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**Annual  
report**



# —

# Highlights 2021

## Operational performance

Strongly increased demand for ABB's offering from the low level in the previous year period when the adverse business impact of the COVID-19 pandemic was significant.

Orders +20% (+17% comparable<sup>(1)</sup>) and revenues +11% (+8% comparable) increased in all Business Areas and regions.

Adverse impact from imbalances in the supply chain to some extent hampered the ability to convert orders into actual deliveries, resulting in an order backlog of \$16.6 billion, +16% (+21% comparable), year-on-year.

Strong improvement in Operational EBITA margin<sup>(1)</sup> to 14.2%, +310 basis points, higher in all Business Areas.

Lifted long-term targets as ABB expects to drive through-the-cycle revenue growth to 4-7% (3-5% organic and 1-2% acquired), in constant currency, and sharpened Operational EBITA margin target to be at least 15% as from 2023, in any given year.

## Portfolio management

Mechanical Power Transmission (Dodge) divestment completed for \$2.9 bn in cash.

Good progress in Turbocharging and E-mobility processes, expected to be completed during first half of 2022.

Acquisition of ASTI to expand in Autonomous Mobile Robots.

Improved portfolio management process to build up acquisition pipelines in the divisions.

## Capital allocation

Very strong uplift in cash generation with cash flow from operating activities in continuing operations of \$3.3 billion improving by \$1.5 billion year-over-year.

Net cash positive at the end of 2021.

Accelerated R&D investments in focus areas.

Board of Directors proposing a CHF 0.82 dividend per share at the 2022 Annual General Meeting.

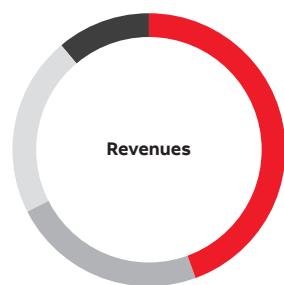
Returned \$2.7 billion of Power Grids proceeds during 2021.

(1) For non-GAAP measures, see the "Supplemental information" section of this annual report.

# ABB at a glance

ABB (ABBN: SIX Swiss Ex) is a leading global technology company that energizes the transformation of society and industry to achieve a more productive, sustainable future. By connecting software to its electrification, robotics, automation and motion portfolio, ABB pushes the boundaries of technology to drive performance to new levels. With a history of excellence stretching back more than 130 years, ABB's success is driven by about 105,000 talented employees in over 100 countries.

% of FY 2021 third party revenues  
excl. Corporate and Other



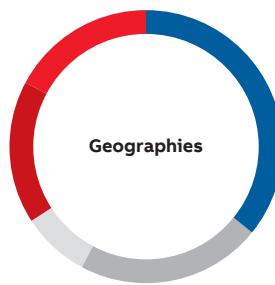
% of FY 2021 Operational EBITA  
excl. Corporate and Other



% of FY 2021 third party revenues



% of FY 2021 third party revenues



(1) For non-GAAP measures, see the "Supplemental information" section of this annual report.

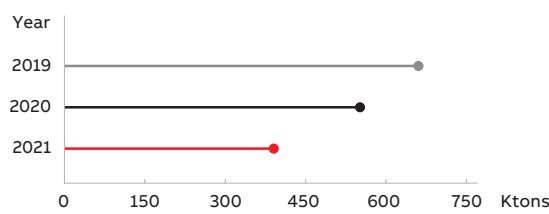
(2) Management estimates.

## Key figures

\$ in millions, unless otherwise indicated	FY 2021	FY 2020	US\$	Comparable <sup>(4)</sup>
Orders	<b>31,868</b>	26,512	+20%	+17%
Order backlog (end December)	<b>16,607</b>	14,303	+16%	+21%
Revenues	<b>28,945</b>	26,134	+11%	+8%
Income from operations	<b>5,718</b>	1,593	+259%	
Operational EBITA <sup>(1)</sup>	<b>4,122</b>	2,899	+42%	+37% <sup>(5)</sup>
as % of operational revenues	<b>14.2%</b>	11.1%	+3.1 pts	
Income from continuing operations, net of tax	<b>4,730</b>	345	n.a.	
Net income attributable to ABB	<b>4,546</b>	5,146	-12%	
Basic Earnings per share (\$)	<b>2.27</b>	2.44	-7% <sup>(2)</sup>	
Dividend per share	<b>0.82</b>	0.80		
Cash flow from operating activities <sup>(3)</sup>	<b>3,330</b>	1,693	+97%	
Cash flow from operating activities in continuing operations	<b>3,338</b>	1,875	+78%	
Net (cash) debt (end December) <sup>(1)</sup>	<b>(98)</b>	112		
	FY2021	FY2020		Change
CO <sub>2</sub> e own operations emissions, kt scope 1 and 2	<b>405 kt</b>	561 kt	-28%	
Lost Time Injury Frequency Rate (LTIFR), frequency / 200,000 working hours	<b>0.142</b>	0.162	-12%	
Share of females in senior management positions, %	<b>16.3%</b>	13.5%	+2.8 pts	

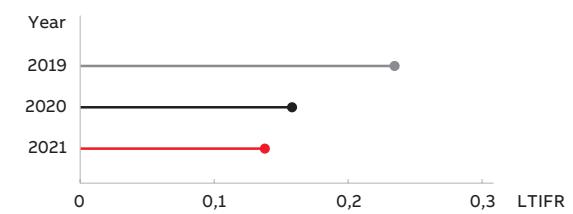
### CO<sub>2</sub> scope 1 & 2

Ktons of CO<sub>2</sub> equivalent emissions



### Lost Time Injury Frequency Rate

LTIFR, frequency/200,000 working hours



(1) For non-GAAP measures, see the "Supplemental information" section of this annual report.

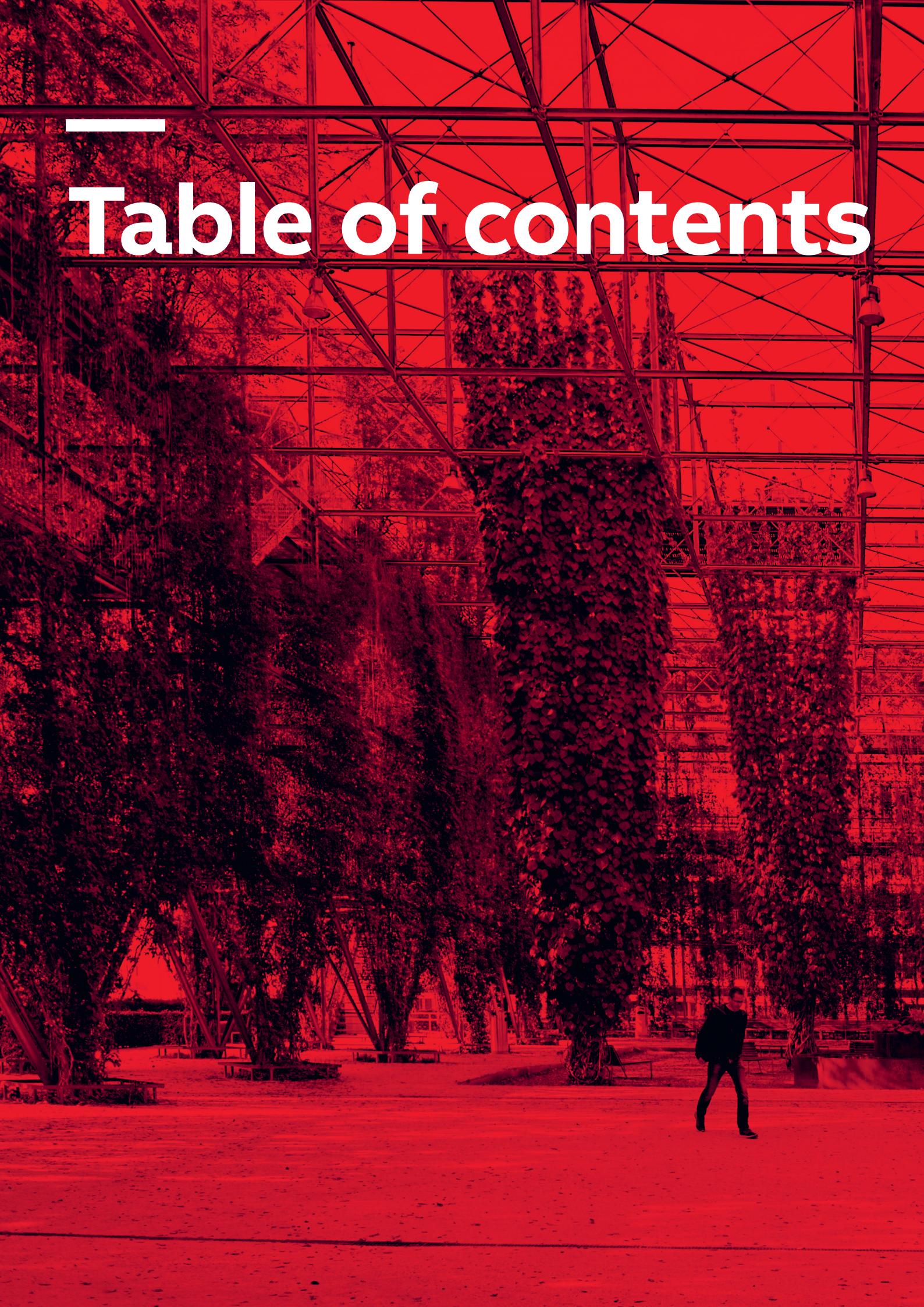
(2) EPS growth rates are computed using unrounded amounts.

(3) Amount represents total for both continuing and discontinued operations.

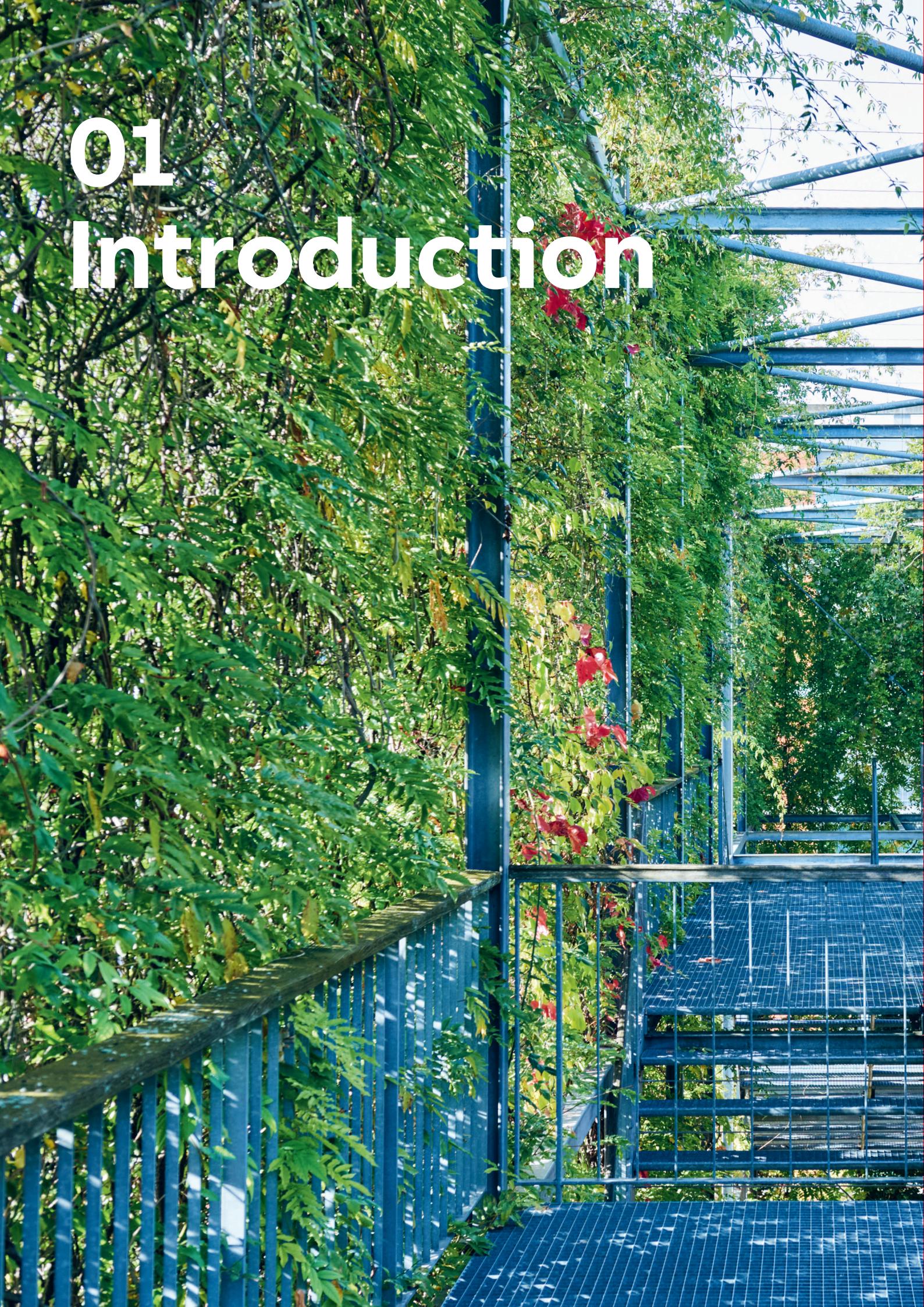
(4) Growth rates for orders, order backlog and revenues are on a comparable basis, see the "Supplemental information" section of this annual report.

(5) Constant currency (not adjusted for portfolio changes).

# Table of contents



- 
- 01**  
**Introduction**  
**8–51**
- 02**  
**Corporate governance report**  
**52–73**
- 03**  
**Compensation report**  
**74–111**
- 04**  
**Financial review of ABB Group**  
**112–243**
- 05**  
**ABB Ltd statutory financial statements**  
**244–261**
- 06**  
**Supplemental information**  
**262–266**

A photograph of a lush green vine with small leaves and occasional red flowers, growing over a blue-painted metal railing and structure. The structure appears to be a modern architectural element, possibly a bridge or walkway, with a grid-patterned floor. The background shows more of the same greenery and some blue sky.

# 01 Introduction

- 
- 10 Chairman and CEO letter**
- 14 Targets and targets fulfilment**
- 16 Sustainability: Creating long-term value across the value chain**
- 22 Executive Committee**
- 24 Diversity and inclusion: Our people**
- 28 Electrification**
- 34 Motion**
- 38 Process Automation**
- 42 Robotics & Discrete Automation**
- 46 Share developments**
- 48 Cash generation and capital allocation**
- 50 Key investor questions 2021**

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**CHAIRMAN AND CEO LETTER**

# Dear shareholders, customers, partners and employees,

The year 2021 was also characterized by uncertainty related to the continuing impacts of the COVID-19 pandemic, especially in the second half. Although demand increased significantly, as can be seen in ABB's order performance, broad disruptions in the global supply chain – including component shortages, challenging logistics and tight labor markets – hampered our ability to convert strong order intake into actual customer deliveries. We expect supply-chain problems to ease during the course of this year, and while rising inflation is a concern, it seems likely that the era of ultra- loose monetary policy is coming to an end, which is good news for the economy.

When it comes to longer-term trends, ABB is well-positioned in very attractive markets. Despite the absence of a global agreement on actions to achieve the Paris climate goal, the COP26 climate conference showed that reducing emissions and making more efficient use of resources are now a must for governments and businesses. For ABB, as a provider of electrification, automation and digital technologies, this represents a huge opportunity. Demand for electricity is growing twice as fast as for any other form of energy and software-driven automation is the most effective way to improve energy and resource efficiency.

## Positioned for stronger growth

In 2021, ABB started to reap the benefits of its ongoing transformation. Improved efficiency combined with higher demand resulted in a significant increase in orders as well as a marked improvement in profitability. In our Business Areas, we advanced on several fronts, with the launch of important innovations for the transport sector and the mining industry, a value-adding acquisition in robotics, and the divestment of our Dodge business (Mechanical Power Transmission Division) for \$2.9 billion in cash.

We made good progress in building a high-performance culture by empowering our Divisions, and we initiated several important actions to reduce our own CO<sub>2</sub> emissions and make ABB a more attractive employer. These achievements, which are covered in more detail below and in the following pages, provide a solid foundation for future profitability and growth. They will also help to strengthen ABB's position in key market segments as well as contribute to sustainable development. In short, our company is now moving forward strongly and with a clear purpose and direction.

Tragically, over the course of the year, we lost several colleagues due to continued outbreaks of COVID-19. However, our high level of preparedness helped us protect our people and keep our operations running. Thanks to our strong focus on safety, we saw a further reduction in workplace injuries and recorded no fatalities for the first time since 2011.

## Financial performance

Our strong financial performance in 2021 showed that our "ABB Way" operating model, introduced in 2020, is the right one for our company. All of our four Business Areas contributed to strong order growth as well as increased profitability. We also improved cash flow and strengthened our balance sheet. For the full-year 2021, Group orders were up 20 percent, revenues rose by 11 percent, and we increased our operational EBITA margin by 3.1 percent to 14.2 percent.

Our order backlog increased, driven in part by strong demand and but also due to supply-chain challenges hampering customer deliveries. We were able to mitigate some of them thanks to our global footprint and multiple sourcing strategy, but a worldwide shortage of semi-conductors, impacted logistics and a tight labor market in the United States meant that deliveries to customers were delayed starting in the third quarter. We expect the situation to ease over the course of this year.

In light of our improved financial results, and in line with our policy of paying a sustainable dividend over time, we will be proposing a dividend of CHF 0.82 per share to our shareholders to be voted on at the annual general meeting on March 24, 2022.

At the AGM, we will also ask our shareholders to approve the cancellation of shares purchased through a second buyback program that was launched on April 9, 2021. The buybacks are to return \$7.8 billion of cash proceeds from the Power Grids divestment to shareholders. We will also seek shareholder approval for the cancellation of shares purchased under the initial buyback program that were not proposed for cancellation at ABB's 2021 AGM.

## Cultural change

A key objective of our transformation is to build a high-performance culture by empowering our



20 Divisions with full ownership and accountability for their respective strategies, performance and resources. Under our decentralized ABB Way operating model, performance is measured through a scorecard system, which provides full transparency on key measures.

To be able to deliver on our commitments to our stakeholders, our Divisions are required to be stable and profitable before focusing on growth. At the end of 2021, around 60 percent of our Divisions were in growth mode, which means that they focus both on organic growth as well as M&A opportunities to consolidate their market position.

Our long-term objective is to shift to more attractive markets, with better quality of revenues, which means better gross margins, less risk and lower earnings volatility. Among the high-growth segments we are targeting are: water and wastewater, food and beverage, sustainable transport and data

centers. We aim to be number 1 or 2 in all of our customer segments.

#### **Strengthening our portfolio**

To further strengthen our position in electrification and automation, we pursue a strategy of active portfolio management with the aim of making at least five small- to mid-sized acquisitions per year. In 2021, we acquired leading autonomous mobile robot manufacturer ASTI Mobile Robotics Group, which will help us to capture growing potential in areas such as logistics and warehouse automation. With ASTI, we now have the most comprehensive portfolio of industrial robots on the market.

In January 2022, we strengthened our E-mobility business by taking a controlling stake in United States electric vehicle (EV) infrastructure company, In-Charge Energy, as well as increasing our majority stake in Chinese EV charging provider, Chargedot

Shanghai New Energy Technology Co., Ltd. to 80 percent.

To drive the further growth and expansion of our E-mobility business, we are moving ahead with efforts to separately list that business and we aim to complete this during the second quarter of 2022. As the world leader in electric vehicle charging infrastructure, we are well-positioned in an extremely

Another important offering, from our Process Automation Business Area, was a portfolio of technologies under the name “ABB Ability™ eMine” to electrify and automate mines, including a remote monitoring capability to optimize energy usage. From 2022, the solution will also include high-power electric chargers for mining trucks as well as an automated trolley system that can reduce diesel consumption by up to 90 percent.

## TO BE ABLE TO DELIVER ON OUR COMMITMENTS, OUR DIVISIONS ARE REQUIRED TO BE STABLE AND PROFITABLE BEFORE FOCUSING ON GROWTH. AT THE END OF 2021, AROUND 60 PERCENT OF OUR DIVISIONS WERE IN GROWTH MODE.

attractive growth market – by 2035, EVs are expected to be outselling combustion cars.

We also made good progress with our planned divestments. We successfully closed the divestment of the Mechanical Power Transmission Division (Dodge) on November 1. This marks the completion of the announced first step to focus our business portfolio on our leading position in electrification and automation. As part of these actions, we have appointed a new head of the Turbocharging Division ahead of a likely spin off.

### Groundbreaking innovations

In 2021, ABB again demonstrated its capacity for groundbreaking innovation with the launch of several new solutions that will further drive the shift to electrification and automation and contribute to a low-carbon society.

One notable example from our E-mobility Division was the Terra 360, the world’s fastest electric-vehicle charger, capable of providing enough charge for 100 km of driving in less than three minutes, or of fully charging an EV in less than 15 minutes. Designed for commercial fleets and heavy-duty vehicles as well as electric cars, the Terra 360 has the capacity to charge up to four vehicles simultaneously and can be installed in almost any setting from the curbside to gas stations and motorway stops.

### Progress on sustainability

In 2021, we began implementing our 2030 sustainability strategy, with the focus on reducing CO<sub>2</sub> emissions across our value chain. In the past two years, we have reduced emissions from our own operations by 39 percent, in part by using our own technologies. To achieve our goal of carbon neutrality by 2030, we committed to electrifying our vehicle fleet, sourcing 100 percent of our energy from renewables and installing energy management systems at our sites around the world. Our carbon-neutrality commitment was verified by the Science-Based Targets initiative as being in line with the 1.5°C scenario of the Paris Agreement.

