

BJÖRN ROSENGREN, ABB CEO

TIMO IHAMUOTILA, ABB CFO

# Capital Markets Day 2023

# Important notices

Today's presentations include forward-looking information and statements including statements concerning the outlook for our businesses.

These statements are based on current expectations, estimates and projections about the factors that may affect our future performance, including global economic conditions, and the economic conditions of the regions and industries that are major markets for ABB Ltd.

These expectations, estimates and projections are generally identifiable by statements containing words such as "expects," "believes," "estimates," "targets," "guidance", "plans," "outlook," "on track," "framework" or similar expressions.

There are numerous risks and uncertainties, many of which are beyond our control, that could cause our actual results to differ materially from the forward-looking information and statements made in this presentation and which could affect our ability to achieve any or all of our stated targets.

**The important factors that could cause such differences include, among others:**

- business risks associated with the volatile global economic environment and political conditions
- costs associated with compliance activities
- market acceptance of new products and services
- changes in governmental regulations and currency exchange rates, and
- such other factors as may be discussed from time to time in ABB Ltd's filings with the US Securities and Exchange Commission, including its Annual Reports on Form 20-F.

Although ABB Ltd believes that its expectations reflected in any such forward-looking statement are based upon reasonable assumptions, **it can give**

**no assurance that those expectations will be achieved.**

This presentation contains non-GAAP measures of performance. Definitions of these measures and reconciliations between these measures and their US GAAP counterparts can be found in on our website at [global.abb/group/en/investors](https://global.abb/group/en/investors)

# Achieved strong performance improvements through transformation period

Setting new standards

## 01

Reshaped the group to fit the ABB purpose

## 02

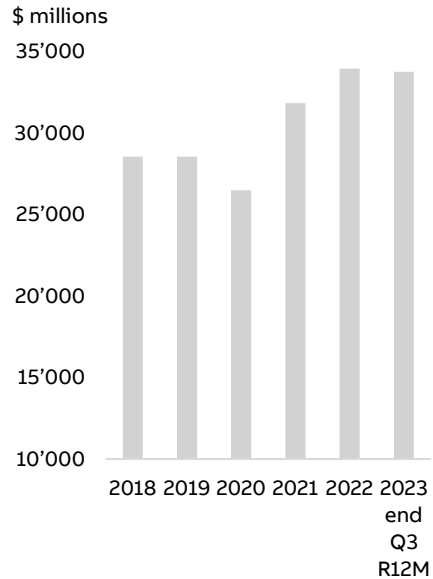
ABB Way operating model:

- Accountability, transparency and speed
- Stability and profitability before growth

## 03

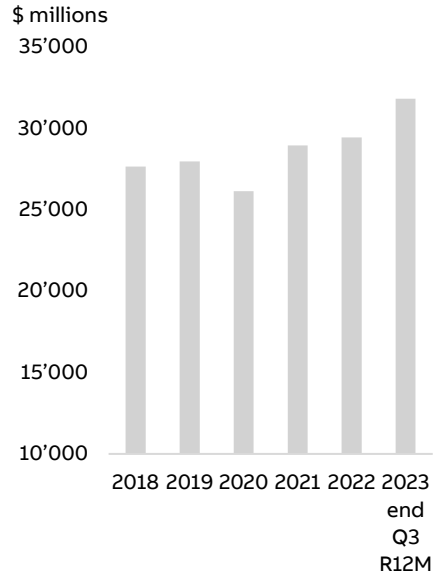
Improved financial and sustainability performances

### Order intake



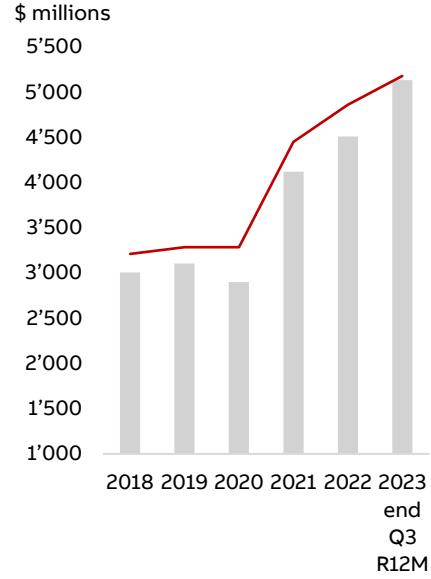
### Revenues

New ATH



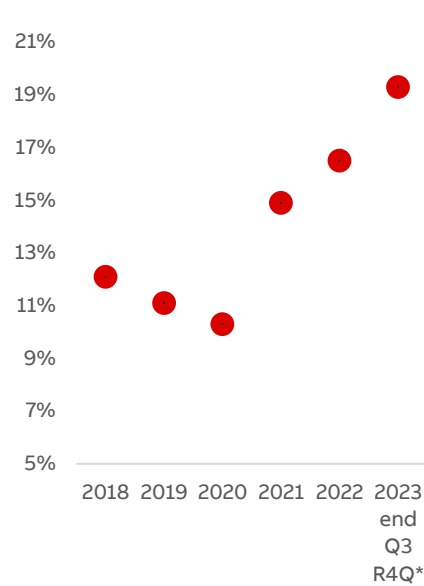
### Op. EBITA | Op. EBITA %

New ATH



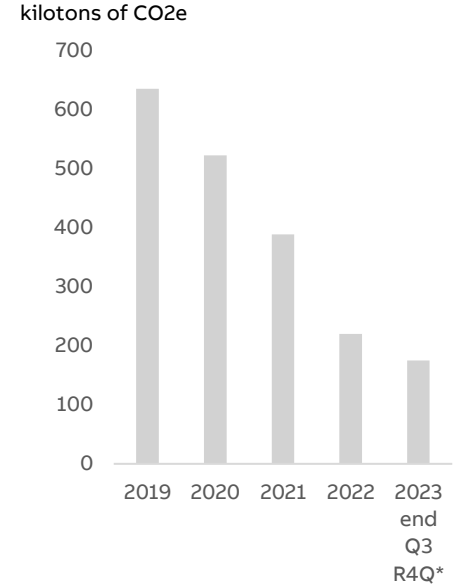
### ROCE

New ATH



### Scope 1 & 2 | GHG emissions

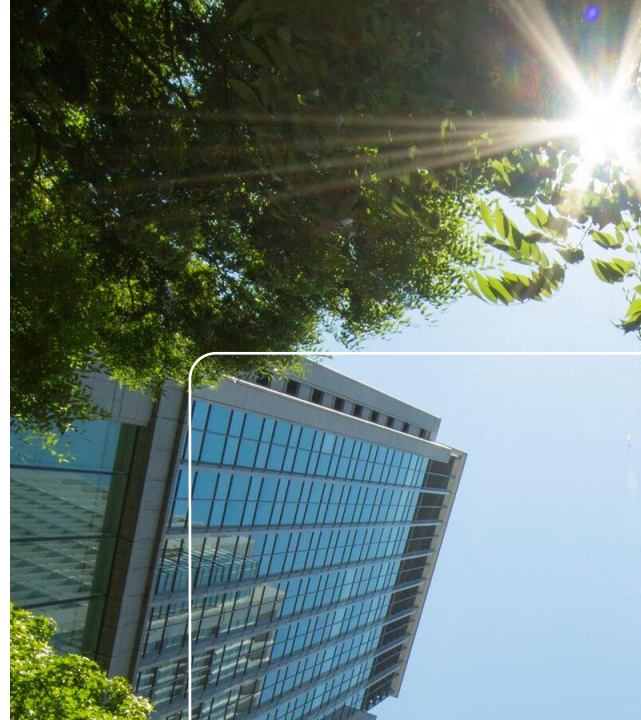
-72% vs 2019 baseline



\* Non-GAAP measure not comparable, details in supplemental reconciliation

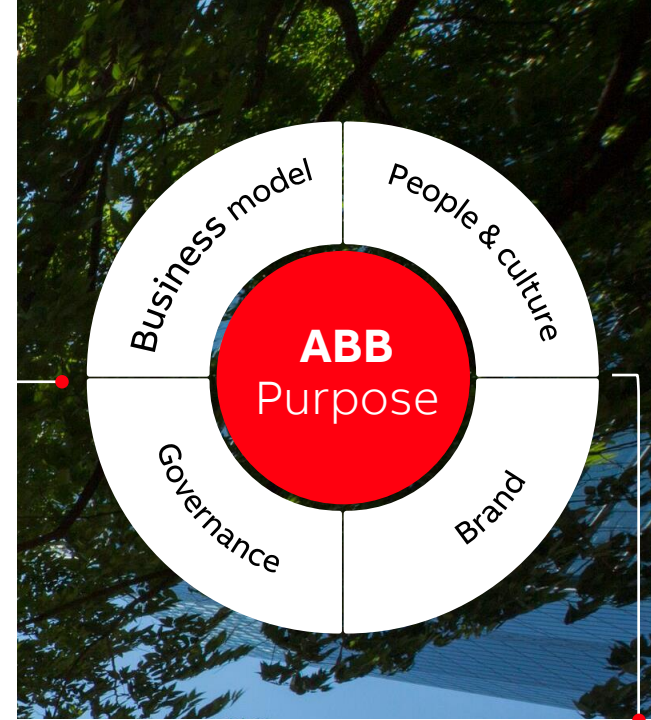
## We have aligned the business portfolio to the ABB Purpose

