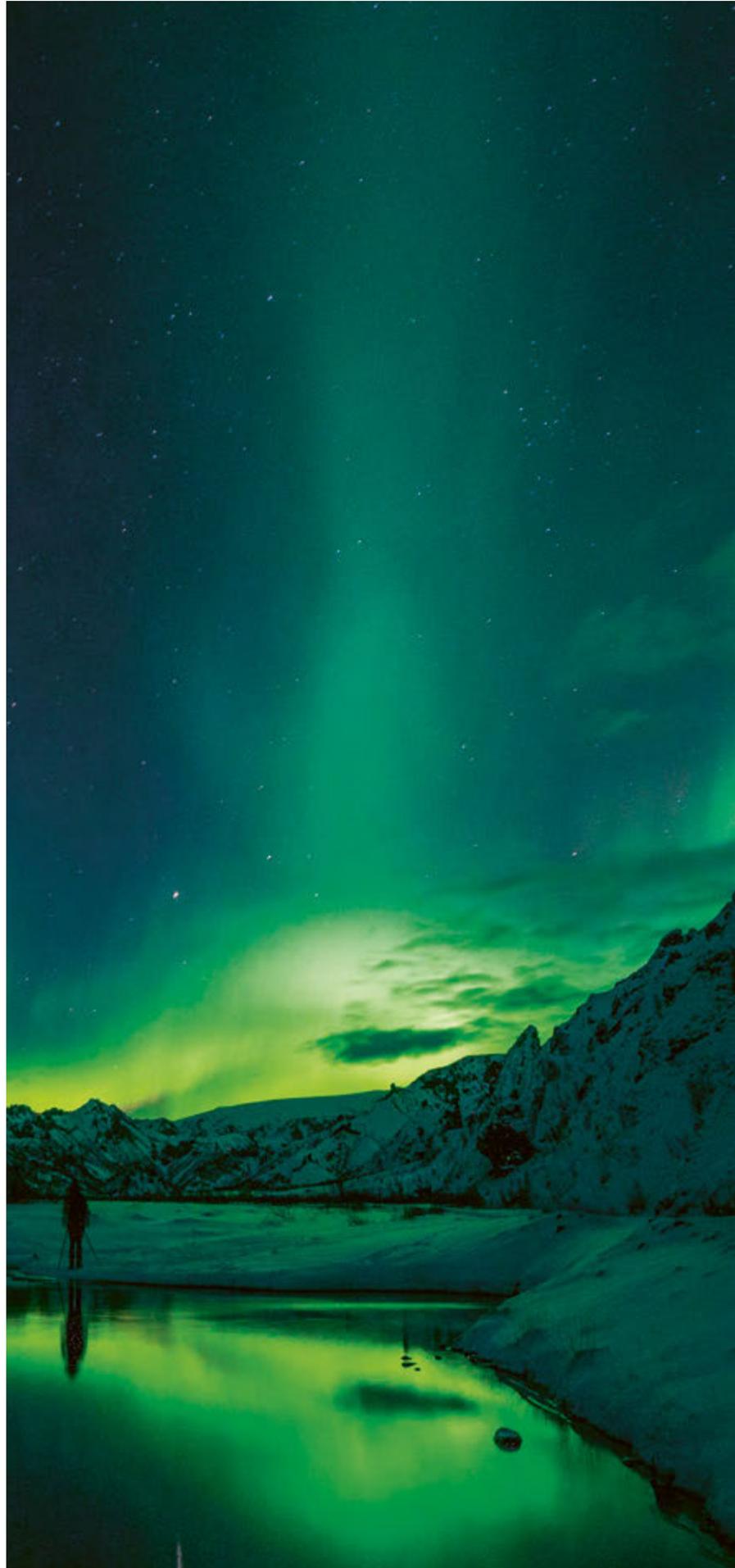
- Systematic capital allocation, both organic and for acquisitions, aligned with ABB's purpose;
- Increase ABB's exposure to high-growth, profitable markets that are benefiting from key megatrends;
- Strive for market leadership positions in all our businesses and enhance our technology and digital leadership

through software-enabled products and systems and stand-alone software and digital services;

- Build resilience to successfully manage a global business in an increasingly volatile world;
- Embed sustainability in all our processes and across our value chain.

In order to achieve ABB's strategic objectives and create superior value for all our stakeholders, we follow consistent strategic and management approaches across all businesses and on all levels of the organization:

- Active portfolio management,
- Performance management,
- Market leadership and digital technology at our core,
- Embedding sustainability in everything we do.



Active portfolio management

ABB actively manages its business portfolio to create value through two complementary approaches; organic investment and active portfolio management, including major acquisitions. In this way, we increase our exposure to current megatrends that are shaping the economy and society and that offer attractive business opportunities for us.

These strategic mandates reflect the Group’s expectations and thus also determine the divisions’ strategic and performance priorities. Divisions in the stability phase are required to restructure or transform their business to significantly and sustainably improve performance. Divisions with a profitability mandate must focus on further improving their profitability while moderately investing in growth – both organic and inorganic. Finally, divisions that are operating at or above their performance targets are mandated to actively pursue organic growth and value-creating, add-on acquisitions.

→ For more information about how we deal with our changing world and related risks and opportunities see chapter “Risks and opportunities”.

Priority setting and capital allocation across divisions: stability and profitability before growth

Each of ABB’s divisions is assigned a strategic mandate that reflects its performance: stability, profitability or growth.

DIVISIONAL STRATEGIC MANDATES

Stability

- Restructure
- Transform offering/business model

Profitability

- Improve margin/return
- Moderately invest in growth
- Pursue selected technology add-on acquisitions

Growth

- Grow above market while maintaining high levels of return
- Invest strongly in organic growth (e.g., digital, R&D, sales/service, capacity)
- Actively pursue acquisitions: including technology additions, larger market consolidation moves and penetration of new market segments

The goal of our portfolio strategy is to bring as many of our divisions into the growth phase as possible. We also seek to improve the quality of our revenues by aligning our business portfolio with more attractive growth markets, developing more long-term business relationships with our customers and reducing our exposure to project-driven activities. The strategic mandates of our divisions also support the allocation of capital in the most value-creating manner, in line with ABB's overarching objective of superior value creation.

Evolution of ABB's portfolio through divestments and acquisitions

To achieve our strategic objectives, we regularly assess ABB's business portfolio according to the following criteria and in line with our Group-wide strategic priorities:

- Fit with ABB and our purpose, complementing existing strengths and capabilities;
- Business and market attractiveness (mid- to long-term growth and attractive profit potential) aligned with key megatrends;
- Potential for value creation and achieving market leadership.

This assessment approach is used both for acquisitions and divestments. Businesses that structurally do not fit these criteria could become exit candidates. This also applies to parts of divisions.

Add-on acquisitions, regardless of size, that ABB's divisions and/or business areas wish to pursue must also match these criteria in order to demonstrate that ABB is a better owner and can create more value than before.

Overall, ABB aims to make at least five small to mid-sized bolt-on acquisitions per year. The majority of such add-on acquisitions should be carried out by divisions with a growth mandate. The rationale for acquisitions can be the need to fill technology gaps, complement or expand our offering for high-growth segments, gain access to new geographical markets or boost economies of scale through market consolidation. Ultimately, acquisitions are made to improve our position in attractive markets and create additional value.

Performance management

By pairing our strategic priorities with a continuous improvement mindset, we aim to deliver better performance on all metrics and consistently deliver superior value creation. We are translating our strategic priorities into a set of short- and long-term targets that are supported by appropriate incentives. These targets encompass both financial performance and progress on sustainability (see “Embedding sustainability in everything we do”). In line with our financial target framework, we focus on the five financial key performance indicators (KPIs), as shown on the right-hand side.

The targets and their related incentives are supported by strong performance management through our scorecard system which is designed to drive continuous improvement. We plan, monitor and

incentivize performance using a holistic set of KPIs covering financials, such as revenues, profit and net working capital, as well as sustainability-linked performance such as reductions in GHG emissions, improvements in health & safety and an increase in the proportion of women in senior management positions.

When it comes to capital allocation, ABB’s priorities are as follows:

- Funding organic growth, research and development (R&D) and Capex at attractive returns;
- Paying a rising, sustainable dividend per share over time;
- Investing in value-creating acquisitions;
- Returning additional cash to shareholders.

→ Please refer to the chapter “Performance” for more details on our financial and sustainability progress.

ABB'S FINANCIAL TARGET FRAMEWORK

4–7%

Revenue growth

annual average through economic cycle¹
3–5% comparable, 1–2% inorganic

≥15%

Operational EBITA margin

as of 2023

15–20%

ROCE

steady improvement

~100%

FCF conversion to net income

maintain solid track record

Basic EPS growth > revenue growth

Effective tax rate of 25% as from 2023

EPS rising strongly due to capital structure optimization program

¹ Calculated to exclude FX impacts and transformational acquisitions and divestments, includes bolt-on acquisitions and divestments with divisions.

Market leadership and digital technology at our core

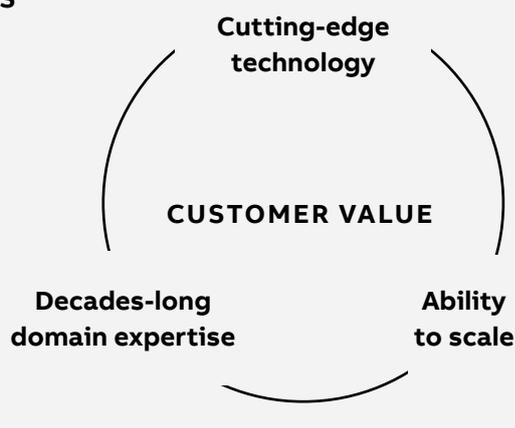
Market leadership with world-class technology is key to ABB's long-term success. All our divisions have the clear objective to achieve and maintain a no. 1 or 2 position in their respective markets and both our active portfolio management and performance management help us achieve this. Market leadership creates high barriers to entry for competitors and helps to improve profitability, drive superior returns, enable growth opportunities for our people and attract talent. It is based on our core competencies, including: cutting-edge technology, ability to scale and decades-long domain expertise.

Our world-class technology and domain-led digital capabilities are embedded in our company DNA. Maintaining and extending our technology and digital leadership is a strategic priority across our divisions. Pushing the boundaries of

technology enables us to help our customers attain new levels of performance and clearly differentiate ABB's offerings.

As part of ABB's digital strategy, we drive growth in both software-enabled products and systems (e.g., drives or breakers with embedded software) as well as stand-alone software and digital services (e.g., in Process Automation). ABB Ability™ is our digital brand and platform for our extensive portfolio of digital solutions that helps companies automate, optimize and future-proof their businesses to achieve higher levels of performance and drive sustainable progress. Digital solutions offer significant growth potential and help us boost other strategic priorities. Therefore, we invest in digital organically and complement this through partnerships and venture investments as well as acquisitions.

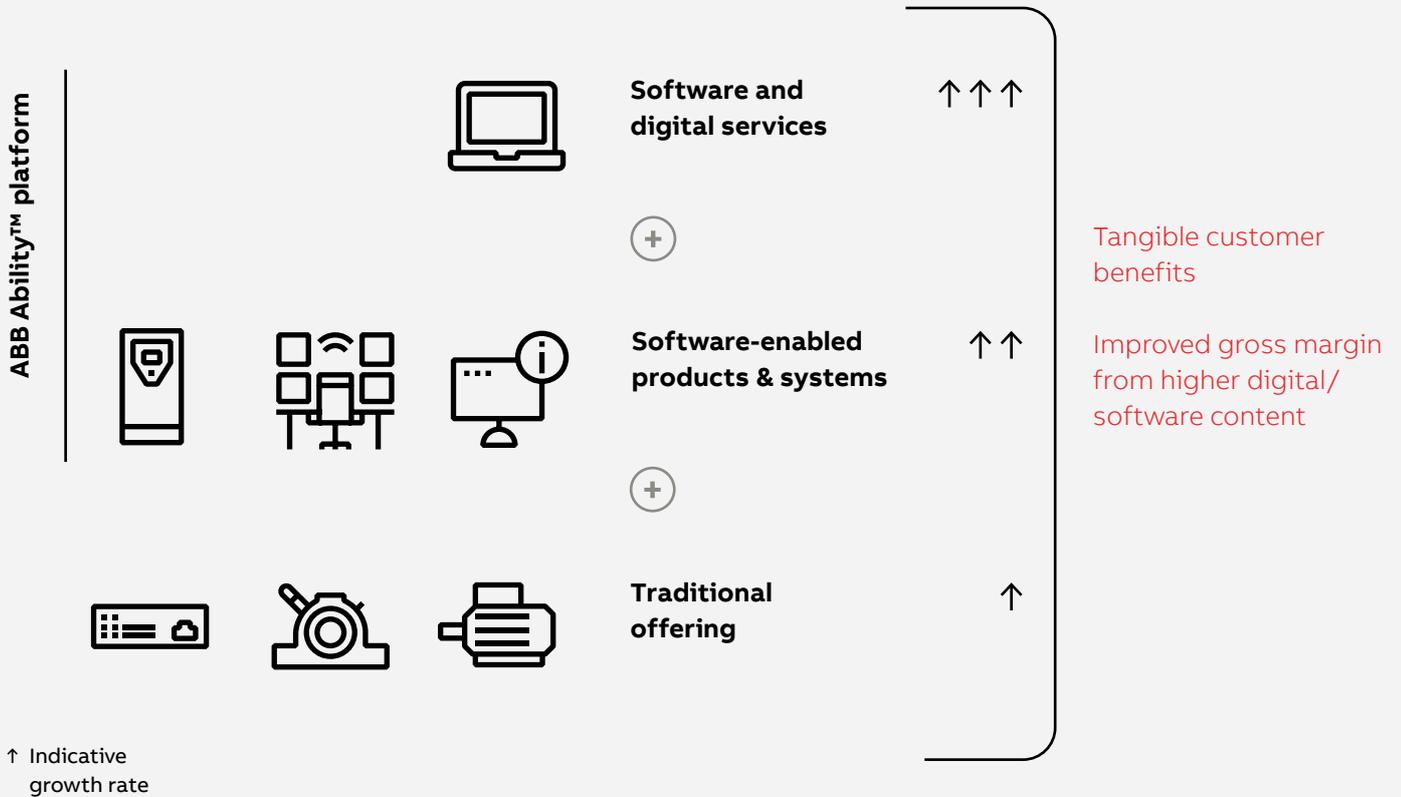
CORE COMPETENCIES



**GLOBAL
NO. 1-2**

in electrification
& automation

**COMPREHENSIVE OFFERING,
MODULAR INFRASTRUCTURE**



“Digitalization is key to sustainability. Our digital solutions enable organizations in energy and resource-intensive process industries to transform more quickly in terms of productivity and efficiency, generating holistic benefits from a sustainability, economic and safety perspective.”

→ Listen to the full podcast [“Why digitalization is key to sustainability”](#).

PETER TERWIESCH

President Process Automation

Embedding sustainability in everything we do

At ABB, sustainability is at the center of our company purpose and the value we create for our stakeholders. We believe that sustainable development means progress towards a healthier and more prosperous world, today and for future generations. To achieve this, we balance the needs of society, the environment and economy across our entire value chain, creating superior value for our customers, suppliers, employees and society.

Our 2030 sustainability strategy positions our company to address the world's greatest sustainability challenges. As a technology leader, we focus on those areas where we can make the biggest impact: enabling a low-carbon society, preserving resources and promoting social progress, while applying our own high standards for integrity and transparency and complying with relevant regulations wherever we operate. To meet our 2030 sustainability targets, we are taking action across the value chain because we believe we can have a greater impact by acting in coordination with our customers, suppliers and other stakeholders. Our sustainability strategy is based on the following four objectives:

- **Enabling a low-carbon society:** We partner with our customers and suppliers to reduce and avoid value-chain emissions, and we aim to make our own operations carbon-neutral by 2030.
- **Preserving resources:** We aim to embed circularity across our value chain. Many

of our solutions reduce waste, increase recycling and foster reusability.

- **Promoting social progress:** We take care of our employees and promote social progress around the world. We strive to create safe, fair and inclusive working environments where people can succeed and develop, and we support community-building.
- **Creating a culture of integrity and transparency:** We drive a culture of integrity and transparency across our value chain and take accountability for our actions.

For each of the four pillars of our sustainability strategy, we have defined targets for the three levels of our value chain; our customers, our own operations and our suppliers. In 2022, we announced a new supplier emissions target to help enable a low-carbon society, and will work with our main tier-one suppliers to reduce their GHG emissions by 50 percent by 2030 compared to 2019.

We have set up a clear sustainability governance model. Responsibility for meeting our sustainability targets lies with our business areas and divisions and progress in implementation is regularly reviewed by our Sustainability Board, comprising the Executive Committee members. The ultimate oversight and responsibility lies with the ABB Board of Directors. By meeting our sustainability targets for 2030, we will contribute to the United Nations' Sustainable Development Goals (SDGs), of which ABB has been a strong advocate. Only with a joint and concerted effort that includes business will we as a society be able to achieve a sustainable future for us all.

→ More information about our sustainability strategy and governance can be found in our [Sustainability Report 2022](#).

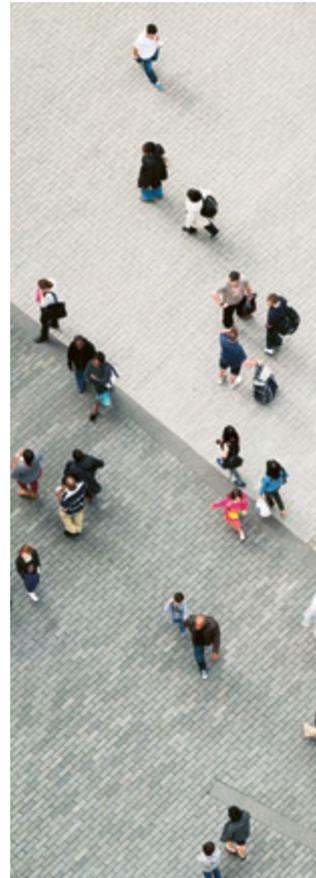
2030
SUSTAINABILITY TARGETS



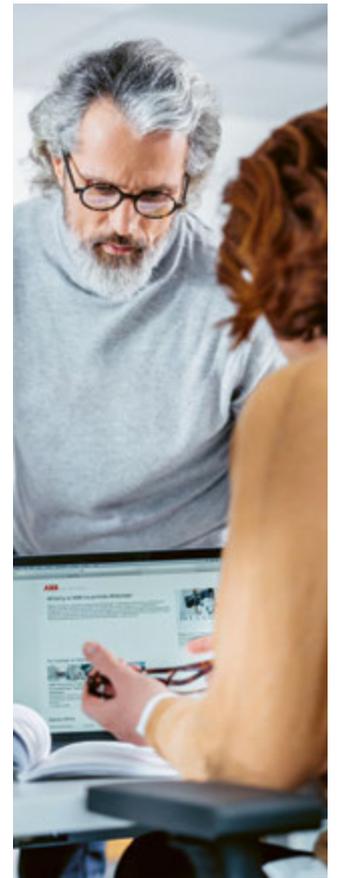
**Enabling
a low-carbon
society**



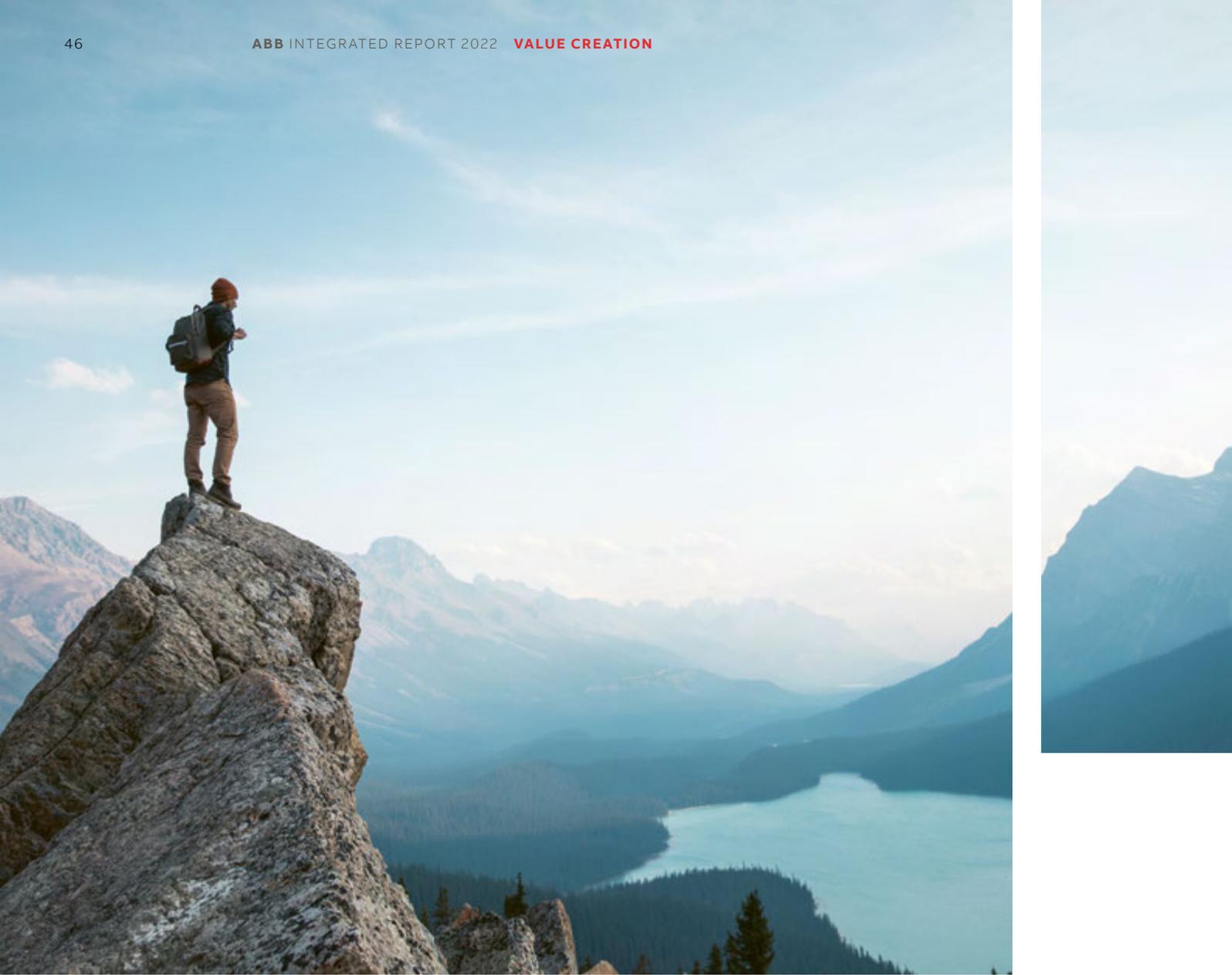
**Preserving
resources**



**Promoting
social progress**



**Creating a culture
of integrity and
transparency**



How we create value



As a global company, we are embedded in our markets, ecosystems, communities and society as a customer, employer, partner, supplier, income provider, taxpayer, community member and corporate citizen.

Our purpose, strategic objectives and operating model are all focused on creating superior value for all our stakeholders. To run our business and be successful, we rely on many forms of “capital” – financial, intellectual, natural, manufactured, human, social and relationship. They enable us to operate, be innovative, realize our continuous improvement mindset and come up with the best solutions for our customers while creating wealth for our investors and increasing value across many different dimensions. Our value creation model transforms the contributions (= inputs) from those various capitals via our operating model, the ABB Way, into our outputs which then turn into outcomes. These in turn also represent impacts on the capitals, as through our value creation model they can be increased, decreased or transformed.

Because our capital flows are closely interconnected, our success and ability to deliver on our commitments to stakeholders depends on maintaining a healthy and sustainable balance among our various capitals. To achieve this, we take an integrated approach to

our business and manage it holistically to guard against maximizing one form of capital at the expense of another. We see ourselves as responsible stewards of the capitals available to us and hold ourselves accountable for the way we use them, knowing that this ultimately impacts all of our stakeholders. Only by balancing all capitals and creating holistic value can we be successful in the longer term. This approach is reflected in the six outcomes that we pursue, each of which is linked to a capital input and aligned with our strategic objective, which is to create superior value:

- by delivering financial performance,
- through world-class technology,
- by enabling a low-carbon society,
- by preserving resources,
- by promoting social progress,
- by driving ethical and sustainable practices across our value chain.

Each of these outcomes and related outputs is explained in more detail in the chapter [“Performance”](#).

Our value creation model is not only rooted in our purpose of enabling a more sustainable and resource-efficient future with our technology leadership in electrification and automation but also embedded in our relationships with our key stakeholder groups. We receive value from them and in return create value for them. The goal of our value creation is to positively impact all our stakeholders.

→ Read more about our stakeholder engagement in the chapter [“Stakeholder engagement and material topics”](#).



Society

Need for reliable and efficient power supply, increased productivity and lower environmental impact

Innovative technology and solutions, fair employment, tax contributions, community support



Communities

Employees, partnerships and ecosystems

Community spending \$10.2 mn, 4,050 volunteer days



Customers

Revenues of \$ 29.4 bn

Meeting customers' needs for products, solutions and services



ABB



Capital



\$4.5 bn capital payments (share buyback and dividends)



Material & services



Spend ~\$14.4 bn



Services



Income tax \$757 mn



Investors



Suppliers



Governments

← Capital inflows from stakeholders

→ Capital outflows to stakeholders



VALUE CREATION MODEL

INPUTS

Financial capital

- Total stockholders' equity: \$13.2 bn
- Total liabilities: \$25.9 bn

Intellectual capital

- 60% of R&D employees in software development
- R&D spend: 4% of revenues in 2022

Natural capital

- Energy consumption: 1,417 GWh in 2022 (741 of which comes from renewable energy sources)
- Water withdrawal: 2,815 kilotons in 2022

Manufactured capital

- Procurement spend¹: \$14.4bn
- Number of sites as of December 31, 2022: 828 (incl. leased & owned sites)

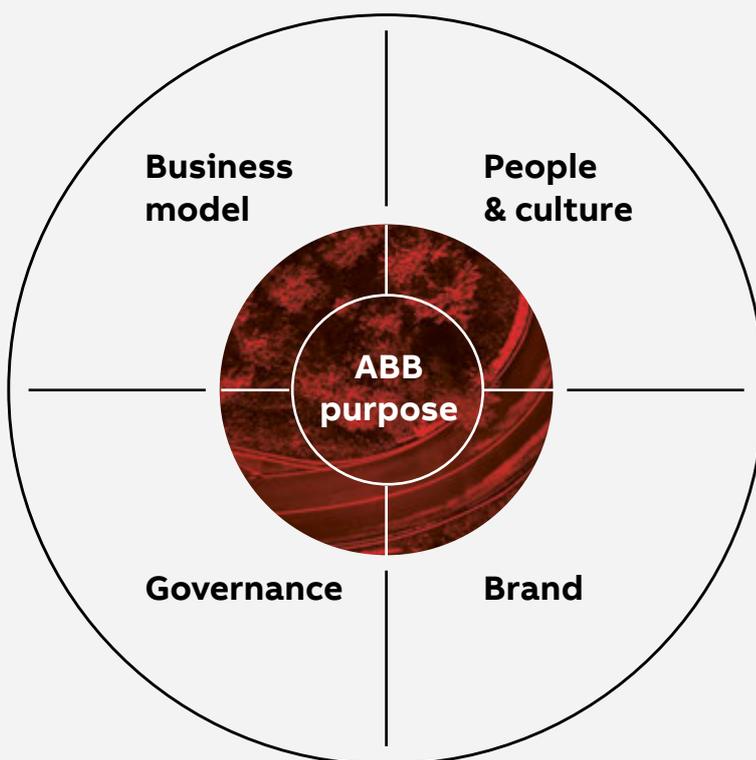
Human capital

- Diverse workforce: ~105,000 employees representing 140 nationalities as of December 31, 2022
- Average hours of training per year and employee²: 30

Social and relationship capital

- Customer base evenly distributed amongst the three regions
- ABB Ability™ industry partnerships with 8 leading organizations³

ABB WAY



OUTPUTS AND OUTCOMES

We deliver financial performance

- Revenue
- Operational EBITA
- ROCE
- FCF conversion to net income
- EPS

We create value through world-class technology

- Orders from digital and software services: ~\$500mn⁴
- Numbers of priority patents filed in 2022⁵: ~500

We enable a low-carbon society

- Reduction of ABB's own emissions: 65% since 2019
- Emissions of main tier-1 suppliers: target of 50% reduction by 2030 was finalized and published in October 2022
- We support customers in reducing their GHG emissions

We preserve resources

- Circularity framework for product portfolio: methodology to be further refined in alignment with relevant regulations in 2023
- Reduction in amount of waste sent to landfill: 32% since 2019
- Number of recycling and waste reduction projects implemented in 2022: approx. 60

We promote social progress

- Employee engagement score: 76/100 in 2022
- Women in senior management positions: 17.8% as of December 31, 2022
- Community spending: \$10.2mn and 4,050 volunteer days in 2022

We create a culture of integrity and transparency

- Targeted upskilling in integrity risk areas, including bribery and corruption
- Delivering Straight Talk case studies (internal integrity successes and failures)

¹ Including services.

⁴ Growing at a double-digit rate.

² Includes tools such as My learning, Harvard Spark, Harvard Manager Mentor, LinkedIn Learning, and covers both leadership and functional/technical learnings, for internal employees.

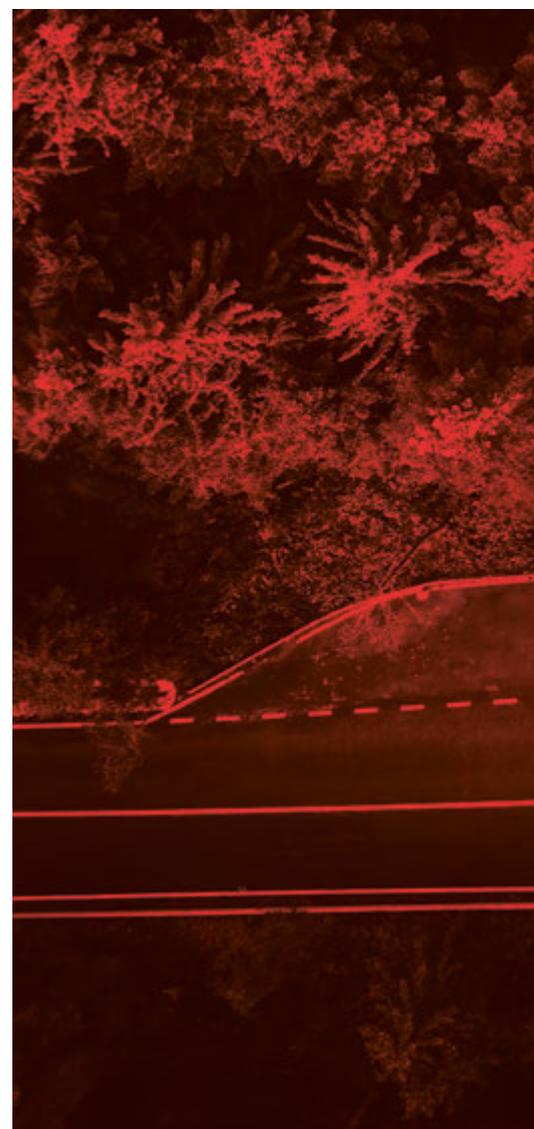
⁵ Including patents, utility model and design applications.

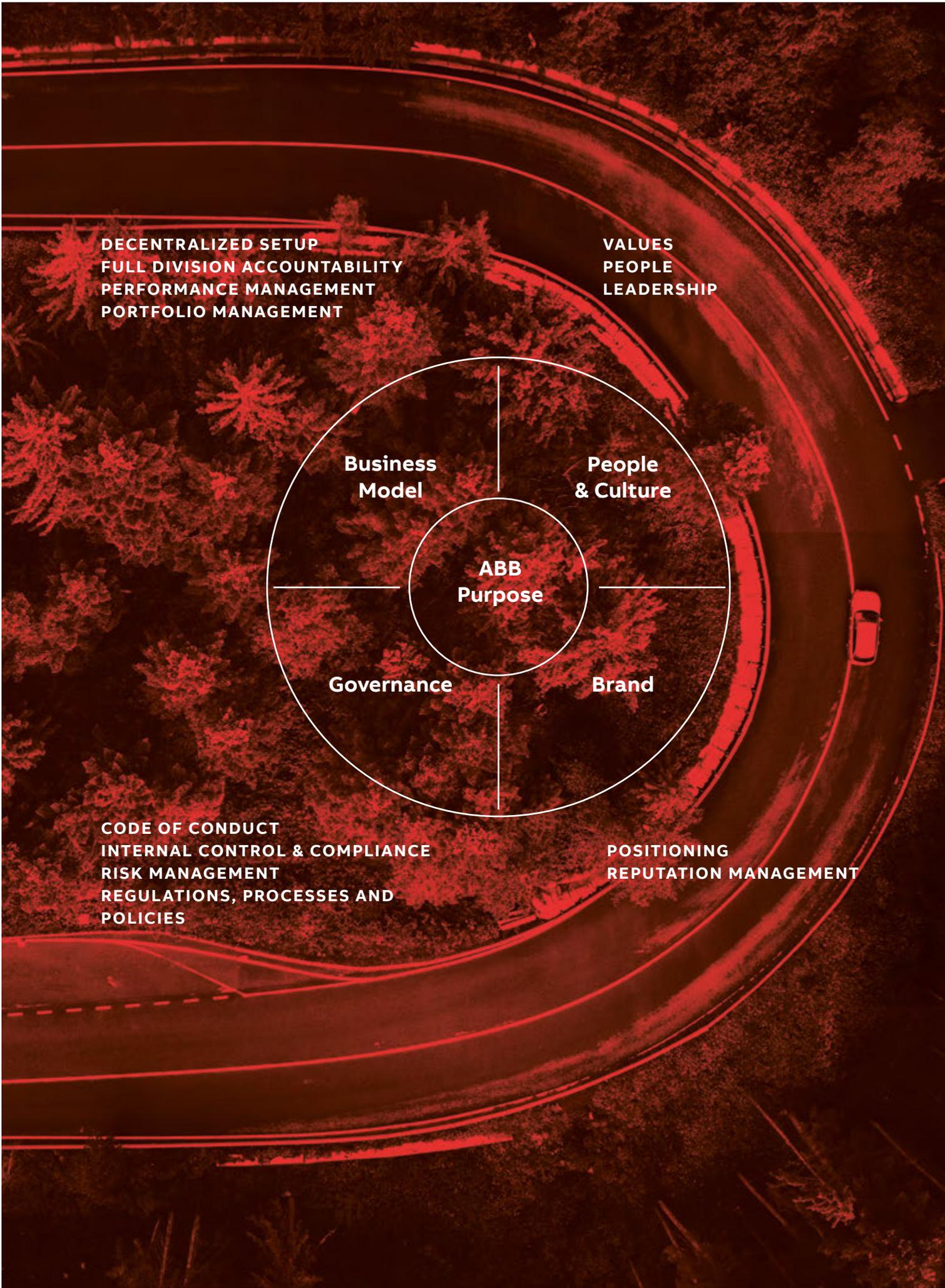
³ Including Microsoft, Hewlett Packard Enterprise, Huawei, IBM, Ericsson, Accenture, Mesh Systems and Crate.io.

Our operating model – the ABB Way

The ABB Way is the common operating model for our divisions, business areas and lean corporate center. It is the “glue” that holds the Group together and has at its core ABB’s purpose, i.e., the “why” we are in business.

The ABB Way defines “how” we create value: how we drive performance, how we ensure that we have the right people in the right place at the right time, how we create a strong culture of governance and integrity and how we build and protect our brand and reputation. The ABB Way is owned and controlled by ABB’s Executive Committee and is mandatory for all businesses in ABB.





**DECENTRALIZED SETUP
FULL DIVISION ACCOUNTABILITY
PERFORMANCE MANAGEMENT
PORTFOLIO MANAGEMENT**

**VALUES
PEOPLE
LEADERSHIP**

**Business
Model**

**People
& Culture**

**ABB
Purpose**

Governance

Brand

**CODE OF CONDUCT
INTERNAL CONTROL & COMPLIANCE
RISK MANAGEMENT
REGULATIONS, PROCESSES AND
POLICIES**

**POSITIONING
REPUTATION MANAGEMENT**

Our business model

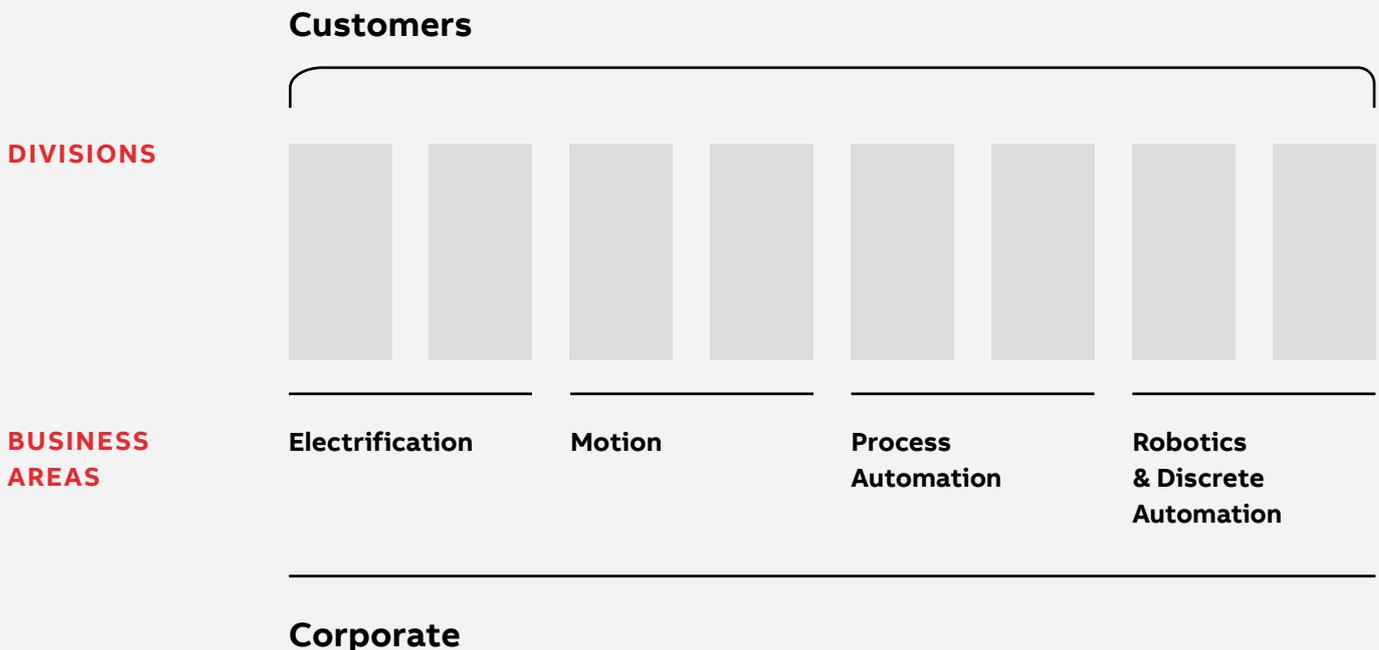
Our business model determines how we govern, steer and manage the performance and portfolios of our 20 divisions. Under our decentralized business model, our divisions represent the highest level of operating decisions within ABB with full ownership and accountability for their respective strategies, performance and resources. Our divisions drive value creation with the clear aim of being no. 1 or 2 in their respective market segments.