To help our customers reduce their CO<sub>2</sub> emissions – another key target of our 2030 sustainability strategy – we have identified products and solutions from our portfolio that deliver the most significant reductions in CO<sub>2</sub> emissions. At the core of our offering are our energy-efficient electric motors and drives produced by our Motion Business Area. Drives can reduce the power consumption of motors by up to 25 percent and the Motion Business Area’s flagship synchronous reluctance (SynRM) motor and drive package has set a new standard for energy efficiency. Thanks to its innovative magnet-free design, the SynRM motor also requires no rare-earth materials in its manufacture, further reducing resource consumption.

Alongside reducing CO<sub>2</sub> emissions, we also have the goal of preserving resources for future generations. In December 2021, we unveiled a new company-wide approach to drive circularity in our own and our customers' operations. By 2030, at least 80 percent of ABB's products and solutions will be evaluated against a clear set of key performance indicators (KPIs), corresponding to each stage of the product lifecycle. We will also send no waste to landfill, wherever this is compatible with local conditions. Today, close to 40 percent of our 440 sites around the world are already sending no waste to landfill.

To support a culture of diversity and inclusion, in line with our 2030 sustainability goal of promoting social progress, we launched a gender-neutral parental leave program for all ABB employees around the world. We also increased the proportion of women in senior management to 16.3 percent, from 13.5 percent in 2020. By 2030, our goal is that 25 percent of senior management roles are filled by women.

To ensure that sustainability is taken as seriously as our other performance targets, we are integrating sustainability KPIs into our performance management planning and our businesses are reporting them at the same time as financial KPIs. Sustainability KPIs are now also part of senior management incentives and a selection is included in our quarterly financial reports.

Finally, to encourage our people to get personally involved in driving ABB's sustainability journey, we launched the "Sustainability Changemaker Award", inviting ideas that support the achievement of our 2030 sustainability goals. The winning individual or team will get the chance to turn their idea into reality.

### **Strong future prospects**

Having decentralized our organization and successfully rolled out our ABB Way operating model, we are in a strong position to capture future growth opportunities. The three key growth drivers for our businesses are: resource efficiency through electrification and automation, where we are global leaders, occupying number 1 or 2 positions in the market; new ways of working, in which our Divisions are accountable for growth and decision-making has been moved closer to the market; and the acceleration of environmental, social and governance (ESG) drivers for energy efficiency and automation.

Accordingly, we have lifted our revenue growth target to 4–7 percent through the economic cycle, in constant currency. Of that, we expect 3–5 percent to come from organic growth and 1–2 percent from acquired growth. We have also sharpened our operational EBITA margin target to be at least 15 percent as of 2023. Previously, we had targeted 3–5 percent for revenue growth through the cycle and an operational EBITA margin in the upper half of a 13–16 percent range as of 2023.

With our leading technologies and talented people, we are confident that ABB will continue to go from strength to strength while living up to the expectations of its stakeholders and making a valuable contribution to a more sustainable society.

On behalf of the Board of Directors and the Executive Committee, we would like to thank our customers and shareholders for their continued trust in ABB and to thank our employees for their tremendous commitment, engagement and hard work. We are proud to lead them.

Best regards,

**PETER VOSER**  
Chairman of the Board  
of Directors

**BJÖRN ROSENGREN**  
Chief Executive Officer

# Targets fulfilment

ABB's financial framework mirrors the company's ambition for improved performance and reflects increased accountability, transparency and speed in decision making. With our 2030 sustainability strategy, we are enabling a low-carbon society, preserving resources, promoting social progress and driving integrity and transparency across the value chain.

## Financial target framework and 2021 performance

### REVENUE GROWTH

Target: **4–7%**  
annual average through  
economic cycle<sup>(1)</sup>

2021 performance:

**8%**

### OPERATIONAL EBITA MARGIN<sup>(2)</sup>

Group target: **≥15%**  
as from 2023

2021 performance:

**14.2%**

### ROCE<sup>(2)</sup>

Target: **15–20%**

2021 performance:

**14.9%**

### FCF CONVERSION TO NET INCOME<sup>(2)</sup>

Target:

2021 performance:

**~100%**

**108%**

### BASIC EPS GROWTH

Target: **EPS**  
growth > revenue  
growth

2021 performance:

**-7%**

Basic EPS growth<sup>(3)</sup>

(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 "Supplemental information" section of this annual report.

(3) Includes impact from Power Grids related book gain in 2020 and Mechanical Power Transmission related book gain in 2021.



## Selected sustainability targets and 2021 progress

### WE ENABLE A LOW-CARBON SOCIETY

Target:

Achieve carbon neutrality in ABB's own operations by 2030

Progress:

**39%**

Reduction compared with 2019 baseline

### WE PRESERVE RESOURCES

Target:

Zero waste from ABB's own operations to be disposed of in landfills by 2030, wherever this is compatible with local conditions and regulations

Progress:

**28%**

Reduction compared with 2019 baseline

### WE PROMOTE SOCIAL PROGRESS

Target:

Double number of women in senior management roles to 25% by 2030

Progress:

**16.3%**

From 13.5% in 2020

## SUSTAINABILITY

# Creating long-term value across the value chain

ABB has always taken a sustainable approach to business. Our predecessor companies were founded in the late 19th century to take advantage of electricity and since then ABB has been helping its customers electrify their operations as well as improve energy efficiency and productivity.

Today, sustainability is at the center of our company Purpose and the value that we create for stakeholders. Last year, we began implementing our 2030 sustainability strategy, having reduced our greenhouse gas emissions by more than half in our previous strategy period to 2020.

### Focus areas of our 2030 sustainability strategy

To determine the focus areas of our 2030 sustainability strategy, we conducted some 400 hours of interviews with 300 stakeholders of ABB's four Business Areas, including customers, suppliers, investors, public representatives and NGOs in 2019. We also analyzed some 40,000 comments from ABB's annual employee engagement survey.

respectively. Each target is supported by operational targets and actions.

### From strategy to implementation

Last year, we began implementing our 2030 sustainability strategy with the focus on enabling a low-carbon society. To support our customers in reducing their CO<sub>2</sub> emissions, we identified a basket of the products and solutions from our portfolio that deliver the most significant reductions in CO<sub>2</sub> emissions for our customers. The calculations have been validated by a third party and the first measurements will be reported in our 2021 sustainability report.

To achieve carbon neutrality across our own operations, we are committed to reducing our scope 1 and 2 emissions by at least 80 percent. To achieve these targets, we will electrify our vehicle fleet, use renewable energy to power our sites and improve energy efficiency across our operations.

TO ACHIEVE CARBON NEUTRALITY, WE WILL ELECTRIFY OUR VEHICLE FLEET, USE RENEWABLE ENERGY TO POWER OUR SITES AND IMPROVE ENERGY EFFICIENCY ACROSS OUR OPERATIONS.

Drawing on the expectations and requirements of those stakeholders, we defined areas where we can make the biggest impact: enabling a low-carbon future, preserving resources, promoting social progress, as well as strengthening our commitment to responsible business practices, and driving integrity and transparency across the value chain.

### Sustainability focus areas and targets

For each of our sustainability focus areas, we defined at least three main targets that apply to ABB, to our customers, and to our supply chain

When it comes to our supply chain, we have mapped our emissions and started engaging with our suppliers through our supplier sustainability framework. We are currently defining more specific actions on the most impactful upstream emissions.

To preserve resources, we are introducing circularity into our business models, aimed at reducing waste at every stage of the value chain. To achieve this goal, we will continuously improve the recycling and reusability of our products and make them more durable, as well as design and reduce the use of virgin and hazardous materials.

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## Sustainability strategy 2030

How did we get there\*

# 400

Hours of interviews to  
determine the focus areas of our  
2030 sustainability strategy

# 300

Stakeholders of ABB's four Business  
Areas, including customers, suppliers,  
investors, public representatives and  
NGOs interviewed

# 40,000

Employee comments analyzed from  
our engagement survey

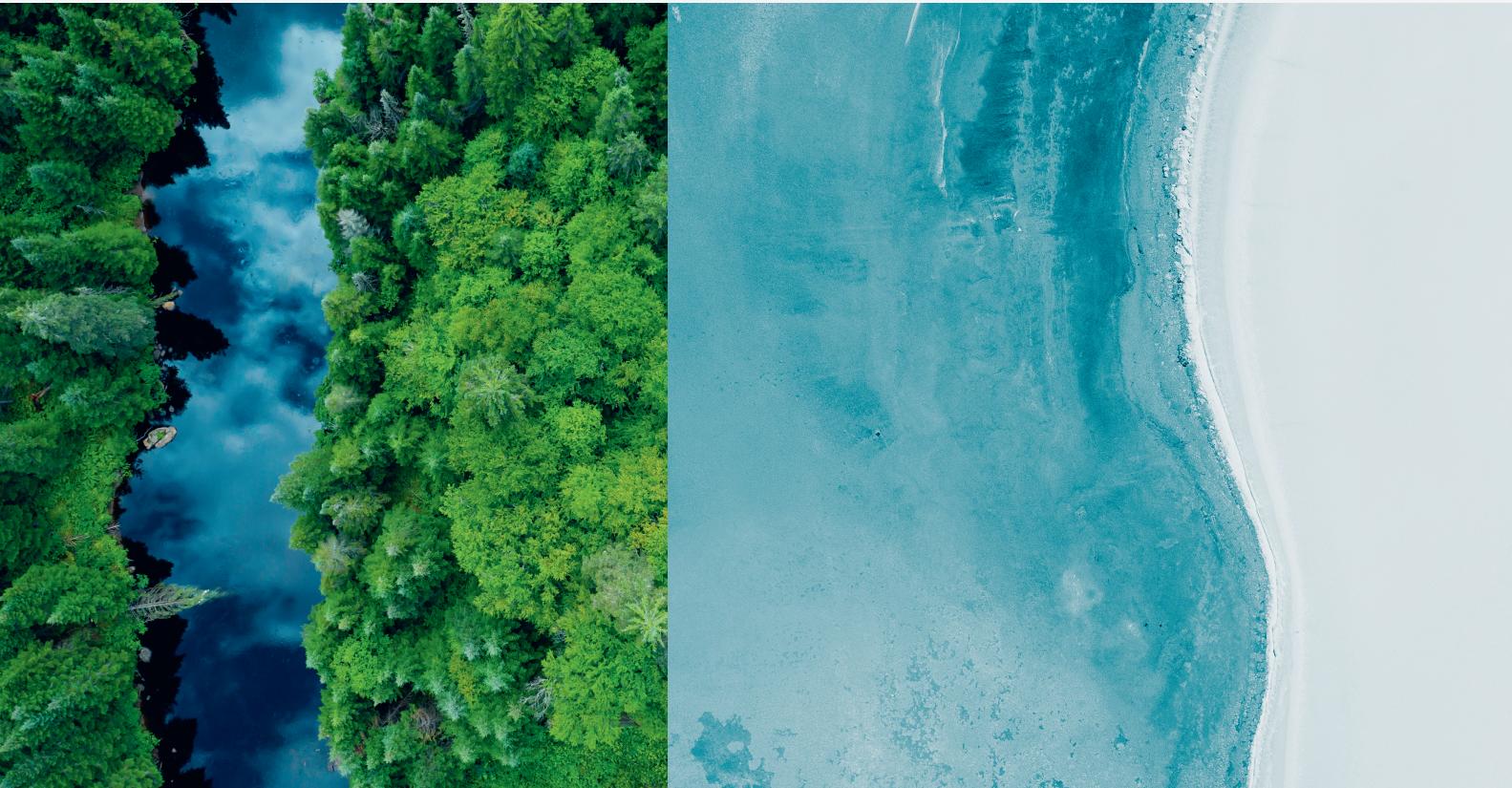
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### Material topics

- Products, solutions and services
- Stakeholder engagement
- Carbon reduction
- Health & safety
- Ethics
- Employee wellbeing
- Responsible sourcing
- Human rights & labor
- Operations – environment
- Circular economy
- Socio-economic impact
- Business resilience
- Data privacy
- Diversity & inclusion

\* Figures from 2019 internal and external stakeholder engagement process used for sustainability materiality matrix.

# Our 2030 commitment



## Enabling a low-carbon society

**Support our customers** in reducing their annual CO<sub>2</sub> emissions by at least **100 megatons**.

Achieve **carbon neutrality** across our **own operations**.

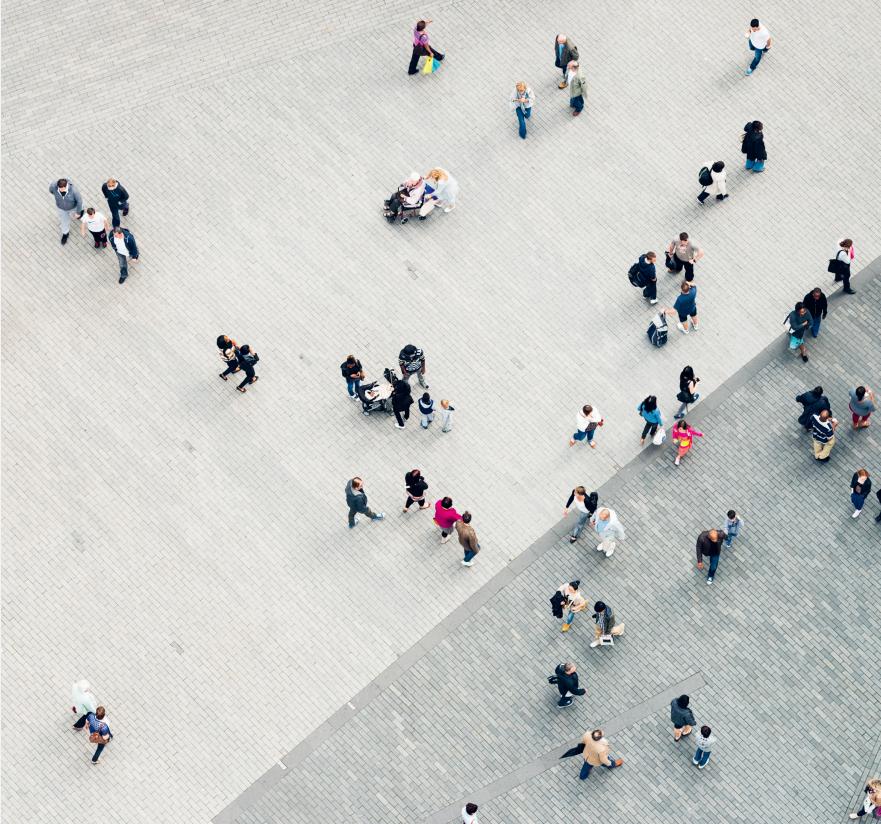
Reduce CO<sub>2</sub> emissions in our **supply chain** through a systematic approach with impactful suppliers.

## Preserving resources

Cover at least **80 percent of ABB products and solutions** with our **circularity approach**.

Reduce **waste sent to landfills to zero**.

Implement **supplier sustainability framework including environment** for at least 80% of supply spend in focus countries.



## Promoting social progress

Aim for **zero harm to employees and contractors**.

**Double the number of women in senior management** roles to 25%; target top-tier employee engagement score in our industry.

Provide impactful support for **community-building initiatives**.

Implement **supplier sustainability framework, including human rights**, for at least 80% of supply spend in focus countries.

## Integrity and transparency

Extend ABB new **Code of Conduct-based approach to projects and counterparties**.

Include compliance with **Supplier Code of Conduct** in procurement terms and conditions.

Include sustainability targets in **senior management incentives**.

To promote social progress, we are creating safe, fair, equitable and inclusive working environments in which our people can succeed and develop. We also work with suppliers to proactively identify, assess and address human rights issues, and to drive broader environmental, social and governance performance.

Each of our sustainability targets has one or more key performance indicators (KPIs) to measure progress. These are being progressively integrated into our performance management planning and are reported by the business at the same time as financial KPIs. Sustainability KPIs are now also part of senior management incentives.

## Actions to enable a low-carbon society

ABB joined three initiatives led by the international non-profit Climate Group to reduce its own emissions:

- EV 100: ABB commits to electrifying its fleet of more than 10,000 vehicles by 2030.
- RE 100: ABB commits to sourcing 100 percent renewable electricity by 2030.
- EP 100: ABB commits to establishing energy efficiency targets and continuing to deploy energy management systems at its sites.

ABB's carbon reduction targets received approval by the Science Based Targets initiative (SBTi) confirming that they are in line with the 1.5°C scenario of the Paris Agreement. ABB also joined the Business Ambition for 1.5°C Campaign, a global coalition of UN agencies, business and industry leaders, led by the UN Global Compact (UNGC).

## How we are preserving resources

We aim to preserve resources at all levels of the value chain by eliminating waste in our own operations and making our products last longer. Today, among our 440 sites across the world, close

to 40 percent are already sending no waste to landfills.

We are also working with customers to reuse and recycle our products. We aim to help them reduce their resource consumption through more efficient processes and by replacing or upgrading old and outdated equipment.

Our objective is to go beyond compliance to become a leader in circularity. That means setting specific, transparent key performance indicators for all aspects of the product lifecycle to enable continuous improvement across our portfolio.

When it comes to our suppliers, our target is that 80 percent of our supply spend in focus countries is covered by Sustainable Supply Base Management (SSBM), which covers all aspects of environmental, social and governance (ESG) performance, including preserving resources.

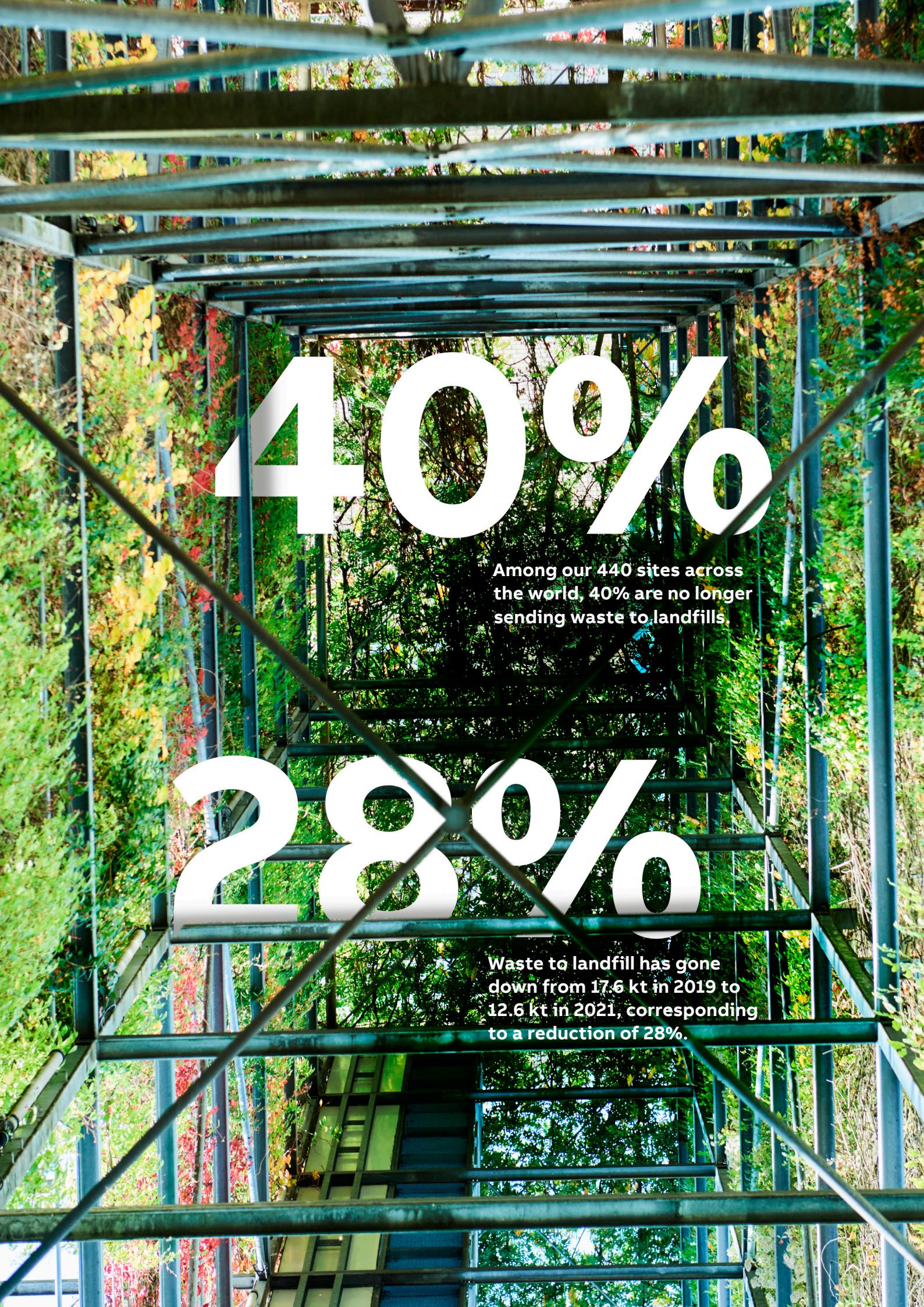
## Case studies

### Reducing our carbon footprint with recycled plastic

In the Netherlands, ABB introduced a range of surface-mounted junction boxes made entirely from recycled plastic waste. Hundreds of millions of these boxes are installed across Europe every year and using recycled rather than new plastic can reduce carbon emissions by up to 70 percent. In the Netherlands, we estimate that this new range of junction boxes and achieve an annual CO<sub>2</sub> footprint reduction of up to 300,000 kilograms – the equivalent of 500 flights from London to New York.

### ABB factory in Italy achieves zero waste to landfill target

In 2021, ABB Smart Power's manufacturing unit in Frosinone, Italy, stopped sending waste to landfills, in line with ABB's target to eliminate waste to landfill by 2030. The factory, which produces more than 3 million circuit breakers per year, achieved the target within two years through rigorous waste sorting and identification. Today, it separates production waste into around 150 categories of material and every workstation has separate waste containers for cardboard/paper and plastic.



# 40%

Among our 440 sites across  
the world, 40% are no longer  
sending waste to landfills.

# 28%

Waste to landfill has gone  
down from 17.6 kt in 2019 to  
12.6 kt in 2021, corresponding  
to a reduction of 28%.