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



## Implemented the ABB Way operating model

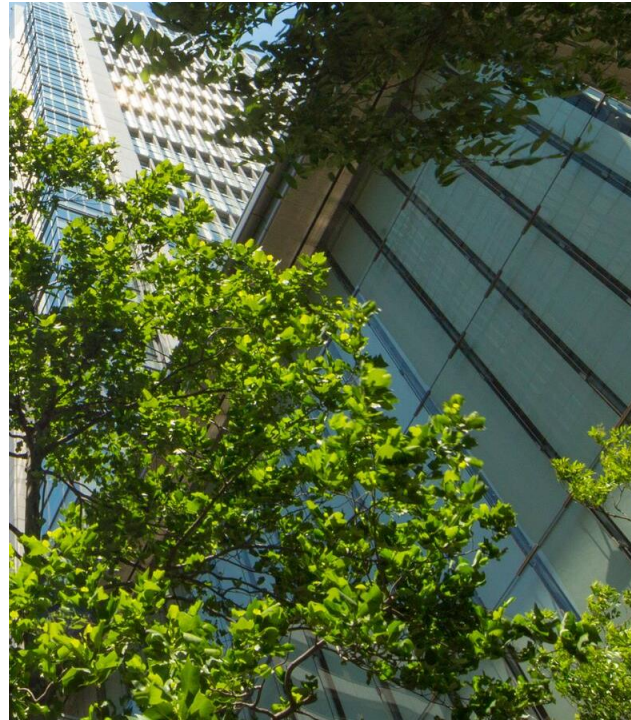
- Operating decisions in the divisions, close to customers  
Increased accountability, transparency and speed
- Performance culture
- Clarity on strategic mandate and target setting



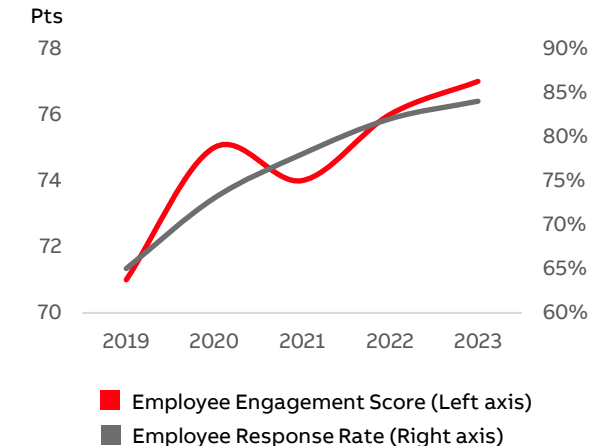
## Exited ~\$1.8bn of revenues in three high performing divisions

- Mechanical Power Transmission, MO divestment
- Turbocharging (Accelleron), PA spin-off
- Power Conversion, EL divestment

Going forward, continuous pruning within divisions

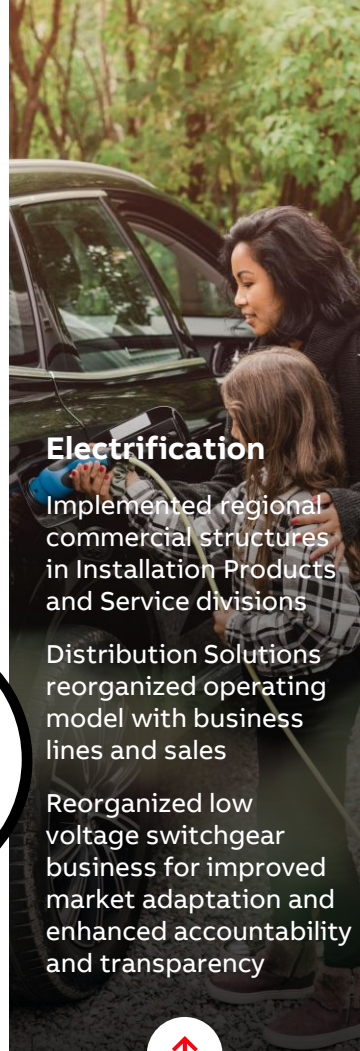
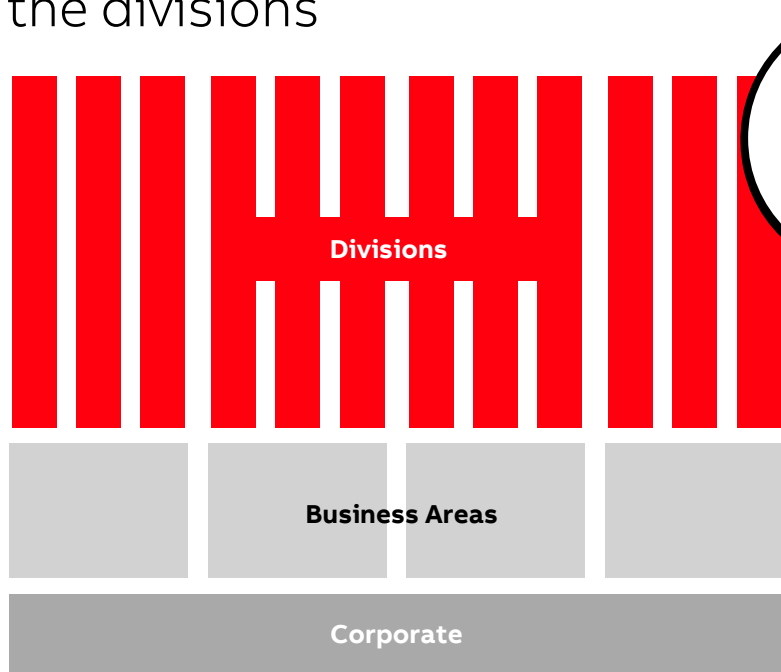


## Strong improvement in Employee Engagement Survey



# ABB Way operating model has been further cemented

Implemented additional actions to increase accountability, transparency and speed within the divisions

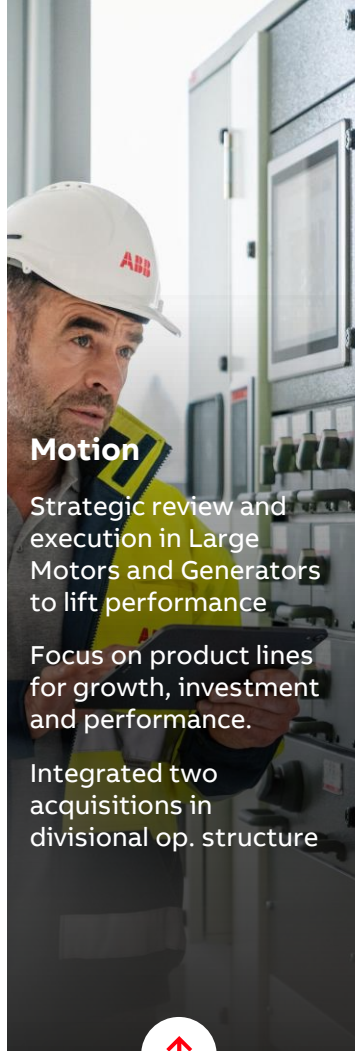


## Electrification

Implemented regional commercial structures in Installation Products and Service divisions

Distribution Solutions reorganized operating model with business lines and sales

Reorganized low voltage switchgear business for improved market adaptation and enhanced accountability and transparency

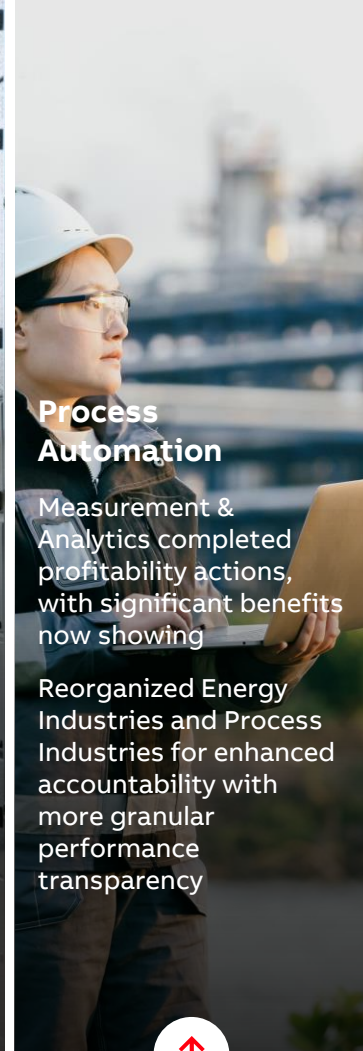


## Motion

Strategic review and execution in Large Motors and Generators to lift performance

Focus on product lines for growth, investment and performance.

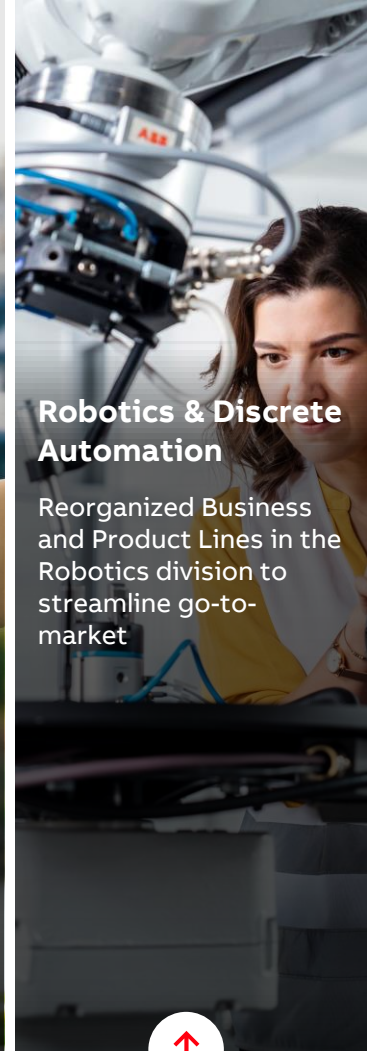
Integrated two acquisitions in divisional op. structure



## Process Automation

Measurement & Analytics completed profitability actions, with significant benefits now showing

Reorganized Energy Industries and Process Industries for enhanced accountability with more granular performance transparency