Performance management and portfolio reviews of the divisions are carried out by our four business areas – Electrification, Motion, Process Automation

and Robotics & Discrete Automation – using a transparent scorecard system. Business areas also manage selected, shared resources on behalf of the divisions, such as R&D and the ABB Ability™ digital platform.

Collaboration is crucial in our decentralized business model. Business leaders are encouraged to cooperate and find synergies to create competitive advantages. Such collaboration can range from internal benchmarking or best-practice sharing to sharing of business resources (e.g., digital platform, account management). We strongly believe that smart leaders collaborate.

ABB'S DECENTRALIZED BUSINESS MODEL

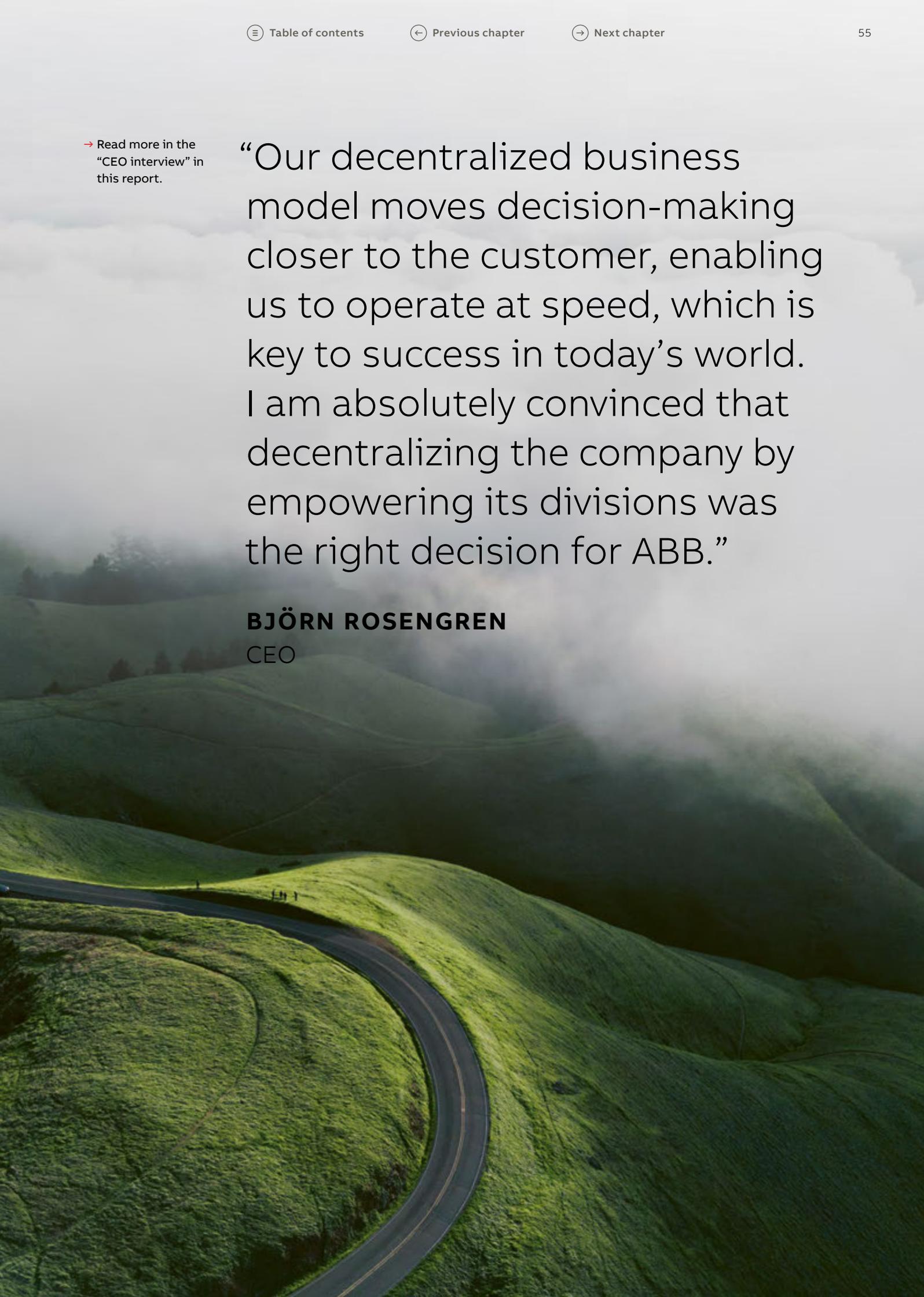


→ Read more in the
“CEO interview” in
this report.

“Our decentralized business model moves decision-making closer to the customer, enabling us to operate at speed, which is key to success in today’s world. I am absolutely convinced that decentralizing the company by empowering its divisions was the right decision for ABB.”

BJÖRN ROSENGREN

CEO

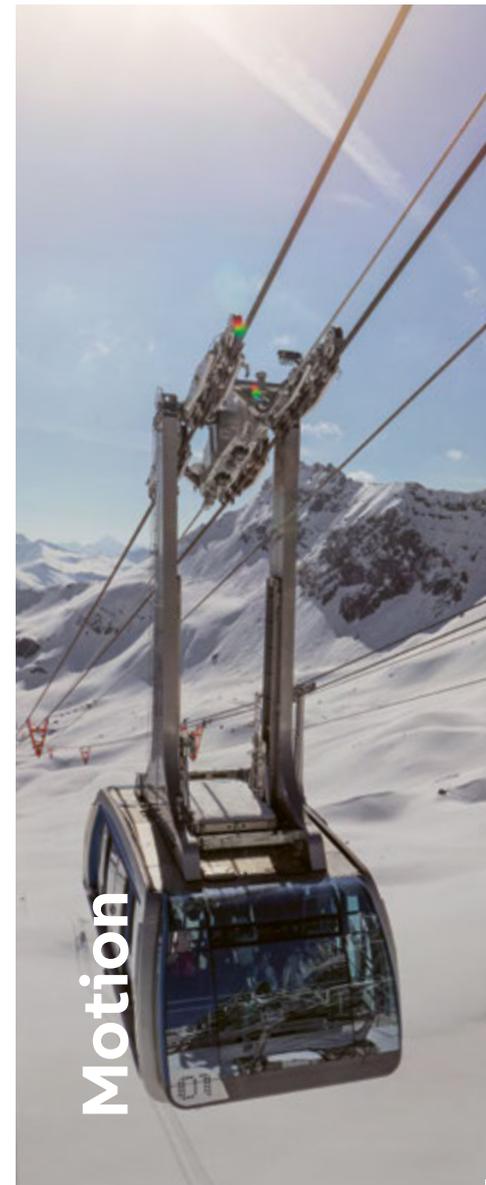


DIVISIONS

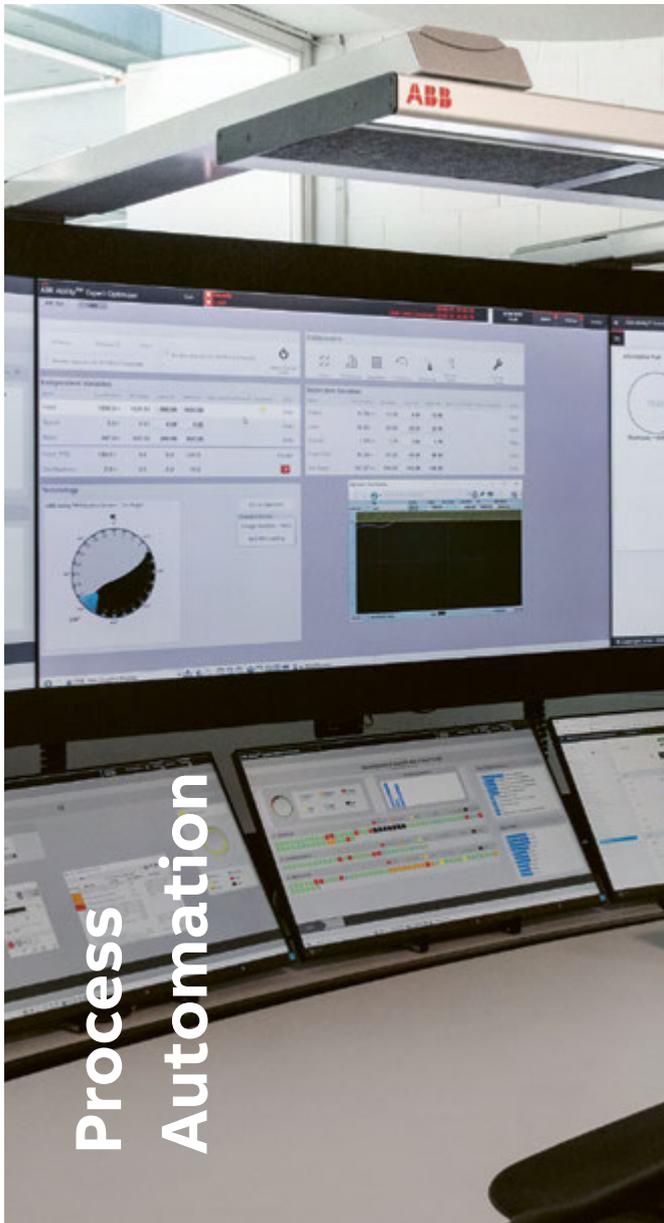
- **Distribution Solutions**
- **Smart Power**
- **Smart Buildings**
- **Installation Products**
- **Power Conversion**
- **E-mobility**
- **Service**



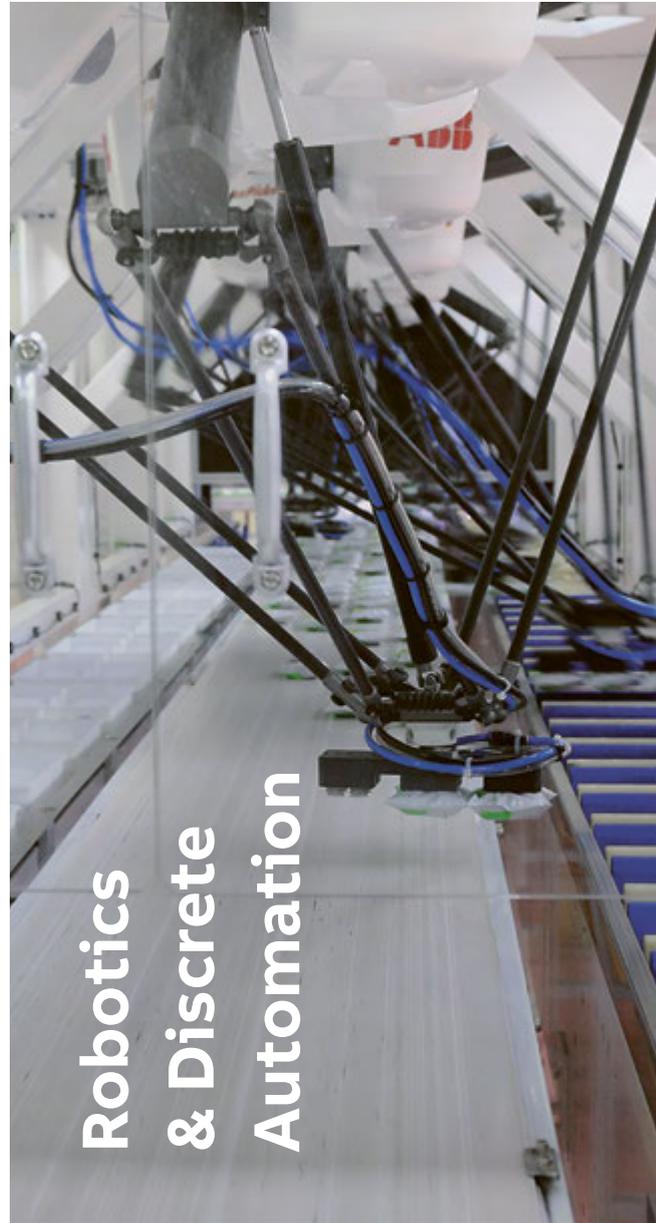
- **Drive Products**
- **Systems Drives**
- **Service**
- **Traction**
- **IEC LV Motors**
- **Large Motors & Generators**
- **NEMA Motors**

**BUSINESS AREAS**

- Energy Industries
- Process Industries
- Marine & Ports
- Measurement & Analytics



- Robotics
- Machine Automation





Electrifying the world in a safe, smart and sustainable way is the motto of ABB's Electrification business, a global technology leader in electrical distribution and management from source to socket.

As global demand for electricity grows, our 50,000+ employees across 100 countries collaborate with customers and partners to transform how people connect, live and work. We develop innovative products, solutions and digital technologies that enable energy efficiency and a low-carbon society across all sectors. By applying global scale with local expertise, we shape and support global trends, deliver excellence for customers and power a sustainable future for society.

Market growth is driven by the ever-increasing demand for electricity, which in turn is the result of global megatrends of urbanization and population growth. Additionally, digitalization and connectivity are accelerating demand for intelligent solutions and smart devices.

CUSTOMERS: ABB Electrification serves a wide range of customer segments, including residential, commercial and industrial buildings, as well as utilities, oil and gas, chemicals, data centers, e-mobility, renewables, food and beverage, transport and infrastructure, among others. From some of the world's tallest buildings to the busiest airports, ABB Electrification's products and solutions are all around us across all sectors.

OUR DIVISIONS



Distribution Solutions

Market position:
Global no. 1 in medium voltage

Offering:
Improves electric power quality and reliability while strengthening grid resilience through automation. With ABB Ability™ enabled digital products and solutions, our customers can unlock the full potential of their electrical systems.

Smart Power

Market position:
Global no. 3
No. 2 in low voltage

Offering:
Global leader in technologies enabling buildings, factories and transportation to make energy management smarter, renewables more productive and operations more resilient.

Smart Buildings

Market position:
Global no. 3
No. 1-2 in distribution enclosures and DIN-rail products

Offering:
Global leader in safe and reliable energy distribution and management to ensure smart and sustainable buildings and homes.



Installation Products

Market position:

Global no. 1-2
No. 1 in North America

Offering:

This market leader in North America builds on its 100-year history of innovation to create products and solutions to safely connect and protect electrical systems that power businesses, cities, homes and transportation.

Power Conversion

Market position:

No. 4 in DC power solutions

Offering:

Designs, develops and manufactures solutions to power and safeguard life's everyday moments. With customers in industries where power reliability, efficiency and quality are essential, solutions are relied upon to solve some of the most difficult power challenges.

→ As announced on January 20, 2023, ABB has reached an agreement to sell this division; the transaction is expected to be completed in 2023.

E-mobility

Market position:

Global no. 1 in EV charging solutions

Offering:

The world leader in EV charging solutions is the partner of choice for the world's largest EV OEMs and nationwide EV charging network operators, and is building a zero-emission mobility future from home to highway.

→ As of January 2023, the E-mobility division is no longer part of the Electrification business area and is managed as a standalone business.

Service

Market position:

Global no. 3
No. 2 in digital services

Offering:

A range of innovative, scalable electrical service solutions to bring peace of mind about the security, safety and reliability of electrical infrastructure, supporting customers to optimize their electrical assets and partner with them as their future energy challenges evolve.





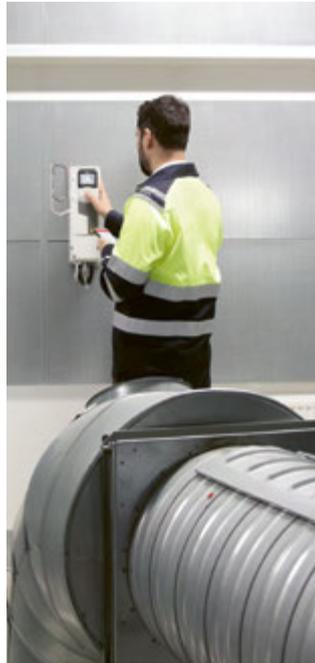
Motion

ABB's Motion business is the leading supplier of drives and motors globally. We provide customers with the complete range of electrical motors, generators, drives, services and integrated digital solutions.

ABB Motion is a key enabler of a low-carbon future. We help our customers and partners improve energy efficiency and shift energy consumption from fossil fuels to clean electricity.

CUSTOMERS: With our digitally enabled drives, motors and services, we can deliver the optimum drive and motor solutions for a wide range of applications in all industrial segments and in transportation. Through our global presence we are always close by to serve our customers.

OUR DIVISIONS



Drive Products

Market position:
Global no. 1

Offering:
Comprehensive product portfolio of low-voltage AC drives.

System Drives

Market position:
Global no. 1

Offering:
Low- and medium-voltage AC drives and modules, wind converters.

Service

Market position:
Global no. 1

Offering:
Base services and spare parts, upgrades and replacements, smart solutions.



Traction

Market position:
Global no. 2

Offering:
Traction systems including converters and motors, battery energy storage systems, auxiliary converters.

IEC LV Motors

Market position:
Global no. 2

Offering:
Comprehensive portfolio of low-voltage motors for any industry and application, compliant with all major markets globally.

Large Motors and Generators

Market position:
Global no. 2

Offering:
Comprehensive product portfolio of large AC motors and generators.

NEMA Motors

Market position:
Global no. 1

Offering:
Comprehensive product portfolio of low-voltage electric motors.

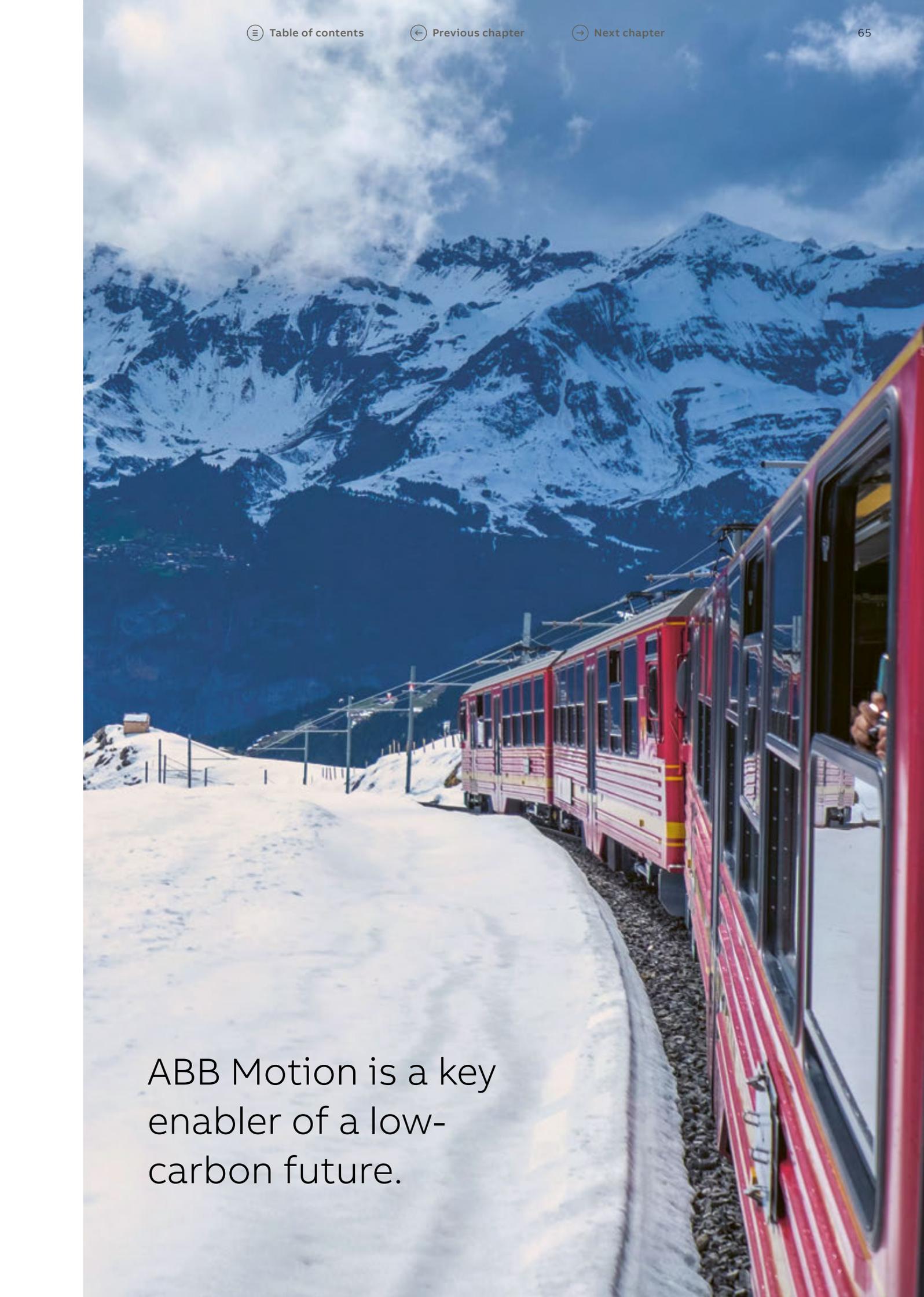
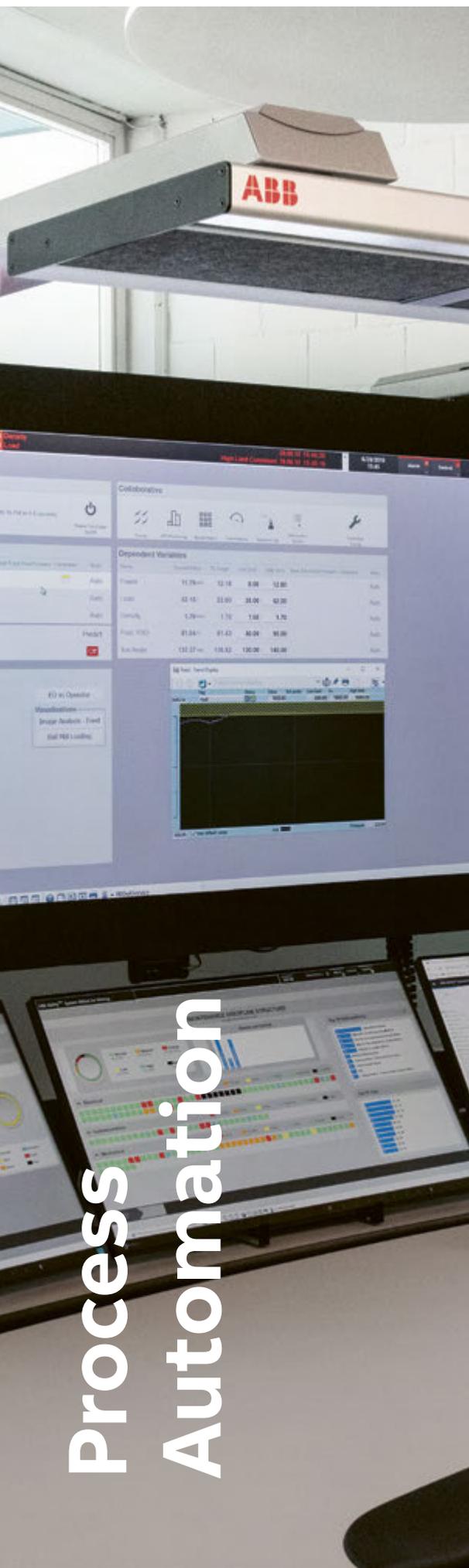


ABB Motion is a key enabler of a low-carbon future.



Process Automation

ABB's Process Automation business offers a broad range of solutions for the process, hybrid and maritime industries, including integrated automation, electrical and digital systems.

The portfolio includes control technologies, industrial software, industry specific anchor products, advanced sensing and lifecycle services. Until the spin-off of the Turbocharging division on October 3, 2022, the Process Automation business area portfolio also included turbochargers.

CUSTOMERS: The Process Automation business area's end customers include companies across process, hybrid and maritime industries. These industries include the energy sector, chemicals and plastics, mining and minerals, metals, pulp and paper, pharmaceuticals, food and beverage, power generation and marine and ports.

OUR DIVISIONS

→ A fifth division, Turbo-charging, was spun off with a listing on the Swiss stock exchange on October 3, 2022.



Energy Industries

Market position:
No. 1–2 in distributed control systems, no. 1 in power generation, no. 3–5 in oil, gas and chemicals

Offering:
Integrated automation and electrical systems, safety, service and digital solutions.



Process Industries

Market position:
No. 1 in distributed control systems, no. 1–2 in mining, pulp & paper

Offering:
Automation, electrical and motion systems; quality control systems, mine hoists, gearless mill drives, high-power rectifiers.



Marine & Ports

Market position:
Global no. 1 in electric propulsion, no. 1 in container terminal automation

Offering:
Azipod® propulsion, ship and port electrification, automation and digital solutions.



Measurement & Analytics

Market position:
No. 1 in analytical, force measurement, no. 2–5 in instrumentation

Offering:
Gas and liquid analyzers, field instrumentation, force measurement, digital and service solutions.



Robotics & Discrete Automation

ABB's Robotics & Discrete Automation offers a comprehensive and integrated portfolio covering robots, autonomous mobile robots (AMRs) and machine automation solutions, designed and orchestrated by our value-creating software.

Our unparalleled expertise and the seamless integration of our products enable customers from all industries to unlock flexible automation. With our global presence in sales, engineering and service, we support our customers at every step of their growth journey.

CUSTOMERS: Robotics & Discrete Automation serves a wide range of customers in industries such as automotive, machine building, metalworking, electronics, food and beverage and logistics. They include end-users such as manufacturers, system integrators and machine builders.

OUR DIVISIONS



Robotics

Market position:
Global no. 2

Offering:
Robots, robotics application cells and smart systems, field services, spare parts, digital services and software.

Machine Automation

Market position:
Global no. 5
No. 2 in high-end segment

Offering:
Solutions based on Programmable Logic Controllers (PLCs), Industrial PCs (IPCs), servo motion, industrial transport systems and vision, software.

Our people & culture

At ABB, we understand that sustainable value is created by people working together in supportive environments that encourage creativity and collaboration and reward performance.

To attract, retain and nurture talent, we are building safe, fair, equitable and inclusive working environments in which our people can succeed and develop. Our performance culture is characterized by our ABB values of courage, care, curiosity and collaboration, supported by robust performance and review processes.

Our four values reflect the attitudes and behaviors we need to drive our decentralized company with its empowered divisions. They guide and shape our behavior and interactions with each other, our customers and partners, and society as a whole.

To help our people succeed, we provide opportunities for learning and personal development and empower them to manage their own careers within ABB

with our open job market, where all positions up to Executive Committee level are posted internally and anyone may apply. A key focus of our people strategy is leadership development – our leadership teams review the strengths and development needs of their team members and support their development so that they are ready to pursue new opportunities when they arise.

Relying on our people's unique attitudes, experiences and domain expertise, we push the boundaries of technology to drive performance, shape new business models and find new ways of working that bring valuable benefits to our customers, partners and society overall. We actively seek partnerships with our customers to drive value creation and sustainable development.

→ For more information about our people-related performance, please refer to the chapter "[We promote social progress](#)".

ABB VALUES



Courage

At ABB, we:

- Take action and manage consequences
- Speak up and ask for help
- Take calculated risks to create success



Care

At ABB, we:

- Take care of our customers, our people and the environment
- Respect and value differences
- Do what is right and act with integrity



Curiosity

At ABB, we:

- Believe there is always a better way
- Lead with technologies and innovations
- Learn from failures and successes



Collaboration

At ABB, we:

- Believe smart people collaborate
- Build on each other's strengths and success
- Partner with our customers

Our brand

→ For more information about how we create value through world-class technology see chapter [“We create value through world-class technology”](#).

Our ABB brand is an important part of the glue that unites us as a company. It is an asset that allows us to occupy a strong position in the market, enables us to differentiate ourselves through quality rather than price and better attract talent and investors. To keep our brand strong, we speak with a single voice and ensure that what we say matches what we do. Credibility is the key to building trust. When we are trusted, customers rely on us, our people feel empowered and all our stakeholders reap the benefits.

Our strong ABB brand is built on the skills and domain expertise of our people who are experts in creating superior customer value through our world-class technology solutions.



Our governance

- Download our [Code of Conduct](#) on the ABB website.
- For more information on how we deal with risks and opportunities, please consult the [next chapter](#).
- More information on our governance can be found in “We create a culture of integrity and transparency along the extended value chain” and in the chapter [“Performance”](#).

We safeguard our business and our company from financial and reputational harm with a comprehensive governance framework that defines how we work, collaborate and do business across our organization. We are committed to fostering a culture in which integrity is woven into the fabric of everything we do.

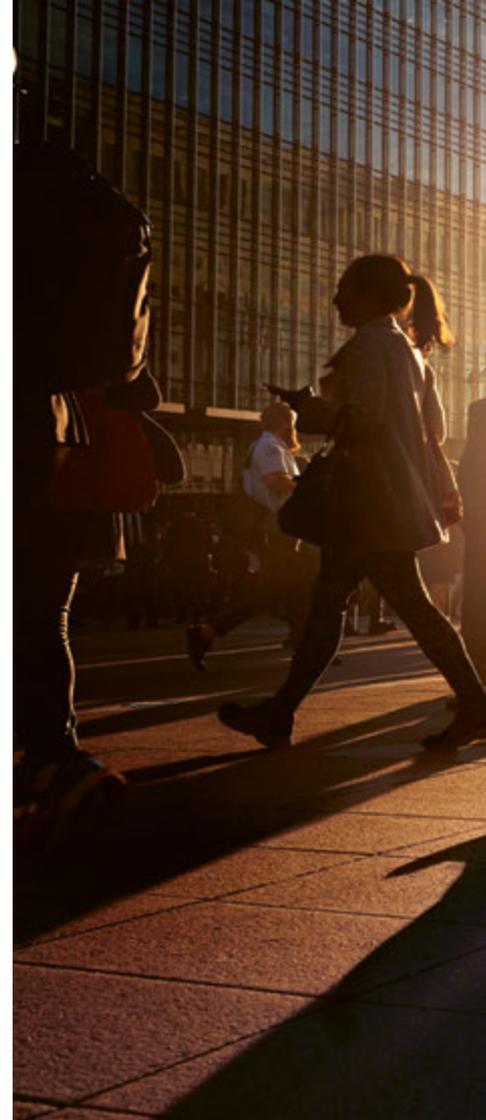
To embed integrity in our own operations as well as throughout our entire value chain, our Code of Conduct guides our employees to follow the law, act honorably and treat each other with respect. The code also forms the basis of our interactions with projects and counterparties and underpins our commitment to ethical behavior and human rights. Our Supplier Code of Conduct describes ABB’s expectations of our suppliers and is included in our standard terms and conditions.

Through our Sustainable Supply Base Management (SSBM) approach, we assess sustainability risks, compliance and the performance of our suppliers to make sure they meet our expectations. To strengthen our sustainability ambitions from a governance perspective, we are also embedding sustainability targets in our senior management incentive awards.



Stakeholder engagement and material topics

Creating value for our stakeholders is why we are in business. Through meaningful dialogue and close cooperation with key stakeholder groups, we work to shape and hone ABB's positions and policies to reflect the broad range of our stakeholders' perspectives in everything we do.



We maintain regular contact and communication with our stakeholders, such as customers, suppliers and employees. We also conduct a transparent dialogue with the capital markets to enable participants to make informed investment decisions on a timely basis. Furthermore, we engage with industry peers, partners, governments and organizations from civil society.

Beyond business-as-usual discussions, we engage with stakeholders for specific strategic and reporting purposes. We are

especially interested in understanding how they perceive value and what matters to them as far as economic, environmental and social issues are concerned. These insights shape our strategic decisions and the way we manage risks and opportunities and they help determine the actions we take and how we communicate to enhance transparency and accountability. This dialogue helps us to identify and anticipate emerging trends, shifting customer needs and changing market expectations.

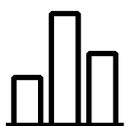


Stakeholder groups

We have identified the following key stakeholder groups for regular engagement:



Customers



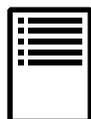
Investors



Suppliers



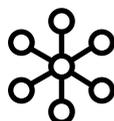
Employees



Governments and civil society



Communities



External partners

Material topics

→ More information about our engagement with stakeholders, material topics and the related process can be found in our [Sustainability Report 2022](#).

Stakeholder engagement allows ABB to assess and disclose matters that substantively affect our ability to create value for our stakeholders over the short, medium and long term.

In 2020, ABB conducted a comprehensive stakeholder engagement process to identify material sustainability topics. More than 300 stakeholders across our four business areas were interviewed and based on their feedback, each business area created its own materiality matrix for sustainability. These matrices were then aggregated into an overall matrix for the Group, which was used as the basis for determining our 2030 sustainability strategy and related targets. The identified topics impact not only

sustainability but also our financial performance, our ability to create value and our reputation. They can be summarized in three categories as shown below.

In 2022, we conducted follow-up discussions with our investors, customers and suppliers about ABB’s sustainability performance.

In 2023, we will further enhance and update our comprehensive materiality assessment with internal and external stakeholder engagement, based on a double materiality approach, considering both the impact that ABB has on the environment and society, and the impact the topics have on ABB’s business success.

MATERIAL TOPICS FOR VALUE CREATION



Business and governance

- Products, solutions and services
- Stakeholder engagement
- Ethics
- Responsible sourcing
- Business resilience
- Data privacy
- Financial performance*
- Risks and opportunities*



Environment

- Carbon reduction
- Operations-environment
- Circular economy

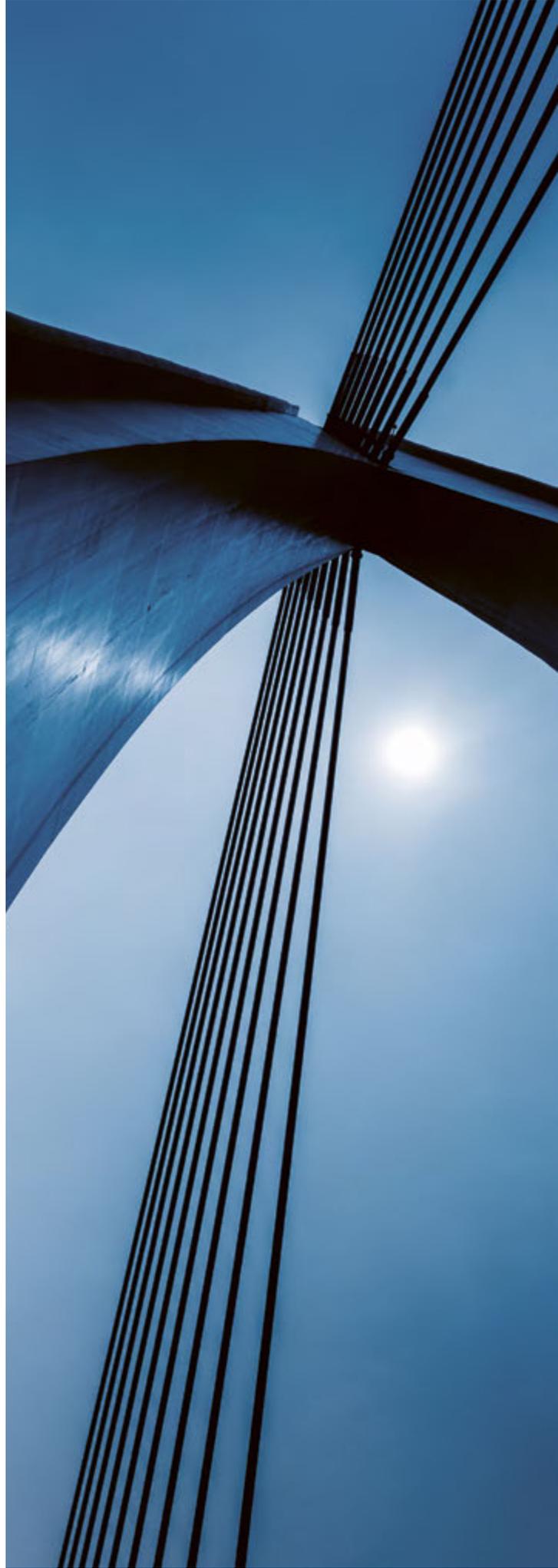


Social

- Health & safety
- Employee well-being
- Human rights & labor
- Socio-economic impact
- Diversity & inclusion

* In addition to the topics identified in the sustainability materiality assessment in this Integrated Report, we also report on our financial performance as well as risks and opportunities that influence our holistic value creation.