# Executive Committee

## As of December 31, 2021



**PETER TERWIESCH**  
President  
Process Automation

**SAMI ATIYA**  
President  
Robotics & Discrete  
Automation

**BJÖRN ROSENGREN**  
Chief Executive Officer

**THEODOR SWEDJEMARK**  
Chief Communications and  
Sustainability Officer

**MARIA VARESELLONA**  
General Counsel &  
Company Secretary



**CAROLINA GRANAT**  
Chief Human Resources  
Officer

**TARAK MEHTA**  
President  
Electrification

**TIMO IHAMUOTILA**  
Chief Financial Officer

**MORTEN WIEROD**  
President  
Motion

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## DIVERSITY AND INCLUSION

# Our people

## Inclusion means everyone

At ABB, we are creating an inclusive culture that represents our communities in all of their diversity. Our goal is that every one of our 105,000 colleagues around the world feels that they are working in a safe, fair, equitable and inclusive environment, where they can succeed and develop.

With our 2030 diversity and inclusion (D&I) strategy, we seek to increase diversity across all dimensions, including gender, LGBTQ+, abilities, ethnicity and generations. Our commitment is reflected in the fact that each dimension is sponsored by a member of our Group Executive Committee, with our CEO Björn Rosengren being the sponsor for gender diversity.

ABB is already a diverse company, with 140 nationalities and five generations represented in the workforce. Here, we tell the stories of nine colleagues who have chosen to pursue their careers at ABB.



**The number of  
nationalities of people  
working at ABB.**



**BRIA WILLIAMS**  
HR business partner,  
Electrification (US)

A self-described people advocate and change agent, Bria joined ABB to bring people together, help them grow and learn, and bring their authentic selves to work.

But to achieve her goals, Bria had to overcome one big challenge – her fear of speaking in public. Bria's supportive manager made sure that she felt comfortable talking with colleagues and pitching ideas. This meant Bria had to step out of her comfort zone – an experience that changed her life and her career prospects. Today, after successfully obtaining her HR certification through the company's development opportunities, Bria helps colleagues realize their career plans and potential at ABB.



**IGA KACZMAREK-WRONA**  
DevOps engineer and  
product owner – ABB Ability,  
Process Automation (Poland)

As a science student, Iga wanted to work in a role that would allow her to combine her twin interests in arts and physics.

After her degree and an internship at ABB, Iga joined the ABB Ability team in Poland where she found an ideal environment to develop and learn as one of the growing number of women in STEM (science, technology, engineering and mathematics) fields. Her current programming role also plays to her love of solving logic puzzles. Through ABB, she was able to meet the famous astronomer and Nobel Prize winner, Didier Queloz, providing further energy and motivation to keep taking on challenges and continuing her learning journey.



**PEDY ZHU ZHU**  
R&D program manager,  
Robotics and Discrete  
Automation (China)

Growing up in China, Pedy was interested in engineering, a traditionally male dominated field. After completing her master's degree, she joined the ABB Robotics Research & Development center.

At ABB, Pedy's manager trusted her with responsibility, allowing her to learn from her mentor and other experienced colleagues. She felt empowered to own her projects and benefited from a supportive learning environment. The support system continued throughout her maternity leave, and she felt welcomed by her manager and team on her return. In the decade that she has been at ABB, she has the opportunity to develop cobots that help customers increase efficiency, productivity and sustainability. She personally identifies with the IRB 1300 robot, agile and quick, just like her.

**JORGE PEREZ BUITRAGO**

Planning & fulfilment specialist, Electrification (US)

Jorge's journey with ABB began at a university job fair in Puerto Rico. Jorge wanted to learn more about the role of a mechanical engineer, and ABB offered him a summer internship. After finishing his degree, Jorge was selected into the ABB R&D team in Milwaukee, WI. Now in Philadelphia, he is exploring the role of a Solutions Product Manager in the Electrification business.

Jorge is motivated by the opportunities to continue learning, but the motivation goes beyond that. At ABB, he can be himself at work. As a member of the LGBTQ+ community, and the spokesperson of the internal employee group, Encompass Pride, Jorge has felt welcomed by everyone at ABB and wants others to feel as comfortable as he does at work.

**SUBBARAMAIAH GANESH**

Leading account payables for AMEA, Global Business Services (India)

Subbaramaiah left a permanent job to join ABB on a short-term contract. Two decades later, he is still with ABB.

Subbaramaiah has faced many challenges in life. He was diagnosed with polio as a child. Later he suffered an accident that left him partially immobile for a few months. Apart from his family, his ABB colleagues provided a strong support system at that tough time. His manager gave him time to recover fully before resuming work, and the managing director of ABB India visited him at home to check on his health.

"ABB has stood by me, valued me, and given me excellent opportunities," he said. "Most importantly, the warmth, the feeling of a community here, is unmatched."

**ZAHER RAJAB**

Automation engineer, Electrification (Netherlands)

Zaher arrived in the Netherlands as a Syrian refugee in 2015. Faced with learning a new language and culture, different from his Arabic heritage, Zaher embraced the challenge.

After his first job in automation, Zaher joined ABB to have more flexibility in his job as a software specialist and to work with a diverse team of talented engineers. By automating processes, such as the packaging of switches, Zaher was able to increase production efficiency. Zaher believes in continuous learning, and that there are no limits to developing new ideas and automating processes.

**FARAH WAHIDAH MAZLAN**

Service sales engineer,  
Electrification  
(Malaysia)

Farah has always loved challenges. Getting into the field of electrical engineering was one of them. After completing her degree program, Farah joined ABB to continue her development as an engineer, and to have a positive impact on her local community and the environment.

In 2020, she achieved a major win at ABB: securing a multi-year service contract with one of Malaysia's leading utilities. The secret was her ability to listen and understand what the customer needed. Farah credits her supportive colleagues and a great working environment for keeping her motivated to keep learning and developing as a service engineer at ABB.

**ALI PARVIZI**

Traction sales manager,  
Motion  
(Australia)

When Ali moved to Australia from his home country of Iran, the future appeared risky, and very different from the languages and culture he had grown up with. That changed when ABB gave him an opportunity to join the traction business as a sales manager. Ali's manager gave him the freedom to take initiatives to develop the traction business in Australia and New Zealand.

Ali loves the opportunity of working on innovative solutions with talented colleagues and winning over influential customers. As a person who is driven to learn new things, Ali has found both encouragement and reward at ABB, and views this as an immense value-add of working in a truly global company.

**CRISTINA D'ÁVILA**

Senior electrification  
engineer, Process Automation  
(Brazil)

Cristina studied electrical engineering and took her first career steps in Rio de Janeiro. But she felt her career stalling, and one of the reasons was there were very few women in the field. Cristina did not give up, and went to São Paulo, where she was hired by ABB to work on a project for Usiminas, one of the biggest steel producers in Brazil.

Since that day 25 years ago, Cristina has been with ABB and is still excited about her work. In her current role in the field of electrical engineering she is responsible for developing electrical and installation projects for the energy industry division in Brazil. She has proudly witnessed how women are playing a bigger role in engineering. Cristina's advice to a younger generation of women joining the engineering workforce is to "follow your goals, overcome obstacles regardless of gender, and never stop asking questions."

# Electrification



WRITING THE FUTURE OF SAFE,  
SMART AND SUSTAINABLE  
ELECTRIFICATION.

ABB's Electrification business offers a wide-ranging portfolio of products, digital solutions and services, from substation to socket, enabling safe, smart and sustainable electrification.

# \$13.2 bn

Revenues

# 16.1%

Operational EBITA margin

Market growth is driven by electricity demand that grows two times faster than other energy sources as a result of urbanization and population growth. Additionally, digitalization is accelerating demand for intelligent solutions.

**The Business Area consists of the following six Divisions:**

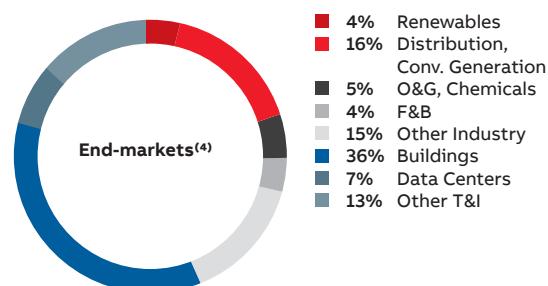
- **Distribution Solutions**, GLOBAL NO. 1 IN MEDIUM-VOLTAGE. Medium-voltage electrical components and digital devices, medium- and low-voltage switchgear, energy systems, digital systems and service
- **Smart Power**, GLOBAL NO. 3, NO. 2 IN LOW VOLTAGE. Low-voltage breakers & switches, enclosures, motor starter application and power protection

- **Smart Buildings**, GLOBAL NO. 3, NO. 1-2 IN DISTRIBUTION ENCLOSURES AND DIN-RAIL PRODUCTS. Miniature breakers, distribution enclosures, wiring accessories and building automation
- **Installation Products**, GLOBAL NO. 1, NO. 1 IN NORTH AMERICA. Wire & cable management, termination, fittings and other accessories
- **Power Conversion**, NO. 4 IN DC POWER SOLUTIONS. Power conversion products including embedded power products, DC power solutions and services (To be exited)
- **E-mobility**, GLOBAL NO. 1 IN EV CHARGING SOLUTIONS. AC & DC charging hardware, B2C & B2B digital services, advanced energy & fleet management

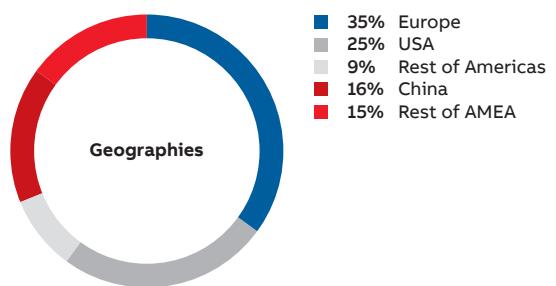
**Key figures Electrification**

\$ in millions, unless otherwise indicated	FY 2021	FY 2020	US\$	Comparable <sup>(2)</sup>
Orders	14,381	11,884	+21%	+18%
Order backlog (end December)	5,458	4,358	+25%	+29%
Revenues	13,187	11,924	+11%	+9%
Income from operations	1,841	1,335	+38%	
Operational EBITA <sup>(1)</sup>	2,121	1,681	+26%	+21% <sup>(3)</sup>
as % of operational revenues	16.1%	14.1%	+2.0 pts	
No. of employees (FTE equiv.)	50,800	50,500	+1%	

% of FY 2021 third party revenues



% of FY 2021 third party revenues



(1) For non-GAAP measures, see the "Supplemental information" section of this annual report.

(2) Growth rates for orders, order backlog and revenues are on a comparable basis (local currency adjusted for acquisitions and divestitures).

(3) Constant currency (not adjusted for portfolio changes).

(4) Management estimates.

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## ELECTRIFICATION

# Powering a sustainable future

ABB's Electrification Business Area is meeting growing demand for safe, smart and sustainable electrification by tackling some of society's greatest challenges. In the face of rising emissions and pollution, population growth and aging infrastructure, cities are having to transform themselves. By far the most significant positive impact we can have is through innovative technologies that reduce energy consumption and emissions, which improves quality of life for citizens around the world.

ABB technologies are found nearly everywhere there is electricity. Operating in more than 100 countries, ABB Electrification employed 51,000 people and generated \$13.2 billion in revenue in 2021 through its six market-leading Divisions – Smart Power, Smart Buildings, Installation Products, Distribution Solutions, E-mobility and Power Conversion.

Another innovation that dramatically reduces greenhouse gas (GHG) emissions is ABB's AirPlus™, a groundbreaking eco-efficient gas mixture that replaces SF<sub>6</sub> in gas-insulated switchgear (GIS) applications. The importance of replacing SF<sub>6</sub> cannot be underestimated. It is one of the world's most powerful GHGs, 23,500 times more potent than CO<sub>2</sub>, with a lifespan of 3,200 years. Since 2002, the concentration of SF<sub>6</sub> in the atmosphere has more than doubled.

In 2021, ABB Electrification continued to introduce new technologies to the market. In September, we launched the world's fastest EV charger, the Terra 360, which can deliver 100km of range in less than three minutes or fully charge an electric car in 15 minutes. This milestone for EV charging will support the rapidly growing global demand for emissions-free vehicles and net-zero goals.

## AS A LEADING PROVIDER OF ELECTRIFICATION SOLUTIONS FOR INDUSTRY, INFRASTRUCTURE AND TRANSPORT – SECTORS THAT ACCOUNT FOR THREE-QUARTERS OF GLOBAL ENERGY CONSUMPTION – ABB ELECTRIFICATION IS A KEY ENABLER OF A LOW-CARBON SOCIETY.

Global electricity demand is expected to more than double by 2050. Unless drastic action is taken now to reduce emissions from power generation and consumption, temperatures will continue to rise at unsustainable levels. As a leading provider of electrification solutions for industry, infrastructure and transport – sectors that account for three-quarters of global energy consumption – ABB Electrification is a key enabler of a low-carbon society.

One such technology is the ABB Ability™ Energy and Asset Manager, which combines sensors and analytics software to provide insights on energy consumption and the performance of multiple systems in a factory or plant. By adopting this solution, a site that consumes 2 GWh of power per year, can reduce annual CO<sub>2</sub> emissions by 40 tons.

Digitalization continues to be an important driver of the energy transition. ABB Electrification is increasingly incorporating software and digital services into its offering. The ABB Ability Market-place™ portal provides customers with access to over 100 cloud-connected digital applications. And the ABB Electrification Startup Challenge invites companies from around the globe to compete for a \$30,000 investment to work with our R&D teams.

By 2030, we expect that our market-leading innovations and the promising technologies in our pipeline will enable customers to reduce annual CO<sub>2</sub> emissions by at least 100 megatons, equivalent to the annual emissions of 30 million combustion cars. As part of our "Mission to Zero" initiative, ABB Electrification is using our innovative technologies to make our own sites carbon neutral, while reducing emissions across our supply chain.



## Case studies

### Cutting energy costs at Vietnam telecommunications HQ by 20 percent

ABB's smart technology has been key to realizing telecom giant Viettel's ambitions to save energy and reduce its carbon footprint while maintaining operational efficiency at its Vietnam headquarters.

The ABB i-bus® KNX solution in the Hanoi facility controls all of the building's functions, from lighting and shutter control to heating, ventilation, security, and energy management. The solution is installed via a single bus interface alongside the standard power lines.

Thanks to this ABB technology, energy costs have been reduced by up to 20 percent, and the 1,000 people working in the building have a much more comfortable and secure work environment. This project sets a benchmark for how intelligent technology can reduce a building's environmental impact.

### Enabling Germany's first fully electrified bus terminal

As part of Germany's wider environmental agenda, Hamburg is one of the first cities to commit to the full electrification of its bus fleet. ABB Electrification equipment is helping the city meet its goal of cutting CO<sub>2</sub> emissions in half by 2030 compared with 1990 levels.

Public transport operator, Hamburger Hochbahn AG, is implementing a wide-reaching fleet electrification program that includes Germany's first fully electrified bus terminal.

ABB's turnkey solution included the installation of transformer, switchgear, and heavy vehicle charging stations in the central bus depot. These can simultaneously recharge 44 buses, each with a range of up to 150 km. Additionally, ABB provided the planning and implementation of the electric infrastructure and the connection of the bus depot to the grid.



## E-mobility – the future of road transport

Of 46 energy technologies and sectors identified by the International Energy Agency (IEA) as being “critical” to achieve net-zero emissions by 2050, only two are on track, according to the IEA: lighting and e-mobility<sup>(1)</sup>. Electric-vehicle (EV) registrations increased by 41 percent globally in 2020, while sales of combustion-engine cars dropped 16 percent. In the first quarter of 2021, global EV sales rose again by around 140 percent, compared to the same period in 2020.

Rapid expansion of the world’s EV charging infrastructure is necessary to support the burgeoning adoption of electric vehicles. By 2040, an estimated 290 million additional charging points will be required, amounting to circa \$500 billion in global investment.

ABB invested early in its EV charging business. Today, through hardware innovation, combined with the expansion of our software and digital offering, we are the market leader in EV charging infrastructure, having sold more than 525,000 chargers across 85 markets, including over 25,000 DC fast chargers and 500,000 AC chargers as of December 31, 2021. In addition, dedicated R&D centers such as our new E-mobility Innovation Lab in Delft in the Netherlands ensure the Division provides charging infrastructure that not only meets today’s needs but anticipates future e-mobility requirements.

To advance EV charging technology, we are also collaborating with leading software companies. In 2021, ABB’s digital e-mobility venture, PANION, and Amazon Web Services (AWS) began testing a newly developed, cloud-based solution, “PANION EV Charge Planning”. This solution is designed for the real-time management of EV fleets and charging infrastructure and will be launched in 2022.

ABB’s fast DC chargers run with a Connected Services Platform, which employs Microsoft’s Azure cloud services to enhance uptime, scalability, and operational efficiencies and to provide real-time remote support services. ABB’s superior offering

includes everything from authorization and analytics to remote monitoring and control.

The new Terra 360 charger is not only the most high-power charging solution in the world, but also one of the most versatile. Designed for commercial fleets, heavy-duty vehicles as well as electric cars, it is capable of charging up to four vehicles at a time.

ABB charging solutions have also played a key role in enabling the rapid transition to e-mobility of countries like Norway, which has installed more than 1,000 ABB fast chargers. Other countries, including the USA, Finland, and Qatar, are also turning to ABB to support their ambitious emissions reduction commitments. The Gulf state of Qatar intends to fully electrify its public transport network and has partnered with ABB to create one of the largest e-bus networks in the world. A heavy vehicle charging network with capacity for 1,000 electric buses to transport 50,000 passengers a day is currently under construction, with four bus depots, eight bus stations and 12 metro stations.

(1) <https://www.iea.org/topics/tracking-clean-energy-progress>



>525,  
000

The number of chargers sold across 85 markets, including over 25,000 DC fast chargers and 500,000 AC chargers as of December 31, 2021.

# Motion



## WRITING THE FUTURE OF MOTION.

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

# \$6.9 bn

Revenues

Market growth is driven by megatrends such as growing population, electrification, urbanization, decarbonization and digitalization. This requires further automation of industrial processes, energy efficiency and electric mobility.

**The Business Area consists of the following seven Divisions:**

- **Drive Products**, GLOBAL NO. 1. Comprehensive product portfolio of low-voltage AC drives
- **System Drives**, GLOBAL NO. 1. Low- and medium-voltage AC drives and modules, wind converters
- **Service**, GLOBAL NO. 1. Base services and spare parts, upgrades & replacements, smart solutions
- **Traction**, GLOBAL NO. 2. Traction systems incl. converters and motors, battery energy storage systems, auxiliary converters

# 17.1%

Operational EBITA margin

- **IEC LV Motors**, GLOBAL NO. 2. Comprehensive portfolio of low voltage motors for any industry and application, compliant with all major markets globally
- **Large Motors and Generators**, GLOBAL NO. 2. Comprehensive product portfolio of large AC motors and generators
- **NEMA Motors**, GLOBAL NO. 1. Comprehensive product portfolio of low voltage electric motors

## Key figures Motion

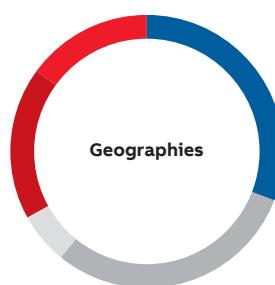
\$ in millions, unless otherwise indicated	FY 2021	FY 2020	US\$	Comparable <sup>(2)</sup>
Orders	7,616	6,574	+16%	+14%
Order backlog (end December)	3,749	3,320	+13%	+20%
Revenues	6,925	6,409	+8%	+7%
Income from operations	3,276	989	+231%	
Operational EBITA <sup>(1)</sup>	1,183	1,075	+10%	+6% <sup>(3)</sup>
as % of operational revenues	17.1%	16.8%	+0.3 pts	
No. of employees (FTE equiv.)	20,100	20,900	-4%	

% of FY 2021 third party revenues



- 7% Conv. Generation, Renewables
- 11% O&G, Chemicals
- 16% Mining, Metals
- 8% Water & Wastewater
- 11% F&B
- 21% Other Industry
- 13% Buildings
- 8% Rail
- 5% Other T&I

% of FY 2021 third party revenues



- 31% Europe
- 30% USA
- 6% Rest of Americas
- 18% China
- 15% Rest of AMEA

(1) For non-GAAP measures, see the "Supplemental information" section of this annual report.

(2) Growth rates for orders, order backlog and revenues are on a comparable basis (local currency adjusted for acquisitions and divestitures).

(3) Constant currency (not adjusted for portfolio changes).

(4) Management estimates.

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**MOTION**

# Helping customers become energy efficient

In 2021, ABB Motion launched the Energy Efficiency Movement, a multi-stakeholder initiative both to raise awareness of the advanced technologies that can mitigate climate change, and drive collective action to reduce energy consumption worldwide. At this critical moment for the climate, roughly 45 percent of the world's electricity is used to power electric motors in industry and buildings, and much of the installed base is out of date and inefficient.

ABB Motion enables major improvements in energy efficiency for industry, cities and transport with its leading portfolio of variable-speed drives, motors, generators, traction systems and digital services. Investing in more efficient technology is one of the simplest and most cost-effective ways to lower energy consumption and associated greenhouse gas emissions. As businesses and transport networks seek to bridge the gap that divides us from a fossil-free future, we offer our customers practical and proven technologies that help.

Our deep domain expertise, comprehensive offering and unmatched global presence make ABB Motion the partner of choice for customers seeking the best solutions and support. In 2021, Motion employed 20,000 people and generated \$6.9 billion in revenue. With the largest research and development budget in the industry, we are consistently pushing the boundaries of motor and drive technology for the benefit of our customers and society.

## INVESTING IN MORE EFFICIENT TECHNOLOGY IS ONE OF THE SIMPLEST AND MOST COST-EFFECTIVE WAYS TO LOWER ENERGY CONSUMPTION AND ASSOCIATED GREENHOUSE GAS EMISSIONS.