## Robotics & Discrete Automation

Reorganized Business and Product Lines in the Robotics division to streamline go-to-market



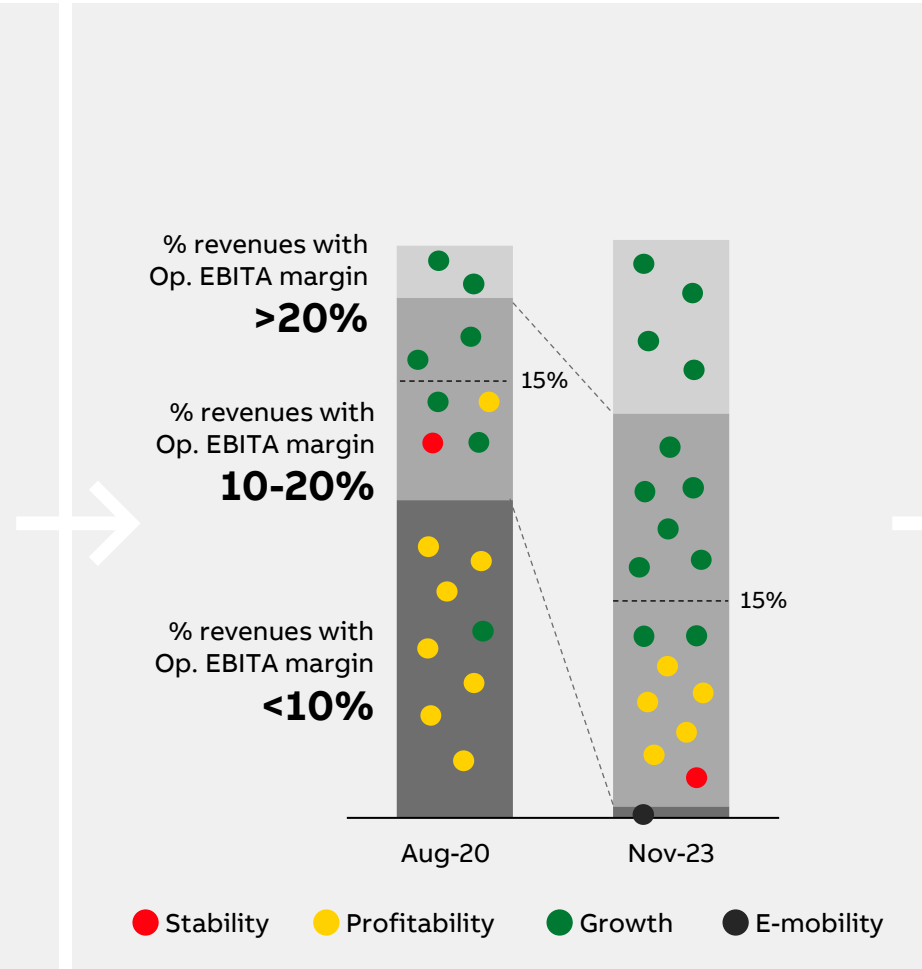
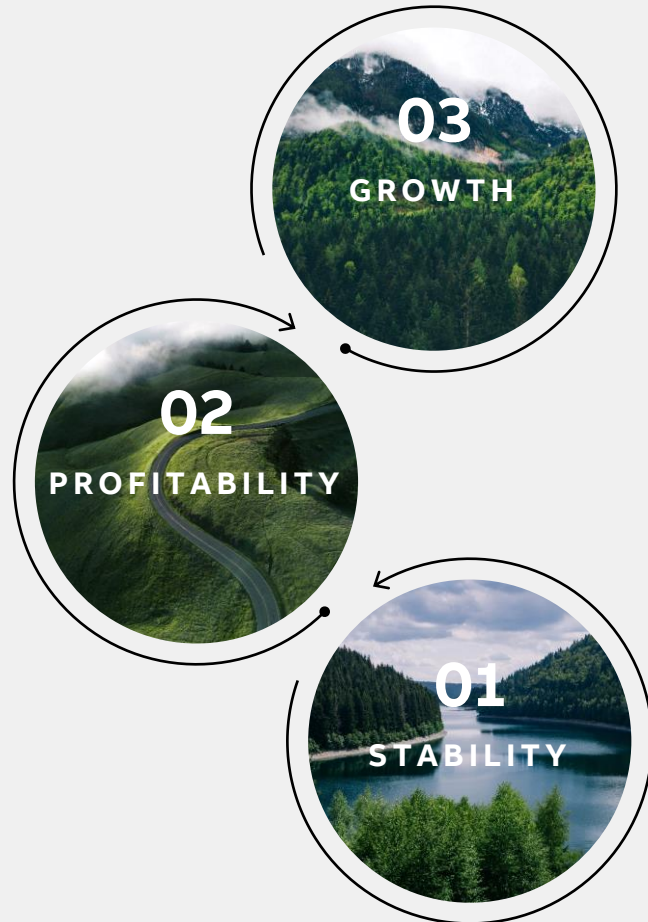
Transferred M&A resources to divisions

Further embedding sustainability through the formal establishment of BA/Corporate Sustainability Council

**ABB Corporate**

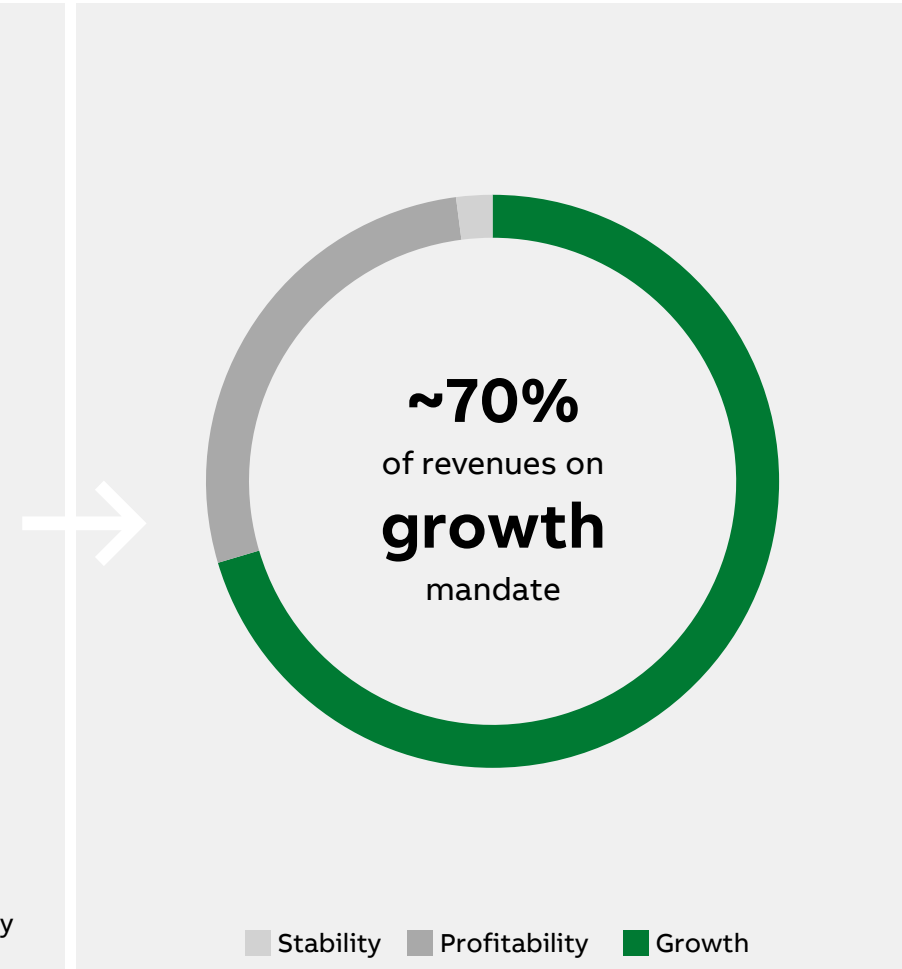
# Improved profitability and transition towards growth