Risks and opportunities



02

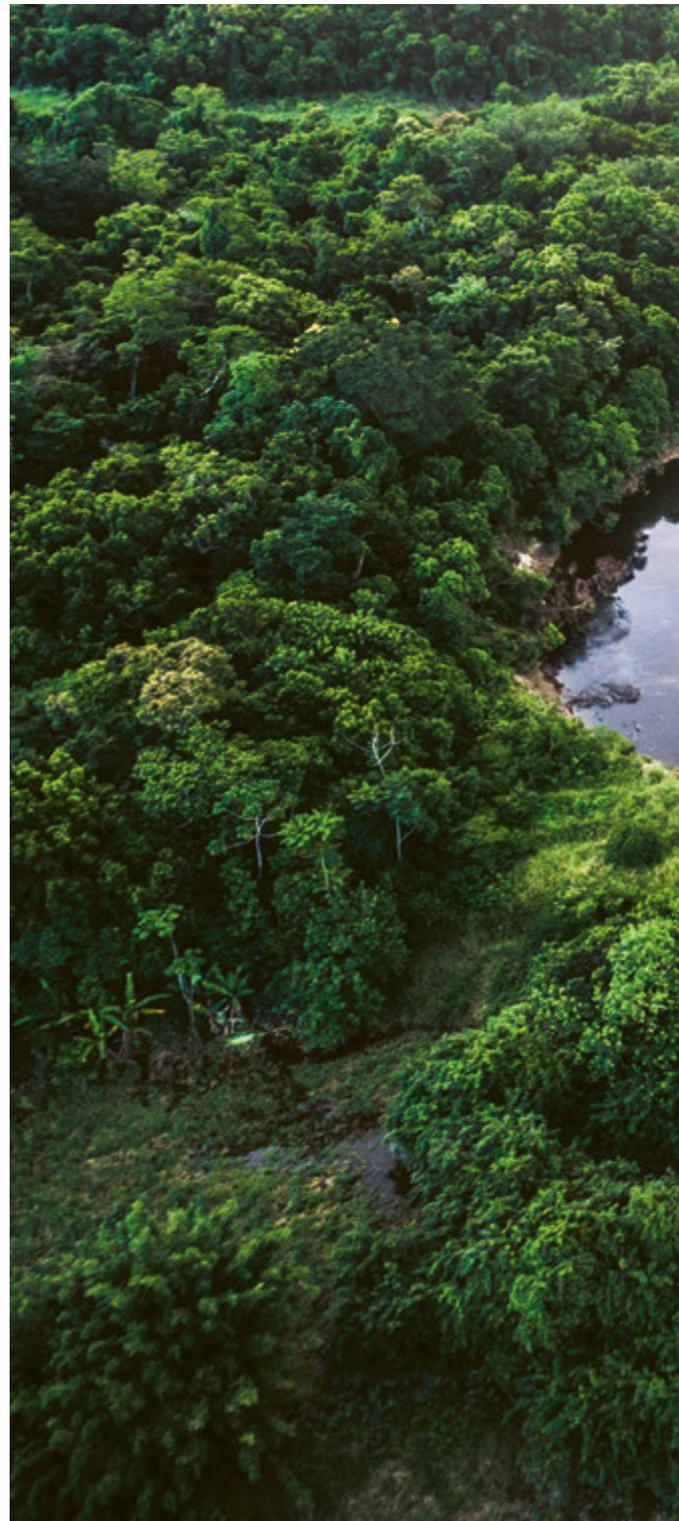
RISKS AND OPPORTUNITIES

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- 86 Risk and opportunity management
- 94 TCFD Recommendations report

Our changing world

To fulfil our purpose and create superior value, we must identify, assess, mitigate and manage risks and opportunities facing our business.

In doing so, we take a broad view of the external environment and megatrends and actively try to prevent risks from materializing while at the same time turning challenges into opportunities. Our holistic approach covers both financial and sustainability-linked aspects of enterprise risk management and special emphasis is placed on climate-related financial risks and opportunities through the adoption of the recommendations of the Taskforce on Climate-Related Financial Disclosures (TCFD).





As the pace of change and uncertainty increases, ABB closely monitors megatrends that are shaping the external environment, analyzes economic and geopolitical shifts and adapts accordingly through its agile and decentralized business model.

In many economies around the world, industry's share of GDP is shrinking and the service sector is expanding. At the same time, companies are increasingly focused on resilience and reshoring to guard against supply chain challenges in the wake of the pandemic, as well as bracing for a downturn as the energy crisis and inflation reduce businesses' and households' spending power. For ABB, as a leader in electrification and automation, these are challenges to be managed, but they also represent an important business opportunity. To take advantage of them, and support our customers with more sustainable solutions, we need more proactive planning, monitoring and management.

On a societal level, demographic change is increasing the size of the population but also shrinking the labor force, creating a need for increased labor productivity. Businesses are also grappling with a lack of qualified and experienced workers, which makes attracting and retaining talents a priority for ABB. At the same time, pressure is growing to improve human and labor rights and respect for diversity, leading to safer, more equitable

and inclusive working environments and greater focus on community engagement and development. Across the world, rapid urbanization is driving the need for smart buildings and infrastructure and e-mobility.

These developments are being enabled by technology but are also increasing demand for energy and putting more pressure on the planet's resources. To limit climate change and resource scarcity, bold and ambitious action is needed to decarbonize the energy system, improve energy and resource efficiency and move towards a circular economy.

With its advanced automation, robotics and digital technologies, ABB is well positioned to tackle these pressing challenges and turn them into business opportunities. Our innovative technological solutions increase productivity and resource efficiency and improve manufacturing flexibility, quality and simplicity. Our purpose of enabling a more sustainable and resource-efficient future with our technology leadership in electrification and automation addresses the megatrends shaping the economy and places ABB in a strong position to drive and support the technological advances that are needed to achieve a sustainable society.

KEY MEGATRENDS THAT ARE SHAPING ABB'S STRATEGIC CONTEXT



Sustainability

- Climate change
- The energy transition
- Environmental protection
- Natural disasters
- Human rights & equality
- Sustainable sourcing



Digitalization

- Artificial intelligence
- Connectivity
- Augmented/virtual reality
- Autonomous operations
- EaaS (Everything-as-a-Service)



Demographics

- Ageing and declining working age population
- Care and medication for the elderly
- Population boom in Africa
- Urbanization
- Growing world population and resource demand (e.g., food, water, energy)



Economic shift

- Declining share of industry in GDP, growing share of the service sector
- Maturing of the Chinese economy
- Globalization, regionalization, (economic) nationalism
- Supply chain security and re-/near-shoring

**CHANGING
WORLD**



More electricity

Electricity demand is growing **>2x** faster than other energy sources resulting in **~50%** higher average annual investment into distribution networks over the next 10 years¹

**OUR
PURPOSE**

**OPPORTUNITIES TO
CREATE VALUE FOR OUR
CUSTOMERS**



**Reduce waste
and increase
circularity**



**Reduce
carbon
intensity**

¹ IEA World Energy Outlook 2021, Announced Pledges Scenario.

² United Nations World Population Prospects 2019.



New energy sources

Share of low-carbon sources in global energy mix to increase **+30% points** from ~20% today to ~50% in 2050



Higher energy efficiency

~45% of the world's electricity is converted into motion by electric motors yet only **~23%** of the world's electric motors are optimized through the control of drives



Shrinking labor force

Globally, the number of working age people (25 to 64 years) per retiree (65 years and over) will fall by **~20%** over next 10 years²

We enable a more sustainable and resource-efficient future with our technology leadership in electrification and automation.



Increase labor productivity



Increase flexibility



Reduce downtime



Increase energy efficiency



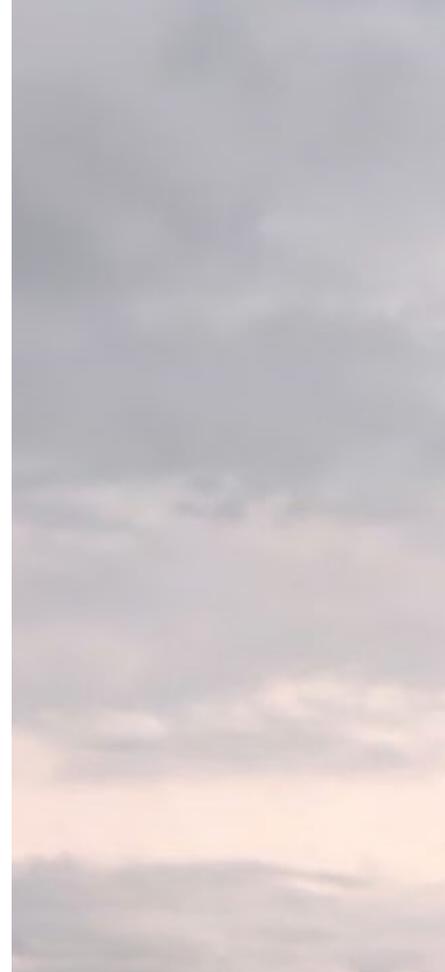
Reduce GHG emissions



Increase safety and improve working environment

Every event, factor or circumstance that could adversely affect ABB's ability to achieve its business objectives and create value is a risk. Therefore, risk management within a strong governance framework is an integral part of our business.

Yet, at ABB we don't only try to minimize risks, we seek to turn them into opportunities and create value for our stakeholders and society. Our goal is to responsibly manage both risks and opportunities, which also includes taking certain risks and getting paid for it. We are well equipped to do so, thanks to our purpose, our ABB Way operating model and our diverse portfolio.



Risk and opportunity management



Enterprise Risk Management

ABB's enterprise risk management (ERM) process provides managers and the Board of Directors, including the Board's Finance, Audit and Compliance Committee (FACC), with a comprehensive and holistic view of the risks facing our business. This information informs our overall strategic and risk discussions and allows us to make better informed decisions and take calculated risks to create value for our stakeholders.

The ERM process is typically cyclical in nature, enabling the continuous refinement of risk management in a dynamic business environment. It starts with the identification of business objectives and related risks that could prevent their successful achievement. Risks are assessed in terms of their potential impact, likelihood, and speed with which an impact could occur should the risk materialize. Risk mitigation measures are then

ENTERPRISE RISK MANAGEMENT (ERM) PROCESS



planned, implemented and monitored on an ongoing basis to ensure their effectiveness. ERM assessments are both top-down and bottom-up. They cover strategic, financial and operational risks, in the short, medium and long term.

Our ERM process is aligned with our strategy and the ABB Way, our operating model, and links to our values of courage, care, curiosity and collaboration. All business areas, divisions and corporate functions are required to identify, assess and report their top five risks as a minimum each year based on a defined methodology and governance.

Risks are classified in one of the following three categories based on a comprehensive ERM risk catalogue:

1. Strategic

This category includes strategic risks which can significantly impact the execution of our business strategies, the management of our portfolio and our ability to achieve our objectives. At ABB, we typically include external and emerging risks in this category, such as industry and technological shifts, macroeconomic developments and geopolitical aspects. These can impact our business negatively in the long term but can also create business opportunities.

2. Operational

This category includes operational and commercial risks which arise as a result of our day-to-day dealings with customers and suppliers as well as engineering, manufacturing and product management. Other examples in this category include integrity and compliance, health, safety and environment, supply chain management, cyber and information security, physical asset management and talent attraction and retention.

3. Financial

This category includes financial risks which arise as a result of ABB's international activities such as currency or interest-rate fluctuations and commodity price volatility. Risks relating to accounting and financial reporting requirements, financial planning, analysis and management, and tax obligations are also covered.

→ Further details on how we manage financial risks by using derivative financial instruments can be found in the [Financial Report 2022](#) in Note 6 "Derivate financial instruments".

Across all categories of risk, ABB actively aims to prevent risks from materializing and reduce potential adverse impacts by designing, implementing and monitoring a wide range of mitigation actions, controls and governance.

Based on the 2022 ERM process, the following top five risk clusters were identified for ABB.

RISK CLUSTER



**Information
& cyber security**



**Availability of
components
& commodity
price volatility**



**Lack of qualified/
available resources**



**Economic
slowdown**



**Geopolitical
instability**

EXAMPLES OF REPORTED RISKS

- Cyber attacks including ransomware attacks that disrupt ABB operations and business processes
- Cyber attacks including ransomware attacks that impact ABB's product and service offerings, including key suppliers, leading to financial and reputational impact
- Non-compliance with information security requirements and laws, leading to business interruptions and adverse financial impacts
- Failure to deliver/fulfill contracts due to business disruptions

- Shortage of material availability, especially for electronics and semi-conductors
- Delays in delivery across the supply chain
- Increased costs due to a lack of key components
- Shortages and changes in customer buying behavior

- Lack of qualified and experienced personnel
- Inability to attract and retain talent
- Inability to execute business strategy effectively and within the defined timeline
- Reduced ability to maintain high engagement in a continuously uncertain environment

- Adverse macro-economic and market conditions, such as recession, stagflation and inflation, which impact ABB's ability to achieve financial targets
- Energy crisis and associated higher costs impacting operations
- Prolonged demand drop coupled with slow economic recovery
- Continued pandemic challenges

- Trade wars and increase in protectionism
- Increase in controlled technology, sanctions and embargoes
- Changes in local content rules and potential preference by customers for local products

EXAMPLES OF MITIGATION MEASURES

- Apply security event monitoring to business-critical systems
- Implement strong network and cyber-defense controls
- Continue raising awareness and providing training on information security requirements

- Perform continuous monitoring of material and market availability
- Engage in dual sourcing of key components
- Pro-actively discuss extended schedules with customers
- Provide long-range forecasts to suppliers for strategic commodities

- Review ABB's ability to offer competitive employment terms with business leaders
- Collaborate within ABB to gain greater visibility into talent available within the organization
- More innovative and agile recruitment sourcing and use of modern tools and channels to attract talent
- Identify viable succession lines

- Track situation across the world on GDP, employment rate and correlated market growth
- More proactive scenario planning and related cost measures
- Continue effective risk identification and mitigation in our tender and project risk management processes
- Drive continuous focus on contractual protection

- Closely monitor geopolitical developments during tender and execution phases of projects, conduct customer and country screenings
- Continuous focus on trade compliance
- Awareness and understanding of export control regulations and product classification requirements

Sustainability risks and opportunities

In addition to the risks covered above, we place special emphasis on sustainability-related risks and opportunities, not least because they can impact all other risk categories. Being both a mega-trend and part of our company purpose, sustainability is a significant business opportunity as well as one of the reasons that we are in business. For example, we are enabling a low-carbon society with our electrification and automation solutions. Our clients and partners rely on our innovative and sustainable technologies for holistic benefits. See the following page for an example of how sustainability turns into a business opportunity for ABB.

Sustainability risks and climate change in particular can impact our operations and financial performance. That is why we support the Task Force on Climate-related Financial Disclosures (TCFD) framework and include it in our reporting (see next chapter). Further sustainability-related aspects of our risk management include, among others:

- **Human rights risk management and mitigation:** these are part of our standard risk review process for screening major ABB projects, supplier engagements and potential mergers & acquisitions.
- **Supplier risks and conflict minerals:** we rely on our Sustainable Supply Base Management (SSBM) and conflict minerals management programs to manage risks related to our relationships with suppliers.
- **Integrity risks:** we assess and monitor reputational and legal risks arising from our relationships with third parties, including our sales channel, as well as from our own teams to mitigate fraud, corruption and any other risks related to business ethics.

To manage our sustainability risks, we have several policies, governance structures and measures in place, including: [Code of Conduct](#), [Supplier Code of Conduct](#). The latter is derived from our Code of Conduct and takes account of the 10 principles of the UN Global Compact, the [ABB Policy Combating Trafficking in Persons](#), the [ABB Policy on Conflict Minerals](#), our [Human Rights policy and statement](#), our [Social policy](#), supply chain and contractor questionnaires, as well as internal policies and guidelines. Furthermore, we dispose of a business ethics helpline, a Sustainability Board, Health/Safety/Environment (HSE) & Security functions as well as regular trainings and audits.

We also have due diligence practices in place and continuously work towards further improvements, including assessing risks related to conflict minerals and child labor as will be required in 2023 by Swiss law, in accordance with the counterproposal to the Responsible Business Initiative. We have established a “Conflict Minerals Compliance Program” to review the use of conflict minerals in our products and are committed to not buying products and materials containing conflict minerals directly from conflict mines and working towards conflict-free trade with our suppliers. With the [Form SD Specialized Disclosure Report](#), we submit our Conflict Minerals Report to the US SEC. We support the principles contained in the OECD Guidelines for Multinational Enterprises and the ILO Core Conventions on Labour Standards and are committed to implementing the United Nations Guiding Principles on Business and Human Rights (UNGP) throughout our operations and along the value chain. We issue a [Modern Slavery Statement](#) annually pursuant to the U.K. Modern Slavery Act 2015 and the Australian Modern Slavery Act 2018.

→ For more information about how we manage our sustainability risks, please refer to the chapters on “Human rights” and “Responsible sourcing” in our [Sustainability Report 2022](#).

ABB partners with Samsung Electronics to drive holistic smart building technology

In 2022, we entered a collaboration with Samsung Electronics to provide remote monitoring and control solutions that deliver energy and cost savings in residential and commercial buildings. By connecting Samsung’s SmartThings application to ABB’s home automation solutions, residents will be able to monitor and manage their appliances, gas and smoke sensors,

energy, security and comfort systems from a single application. This partnership is just one example of how the challenge of reducing energy consumption can be turned into a business opportunity that makes buildings more sustainable while improving people’s quality of life.

→ For more information about how we manage our sustainability opportunities, please refer to our [Sustainability Report 2022](#).

LOWER ENERGY COSTS
SIMPLE DEVICE MANAGEMENT
REDUCED CARBON FOOTPRINT



For your home



Holistic energy management



Combined HVAC offering



Enhanced connectivity



For commercial buildings

As a company that is exposed to the consequences of climate change and at the same time can have a considerable influence on climate change mitigation and adaptation, we strongly identify with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) to report on how we contribute towards climate change mitigation through GHG emissions reduction, how we reduce our negative impact and what climate change means to ABB in terms of financial risks and opportunities and business resilience.

This is our first report in line with the structure proposed by TCFD, but we have been reporting towards similar disclosures through our CDP climate questionnaires for many years. We will continue developing our TCFD reporting in the next year, in line with the upcoming Swiss Ordinance on Climate Reporting and U.S Securities and Exchange Commission (SEC) Climate Risk Disclosures.



TCFD Recommendations report



Climate-related governance

Board of Directors

ABB's Board of Directors has ultimate responsibility for ABB's sustainability strategy, its sustainability targets as well as the annual Sustainability Report, and monitors progress and target achievements. It receives reports on sustainability-related topics including climate from the Executive Committee on a quarterly basis. The Governance & Nominations Committee (GNC) ensures that sustainability topics are holistically considered and integrated into the company's strategy and sets a long-term

commitment towards sustainability goals, while the Compensation Committee ensures that ABB's remuneration policies are linked to the achievement of its sustainability targets. The extensive business and sustainability expertise and experience of our Board members enables them to apply the right judgement and make informed decisions about sustainability and climate matters (see also competence matrix in the chapter "[Corporate Governance summary](#)").

Executive Committee

The ABB Sustainability Board, comprising all Executive Committee members and chaired by the CEO, validates the sustainability strategy and its implementation, and the resources required to deliver it. It is also responsible for reviewing and validating strategic goals and ensuring that a culture focused on sustainability is embedded in the company. This includes both assessing and managing climate-related risks and opportunities. Formal sustainability and climate-related sessions happen at least every second month. The Chief Communications and Sustainability Officer, who is a member of the Executive Committee, has functional responsibility and reports to the GNC on sustainability-related topics and progress.

The Sustainability Board is advised by a Sustainability Council, consisting of the Group Head of Sustainability and representatives from each of our four business areas. The Sustainability Council's purpose is to ensure alignment across the Group on the strategic direction of sustainability, common topics and sharing of best practices.

As the operational body that oversees sustainability policies and programs, reviews developments, and monitors progress toward our targets, the Sustainability Council makes recommendations to the Sustainability Board on strategy, target deployment and performance reviews.

→ More information about our sustainability governance framework and our governance structure for sustainability can be found in our [Sustainability Report 2022](#).

Climate-related strategy

Climate-related risks and opportunities

We continuously identify, monitor and manage climate-related risks and opportunities over the short- (1 year), medium- (2–5 years) and long-term (5–20 years). They fall into two major categories: risks related to the physical impacts of climate change and risks related to the transition towards a low-carbon economy, which are already present to some extent. As global temperatures rise, acute physical risks will become more likely and may become more severe. New additional risks may also emerge. Long-term climate risks and opportunities are assessed in our analyses of science-based climate and emissions scenarios. These help us to understand how our global emissions in our value chain must progress over the coming 10, 15 and 20 years, and serves as a basis for assessing options and costs, and for setting long-term targets.

Physical risks

Physical risks are direct effects from climate change and can result in extreme weather events such as hurricanes or floods or in long-term chronic climate conditions like sustained higher temperatures leading to rising sea levels or more severe heat waves. These risks can have financial implications through damage to assets, reduced availability of resources or disruption of operations and supply chains.

For example, ABB sites around the world are vulnerable to water-related incidents caused by extreme weather events, such as flooding from heavy rain, storms or hurricanes. These events may cause disturbances or interrupt production for several months at a time. They can also affect our supply chain. If the production of key suppliers is interrupted as

has happened in the past due to severe flooding in South-East Asia, our own production and revenues may be impacted as well. Upstream risks related to climate change are business continuity risks that are typically part of the ongoing dialogue that ABB has with its suppliers.

Transitional risks

As the world tries to move towards a lower-carbon economy, the increasing challenge of climate change may lead to significant changes in the external environment in which we are operating. Measures to mitigate and adapt to climate change may lead to significant policy, legal, technological and market changes that would affect our financial position, strategic decisions and the way we operate.

An example of emerging regulation would be carbon pricing mechanisms. Today, ABB is already paying carbon taxes in several countries, particularly in Europe, and carbon tax legislation and the carbon price are likely to increase in the coming years. The higher our scope 1 emissions, the more carbon tax we pay. Therefore, reducing our GHG emissions is not only good for the environment, but also for our business.

Climate-related opportunities

Climate change can also represent opportunities for growth, improvements and value creation. With our purpose, strategy and operating model, we believe that ABB is best positioned to help the world mitigate and adapt to climate change and create financial value at the same time. By increasing energy efficiency, switching to renewable energy sources and

moving toward circular business models, we are able to reduce costs and improve resilience even in times of crisis. With our leading technologies, we can make an even bigger impact in our customers' operations. By helping them reduce energy and resource consumption and avoid emissions, we make them more sustainable while driving further demand for our products, solutions and services.

To help our customers reduce GHG emissions, we have identified products and solutions from our portfolio that deliver emissions reductions. These include energy-efficient electric motors and drives and advanced automation, digital and electrification solutions for energy-intensive industries. As many customers

lack expertise in energy management, ABB offers an end-to-end approach and one-stop-shop for building automation and smart energy management solutions. These include the ABB Ability™ Building Ecosystem, NeoGear low-voltage switchgear solutions and the ABB Ability™ Energy and Asset Manager. Crucially, we also support the energy transition with technologies that integrate power from intermittent renewable sources into the electricity grid. For ABB, this represents a huge opportunity both in the short- and medium-term.

We assess the impact of climate-related risks on ABB and its value chain and what they could mean in terms of financial costs, as well as how we can mitigate them. At the same time, we also consider the opportunities that such risks create for us as a business to drive value creation. The identification of climate-related business impacts and effects is also part of our strategic planning process as ABB has clearly identified climate change as a long-term, global challenge that requires low-carbon, high efficiency solutions. Our business strategy is supported by our long-term commitment to innovation and technology leadership in areas such as high-efficiency electrification, automation and control systems, robotics and motion solutions, and technologies to capture the full potential of renewable energies. Through our sustainability strategy 2030 and by joining the "Business Ambition for 1.5°C" pledge, we are committed to achieving carbon neutrality by 2030 in our own operations and to net-zero value chain GHG emissions by no later than 2050.

We can significantly contribute towards a low-carbon society through our products, systems and services that help our customers reduce GHG emissions. The

related market opportunities, which include smart building solutions, urban infrastructure, clean energy, energy efficiency and mobility systems, are projected to be worth more than \$5 trillion by 2030 (Business and Sustainable Development Commission, January 2017).

ABB has also identified water and wastewater as a growth segment that also plays an important role in climate discussions. In 2022, approx. 3 percent of our revenues came from this growth segment. In addition, we continuously invest in improving our energy and climate performance, which makes our operations more sustainable and resilient. In 2021, we started to assess the extent to which our activities are reflected in the European Union's common classification system for sustainable economic activities, known as the "EU Taxonomy" and continued with the alignment assessment in 2022.

The following table provides an overview of some of the main risks and opportunities that we have identified through our risk management processes (see more under "[Risk and opportunity management](#)"), what they mean for us and how we deal with them:

Impact on our business and strategy

→ More information on EU Taxonomy can be found in our [Sustainability Report 2022](#).

Category	Where it impacts our value chain	Time horizon	Likelihood	Severity ¹	(Potential) Impact	Measures taken
RISKS						
PHYSICAL						
Acute						
Floods	Direct operations	Short-term (current)	Likely	Medium	Decreased revenues due to reduced production capacity	Risk mitigation and emergency response program through ongoing Business Continuity Planning
	Upstream				Decreased revenues due to reduced production capacity following a supply chain disruption	We maintain comprehensive engagement with our suppliers including consideration of sustainability and climate related issues.
Chronic						
Droughts	Direct operations	Long-term (emerging)	Likely	Medium	Sustained higher temperatures may lead to droughts and increased water stress in certain regions.	While the majority of our manufacturing processes are not water-intensive, we work on minimizing the water impacts of ABB's operations through the use of the World Resources Institute's Aqueduct global water risk tool.
TRANSITIONAL						
Policy and legal risk						
Carbon pricing	Direct operations	Medium-term (emerging)	Likely	Medium	Increased direct costs	Investments in energy efficiency and emission reduction
Market risk						
Supply chain disruption	Direct operations/ Upstream	Medium-term (emerging)	Likely	Medium	Based on the geographic location of our suppliers, commodity risk exists, which can result in limited supply of products or increased purchase prices.	We proactively identify, assess and address sustainability issues at our high-risk suppliers through our SSBM.
Reputation risk						
Stakeholder expectations	Direct operations	Medium-term (emerging)	Low	Medium	Loss of reputation if we fail to meet climate-related regulations or stakeholder expectations.	Our Purpose, strategy and operating model help us build a sustainable business. We directly engage with our stakeholders, build partnerships and actively support and disclose transparently according to climate related initiatives such as TCFD and CDP.
OPPORTUNITIES						
Products and services						
Low emission goods and services	Downstream	Medium-term (current/emerging)	Certain	High	Increased revenues resulting from increased demand for products and services	R&D investments in offerings that help customers reduce GHG emissions, marketing
Carbon pricing	Downstream	Medium-term (emerging)	Likely	High	Customers facing increased costs due to carbon pricing, are keen to reduce their GHG emissions by buying and using our offering.	R&D investments in offerings that help customers reduce GHG emissions, marketing
Resource efficiency						
Energy and emissions reduction	Direct operations	Short-term (current)	Certain	Medium	Reduced direct costs	Investments in energy efficiency measures in our own operations (e.g., HVAC systems, energy efficient lighting, compressed air systems, building improvements, specific manufacturing process improvements).

¹ Scale: low, medium, high.

Category	Where it impacts our value chain	Time horizon	Likelihood	Severity ¹	(Potential) Impact	Measures taken
Energy source						
Shifting towards renewable energy sources	Direct operations	Medium-term (current)	Certain	Medium	Reduced direct costs and stable energy supply	We are working towards 100% renewable electricity, which increases the share of renewable energy sources and reduces our dependence on fossil energy.
Markets and technology						
Transition to a lower-carbon economy	Direct operations	Short- to long-term (current/emerging)	Certain	High	Matching our customer offering with market and technology trends	Technology development related to climate change is a big opportunity for ABB. Examples are electric motors and drives for highest energy efficiency in line with Ecodesign Regulation (EU 2019/1781) or the rapid development of EV-charging for electric vehicles as the road transport sector is shifting away from fossil fuels.

Business resilience and scenario analysis

ABB has reviewed the various RCP (Representative Concentration Pathway) scenarios of the IPCC (Intergovernmental Panel on Climate Change) to inform our understanding of physical risks linked to our operations and to our 2030 sustainability strategy. We have based our assessment of our climate-related physical risks on RCP 4.5, which is an intermediate scenario likely to result in a global temperature rise of 2–3°C by 2100. In this scenario, sea levels are expected to rise and extreme weather events, including heavy precipitation, drought and heat waves, to become more frequent. Our sites are prepared for emergencies to keep our people safe and maintain business continuity. These analyses feed into our business continuity plans and preparations. For example, we use the World Resources Institute's (WRI) Aqueduct global water risk tool to assess our facilities according to the level of baseline water stress of the local watershed. Of the 332 ABB locations mapped in 2022, 36 face an extremely high level of water stress, 58 face a high level and 39 face a medium-to-high level. The tool not only helps us assess water stress at our sites, but also the levels of groundwater depletion, flood risk and seasonal variability of water availability at our sites, which is extremely useful for our work in managing water risk.

ABB has also used different scenarios to understand the speed at which we need to decarbonize our own operations to be in line with scientific estimates. This helped us set science-based targets in line with the 1.5°C trajectory of the Paris Agreement, in which ABB commits to reduce absolute scope 1 and 2 GHG emissions by at least 80 percent between 2019 and 2030.

Many of ABB's technologies directly address the causes of climate change and our market opportunity and value proposition assessments and product/systems development roadmaps, rely directly or indirectly on climate-related scenario analysis and expectations linked to climate-related policy and standards development. For longer-term trends, the analysis shows that ABB is well positioned in very attractive markets. We will further intensify our work on climate risk modelling in the coming year to be able to provide an even more comprehensive analysis including financial quantification of risks and opportunities.

Climate risk management

ABB includes climate-related risks in its company-wide Enterprise Risk Management (ERM) process. This holistic risk management process supports the identification, assessment and mitigation of climate-related risks and considers their potential negative impact for us in achieving our business objectives and creating value. Climate risks are also considered in terms of their potential effects on our suppliers and customers across the value chain.

ABB has well-developed emergency response programs to manage potential impacts from climate change, such as storms, floods or threats to the water supply. These include, for example, ABB's facility and workplace emergency preparedness, protocols for unexpected emergencies and ABB's mandatory business continuity plans for our sites. Our Insurance Risk Management function works closely with our global insurance providers to identify risks to our assets and operations. Reviews of facilities are conducted annually or biennially, depending on the value of the asset. Incentive and penalty programs are in place to promote implementation of best practices and risk mitigation and avoidance recommendations. All facilities are required to develop, implement and test business continuity plans.

Our risk management approach also covers upstream business continuity risks related to climate change, such as extreme weather conditions affecting our suppliers. This includes comprehensive monitoring and development of our supply base to ensure sustainability, both in terms of materials and processes used and is typically part of the ongoing dialogue that ABB has with its suppliers.

We operate a worldwide supply chain management network with employees dedicated to this function in our business areas, divisions and in key countries. Upstream climate change risks and opportunities are also considered and analyzed in our assessment of upstream scope 3 emissions, where we identify the climate impact of all relevant scope 3 categories. With our Sustainable Supply Base Management (SSBM) program, we have a comprehensive approach in place, which includes surveillance of the sustainability performance of our suppliers. It involves supplier screening, training, on-site assessment, monitoring and follow-up until all identified non-conformities are closed. We aim to address sustainability topics and performance at each stage of supplier lifecycle management as part of our "beyond audit" approach and have at least 80 percent of our supply spend in focus countries covered by SSBM by 2030.

For mitigating transitional risks linked to our exposure to current and potential carbon taxes, as well as realizing opportunities linked to cost savings, we invest in energy efficiency and emissions reductions throughout our operations. We have committed to electrifying our fleet of more than 10,000 vehicles by 2030 and to continue deploying energy management systems at the company's sites. Our substantial annual investments in energy efficiency and emissions reduction projects frequently come along with favorable break-even time. This includes investments in low-carbon energy sources, compressed air systems, heating, ventilation and cooling systems. The largest part of the investment was made in energy-efficient lighting.

→ For more information see chapter "[Risk and opportunity management](#)".

Climate-related metrics and targets

Through our sustainability strategy 2030 and by joining the “Business Ambition for 1.5°C” pledge, we are committed to achieving carbon neutrality by 2030 (scope 1 and 2 GHG emissions) and net-zero value chain GHG emissions before 2050. These targets are validated and approved by the Science Based Target initiative.

By 2030, we will reduce our own emissions by at least 80 percent and work with our customers and suppliers to reduce their emissions and implement sustainable practices across our value chain.

By 2030, we aim to cover at least 80 percent of ABB’s portfolio of products and solutions with a circularity approach and send zero waste to landfill while taking measures to prevent waste generation.

We track our scope 1, 2 and 3 emissions, as well as waste generation and water withdrawal, especially from water-stressed areas.

We also aim to increase the share of our economic activities related to turnover, Opex and Capex that are classified as sustainable in accordance with the EU Taxonomy, especially through their contribution towards the environmental objectives of climate change mitigation and adaptation.

→ Additional information can be found in our [Sustainability Report 2022](#).



Performance

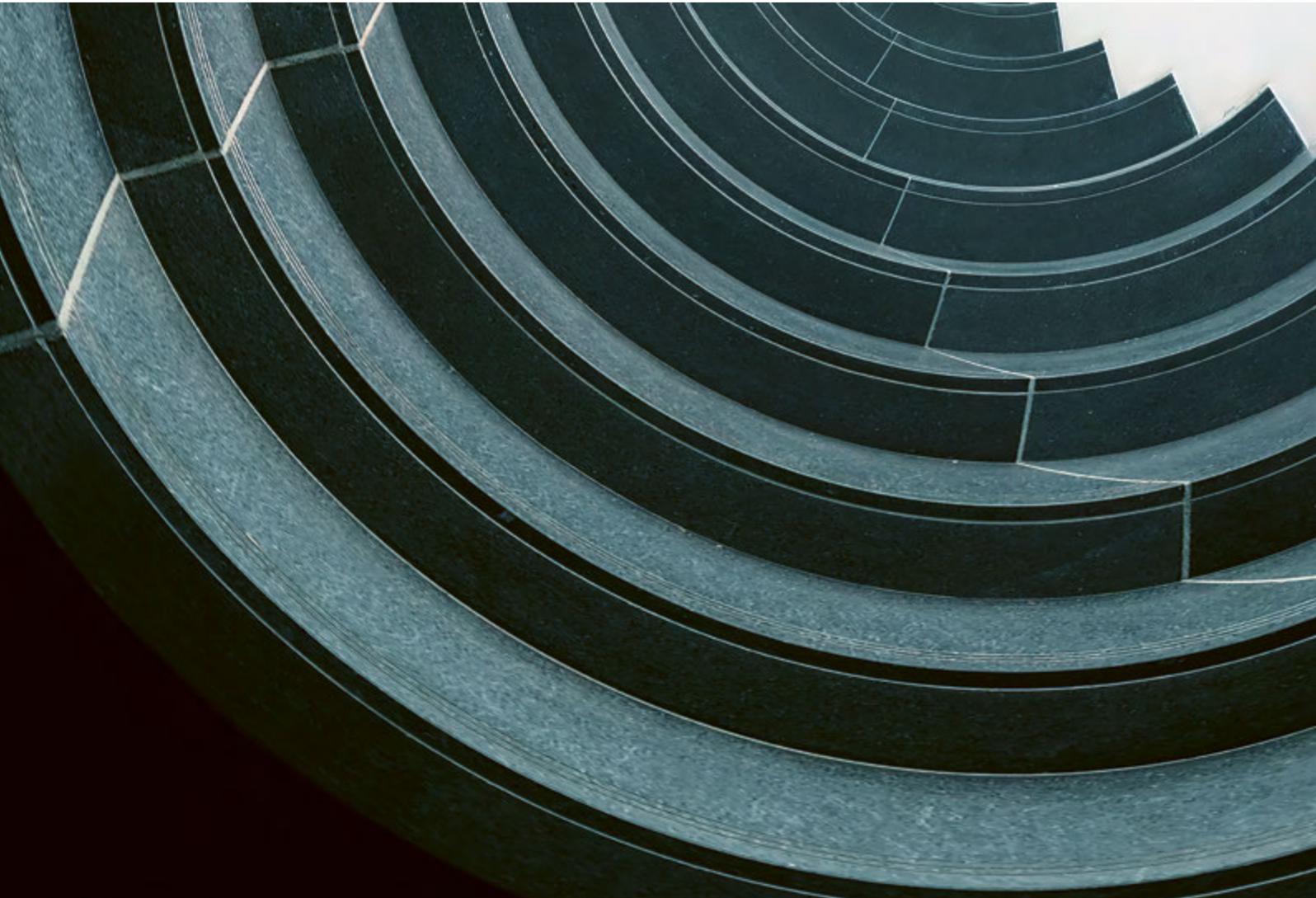


03

PERFORMANCE

- 106** We deliver financial performance
- 124** We create value through world-class technology
- 132** We enable a low-carbon society
- 140** We preserve resources
- 146** We promote social progress
- 156** We create a culture of integrity and transparency along the extended value chain

We deliver
financial
performance





ABB's financial framework mirrors the company's ambition for improved performance and reflects increased accountability, transparency and speed in decision making.

Through our focused portfolio around sustainability and resource efficiency, improvement of the quality of revenues and exposure to high-growth markets in our decentralized divisions, we generate increasing growth rates. Strong financial performance allows for solid and attractive shareholder returns and sustains our long-term value creation for all of our stakeholders.

Orders and revenues

→ For additional information and analysis about individual business area revenues and order performance, refer to the relevant sections of “Business analysis” in our [Financial Report 2022](#).

1 For non-GAAP measures see chapter “[Alternative performance measures](#)”.

In 2022, total orders increased 7 percent compared with 2021 (16 percent comparable¹). All business areas contributed to the robust order growth due to strong demand across all regions and most customer segments. A favorable trend was noted for the product and project business as well as service. In addition to strong underlying markets, the order intake was additionally supported in the first half of the year by customers placing some orders early in an effort to secure deliveries in an environment with generally tight supply chains. As supply chain constraints progressively eased during the latter part of the year, customer order patterns normalized. For the year in total, both volumes and pricing contributed to the robust growth development, more than offsetting the negative impact from exchange rate fluctuations and portfolio changes. The main contribution to increased orders derived from strong order growth in the Electrification and Robotics & Discrete Automation business areas. Both Process Automation and Motion contributed with low-single digit growth, with the former impacted by the Accelleron (formerly Turbocharging division) spin-off in October 2022, while the latter was impacted by the divestment of the Mechanical Power Transmission business in November 2021.