ABB's portfolio includes the most energy-efficient motors and drives on the market. Among these is a synchronous reluctance (SynRM) motor and drive package that has set a new standard for efficiency. The SynRM motor meets the IE5 ultra-premium efficiency rating, providing the performance advantages of permanent magnet technology without using rare earth materials.

Packaging a modern motor with an ABB drive optimizes its operation leading to even greater efficiency. Drives control the speed and torque of a motor to match the load requirements, typically reducing energy consumption by 25 percent or more in industrial applications. ABB's advanced drive offerings include our line of ultra-low-harmonic drives, which minimize electromagnetic disturbances in power networks, resulting in more reliable operations, reduced maintenance needs and higher efficiency.

### Serving a wide range of applications with efficient solutions

Transport represents another field of opportunity for the latest electric motion technologies: It accounts for about 25 percent of the world's energy use, and more than 99 percent of that currently depends on the combustion of fossil fuels. ABB Motion provides a variety of solutions for modern electric mobility, including systems used in electric trains, buses, ships and other heavy vehicles that are increasingly being powered by electricity. Our state-of-the-art traction, energy storage and e-drivetrain technologies enable energy-efficient and emission-free mobility in numerous transit systems, rail networks and vehicle fleets.

Alongside our technologies, we deliver a comprehensive range of services and digital solutions to maximize uptime, extend product lifecycles and

enhance the performance and efficiency of motors and drives. By tailoring our service offering and solutions to our customers' needs, we help them run their operations more profitably, safely and reliably, allowing them to better take advantage of new business opportunities.



## Case studies

### Synchronous condensers for greener energy

ABB is working closely with Statkraft, Europe's largest generator of renewable energy, to design, manufacture and install two high-inertia synchronous condenser systems for the Lister Drive Greener Grid project in Liverpool, England. The innovative project will play a key role in stabilizing the local electricity network to handle an increasing amount of wind and solar power. This will help National Grid meet its target of operating a zero-carbon electrical system in the UK by 2025.

Statkraft has signed a 10-year service contract with ABB in which we will deploy digital condition monitoring solutions that optimize performance and predict maintenance needs. By assessing real-time data with cloud-based analytics, our service team will be able to plan corrective actions before issues occur, ensuring the system is highly reliable.

### ABB traction technology to increase efficiency of Germany's high-speed trains

ABB traction converters were selected in 2021 to upgrade 76 high-speed locomotives on Germany's Deutsche Bahn network. As part of a refurbishment program, our highly energy-efficient traction converters are replacing power electronics from the 1990s. Upgrading the existing fleet will help extend its operating life and improve energy efficiency, reliability and ease of maintenance.

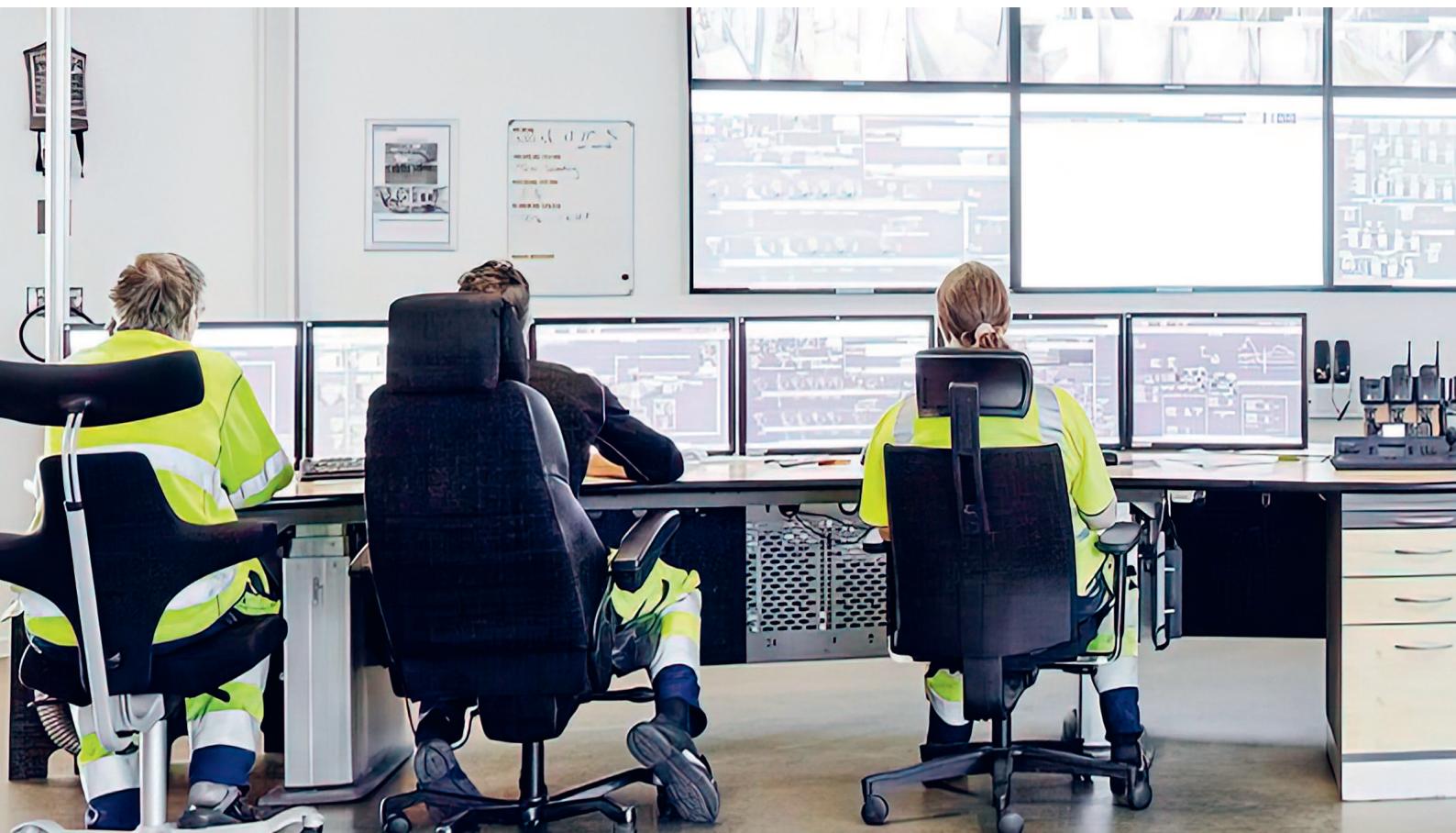
### ABB motors and drives reduce power consumption at leading fertilizer company

To improve energy efficiency at its largest production site, Norwegian mineral fertilizer producer, Yara, is upgrading its electric motors with high efficiency ABB drives and motors.

As part of a global frame agreement, Yara has already upgraded around 1,000 motors to an IE3 efficiency rating, mostly with drives. In the next step, some 2,500 motors will be replaced with IE5 SynRM motor and drive technology. Nearly 70 percent of these applications are for pumps and fans, which offer significant room for energy savings. The annual power savings at the Yara Porsgrunn site in Norway are expected to be in the region of 32–40 GWh, leading to CO<sub>2</sub> emissions reductions of 12–19 kilotonnes. In addition, Yara expects to save some €300,000 per year in maintenance costs due to lower wear and tear.

The Yara Porsgrunn site is also part of a project with ABB and Stena Recycling to recycle copper, aluminum and iron from old motors, helping to support the circular economy.

# Process Automation



## WRITING THE FUTURE OF SAFE, SMART AND SUSTAINABLE OPERATIONS.

ABB's Process Automation business offers a broad range of solutions for process and hybrid industries, including integrated automation, electrification and digital solutions, control technologies, software and lifecycle services, as well as measurement and analytics, marine and turbocharging offerings.

# \$6.3 bn

Revenues

Market growth is driven by need for productivity, reliability and improved resource efficiency as well as increasing demand for decarbonized operations and safer workplaces.

**The Business Area consists of the following five Divisions:**

- **Energy Industries**, NO. 1–2 IN DISTRIBUTED CONTROL SYSTEMS, NO. 1 IN POWER GENERATION, NO. 3–5 IN OIL, GAS, CHEMICALS. Integrated automation & electrical systems, safety, service and digital solutions
- **Process Industries**, NO. 1 IN DISTRIBUTED CONTROL SYSTEMS, NO. 1–2 MINING, PULP & PAPER. Automation, electrical & motion systems; quality control, mine hoists, gearless mill drives, high power rectifiers, electromagnetic stirrers

# 12.8%

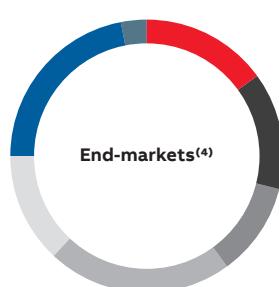
Operational EBITA margin

- **Marine & Ports**, GLOBAL NO. 1. Azipod® propulsion, ship and port electrification & automation, digital
- **Measurement & Analytics**, NO. 1 IN ANALYTICS, FORCE MEASUREMENT, NO. 2–5 IN INSTRUMENTATION. Gas and liquid analyzers, field instrumentation, force measurement, digital, service
- **Turbocharging**, NO. 1 IN LOW AND MEDIUM SPEED. Low, medium and high speed turbochargers, service, digital solutions (To be exited)

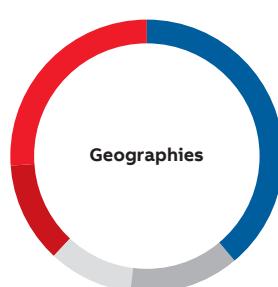
### Key figures Process Automation

\$ in millions, unless otherwise indicated	FY 2021	FY 2020	US\$	Comparable <sup>(2)</sup>
Orders	6,779	6,144	+10%	+7%
Order backlog (end December)	6,079	5,805	+5%	+10%
Revenues	6,259	5,792	+8%	+5%
Income from operations	713	344	+107%	
Operational EBITA <sup>(1)</sup>	801	451	+78%	+70% <sup>(3)</sup>
as % of operational revenues	12.8%	7.8%	+5.0 pts	
No. of employees (FTE equiv.)	22,000	22,200	-1%	

% of FY 2021 third party revenues



% of FY 2021 third party revenues



(1) For non-GAAP measures, see the "Supplemental information" section of this annual report.

(2) Growth rates for orders, order backlog and revenues are on a comparable basis (local currency adjusted for acquisitions and divestitures).

(3) Constant currency (not adjusted for portfolio changes).

(4) Management estimates.

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## PROCESS AUTOMATION

# Supporting a prosperous, low-carbon society

Demand for energy and material is expanding in step with the world's population growth and the pursuit of higher living standards. At the same time, there is a need to reduce harmful emissions from human activity.

ABB's Process Automation Business Area supports industries that address a wide range of essential needs – from supplying energy and water to manufacturing goods and transporting them to market. Through our automation, electrification and digital technologies, we help our customers in industry, transport and infrastructure sectors improve the safety, efficiency and sustainability of their operations. With our R&D and innovation pipeline, we are continuing to push the boundaries of how to address the world's energy challenges and contribute to a circular economy, together with our partners and customers.

With 22,000 employees and \$6.3 billion in revenue in 2021, Process Automation enables efficient operations that are safer, smarter and more sustainable over the lifecycle of its customers' investments – some of the largest and most complex industrial infrastructures on the planet. Key to this is the extensive portfolio of solutions combined with the deep domain expertise of our five Divisions – Energy Industries, Process Industries, Marine & Ports, Measurement & Analytics, and Turbocharging. Our solutions include industry-specific products such as mine hoists, gearless mill drives, ma-

expand our solutions and portfolio with Industry 4.0 advances. Our Business Area is a trusted partner for customers at every stage of their digitalization journey, enabling them to maximize their existing investments and installed infrastructure as well as integrate new digital solutions, to take "billions of better operational decisions".

In 2021, in response to the challenges of the COVID-19 pandemic, the use of digital technologies for remote monitoring and control of operations became the "new normal". Today, ABB's remote technologies serve a growing number of customers with asset health monitoring, predictive analytics, enterprise-wide emissions tracking, and continuous access to service expertise, while enabling consistent cost reductions and improvements in productivity and safety. Our ABB Ability™ Collaborative Operations network provides 24/7 remote support to more than 1,500 ships, 80 mines, 300 power generation sites and over 1,200 other industrial facilities. Also in 2021, this remote support was critical to keeping critical infrastructure and production running, and people connected during expansive lockdown periods.

### Pushing the boundaries of process technologies

In 2021, we released new applications as part of the ABB Ability™ Genix Industrial Analytics and AI Suite. ABB Ability™ Genix Datalyzer enables comprehensive analysis, consolidation, and utilization

## WE ENABLE INDUSTRY TO OPERATE SAFELY, EFFICIENTLY AND SUSTAINABLY – MAKING A WORLD OF DIFFERENCE TOGETHER.

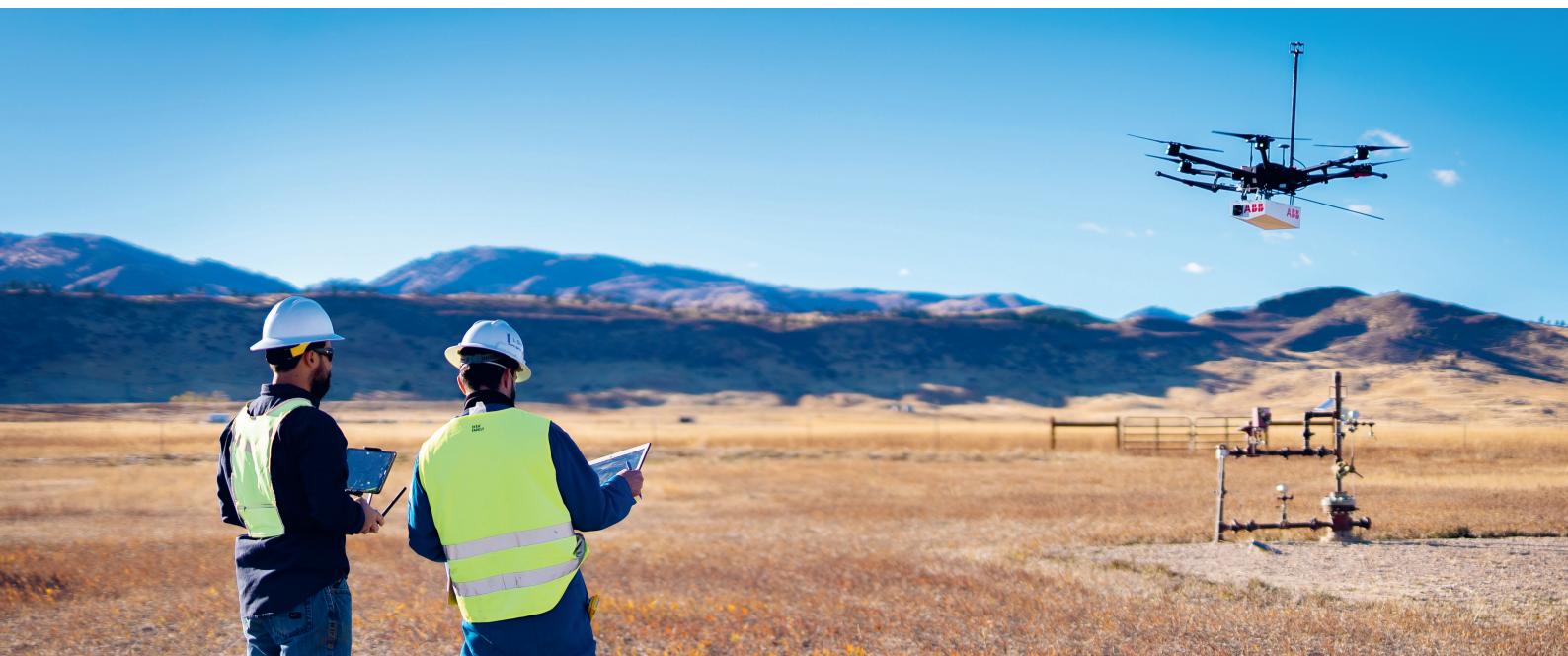
rine propulsion systems, high power rectifiers, or paper quality control systems, but also an industry-agnostic automation platform in Distributed Control Systems (DCS), where ABB has been the market leader for the past 22 years. All our solutions are supported by a wide range of advanced systems, remote and digital services.

### Leveraging digitalization

Connectivity has been at the heart of our solutions for decades. Over the years, we have accelerated the use of digital technologies to continuously

of emissions data from industrial plants, helping customers manage their emissions and improve environmental compliance while keeping costs under control. ABB Ability™ Genix Asset Performance Management (APM) consolidates ABB's asset management portfolio into a single powerful system, providing actionable insights that help improve equipment utilization.

In another major advance, Process Automation launched ABB Ability eMine™, a portfolio of solutions that makes the all-electric mine a reality. It deploys a range of fully integrated electrification,



automation and digital systems from mine to port. The benefits of all-electric mining are significant. Electrifying a single mining truck eliminates an amount of CO<sub>2</sub> emissions per year that would take 46,000 trees to absorb.

The launch of the world's fastest, most sensitive drone-based gas leak detection and emissions measurement system, HoverGuard™, was yet another important milestone of 2021. HoverGuard™ is capable of reliably detecting, quantifying and mapping leaks of greenhouse gases from natural gas pipelines and other potential sources from distances of up to 100 meters. In doing so, it can play a critical role in helping industry, cities and communities to reduce emissions and curb climate change.

## Case studies

### A partnership to make green hydrogen more affordable

Cost is currently a major barrier to the widespread adoption of green hydrogen, which is about three to six times more expensive than hydrogen produced using fossil fuels. In June 2021, ABB joined forces with Switzerland's largest producer of renewable energy, Axpo, to develop modular hydrogen production plants in Italy, with the goal of producing affordable green hydrogen. ABB is building on its capabilities in automation, electrification and industrial operations, and combining them with Axpo's experience as an energy provider. The work will include feasibility studies and exploring

strategies for the standardization, modularization, and efficient production of hydrogen solely from renewable resources.

### Equipping an all-electric ferry service in Lisbon

In the Portuguese capital, Lisbon, ABB is partnering with shipbuilder Astilleros Gondán GRP Division to replace 10 diesel-powered vessels of the public ferry operator Transtejo, S.A. with an all-electric fleet. The new vessels, operating across the Tagus River, will begin to enter service in 2022. ABB will deliver a comprehensive electric power solution, including energy storage, and an integrated marine and propulsion automation system. Increased electrification of transport, including river vessels, will play a key role in helping Portugal meet its goal of achieving carbon neutrality by 2050. ABB estimates that the new electric ferries will cut CO<sub>2</sub> emissions by about 6,500 tons every year.

### Using paper mill technology to enable a more efficient way to recycle textiles

ABB was chosen to deliver an integrated automation, electrification, motion and quality control system for Renewcell's new industrial textile recycling production facility in Sweden. Renewcell, a specialist in textile-to-textile recycling, is using the ABB solution to transform a former paper mill into the world's first commercial-scale recycling plant for cellulosic textiles, which are manufactured by dissolving natural fibers. The process for recycling these materials is similar to pulp drying, as the cellulose in cotton and viscose textiles is broken down for reuse in new materials. The recycled textiles would otherwise have been disposed of in landfills or incinerated.

# Robotics & Discrete Automation



## WRITING THE FUTURE OF FLEXIBLE AUTOMATION AND SMART MACHINES.

ABB's Robotics & Discrete Automation business provides products, software and solutions in robotics, machine, and factory automation. 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.

# \$3.3 bn

Revenues

# 10.8%

Operational EBITA margin

Market growth driven by megatrends of individualized consumers, labor shortage, digitalization and uncertainty. Resulting in need for automation solutions for increased productivity, highest flexibility, improved quality and maximum simplicity.

**The Business Area consists of the following two Divisions:**

- **Robotics**, GLOBAL NO. 2. Robots, robotics application cells and smart systems, field services, spare parts, digital services and software

- **Machine Automation**, GLOBAL NO. 2 IN HIGH-END SEGMENT. Solutions based on Programmable Logic Controllers (PLCs), Industrial PCs (IPCs), servo motion, industrial transport systems and vision, software

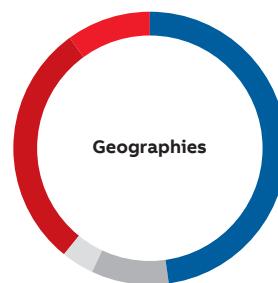
### Key figures Robotics & Discrete Automation

\$ in millions, unless otherwise indicated	FY 2021	FY 2020	US\$	Comparable <sup>(2)</sup>
Orders	3,844	2,868	+34%	+29%
Order backlog (end December)	1,919	1,403	+37%	+43%
Revenues	3,297	2,907	+13%	+9%
Income from operations	269	-163	n.a.	
Operational EBITA <sup>(1)</sup>	355	237	+50%	+43% <sup>(3)</sup>
as % of operational revenues	10.8%	8.2%	+2.6 pts	
No. of employees (FTE equiv.)	10,600	10,300	+3%	

% of FY 2021 third party revenues



% of FY 2021 third party revenues



(1) For non-GAAP measures, see the "Supplemental information" section of this annual report.

(2) Growth rates for orders, order backlog and revenues are on a comparable basis (local currency adjusted for acquisitions and divestitures).

(3) Constant currency (not adjusted for portfolio changes).

(4) Management estimates.

(5) Consumer Segments and Service Robotics.

**ROBOTICS & DISCRETE AUTOMATION**

# Opening a new world of possibilities with flexible automation

With 11,000 employees and \$3.3 billion in revenue in 2021, ABB Robotics & Discrete Automation is a pioneer in robotics, machine automation and digital services, providing innovative solutions for a diverse range of industries. The Business Area supports automotive OEMs, automotive tier 1 suppliers, electronics manufacturers, general industry and the consumer and service robotics segments and provides machine automation solutions for machine builders.