Transition through ABB Way operating model



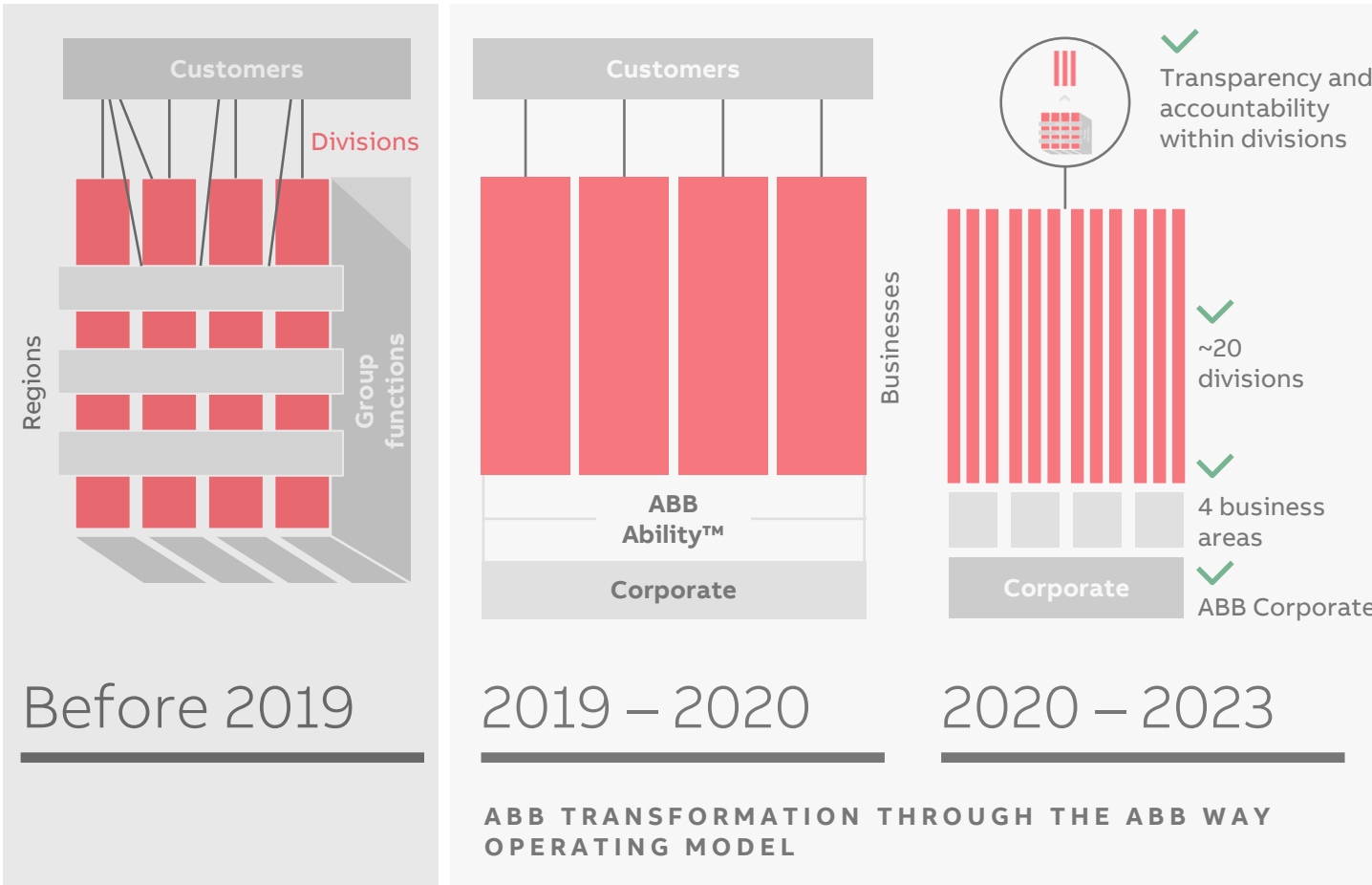
Placement of dots within the range is not indicative of relative margin variance.

Both columns exclude exited Turbocharging, Mechanical Power Transmission and Power Conversion divisions. Construct of divisions may have changed due to governance under the ABB Way operating model.



# Coming out of transformation phase

The best is yet to come



**Consistency in operating model**



**Accelerating growth**



**Continuous improvements**

2024 –

“ We have cemented the ABB way in the organisation. We see our leaders acting with higher accountability and speed in decision making.



**Bjorn Rosengren**  
CEO

—

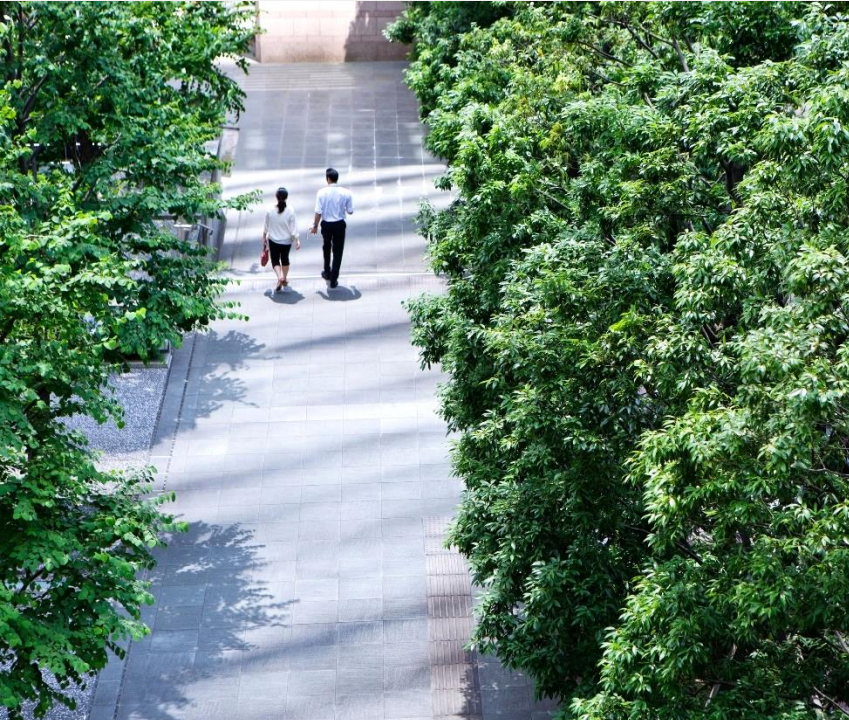
# Consistency in operating model

## ABB Way

“ Staying true to the ABB way gives stability in ways of working to the entire organisation. It will support profitability as we further drive quality of revenues.



**Timo Ihamuotila**  
CFO



“ The Board of Directors is fully behind maintaining consistency in the ABB Way operating model. It drives strong shareholder value creation.



**Peter Voser**  
CHAIRMAN OF BOARD





# Accelerating growth

Both internal and external drivers

03

**Accelerating sustainability drivers for electrification and automation**

EXTERNAL

● **For electrification and automation**

- The world going electric – Energy security – Energy efficiency – Automation
- Global carbon reduction targets
- Regulations – reporting standards
- Impact on corporates operational performance due to rising cost of carbon
- Customer, employee and shareholder focus

02

**New ways of working with divisions accountable for growth with decision-making closer to the market**

INTERNAL

● **Divisions accountable for growth with decision-making closer to the market**

- ABB Way operating model – transferred operating decisions to divisions. Accountable for both organic and inorganic growth
- Clarity and consistency on strategic mandate in businesses
  - Clear target setting and accountability

01

**Reshaped portfolio around the ABB purpose of increased sustainability and resource efficiency through electrification and automation**

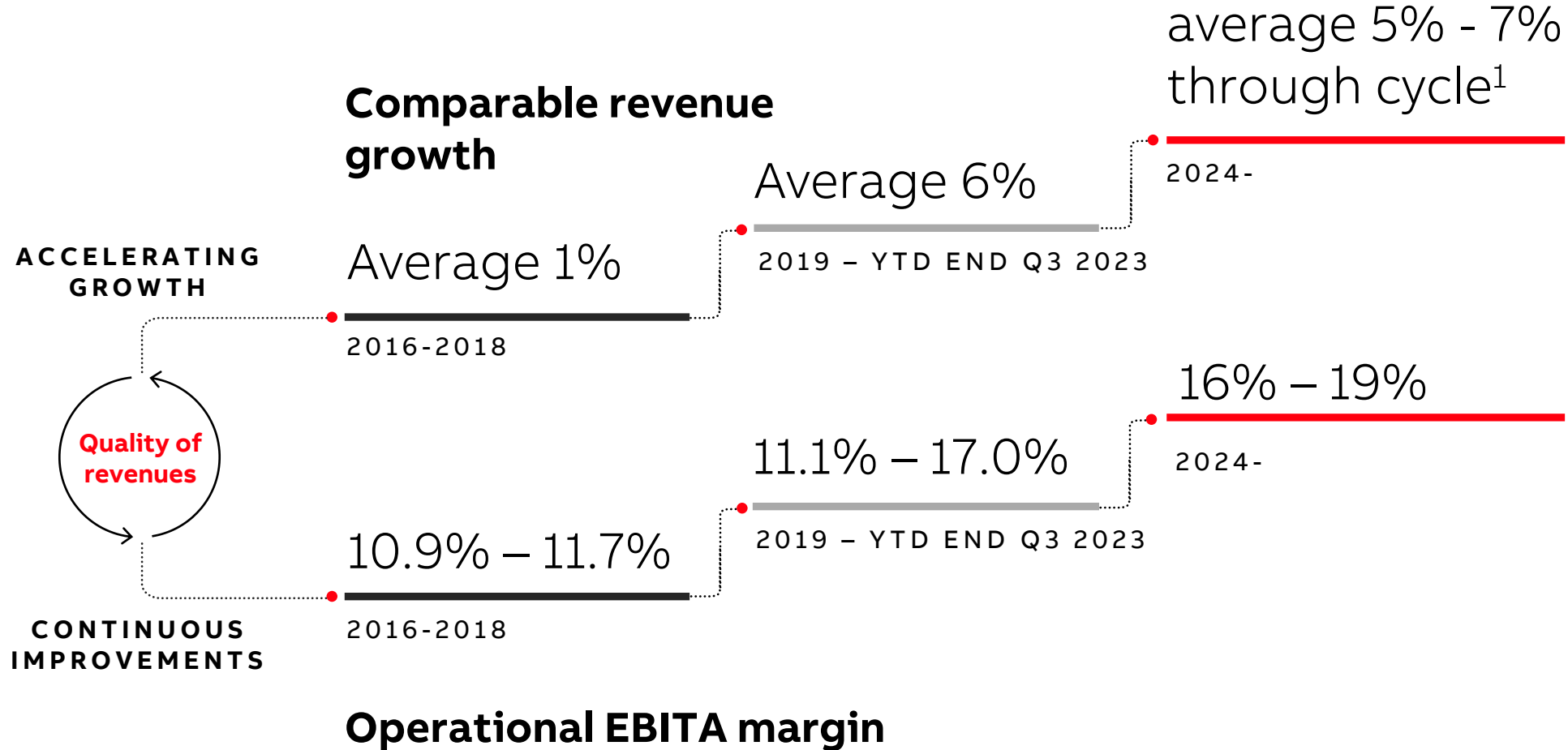
INTERNAL

● **Around sustainability and resource efficiency through electrification and automation**

- Exit of EPC business – reduced exposure to utilities
- Short-cycle business now ~50% of revenues, vs ~30% in 2016\*, with ~20% service business on top
- ~36% of revenues generated through distributors vs ~23% in 2016\*
- Continuous business portfolio assessment

\* 2016 inclusive of PG not in discontinued operations, details in supplemental reconciliation

# Increasing ambitions and continuous improvements for growth and margin



setting new standards

As reported, i.e., business portfolio is not comparable over the historical periods





1. Excluding FX impacts, acquisitions and divestments

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# Corporates navigating challenges and opportunities from global tension such as...