Customer activity was strong across all regions. Order intake in the Americas increased by 19 percent (28 percent comparable) driven by the United States. Orders in Europe developed basically flat at -1 percent (up 13 percent comparable), supported by most larger markets in the region. The Asia, Middle East and Africa region reported an increase of

3 percent (10 percent comparable), including growth of 1 percent (5 percent comparable) in China.

In 2022, revenues increased by 2 percent (12 percent comparable). During the first half of the year, revenues were hampered as component constraints somewhat hindered customer deliveries. Supply chains, however, progressively eased throughout the year, triggering higher revenue growth rates in the latter part of the year, when excluding the negative impact from exchange rate fluctuations and portfolio changes. All business areas benefitted from increased volumes and strong pricing execution. Electrification was the largest contributor to ABB’s revenue growth with a 7 percent increase (14 percent comparable). Motion and Process Automation both declined 3 percent (up 14 percent and 7 percent comparable, respectively) due to the adverse impact from the divestment of the Mechanical Power Transmission business in November 2021 on the former and the Accelleron (formerly Turbocharging division) spin-off in October 2022 on the latter. Robotics & Discrete Automation reported a moderate revenue decline of 4 percent (up 4 percent comparable), with growth benefiting in the second half of the year as component constraints eased. Overall, the strong order intake for ABB coupled with revenues that were somewhat hampered by a strained supply chain, resulted in a positive book-to-bill ratio of 1.15 for the year.

GROWTH

Change year-on-year	FY 2022 Orders	FY 2022 Revenues
Comparable	16%	12%
FX	-6%	-7%
Portfolio changes	-3%	-3%
Total	7%	2%

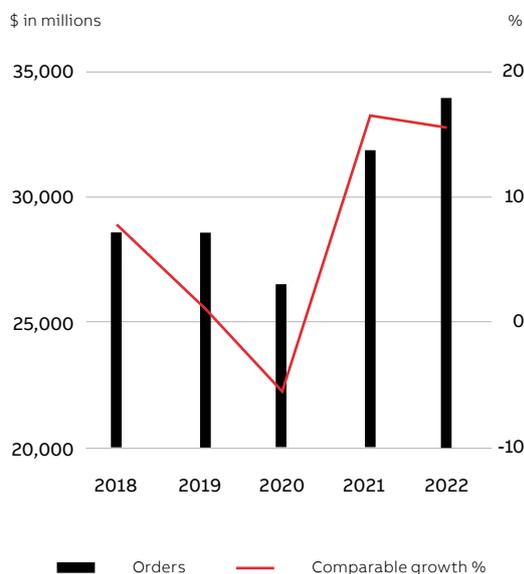
ORDERS BY REGION

(\$ in millions, unless otherwise indicated)	FY 2022	FY 2021	Change	
			US\$	Comparable ¹
Europe	11,778	11,857	-1%	13%
Americas	11,825	9,940	19%	28%
Asia, Middle East and Africa	10,385	10,071	3%	10%
ABB Group	33,988	31,868	7%	16%

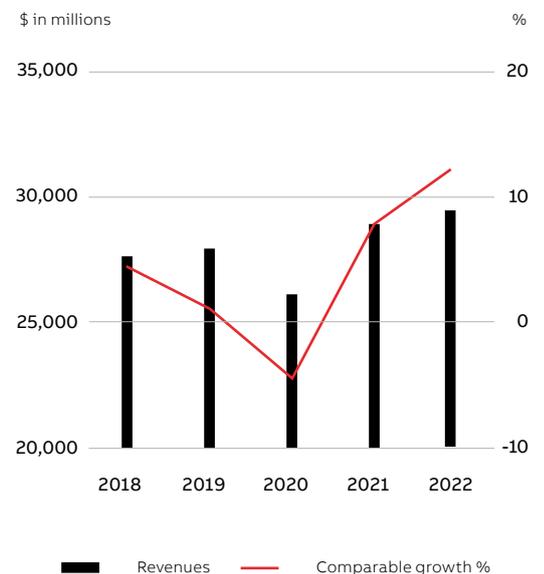
REVENUES BY REGION

(\$ in millions, unless otherwise indicated)	FY 2022	FY 2021	Change	
			US\$	Comparable ¹
Europe	10,286	10,529	-2%	12%
Americas	9,572	8,686	10%	19%
Asia, Middle East and Africa	9,588	9,730	-1%	6%
ABB Group	29,446	28,945	2%	12%

ORDERS



REVENUES



Earnings

¹ Constant currency (not adjusted for portfolio changes).

² For non-GAAP measures see chapter “Alternative performance measures”.

Gross profit

Gross profit increased by 3 percent (11 percent in constant currency¹) to \$9,710 million in 2022, supported by a gross margin improvement of 30 basis points to 33.0 percent. Increases were noted in three out of four business areas, while Robotics & Discrete Automation declined.

Income from operations

Income from operations in 2022 amounted to \$3,337 million down from \$5,718 million in the prior year. Results included a charge triggered by the exit of the legacy full-train retrofit business in non-core operations as well as a provision related to the legacy Kusile project in South Africa awarded in 2015. Results in 2021 included a book gain of \$2.2 billion related to the divestment of the Mechanical Power Transmission business.

Operational EBITA²

In 2022, Operational EBITA improved by 9 percent (18 percent in constant currency) to \$4,510 million and the Operational EBITA margin² increased by 110 basis points to 15.3 percent, achieving the margin target of at least 15 percent one year earlier than expected. Performance was driven by the positive impacts from strong pricing execution and higher volumes, which more than offset cost inflation in raw materials, freight and labor. Additionally, Corporate and Other Operational EBITA improved by \$169 million to -\$169 million, partly due to higher real estate gains and a better non-core result.

Net finance expenses and non-operational pension credits

The net finance expenses declined \$39 million to \$58 million in 2022.

Non-operational pension credits declined \$51 million to \$115 million compared to the same period last year.

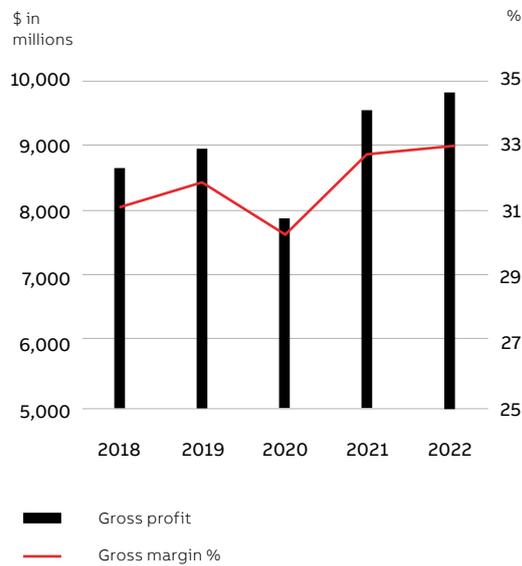
Income tax

Income tax expense was \$757 million with a tax rate of 22.3 percent up from 18.3 percent in 2021, due primarily to the adverse impacts from non-deductible non-operational charges as well as a positive impact related to a release of a valuation allowance on deferred tax assets due to the improved business performance mainly related to the US. In 2021, the tax impacts related to the sale of the Dodge business reduced the effective tax rate by approximately 5 percent.

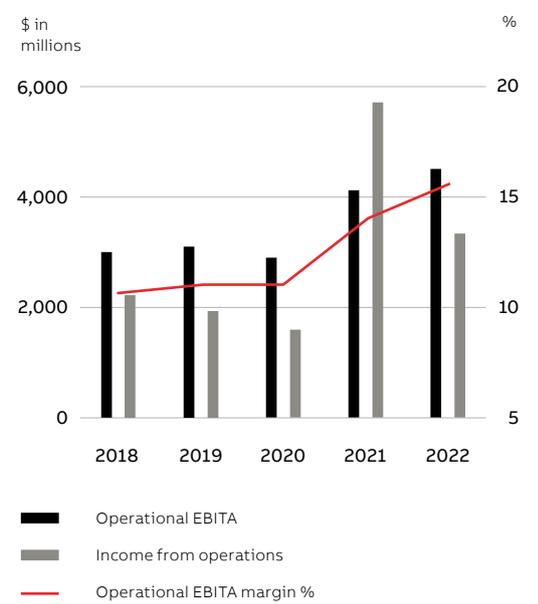
Net income and earnings per share

Net income attributable to ABB was \$2,475 million and decreased by 46 percent. Basic earnings per share was \$1.30 and decreased by 43 percent. Both measures were adversely impacted by the charges triggered by the exit of the legacy full-train retrofit business in non-core operations as well as the provision related to the legacy Kusile project in the current year and include a book gain related to the divestment of the Mechanical Power Transmission business in 2021.

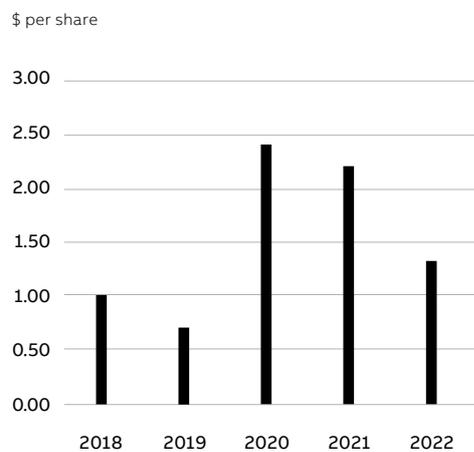
GROSS PROFIT & GROSS MARGIN



INCOME FROM OPERATIONS & OPERATIONAL EBITA



BASIC EPS



Balance sheet and cash flow

¹ For non-GAAP measures, see the “Alternative performance measures”.

Net working capital

Net working capital amounted to \$3,216 million, increasing year-on-year from \$2,303 million. The increase mainly reflects the impact from higher inventories. Net working capital as a percentage of revenues¹ increased from 8.1 percent at the end of 2021 to 11.1 percent at the end of 2022.

Capital expenditures

Purchases of property, plant and equipment and intangible assets amounted to \$762 million in 2022 compared to \$820 million the year before.

Cash flows

Cash flows from operating activities in continuing operations in 2022 provided net cash of \$1,287 million, a decrease of 61 percent compared to 2021 of which 7 percent was due to movements in exchange rates. In addition, in 2022, we had lower cash effective net income partially due to costs associated with business transformation activities and payments of approximately \$315 million in relation to regulatory penalties for the Kusile project. In 2022, an increase in both business volumes and inflation driven cost and price changes resulted in growth in our working capital.

Free cash flow¹ was \$652 million, 75 percent lower on a year-on-year basis, and FCF conversion to net income¹ 27 percent.

Return on Capital Employed

The Group’s benchmark for the measurement of returns is Return on Capital

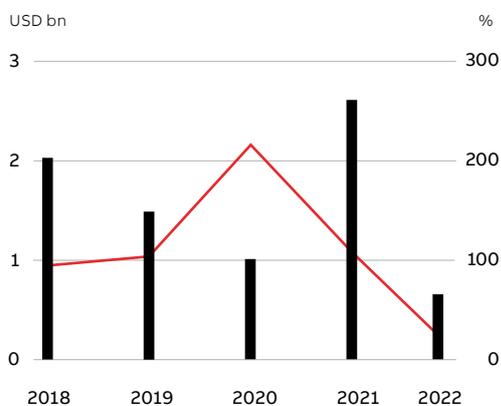
Employed (ROCE)¹. The Group’s ROCE significantly increased into the 15 to 20 percent target range to 16.5 percent from 14.9 percent in 2021. The improvement was driven by a higher Operational EBITA compared to 2021. The Group’s ROCE was negatively impacted by approximately 130 basis points due to the 19.9 percent ownership interest in Hitachi Energy.

Net debt¹

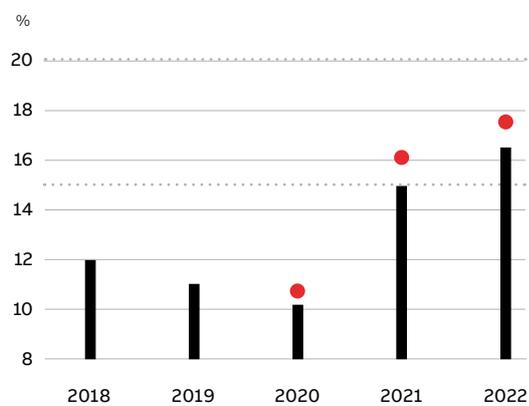
Net debt amounted to \$2,779 million at the end of 2022 and increased from a net cash position of \$98 million, year-on-year. Net debt to EBITDA ratio increased to 0.67 from (0.01) last year, due primarily to lower cash generation from operating activities in 2022, while we increased our total cash payments to shareholders in the form of dividends and purchases of treasury stock.

\$ in millions, unless otherwise indicated	Dec. 31 2022	Dec. 31 2021
Short-term debt and current maturities of long-term debt	2,535	1,384
Long-term debt	5,143	4,177
Total debt	7,678	5,561
Cash & equivalents	4,156	4,159
Restricted cash - current	18	30
Marketable securities and short-term investments	725	1,170
Restricted cash - non-current	–	300
Cash and marketable securities	4,899	5,659
Net debt (cash)	2,779	(98)

FREE CASH FLOW AND CONVERSION RATE



RETURN ON CAPITAL EMPLOYED

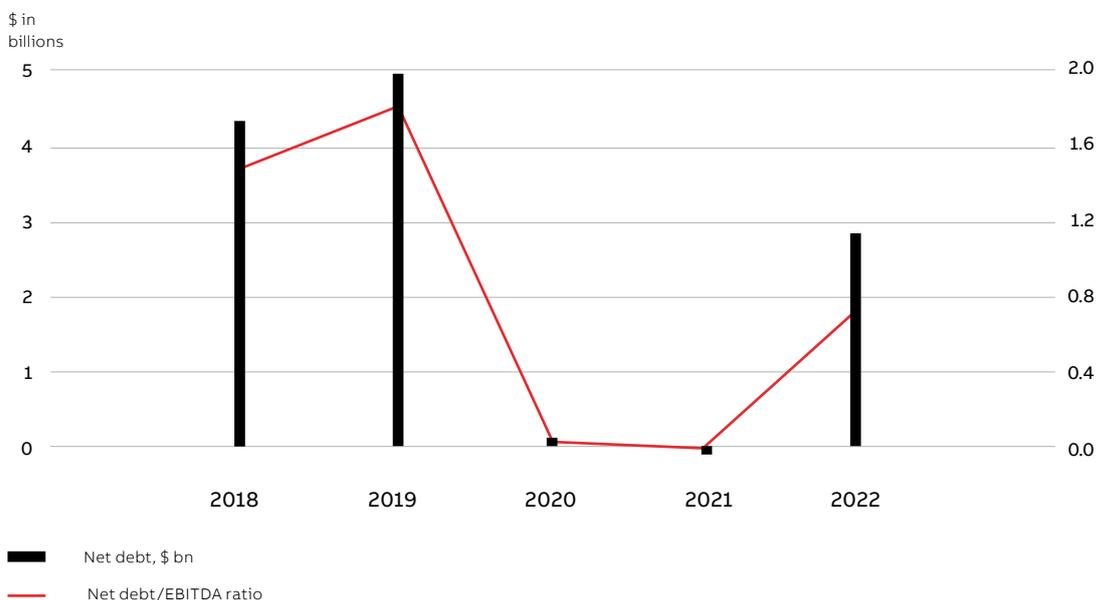


1 2022, 2021, 2020 and 2019 are not comparable to 2018 due to the adoption of the new lease accounting standard in 2019.

Free cash flow
% of net income

Return on Capital employed ROCE¹
Impact of PG JV ownership interest
Target range 15–20%

NET DEBT



Net debt, \$ bn
Net debt/EBITDA ratio

Performance of business areas

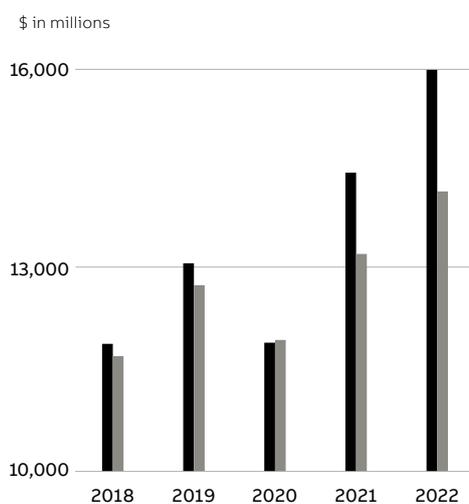
Strong financial performance for ABB Group in full-year 2022 supported by improvements in all business areas.

ELECTRIFICATION

KEY FIGURES

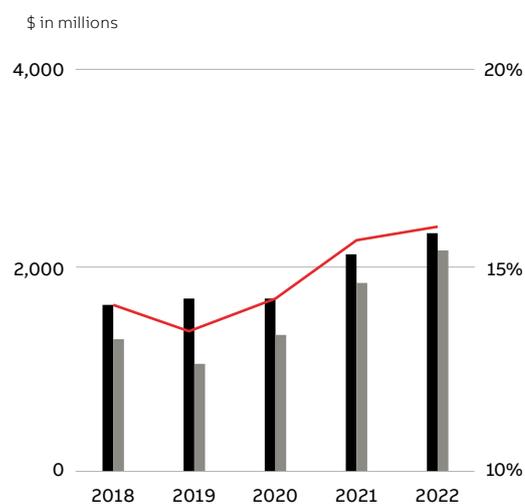
\$ in millions, unless otherwise indicated	Change			
	FY 2022	FY 2021	US\$	Comparable
Orders	15,901	14,381	11%	17%
Order backlog	6,933	5,458	27%	33%
Revenues	14,105	13,187	7%	14%
Operational EBITA	2,328	2,121	10%	
as % of operational revenues	16.5%	16.1%	+0.4 pts	
Cash flow from operating activities	1,887	2,181	-13%	
No. of employees (FTE equiv.)	52,300	50,800	3%	

ORDERS AND REVENUES



■ Orders
■ Revenues

INCOME FROM OPERATIONS & OPERATIONAL EBITA



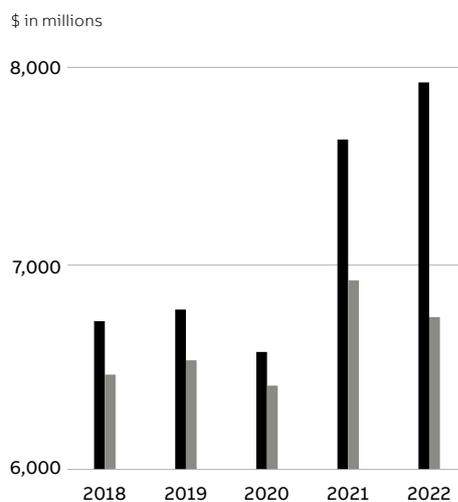
■ Operational EBITA
■ Income from operations
— Operational EBITA margin %

MOTION

KEY FIGURES

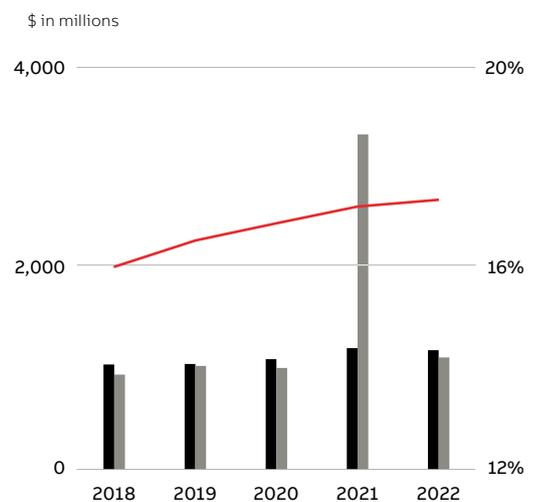
\$ in millions, unless otherwise indicated	Change			
	FY 2022	FY 2021	US\$	Comparable
Orders	7,896	7,616	4%	20%
Order backlog	4,726	3,749	26%	34%
Revenues	6,745	6,925	-3%	14%
Operational EBITA	1,163	1,183	-2%	
as % of operational revenues	17.3%	17.1%	+0.2 pts	
Cash flow from operating activities	853	1,362	-37%	
No. of employees (FTE equiv.)	21,100	20,100	5%	

ORDERS AND REVENUES



Orders
 Revenues

INCOME FROM OPERATIONS & OPERATIONAL EBITA



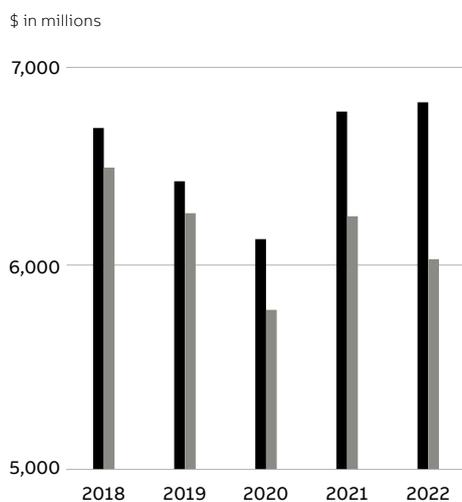
Operational EBITA
 Income from operations
 Operational EBITA margin %

PROCESS AUTOMATION

KEY FIGURES

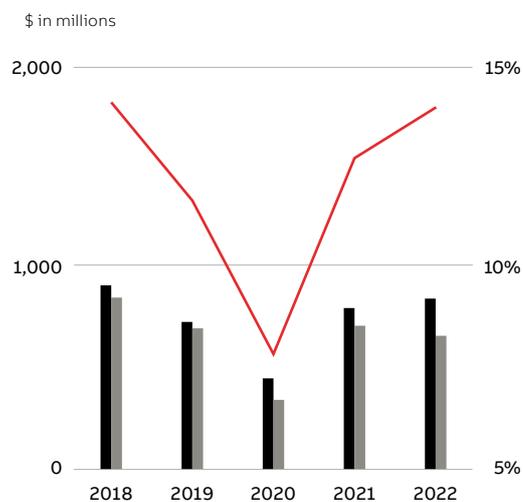
\$ in millions, unless otherwise indicated	Change			
	FY 2022	FY 2021	US\$	Comparable
Orders	6,825	6,779	1%	11%
Order backlog	6,229	6,079	2%	16%
Revenues	6,044	6,259	-3%	7%
Operational EBITA	848	801	6%	
as % of operational revenues	14.0%	12.8%	+1.2 pts	
Cash flow from operating activities	675	1,062	-36%	
No. of employees (FTE equiv.)	20,100	22,000	-8%	

ORDERS AND REVENUES



Orders
 Revenues

INCOME FROM OPERATIONS & OPERATIONAL EBITA



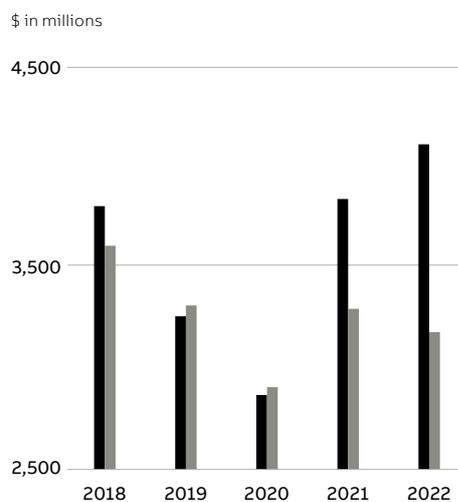
Operational EBITA
 Income from operations
 Operational EBITA margin %

ROBOTICS & DISCRETE AUTOMATION

KEY FIGURES

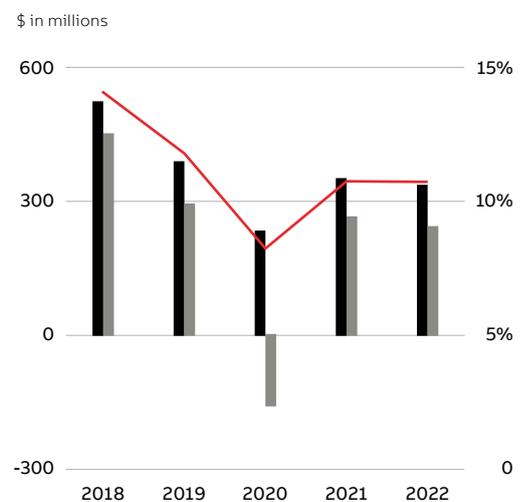
\$ in millions, unless otherwise indicated	Change			
	FY 2022	FY 2021	US\$	Comparable
Orders	4,116	3,844	7%	15%
Order backlog	2,679	1,919	40%	48%
Revenues	3,181	3,297	-4%	4%
Operational EBITA	340	355	-4%	
as % of operational revenues	10.7%	10.8%	-0.1 pts	
Cash flow from operating activities	214	374	-43%	
No. of employees (FTE equiv.)	10,700	10,600	0%	

ORDERS AND REVENUES



Orders
 Revenues

INCOME FROM OPERATIONS & OPERATIONAL EBITA



Operational EBITA
 Income from operations
 Operational EBITA margin %

Acquisitions and divestments

Acquisitions

During 2022 we accelerated the pace of strategic partnerships as well as bolt-on acquisitions driven by the divisions. Motion announced their first two acquisitions in over a decade at combined revenues of approximately \$125 million. Both the Siemens low voltage NEMA motor business and the PowerTech Converter acquisition will help the respective divisions to further cement their leading market positions. We have also driven

minority investments through our divisional lens. Both the InCharge Energy and Numocity majority acquisitions made earlier this year are good examples that these minority investments can later also become acquisition targets. As part of our future strategy, we continue to aim to complete five or more bolt-on acquisitions each year.

Divestments

Active portfolio management continues to be part of our performance culture. On the back of systematic portfolio reviews we ascertain whether, ultimately, ABB is the best owner of the different businesses. We continued to make strong progress in aligning our business portfolio with our purpose and fully focus on the areas of electrification and automation. We completed the spin-off of the Turbocharging division in October, and sold the remaining 19.9 percent interest in Hitachi Energy to Hitachi in December 2022. The net cash received from the sale further strengthened our balance sheet, giving us additional flexibility in our capital allocation decisions. After the end of the year, we also reached an agreement in January 2023 to sell our Power Conversion division to AcBel Polytech Inc. for \$505 million in cash. The transaction

is subject to regulatory approvals and is expected to be completed in the second half of 2023.

At the same time, we remain committed to our strategy to separately list our E-mobility business subject to constructive market conditions. In the meantime, we received gross proceeds of approximately CHF 200 million through a private placement of shares in ABB E-Mobility Holding Ltd in November 2022. After the end of the year, we increased the amount of funding raised through the private placement, increasing the total by an additional CHF 325 million in February 2023. We remain a committed partner to ABB E-mobility with a shareholding of approximately 81 percent.

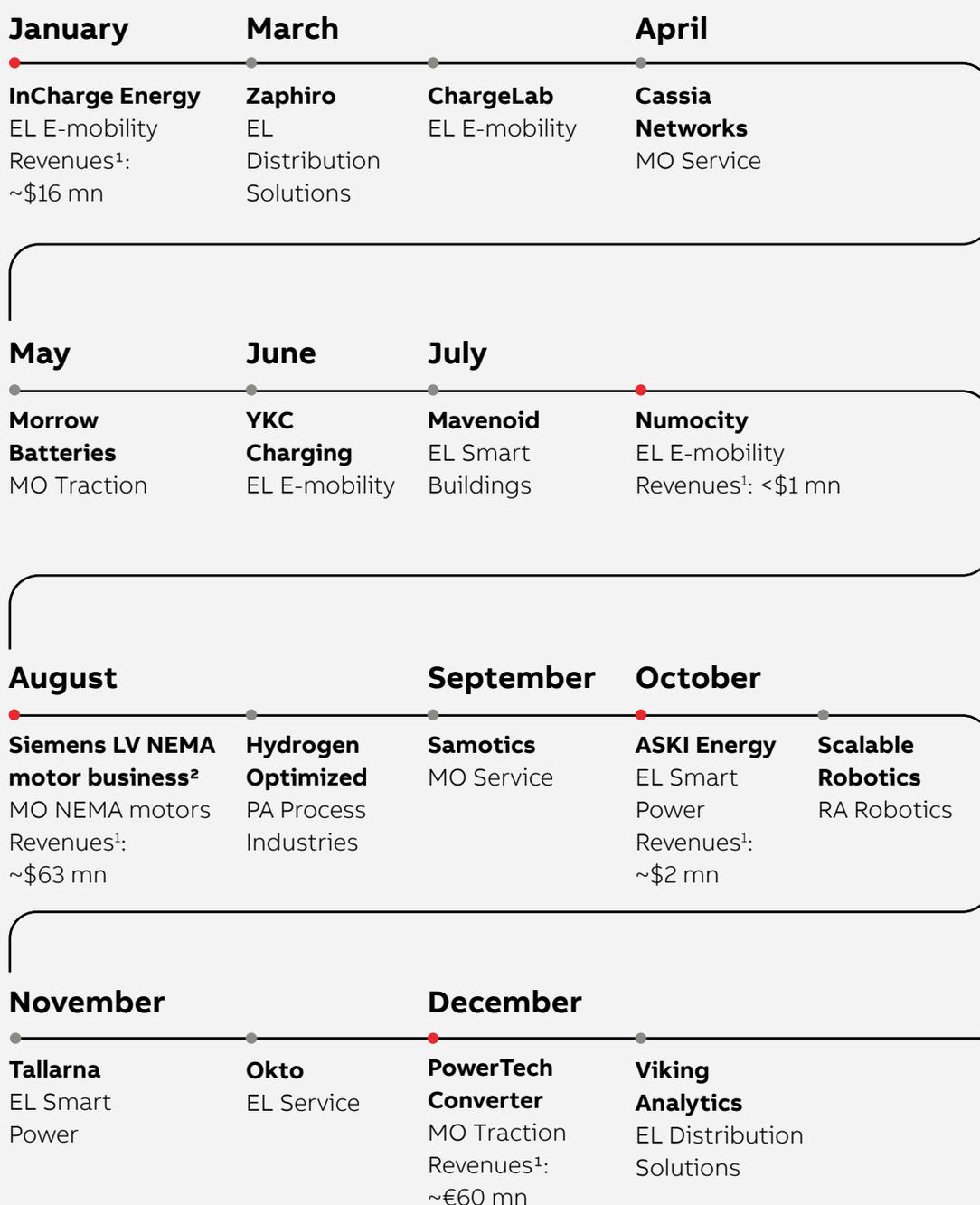
DIVISIONS ACCOUNTABLE TO DRIVE ACQUISITION STRATEGY PACE ACCELERATING IN 2022

Product whitespace Filling a technology gap	New segments Complement offering for high growth segments	Market access New geographic market opportunities	Economies of scale Market consolidation
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Ambition is a run-rate of ≥5 small to mid-size bolt-ons per year

¹ Represents the estimated annual revenues for the last fiscal year prior to the announcement of the respective acquisition.

² Announced, expected to close in Q2 2023.



● Majority acquisitions
● Minority investments

Share developments

During 2022, the price of ABB Ltd shares listed on the SIX Swiss Exchange decreased 17 percent, while the Swiss Market Index decreased 17 percent. The price of ABB Ltd shares on NASDAQ Stockholm decreased 5 percent, compared to the OMX Stockholm 30 Index, which decreased 16 percent. The price of ABB Ltd American Depositary Shares traded on the New York Stock Exchange decreased 16 percent, compared to the S&P 500 Index, which decreased 19 percent. Total shareholder return (including dividends) of ABB Ltd shares listed on the SIX Swiss Exchange was -14 percent during 2022.

1 Proposed by the Board of Directors and subject to approval by shareholders at the Annual General Meeting on March 23, 2023.

2 Calculation based on weighted-average number of shares outstanding.

3 Calculation based on the number of shares outstanding at December 31.

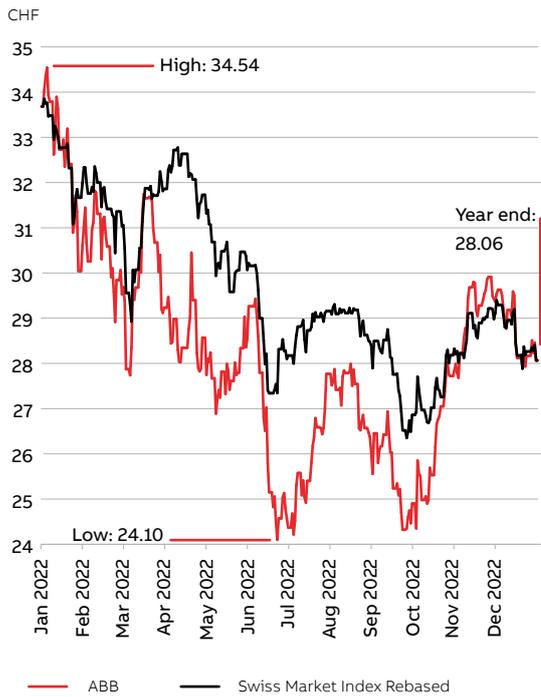
4 Dividend per share (converted to U.S. dollars at year-end exchange rates) divided by basic earnings per share.

KEY DATA

	FY 2022	FY 2021	FY 2020
Dividend per share (CHF)	0.84 ¹	0.82	0.80
Votes per share	1	1	1
Basic earnings per share (USD) ²	1.30	2.27	2.44
Total ABB stockholders' equity per share (USD) ³	6.85	7.96	7.72
Dividend payout ratio (%) ⁴	70%	40%	37%
Weighted-average number of shares outstanding (in millions)	1,899	2,001	2,111

Zurich

Average daily traded number of shares: 4.21 millions



Source: FactSet. Data prior to October 3, 2022, has been adjusted for the Accelleron spin-off.

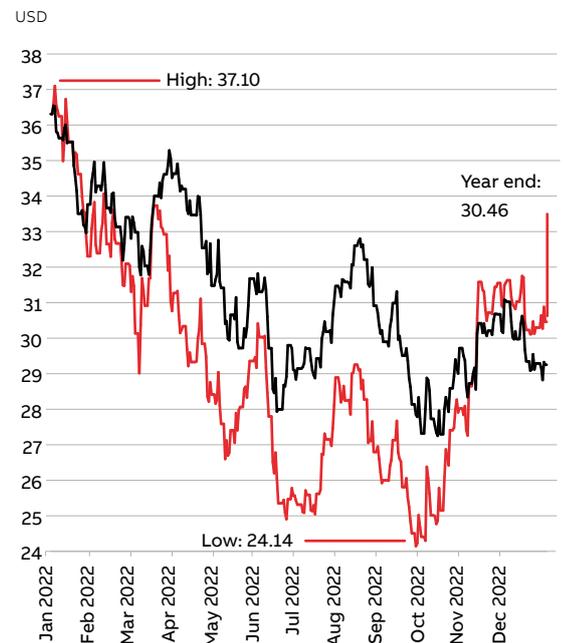
Stockholm

Average daily traded number of shares: 0.89 millions



New York

Average daily traded number of shares: 2.06 millions

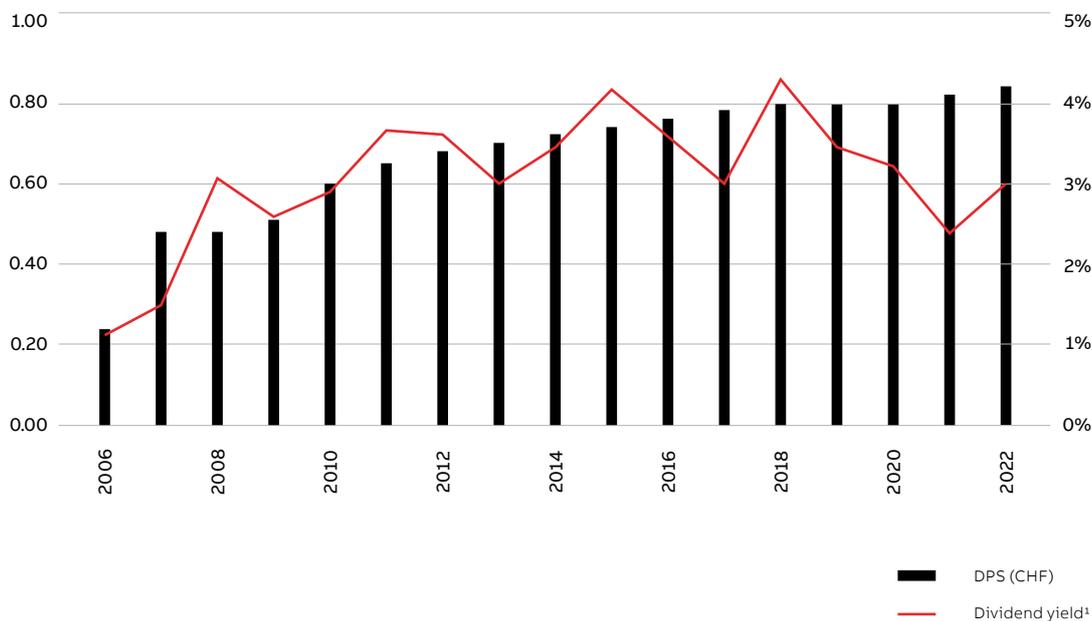


Dividends and share buybacks

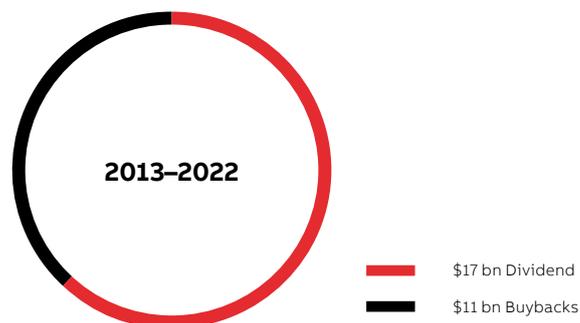
During 2022, ABB distributed a dividend of CHF 0.82 per share to shareholders, totaling \$1,700 million. With respect to the year ended December 31, 2022, ABB's Board of Directors has proposed to distribute a dividend to shareholders in the amount of CHF 0.84 per share. This is subject to approval by shareholders at ABB Ltd's 2023 Annual General Meeting. The proposal is in line with our dividend policy to pay a rising, sustainable dividend per share over time.