Against the backdrop of the Covid-19 pandemic and resulting acceleration in global mega trends – from labor shortages, to consumer demand for personalized products and growing pressure to op-

automotive market, our new fast and precise Ultrasonic Spot Weld quality inspection offers a 20x increase in productivity, using cutting edge AI and ultrasound technology.

Our Machine Automation division launched an innovative magnetic levitation shuttle system, ACO-POS 6D, offering up to four times the shuttle density of other systems on the market.

In addition, we have continued to develop solutions targeting new, high-growth customer segments including e-commerce, laboratories and logistics. These segments offer double-digit, profitable growth by increasing automation levels with

## AT ABB ROBOTICS & DISCRETE AUTOMATION, WE ARE LEADING THE TRANSFORMATION TO AUTOMATION AND HELPING OUR CUSTOMERS REALIZE NEW POSSIBILITIES AND OPPORTUNITIES.

erate sustainably – businesses across the board are seeking to adapt their processes. In a survey of 1,650 large and small businesses in the United States, Europe and China, 84 percent<sup>(1)</sup> said that they will introduce or increase the use of robotics and machine automation in the next decade, with flexibility becoming a strategic need.

Our intelligent robotics solutions support businesses well beyond traditional manufacturing, increasing productivity and flexibility in high-growth segments including healthcare, logistics, food and beverage, construction and retail, including ecommerce.

### **Strategic expansion in 2021**

Throughout 2021, we successfully expanded both our market and our offer.

We launched more than 20 major new products, covering a broad range of applications across multiple industries. Our new OmniCore™ robot controllers offer faster, scalable, more energy efficient manufacturing, while the speed of our new IRB 920T SCARA robot helps customers in electronics launch new products faster. In our core

our value-adding, flexible automation solutions. We have made strong progress in our efforts to support long-term profitability by reducing exposure to the automotive systems business.

This current and future market expansion is underpinned by significant steps to broaden our technology and application leadership.

In February, we announced a new generation of stronger, faster collaborative robots that can work side-by-side with people on a broad range of tasks, dramatically expanding the reach of robotics automation and unlocking potential for sectors and businesses that have not previously had the opportunity to automate.

We further expanded our portfolio of flexible automation solutions in August by completing the acquisition of ASTI Mobile Robotics Group, which has the largest installed fleet of autonomous mobile robots (AMRs) in Europe, and a broad customer base in 20 countries. The market for AMRs has significant growth potential, with global sales expected to reach \$14 billion by 2025, a CAGR of approximately 20 percent.

(1) The survey, commissioned by ABB, was conducted by 3Gem Global Market Research & Insights between December 26, 2020, and January 19, 2021.



This acquisition means we are now the only company with a comprehensive and integrated portfolio covering robots, AMRs and machine automation solutions, designed and orchestrated by our value-creating software.

In November, we took another step to enhance our AMR offering, announcing a strategic partnership and investment with Swiss-based start-up, SevenSense Robotics. Their AI and 3D vision mapping software will enable our mobile robots to navigate autonomously in complex, dynamic environments, helping to drive the next generation of flexible automation for our customers.

We continue to expand our software portfolio, for example enhancing our RobotStudio® simulation and programming software with a new Augmented Reality capability, advancing our integration of digital and physical worlds, and creating an intuitive, easy to use interface for new customers. 2021 saw double digit growth for RobotStudio®, doubling the number of active users.

#### **Contributing to a brighter future**

At Robotics & Discrete Automation, we provide solutions that free people from dull, dirty, dangerous and repetitive tasks, enabling them to develop their skills and pursue more fulfilling occupations.

At the same time, we help our customers save energy, reduce waste and extend the lifetime of their equipment with solutions that increase product quality and durability.

Our vision is of a world where robots are as familiar in the workplace as laptops or smartphones, and where, by collaborating with humans, robots help make work more rewarding and productive,

workplaces safer and healthier, and contribute to a more sustainable future.

## **Case studies**

### **A ground-breaking factory transport system**

In 2021, our Machine Automation division launched ACOPOS 6D, a rail-free product transport system, with intelligent shuttles that move independently between stations. Unlike conventional systems, the solution is not limited to rigid, sequential processes. The solution integrates magnetic levitation technology from Planar Motors Inc. (PMI) and helps customers transition to producing smaller batch sizes and shorter product lifecycles. The healthcare and pharmaceutical sectors, in particular, stand to benefit from this highly flexible manufacturing solution.

### **A vision for sustainable packaging**

ABB Robotics & Discrete Automation is helping to address the problem of plastic waste by collaborating with Zume, a provider of innovative sustainable packaging solutions, to create fully compostable packaging from plant-based agricultural waste. Over the next five years, ABB robots will be installed in more than 1,000 Zume packaging manufacturing cells worldwide, with the potential to turn thousands of tons of plant material into millions of pieces of sustainable packaging every year.

With Zume's solutions, enabled by ABB robots, we can potentially replace single-use plastics, reducing emissions, preserving scarce resources, and cutting plastic waste.

# Share developments

## ABB Ltd share price trend during 2021

During 2021, the price of ABB Ltd shares listed on the SIX Swiss Exchange increased 41 percent, while the Swiss Market Index increased 20 percent. The price of ABB Ltd shares on NASDAQ OMX Stockholm increased 51 percent, compared to the OMX 30 Index, which increased 29 percent. The price of ABB Ltd American Depository Shares traded on the New York Stock Exchange increased 37 percent, compared to the S&P 500 Index, which increased 27 percent.

## Dividends and total shareholder return

During 2021, ABB distributed a dividend of 0.80 Swiss francs per share to shareholders. Total shareholder return of ABB Ltd shares listed on the SIX Swiss Exchange was 45 percent during the year. With respect to the year ended December 31, 2021, ABB Ltd's Board of Directors has proposed to distribute a dividend to shareholders in the amount of 0.82 Swiss francs per share. This is subject to approval by shareholders at ABB Ltd's 2022 Annual General Meeting. The proposal is in line with the Company's dividend policy to pay a rising, sustainable dividend per share over time.

## Key data

	2021	2020	2019
Dividend per share (CHF)	<b>0.82<sup>(1)</sup></b>	0.80	0.80
Votes per share	<b>1</b>	1	1
Basic earnings per share (USD) <sup>(2)</sup>	<b>2.27</b>	2.44	0.67
Total ABB stockholders' equity per share (USD) <sup>(3)</sup>	<b>7.96</b>	7.72	6.34
Dividend payout ratio (%) <sup>(4)</sup>	<b>40%</b>	37%	123%
Weighted-average number of shares outstanding (in millions)	<b>2,001</b>	2,111	2,133

(1) Proposed by the Board of Directors and subject to approval by shareholders at the Annual General Meeting on March 24, 2022.

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

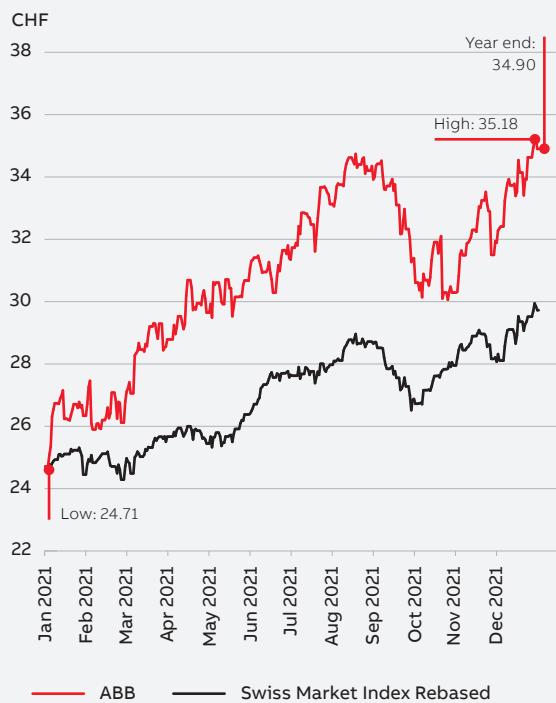
(3) Calculation based on the number of shares outstanding at December 31.

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

Source: FactSet

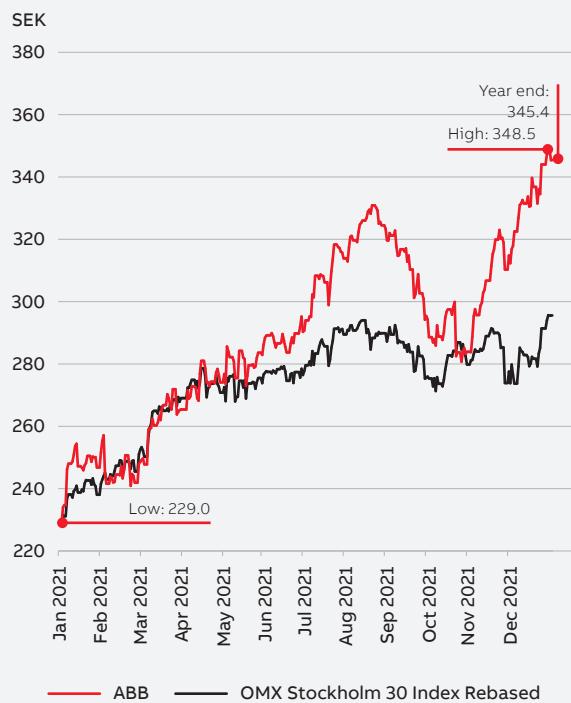
### Zurich

Average daily traded number of shares: 4,75 millions



### Stockholm

Average daily traded number of shares: 1,04 millions



### New York

Average daily traded number of shares: 1,45 millions



# Cash generation and capital allocation

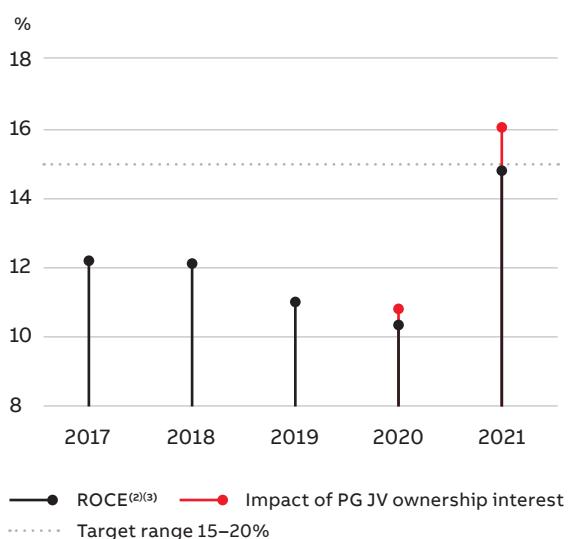
During 2021, ABB delivered a very strong cash flow for the full year. Cash flow from operating activities in continuing operations was \$3,338 million, 78 percent higher year-on-year. The increase was driven by improved profitability from all Business Areas, a strong focus on net working capital management as well as fewer items impacting comparability, including transformational impacts such as restructuring or separation costs and cash outflow in the prior year due to the Kusile settlement and pension plan transfers. Cash flow volatility between quarters declined during 2021 – a result of a high focus on net working capital management.

Free cash flow (FCF)<sup>(1)(2)</sup> was \$2,603 million, 159 percent higher on a year-on-year basis, and FCF conversion to net income<sup>(2)</sup> 108 percent despite 11 percent revenue growth.

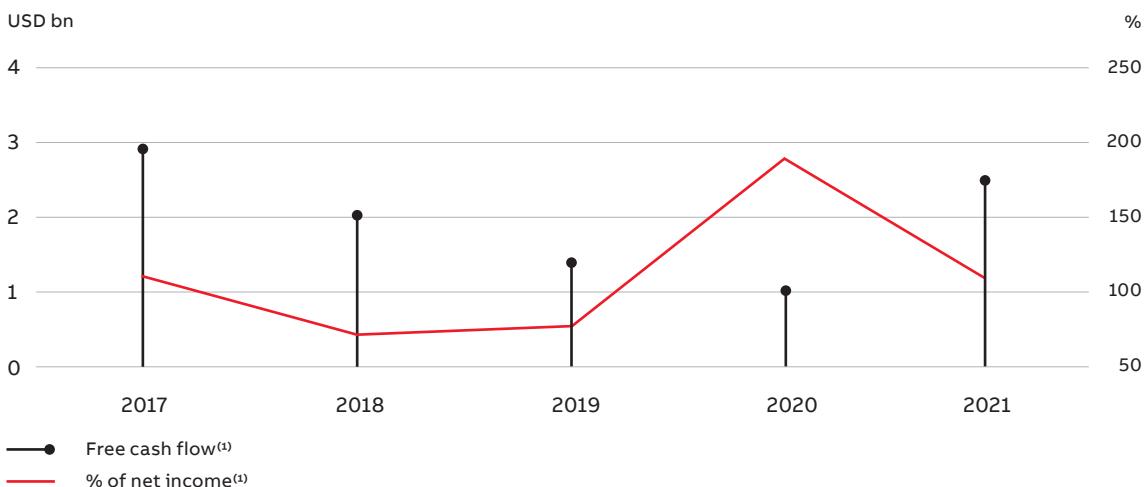
The Group's benchmark for the measurement of returns is Return on Capital Employed (ROCE)<sup>(2)</sup>. The Group's ROCE significantly increased to 14.9 percent, from 10.3 percent in 2020, just shy of ABB's 15–20% target range. The improvement was driven by a higher Operational EBITA<sup>(2)</sup> and a lower adjusted group effective tax rate compared to 2020. The Group's ROCE was negatively impacted by

approximately 120 basis points due to the 19.9% ownership interest in Hitachi Energy.

## Return on Capital Employed



## Free cash flow and conversion rate



(1) Amount represents total for both continuing and discontinued operations.

(2) For non-GAAP measures, see the "Supplemental information" section of this annual report.

(3) 2021, 2020 and 2019 are not comparable to 2018 and 2017 due to the adoption of the new lease accounting standard in 2019.

ABB's capital allocation priorities are:

- Fund organic growth, research and development (R&D), capex at attractive returns
- Rising, sustainable dividend per share over time
- Value-creating acquisitions
- Returning additional cash to shareholders

ABB invested \$820 million in capital expenditure. Non-order related R&D investment was \$1,219 million in 2021 or 4.2 percent of revenues for the year.

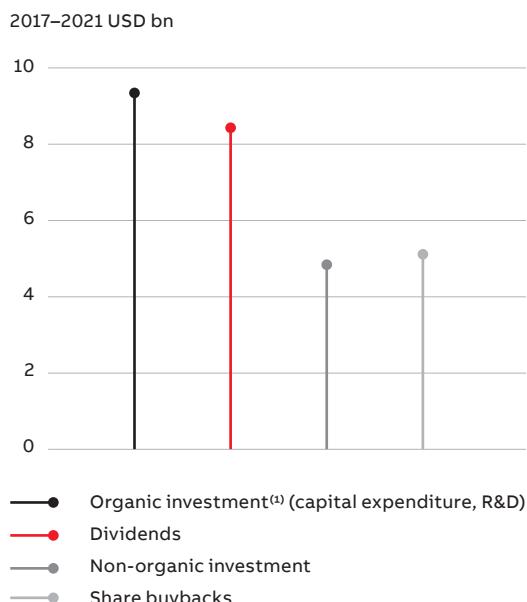
ABB paid \$1,726 million in dividends during 2021. The Board of Directors is proposing a 0.82 Swiss francs dividend per share at the 2022 Annual General Meeting. The proposal is in line with ABB's dividend policy of paying a rising, sustainable dividend per share over time.

In April 2021, the E-mobility Division acquired a majority stake in Enervalis, a smart energy control platform company. In August 2021, the Robotics Division acquired ASTI Mobile Robotics Group, a leading global autonomous mobile robot manufacturer

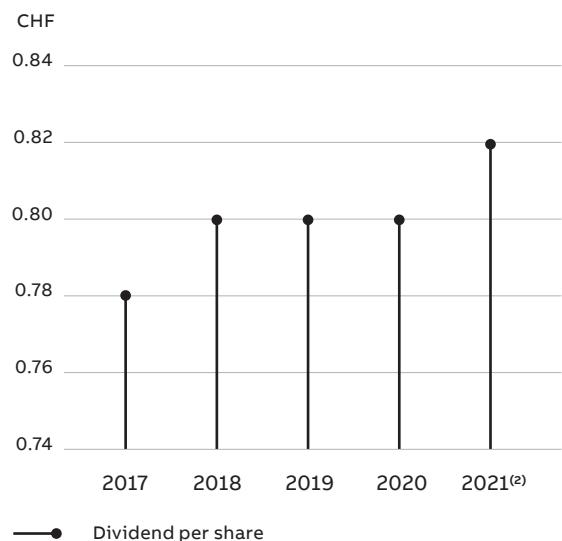
with a broad portfolio across all major applications enabled by the company's software suite.

In April 2021, ABB launched a follow-up share buy-back program of up to \$4.3 billion to return to shareholders cash proceeds following the completion of the sale of 80.1 percent of the Power Grids business to Hitachi. Through this follow-up buy-back program, the Company purchased shares in 2021 for approximately \$2.0 billion. Together with the initial share buyback program, which ran from July 2020 to March 2021, ABB spent approximately a combined \$2.7 billion during the year 2021. ABB plans to continue its share buybacks for the full year of 2022, also in excess of the Power Grids capital return program.

### Allocation of Capital



### Dividends



(1) Continuing operations only.  
(2) Proposed.

# Key investor questions 2021



**Q** You have moved to a decentralized operating model during 2020 and 2021 – The ABB Way – is this now fully implemented?

**A** We have come a long way and have reached important milestones. Under the ABB Way, the Divisions represent the highest level of operating decisions ensuring speed and customer focused decisions as they are closest to the markets. A lean corporate only focuses on necessary strategic, financial and governance activities. The Divisions are fully accountable for their performance and the divisional targets are aligned with their strategic mandate of stability, profitability before growth. To complement the decentralized operating model, we apply an improved performance management system. This facilitates transparency on divisional and Business Area performance, based on a standardized set of Key Performance Indicators. To fully complete the decentralized way of working at ABB, our focus area in 2022 will be to make sure that we also have accountability, transparency and speed within all of the Divisions. In many cases, it makes sense to drive global accountability even one level lower for product groups within Divisions and here we still have potential to improve.

**Q** What are the levers to reach at least 15 percent Operational EBITA margin in 2023?

**A** We have made strong progress towards our profitability target during 2021, improving the Operational EBITA margin from 11.1% in 2020 to 14.2% in 2021. This was driven by better results in all Business Areas, supported by increased efficiency, good volumes and part of the cost base still running at lower “pandemic levels”, as well as clearly lower corporate costs and lower specific items which impact comparability. We see further potential in all of our Business Areas. Six out of 18 Divisions (excluding Divisions that we plan to exit) have a strategic mandate to stabilize their business or improve profitability. The remaining 12 Divisions are incentivized to drive profitable growth and therefore improve the mix of the Group. All Divisions have an annual productivity target of 3 percent per annum and will focus on pushing through strategic pricing actions and further improve operational efficiencies including footprint optimizations. Additionally, the exit of our non-core business will also be an important driver.

**Q You are now targeting 3 to 5 percent comparable growth through the cycle, clearly above what you have achieved over the last five years. What has changed?**

**A** In recent years, we have taken significant organic and inorganic actions to align our business portfolio to more attractive growth markets, increasing our focus on discrete industries as well as transport and infrastructure that offer better growth opportunities. This ongoing shift towards better quality of revenues is part of ABB's DNA which centers around resource-efficiency in electrification and automation. Additionally, the responsibility for growth has now been fully transferred into the businesses, close to customers. Divisions have the best insights into current and future customer needs and are accountable to build their respective business accordingly. With more Divisions transitioning from stability and profitability to growth over time, we expect to see a continuous shift in the growth profile of ABB. Finally, the underlying demand for our products, systems and services is supported by the escalating drivers from sustainability megatrends with more favorable regulations, improved technology and changing consumer patterns.

**Q What is the timeline for the remaining portfolio actions after the divestment of the Mechanical Power Transmission Division?**

**A** Active portfolio management is 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. As a result, we successfully divested the Mechanical Power Transmission Division during 2021. We continue to make progress on the exit of the Turbocharging Division, where we are currently running a dual track process for a spin-off or divestment with a spin-off currently looking more likely and a preliminary timeline for summer 2022. We plan to exit the Power Conversion Division during H2 2022 upon improving performance. In addition, we target to complete the legal separation of the E-mobility Division during Q1 2022 and work towards an IPO in Q2 2022 to create a platform for accelerated growth and value creation. We plan to remain a clear majority owner of the new company. At the same time, our active portfolio management process is driving decisions within the Divisions to improve or exit areas of underperformance, supporting improved

performance ambitions. Further, the Group intends to pursue strategic partnerships as well as bolt-on acquisitions driven by the Divisions. Over time it is our ambition to complete approximately five bolt-on acquisitions each year.

**Q You ended the year 2021 with a net cash position and have significantly improved your cash generation. What are your capital allocation priorities?**

**A** We reiterate our capital allocation principles, which are 1) funding organic growth, 2) paying a rising, sustainable dividend per share over time, 3) investing in value creating acquisitions and 4) returning additional cash to shareholders, which we have mainly done through buybacks in the past. We expect that our improved cash generation on the back of the ABB Way operating model will enhance our flexibility to invest in both organic growth and bolt-on acquisitions, while providing attractive returns to shareholders. We aim to increase the pace of acquisitions going forward, adding technology, digital know-how and further improve geographical footprint. Additionally, we plan to continue our share buybacks for full year of 2022, also in excess of the PG capital return program.

**Q How are you managing the various supply chain imbalances that you are currently facing?**

**A** Under the ABB Way, the Divisions are in the lead to manage the supply chain imbalances. Mitigating measures include Divisions cooperating where it is an advantage to pool supply volumes and put the combined ABB weight behind supply chain negotiations, including C-suite discussions where needed. Disruptions towards the end of the year were tangible, predominantly in semiconductor shortages but also in logistics.