## Strained value chain

including for...

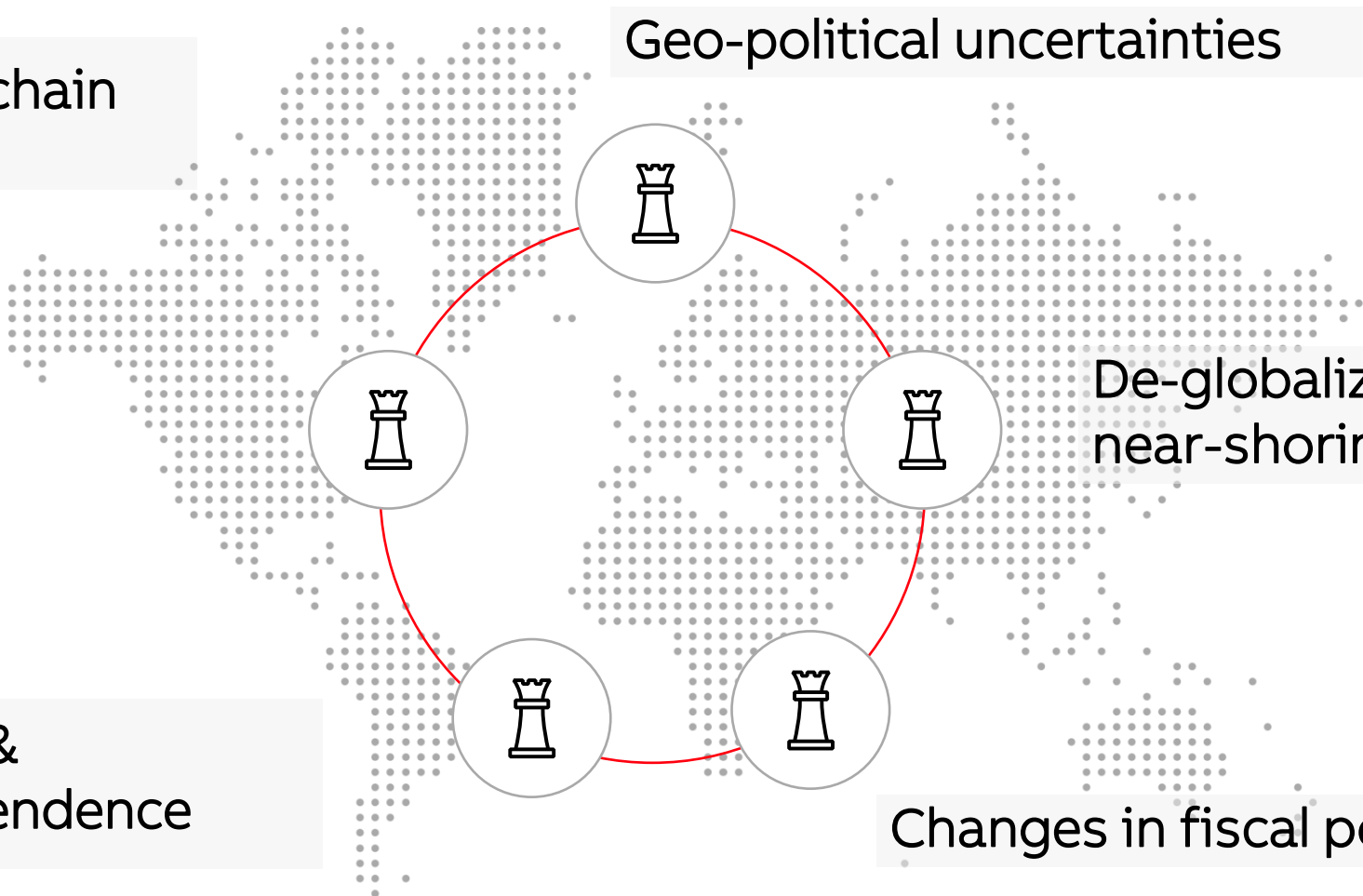
-  commodities
-  freight
-  components
-  people

Energy crisis & energy independence

Geo-political uncertainties

De-globalization & near-shoring

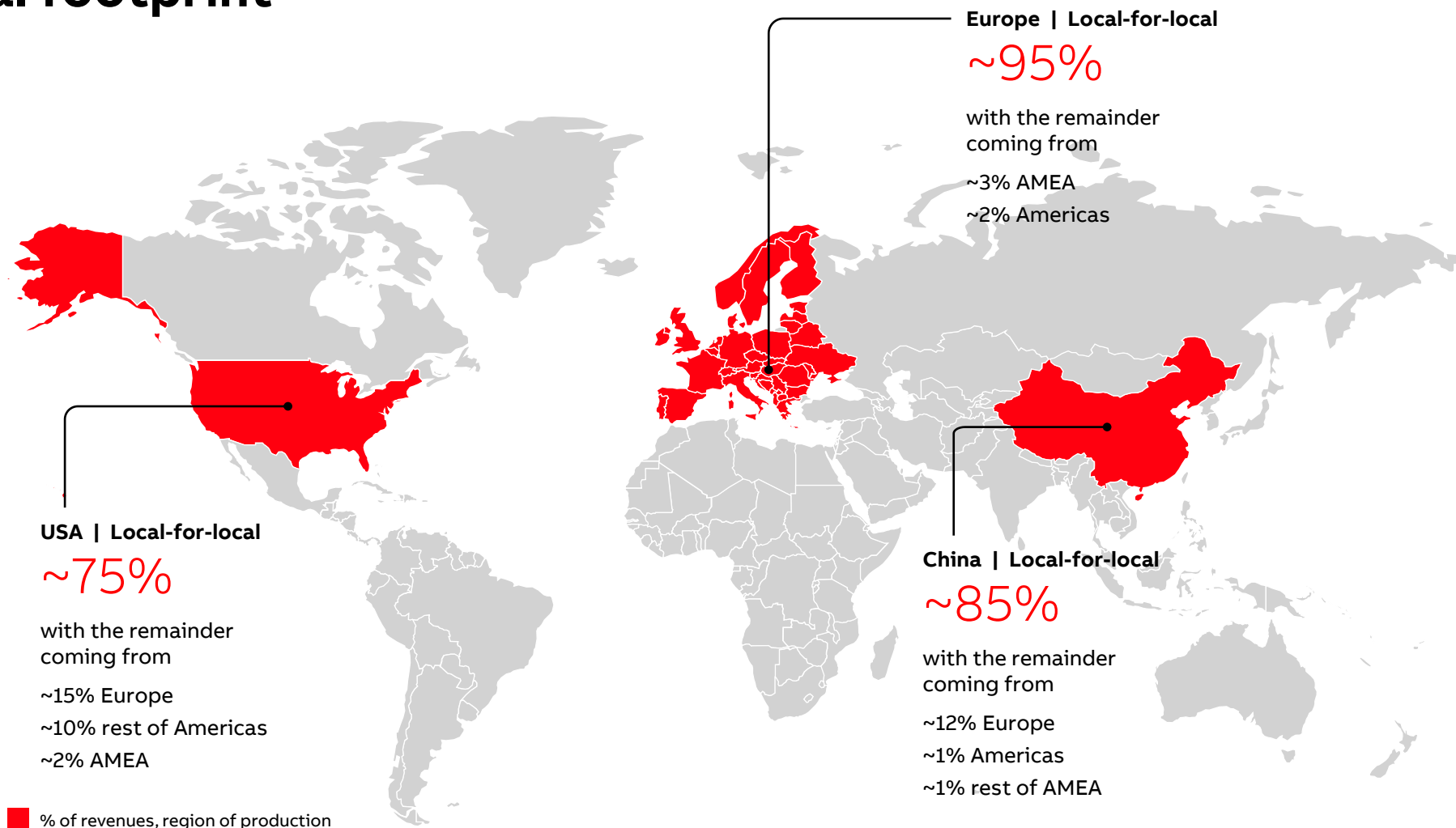
Changes in fiscal policies



# Operational performance supported by strong local-for-local footprint

**Close to customers –**  
ABB has a long tradition of local-for-local manufacturing

Europe, USA and China represent ~75% of Group revenues



Note: Management estimates and % based on revenues 3<sup>rd</sup> party 2022. Excludes non-core, Turbocharging and Power Conversion. Total may not add to 100% due to roundings.