In April 2022, we launched a new share buyback program of up to \$3 billion. As part of this program, we completed the return of the remaining \$1.2 billion out of the \$7.8 billion of cash proceeds from the Power Grids divestment. Together with the prior share buyback program, which ran from April 2021 to March 2022, we spent approximately a combined \$2.8 billion during the year 2022. We plan to continue our share buybacks for the full-year of 2023 in line with our capital allocation priorities to return excess cash to shareholders through buybacks.

1 Calculated based on the share price at December 31.



>\$28 BN CASH RETURNED TO SHAREHOLDERS OVER LAST 10 YEARS



Outlook

In full-year 2023, despite current market uncertainty, we anticipate comparable revenue growth to be above 5% and we expect to again achieve our long-term target of Operational EBITA margin of at least 15%.



To create value for all our stakeholders, we aim to maximize our social, environmental and financial performance, taking into account the interlinkages among the different performance categories. For this purpose, we have defined ambitious targets and report our holistic performance against these targets following the six outcomes as shown in our value creation model.

We continuously evolve our offering in order to remain a relevant and trusted partner to our customers. Technology and innovation are key to our stakeholder value creation and long-term success and we invest heavily into world-class technology through research and development and can count on a highly-skilled and motivated workforce. We are committed to staying ahead to help our customers address the world's energy challenges, transform industries to reach new levels of performance and embed sustainability in everything we do so we can leave behind a healthier and more prosperous world for future generations.

We create value through world-class technology





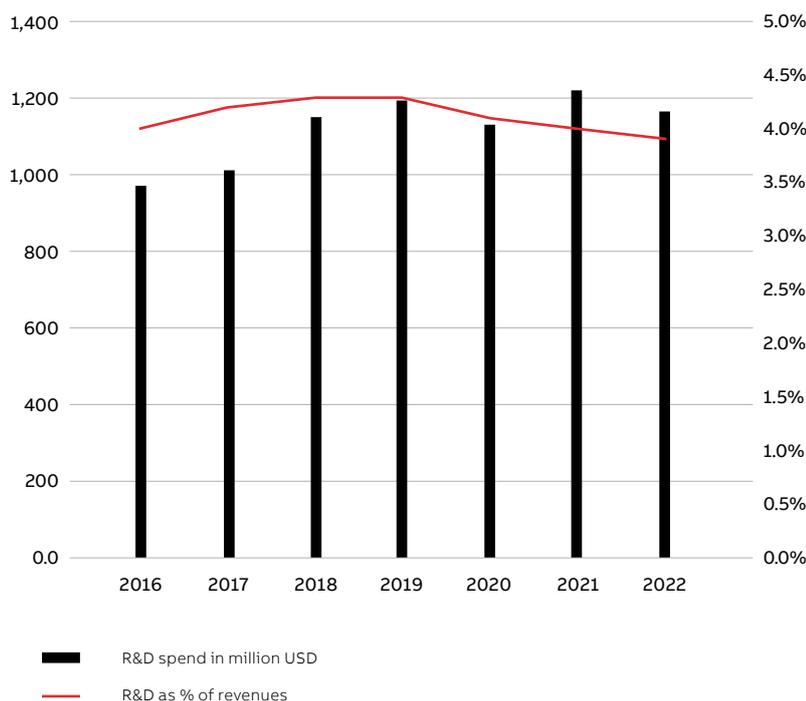
Our approach to R&D

At ABB, our research and development is focused on developing and commercializing technologies that are of strategic importance to our future growth. Every year, we invest a significant proportion of our revenues in R&D. As of December 31, 2022, we had approximately 7,500 employees working in R&D centers across more than 30 countries in 6 continents, of which about 60 percent were focused on digital and software development. 13.5 percent of our R&D professionals are women, an increase of 0.2 percentage points since December 2021, in line with our strategy to increase the share of women in our workforce, including in technical areas (see also chapter “We promote social progress”). In 2022, we invested \$1,166 million or approximately 4.0 percent of our 2022 consolidated revenues, in R&D activities in our continuing operations. We also spent

\$48 million or approximately 0.2 percent of our 2022 consolidated revenues, on order-related development activities. These are customer- and project-specific efforts that we undertake to develop or adapt equipment and systems to the unique needs of our customers in connection with specific orders or projects. We make significant investments in future-oriented activities and opportunities and spend it wisely according to individual business’ needs.

Since 2016, we have invested more than \$7.8 billion in R&D representing an annual average of 4-5 percent of revenues. R&D spend by division ranges from 1 to 11 percent of revenues, as each division is different and has different investment needs to secure future growth.

OUR R&D INVESTMENTS OVER THE PAST YEARS



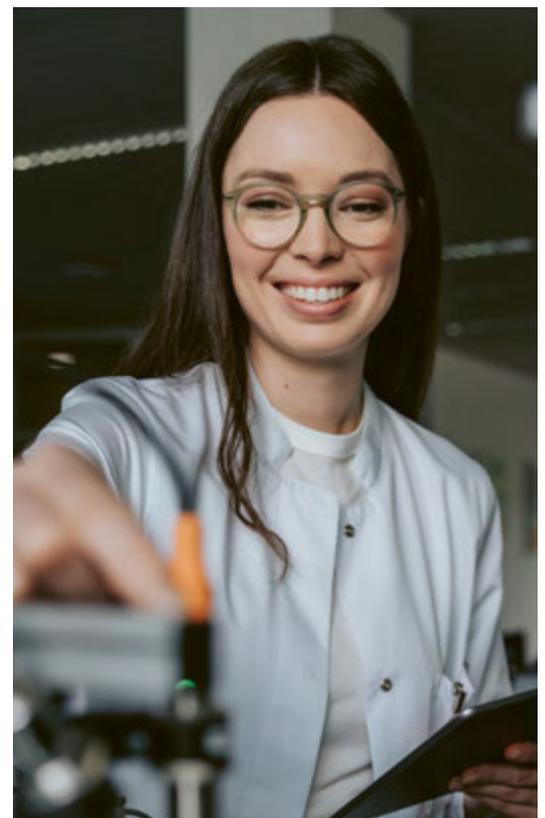
In addition to continuous product development and order-related engineering work, our R&D laboratories develop platforms for technology applications in our businesses. Our main digital platform is ABB Ability™, which is also the brand name of our digital solutions offerings. We seek to maintain a balance between short- and long-term R&D programs and optimize our return on investment. We keep control of our innovations by holding patents, copyrights and other intellectual property protections.

To complement our business-focused product development, our businesses invest jointly in collaborative research activities covering multiple technology areas including artificial intelligence, software, sensors, control and optimization, mechatronics and robotics, power electronics, communication technologies, materials and manufacturing, electrodynamics and electrical switching technologies. In this way, we advance technologies that are used in our products and common technology platforms and apply them to multiple product lines.

Universities are incubators of future technology and one task of our R&D teams is to transform university research projects into industry-ready technology platforms. We collaborate with multiple universities and research institutions to build research networks and foster new technologies. We believe these collaborations shorten the amount of time required to turn basic ideas into viable

products. They also help us to recruit and train new personnel. Our university collaborations include long-term, strategic relationships with leading institutions in the United States, the United Kingdom, Sweden, Germany, Switzerland, Poland, India and China.

To enhance our innovation efforts and gain speed, we partner with other leading companies which have complementary competencies and we invest in and collaborate with start-ups around the world through our venture capital arm, ABB Technology Ventures, and our start-up collaboration hub, SynerLeap. We act as a catalyst to push innovative entrepreneurs to success and bring benefits to ABB customers and society in the wider sense. In-Charge Energy is a good example, of how initial investments through ABB Technology Ventures can even turn into significant R&D driven acquisitions. As of January 2022 it was incorporated into the ABB family, leveraging synergies for both sides.

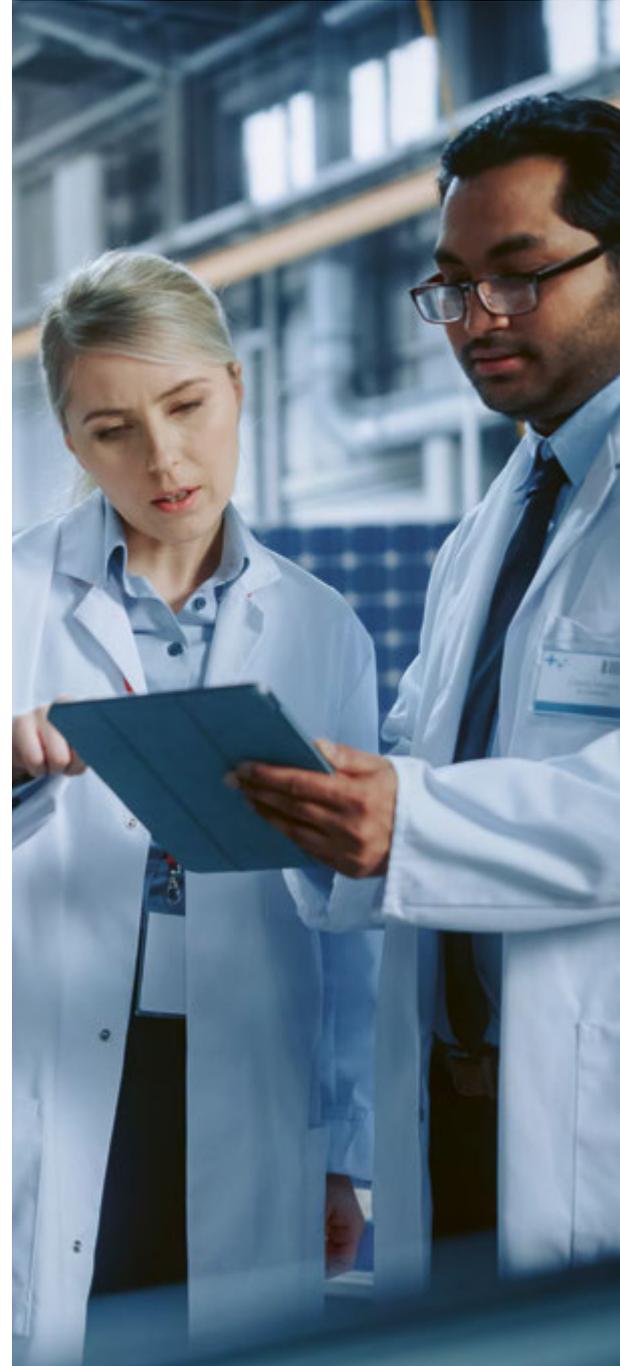


Patents and trademarks

Intellectual property rights are crucial to protect the assets of our business.

Over the past ten years, we have added a substantial number of new applications to our existing first patent filings and we will continue to seek patent protection for our technologies, products and solutions. As of December 31, 2022, we have a portfolio of approximately 25,000 pending patent applications and granted patents, of which approximately 5,500 are pending applications. This portfolio includes approximately 3,500 utility models and design rights, of which approximately 200 are pending applications. In 2022, we filed close to 500 priority patents, utility model and design applications, each covering a unique invention or unique angle on an invention. Based on

our existing intellectual property strategy, we believe that we have adequate control over our core technologies. The “ABB” trademarks and logo are protected in all countries in which we operate. We proactively assert our intellectual property rights to safeguard the reputation associated with the ABB technology and brand. While these intellectual property rights are fundamental to all our businesses, no business is dependent on any single patent, utility model or design application.



Cutting-edge technology: innovations in 2022

We have fostered our global market leadership thanks to our world-class technology. As in previous years, we launched important innovations in 2022 to remain the relevant and trusted partner of our customers.

Electrification



Terra 360: honored by Time Magazine as one of the best inventions of 2022, this charging station is not only one of the fastest electric car chargers in the world, but even more importantly also the most flexible one. It can fully charge a car in 15 minutes at a highway hub for example or be used overnight for fleet owners. The Terra 360 can charge up to four vehicles at once.

SACE Infnitus: launched an innovative solid-state circuit breaker that makes ships safer and more energy efficient. SACE Infnitus detects and clears short circuit faults 100 times faster than a traditional circuit breaker – and lasts 100 times longer.



Motion

DCS880 converter modules for hydrogen production: hydrogen has tremendous potential as an energy source in the clean energy future. Production of hydrogen however requires a lot of energy.



By extending the ABB DCS880 drives series with the H8 Turbo (HT8) which is specially designed for the hydrogen market, we further expanded our offering to enable safe, sustainable and efficient production and use of hydrogen.



Digital Powertrain Energy Appraisal: energy appraisals are an important way of identifying potential energy savings. With this new digital service, ABB has a new way to boost the power of data. Data is measured from fleets of digitally connected motor-driven applications to show where and how much energy can be saved by upgrading to the latest high-efficiency technologies or re-dimensioning the motor(s), among others, allowing industrial operators to make better decisions about their technology investment priorities.

Process Automation



GLA533-NG Sensi+™: this high-tech instrument provides natural gas producers and distribution networks with automated, fast and accurate monitoring of gas streams in relation to excessive levels of contaminants.



Integrated into an explosion-proof enclosure, it is ideal for even the most demanding applications in remote and/or hazardous locations.

Digital services and software: we have 80 percent of our employees working in the software area with approximately \$500 million in orders, growing at a double-digit rate. One of the new innovative solutions launched in 2022 is the fleet support center OVERSEA, developed by ABB Marine & Ports and Wallenius Marine. This pioneering digital offering combines fleet management expertise with advanced analytics to improve a vessel's operational sustainability, efficiency and safety.

Robotics & Discrete Automation



ABB RobotStudio®: the world's most used offline simulation tool is now available online thanks to cloud technology. The interface is greatly simplified, enabling users with little engineering expertise to benefit from the programming tool with ease. ABB's engineering and programming tool is unique, we are the first to move into cloud.

Delta robot IRB 365: the newest generation of our delta robots has the fastest pick rates in its class. It can pick, reorient and place 118 items of 1 kg per minute.



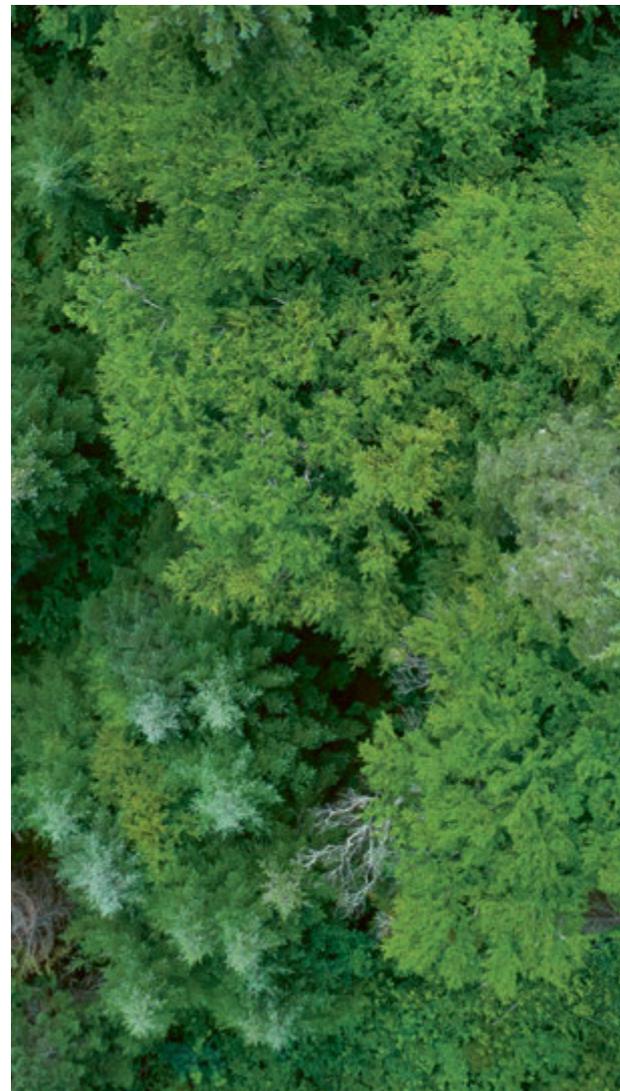
We enable a low-carbon society

The need for action on climate change is becoming ever more urgent.

The hottest years on record have all occurred since 1998 and they are increasing in frequency. At the same time, overuse of the earth's resources and environmental degradation are jeopardizing the health and future prospects of huge numbers of people around the world.

We are actively helping to reduce greenhouse gas (GHG) emissions. Our technologies target industry, buildings and transport – sectors that together account for three quarters of global energy consumption. Since the introduction of our ambitious 2030 sustainability targets to enable a low-carbon society, we have already made considerable progress. In 2022, we added mid-term targets 2025 for increased accountability.





ENABLING A LOW-CARBON SOCIETY

- 1 Where a baseline applies.
- 2 Carbon offsets of remaining 20% CO₂e emissions as a last resort.
- 3 Suppliers covering 70% of our annual procurement spend.

	Targets 2030	Mid-term targets 2025	2019 baseline¹	2022 status
	Achieve carbon neutrality in our own operations by 2030; reduce own scope 1 and 2 emissions by at least 80% ²	Reduce own scope 1 and 2 emissions by at least 70%	639 kilotons CO ₂ e (adjusted for portfolio changes in 2022)	65% since baseline and 43% in 2022 alone
	Work with main tier-one suppliers ³ to reduce their scope 1 and 2 CO ₂ e emissions by 50%	Work with main tier-one suppliers ³ to reduce their scope 1 and 2 CO ₂ e emissions by 20%	Measurement in process	Measurement in process

We aim to reduce our own emissions (scope 1 and 2) by at least 80 percent by 2030, a target that has been confirmed by the Science Based Targets initiative (SBTi) as being in line with Paris Agreement goal to limit global warming to 1.5°C. Our greenhouse gas accounting methodology is based on the globally accepted GHG Protocol.

Considering the complete life cycle of our products and services, the biggest environmental footprint lies within our extended value chain. Life-cycle assessments (LCAs) help us evaluate the carbon footprint of our products. The biggest impact is in our downstream value

chain, which is when our products are in use by our customers, followed by our suppliers' footprint in the upstream value chain. Therefore, our ambition is also to help our customers and suppliers reduce their GHG emissions. We work intensively on screening, measuring and reducing our so-called scope 3 emissions, which represent indirect GHG emissions occurring in our value chain. Examples include emissions from purchased goods, business travel or commuting. Please refer to our [Sustainability Report 2022](#) for more information.

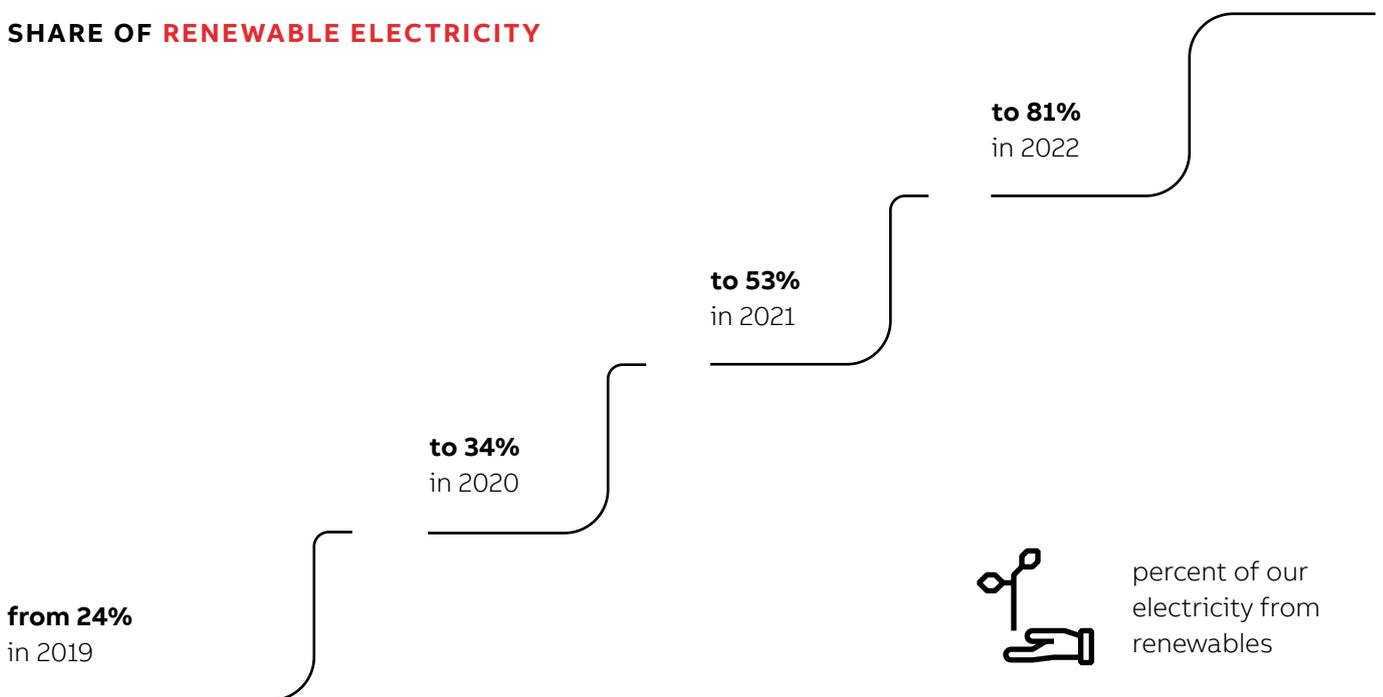


Climate action in our own operations

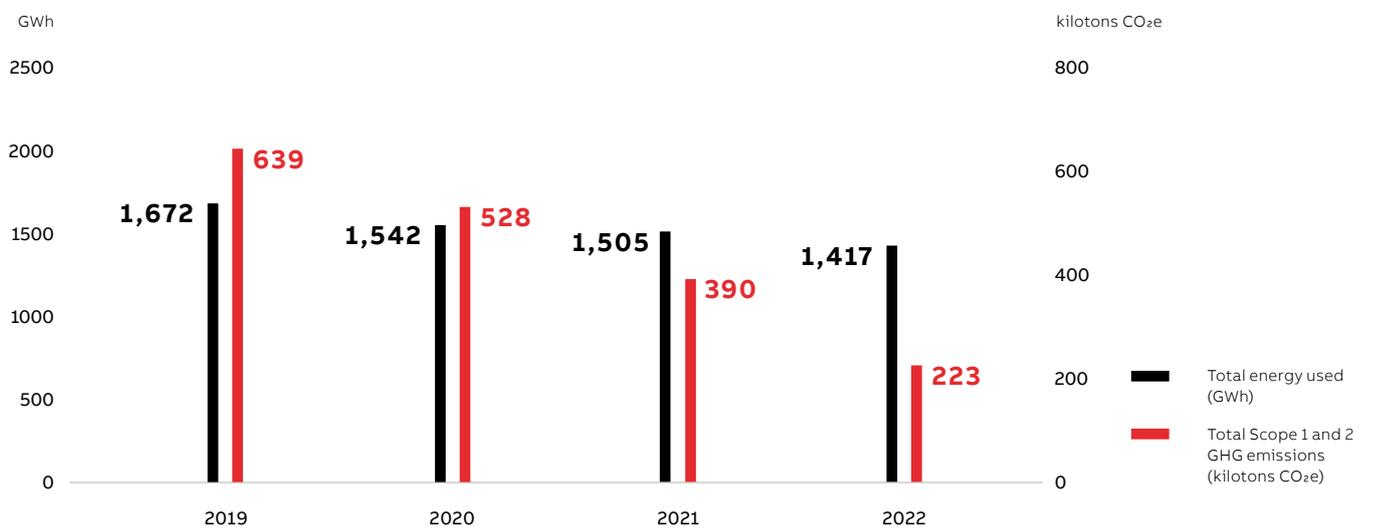
In 2022, we made considerable progress towards our goal of achieving carbon neutrality in our own operations by 2030. To achieve carbon neutrality, we have committed to three initiatives of the Climate Group of global companies with the aim of reducing our absolute emissions as much as possible. By 2030, we will completely electrify our vehicle fleet (EV100 initiative), source 100 percent of our electricity from renewable energy sources (RE100 initiative) and improve energy efficiency and productivity across our operations (EP100 initiative). These actions will help us achieve our scope 1 and 2 GHG emissions reduction target of

at least 80 percent by 2030. We are exploring further solutions for reducing the remaining 20 percent, with carbon offsets as the last resort. In 2022, we reduced our total energy consumption by 15 percent compared with 2019. Considering the increased energy costs due to the energy crisis that hit in 2022, this represents also an important cost saving. At the end of 2022, 52 percent of our energy consumption and 81 percent of our electricity was sourced from renewables. Since our baseline year 2019, we have reduced our scope 1 and 2 emissions by 65 percent.

SHARE OF RENEWABLE ELECTRICITY



TOTAL ENERGY USED AND TOTAL SCOPE 1 & 2 GHG EMISSIONS



Figures in the graphs are adjusted for portfolio changes.

Supplier emissions

→ Further information about how we help to enable a low-carbon society can be found in [Sustainability Report 2022](#).

We announced a new emissions target for our supply chain in 2022. We aim to work with our main tier-one suppliers to achieve a 50 percent reduction in their scope 1 and 2 GHG emissions by 2030 compared to 2019. The target covers 70 percent of our annual procurement spend. The new target will make an important contribution to our goal of enabling a low-carbon society as well as our overall scope 3 emissions reductions because, in many cases, our suppliers have a bigger footprint than ABB itself.

In 2022, we also continued to strengthen ABB's capacity to conduct life-cycle assessments (LCAs). These are effective tools for identifying and prioritizing actions with suppliers because they quantify how much of the overall emissions footprints of our products are accounted for by raw material sourcing.

Measures to reach our target include:

- incorporating more recycled materials into our products,
- shifting to lower-carbon primary materials, and
- using lower-carbon transport throughout the supply chain, including between different tiers of our direct and indirect suppliers.

As part of achieving our supplier target, we will encourage our suppliers to have their emissions targets approved by the Science Based Targets initiative and to have their GHG emissions data validated or assured by a third party.

Customer emissions

→ For specific examples of products that contribute towards our ambition of supporting customers in avoiding GHG emissions, see our [Sustainability Report 2022](#).

Our biggest contribution to a low-carbon society comes from technologies that reduce and/or avoid energy consumption and emissions at our customers' operations. As we intend to have our targets validated against the Science Based Targets initiative's new Net-Zero Standard, we are no longer focusing on a limited amount of cases linked to the 100 megatons emissions' avoidance but rather on our complete portfolio of offerings.

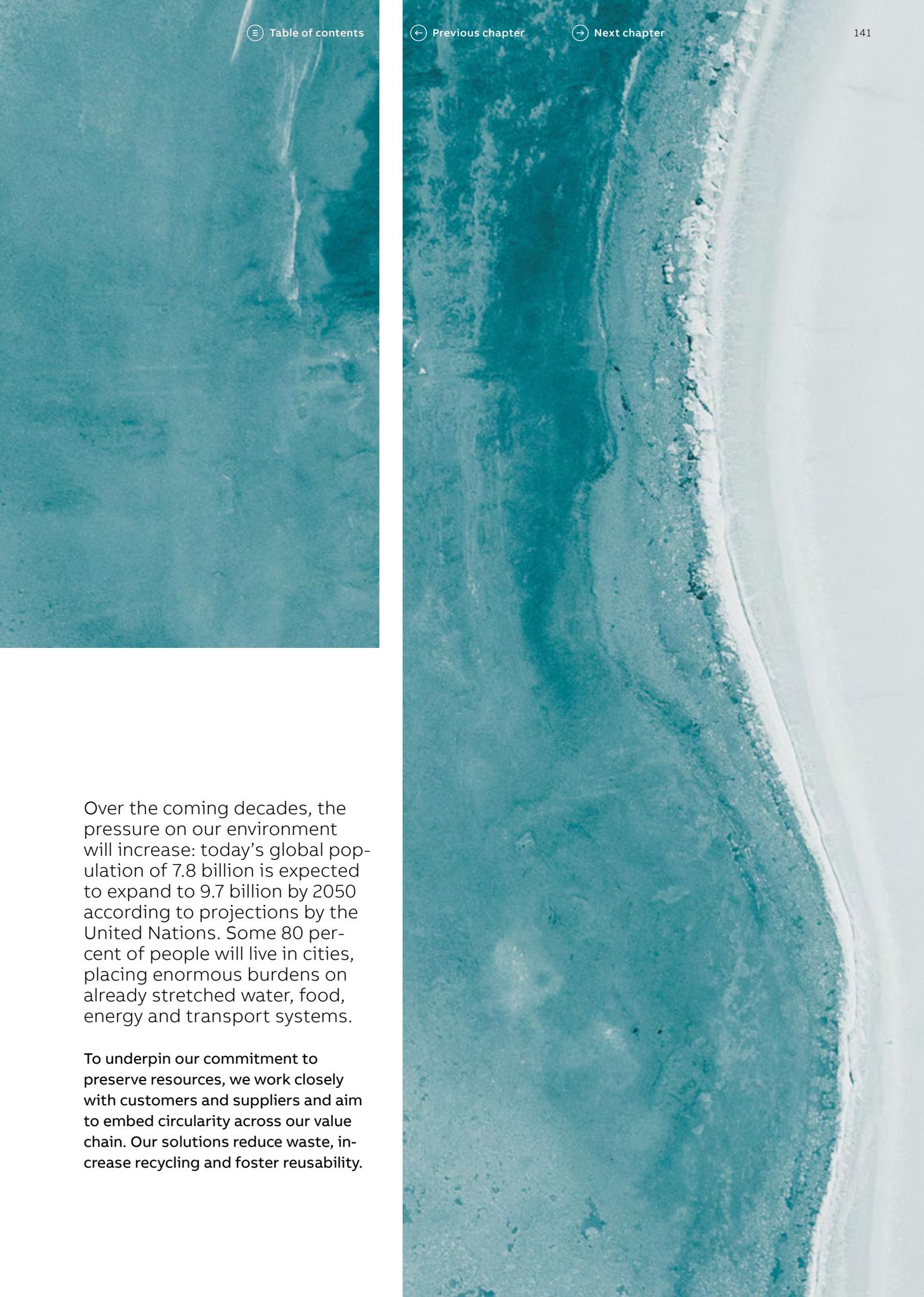
More and more companies are trying to make a positive impact on society and the environment beyond their own operations. However, calculating the related impact of a company's activities or offerings is a challenge, particularly when it comes to avoided emissions, which is a relatively new concept and one in which practices and methodologies vary given the absence of a generally accepted framework. Efforts at harmonization and standardization are currently underway (see the [website of GHG Protocol](#) for more information). Therefore, we are reviewing our approach with the aim of establishing more robust and standardized methodologies, based on international scientific research, to calculate the impact of our products. We will transparently communicate about our status on a regular basis. As part of that process, we are assessing examples of products, services and solutions to help

us achieve our ambition of supporting customers in their GHG emissions reduction and avoidance. We collaborate closely with our customers to leverage the full benefits of our products and services. One of the tools we use for these engagements is the [EnergySave Calculator](#), which helps customers calculate how much energy and money they could save by using ABB drives compared to traditional flow control methods in different applications such as pumps, fans and compressors.





We preserve
resources

An aerial photograph of a coastal region. On the left, a wide river delta flows into the sea. To the right, a long, narrow sandy beach runs parallel to the coast, bordered by a thin strip of vegetation. The water is a deep blue, and the sand is a light, pale color.

Over the coming decades, the pressure on our environment will increase: today's global population of 7.8 billion is expected to expand to 9.7 billion by 2050 according to projections by the United Nations. Some 80 per cent of people will live in cities, placing enormous burdens on already stretched water, food, energy and transport systems.

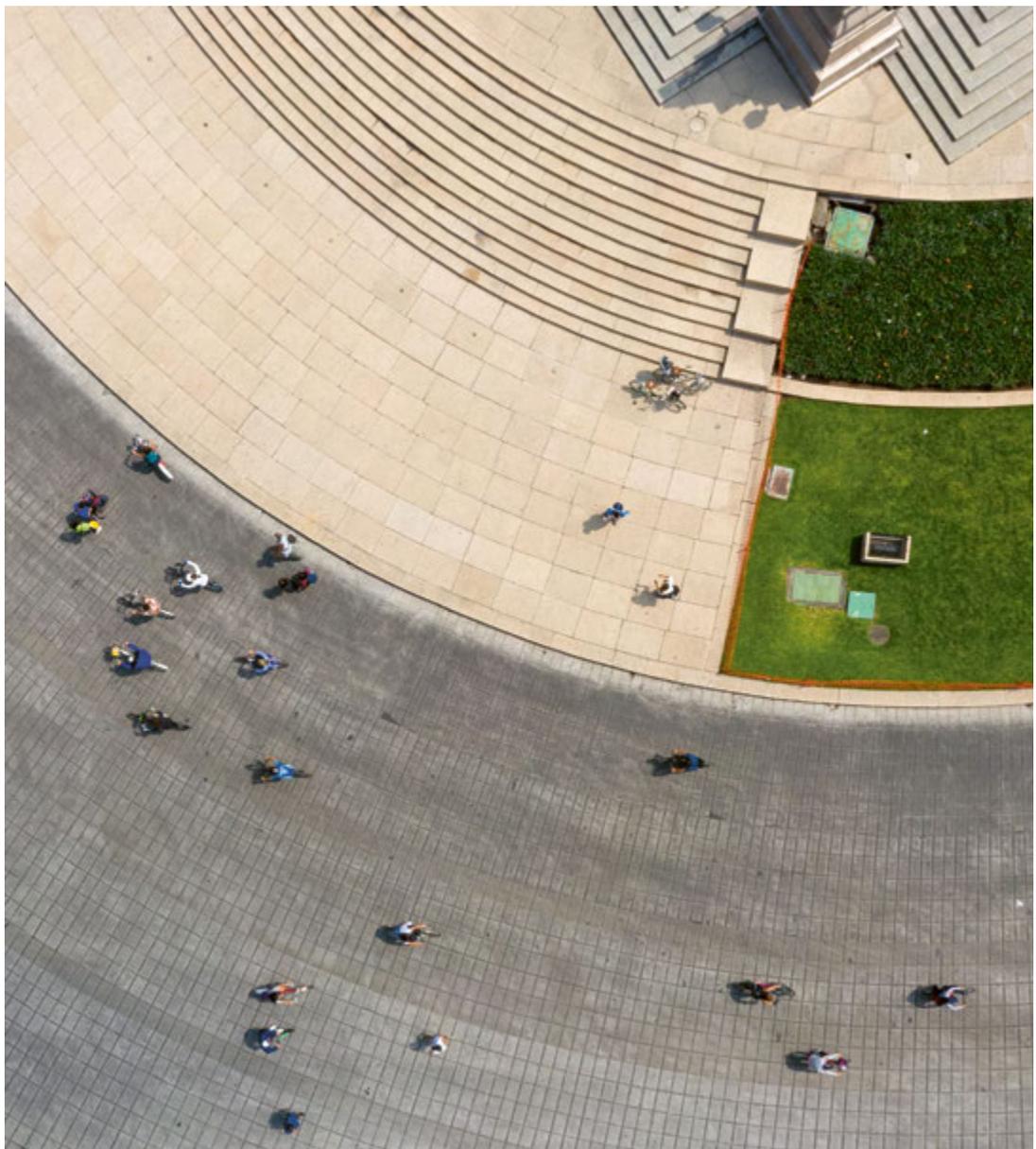
To underpin our commitment to preserve resources, we work closely with customers and suppliers and aim to embed circularity across our value chain. Our solutions reduce waste, increase recycling and foster reusability.

The following overview shows our 2022 progress against our 2030 targets to preserve resources:

- 1 Where a baseline applies.
- 2 Where compatible with local conditions.

PRESERVING RESOURCES

Targets 2030	2019 baseline ¹	2022 status
Cover at least 80% of ABB’s portfolio of products and solutions with circularity approach	n/a	We aim to revise our circularity approach towards clear alignment with regulations in 2023.
Send zero waste to landfill while taking measures to prevent waste generation ²	17.1 kilotons, equivalent to 8.8% of total waste (adjusted for portfolio changes)	11.6 kilotons, equivalent to 6.7% of total waste



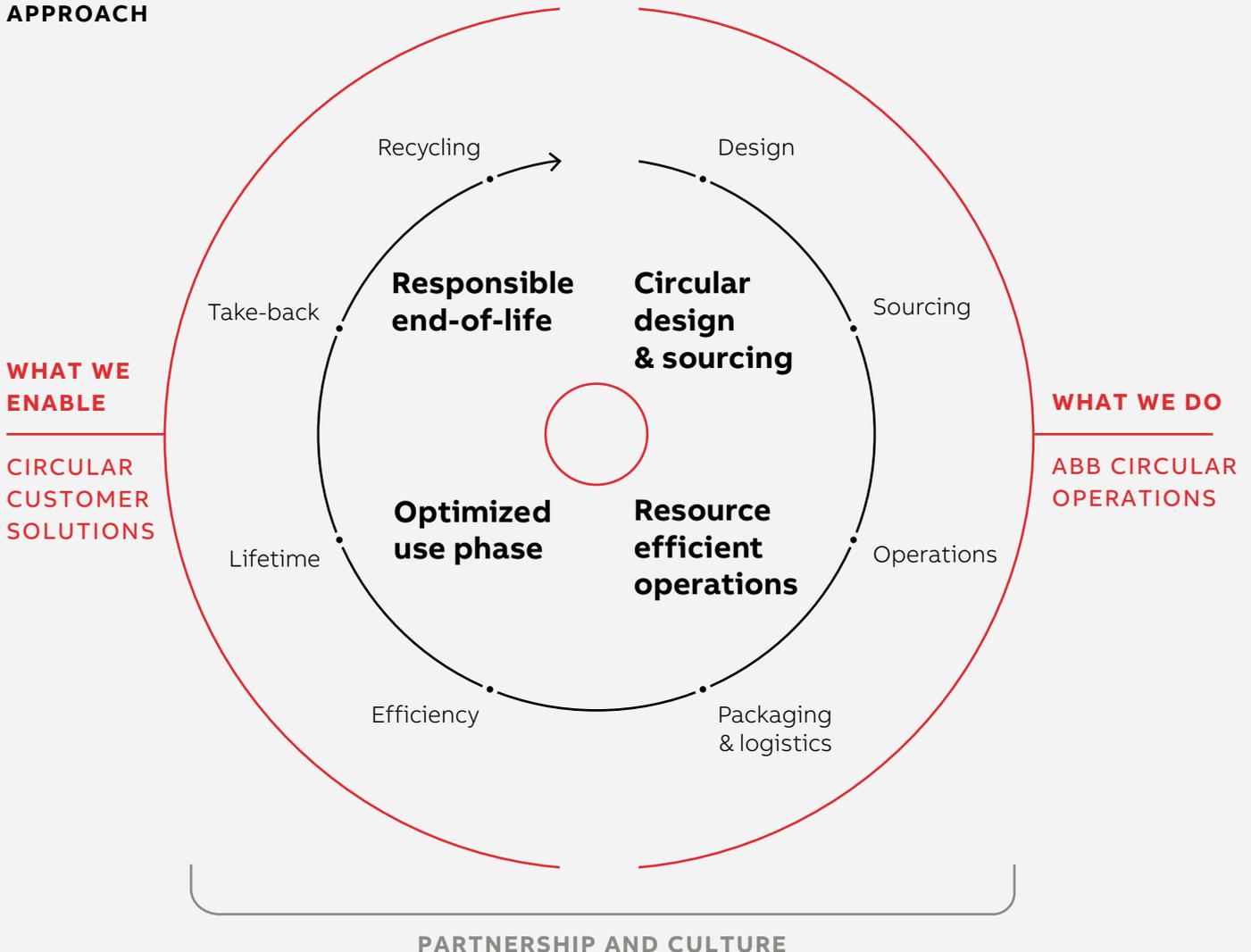
Circular economy

We are working towards aligning our circularity framework with the evolution of external reporting frameworks and regulations, including the EU Taxonomy for sustainable activities, the Corporate Sustainability Reporting Directive (CSRD) and GRI Standards. Our goal is to develop a robust, objective, quantitative, measurable and auditable framework that captures the true circularity credentials of our product portfolio and we believe that considering external standards will enable

us to better meet the needs of our stakeholders in this respect.