**Q What are your expectations for ABB in 2022?**

**A** In full year 2022, we expect a steady margin improvement towards the 2023 target of at least 15%, supported by increased efficiency as we fully incorporate the decentralized operating model and performance culture in all our divisions. Furthermore, we expect support from an anticipated positive market momentum and our strong order backlog.



# 02

# Corporate governance report

**54 Chairman's letter**

**56 Summary of corporate governance approach**

**56 Board of Directors**

**62 Executive Committee**

**64 Shares**

**66 Shareholders**

**69 Independent external auditors**

**70 Other governance information**

# Chairman's letter

## Dear Shareholders,

2021 was another turbulent year, due to continued outbreaks of COVID-19. However, our high level of preparedness helped us protect our people and keep our operations running. Strong demand boosted our order and revenue growth, but supply-chain disruptions caused delays in deliveries to customers in the second half of the year. Overall, we are pleased with ABB's financial performance, which has improved significantly compared with pre-pandemic times.

Against that backdrop, we continued to transform ABB by moving accountability to our Divisions, increasing efficiency, making our operations safer and more sustainable, and redesigning our leadership development and succession planning. We also plan to spin off our Turbocharging Division and separately list our E-mobility business. With these steps, we are living up to our Purpose of creating superior, sustainable value, and strengthening our focus on electrification and automation, both of which are key technologies to reduce emissions and enable a more sustainable future.

### Sustainability strategy 2030

In 2021, we began implementing our 2030 sustainability strategy, with the focus on reducing CO<sub>2</sub>-equivalent emissions across our value chain. In the past two years, we have reduced emissions from our own operations by 39 percent, putting us well on track to achieve our goal of carbon neutrality by 2030. In the years ahead, we can make an even bigger contribution in our customers' operations through many of our technologies like ABB's energy-efficient electric motors and drives and electric-vehicle charging solutions. By 2030, we aim to help our customers reduce their annual CO<sub>2</sub>-equivalent emissions by 100 megatons, equivalent to the annual emissions of 30 million combustion cars.

We also clarified roles and responsibilities related to sustainability within the Board: The Governance and Nomination Committee is responsible for overseeing corporate social responsibility (including health, safety and environment as well as sustainability), while ultimate responsibility for ABB's sustainability strategy, its sustainability targets and its annual sustainability report lies with the entire Board of Directors.

At next year's AGM, we intend to seek shareholder support for our environmental, social and governance (ESG) goals. These include emissions reductions across our value chain, increasing circularity in our own and our customers' operations, and promoting social progress, including human rights and good governance, in our supply chain and the communities in which we operate.

### Stock-exchange listings

In December, we appointed a new head of our Turbocharging Division ahead of a likely spin-off, in the event of which we would invite shareholders to an extraordinary general meeting to seek their approval. We are also moving ahead with efforts to separately list our E-mobility business and we aim to complete this during the second quarter. ABB would retain a majority shareholding in the future listed entity. As a world leader in electric-vehicle (EV) charging infrastructure, we are well-positioned in an extremely attractive growth market – by 2035, EVs are expected to be outselling combustion cars.

### Board assessment and diversity

In 2021, an external assessment concluded that the Board's effectiveness was in the top quartile of comparable companies. The assessment put forward a small number of recommendations concerning the Board's role in ESG, risk and reputation management, and future requirements in the skills matrix of new Board members, all of which were comprehensively addressed by the Board during the course of last year. As part of this assessment, we also conducted a peer review within the Board in which every Board member assessed the individual performance of all other members. The Board will continue to conduct internal self-assessments every year, complemented periodically with external reviews.

Last year, we also highlighted the need to improve gender diversity on the Board of Directors. In 2021, we sought and identified candidates that would further strengthen the Board's diversity, expertise and experience. To accommodate candidates' personal career planning and allow for board adjustments as necessary (overboarding), we will be proposing one or more new

members for election at the AGM in 2023. This year, all existing Board members will stand for re-election, and no new members will be proposed.

#### **Leadership development and succession planning**

Finally, as part of the implementation of the ABB Way operating model, our leadership development and succession planning was redesigned and has been reviewed by the Executive Committee and the Board of Directors, including the Governance and Nomination Committee. Instead of position-based succession planning, we have introduced an open job market, where all positions up to Executive Committee (EC) level are posted on our internal jobs platform. As part of the new approach, EC- and Business Area-level leadership teams review the strengths and development needs of all team members and support their development so that they are ready to pursue new opportunities when they arise. In this way, we enable our leaders to realize their ambitions through a fair and transparent process that promotes the best people for the job.

On behalf on the Board of Directors, I would like to thank you for your continued trust and support.

**Peter Voser**  
Chairman of the Board of Directors

Zurich, February 24, 2022

# Summary of corporate governance approach

## Corporate governance – general principles

ABB is committed to the highest international standards of corporate governance and this is reinforced in its structure, processes and rules as outlined in this section of the Annual Report. In line with this, ABB complies with the general principles as set forth in the Swiss Code of Best Practice for Corporate Governance, as well as those of the capital markets where its shares are listed and traded. In addition to the provisions of the Swiss Code of Obligations, ABB's key principles and rules on corporate governance are laid down in ABB's Articles of Incorporation, the ABB Ltd Board Governance Rules (which includes the governance rules of ABB's Board committees and the ABB Ltd Related Party Transaction Policy, which was prepared based on the Swiss Code of Best Practice for Corporate Governance and the independence criteria set forth in the corporate governance rules of the New York Stock Exchange), and the ABB Code of Conduct. These documents are available on ABB's website at

<https://new.abb.com/about/corporate-governance>. It is the duty of ABB's Board of Directors (the Board) to review and amend or propose amendments to those documents from time to time to reflect the most recent developments and practices, as well as to ensure compliance with applicable laws and regulations. Shareholders and other interested parties may communicate with the Chairman of the Board or the independent directors by writing to ABB Ltd (Attn: Chairman of the Board/independent directors), at Affolternstrasse 44, CH-8050 Zurich, Switzerland.

## Compensation governance and Board and EC compensation

Information about ABB's compensation governance as well as Board and Executive Committee (EC) compensation and shareholdings is provided in the Compensation Report that can be found on pages 74 to 110 of this Annual Report.

# Board of Directors

## Board and Board committees (2021–2022 board term)

Board of Directors		
Chairman: Peter R. Voser	Gunnar Brock	Jennifer Xin-Zhe Li
Vice-Chairman: Jacob Wallenberg	David Constable	Geraldine Matchett
	Frederico Fleury Curado	David Meline
	Lars Förberg	Satish Pai
Finance, Audit and Compliance Committee	Governance and Nomination Committee	Compensation Committee
David Meline (chairman)	Peter R. Voser (chairman)	Frederico Fleury Curado (chairman)
Gunnar Brock	Lars Förberg	David Constable
Geraldine Matchett	Jennifer Xin-Zhe Li	Jennifer Xin-Zhe Li
Satish Pai	Jacob Wallenberg	

## Board governance

### The Board

The Board defines the ultimate direction of the business of ABB and issues the necessary instructions. It determines the organization of the ABB Group and appoints, removes and supervises the persons entrusted with the executive management and representation of ABB. The internal organizational structure and the definition of the areas of responsibility of the Board, as well as the information and control instruments vis-à-vis the Executive Committee are set forth in the ABB Ltd Board Governance Rules (available at <https://new.abb.com/about/corporate-governance>).

The Board takes decisions as a whole, supported by its three committees: the Finance, Audit and Compliance Committee (FACC), the Governance and Nomination Committee (GNC), and the Compensation Committee (CC). These committees assist the Board in its tasks and report regularly to the Board. The Board and its committees meet regularly throughout the year.

The directors and officers of a Swiss corporation are bound, as specified in the Swiss Code of Obligations, to perform their duties with all due care, to safeguard the interests of the corporation in good faith and to extend equal treatment to shareholders in like circumstances. Prior to proposing new candidates for election to the Board, checks are performed to ensure that they are independent and that there are no conflicts of interest.

The Swiss Code of Obligations does not specify what standard of due care is required of the directors of a corporate board. However, it is generally held by Swiss legal scholars and jurisprudence that the directors must have the requisite capability and skill to fulfill their function, and must devote the necessary time to the discharge of their duties. Moreover, the directors must exercise all due care that a prudent and diligent director would have taken in like circumstances. Finally, the directors are required to take actions in the best interests of the corporation and may not take any actions that may be harmful to the corporation.

Although the Swiss Code of Obligations does not discuss specifically conflicts of interest for board members, the ABB Ltd Board Governance Rules (available at <https://new.abb.com/about/corporate-governance>) state that board members shall avoid entering into any situation in which their personal or financial interests may conflict with the interests of ABB.

### Chairman of the Board

The Chairman is elected by the shareholders to represent their interests in creating sustainable value through effective governance. In addition, the Chairman (1) takes provisional decisions on behalf of the Board on urgent matters where a regular Board decision cannot be obtained, (2) calls for Board meetings and sets the related agendas, (3) interacts with the CEO and other EC members on a more frequent basis outside of Board meetings and (4) represents the Board internally and in the public sphere.

### Vice-Chairman of the Board

The Vice-Chairman is elected by the Board and handles the responsibilities of the Chairman to the extent the Chairman is unable to do so or would have a conflict of interest in doing so. He also acts as counselor/advisor to the Chairman on any matters that are Company or Board relevant and as appropriate or as the Chairman may require and with a particular focus on strategic aspects related to the Company and its business in general. In addition, the Vice-Chairman takes such other actions as may be decided by the Board or requested by the Chairman.

### Finance, Audit and Compliance Committee

The FACC is responsible for overseeing (1) the integrity of ABB's financial statements, (2) ABB's compliance with legal, tax and regulatory requirements, (3) the external auditors' qualifications and independence, (4) the performance and role of ABB's internal audit function and the performance of the external auditors, (5) ABB's capital structure, funding requirements and financial and risk policies, and (6) ABB's implementation and maintenance of an integrity program and internal controls designed to mitigate integrity risk.

The FACC must comprise three or more independent directors who have a thorough understanding of finance and accounting. The Chairman of the Board and, upon invitation by the committee's chairman, the CEO or other members of the Executive Committee may participate in the committee meetings, provided that any potential conflict of interest is avoided and confidentiality of the discussions is maintained. In addition, the chief integrity officer, the head of internal audit and the external auditors participate in the meetings as appropriate. The Board has determined that each member of the FACC is an audit committee financial expert as such term is defined in Form 20-F.

## Governance and Nomination Committee

The GNC is responsible for (1) overseeing corporate governance practices within ABB, (2) overseeing corporate social responsibility (including health, safety and environment as well as sustainability), (3) nominating candidates for the Board, the role of CEO and other positions on the Executive Committee, and (4) succession planning and employment matters relating to the Board and the Executive Committee. The GNC is also responsible for maintaining an orientation program for new Board members and an ongoing education program for existing Board members.

The GNC must comprise three or more independent directors. Upon invitation by the committee's chairman, the CEO or other members of the Executive Committee may participate in the committee meetings, provided that any potential conflict of interest is avoided and confidentiality of the discussions is maintained.

## Compensation Committee

The CC is responsible for compensation matters relating to the Board and the Executive Committee.

The CC must comprise three or more directors who are elected by the shareholders. The Chairman of the Board and, upon invitation by the committee's chairman, the CEO or other members of the Executive Committee may participate in the committee meetings, provided that any potential conflict of interest is avoided and confidentiality of the discussions is maintained.

## Board membership

### Board composition

In proposing individuals to be elected to the Board, the Board seeks to align the composition and skills of the Board with the Company's strategic needs, business portfolio, geographic reach and culture. The Board must be diverse in all aspects including gender, nationalities, geographic/regional experience and business experience. In addition, the average tenure of the members of the Board should be well-balanced. The Board also considers the number of other mandates of each Board member to ensure that he/she will have sufficient time to dedicate to his/her role as an ABB Board member.

### Elections and term of office

The members of the Board of Directors and the Chairman of the Board as well as the members of the Compensation Committee are elected by the shareholders at the general meeting of shareholders for a term of office extending until completion of the next ordinary general meeting of shareholders. Members whose terms of office have expired shall be immediately eligible for re-election. ABB's Articles of Incorporation (available at <https://new.abb.com/about/corporate-governance>) do not provide for the retirement of directors based on their age. However, an age limit for members of the Board is set forth in the ABB Ltd Board Governance Rules (available at <https://new.abb.com/about/corporate-governance>), although waivers are possible and subject to Board discretion. If the office of the Chairman of the Board of Directors or any position on the Compensation Committee becomes vacant during a Board term, the Board

### Members of the Board (2021–2022 board term)

Board Member	Corporate Officer Experience		Other Business Experience		Global Experience	Country of Origin / Nationality	Gender	Non-Executive	Independent
	Board Experience	Other Public Board Experience	CEO	CFO					
Peter R. Voser	7	●	●	●	●	●	●	CH	M
Jacob Wallenberg	23	●	●		●	●	●	SE	M
Gunnar Brock	4	●	●		●	●	●	SE	M
David Constable	7	●	●		●	●	●	CA, US	M
Frederico Fleury Curado	6	●	●		●	●	●	BR, PT	M
Lars Förberg	5	●	●		●	●	●	SE, CH	M
Jennifer Xin-Zhe Li	4	●		●	●	●	●	CN, CA	F
Geraldine Matchett	4		●	●	●	●	●	CH, UK, FR	F
David Meline	6	●		●	●		●	US, CH	M
Satish Pai	6	●	●		●	●	●	IN	M

of Directors may appoint (shall appoint in the case of the Chairman of the Board) another individual from among its members to that position for the remainder of that term. The Board of Directors shall consist of no less than 7 and no more than 13 members.

## Members of the Board (2021–2022 board term)



**Peter R. Voser** has been a member and Chairman of ABB's Board of Directors since April 2015. He was also ABB's Chief Executive Officer from April 2019 to February 2020.

He is a member of the board of directors of IBM Corporation (U.S.). He is also a member of the board of directors of Temasek Holdings (Private) Limited (Singapore) as well as chairman of the board of PSA International Pte Ltd (Singapore), one of its subsidiaries. In addition, he is the chairman of the board of trustees of the St. Gallen Foundation for International Studies. He was previously the chief executive officer of Royal Dutch Shell plc (The Netherlands). Mr. Voser was born in 1958 and is a Swiss citizen.



**Jacob Wallenberg** has been a member of ABB's Board of Directors since June 1999 and Vice-Chairman since April 2015. He is the chairman of the board of Investor AB (Sweden). He is vice-chairman of the boards of Telefonaktiebolaget LM Ericsson, FAM AB and Patricia Industries (all Sweden). He is also a member of the boards of directors of Nasdaq, Inc. (U.S.) and the Knut and Alice Wallenberg Foundation (Sweden) as well as a member of the nomination committee of SAS AB (Sweden). Mr. Wallenberg was born in 1956 and is a Swedish citizen.



**Gunnar Brock** has been a member of ABB's Board of Directors since March 2018. He is chairman of the boards of Neptunia Invest AB, Mölnlycke Health Care AB and Stena AB (all Sweden). He is a member of the boards of directors of Investor AB and Patricia Industries (both Sweden). He was formerly president and chief executive officer of Atlas Copco AB (Sweden). Mr. Brock was born in 1950 and is a Swedish citizen.



**David Constable** has been a member of ABB's Board of Directors since April 2015. He is the chief executive officer of Fluor Corporation (U.S.), for which he

also serves as a member of the board of directors. He was formerly the chief executive officer and president as well as a member of the board of directors of Sasol Limited (South Africa). He joined Sasol after more than 29 years with Fluor Corporation (U.S.). Mr. Constable was born in 1961 and is a Canadian and U.S. citizen.



**Frederico Fleury Curado** has been a member of ABB's Board of Directors since April 2016. He is a member of the boards of directors of Ultramar S.A. (Brazil) and Transocean Ltd. (Switzerland). He was formerly the chief executive officer of Ultramar S.A. and Embraer S.A. (both Brazil). Mr. Curado was born in 1961 and is a Brazilian and Portuguese citizen.



**Lars Förberg** has been a member of ABB's Board of Directors since April 2017. He is co-founder and managing partner of Cevian Capital. Mr. Förberg was born in 1965 and is a Swedish and Swiss citizen.



**Jennifer Xin-Zhe Li** has been a member of ABB's Board of Directors since March 2018. She is a member of the boards of directors of Flex Ltd (Singapore/U.S.), Kone Oy (Finland) and Full Truck Alliance Co. Ltd. (Cayman Islands/P.R.C.). Through May 2021, she was a member of the boards of directors of Philip Morris International Inc. (U.S.) and The Hongkong and Shanghai Banking Corporation Limited (Hong Kong). Ms. Li is a founder and general partner of Changcheng Investment Partners (P.R.C.), a private investment fund. From 2008 to 2018, she served as chief financial officer of Baidu Inc. (P.R.C.) and chief executive officer of Baidu Capital (P.R.C.). Prior to that, Ms. Li spent 14 years with General Motors, holding various senior finance positions, including chief financial officer of GM China and corporate controller for GMAC North American Operations. Ms. Li was born in 1967 and is a Canadian citizen.



**Geraldine Matchett** has been a member of ABB's Board of Directors since March 2018. She is the co-chief executive officer, the chief financial officer and a member of the managing board of Royal DSM N.V. (The Netherlands). She was previously the chief financial officer of SGS Ltd (Switzerland). Prior to joining SGS she worked as an auditor at Deloitte Ltd (Switzerland) and KPMG LLP (U.K.). Ms. Matchett was born in 1972 and is a Swiss, British and French citizen.



**David Meline** has been a member of ABB's Board of Directors since April 2016. He is the chief financial officer of Moderna Inc. (U.S.). From 2014 through 2019, Mr. Meline was the chief financial officer of Amgen Inc. (U.S.). He was formerly with the 3M Company (U.S.), where he served as chief financial officer. Prior to joining 3M, Mr. Meline worked for more than 20 years for General Motors Company (U.S.). Mr. Meline was born in 1957 and is a U.S. and Swiss citizen.



**Satish Pai** has been a member of ABB's Board of Directors since April 2016. He is the managing director and a member of the board of directors of Hindalco Industries Ltd. (India). He joined Hindalco in 2013 after 28 years with Schlumberger Limited (U.S.). Mr. Pai was born in 1961 and is an Indian citizen.

As of December 31, 2021, none of the Board members held any official functions or political posts. Further information on ABB's Board members can be found by clicking on the ABB Board of Directors link (available at <https://new.abb.com/about/corporate-governance>).

## Board meetings and attendance

The Board and its committees have regularly scheduled meetings throughout the year. These meetings are supplemented by additional meetings (either in person or by conference call), as necessary. Board meetings are convened by the Chairman or upon request by any other board member or the CEO. Documentation covering the various items of the agenda for each Board meeting is sent out in advance to each Board member

in order to allow each member time to study the covered matters prior to the meetings. Each board meeting has a private session without management or others being present. Decisions made at the Board meetings are recorded in written minutes of the meetings. Some decisions are also taken by circular resolution.

2021 was an intensive year for the Board and its committees. The table below shows the number of meetings held during 2021 by the Board and its committees, their average duration, as well as the attendance of the individual Board members. The Board meetings shown include a strategic retreat attended by the members of the Board and the EC.

## Mandates of Board members outside the ABB Group

No member of the Board may hold more than ten additional mandates, of which no more than four may be in listed companies. Certain types of mandates, such as those in our subsidiaries, those in the same group of companies and those in non-profit and charitable institutions, are not subject to those limits. Additional details can be found in Article 38 of ABB's Articles of Incorporation (available at <https://new.abb.com/about/corporate-governance>).

### 2021 Board and Board Committee Meetings

Meetings and attendance	Pre annual general meeting 2021					Post annual general meeting 2021				
	Board					Board				
	Mtg.	Conf. Call	FACC	GNC	CC	Mtg.	Conf. Call	FACC	GNC	CC
Average duration (hours)	7.5	1.5	3	1.25	1.75	9	1	3	1.4	1.6
Number of meetings	1	1	2	2	2	4	2	4	5	5
Meetings attended:										
Peter R. Voser	1	1				3	2			5
Jacob Wallenberg	1	1		2		4	2			4
Matti Alahuhta	1	1		2						
Gunnar Brock	1	1	2			4	2	4		
David Constable		1			2	4	2			5
Frederico Fleury Curado	1	1			2	4	2			5
Lars Förberg	1	1		2		4	2			5
Jennifer Xin-Zhe Li	1	1			2	4	2		5	5
Geraldine Matchett	1	1	2			3	2	4		
David Meline	1	1	2			4	2	4		
Satish Pai	1	1	2			4	2	4		

## Business relationships between ABB and its Board members

This section describes important business relationships between ABB and its Board members, or companies and organizations represented by them.

Fluor Corporation (Fluor) is an important customer of ABB. ABB sells primarily electrical switchgears, control systems and electrical solutions through its Electrification and Process Automation businesses to Fluor. David Constable is the CEO and a director of Fluor.

After reviewing the level of business with Fluor, the Board has determined that ABB's business relationship with Fluor is not unusual in its nature or conditions and does not constitute a material business relationship. As a result, the Board concluded that all members of the Board are independent.

These determinations were made in accordance with ABB Ltd's Related Party Transaction Policy which was prepared based on the Swiss Code of Best Practice for Corporate Governance and the independence criteria set forth in the corporate governance rules of the New York Stock Exchange. This policy is contained in the ABB Ltd Board Governance Rules (available at <https://new.abb.com/about/corporate-governance>).

## Information and control systems of the Board vis-à-vis the Executive Committee

### Information from the Executive Committee

In accordance with the ABB Board Governance Rules (available at <https://new.abb.com/about/corporate-governance>), the CEO reports regularly to the Board about ABB's overall business and when circumstances require on any extraordinary events that may arise. This includes:

- Reports on financial results (including profit and loss, balance sheet and cash flows);
- Changes in key members of management;
- Information that may affect the supervisory or monitoring function of the Board (including on matters of strategy and compliance); and
- Significant developments in legal matters.