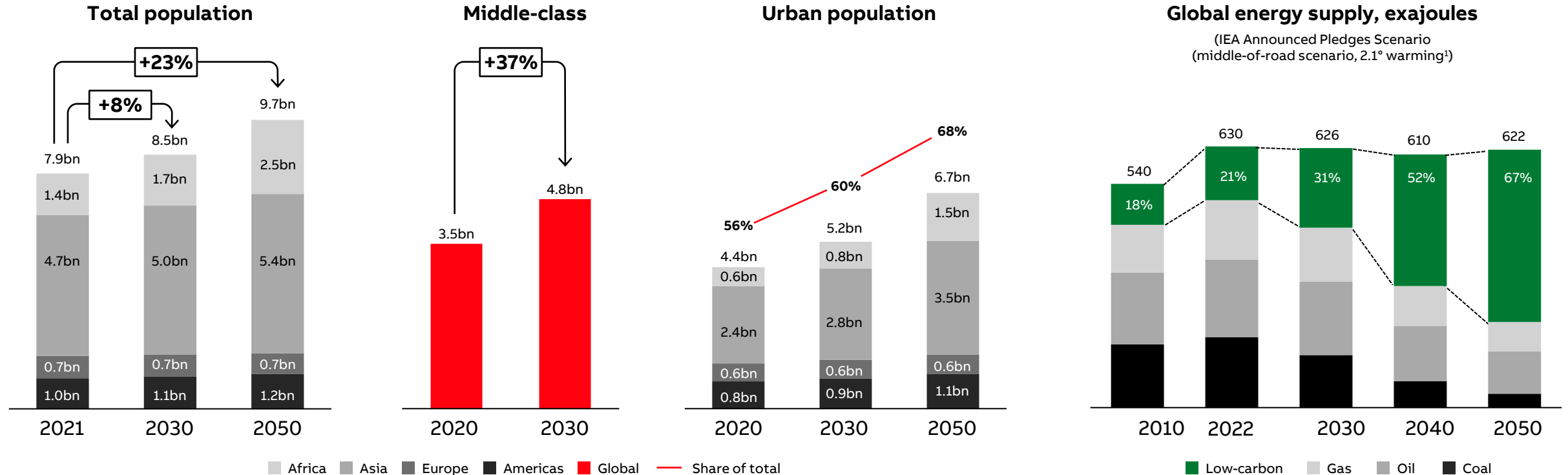
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# Well positioned in a changing world

Growing population with rising expectations of higher standard of living...

...while the global agenda targets carbon footprint reduction

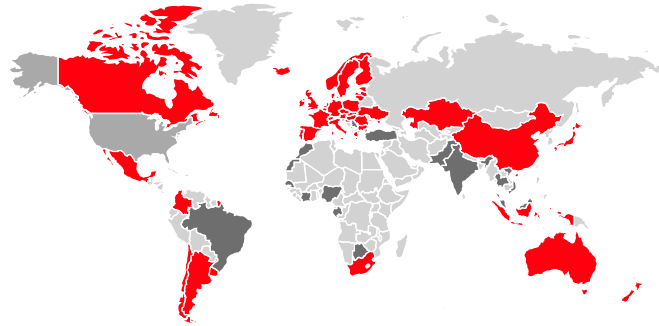


1. By 2100, 50% confidence interval Source: UN, Brookings; IEA World Energy Outlook, 2023, Announced Pledges Scenario  
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# Rising cost of carbon

puts spotlight on low carbon solutions

Carbon pricing is spreading globally and already covering several large economies

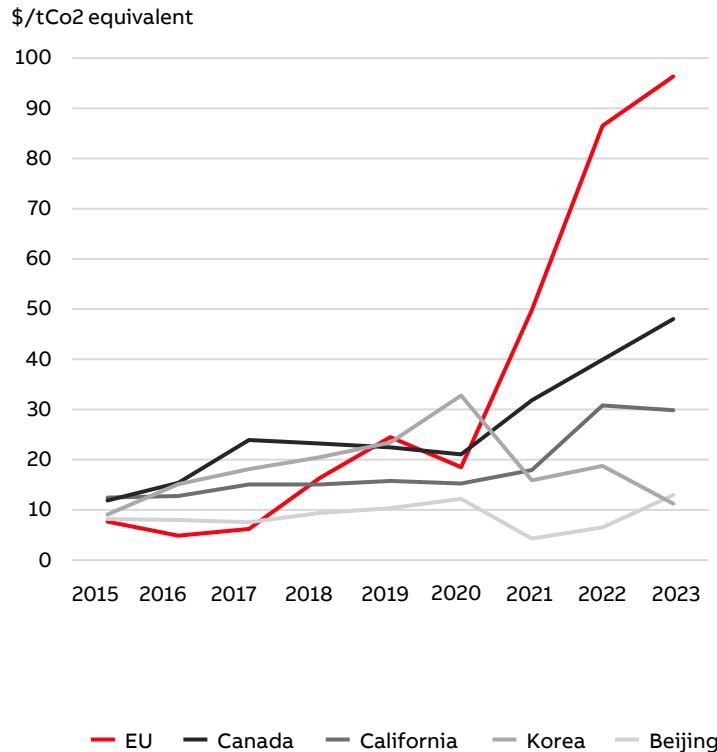


- Carbon market/tax implemented
- Carbon market/tax on sub-national level
- Carbon market/tax considered

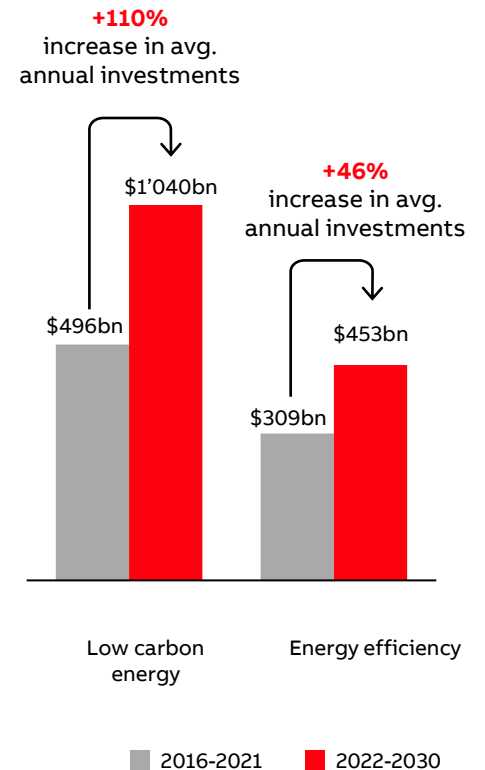
Source: Bloomberg New Energy Finance: IEA World Energy Outlook, 2023, Announced Pledges Scenario

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## Rising cost of carbon



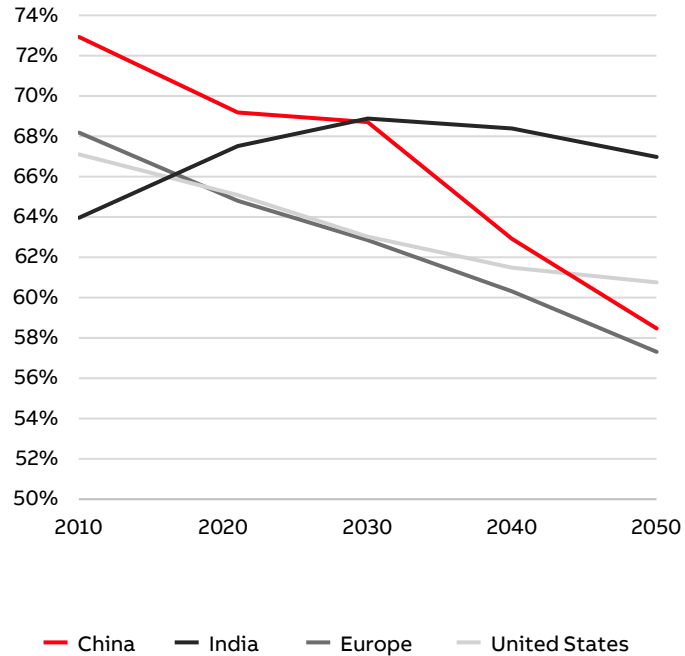
## Strong growth in annual investments in low carbon energy supply and energy efficiency



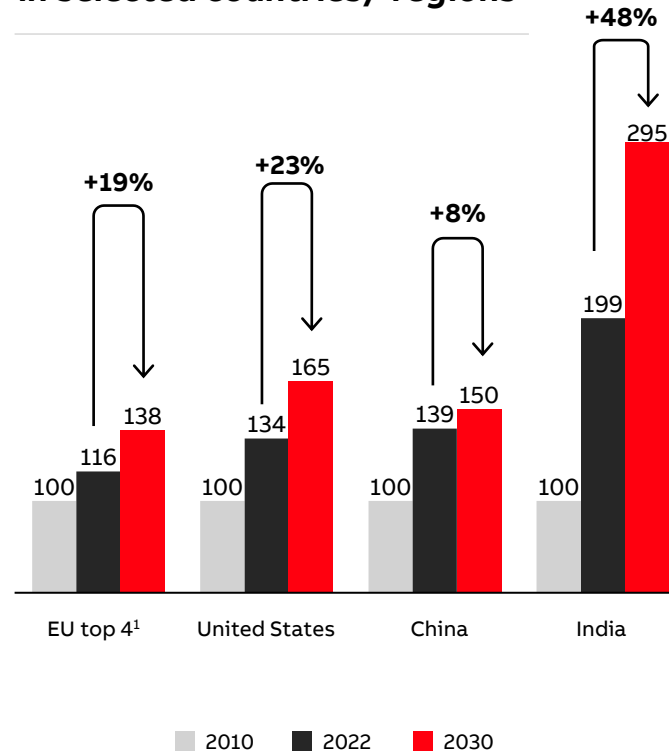
# Automation needed to remain able and efficient

## Labor force is shrinking and increasingly expensive

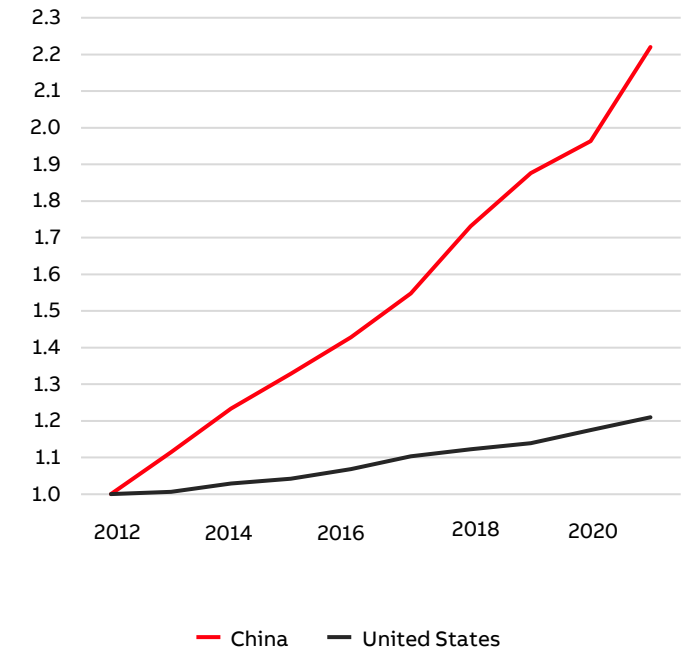
Share of working age population (15-64) in selected countries/ regions