In June 2022, we launched the ABB EcoSolutions label to satisfy our customers' appetite for externally validated, transparent information on our products' circularity performance. We are steadily increasing the number of environmental product declarations covering selected major product lines.

ABB CIRCULARITY APPROACH



We aim to refine our circularity approach in line with external regulations in 2023. Thereafter, we will measure our baseline revenue covered by our circularity approach and strengthen our focus on circularity in our strategy.

Our comprehensive circularity approach is built on a framework that drives circularity in our own operations, and supports and enables our suppliers and customers to become more circular. By 2030, we aim to innovate towards new circular business models covering all stages of the product life cycle:

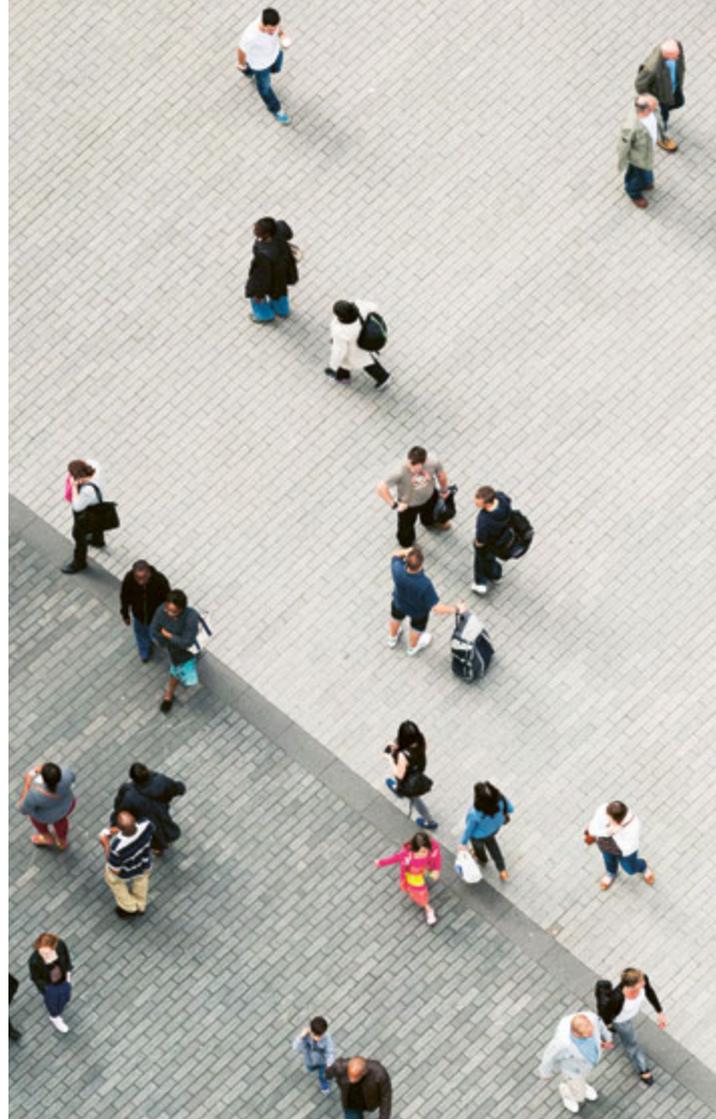
- We consider the entire product life cycle at the design and sourcing stage. Our goal is to develop products and solutions that can be produced in a resource-efficient manner that minimizes the use of virgin or hazardous materials. At the same time, we ensure that our product design takes circularity into account, such as extended lifetime, repairability, modularity and recyclability.
- In the production phase, we work to eliminate or recycle any waste generated by our processes and packaging and implement resource-efficient operations.
- During the use phase of our products, we help our customers maximize the efficiency and lifetime of their equipment.
- At the end of the product lifecycle, we seek to ensure that products can be refurbished whenever possible or dismantled and recycled. Most of the materials used in our products are reclaimable at the end of a product's life and we design our products with this in mind.

Reducing waste

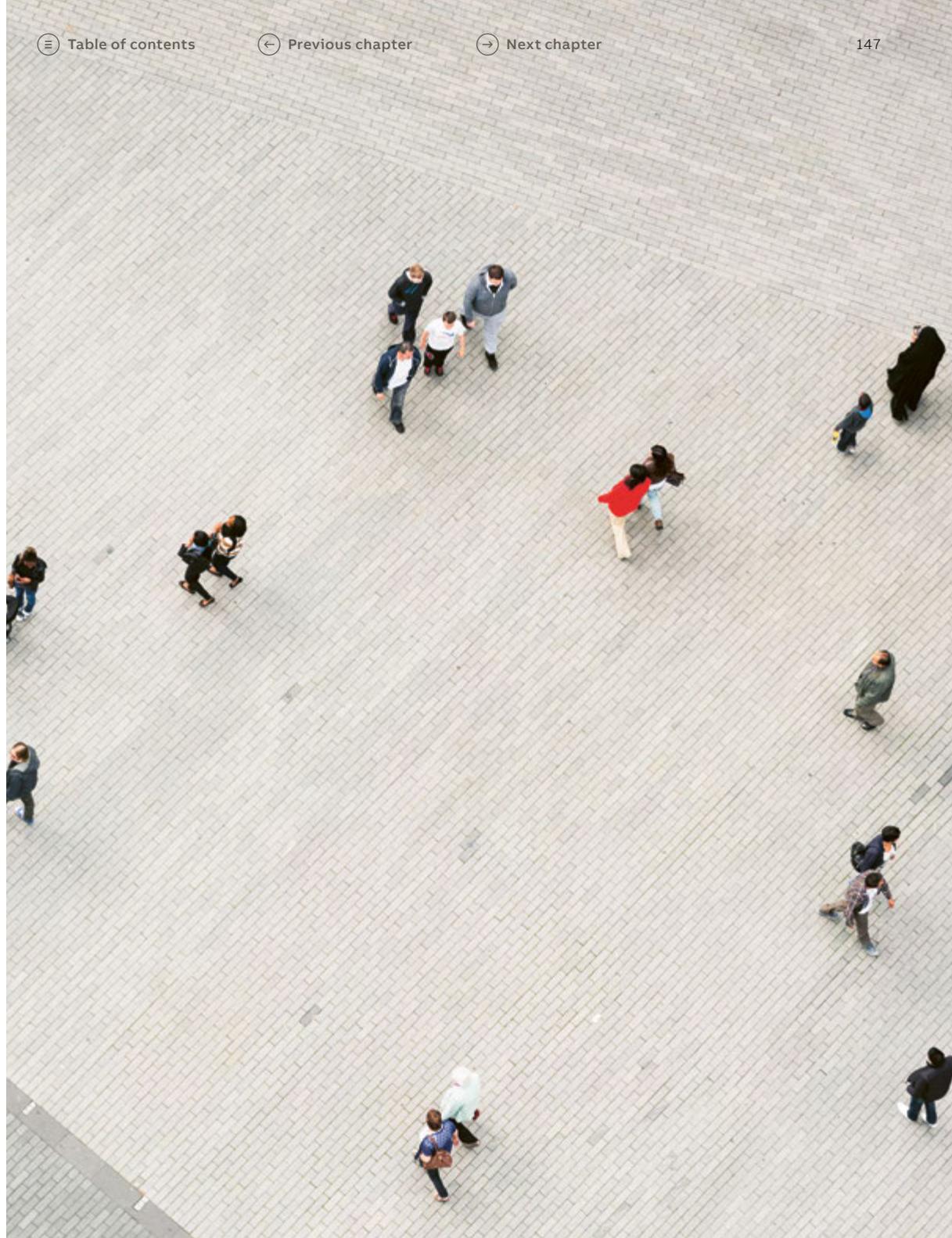
→ Further information about how we preserve resources can be found in our [Sustainability Report 2022](#).

For more than a decade, ABB has been launching intensive waste-reduction and recycling programs at its sites around the world. During 2022, we reduced the amount of waste that ABB generates by 4.8 kilotons to 182 kilotons compared to the previous year. We implemented nearly 60 recycling and waste reduction projects in 2022, that reduced the waste we generate annually by an estimated 700 tons. 86 percent of our waste in 2022 was recycled and 6.7 percent sent to landfill, down from 7.0 percent in the previous year. We now have 159 sites that don't send any waste to landfill, bringing us closer to reaching our target of having zero waste from our operations disposed of in landfills, wherever this is compatible with local conditions and regulations.





We promote
social
progress



We take care of our employees and promote social progress around the world.

We build safe, fair and inclusive working environments where our people can succeed and develop. At the same time, we engage and support communities in which our employees and customers live and work, and promote social progress across our extended value chain.

With respect to our 2030 targets to promote social progress, we have achieved the following performance so far:

¹ Where a baseline applies.

PROMOTING SOCIAL PROGRESS

Targets 2030	2019 baseline ¹	2022 status
Zero harm is caused to our people and contractors – we aim for a yearly reduction in lost time from incidents (LTIFR value = 0)	0.246	0.143
Increase proportion of women in senior management roles to 25%	11.7%	17.8%
Reach a top-tier employee engagement score (out of 100)	71	76
Extend common programs for community engagement	n/a	Guidance for emergency and disaster relief aligned with the new operating model

Occupational health and safety

Since 2014, ABB has recorded a significant downward trend in the total number of serious incidents, which shows that our business areas' safety programs are highly effective at reducing or eliminating risky conditions. In 2022, ABB recorded zero workplace related employee fatalities and zero workplace related contractor fatalities. Following our decentralized approach, the divisions take full ownership of their respective

safety programs. Since 2019, the recorded lost-time injury frequency rate (LTIFR), defined as work-related injuries that result in at least one day away from work per 200,000 hours worked (equivalent to 100 full-time employees per year), has dropped from 0.246 to 0.143. In part, this is due to Covid-19, which resulted in reduced in-person activities.

SAFETY AT ABB LOST-TIME INJURY FREQUENCY RATE (LTIFR)

LTIFR

0.30

2019
0.246

0.25



0.20

2020
0.159



0.15

2021
0.142



0.10

2022
0.143



0.05

0

Diversity and employee engagement

At ABB, we are convinced that the diversity of our workforce and our inclusive culture have a positive impact on both our company and the communities in which we operate. We aim to increase diversity across all dimensions, including gender, LGBTQ+, abilities, ethnicity and generations so that we attract the broadest pool of talent and offer environments in which everyone can succeed and develop for the long-term success of our people, our business and society as a whole. Global roadmaps and executive sponsorships have been established across all these dimensions to ensure high level commitment and progress.

Our diversity & inclusion (D&I) strategy 2030 is based on three pillars:

- governance that enables an environment of diversity, inclusion and equal opportunities;
- inclusive leadership & culture; and
- partnerships to create awareness and engage with stakeholders both in and outside of ABB.

Our approach goes hand-in-hand with our ABB values of courage, care, curiosity and collaboration.

As part of our global D&I strategy 2030, we aim to increase the proportion of women in senior management to 25 percent, which would be a doubling from a

2019 baseline. To improve gender diversity across the company, we are working on increasing the share of women in our early talent hires. In recent years, we were able to increase the proportion of women in senior management positions and the workforce overall.

To foster a more diverse, fair and inclusive workplace, we also supported the growth of Employee Resource Groups (ERGs), which are voluntary, employee-led groups that champion diversity initiatives at ABB.

As part of our commitment to further promote social progress and diversity and inclusion, in 2022, ABB adopted the United Nations (UN) Women's Empowerment Principles, adding to our broad partnerships to embrace difference and foster inclusion.

As announced in 2022, ABB will be strengthening gender diversity on its Board of Directors by proposing one additional female member for election to the Board at its annual general meeting 2023.

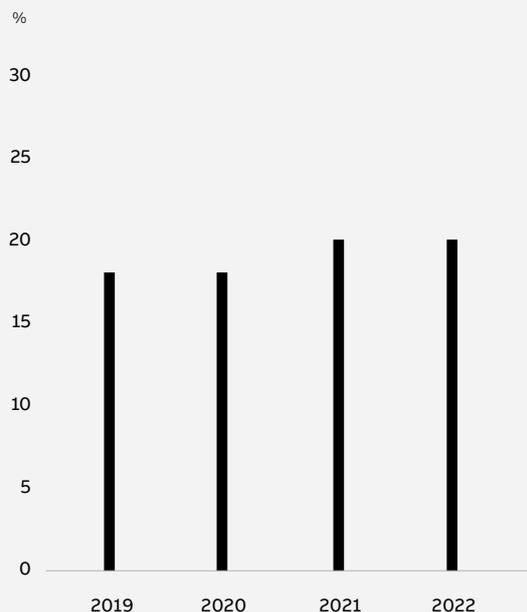
WOMEN IN SENIOR MANAGEMENT¹ (%)



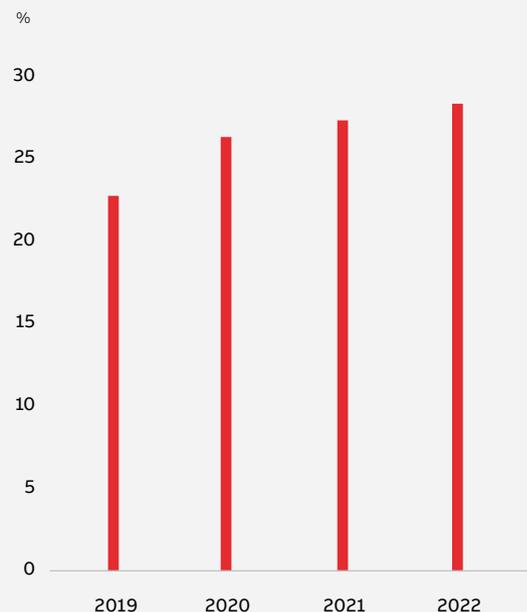
¹ At ABB, senior managers are defined as employees with Hay grades 1–7.

→ All numbers on this page are as of December 31 and calculated using head-count data.

WOMEN ON THE BOARD



WOMEN IN TOTAL WORKFORCE



**WOMEN'S EMPOWERMENT PRINCIPLES
ESTABLISHED BY UN WOMEN AND THE
UN GLOBAL COMPACT OFFICE**

In support of

**WOMEN'S
EMPOWERMENT
PRINCIPLES**

Established by UN Women and the
UN Global Compact Office

1

Establish high-level corporate leadership for gender equality.

2

Treat all women and men fairly at work – respect and support human rights and non-discrimination.

3

Ensure the health, safety and well-being of all women and men workers.

4

Promote education, training and professional development for women.

5

Implement enterprise development, supply chain and marketing practices that empower women.

6

Promote equality through community initiatives and advocacy.

7

Measure and publicly report on progress to achieve gender equality.

→ More information about the UN Women's Empowerment-Principles and ABB's engagement can be found on the [ABB website](#).

ABB Sustainability Changemaker Award

To drive and support an inclusive corporate culture, we conduct a continuous and open dialogue with our employees through various initiatives and engagements, such as Pride Month and our ABB Sustainability Changemaker Award (see below).

In ABB's 2022 employee Engagement Survey, our employee engagement score was 76 out of 100, compared with scores of 74 in 2021, 75 in 2020 and 71 in 2019. The response rate reached a record high level of 82 percent with 85,878 employees taking part, thanks largely to engaging more production employees.

One way in which we engaged our employees was to give them the opportunity to play a part in driving and supporting sustainable development at ABB. In 2021, the ABB Sustainability Changemaker Award invited employees to submit ideas or innovations to help us meet our sustainability goals. In total, 223 entries were received from teams around the world. In a semifinalist preselection, 12 innovative projects covering all of our four sustainability pillars were assessed. The winners were announced at ABB's annual gathering of senior managers, the Group Leadership Forum, in June 2022. Named "Sustainable/circular plastic solutions for products and their packaging",

We partner with Glint Inc. to benchmark ourselves against our peers. Our aim is to achieve a top-tier engagement score. Overall, we have made steady progress since the survey's launch in 2019, when many of our scores were significantly below the benchmark. In 2022, we scored 1 point above benchmark. We received strong scores for safety, integrity, role clarity, communication and accountability. We received a lot of comments and constructive feedback through the survey. To drive engagement, we will continue to empower our divisions and focus on making ABB an even better place to work.

the winning entry was chosen for its approach of substituting conventional plastics with recycled or bio-based materials. The solution has the potential to reduce emissions attributed to plastics in ABB products and packaging by two thirds. In addition to the award, the winning team will receive all necessary support from ABB to realize the solution. Over 10 use cases related to various products and their packaging are being worked on in close collaboration with our divisions. Some have already successfully passed the pilot phase and in one case related to 100 percent recycled PET, it has already been implemented.

Human rights

- Further information about how we promote social progress can be found in our [Sustainability Report 2022](#).
- Further information about how we ensure sustainability across our extended value chain can be found in the chapter [“Third-party management and responsible sourcing”](#).

ABB places great emphasis on respecting human rights in its business as well as in the extended value chain. In 2022, as part of our five-year human rights plan until 2025, we re-assessed our salient human rights risks and conducted a high level, systematic review of our human rights due diligence framework. This will be followed in 2023 by business specific reviews of risks and due diligence processes as well as external stakeholder engagement to validate our conclusions. Based on the results of our 2021 pilot program, we also updated our human rights self-assessment protocol and continued to conduct self-assessments at selected ABB sites. In total, 58 sites in 25 countries undertook assessments in 2022. We also continued to train our employees on human rights topics to make sure that awareness, identification, mitigation and avoidance of human rights risks are embedded in our daily operations. In total, 4,687 employees completed general human rights e-learning courses, and we provided targeted trainings for management and job roles specifically exposed to human rights risks.

For the past several years, we have also issued a yearly Modern Slavery Statement pursuant to the U.K. Modern Slavery Act 2015 and the Australian Modern Slavery Act 2018. Risks related to modern slavery and human trafficking are specifically addressed in our training programs and assessment protocols. During 2022, three cases of working conditions that could involve modern slavery at ABB suppliers were reported via our business ethics helpline. No allegations have been substantiated; two of these cases were still under investigation at the close of the year.

ABB has well-established internal reporting and allegation management processes to deal with alleged violations of our Code of Conduct, including matters relating to human rights. Our allegation management team aims to listen attentively and respond swiftly to employee concerns and manage a fair justice adjudication process aligned with our values. Work continues to enhance employee trust in our integrity and reporting program for concerns of potential non-compliance with our Code of Conduct to be reported in a timely manner.

Following the introduction of our ABB Way operating model in 2020, various workplace enhancements were launched, including an open job market, new leadership learning ecosystems, innovations in our integrity learning and speak-up culture, and messaging regarding the use of our business ethics helpline to report suspected cases of non-compliance with our Code of Conduct.

Following this progress, in 2021 we launched “Straight Talk”, a learning platform that uses real cases that we have faced and continue to face as an organization to share knowledge and continuous learning to strengthen our culture of integrity.

Among the key messages that were imparted to employees, were the necessity of reporting all potential cases of non-compliance with the Code of Conduct to our business ethics helpline, and a focus on driving safety in reporting to build confidence in our zero tolerance for retaliation risk.

As a result, we have seen greater employee engagement in the use of our learning tools intended to drive heightened integrity awareness.

Community engagement

As part of our 2030 sustainability strategy, we provide impactful support for community-building initiatives around the world, focused on: education, diversity and inclusion, and care in the community. In 2022, we supported more than 400 projects and charities in 40 countries with over \$10 million of donations and 4,050 person days of volunteer work. To support the humanitarian effort in Ukraine, we contributed more than CHF 2.2 million in employee and Group donations to the response campaign of the International Committee of the Red Cross. Some ABB employees travelled to the borders of Ukraine to transport people fleeing the country to a safe place, while others donated essentials like food and warm clothing to

refugees through company-organized evacuations and aid initiatives.

In 2022, we also continued our strong focus on science, technology, engineering, and mathematics (STEM) education through a variety of projects across the world. These included providing financial support for underprivileged students, promoting diversity and inclusion in STEM education and enhancing technical skills through training courses and access to the latest technology. ABB employees in many regions also volunteered their time for mentoring programs to support students from elementary school through to university level.

COMMUNITY ENGAGEMENT HIGHLIGHTS: OUR EMPLOYEES AND OUR BUSINESS AREAS SUPPORTED OUR COMMUNITIES

40

countries
worldwide

\$10.2

million
donated

4,050

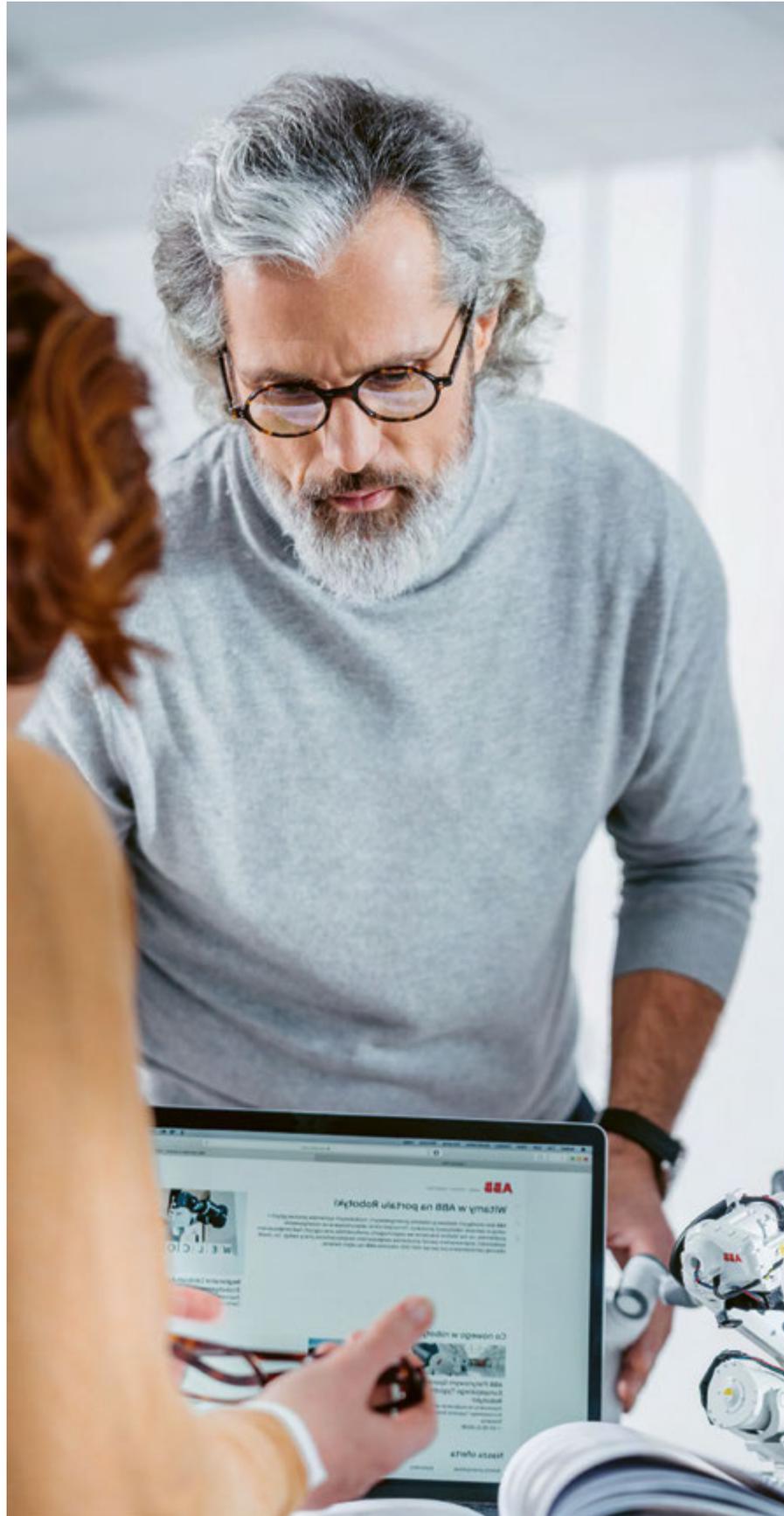
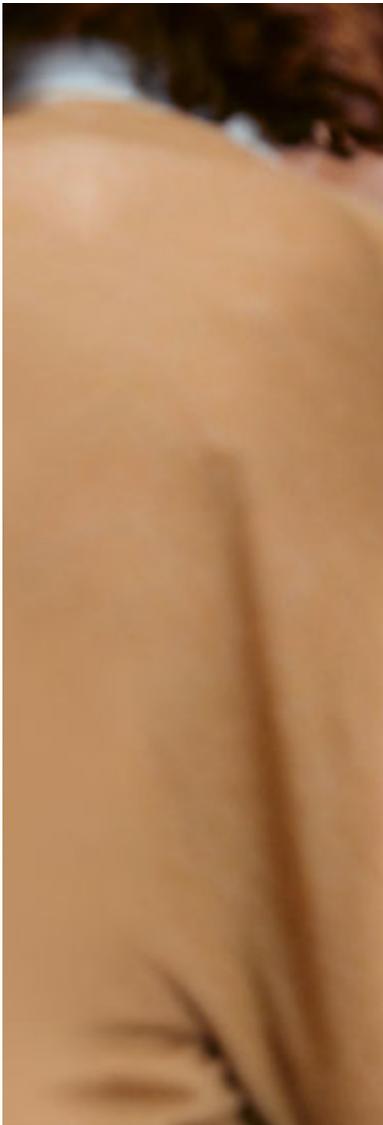
person-days
volunteered

400+

community projects
and charities

We create
a culture of
integrity and
transparency
along the
extended
value chain

Integrity and transparency are core to our operating model. Having evolved far beyond pure legal compliance, we aim to embed integrity in everything we do.



We drive accountability for sustainable business practices by keeping awareness high. We manage our third-party risk proactively. We measure integrity performance through data analytics. By increasing the scope and quality of our reporting in line with international sustainability reporting standards such as the “GRI Standards”, we commit to continuous enhancement.

As we iterate our Global Integrity Program, we updated two targets which were set in 2020 to more accurately reflect how we further embed integrity into our operating model to drive sustainable business practices, and to better align with our overall mission. Our 2030 targets for creating a culture of integrity and transparency along the extended value chain are:

1 Where a baseline applies.

2 Targets have been adjusted in 2022.

3 This target was moved from the pillar “Promoting social progress” to the pillar “Creating a culture of integrity and transparency” as compared to our [Sustainability Report 2021](#), to better reflect our strategic approach.

4 Argentina, Brazil, Bulgaria, China, Colombia, India, Indonesia, Malaysia, Mexico, Peru, Poland, Saudi Arabia, South Africa, Thailand, Turkiye, Vietnam.

CREATING A CULTURE OF INTEGRITY AND TRANSPARENCY

Targets 2030	2019 baseline¹	2022 status
Global framework for assessing and mitigating third-party integrity risks through risk-based due diligence and lifecycle monitoring ²	n/a	This target measures the implementation of a global framework for assessing third-party integrity risks. It is an ongoing and critical organization-wide, integrity-based enhancement, which enhances how we onboard and manage the life cycle of our relationships with suppliers, sales channels and customers.
		<p>Suppliers (buy-side) In January 2022, we launched various integrity due diligence and risk management enhancements within our global supplier onboarding process.</p> <p>Sales Channels (sell-side) In 2022, we finalized the design of various integrity due diligence and risk management enhancements within our onboarding process for new sales channels. The process was launched in selected ABB locations in October and November 2022, with the global launch planned for March 2023.</p>

Targets 2030	2019 baseline ¹	2022 status
Global Integrity Program underpinned by accountability for integrity and an adaptive risk management strategy gained from insights through targeted learnings, transparent reporting and monitoring ²	n/a	<p>This target measures the implementation and effectiveness of our Global Integrity Program through how we drive individual accountability for integrity and adapt our risk management strategy to real-time data insights gained from integrity-based learnings, reporting and monitoring.</p> <ol style="list-style-type: none"> 1. Trust KPI – The rate of severity level 1 and 2 investigations where the reporter disclosed their identity: <ul style="list-style-type: none"> • Year 1 (January 1, 2021 to December 31, 2021): 57% of reporters • Year 1 & 2 (January 1, 2021 - December 31, 2022): 60% of reporters. 2. Engagement KPI – The volume of employees with online access on the Integrity Awareness Portal (IAP) for integrity learnings: <ul style="list-style-type: none"> • Year 1 (January 1, 2021, to December 31, 2021): 25.46% of employees with online access. • Year 1 & 2 (January 1, 2021, to December 31, 2022): 69.86% of employees with online access.
At least 80% of supply spend in focus countries ⁴ covered by Sustainable Supply Base Management (SSBM) ³	n/a	Using a risk-based approach, an interim 2025 target has been set, focusing on high-risk suppliers in focus countries ⁴ .
Mid-term target for 2025: At least 80% of spend on high-risk suppliers in focus countries ⁴ covered by SSBM	n/a	22%
Management sustainability incentive with yearly target	n/a	The individual component of the Annual Incentive Plan (AIP) for Executive Committee (EC) members, with a weight of 20 percent, consists of a combination of up to 3 quantitative and qualitative goals, of which at least 2 are sustainability-related (e.g. GHG emissions, safety or female leadership goals).

Integrity

→ Download the [ABB Code of Conduct](#) on the ABB website.

Our culture of integrity and transparency is anchored in our ABB Code of Conduct, which explains the behavior that ABB expects of every employee and stakeholder around the world. It is built on our five integrity principles:

1

2

3

4

5

We behave and do business in an ethical way

We work in a safe and sustainable way

We build trust with all stakeholders

We protect ABB’s assets and reputation

We speak up and do not retaliate

The Integrity & Regulatory Affairs team, which sits within the Legal & Integrity function, is responsible for driving core enhancements across ABB, which collectively form our ongoing integrity transformation under our ABB Way operating model. These enhancements extend across all ABB functions and our four business areas, setting an integrity program which is comprehensive, adaptive to risk in real time and overall fit-for-purpose. At its core, ABB’s Global Integrity Program has three objectives. Firstly, to appropriately and thoroughly remediate integrity-related risks identified through root-cause analysis and testing and monitoring activities. Secondly, to enhance our internal controls, with emphasis on our anti-bribery and anti-corruption program and to verify the efficacy of our controls through testing. Thirdly, to assess and enhance our workplace culture through on-going and

targeted integrity-focused self-learning and awareness to drive behavior accountability.

As part of this self-learning and awareness process, we continue to promote on a monthly basis our “Straight Talk” case library, a dedicated internal platform where we share integrity learnings, both successes and failures, from real-life cases that ABB (or another major organization) has faced. We complement these learnings with readily available data on active or recent investigations, giving greater transparency to what our investigations portfolio looks like in terms of risks and trends, the types of reports made, the geographies concerned and the methods of reporting used by employees.

Antitrust compliance program

The allegations reported in 2022 were categorized into the following categories (as well as more detailed subcategories within each of these) to ensure appropriate attention, resourcing and internal escalation:

- Antitrust & Fair Competition
- Bribery benefiting ABB
- Commercial integrity & Regulatory
- Fraud: Non-Self-Dealing
- Fraud: Self-Dealing
- HSE & Security
- Human Resources
- Non-Integrity Issue
- Other Integrity Issue

ABB's antitrust compliance program is an established program which is evaluated on a regular basis to respond to legal and regulatory developments, to advances in globally recognized compliance "best practices" and to learnings from ABB's own investigations. It is supported by ABB's Board of Directors and senior executives and driven by a team of dedicated antitrust experts. The program's rules are set forth in a suite of policies, procedures, and internal controls specifically addressing ABB's antitrust risks. These are integrated into ABB's culture and internal controls through dedicated training of legal and business communities, the provision of specific expert antitrust advice as well as regular internal

In 2022, the following employment actions – in addition to myriad, non-disciplinary remedial actions – resulted from integrity violations pursuant to ABB's root-cause analysis and accountability processes:

- 36 verbal warnings
- 116 written warnings
- 135 employment separations
- 4 demotions, suspensions or other financial penalties

Our internal investigations framework requires that investigations follow due process and that any employment actions are measured, appropriate, and reached in consultation with appropriate ABB management.

exchange forums to raise awareness of antitrust topics of relevance to our operations.

Our antitrust experts work closely with our colleagues responsible for ABB's business ethics helpline to facilitate the identification, investigation and remediation of any antitrust concerns. Importantly, a strong antitrust ethos permeates ABB's mergers & acquisitions activity, including through the performance of due diligence prior to investments, acquisitions or joint ventures, to support healthy and compliant company growth.

Anti-Bribery and Anti-Corruption

ABB has a “zero tolerance” policy towards unethical business behavior. Whether it is bribery, corruption, forced labor or other improper business practices, our Code of Conduct is clear: improper payments and arrangements are illegal and we do not accept or tolerate these business practices, whether with public officials or with private sector business partners.

In 2022, we rolled out new Anti-Bribery & Anti-Corruption (ABAC) upskilling for employees in gatekeeper functions and customer facing roles across ABB to enhance core ABAC competencies and to highlight the crucial role these employees play in ensuring ABB’s sustainable and competitive future. We also launched version 2.0 of our Integrity Gateway, a global and now centralized tool for all employee-related requests for Gifts, Travel & Hospitality, Donations & Sponsorships and the disclosure and management of Conflicts of Interest. These enhancements are significant developments in the way we monitor and manage ABAC risks that third parties pose to ABB.

On December 2, 2022, we announced that ABB had reached a full and final settlement with the National Director of Public Prosecution in South Africa, the U.S. Department of Justice, the U.S. Securities and Exchange Commission, and the Office of the Attorney General of Switzerland, for their investigations into improper business practices by ABB on the legacy Kusile project in South Africa awarded in 2015.

We have taken, and continue to take, extensive actions to enhance our culture of integrity, including:

- Comprehensively remediating the root causes of the conduct, firstly through internal control enhancements at the local level where they occurred, and secondly through global process enhancements;
- Applying learnings to drive company-wide cultural changes and individual accountability for integrity; and
- Innovating ABB’s monitoring and testing activities and the platforms/tools we use for strong risk management and integrity assurance.

Our work does not stop here; we continue to work, innovate and enhance our integrity program, to have controls, processes and a culture that are effective deterrents of bribery and corruption. Integrity is not a static concept and nor is our integrity program which underpins it.

Reporting channels for integrity related concerns

A speak-up culture is critical for a sustainable business. It is led by our tone from the top, which enables us to drive regular communications and awareness to all employees that reporting integrity concerns must be championed and encouraged.

We do this through multiple internal platforms, including quarterly integrity topics shared in team meetings, sharing learnings from cases past and present and having middle and senior management delivering this messaging via various media. We have five established reporting channels for integrity concerns and actively promote these across all four of our business areas.

REPORTING CHANNELS FOR INTEGRITY CONCERNS



**ABB Business Ethics Helpline
Code of Conduct mobile app
and Web Submission**



Manager



**Member of Legal
& Integrity**



**Human
Resources**



**Integrity
Team at HQ**

Third-party management and responsible sourcing

Sustainable supply chain

→ Read more about ABB's principles on conducting business that respects employees, society and the environment in the [ABB Supplier Code of Conduct](#).

The standard that we expect from our third parties is simple – that they share our ethical standards. We continue to advance ABB's commitment to having a supply base that is sustainable and that sustainability as a whole remains firmly at the center of our approach to how we conduct business. In 2022, we launched an enhanced "Third Party Management" (TPM) program and associated global roll-out of enhanced onboarding and monitoring processes across ABB. Focusing initially on our suppliers (buy-side) and sales channels (sell-side),

these enhancements take a risk-based approach to due diligence and selecting appropriate third parties that we do business with or that act on our behalf, to enable more effective oversight and monitoring of their activities and overall performance and business value to ABB. During the course of 2023, we will extend the application of the enhanced TPM program and processes to our existing third party population further enhancing our ongoing management of third-party risk.

With respect to our supply chain, 22 percent of our spend on high-risk suppliers in focus countries was covered by our Sustainable Supply Base Management program by the end of 2022, and 87 percent of identified risks were closed. Plans are in place to achieve our medium-term target by 2025.