At each Board meeting, Board members are briefed by the Chairman, CEO, CFO and other EC members on ABB's business performance and on material developments affecting ABB. Outside of

Board meetings, Board members generally channel any requests for information through the Chairman. Board members also obtain information through offsite retreats with the Executive Committee and visits to ABB sites. In addition, Board members obtain information through the Board committees in which they participate and which are also attended by relevant EC members and management representatives from human resources, finance, legal and the business.

### Internal Audit

ABB has an Internal Audit team that provides independent objective assurance and other services to help ensure that ABB operates in accordance with applicable laws as well as internal policies and procedures. Internal Audit reports to the FACC and to the CFO. The FACC reviews and approves the internal audit plan, and material changes to the plan. Investigations of potential fraud and inappropriate business conduct are an integral part of the internal audit process. Depending on circumstances, Internal Audit may act together with ABB's Integrity Investigations and Monitoring department, which is part of ABB's integrity function. Internal Audit reports on a regular basis its main observations and recommendations to the relevant members of the EC and to the FACC as appropriate.

### Risk Management

ABB has an enterprise risk management program (ERM) in place which takes into account ABB's size and complexity. ERM provides the EC and the Board with a comprehensive and holistic view of the risks facing the business. ERM involves managing the acceptance of risk to achieve the objectives of the business. The ERM process is typically cyclical in nature, conveying the idea of continuous refinement of the risk management approach in a dynamic business environment. Furthermore, ABB runs a mitigation process for the identified risks that is key to the success of this process. ERM assessments are both top down and bottom up. They cover strategic, financial, and operational risks, both current and long term. Key risks identified and managed in 2021 were those related to the continuation of the COVID-19 pandemic, to constraints in global supply chains, as well as to the preparation for the separation of ABB's turbocharging business and the planned initial public offering in Switzerland of ABB's electric-vehicle charging business. ERM results are reported to the FACC and the entire Board. This information becomes part of the overall strategic and risk discussions by the Board to help create value for stakeholders.

# Executive Committee

## Composition of the Executive Committee (at December 31, 2021)

		<b>Björn Rosengren</b> Chief Executive Officer
CORPORATE OFFICERS		BUSINESS AREA PRESIDENTS
<b>Timo Ihamuotila</b> Chief Financial Officer		<b>Tarak Mehta</b> Electrification
<b>Carolina Granat</b> Chief Human Resources Officer		<b>Peter Terwiesch</b> Process Automation
<b>Maria Varsellona</b> General Counsel		<b>Morten Wierod</b> Motion
<b>Theodor Swedjemark</b> Chief Communications and Sustainability Officer		<b>Sami Atiya</b> Robotics & Discrete Automation

## Executive Committee responsibilities and organization

The Board has delegated the executive management of ABB to the CEO. The CEO and, under his direction, the other members of the Executive Committee are responsible for ABB's overall business and affairs and day-to-day management. The CEO reports to the Board regularly, and whenever extraordinary circumstances so require, on the course of ABB's business and financial performance and on all organizational and personnel matters, transactions and other issues material to the Group. Each member of the Executive Committee is appointed and discharged by the Board.

## Members of the Executive Committee (at December 31, 2021)



**Björn Rosengren** was appointed Chief Executive Officer and member of the Executive Committee effective March 2020. He is a member of the board of directors of the World Childhood Foundation (Sweden). Before joining ABB, he was the president and chief executive officer of Sandvik AB (Sweden) since 2015. Prior to that, Mr. Rosengren was the chief executive officer of Wärtsilä Corporation (Finland) from 2011 to 2015. He held a variety of management roles at Atlas Copco AB (Sweden) from 1998 to 2011. Mr. Rosengren was born in 1959 and is a Swedish citizen.



**Timo Ihamuotila** was appointed Chief Financial Officer and member of the Executive Committee effective April 2017. He is a member of the board of directors of SoftwareONE Holding AG and Hitachi Energy Ltd (both Switzerland). From 2009 to 2016, Mr. Ihamuotila was chief financial officer and an executive vice president of the Nokia Corporation (Finland). From 1999 to 2009, he held various senior roles with Nokia. Mr. Ihamuotila was born in 1966 and is a Finnish citizen.



**Carolina Granat** was appointed Chief Human Resources Officer and member of the Executive Committee effective January 2021. She joined ABB in 2020 as Head of People Development. Prior to that, she was globally responsible for human resources at the Machining Solutions business area of Sandvik AB (Sweden). Ms. Granat was born in 1972 and is a Swedish citizen.



**Maria Varsellona** was appointed General Counsel and member of the Executive Committee effective November 2019. From 2014 to 2019 she was the Chief Legal Officer of Nokia Corporation (Finland) and from 2018 to 2019 she was also the president of Nokia Technologies. From 2013 to 2014 she was the General Counsel of Nokia Siemens Networks. During the period from 2011 to 2013 Ms. Varsellona was the Group General Counsel of Tetra Pak and from 2009 to 2010 she was the Group General Counsel of Sidel, both part of the Tetra Laval Group (Sweden). From 2001 to 2009 she held various senior legal roles mainly with GE Oil & Gas.

Ms. Varsellona was born in 1970 and is an Italian citizen.



**Theodor Swedjemark** was appointed Chief Communications Officer and member of the Executive Committee effective August 2020. As per March 2021 his title

was amended to Chief Communications and Sustainability Officer and member of the Executive Committee. He is a member of the board of directors of the Swedish Swiss Chamber of Commerce and is the chairman of the ABB Jürgen Dormann Foundation. Mr. Swedjemark acted as interim Head of Corporate Communications & Public Affairs from March 2020 through August 2020. Prior to that, he assumed the role of Chief of Staff in 2017, later adding group responsibility for government relations and public affairs. During 2016, Mr. Swedjemark managed the Strategic Portfolio Review of the Power Grids project. From 2006 to 2015, he held various management positions at ABB in different functions and businesses. Mr. Swedjemark was born in 1980 and is a Swedish citizen.



**Tarak Mehta** was appointed President of the Electrification Business effective April 2019 and has been a member of the Executive Committee since October 2010. He

is a member of the board of directors of Prysmian S.p.A. (Italy). He had previously been President of the Electrification Products division since January 2016. From October 2010 through December 2015, he was President of the Low Voltage Products division. From 2007 to 2010, he was Head of ABB's transformers business. Between 1998 and 2006, he held several management positions with ABB. Mr. Mehta was born in 1966 and is a U.S. and Swiss citizen.



**Peter Terwiesch** was appointed President of the Process Automation Business (known as Industrial Automation from 2017–2020) and member of the Executive Committee effective January 2015. He is a member of the board of directors of Metall Zug AG (Switzerland). From 2011 to 2014, Mr. Terwiesch was Head of ABB's Central Europe region. He was ABB's Chief Technology Officer from 2005 to 2011. From 1994 to 2005, he held several positions with ABB. Mr. Terwiesch was born in 1966 and is a German and Swiss citizen.



**Morten Wierod** was appointed President of the Motion Business and member of the Executive Committee effective April 2019. From 2015 until April 2019 he was the Managing Director of the drives business unit

in the Robotics and Motion division. During 2011 to 2015, Mr. Wierod was the Managing Director of the control products business unit in the Low Voltage Products division. Between 1998 to 2011, Mr. Wierod held various management roles with ABB. Mr. Wierod was born in 1972 and is a Norwegian citizen.



**Sami Atiya** was appointed President of the Robotics & Discrete Automation Business effective April 2019 and has been a member of the Executive Committee since June 2016. He is a member of the board of directors of SGS SA (Switzerland). He had previously been President of the Robotics and Motion division since January 2017. From June to December 2016 he was President of the Discrete Automation and Motion division. Prior to joining ABB, Mr. Atiya held senior roles at Siemens in Germany from 1997 to 2015, including as chief executive officer of the mobility and logistics division in the infrastructure and cities sector from 2011. Mr. Atiya was born in 1964 and is a German citizen.

Further information about the members of the Executive Committee can be found by clicking on the Executive Committee link (available at <https://new.abb.com/about/corporate-governance>).

## Mandates of EC members outside the ABB Group

No member of the EC may hold more than five additional mandates, of which no more than one may be in a listed company. Certain types of mandates, such as those in our subsidiaries, those in the same group of companies and those in non-profit and charitable institutions, are not subject to those limits. Additional details can be found in Article 38 of ABB's Articles of Incorporation (available at <https://new.abb.com/about/corporate-governance>).

## Business relationships between ABB and its EC members

This section describes important business relationships between ABB and its EC members, or companies and organizations represented by them.

ABB has a minority stake in Hitachi Energy Ltd (Hitachi Energy), the holding company of ABB's former power grids business. Hitachi Energy is both an important supplier to and customer of ABB. Timo Ihamuotila is a director of Hitachi Energy.

After reviewing the level of business with Hitachi Energy, the Board has determined that ABB's business relationship with Hitachi Energy is not unusual in its nature or conditions.

These determinations were made in accordance with ABB Ltd's Related Party Transaction Policy

which was prepared based on the Swiss Code of Best Practice for Corporate Governance and the independence criteria set forth in the corporate governance rules of the New York Stock Exchange. This policy is contained in the ABB Ltd Board Governance Rules (available at <https://new.abb.com/about/corporate-governance>).

## Shares

### Share capital of ABB

At December 31, 2021, ABB's ordinary share capital (including treasury shares) as registered with the Commercial Register amounted to CHF 246,377,791.68, divided into 2,053,148,264 fully paid registered shares with a par value of CHF 0.12 per share.

ABB Ltd's shares are listed on the SIX Swiss Exchange, the NASDAQ OMX Stockholm Exchange and the New York Stock Exchange (where its shares are traded in the form of American depositary shares (ADS) – each ADS representing one registered ABB share). At December 31, 2021,

ABB Ltd had a market capitalization based on outstanding shares (total number of outstanding shares: 1,958,344,400) of approximately CHF 68 billion (\$75 billion, SEK 676 billion). The only consolidated subsidiary in the ABB Group with listed shares is ABB India Limited, Bangalore, India, which is listed on the BSE Ltd. (Bombay Stock Exchange) and the National Stock Exchange of India. At December 31, 2021, ABB Ltd, Switzerland, directly or indirectly owned 75 percent of ABB India Limited, Bangalore, India, which at that time had a market capitalization of approximately INR 474 billion.

#### Stock exchange listings (at December 31, 2021)

Stock exchange	Security	Ticker symbol	ISIN code
SIX Swiss Exchange	ABB Ltd, Zurich, share	ABBN	CH0012221716
SIX Swiss Exchange	ABB Ltd, Zurich, share buyback (second trading line)	ABBNE	CH0357679619
NASDAQ OMX Stockholm Exchange	ABB Ltd, Zurich, share	ABB	CH0012221716
New York Stock Exchange	ABB Ltd, Zurich, ADS	ABB	US0003752047
BSE Ltd. (Bombay Stock Exchange)	ABB India Limited, Bangalore, share	ABB <sup>(1)</sup>	INE117A01022
National Stock Exchange of India	ABB India Limited, Bangalore, share	ABB	INE117A01022

(1) Also called Scrip ID.

### Share repurchases and cancellation

Under the share buyback program that ran from July 2020 to March 2021, ABB repurchased a total of 128,620,589 shares. At ABB's Annual General Meeting 2021, the shareholders approved the proposal to cancel 115,000,000 repurchased shares. These shares were cancelled in June 2021, resulting in a reduced total number of issued ABB Ltd shares of 2,053,148,264. ABB intends to propose to the Annual General Meeting 2022 to cancel the remaining 13,620,589 repurchased shares.

In April 2021, ABB launched a follow-up share buyback program of up to \$4.3 billion to complete ABB's plan to return \$7.8 billion of cash proceeds from the Power Grids divestment to shareholders.

Under that share buyback program, ABB repurchased a total of 58,627,600 shares as per December 31, 2021, and a total of 74,782,600 shares as per February 15, 2022. ABB intends to propose to the Annual General Meeting 2022 to cancel these shares.

In addition, ABB repurchased a total of 32,668,987 shares as per December 31, 2021, primarily for use in connection with employee share programs. Further information can be found at <https://www.abb.com/investorrelations>.

## Changes to the ordinary share capital

Except for the share cancellation described above, there were no other changes to ABB's ordinary share capital during 2021, 2020 and 2019.

## Convertible bonds and options

ABB does not have any bonds outstanding that are convertible into ABB shares. For information about options on shares issued by ABB, please refer to "Note 19 – Stockholders' equity" to ABB's Consolidated Financial Statements.

## Contingent share capital

At December 31, 2021, ABB's share capital may be increased by an amount not to exceed CHF 24,000,000 through the issuance of up to 200,000,000 fully paid registered shares with a par value of CHF 0.12 per share through the exercise of conversion rights and/or warrants granted in connection with the issuance on national or international capital markets of newly or already issued bonds or other financial market instruments. If this contingent share capital were fully issued this would increase the existing share capital by approximately 9.7 percent. The contingent share capital has not changed during the last three years.

At December 31, 2021, ABB's share capital may be increased by an amount not to exceed CHF 1,200,000 through the issuance of up to 10,000,000 fully paid registered shares with a par value of CHF 0.12 per share through the exercise of warrant rights granted to its shareholders. If this contingent share capital were fully issued this would increase the existing share capital by approximately 0.5 percent. This contingent share capital has not changed during the last three years. The Board may grant warrant rights not taken up by shareholders for other purposes in the interest of ABB.

The pre-emptive rights of the shareholders are excluded in connection with the issuance of convertible or warrant-bearing bonds or other financial market instruments or the grant of warrant rights. The then current owners of conversion rights and/or warrants will be entitled to subscribe for new shares. The conditions of the conversion rights and/or warrants will be determined by the Board.

The acquisition of shares through the exercise of warrants and each subsequent transfer of the shares will be subject to the restrictions of ABB's Articles of Incorporation (see "Limitations on

transferability of shares and nominee registration" in the Shareholders section below) (available at <https://new.abb.com/about/corporate-governance>).

In connection with the issuance of convertible or warrant-bearing bonds or other financial market instruments, the Board is authorized to restrict or deny the advance subscription rights of shareholders if such bonds or other financial market instruments are for the purpose of financing or refinancing the acquisition of an enterprise, parts of an enterprise, participations or new investments or an issuance on national or international capital markets. If the Board denies advance subscription rights, the convertible or warrant-bearing bonds or other financial market instruments will be issued at the relevant market conditions and the new shares will be issued pursuant to the relevant market conditions taking into account the share price and/or other comparable instruments having a market price. Conversion rights may be exercised during a maximum ten-year period, and warrants may be exercised during a maximum seven-year period, in each case from the date of the respective issuance. The advance subscription rights of the shareholders may be granted indirectly.

At December 31, 2021, ABB's share capital may be increased by an amount not to exceed CHF 11,284,656 through the issuance of up to 94,038,800 fully paid shares with a par value of CHF 0.12 per share to employees. If this contingent share capital were fully issued this would increase the existing share capital by approximately 4.6 percent. This contingent share capital has not changed during the last three years. The pre-emptive and advance subscription rights of ABB's shareholders are excluded. The shares or rights to subscribe for shares will be issued to employees pursuant to one or more regulations to be issued by the Board, taking into account performance, functions, level of responsibility and profitability criteria. ABB may issue shares or subscription rights to employees at a price lower than that quoted on a stock exchange. The acquisition of shares within the context of employee share ownership and each subsequent transfer of the shares will be subject to the restrictions of ABB's Articles of Incorporation (see "Limitations on transferability of shares and nominee registration" in the Shareholders section below).

## Authorized share capital

At December 31, 2021, ABB had an authorized share capital in the amount of up to CHF 24,000,000 through the issuance of up to 200,000,000 fully paid registered shares with a par value of CHF 0.12 each, which is valid

through March 25, 2023. If the authorized share capital were fully issued, this would increase the existing share capital by approximately 9.7 percent. Aside from renewal at the 2021 AGM, the authorized share capital has not changed during the last three years. The Board is authorized to determine the date of issue of new shares, the issue price, the type of payment, the conditions for the exercise of pre-emptive rights and the beginning date for dividend entitlement. In this regard, the Board may issue new shares by means of a firm underwriting through a banking institution, a syndicate or another third party with a subsequent offer of these shares to the shareholders. The Board may permit pre-emptive rights that have not been exercised by shareholders to expire or it may place these rights and/or shares as to which pre-emptive rights have been

granted but not exercised at market conditions or use them for other purposes in the interest of the Company. Furthermore, the Board is authorized to restrict or deny the pre-emptive rights of shareholders and allocate such rights to third parties if the shares are used (1) for the acquisition of an enterprise, parts of an enterprise, or participations, or for new investments, or in case of a share placement, for the financing or refinancing of such transactions; or (2) for the purpose of broadening the shareholder constituency in connection with a listing of shares on domestic or foreign stock exchanges. The subscription and the acquisition of the new shares, as well as each subsequent transfer of the shares, will be subject to the restrictions of ABB's Articles of Incorporation (available at <https://new.abb.com/about/corporate-governance>).

# Shareholders

## Shareholder structure

As of December 31, 2021, the total number of shareholders directly registered with ABB Ltd was approximately 96,000 and another 513,000 shareholders held shares indirectly through nominees. In total as of that date, ABB had approximately 609,000 shareholders.

## Significant shareholders

Under the Swiss Financial Market Infrastructure Act, shareholders and groups of shareholders acting in concert who directly or indirectly acquire or sell shares of a listed Swiss corporation or rights based thereon and thereby reach, exceed or fall below the thresholds of 3 percent, 5 percent, 10 percent, 15 percent, 20 percent, 25 percent, 33 $\frac{1}{3}$  percent, 50 percent or 66 $\frac{2}{3}$  percent of the voting rights of the corporation must notify the corporation and the SIX Swiss Exchange of such holdings. Consequently, significant shareholdings may have varied within the relevant threshold levels since they were reported.

Investor AB, Sweden, held 265,385,142 ABB shares as of December 31, 2021 (refer to Investor's year-end 2021 report available at <https://www.investorab.com/investors-media/reports-presentations>). This holding represented 12.9 percent of ABB's total share capital and voting rights as registered in the Commercial Register on December 31, 2021. The number of shares held by Investor AB does not include shares

held by Mr. Jacob Wallenberg, the chairman of Investor AB and a director of ABB, in his individual capacity.

The Capital Group Companies Inc., USA, disclosed that as of July 1, 2021, it, together with its direct and indirect affiliates, held 115,841,336 ABB shares (refer to <https://www.ser-ag.com/en/resources/notifications-market-participants/significant-shareholders.html#/shareholder-details/TAL7600020>). This holding represented 5.64 percent of ABB's total share capital and voting rights as registered in the Commercial Register at that time.

Cevian Capital II GP Limited, Jersey, disclosed that as of August 3, 2020, it held 105,988,662 ABB shares (refer to <https://www.sec.gov/Archives/edgar/data/1091587/000090266420002862/p20-1467sc13da.htm>). This holding represented 4.89 percent of ABB's total share capital and voting rights as registered in the Commercial Register at that time.

BlackRock Inc., U.S., disclosed that as of August 31, 2017, it, together with its direct and indirect subsidiaries, held 72,900,737 ABB shares (refer to <https://www.ser-ag.com/en/resources/notifications-market-participants/significant-shareholders.html#/shareholder-details/TAH91000F4>). This holding represented 3.36 percent of ABB's total share capital and voting rights as registered in the Commercial Register at that time.

At December 31, 2021, to the best of ABB's knowledge, no other shareholder held 3 percent or more of ABB's total share capital and voting rights as registered in the Commercial Register on that date.

ABB Ltd has no cross shareholdings in excess of 5 percent of capital, or voting rights with any other company.

Announcements related to disclosure notifications made by shareholders during 2021 can be found via the search facility on the platform of the Disclosure Office of the SIX Swiss Exchange: <https://www.ser-ag.com/en/resources/notifications-market-participants/significant-shareholders.html#/>.

Under ABB's Articles of Incorporation (available at <https://new.abb.com/about/corporate-governance>), each registered share represents one vote. Significant shareholders do not have different voting rights. To our knowledge, we are not directly or indirectly owned or controlled by any government or by any other corporation or person.

## Shareholders' rights

Shareholders have the right to receive dividends, to vote and to execute such other rights as granted under Swiss law and the Articles of Incorporation (available at <https://new.abb.com/about/corporate-governance>).

### Right to vote

ABB has one class of shares and each registered share carries one vote at the general meeting. Voting rights may be exercised only after a shareholder has been registered in the share register of ABB as a shareholder with the right to vote, or with Euroclear Sweden AB (Euroclear), which maintains a subregister of the share register of ABB.

A shareholder may be represented at the Annual General Meeting by its legal representative, by another shareholder with the right to vote or by the independent proxy elected by the shareholders (unabhängiger Stimmrechtsvertreter). If the Company does not have an independent proxy, the Board of Directors shall appoint the independent proxy for the next General Meeting of Shareholders. All shares held by one shareholder may be represented by one representative only.

For practical reasons shareholders must be registered in the share register no later than 6 business days before the general meeting in order to be entitled to vote. Except for the cases described under "Limitations on transferability of shares and nominee registration" below, there are no voting rights restrictions limiting ABB's shareholders' rights.

### Annual General Meeting/COVID-19

ABB's top priority is protecting the health of its shareholders and employees. Therefore, due to the extraordinary circumstances and in accordance with applicable Swiss COVID-19 legislation, shareholders were not able to attend ABB's Annual General Meeting 2021 in person, but could exercise their shareholder rights via the independent proxy only. The Board of Directors has resolved that for ABB's Annual General Meeting 2022, in accordance with applicable Swiss COVID-19 legislation, the same procedures shall apply. In addition, ABB will offer shareholders the opportunity to address questions on agenda items to the Board of Directors in writing ahead of the meeting.

### Powers of General Meeting

The Ordinary General Meeting of Shareholders must be held each year within 6 months after the close of the fiscal year of the Company; the business report, the compensation report and the Auditors' reports must be made available for inspection by the shareholders at the place of incorporation of the Company by no later than 20 days prior to the meeting. Each shareholder is entitled to request immediate delivery of a copy of these documents.