Unit labor cost index (LCU, 2010 = 100) in selected countries/ regions



Cost of manufacturing labor (2012-2021, indexed to 2012)



1. EU top 4 = Germany, France, Italy, Spain Source: UN Population Prospects 2022, S&P Global  
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## Future proof

ABB purpose and customer offering aligned with secular trends

### More electricity

Electricity demand growing **>10x** faster than other energy sources in 2022-2030, resulting in **~50%** higher average annual investment into electricity networks in 2023 – 2030 (vs 2016 – 2022)<sup>1</sup>

### Higher energy-efficiency

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

### New energy sources

Share of low-carbon sources in global energy mix to increase **+50%** – points from ~20% today to ~70% in 2050<sup>1</sup>

### Shrinking labor force

Global number of working age people (15 to 64 years) per retiree (65 years or over) to fall by **~20%** over next 10 years<sup>2</sup>

1. IEA World Energy Outlook 2023, Announced Pledges Scenario

2. United Nations World Population Prospects 2022

## ABB Our purpose

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

Our offering supports customers to:

Reduce waste and increase circularity

Reduce carbon intensity

Increase labor productivity

Increase energy efficiency

Increase flexibility

Reduce footprint

Reduce downtime

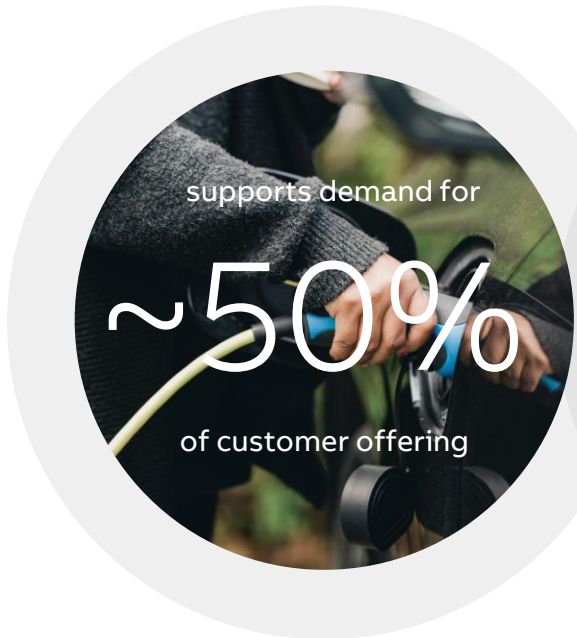
Increase safety and improve working environment



# Secular trends support growth

Businesses exposed to several secular trends

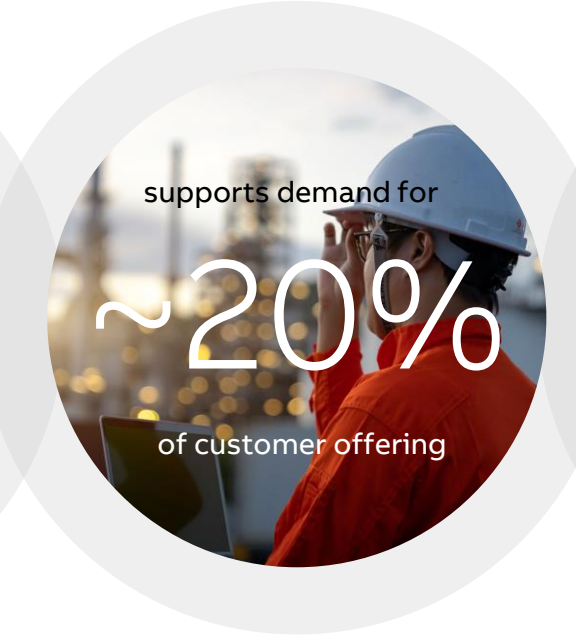
## Electrification - the world going electric



Visual for relative BA exposure

EL +++ PA ++ MO + RA +

## Energy security



EL ++ PA ++ MO +

## Emission reduction, energy efficiency



MO +++ PA ++ EL ++

## Automation



RA +++ PA +++ MO + EL +

% is management estimate  
+++ is >60% of rev, ++ is 25% - 60% of rev, + is 1% - 25% of rev

# Structural support for our market leading offering in medium voltage



## Structural support to demand

Energy security – Energy transition – Low carbon – Data processing power



## Improved profitability

Recent successful profitability actions, so less of an adverse mix impact from medium voltage business

YTD 2023 Op. EBITA margin of ~15%

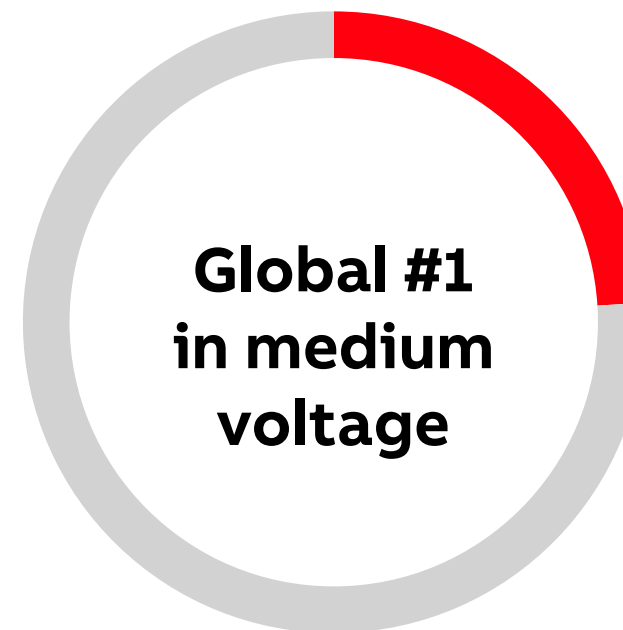


## Key exposures in:

**Electrification:** Distribution Solutions | Installation Products | Service

**Process Automation:** Energy Industries | Process Industries | Marine & Ports

**Motion:** Large Motors & Gen. | System Drives | Service



■ Medium voltage is ~25% of ABB total revenues

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# Medium voltage demand drivers

energy security – energy transition

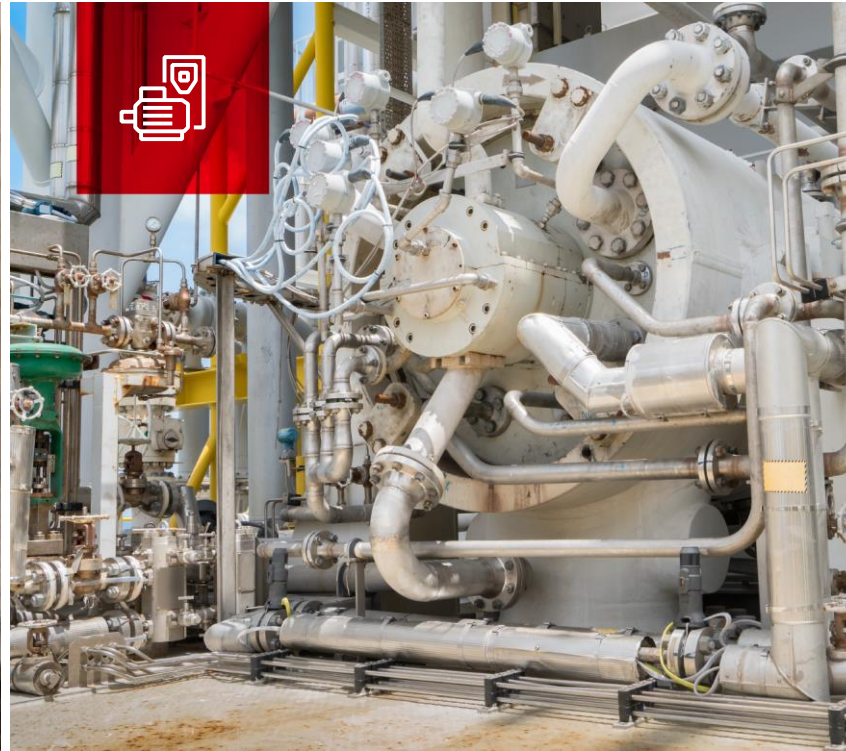
45,000 miles of US electrical cabling is expected to be put underground by 2040 in order to secure power supply.

Drives demand for ABB Electrification underground switchgear + electrical accessories.



Electric drivetrains instead of gas and steam turbines in process industries.

Drives demand for ABB Motion high-power motors and drives.