As part of our longstanding program to monitor the supplier sustainability performance, in 2022 we assessed 58 suppliers on site and mitigated 87 percent of identified risks. These often relate to working practices and safety, lack of risk management, controls and reporting, and sub-suppliers management. In 7 cases, ABB had to terminate the relationships with suppliers in 2022 due to unsatisfactory progress on their corrective action plans. Three cases of working conditions that could involve modern slavery at ABB suppliers were reported via our business ethics helpline. No allegations have been substantiated; two of these cases were still under investigation at the close of the year. During the year, we rolled out an updated supplier onboarding process

that better embeds sustainability and human rights topics in supplier selection and qualification procedures. We also completed the review of our Supplier Code of Conduct to clarify our commitments in certain key areas and to address changes in the regulatory environment since the last revision. The updated Code will be rolled out in early 2023 along with other enhancements to supplier qualification processes. In other activities related to responsible sourcing, we trained 26 ABB employees and 54 suppliers in the course of the year on applying the principles of the ABB Supplier Code of Conduct.

Special focus is also given to responsible sourcing of minerals, underpinned by the ABB Policy on Conflict Minerals. We are a member of the Responsible Minerals Initiative (RMI) which works to encourage smelters and refiners to undergo audits aligned with OECD guidelines to increase the transparency of conflict minerals in our supply chain. On an annual basis, we report on this critical worldwide sustainability issue in our Conflict Minerals Report.

Sustainability incentives

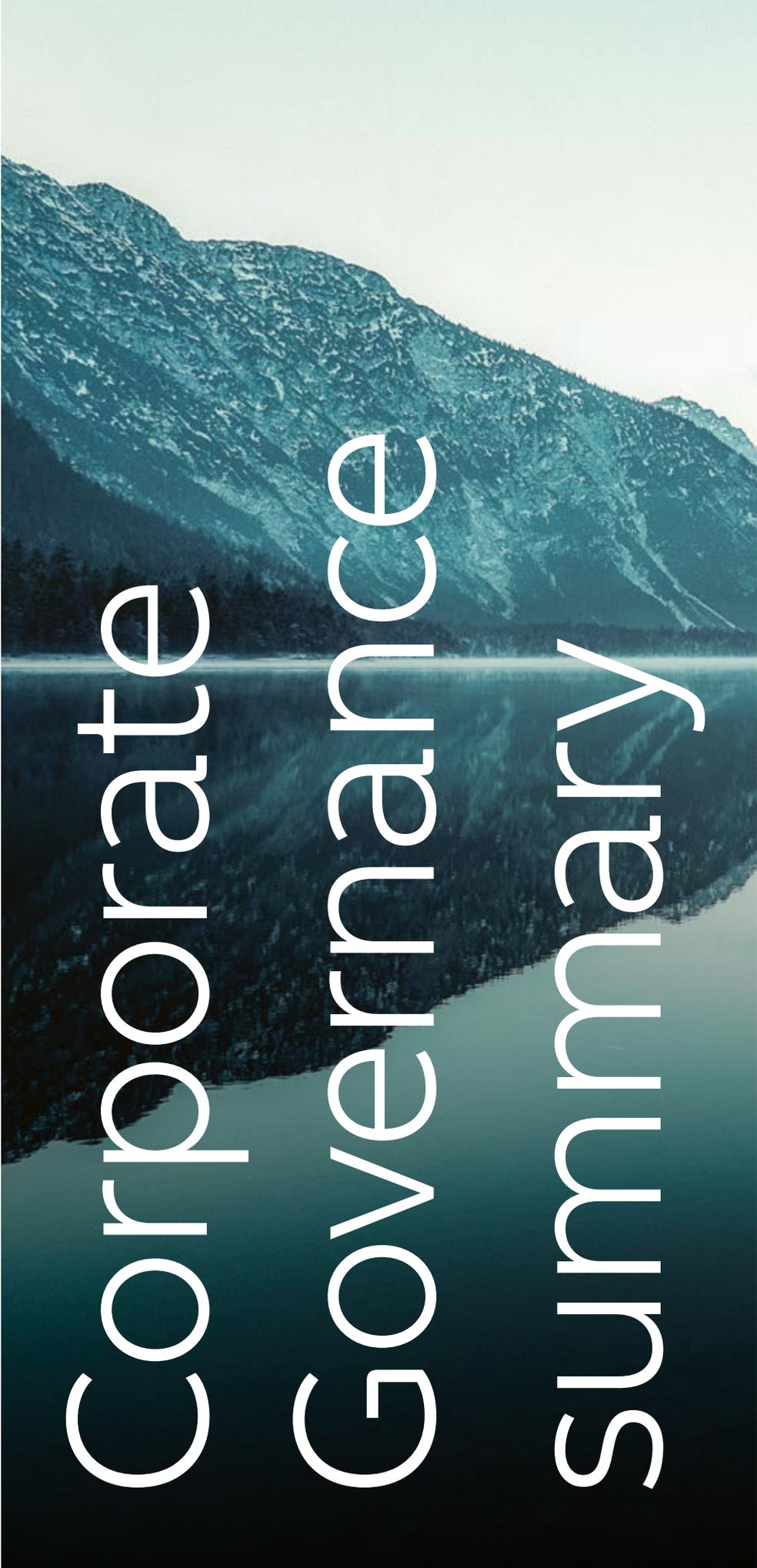
→ Further information about remuneration and incentives can be found in the [“Compensation summary”](#) in this report and in the separate [Compensation Report 2022](#).

→ More information about how we create a culture of integrity and transparency along the extended value chain can be found in our [Sustainability Report 2022](#).

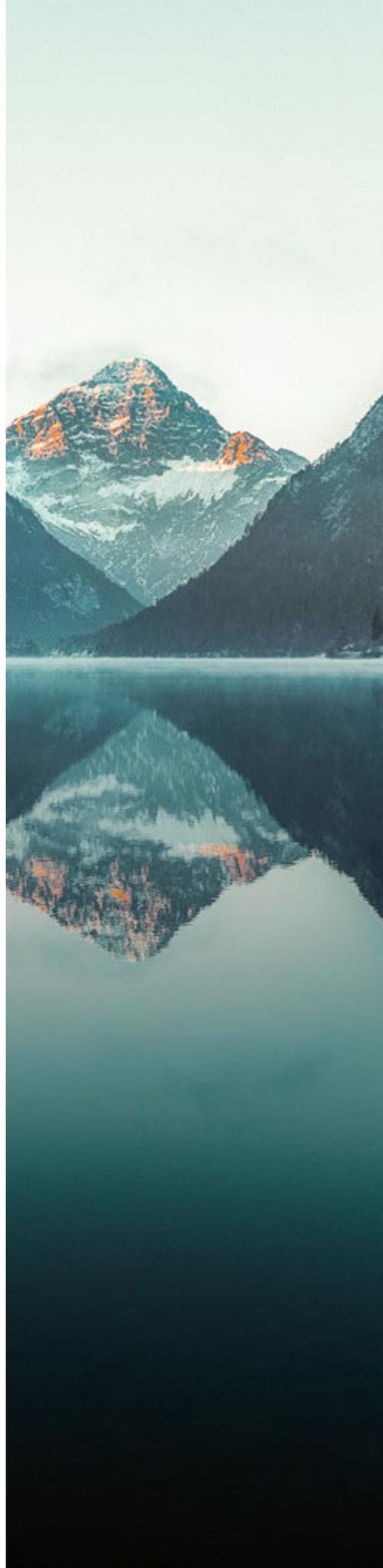
Sustainability goals are linked to senior management variable pay to help incentivize and recognize the achievements of our sustainability targets. This in turn contributes to employee engagement and their identification with our purpose, as well as closer alignment with the expectations of our other stakeholders, including investors, regulators, customers and suppliers.

Beginning in 2022, all Executive Committee (EC) members had at least two sustainability-related goals (e.g., GHG emissions reduction, safety, female leadership) in the individual component of the Annual Incentive Plan (AIP), while a corporate sustainability goal with a weighting of 20 percent has been added to the Long-Term Incentive Plan (LTIP), which is offered to all EC members and senior management population of around 100 employees. The goal applied to the LTIP for the performance period 2022–2024 relates to scope 1 and scope 2 GHG emission reductions, compared to a 2019 baseline.





Corporate Governance summary





04

**CORPORATE
GOVERNANCE
SUMMARY**

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170	Board of Directors
176	Executive Committee

Governance

ABB is committed to the highest international standards of corporate governance. This is reinforced in its structure, processes and rules, as outlined in more detail in ABB's Corporate Governance Report.

ABB complies with all relevant frameworks, including the Swiss Code of Obligations, the Swiss Code of Best Practice for Corporate Governance and the rules of the capital markets where its shares are listed. Governance principles are also anchored in various ABB corporate documents, such as its Articles of Incorporation and its Board Governance Rules.

Strong corporate governance is not only necessary to ensure compliance with applicable legal requirements, but also represents a solid basis for creating sustainable value. We are convinced that our established governance culture helps ABB successfully manage its business and realize opportunities for the benefit of all of its shareholders. This applies in particular to sustainability. ABB has a robust sustainability governance structure from its Board of Directors through to its operating divisions.

→ More information about our sustainability governance structure can be found in our [Sustainability Report 2022](#).

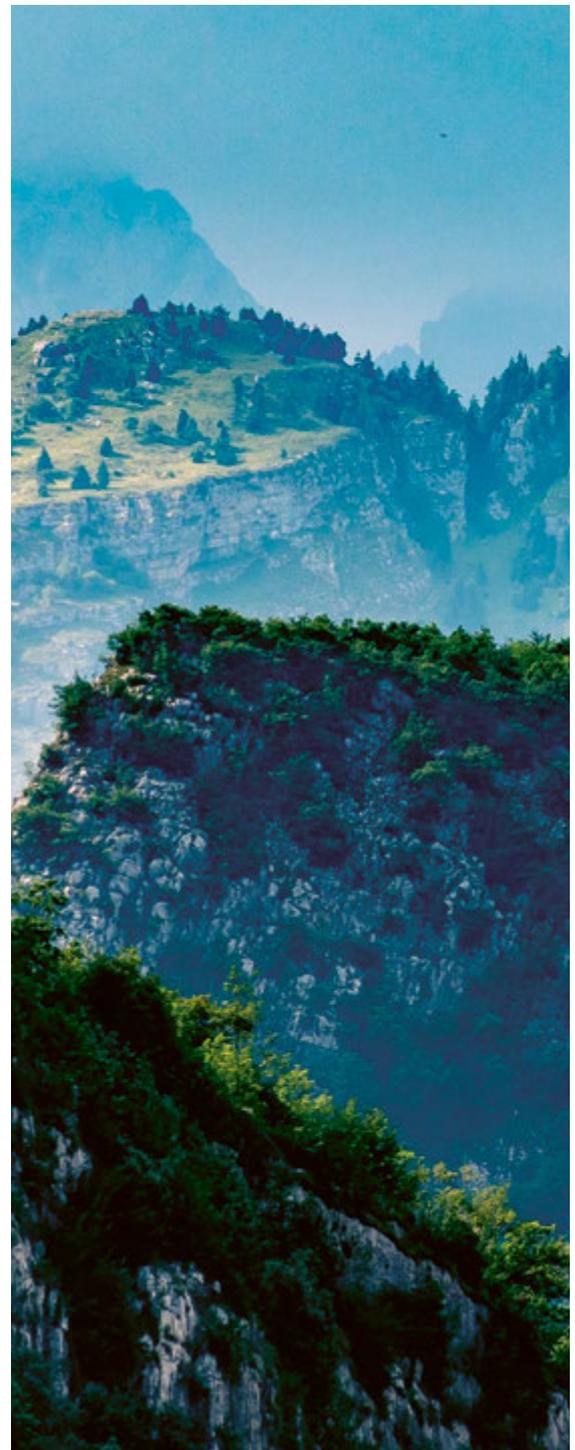


ABB GOVERNANCE STRUCTURE

Board of Directors

**Finance, Audit
and Compliance
Committee**

**Governance
and Nomination
Committee**

**Compensation
Committee**

Executive Committee

Board of Directors

ABB's Board of Directors is responsible for the strategy of the company. It is a truly diverse board: seven of its ten members have been elected in the past six years and all of them represent a broad variety of geographical, business, management and cultural experience.

While the Board takes decisions as a whole, its three committees – the Finance, Audit and Compliance Committee, the Governance and Nomination Committee and the Compensation Committee – support it with high-level

expertise and by ensuring an efficient mode of operation. Special attention is paid to sustainability aspects: oversight of ABB's corporate social responsibility (including health, safety and environment as well as sustainability) is the responsibility of the Governance and Nomination Committee. The Compensation Committee ensures that sustainability-related key performance indicators are embedded in the compensation schemes for ABB's Executive Committee. Ultimate responsibility for ABB's sustainability strategy, its sustainability targets and its annual Sustainability Report lies with the entire Board of Directors.



Our Board members



PETER R. VOSER

Chairman of ABB's Board of Directors since 2015

Chairman of the Governance and Nomination Committee

Swiss citizen

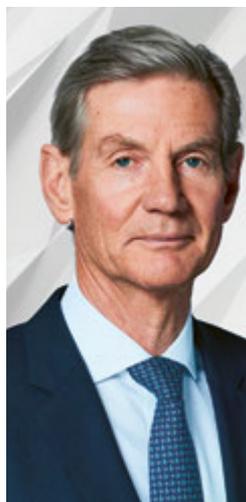


JACOB WALLENBERG

Member of ABB's Board of Directors since 1999 and Vice-Chairman since 2015

Member of the Governance and Nomination Committee

Swedish citizen



GUNNAR BROCK

Member of ABB's Board of Directors since 2018

Member of the Finance, Audit and Compliance Committee

Swedish citizen



DAVID CONSTABLE

Member of ABB's Board of Directors since 2015

Member of the Compensation Committee

Canadian and U.S. citizen



FREDERICO FLEURY CURADO

Member of ABB's Board of Directors since 2016

Chairman of the Compensation Committee

Brazilian and Portuguese citizen



LARS FÖRBERG

Member of ABB's Board of Directors since 2017

Member of the Governance and Nomination Committee

Swedish and Swiss citizen



JENNIFER XIN-ZHE LI

Member of ABB's Board of Directors since 2018

Member of the Governance and Nomination Committee and Compensation Committee

Canadian citizen



GERALDINE MATCHETT

Member of ABB's Board of Directors since 2018

Member of the Finance, Audit and Compliance Committee

Swiss, British and French citizen



DAVID MELINE

Member of ABB's Board of Directors since 2016

Chairman of the Finance, Audit and Compliance Committee

U.S. and Swiss citizen



SATISH PAI

Member of ABB's Board of Directors since 2016

Member of the Finance, Audit and Compliance Committee

Indian citizen

MEMBERS OF THE BOARD (2022–2023 BOARD TERM)

Board member	Board experience		Corporate officer experience		Other business experience							Non-executive	Independent
	ABB Board tenure (years)	Other public board experience	CEO	CFO	Operations	Risk management	Sustainability	Digital / technology	Global experience	Country of origin / nationality	Gender		
Peter Voser	8	●	●	●	●	●	●	●	●	CH	M	Yes	Yes
Jacob Wallenberg	24	●	●		●	●	●	●	●	SE	M	Yes	Yes
Gunnar Brock	5	●	●		●	●	●		●	SE	M	Yes	Yes
David Constable	8	●	●		●	●	●		●	CA, US	M	Yes	Yes
Frederico Curado	7	●	●		●	●	●	●	●	BR, PT	M	Yes	Yes
Lars Förberg	6	●	●			●	●		●	SE, CH	M	Yes	Yes
Jennifer Xin-Zhe Li	5	●		●	●	●	●	●	●	CN, CA	F	Yes	Yes
Geraldine Matchett	5		●	●		●	●		●	CH, UK, FR	F	Yes	Yes
David Meline	7	●		●		●			●	US, CH	M	Yes	Yes
Satish Pai	7	●	●		●	●	●	●	●	IN	M	Yes	Yes



Each member of the Executive Committee is appointed by the Board of Directors. The Board has delegated the executive management of ABB to the CEO, who – together with the other members of the Executive Committee – is responsible for the company’s operational business.

In line with the Board’s leading example, ABB’s Executive Committee strives to be equally diverse, not only in business and management experience, but also when it comes to geographical and cultural backgrounds.

Executive Committee





Our Executive Committee members



**BJÖRN
ROSENGREN**

Chief Executive
Officer since 2020

Swedish citizen



**TIMO
IHAMUOTILA**

Chief Financial
Officer since 2017

Finnish citizen



**CAROLINA
GRANAT**

Chief Human
Resources Officer
since 2021

Swedish citizen



**ANDREA
ANTONELLI**

General Counsel
and Secretary
to the Board
of Directors
since 2022

Italian citizen



**KARIN
LEPASOON**

Chief Communi-
cations and Sus-
tainability Officer
since 2022

Swedish citizen



**MORTEN
WIEROD**

President of the Electrification business area since 2022 (President of the Motion business area from 2019 to 2022)

Norwegian citizen



**PETER
TERWIESCH**

President of the Process Automation business area since 2015

German and Swiss citizen



TARAK MEHTA

President of the Motion business area since 2022 (President of the Electrification business area from 2019 to 2022; member of the Executive Committee since 2010)

U.S. and Swiss citizen

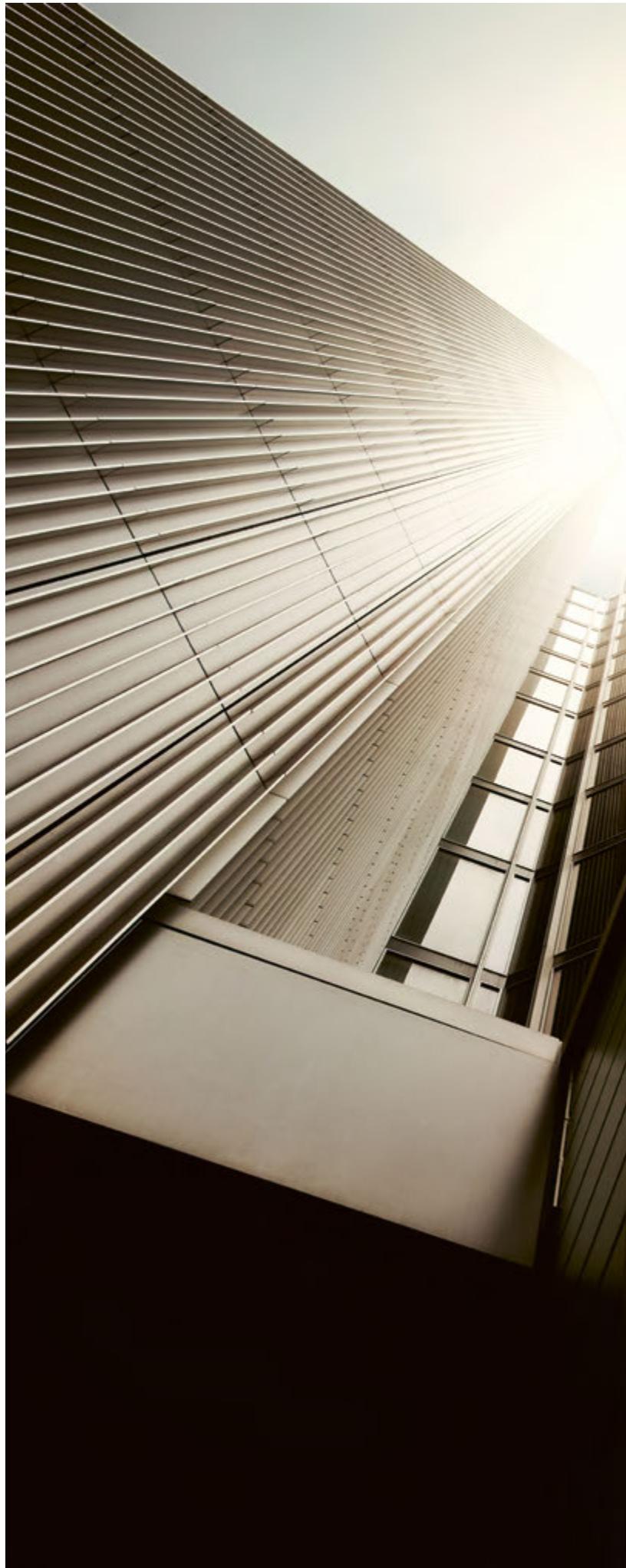


SAMI ATIYA

President of the Robotics & Discrete Automation business area since 2019 (member of the Executive Committee since 2016)

German citizen

Compensation summary



05

COMPENSATION SUMMARY

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Extracts from Compensation Committee Chair Letter

Our focus at the Compensation Committee remains to ensure that the compensation structure at ABB drives value creation for our shareholders, represents a motivating package for our executives, and ensures alignment with best-practice corporate governance standards and with ABB's sustainability strategy.

Disclosure

As in previous years, the Compensation Committee has listened carefully to inputs and suggestions from our stakeholders related to potential improvements to disclosure and has progressively moved to adopting leading market practices.

In response to this feedback, the Annual Incentive Plan (AIP) targets for the CEO, starting in 2023, will be retrospectively disclosed in the following year's Compensation Report (thus for the first time in 2024). This will represent a relevant additional level of transparency on the alignment between

pay and performance that we seek to ensure at ABB.

Termination Provisions under the AIP

For new joiners to the Executive Committee (EC), we also plan to amend the termination provisions under our AIP to be broadly aligned with the termination provisions under the LTIP. This will specifically include, in the event of resignation, the full forfeiture of the AIP award if the last day of employment is prior to the end of the performance period (i.e., 31 December of the relevant performance year).

Following valuable stakeholder feedback, we will maintain the strong link between our sustainability strategy and compensation programs, such that all EC members will continue to have a sustainability measure in their Long-Term Incentive Plan (LTIP), with a material weighting of 20 percent. In addition, all EC members

shall continue to have at least two sustainability related goals in the individual component of their AIP.

The sustainability targets for both the 2022 and 2023 LTIP relate to our long-term greenhouse gas (GHG) emissions reduction ambitions, which are prospectively disclosed in the [Compensation Report 2022](#).

Summary of
changes for 2023

Sustainability
impact in executive
compensation

2022 performance and results

2022 was a year of solid performance, despite supply chain, logistics and labor challenges, rising inflation and the energy crisis in Europe. Overall, most key financial, sustainability and operational targets were met or excelled. ABB delivered a strong

operational EBITA margin, increased its revenues and orders, and improved productivity in 2022. In addition, the company made significant progress in reducing its environmental footprint and contributing to a more sustainable environment.

Compensation policy outcomes

Board of Directors: the aggregate Board compensation for the 2022–2023 term (CHF 4.38 million) is in line with the maximum amount (CHF 4.4 million) approved at the 2022 Annual General Meeting (AGM). There has been no change to the individual Board fees since 2015.

Executive Committee: the aggregate EC total compensation was CHF 36.0 million in 2022, compared to CHF 39.2 million in 2021, and in line with the maximum amount (CHF 40 million) approved at the 2021 AGM.

Five of the nine EC members in place received a salary adjustment in March 2022, which ranged from 2.1 to 12.5 percent, for exceptional performance, market adjustment or broadening of responsibilities. This corresponded to an average 3.25 percent increase on the annual aggregate

base salaries for EC members in post in March 2022.

The average award for the current EC members under the AIP for 2022 was 118.3 percent (out of a maximum 150 percent), compared to 143.4 percent in 2021. This outcome was driven by a strong performance from the majority of the businesses as well as strong progress on sustainability related and other strategic targets.

The average weighted achievement level of the 2019 LTIP, which vested in 2022, was 121.0 percent (out of a maximum 200 percent), driven primarily by a maximum vesting under the Total Shareholder Return (TSR) performance measure.

Governance

At the annual general meeting (AGM) on March 23, 2023, shareholders will be asked to vote on the maximum aggregate compensation for the Board for its 2023–2024 term and on the maximum aggregate compensation for the EC in 2024. The former is again unchanged compared to the prior year, while the latter shows a reduction from the level requested for last year due to

lower potential vesting related costs from the 2021 LTIP award, as well as the lower compensation levels applied to new EC members compared to plan.

The [Compensation Report 2022](#) will also be submitted for a non-binding, consultative vote by shareholders.

Board compensation

Compensation for the 2022–2023 term of office

The aggregate Board compensation for the 2022–2023 term of office (CHF 4,380,000) was within the maximum amount (CHF 4,400,000) approved at the 2022 AGM.

There has been no change to the individual Board fees since 2015. Further details including the Board fee structure can be found in [ABB’s Compensation Report 2022](#).

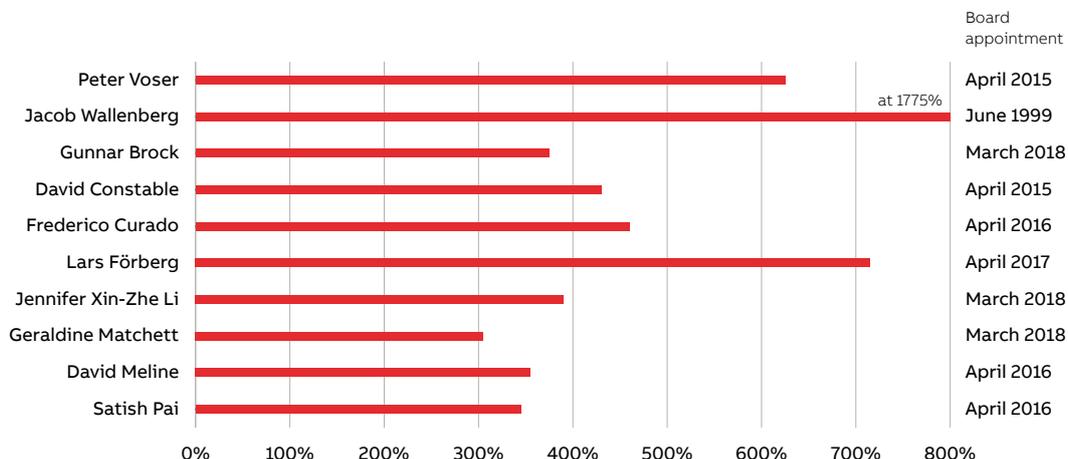
EXHIBIT 1: BOARD COMPENSATION (IN CHF) FOR THE 2022–2023 TERM OF OFFICE

Aggregate compensation	4,380,000
Approved compensation amount	4,400,000

Shareholding of Board members

All Board members held ABB shares at December 31, 2022, worth at least 300 percent of their 2022 Board compensation.

EXHIBIT 2: BOARD MEMBERS SHAREHOLDING (AT DECEMBER 31, 2022) IN % OF 2022 TOTAL COMPENSATION*



* Based on share price of CHF 32.48, the 2022 Long-Term Incentive Plan (LTIP) reference price, and shares held at December 31, 2022.

Executive Committee compensation

Compensation structure

The elements of the EC members' compensation structure, including the purpose, the link to strategy as well as applicable performance indicators are summarized in the following table:

EXHIBIT 3: EC COMPENSATION STRUCTURE AS FROM 2022

	Fixed compensation – base salary and benefits	Variable compensation – short term incentive (AIP)	Variable compensation – long term incentive (LTIP)	Wealth at risk/ Share ownership
Purpose and link to strategy	Facilitates attraction and retention of talented EC members; base salary compensates for the role and relevant experience; benefits protect against risks	Rewards annual company, business area, functional and individual performance; Aligned with the company's Annual Performance Plan	Rewards company performance over a three-year period and encourages creation of long-term, sustainable value for shareholders; Aligned with the company's Long-term Performance Plan	Aligns individual's personal wealth at risk directly to the ABB share price, and EC members' interests with those of shareholders in order to maintain focus on ABB's long-term success
Operation	Salary in cash, benefits in kind, and pension contribution	Annual awards, payable in cash after a one-year performance period	Annual grants in shares which may vest after three years, and are subject to performance conditions	Individuals are required to hold ABB shares
Opportunity level (as % of annual base salary)	Based on scope of responsibilities, personal experience and skillset			CEO 500% of annual salary (net of taxes) Other EC members* 400% of annual salary (net of taxes)
Performance indicators	Changes to base salary take into account individual performance, future potential, broadening of responsibilities, and external benchmarking			Exposure to ABB share price

* EC members with legacy employment contracts have a target LTIP grant of 100 percent, and Max LTIP opportunity of 200 percent. The higher LTIP opportunity for the newer EC members is largely offset by lower fixed benefit costs.

Total EC compensation for 2022

The aggregate EC compensation for 2022 (CHF 36,035,073) was within the maximum amount approved at the 2021 AGM (CHF 40,000,000).

EXHIBIT 4: EC COMPENSATION (IN CHF) FOR 2022

Effective aggregate compensation	36,035,073
Approved aggregate compensation	40,000,000

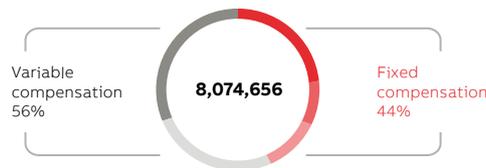
The larger portion of the CEO’s 2022 total compensation was delivered via variable compensation (56 percent represented by short-term incentive and long-term incentive). For the other EC members, on an aggregate level, variable compensation represented 51 percent of their 2022 compensation. The following chart

shows the composition of the 2022 total compensation for EC members as of December 31, 2022.

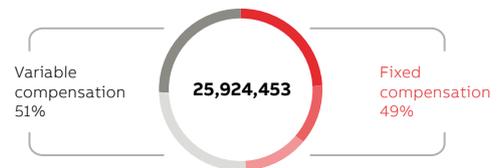
Details on each EC member’s compensation for 2022 can be found in [ABB’s Compensation Report 2022](#).

EXHIBIT 5: 2022 TOTAL COMPENSATION MIX FOR THE CEO AND OTHER EC MEMBERS ON AGGREGATE LEVEL IN CHF*

CEO



Other EC members



- 21.9% Base salary
- 9.4% Pension benefits
- 12.2% Other benefits
- 26.5% Short-term incentive
- 29.9% Long-term incentive

- 22.6% Base salary
- 12.2% Pension benefits
- 14.0% Other benefits
- 27.3% Short-term incentive
- 23.8% Long-term incentive

* Sum of percentage figures may differ from 100 percent due to rounding with one decimal.

Realized variable compensation in 2022

Realized variable compensation considers the AIP award and the LTIP award at the end of their respective performance cycles, reflecting actual AIP payment and LTIP vesting, based on achievement of the respective plan performance measures.

The outcome of the 2022 AIP was above the target for most of the current EC members (118.3 percent on average), and the LTIP that vested in 2022 (2019 LTIP) exceeded the target level, with a final vesting level of 121.0 percent of target.

EXHIBIT 6: 2022 AIP OUTCOME COMPARED TO TARGET

→ Target AIP corresponds to 100 percent of base salary.

* Individual outcomes range from 67 to 150 percent.

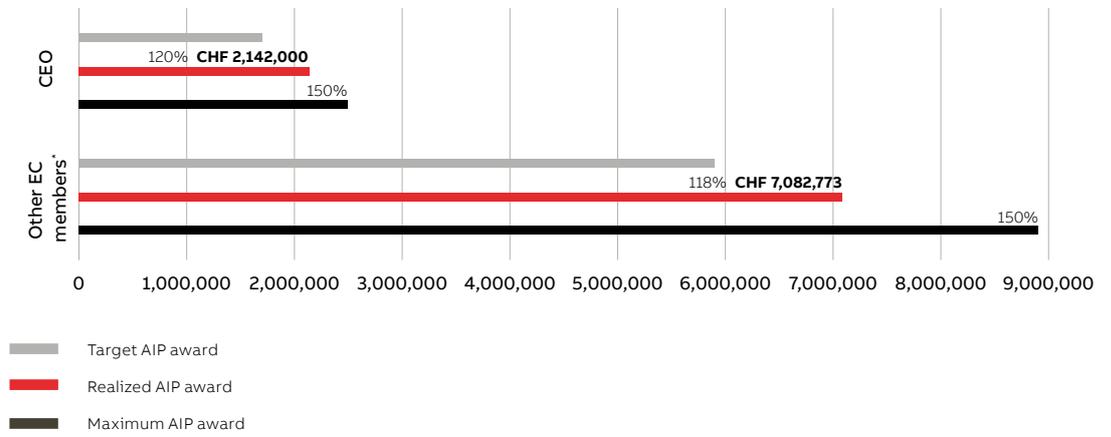
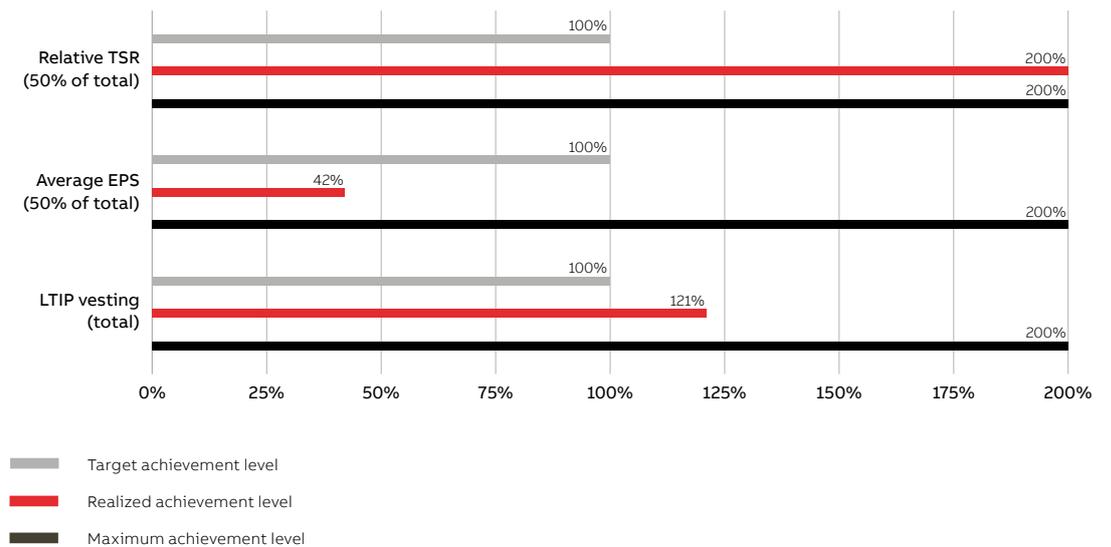


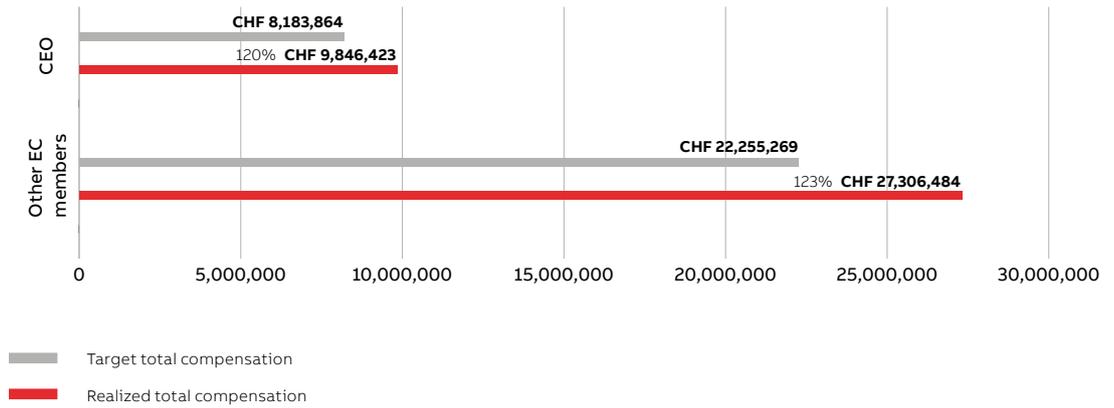
EXHIBIT 7: 2019 LTIP OUTCOME COMPARED TO TARGET



Realized total compensation in 2022

Considering the stated variable components above, the realized total compensation in 2022 was above the target total compensation for all EC members, driven by strong performance in 2022.

EXHIBIT 8: REALIZED TOTAL COMPENSATION IN 2022 COMPARED TO TARGET TOTAL COMPENSATION



Further details related to the realized compensation of each EC member and each compensation component are specified in the Compensation Report 2022 (Exhibit 44).

Shareholding of EC members

EC members may not sell their shares (except to meet tax and social security costs) until they achieve the required shareholding level.

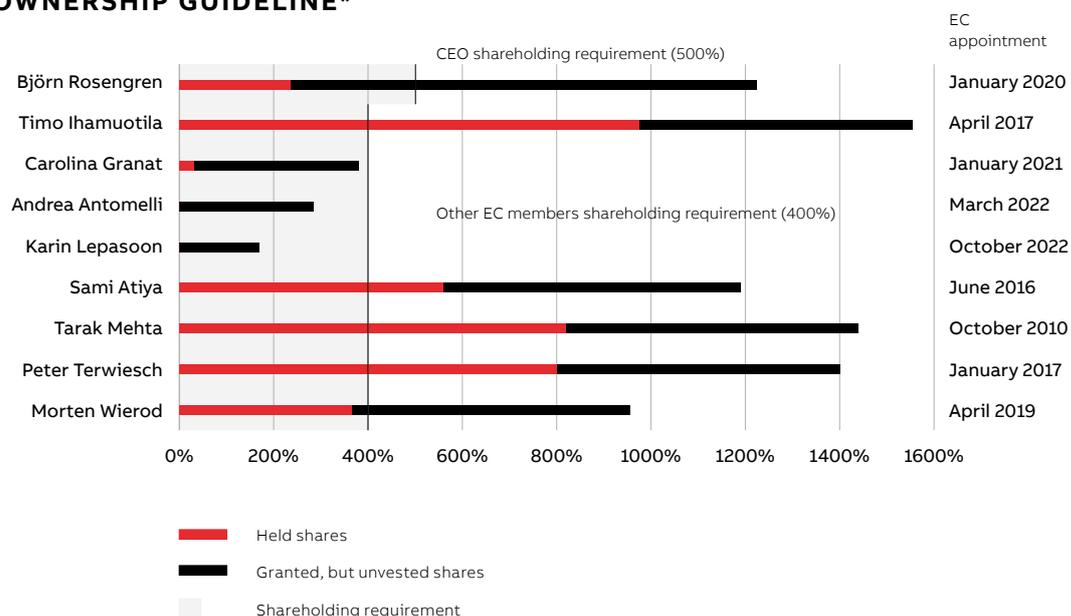
Four out of nine EC members have already met and exceeded their share ownership requirement. Two other members are close to achieving their requirement,

while three members have been appointed to the EC in the last two years.