The following powers shall be vested exclusively in the General Meeting of Shareholders:

- Adoption and amendment of the Articles of Incorporation;
- Election of the members of the Board of Directors, the Chairman of the Board of Directors, the members of the Compensation Committee, the Auditors and the independent proxy;
- Approval of the annual management report and consolidated financial statements;
- Approval of the annual financial statements and decision on the allocation of profits shown on the balance sheet, in particular with regard to dividends;
- Approval of the maximum compensation of the Board of Directors and of the Executive Committee pursuant to Article 34 of the Articles of Incorporation;
- Granting discharge to the members of the Board of Directors and the persons entrusted with management;
- Passing resolutions as to all matters reserved to the authority of the General Meeting by law or under the Articles of Incorporation or that are submitted to the General Meeting by the Board of Directors, subject to Article 716a of the Swiss Code of Obligations.

## **Resolutions and elections at General Meetings**

Shareholders' resolutions at general meetings are approved with an absolute majority of the votes represented at the meeting, except for those matters described in Article 704 of the Swiss Code of Obligations and for resolutions with respect to restrictions on the exercise of the right to vote and the removal of such restrictions, which all require the approval of two-thirds of the votes represented at the meeting.

At December 31, 2021, shareholders representing shares of a par value totaling at least CHF 48,000 may require items to be included in the agenda of a general meeting. Any such request must be made in writing at least 40 days prior to the date of the general meeting and specify the items and the motions of such shareholder(s).

ABB's Articles of Incorporation do not contain provisions on the convocation of the general meeting of shareholders that differ from the applicable legal provisions.

## **Shareholders' dividend rights**

The unconsolidated statutory financial statements of ABB Ltd are prepared in accordance with Swiss law. Based on these financial statements, dividends may be paid only if ABB Ltd has sufficient distributable profits from previous years or sufficient free reserves to allow the distribution of a dividend. Swiss law requires that ABB Ltd retain at least 5 percent of its annual net profits as legal reserves until these reserves amount to at least 20 percent of ABB Ltd's share capital. Any net profits remaining in excess of those reserves are at the disposal of the shareholders' meeting.

Under Swiss law, ABB Ltd may only pay out a dividend if it has been proposed by a shareholder or the Board of Directors and approved at a general meeting of shareholders, and the auditors confirm that the dividend conforms to statutory law and ABB's Articles of Incorporation. In practice, the shareholders' meeting usually approves dividends as proposed by the Board of Directors.

Dividends are usually due and payable no earlier than 2 trading days after the shareholders' resolution and the ex-date for dividends is normally 2 trading days after the shareholders' resolution approving the dividend. Dividends are paid out to the holders that are registered on the record date. Euroclear administers the payment of those shares registered with it. Under Swiss law, dividends not collected within 5 years after the due date accrue to ABB Ltd and are allocated to its other reserves. As ABB Ltd pays cash dividends, if any, in Swiss francs (subject to the exception for certain shareholders in Sweden described below), exchange rate fluctuations will affect the U.S. dollar

amounts received by holders of ADSs upon conversion of those cash dividends by Citibank, N.A., the depositary, in accordance with the Amended and Restated Deposit Agreement dated May 7, 2001.

For shareholders who are residents of Sweden, ABB has established a dividend access facility (for up to 600,004,716 shares). With respect to any annual dividend payment for which this facility is made available, shareholders who register with Euroclear may elect to receive the dividend from ABB Norden Holding AB in Swedish krona (in an amount equivalent to the dividend paid in Swiss francs) without deduction of Swiss withholding tax. For further information on the dividend access facility, see ABB's Articles of Incorporation.

## **Limitations on transferability of shares and nominee registration**

ABB may decline a registration with voting rights if a shareholder does not declare that it has acquired the shares in its own name and for its own account. If the shareholder refuses to make such declaration, it will be registered as a shareholder without voting rights. A person failing to expressly declare in its registration/application that it holds the shares for its own account (a nominee), will be entered in the share register with voting rights, provided that such nominee has entered into an agreement with ABB concerning its status, and further provided that the nominee is subject to recognized bank or financial market supervision. In special cases the Board may grant exemptions. There were no exemptions granted in 2021. The limitation on the transferability of shares may be removed by an amendment of ABB's Articles of Incorporation by a shareholders' resolution requiring two-thirds of the votes represented at the meeting.

## **No restriction on trading of shares**

No restrictions are imposed on the transferability of ABB shares. The registration of shareholders in the ABB share register, Euroclear and the ADS register kept by Citibank does not affect transferability of ABB shares or ADSs. Registered ABB shareholders or ADR holders may therefore purchase or sell their ABB shares or ADRs at any time, including before a General Meeting regardless of the record date. The record date serves only to determine the right to vote at a General Meeting.

## **Duty to make a public tender offer**

ABB's Articles of Incorporation do not contain any provisions raising the threshold (opting up) or waiving the duty (opting out) to make a public tender offer pursuant to Article 135 of the Swiss Act on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading.

# Independent external auditors

## Duration of the mandate and term of office of the auditors

On March 25, 2021, shareholders at the Annual General Meeting of ABB Ltd approved the appointment of KPMG AG (KPMG) to be the auditors of the Company for the 2021 financial year.

KPMG are the auditors of ABB's statutory and consolidated financial statements. KPMG, Switzerland, assumed the sole auditing mandate of the consolidated financial statements of the ABB Group beginning in the year ended December 31, 2018. The auditor in charge and responsible for the mandate, Hans-Dieter Krauss, began serving in this capacity in respect of the financial year ended December 31, 2018. Pursuant to ABB's Articles of Incorporation (available at <https://new.abb.com/about/corporate-governance>), the term of office of ABB's auditors is one year.

## Information to the Board and the Finance, Audit and Compliance Committee

### Supervisory and control instruments vis-à-vis the auditors

Our auditors, KPMG, attend each meeting of the FACC and each meeting includes a private session between the auditors and the FACC without the management being present. In 2021, the FACC had 6 meetings (either in person or via telephone call). On at least an annual basis, the FACC reviews and discusses with the external auditors all significant relationships that the auditors have with the Company that could impair their independence. The FACC reviews the auditor engagement letter and the audit plan including discussion of scope, staffing, locations and general audit approach. The FACC also reviews and evaluates the auditors' judgment on the quality and appropriateness of the Company's accounting principles as applied in the financial reporting. In addition, the FACC approves in advance any non-audit services to be performed by the auditors.

At least annually, the FACC obtains and reviews a report by the auditors that includes discussion on:

- The Company's internal control procedures;
- Material issues, if any, raised by the most recent internal quality control review;
- Critical accounting policies and practices of the Company;
- All alternative accounting treatments of financial information that were discussed between the auditors and management as well as the related ramifications; and
- Material communications between the auditors and management such as any management letter or schedule of audit differences.

Taking into account the opinions of management the FACC evaluates the qualifications, independence and performance of the auditors. The FACC reports the material elements of its supervision of the auditors to the Board and on an annual basis recommends to the Board the auditors to be proposed for election at the shareholders meeting.

## Audit and additional fees paid to the auditors

The audit fees charged by KPMG for the legally prescribed audit amounted to \$34.5 million in 2021. Audit services are defined as the standard audit work performed each fiscal year necessary to allow the auditors to issue an opinion on the consolidated financial statements of ABB and to issue an opinion on the local statutory financial statements.

This classification may also include services that can be provided only by the auditors, such as pre-issuance reviews of quarterly financial results and comfort letters delivered to underwriters in connection with debt and equity offerings. Included in the 2021 audit fees were approximately \$4.7 million related to audits from 2020 and earlier, which were not agreed until after the Company had filed its annual report on Form 20-F with the SEC on February 26, 2021.

In addition, KPMG charged \$13.6 million for non-audit services during 2021. Non-audit services include primarily carve-out financial statement audits in relation to transactional activities, service organization attestation

procedures, agreed-upon procedure reports, accounting consultations, audits of pension and benefit plans, accounting advisory services and other attest services related to financial reporting that are not required by statute or regulation, income tax and indirect tax compliance services

as well as tax advisory services. In accordance with the requirements of the U.S. Sarbanes Oxley Act of 2002 and rules issued by the SEC, we utilize a procedure for the review and pre approval of any services performed by KPMG.

# Other governance information

## ABB Group organizational structure

ABB Ltd, Switzerland, is the ultimate parent company of the ABB Group. It is the sole shareholder of ABB Asea Brown Boveri Ltd which directly or indirectly owns the other companies in the ABB Group. The table in the appendix to this Corporate Governance Report sets forth, as of December 31, 2021, the name, place of incorporation, ownership interest and share capital of the significant direct and indirect subsidiaries of ABB Ltd. In addition, ABB Ltd also owns 19.9 percent of Hitachi Energy Ltd. ABB's operational group structure is described in the "Financial review of ABB Group" section of this Annual Report under "Operating and financial review and prospects – Organizational structure".

## Management contracts

There are no management contracts between ABB and companies or natural persons not belonging to the ABB Group.

## Change of control clauses

Board members, Executive Committee members, and other members of senior management do not receive any special benefits in the event of a change of control. However, the conditional grants under the Long Term Incentive Plan (LTIP) and the Management Incentive Plan (MIP) may be subject to accelerated vesting in the event of a change of control. From 2021, the rules for the LTIP have been amended to no longer provide for accelerated vesting upon a change in control. No further grants are made under the MIP.

## Employee participation programs

In order to align its employees' interests with the business goals and financial results of the Company, ABB operates a number of incentive plans, linked to ABB's shares, such as the Employee Share Acquisition Plan, the Management Incentive Plan and the Long Term Incentive Plan. For a more detailed description of these incentive plans, please refer to "Note 18 – Share-based payment arrangements" to ABB's Consolidated Financial Statements.

## General blackout periods for trading ABB securities

During the 30 days prior to the day of publication of the ABB Group's quarterly financial results, as well as on such day, the members of the Board of Directors and the Executive Committee as well as certain employees of ABB, as specified in ABB's internal policies, are prohibited from trading in ABB Ltd securities and any related financial instruments.

## Governance differences from NYSE Standards

According to the New York Stock Exchange's corporate governance standards (the Standards), ABB is required to disclose significant ways in which its corporate governance practices differ from the Standards. ABB has reviewed the Standards and concluded that its corporate governance practices are generally consistent with the Standards, with the following significant exceptions:

- Swiss law requires that the external auditors be elected by the shareholders at the Annual

- General Meeting rather than by the audit committee or the board of directors.
- The Standards require that all equity compensation plans and material revisions thereto be approved by the shareholders. Consistent with Swiss law such matters are decided by our Board. However, the shareholders decide about the creation of new share capital that can be used in connection with equity compensation plans.

- Swiss law requires that the members of the compensation committee are elected by the shareholders rather than appointed by our Board.
- Swiss law requires shareholders to approve the maximum aggregate Board compensation and the maximum aggregate Executive Committee compensation.

## Information policy

ABB, as a publicly traded company, is committed to communicating in a timely and consistent way to shareholders, potential investors, financial analysts, customers, suppliers, the media and other interested parties. ABB is required to disseminate material information pertaining to its businesses in a manner that complies with its obligations under the rules of the stock exchanges where its shares are listed and traded.

ABB publishes an annual report that provides audited financial statements and information about ABB including our business results, strategy, products and services, corporate governance and executive compensation. ABB also submits an annual report on Form 20-F to the Securities and Exchange Commission (SEC). In addition, ABB publishes its results on a quarterly basis as press releases, distributed pursuant to the rules and regulations of the stock exchanges on which its shares are listed and traded. Press releases relating to financial results and material events are also filed with the SEC on Form 6-K. An archive containing Annual Reports, Form 20-F reports, quarterly results releases and related presentations can be found in the “Financial results and presentations” section at [www.abb.com/investorrelations](http://www.abb.com/investorrelations). The quarterly results press releases contain unaudited financial information prepared in accordance with or reconciled to U.S. GAAP. To subscribe to important press releases, please click on the “Contacts and Services” and choose “Subscribe to updates” at <https://www.abb.com/investorrelations>. Ad-hoc notices can also be found in the press releases section at <https://www.abb.com/news>.

ABB's official means of communication is the Swiss Official Gazette of Commerce (<https://www.shab.ch>). The invitation to the Company's Annual General Meeting is sent to registered shareholders by mail.

Inquiries may also be made to ABB Investor Relations:

Affolternstrasse 44  
CH-8050 Zurich, Switzerland  
Telephone: +41 43 317 7111  
E-Mail: [investor.relations@ch.abb.com](mailto:investor.relations@ch.abb.com)  
ABB's website is: [www.abb.com](http://www.abb.com)

## Further information on corporate governance

The list below contains references to additional information concerning the corporate governance of ABB (available at <https://new.abb.com/about/corporate-governance>).

- Articles of Incorporation
- ABB Ltd Board Governance Rules, which includes:
  - Governance Rules of the Finance, Audit and Compliance Committee
  - Governance Rules of the Governance and Nomination Committee
  - Governance Rules of the Compensation Committee
  - Related Party Transaction Policy
- ABB Code of Conduct
- Comparison of ABB's corporate governance practices to the New York Stock Exchange rules
- Summary of differences of shareholder rights under Swedish and Swiss law applicable to ABB
- CVs of the Board members
- CVs of the Executive Committee members

ABB's corporate calendar can be found at <https://new.abb.com/investorrelations/calendar-events-and-publications/financial-calendar>.

## Appendix – ABB Ltd's significant subsidiaries

Company name/location	Country	ABB interest %	Share capital in thousands	Currency
ABB S.A., Buenos Aires	Argentina	100.00	278,860	ARS
ABB Australia Pty Limited, Moorebank	Australia	100.00	131,218	AUD
ABB Group Holdings Pty. Ltd., Moorebank	Australia	100.00	552,982	AUD
ABB Group Investment Management Pty. Ltd., Moorebank	Australia	100.00	505,312	AUD
ABB AG, Wiener Neudorf	Austria	100.00	15,000	EUR
B&R Holding GmbH, Eggelsberg	Austria	100.00	35	EUR
B&R Industrial Automation GmbH, Eggelsberg	Austria	100.00	1,240	EUR
ABB N.V., Zaventem	Belgium	100.00	34,308	EUR
ABB Automacao LTDA, Sorocaba	Brazil	100.00	196,554	BRL
ABB Eletrificacao LTDA, Sorocaba	Brazil	100.00	268,759	BRL
ABB Bulgaria EOOD, Sofia	Bulgaria	100.00	65,110	BGN
ABB Electrification Canada ULC, Edmonton	Canada	100.00	— <sup>(2)</sup>	CAD
ABB Inc., Saint-Laurent	Canada	100.00	— <sup>(2)</sup>	CAD
ABB S.A., Santiago	Chile	100.00	5,484,348	CLP
ABB (China) Investment Limited, Beijing	China	100.00	95,000	USD
ABB (China) Ltd., Beijing	China	100.00	140,000	USD
ABB Beijing Drive Systems Co. Ltd., Beijing	China	90.00	5,000	USD
ABB Beijing Switchgear Limited, Beijing	China	60.00	16,500	USD
ABB Electrical Machines Ltd., Shanghai	China	100.00	14,400	USD
ABB Engineering (Shanghai) Ltd., Shanghai	China	100.00	40,000	USD
ABB LV Installation Materials Co. Ltd. Beijing, Beijing	China	85.70	17,100	USD
ABB Shanghai Free Trade Zone Industrial Co., Ltd., Shanghai	China	100.00	6,500	CNY
ABB Shanghai Motors Co. Ltd., Shanghai	China	75.00	11,217	USD
ABB Xiamen Low Voltage Equipment Co. Ltd., Xiamen	China	100.00	15,800	USD
ABB Xiamen Switchgear Co. Ltd., Xiamen	China	66.52	29,500	USD
ABB Xinhui Low Voltage Switchgear Co. Ltd., Xinhui	China	90.00	6,200	USD
ABB s.r.o., Prague	Czech Republic	100.00	400,000	CZK
ABB A/S, Skovlunde	Denmark	100.00	100,000	DKK
ABB for Electrical Industries (ABB ARAB) S.A.E., Cairo	Egypt	100.00	353,479	EGP
Asea Brown Boveri S.A.E., Cairo	Egypt	100.00	166,000	USD
ABB AS, Jüri	Estonia	100.00	1,663	EUR
ABB Oy, Helsinki	Finland	100.00	10,003	EUR
ABB France, Cergy Pontoise	France	99.83	25,778	EUR
ABB SAS, Cergy Pontoise	France	100.00	45,921	EUR
ABB AG, Mannheim	Germany	100.00	167,500	EUR
ABB Beteiligungs- und Verwaltungsges. mbH, Mannheim	Germany	100.00	61,355	EUR
ABB Stotz-Kontakt GmbH, Heidelberg	Germany	100.00	7,500	EUR
B + R Industrie-Elektronik GmbH, Bad Homburg	Germany	100.00	358	EUR
Busch-Jaeger Elektro GmbH, Lüdenscheid	Germany	100.00	1,535	EUR
ABB Engineering Trading and Service Ltd., Budapest	Hungary	100.00	436,281	HUF
Industrial C&S Hungary Kft., Budapest	Hungary	100.00	3,000	HUF
ABB Global Business Services and Contracting India Private Limited, Bangalore	India	100.00	5,200,100	INR
ABB Global Industries and Services Private Limited, Bangalore	India	100.00	366,923	INR
ABB India Limited, Bangalore	India	75.00	423,817	INR
ABB S.p.A., Milan	Italy	100.00	110,000	EUR
ABB K.K., Tokyo	Japan	100.00	1,000,000	JPY
ABB Ltd., Seoul	Korea, Republic of	100.00	23,670,000	KRW
ABB Electrical Control Systems S. de R.L. de C.V., Monterrey	Mexico	100.00	315,134	MXN
ABB Mexico S.A. de C.V., San Luis Potosi	Mexico	100.00	683,418	MXN
Asea Brown Boveri S.A. de C.V., San Luis Potosi	Mexico	100.00	667,686	MXN
ABB B.V., Rotterdam	Netherlands	100.00	9,200	EUR
ABB Finance B.V., Rotterdam	Netherlands	100.00	20	EUR
ABB Holdings B.V., Rotterdam	Netherlands	100.00	363	EUR
ABB AS, Fornebu	Norway	100.00	134,550	NOK
ABB Electrification Norway AS, Skien	Norway	100.00	60,450	NOK

Company name/location	Country	ABB interest %	Share capital in thousands	Currency
ABB Holding AS, Fornebu	Norway	100.00	240,000	NOK
ABB Business Services Sp. z o.o., Warsaw	Poland	99.94	24	PLN
ABB Industrial Solutions (Bielsko-Biala) Sp. z o.o., Bielsko-Biala	Poland	99.94	328,125	PLN
ABB Industrial Solutions (Klodzko) Sp.z o.o., Klodzko	Poland	99.94	50	PLN
ABB Sp. z o.o., Warsaw	Poland	99.94	245,461	PLN
Industrial C&S of P.R. LLC, San Juan	Puerto Rico	100.00	— <sup>(2)</sup>	USD
ABB Ltd., Moscow	Russian Federation	100.00	23,000	RUB
ABB Electrical Industries Co. Ltd., Riyadh	Saudi Arabia	65.00	181,000	SAR
ABB Pte. Ltd., Singapore	Singapore	100.00	32,797	SGD
ABB Holdings (Pty) Ltd., Modderfontein	South Africa	100.00	217,758	ZAR
ABB Investments (Pty) Ltd, Modderfontein	South Africa	51.00	56,000	ZAR
ABB South Africa (Pty) Ltd., Modderfontein	South Africa	74.91	200,001	ZAR
Asea Brown Boveri S.A., Madrid	Spain	100.00	33,318	EUR
ABB AB, Västerås	Sweden	100.00	200,000	SEK
ABB Electrification Sweden AB, Västerås	Sweden	100.00	10,000	SEK
ABB Norden Holding AB, Västerås	Sweden	100.00	2,344,783	SEK
ABB Asea Brown Boveri Ltd, Zurich	Switzerland	100.00	2,767,880	CHF
ABB Canada EL Holding GmbH, Zurich	Switzerland	100.00	1,000	CHF
ABB Capital AG, Zurich	Switzerland	100.00	100	CHF
ABB Information Systems Ltd., Zurich	Switzerland	100.00	500	CHF
ABB Investment Holding 2 GmbH, Zurich	Switzerland	100.00	20	CHF
ABB Management Services Ltd., Zurich	Switzerland	100.00	571	CHF
ABB Schweiz AG, Baden	Switzerland	100.00	55,000	CHF
ABB Ltd., Taipei	Taiwan (Chinese Taipei)	100.00	195,000	TWD
ABB Elektrik Sanayi A.S., Istanbul	Turkey	99.99	13,410	TRY
ABB Industries (L.L.C.), Dubai	United Arab Emirates	49.00 <sup>(1)</sup>	5,000	AED
ABB Holdings Limited, Warrington	United Kingdom	100.00	226,014	GBP
ABB Limited, Warrington	United Kingdom	100.00	120,000	GBP
ABB Finance (USA) Inc., Wilmington, DE	United States	100.00	1	USD
ABB Holdings Inc., Cary, NC	United States	100.00	2	USD
ABB Inc., Cary, NC	United States	100.00	1	USD
ABB Installation Products Inc, Memphis, TN	United States	100.00	1	USD
ABB Motors and Mechanical Inc, Fort Smith, AR	United States	100.00	— <sup>(2)</sup>	USD
ABB Treasury Center (USA), Inc., Wilmington, DE	United States	100.00	1	USD
Edison Holding Corporation, Wilmington, DE	United States	100.00	— <sup>(2)</sup>	USD
Industrial Connections & Solutions LLC, Cary, NC	United States	100.00	— <sup>(2)</sup>	USD

(1) Company consolidated as ABB exercises full management control.

(2) Shares without par value.