When considering the number of granted, but unvested, ABB shares of current EC members as per December 31, 2022, it is expected that most will meet or exceed their share ownership requirement in 2023, after vesting of the 2020 LTIP grant.

* Based on share price of CHF 32.48, the 2022 LTIP reference price, and shares held at December 31, 2022. Future allocation of granted, but unvested, shares is based on target achievement level and relevant plan specific settlement: default settlement of the final 2020 LTIP, 2021 LTIP and 2022 LTIP awards is 100 percent in shares. Default settlement of replacement shares is 65 percent in shares (recipient may elect to receive 100 percent of the vested award in shares). The value of shares is compared against the annual base salary net of taxes, at December 31, 2022.

EXHIBIT 9: EC SHAREHOLDING COMPARED TO SHARE OWNERSHIP GUIDELINE*



Sustainability considerations in ABB's compensation

Impact of sustainability performance on variable compensation

There are several sustainability related considerations, that play an important role in our compensation philosophy, of which one is to foster the link between

the sustainability performance measures under our sustainability strategy and the variable compensation for our EC and senior management.

One of the main subjects of the Compensation Committee's recent decisions was to reinforce the link of ABB's sustainability strategy – and its associated ambitious targets for 2030 – to ABB's key variable compensation programs AIP and LTIP. These decisions resulted in a suite of changes which we believe keep ABB in line with leading compensation market practices and reinforce our commitment towards sustainability and long-term value creation.

and other corporate officers had a social goal, on top of the environment goal.

In regard to the LTIP granted to ABB's senior management, including the EC, a sustainability measure with a weighting of 20 percent forms part of the performance measures.

With regard to the AIP, ABB recently enlarged the mandatory inclusion of sustainability performance measures in the individual component of the relevant AIP for its executives and further employees in the organization. All EC members have two or more sustainability related goals (out of maximum three) in the individual component of their AIP. While all EC members had an environment target in 2022, business area Presidents had a safety goal, the CFO a governance goal

- For the 2022 LTIP, the sustainability measure was the company's scope 1 and 2 GHG emissions reduction at the end of the three-year performance period (2022–2024), compared to the 2019 baseline.
- The 2022 sustainability measure has also been applied to 2023 LTIP, namely scope 1 and 2 GHG emissions reduction at the end of the three-year performance period (2023–2025), compared to the 2019 baseline.
- Details of the long-term GHG emissions reduction targets can be found in the [Sustainability Report 2022](#).

Employee remuneration

ABB applies a holistic total remuneration approach, generally consisting of fixed base salary, variable performance-linked pay, pension contributions and benefits. The key programs of ABB’s compensation

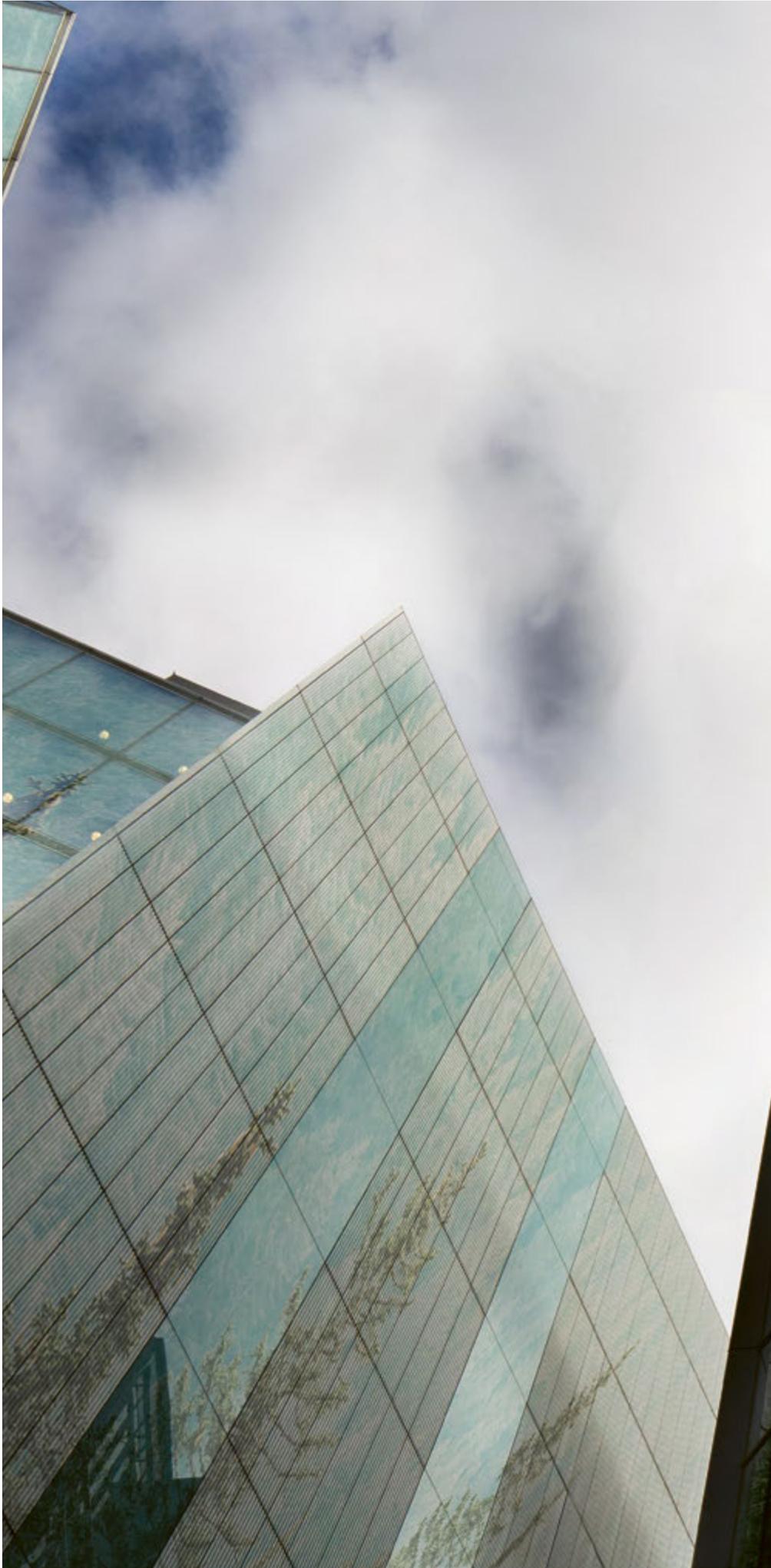
structure and their strategic links to our employee value proposition and sustainability strategy are summarized in the Exhibit 10 below.

EXHIBIT 10: COMPENSATION STRUCTURE FOR EMPLOYEES

Program	Operation and purpose	Link to ABB’s employee value proposition and sustainability strategy
Base Salary	Offered to all employees, compensating for the role and relevant experience of the employee while changes to base salary take into account individual performance, future potential and external benchmarking.	Facilitating attraction and retention of qualified employees.
Short-Term Incentive	Offered to ca. 80 percent of ABB’s workforce, rewarding annual performance.	Helping to establish strong alignment with the company’s Annual Performance Plan, which may include financial and/or sustainability targets.
Annual Incentive Plan (AIP)	Offered to ca. 45 percent of ABB’s workforce (employees outside of the Sales & Marketing functions and Production areas).	Rewarding participants, where appropriate, for the achievement of financial and sustainability targets at Group and business level, and other organizational and individual goals.
Production Plans	Offered to ca. 25 percent of ABB’s workforce (employees of Production areas).	Rewarding participants for the achievement of productivity and other operational targets at local business level.
Sales Incentive Plans	Offered to ca. 10 percent of ABB’s workforce (employees of the Sales & Marketing functions).	Rewarding participants for the achievement of financial targets at a local business and individual level.
Long-Term Incentive	Offered to ca. 800 executives and senior leaders of ABB.	Encouraging the creation of long-term, sustainable value for shareholders, and delivery of long term strategic goals.
Long-Term Incentive Plan (LTIP) with performance conditions	Offered to ca. 100 executives, who significantly impact ABB’s performance and long-term success of the business. After completion of a three-year plan period and subject to the achievement of the plan specific performance measures, the award is earned and delivered.	Aligning with the company’s Long-Term Performance Plan, and facilitating retention of senior executives.
Restricted Shares without performance conditions	Offered to ca. 700 senior leaders and key talent who influence ABB’s performance and long-term success of the business. After completion of a three-year plan period, the award is earned and delivered.	Facilitating retention of senior managers. Supports aligning employees’ interests with the interests of external shareholders and maintaining focus on the long-term success of the company.

Program	Operation and purpose	Link to ABB's employee value proposition and sustainability strategy
Employee Share Acquisition Plan	Offered to ca. 100,000 employees in over 60 countries, providing the opportunity to purchase shares in ABB one year after the start of a plan, at a price which will be fixed at the beginning of each annual plan cycle, and become ABB shareholders.	Supports aligning employees' interests with the interests of external shareholders and maintaining focus on the long-term success of the company.
Benefits (selection)	Offered to all employees by country, subject to the relevant local market practice.	Protecting against risks, and help facilitating the attraction and retention of employees.
Risk Benefits	These generally include retirement, insurance and healthcare plans.	Providing support for the employees and their dependents in case of retirement, disability or death.
Parental Leave	A global and gender-neutral program, offered to all employees, on the birth or adoption of a new child, which sets out a minimum standard on paid parental leave that supports all family types. The primary caregivers receive 12 weeks of paid leave and the secondary caregivers 4 weeks.	Aligning with the ABB value of "Care".
Employee Assistance	A global program, offered to all employees. The program supports the employee's emotional, practical and physical well-being by offering paid counseling on emotional health, family concerns and workplace concerns.	Aligning with the ABB value of "Care".
Car or Transportation Allowance	Offered to selected employees based on business need or market practice, with any car provision being progressively migrated to e-vehicles or transportation allowances which can be used to contribute to public transport, cycle or other transport needs.	Addressing changed needs related to mobility by providing greater flexibility to opt for more environmentally friendly solutions.





06

APPENDIX

- 196** Consolidated financial information
- 200** Alternative performance measures
- 204** Key terms

Consolidated financial information

The following is an extract from the Consolidated Financial Statements included in the [Financial Report 2022](#).

ABB LTD CONSOLIDATED INCOME STATEMENTS

Year ended December 31 (\$ in millions, except per share data in \$)	2022	2021	2020
Sales of products	24,471	23,745	21,214
Sales of services and other	4,975	5,200	4,920
Total revenues	29,446	28,945	26,134
Cost of sales of products	(16,804)	(16,364)	(15,229)
Cost of services and other	(2,932)	(3,114)	(3,027)
Total cost of sales	(19,736)	(19,478)	(18,256)
Gross profit	9,710	9,467	7,878
Selling, general and administrative expenses	(5,132)	(5,162)	(4,895)
Non-order related research and development expenses	(1,166)	(1,219)	(1,127)
Impairment of goodwill	—	—	(311)
Other income (expense), net	(75)	2,632	48
Income from operations	3,337	5,718	1,593
Interest and dividend income	72	51	51
Interest and other finance expense	(130)	(148)	(240)
Losses from extinguishment of debt	—	—	(162)
Non-operational pension (cost) credit	115	166	(401)
Income from continuing operations before taxes	3,394	5,787	841
Income tax expense	(757)	(1,057)	(496)
Income from continuing operations, net of tax	2,637	4,730	345
Income (loss) from discontinued operations, net of tax	(43)	(80)	4,860
Net income	2,594	4,650	5,205
Net income attributable to noncontrolling interests and redeemable noncontrolling interests	(119)	(104)	(59)
Net income attributable to ABB	2,475	4,546	5,146
Amounts attributable to ABB shareholders:			
Income from continuing operations, net of tax	2,517	4,625	294
Income (loss) from discontinued operations, net of tax	(42)	(79)	4,852
Net income	2,475	4,546	5,146
Basic earnings per share attributable to ABB shareholders:			
Income from continuing operations, net of tax	1.33	2.31	0.14
Income (loss) from discontinued operations, net of tax	(0.02)	(0.04)	2.30
Net income	1.30	2.27	2.44
Diluted earnings per share attributable to ABB shareholders:			
Income from continuing operations, net of tax	1.32	2.29	0.14
Income (loss) from discontinued operations, net of tax	(0.02)	(0.04)	2.29
Net income	1.30	2.25	2.43
Weighted-average number of shares outstanding (in millions) used to compute:			
Basic earnings per share attributable to ABB shareholders	1,899	2,001	2,111
Diluted earnings per share attributable to ABB shareholders	1,910	2,019	2,119

ABB LTD CONSOLIDATED BALANCE SHEETS

December 31 (\$ in millions, except share data)	2022	2021
Cash and equivalents	4,156	4,159
Restricted cash	18	30
Marketable securities and short-term investments	725	1,170
Receivables, net	6,858	6,551
Contract assets	954	990
Inventories, net	6,028	4,880
Prepaid expenses	230	206
Other current assets	505	573
Current assets held for sale and in discontinued operations	96	136
Total current assets	19,570	18,695
Restricted cash, non-current	—	300
Property, plant and equipment, net	3,911	4,045
Operating lease right-of-use assets	841	895
Investments in equity-accounted companies	130	1,670
Prepaid pension and other employee benefits	916	892
Intangible assets, net	1,406	1,561
Goodwill	10,511	10,482
Deferred taxes	1,396	1,177
Other non-current assets	467	543
Total assets	39,148	40,260
Accounts payable, trade	4,904	4,921
Contract liabilities	2,216	1,894
Short-term debt and current maturities of long-term debt	2,535	1,384
Current operating leases	220	230
Provisions for warranties	1,028	1,005
Other provisions	1,171	1,386
Other current liabilities	4,323	4,367
Current liabilities held for sale and in discontinued operations	132	381
Total current liabilities	16,529	15,568
Long-term debt	5,143	4,177
Non-current operating leases	651	689
Pension and other employee benefits	719	1,025
Deferred taxes	729	685
Other non-current liabilities	2,085	2,116
Non-current liabilities held for sale and in discontinued operations	20	43
Total liabilities	25,876	24,303
Commitments and contingencies		
Redeemable noncontrolling interest	85	—
Stockholders' equity:		
Common stock, CHF 0.12 par value (1,965 million and 2,053 million shares issued at December 31, 2022 and 2021, respectively)	171	178
Additional paid-in capital	141	22
Retained earnings	20,082	22,477
Accumulated other comprehensive loss	(4,556)	(4,088)
Treasury stock, at cost (100 million and 95 million shares at December 31, 2022 and 2021, respectively)	(3,061)	(3,010)
Total ABB stockholders' equity	12,777	15,579
Noncontrolling interests	410	378
Total stockholders' equity	13,187	15,957
Total liabilities and stockholders' equity	39,148	40,260

ABB LTD CONSOLIDATED STATEMENTS OF CASH FLOWS

Year ended December 31 (\$ in millions)	2022	2021	2020
Operating activities:			
Net income	2,594	4,650	5,205
Loss (income) from discontinued operations, net of tax	43	80	(4,860)
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	814	893	915
Impairment of goodwill	—	—	311
Changes in fair values of investments	(33)	(123)	(99)
Pension and other employee benefits	(125)	(216)	50
Deferred taxes	(344)	(289)	(280)
Losses from extinguishment of debt	—	—	162
Loss from equity-accounted companies	102	100	66
Net loss (gain) from derivatives and foreign exchange	(23)	49	(2)
Net gain from sale of property, plant and equipment	(84)	(38)	(37)
Net loss (gain) from sale of businesses	7	(2,193)	2
Other	66	117	90
Changes in operating assets and liabilities:			
Trade receivables, net	(831)	(142)	(100)
Contract assets and liabilities	416	29	186
Inventories, net	(1,599)	(771)	196
Accounts payable, trade	395	659	(13)
Accrued liabilities	136	454	(92)
Provisions, net	(70)	(48)	243
Income taxes payable and receivable	(94)	117	(76)
Other assets and liabilities, net	(36)	10	8
Net cash provided by operating activities – continuing operations	1,334	3,338	1,875
Net cash used in operating activities – discontinued operations	(47)	(8)	(182)
Net cash provided by operating activities	1,287	3,330	1,693
Investing activities:			
Purchases of investments	(321)	(1,528)	(5,933)
Purchases of property, plant and equipment and intangible assets	(762)	(820)	(694)
Acquisition of businesses (net of cash acquired) and increases in cost- and equity-accounted companies	(288)	(241)	(121)
Proceeds from sales of investments	697	2,272	4,341
Proceeds from maturity of investments	73	81	11
Proceeds from sales of property, plant and equipment	127	93	114
Proceeds from sales of businesses (net of transaction costs and cash disposed) and cost- and equity-accounted companies	1,541	2,958	(136)
Net cash from settlement of foreign currency derivatives	(166)	(121)	138
Changes in loans receivable, net	320	(19)	(3)
Other investing activities	(14)	(4)	11
Net cash provided by (used in) investing activities – continuing operations	1,207	2,671	(2,272)
Net cash provided by (used in) investing activities – discontinued operations	(226)	(364)	9,032
Net cash provided by investing activities	981	2,307	6,760

Year ended December 31 (\$ in millions)	2022	2021	2020
Financing activities:			
Net changes in debt with maturities of 90 days or less	1,366	(83)	(587)
Increase in debt	3,849	1,400	343
Repayment of debt	(2,703)	(1,538)	(3,459)
Delivery of shares	394	826	412
Purchase of treasury stock	(3,553)	(3,708)	(3,048)
Dividends paid	(1,698)	(1,726)	(1,736)
Cash associated with the spin-off of the Turbocharging division	(172)	—	—
Dividends paid to noncontrolling shareholders	(99)	(98)	(82)
Proceeds from issuance of subsidiary shares	216	—	—
Other financing activities	6	(41)	(49)
Net cash used in financing activities – continuing operations	(2,394)	(4,968)	(8,206)
Net cash provided by financing activities – discontinued operations	—	—	31
Net cash used in financing activities	(2,394)	(4,968)	(8,175)
Effects of exchange rate changes on cash and equivalents and restricted cash	(189)	(81)	79
Net change in cash and equivalents and restricted cash	(315)	588	357
Cash and equivalents and restricted cash, beginning of period	4,489	3,901	3,544
Cash and equivalents and restricted cash, end of period	4,174	4,489	3,901
Supplementary disclosure of cash flow information:			
Interest paid	90	132	189
Income taxes paid	1,188	1,292	905

Alternative performance measures

→ For a full reconciliation of ABB's non-GAAP measures, please refer to "Supplemental Reconciliations and Definitions" in the "ABB Q4 2022 Financial Information" (<https://global.abb/group/en/investors/results-and-reports/2022>).

The following are definitions of key financial measures used to evaluate ABB's operating performance. These financial measures are referred to in this Annual Report and are not defined under United States generally accepted accounting principles (U.S. GAAP).

While ABB's management believes that the non-GAAP financial measures herein are useful in evaluating ABB's operating results, this information should be considered as supplemental in nature and not as a substitute for the related financial information prepared in accordance with U.S. GAAP.

Comparable growth rates

Growth rates for certain key figures may be presented and discussed on a "comparable" basis. The comparable growth rate measures growth on a constant currency basis. Since we are a global company, the comparability of our operating results reported in U.S. dollars is affected by foreign currency exchange rate fluctuations. We calculate the impacts from foreign currency fluctuations by translating the current-year periods' reported key figures into U.S. dollar amounts using the exchange rates in effect for the comparable periods in the previous year.

Comparable growth rates are also adjusted for changes in our business portfolio. Adjustments to our business portfolio occur due to acquisitions, divestments, or by exiting specific business activities or customer markets. The adjustment for portfolio changes is calculated as follows: where the results of any business acquired or divested have not been consolidated and reported for the entire duration of both the current and comparable periods, the reported key figures of such business are adjusted to exclude the relevant key figures of any corresponding quarters which are not comparable when computing the comparable growth rate. Certain portfolio changes which do not qualify as divestments under U.S. GAAP have been treated in a similar manner to divestments. Changes in our portfolio where we have exited certain business activities or customer markets are adjusted as if the relevant business was divested in the period when the decision to cease business activities was taken. We do not adjust for portfolio changes where the relevant business has annualized revenues of less than \$50 million.

Operational EBITA margin

Operational EBITA margin

Operational EBITA margin is Operational EBITA as a percentage of Operational revenues.

Operational EBITA

Operational earnings before interest, taxes and acquisition-related amortization (Operational EBITA) represents Income from operations excluding:

- acquisition-related amortization (as defined below),
- restructuring, related and implementation costs (as defined below),
- changes in the amount recorded for obligations related to divested businesses occurring after the divestment date (changes in obligations related to divested businesses),
- changes in estimates relating to opening balance sheets of acquired businesses (changes in pre-acquisition estimates),
- gains and losses from sale of businesses (including fair value adjustment on assets and liabilities held for sale),
- acquisition- and divestment-related expenses and integration costs,
- other income/expense relating to the Power Grids joint venture,
- certain other non-operational items, as well as
- foreign exchange/commodity timing differences in income from operations consisting of: (a) unrealized gains and losses on derivatives (foreign exchange, commodities, embedded derivatives), (b) realized gains and losses on derivatives where the underlying hedged transaction has not yet been realized, and (c) unrealized foreign exchange movements on receivables/payables (and related assets/liabilities).

Certain other non-operational items generally includes: certain regulatory, compliance and legal costs, certain asset write downs/impairments (including impairment of goodwill) and certain other fair value changes, as well as other items which are determined by management on a case-by-case basis.

Operational EBITA is our measure of segment profit but is also used by management to evaluate the profitability of the Company as a whole.

Acquisition-related amortization

Amortization expense on intangibles arising upon acquisitions.

Restructuring, related and implementation costs

Restructuring, related and implementation costs consists of restructuring and other related expenses, as well as internal and external costs relating to the implementation of group-wide restructuring programs.

Other income/expense relating to the Power Grids joint venture

Other income/expense relating to the Power Grids joint venture consists of amounts recorded in Income from continuing operations before taxes relating to the divested Power Grids business including the income/loss under the equity method for the investment in Hitachi Energy Ltd. (Hitachi Energy), amortization of deferred brand income as well as changes in value of other obligations relating to the divestment.

Operational revenues

We present Operational revenues solely for the purpose of allowing the computation of Operational EBITA margin. Operational revenues are total revenues adjusted for foreign exchange/

commodity timing differences in total revenues of: (i) unrealized gains and losses on derivatives, (ii) realized gains and losses on derivatives where the underlying hedged transaction has not yet been realized, and (iii) unrealized foreign exchange movements on receivables (and related assets). Operational revenues are not intended to be an alternative measure to Total Revenues, which represent our revenues measured in accordance with U.S. GAAP.

Net working capital as a percentage of revenues

Net working capital as a percentage of revenues

Net working capital as a percentage of revenues is calculated as Net working capital divided by Adjusted revenues for the trailing twelve months.

Net working capital

Net working capital is the sum of (i) receivables, net, (ii) contract assets, (iii) inventories, net, and (iv) prepaid expenses; less (v) accounts payable, trade, (vi) contract liabilities (including non-current amounts) and (vii) other current liabilities (excluding primarily: (a) income taxes payable, (b) current derivative liabilities, (c) pension and other employee benefits, (d) payables under the share buyback program, (e) liabilities related to certain other restructuring-related activities and (f) liabilities related to the divestment of the Power Grids business); and including the amounts related to these accounts which have been presented as either assets or liabilities held for sale but excluding any amounts included in discontinued operations.

Adjusted revenues for the trailing twelve months

Adjusted revenues for the trailing twelve months includes total revenues recorded by ABB in the twelve months preceding the relevant balance sheet date adjusted to eliminate revenues of divested businesses and the estimated impact of annualizing revenues of certain acquisitions which were completed in the same trailing twelve-month period.

Free cash flow conversion to net income

Free cash flow conversion to net income

Free cash flow conversion to net income is calculated as free cash flow divided by Adjusted net income attributable to ABB.

Adjusted net income attributable to ABB

Adjusted net income attributable to ABB is calculated as net income attributable to ABB adjusted for: (i) impairment of goodwill, (ii) losses from extinguishment of debt, and (iii) gains arising on the sale of the equity-accounted investment in Hitachi Energy Ltd., the Mechanical Power Transmission division (Dodge) and the Power Grids business, the latter being included in discontinued operations.

Free cash flow

Free cash flow is calculated as net cash provided by operating activities adjusted for: (i) purchases of property, plant and equipment and intangible assets, and (ii) proceeds from sales of property, plant and equipment.

Return on Capital employed (ROCE)

Return on Capital employed

Return on Capital employed is calculated as Operational EBITA after tax, divided by the average of the period's opening and closing Capital employed, adjusted to reflect impacts from the timing of significant acquisitions/divestments occurring during the period.

Capital employed

Capital employed is calculated as the sum of Adjusted total fixed assets and Net working capital (as defined above).

Adjusted total fixed assets

Adjusted total fixed assets is the sum of (i) property, plant and equipment, net, (ii) goodwill, (iii) other intangible assets, net, (iv) investments in equity-accounted companies, and (v) operating lease right-of-use assets, less (vi) deferred tax liabilities recognized in certain acquisitions.

Notional tax on Operational EBITA

The Notional tax on Operational EBITA is computed using an adjusted group effective tax rate multiplied by Operational EBITA.

Adjusted Group effective tax rate

The Adjusted Group effective tax rate is computed by dividing an adjusted income tax expense by an adjusted pre-tax income. Certain amounts recorded in income before taxes and the related income tax expense (primarily due to gains and losses from sale of businesses and in 2022, regulatory penalties in connection with the Kusile project) are removed from the reported amounts when computing these adjusted amounts. Certain other amounts recorded in income tax expense are also excluded from the computation to determine the Adjusted Group effective tax rate.

Net debt

Net debt

Net debt is defined as Total debt less Cash and marketable securities.

Total debt

Total debt is the sum of Short-term debt and current maturities of long-term debt, and Long-term debt.

Cash and marketable securities

Cash and marketable securities is the sum of Cash and equivalents, Restricted cash (current and non-current) and Marketable securities and short-term investments.

Net debt/EBITDA ratio

Net debt/EBITDA ratio

Net debt/EBITDA ratio is defined as Net debt (as defined above) divided by EBITDA.

EBITDA

EBITDA is defined as Income from operations for the trailing twelve months preceding the balance sheet date before depreciation and amortization for the same trailing twelve-month period.

Net finance expenses

Net finance expenses is calculated as Interest and dividend income less Interest and other finance expense.

Book-to-bill ratio

Book-to-bill ratio is calculated as Orders received divided by Total revenues.

Key terms

A

ABB Way

The ABB Way is the common operating model for our divisions, business areas and lean corporate center. It defines “how” we create value. It is built around our purpose and consists of four elements: business model, people & culture, brand and governance.

B

Business areas

ABB has a decentralized business model with of 20 divisions grouped into four business areas: Electrification, Motion, Process Automation and Robotics & Discrete Automation. They complement each other, cooperate and find synergies to create competitive advantages and best serve our customers.

C

Capitals

We rely on six types of resources and relationships, the so-called “capitals” as referenced in the Integrated Reporting (<IR>) Framework, to run our business and be successful: financial capital, intellectual capital, natural capital, manufactured capital, human capital, and social & relationship capital. They are the inputs that enable us to create value in the short, medium and long term. Through our business activities, we create outputs and outcomes, which in turn

increase, decrease or transform the capitals. Because the capital flows are interconnected, we seek to balance and increase them overall.

Circular economy

In contrast to a linear “take-make-waste” model of production and consumption, the circular economy aims to keep resources in use by designing products for durability, reusability and recyclability. At ABB, circular economy approaches are at the center of the second pillar of our sustainability strategy, “Preserving resources”. By 2030, we aim to have at least 80 percent of ABB’s products and solutions covered by our circularity approach and evaluated against a clear set of key performance indicators (KPIs), corresponding to each stage of the product lifecycle.

Creating a culture of integrity & transparency along the extended value chain

The fourth pillar of our sustainability strategy 2030 aims to embed integrity and transparency across our value chain. Our Code of Conduct is binding on all employees and forms the basis for interactions with projects and counterparties. As well as our global integrity program, we have defined targets for mitigating third-party and supplier risks and we are including our sustainability targets in our senior management incentives.

D

Divisions

Our 20 divisions represent the highest level of operating decisions within ABB with full ownership and accountability for their respective strategies, performance and resources, as they are closest to the markets. They are grouped into four business areas.

E

Enabling a low-carbon society

The first pillar of our sustainability strategy 2030 is where we can make the biggest contribution to a more sustainable society. We have set 2030 and 2025 targets to reduce GHG emissions along our value chain.

G

Greenhouse gas emissions

GHG emissions refer to all emissions that have a warming effect on the earth's surface by trapping heat in the atmosphere. The Kyoto Protocol defines the following six greenhouse gases: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), the so-called F-gases (hydrofluorocarbons and perfluorocarbons) and sulfur hexafluoride (SF₆). CO₂, methane and nitrous oxide are released during the combustion of fossil fuels, such as coal, oil or natural gas. All GHG emissions can be calculated as CO₂-equivalents (CO₂e), which is the metric measure that we use at ABB to calculate our overall emissions

and progress towards our emissions reduction targets.

H

Headcount

Headcount represents the number of people employed at ABB and is notably used in social reporting. It differs from FTE (or Full-Time Equivalent) which represents the number of worked hours compared to a full-time employee; FTE is notably used in financial reporting. For example, a full-time employee is considered as 1 headcount and 1 FTE whereas a part-time employee is considered as 1 headcount and less than 1 FTE.

M

Materiality/material topics

Materiality refers to the process of identifying the most important topics to be managed and included in reporting. ABB's material sustainability topics were identified in 2020 through a comprehensive stakeholder engagement process. Based on this analysis, we present an overview of material topics for value creation in the chapter "Material topics". We are currently working on further enhancing our double materiality approach through stakeholder engagement by considering both the impact that ABB has on the environment and society, and the impact that material topics have on ABB's business success.

N

Net-zero vs. carbon neutral

“Net-zero” means that any carbon dioxide released into the atmosphere is balanced by an equivalent amount being removed. “Carbon neutral” means that carbon emissions can be offset by a reduction in emissions or a removal of carbon from the atmosphere, for instance through carbon sinks, which absorb more carbon than they emit. To achieve net-zero or carbon neutrality, companies can buy carbon credits to cover the emissions they cannot eliminate. At ABB, we aim to achieve carbon neutrality in our own operations by 2030, and net-zero value chain GHG emissions by 2050.

P

Preserving resources

The second pillar of our sustainability strategy 2030 aims to preserve resources by moving to circular business models that cut waste, increase recyclability and reusability, and make our products more durable. We work closely with customers and suppliers and aim to embed circularity across our value chain.

Promoting social progress

The third pillar of our sustainability strategy 2030 is centered on promoting social progress in the workplace and beyond. We build safe, fair and inclusive working environments where our people can succeed and develop while promoting social progress across our value chain. We aim at being a top-tier employer and care for the communities where we live and work.

Purpose

ABB’s purpose is to enable a more sustainable and resource-efficient future with our technology leadership in electrification and automation. This is why we are in business and is the guiding star for ABB’s direction and strategy. It is based on the five themes of: creating success for all our stakeholders, addressing the world’s energy challenges, transforming industries, embedding sustainability in everything we do and leading with technology.

S

Scope 1 GHG emissions

Direct emissions from company-owned and controlled resources, for example, emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc.

Scope 2 GHG emissions

Indirect emissions from the generation of purchased energy (electricity, steam, heat, cooling), from a utility provider.

Scope 3 GHG emissions

All other indirect emissions not included in scope 2 that occur in the value chain, both upstream and downstream. According to the GHG protocol, scope 3 emissions are separated into 15 categories, and include for example purchased goods and services, business travel and commuting or use of sold products.

Sustainability

Sustainability or sustainable development can be defined as “meeting the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland Report, 1987). Sustainability is commonly based on three dimensions: economic sustainability, environmental sustainability and social sustainability. At ABB, we strive to embed sustainability in everything we do. Sustainability is at the center of our company purpose, strategy, operating model (the ABB Way) and objectives, and is a key part of the value that we create for our stakeholders.

value for all our stakeholders, for ABB, society and the environment. We are convinced that this is not only the right thing to do, but also in the interest of our long-term business success.

Sustainability strategy 2030

In 2020, ABB defined a clear strategy to contribute to a more sustainable society. The key pillars of our sustainability strategy 2030 are: enabling a low-carbon society, preserving resources, promoting social progress and creating a culture of integrity & transparency along the extended value chain.

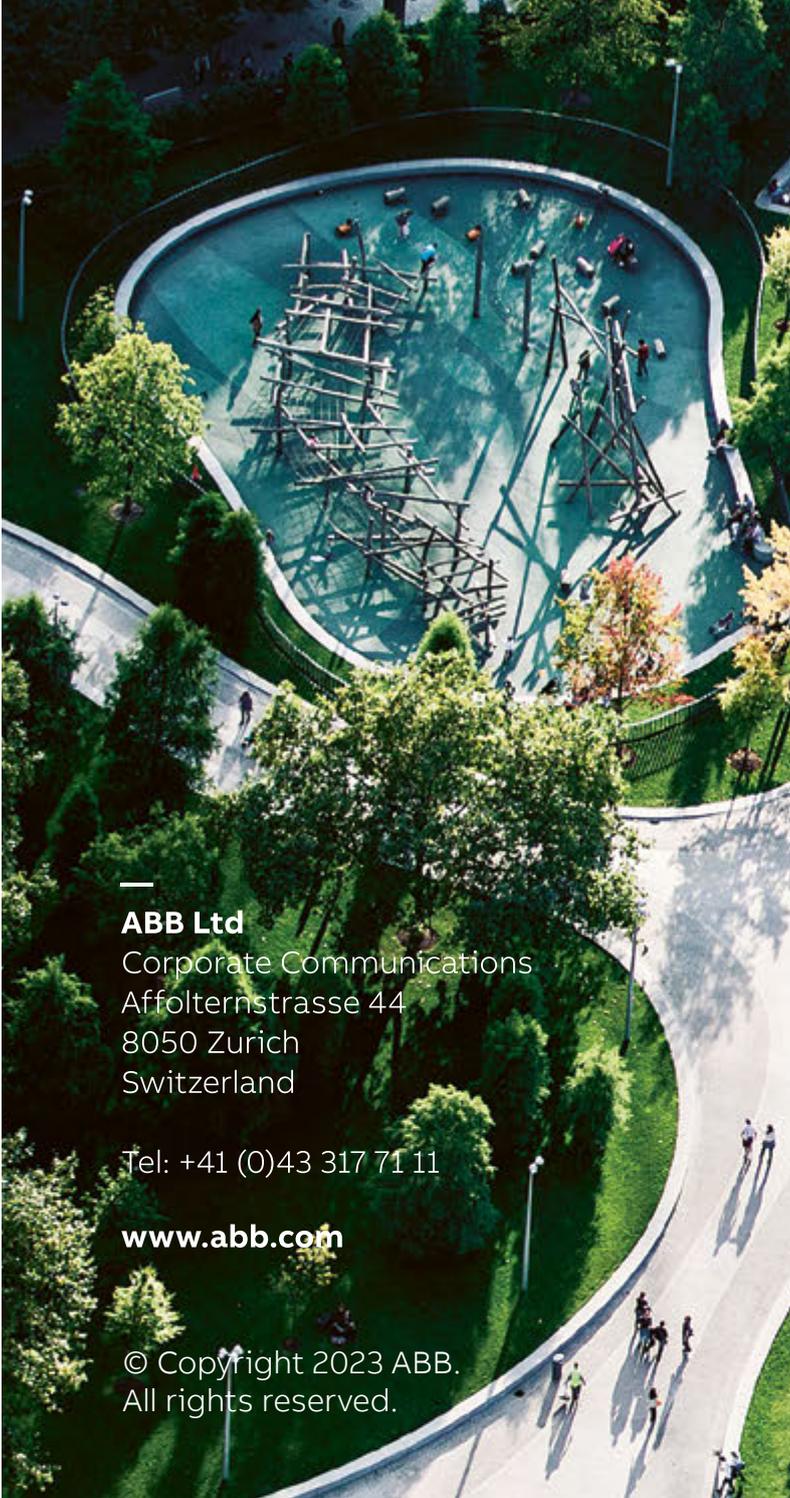
V

Value creation

The process that results in increases, decreases or transformations of “the capitals” and related outputs and outcomes caused by our business activities in the short, medium and long term. We not only focus on maximizing shareholder value but work holistically to create financial and sustainability-linked

Caution concerning forward-looking statements

The Integrated Report 2022 includes “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. We have based these forward-looking statements largely on current expectations, estimates and projections about the factors that may affect our future performance, including global economic conditions as well as the economic conditions of the regions and the industries that are major markets for ABB. The words “believe,” “may,” “will,” “estimate,” “continue,” “target,” “anticipate,” “intend,” “expect,” “plan” and similar words and the express or implied discussion of strategy, plans or intentions are intended to identify forward-looking statements. These forward-looking statements are subject to risks, uncertainties and assumptions, including among other things, the following: (i) business risks related to the global volatile economic environment; (ii) costs associated with compliance activities; (iii) difficulties encountered in operating in emerging markets; (iv) risks inherent in large, long term projects served by parts of our business; (v) the timely development of new products, technologies, and services that are useful for our customers; (vi) our ability to anticipate and react to technological change and evolving industry standards in the markets in which we operate; (vii) changes in interest rates and fluctuations in currency exchange rates; (viii) changes in raw materials prices or limitations of supplies of raw materials; (ix) the weakening or unavailability of our intellectual property rights; (x) industry consolidation resulting in more powerful competitors and fewer customers; (xi) effects of competition and changes in economic and market conditions in the product markets and geographic areas in which we operate; (xii) effects of, and changes in, laws, regulations, governmental policies, taxation, or accounting standards and practices and (xiii) other factors described in documents that we may furnish from time to time with the US Securities and Exchange Commission, including our Annual Reports on Form 20-F. Although we believe that the expectations reflected in any such forward-looking statements are based on reasonable assumptions, we can give no assurance that they will be achieved. We undertake no obligation to update publicly or revise any forward-looking statements because of new information, future events or otherwise. In light of these risks and uncertainties, the forward-looking information, events and circumstances might not occur. Our actual results and performance could differ substantially from those anticipated in our forward-looking statements.



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