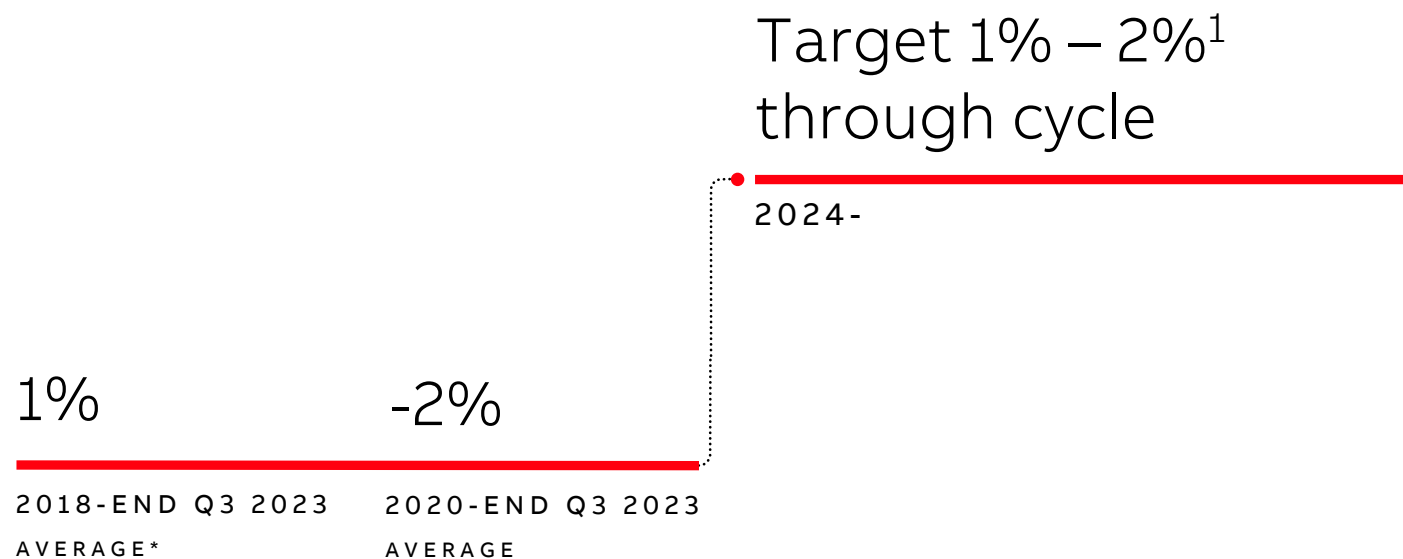


LNG projects in US and multiple other locations. Drives demand for ABB Process Automation electrification, control and power management systems.



# Higher ambitions for inorganic growth as coming out of transformation period

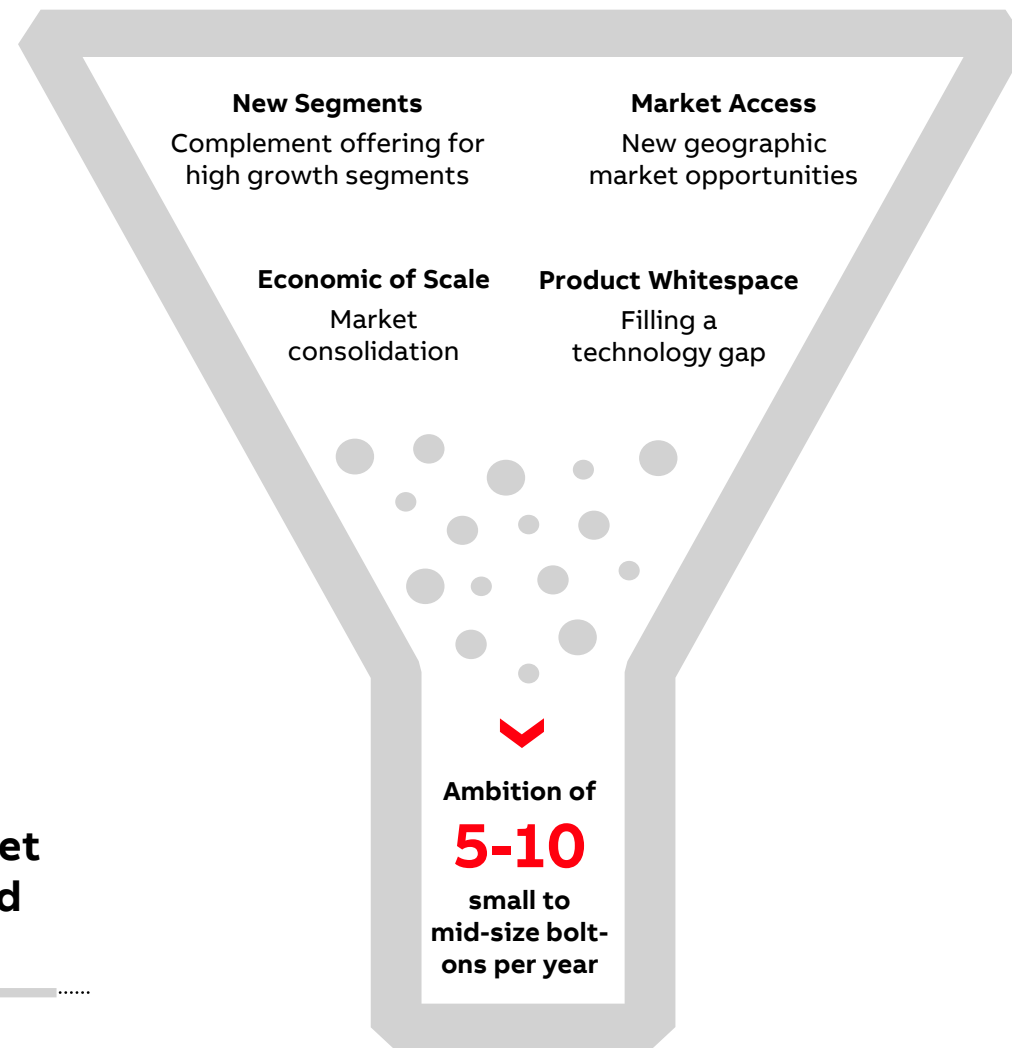
Pace and size driven by divisions



**Target is net of acquisitions and divestments**

**M&A resources now fully transferred to divisions**

**Solid balance sheet supports acquired growth**



\*2018 – 2023 excl. discontinued operations.

1. Excl. transformational divestments of full Division or larger than 3% of Group revenues

# Targeting 5-10 acquisitions per year

Small to mid-size bolt-ons

Pace of deals to pick up; so far small in size

Scope for exits should shrink beyond 2024

High activity in venture capital investments; extension of R&D

- Majority ownership
- Minority investment
- Majority ownership, to be completed

ACQUISITIONS

EXITS

- 5 Venture capital investments
- Intrion, RA
- Rotech, RA
- GEIS, EL

~2,680 mn<sup>1</sup>

2018

- 4 Venture capital investments

~28 mn<sup>1</sup>

2019

- 3 Venture capital investments
- Codian, RA
- ChargeDot, E-mobility
- Cylon, EL

~47 mn<sup>1</sup>

2020

- 4 Venture capital investments
- Enervalis, EL
- ASTI, RA

~37 mn<sup>1</sup>

2021

- 13 Venture capital investments
- PowerTech Converter, MO
- InCharge Energy, E-mob
- Numocity, E-mob
- ASKI Energy, EL

~76 mn<sup>1</sup>

2022

- 6 Venture capital investments
- SpringPoint, MO
- Vourity, E-mob
- Siemens low V. motors, MO
- EVE Systems, EL

~60 mn<sup>1</sup>

2023

2024

~120 mn<sup>1</sup>

- L'Ébénoïd, EL
- PG Connector, EL

- MBS, EL

~9,537 mn<sup>1</sup>

- Power Grids (80% exit), ABB
- Solar Inverter, EL

~645 mn<sup>1</sup>

- MPT (Dodge), EL

~750 mn<sup>1</sup>

- Hitachi Energy JV, ABB
- Turbocharging, PA

~475 mn<sup>1</sup>

- Power Conversion, EL
- UK technical engineering consultancy business, PA
- Industrial plugs & sockets, EL

- Emergency Lighting, EL

1. Revenues of deals with majority ownership, USD million, estimated revenues for the last fiscal year prior to the announcement of the respective acquisition/divestment

# Setting new standards

## Upgraded financial targets

UPGRADE

**Growth** through economic cycle

**Comparable**

**5%-7%** average

Excluding FX impacts, acquisitions and divestments

**Acquired**

**1%-2%** average<sup>1</sup>

Target is the net of acquisitions and divestments

1. Excl. transformational divestments of full Division or larger than 3% of Group revenues

UPGRADE

**Op. EBITA %** annual

**16%-19%**

UPGRADE

**ROCE** annual

**>18%**

Excl. transformational acquisitions of full Division or deals larger than 3% of Group revenues

UPGRADE

**EPS growth** through economic cycle

**At least high single-digit %**

Basic EPS

UNCHANGED

**FCF conversion to net income** annual

**~100%**

**Dividend policy unchanged** at rising sustainable dividend per share over time

# We've reinforced and accelerated our sustainability agenda

Aligned with recognized international frameworks

## Upgraded



### Net-Zero targets

- Scopes 1, 2 & 3
- 2030 & 2050



### 600Mt avoided CO<sub>2</sub>e emissions ambition

- Aligned with WBCSD 2023 guidance
- By 2030

## We enable a low-carbon society

- Reduce emissions in own operations by 80% and achieve carbon neutrality (with offsets)
- Support our customers in reducing annual CO<sub>2</sub> emissions by >100 Mt<sup>1</sup>
- 50% reduction in emissions of tier-one suppliers (70% of procurement spending)

## We preserve resources

- 80% of ABB products & solutions covered by circularity approach
- Zero waste to landfill from own operations wherever possible

## We promote social progress

- Zero harm to our people and contractors
- 25% women in senior management roles
- Top-tier employee engagement score in our industry
- Impactful support for community-building initiatives

## ABB Way

Sustainability embedded throughout the business

Board of Directors | Executive Committee | Sustainability Council | Division-level implementation

# Next step on the journey of quality of revenues



Focus on **quality of revenues** is part of our new ways of working

Op. EBITA %  
annual

**16%-19%**

ROCE  
annual

**>18%**

Excluding transformational deals<sup>1</sup>

FCF conversion to net income  
annual

**~100%**

EPS growth  
Basic, through economic cycle

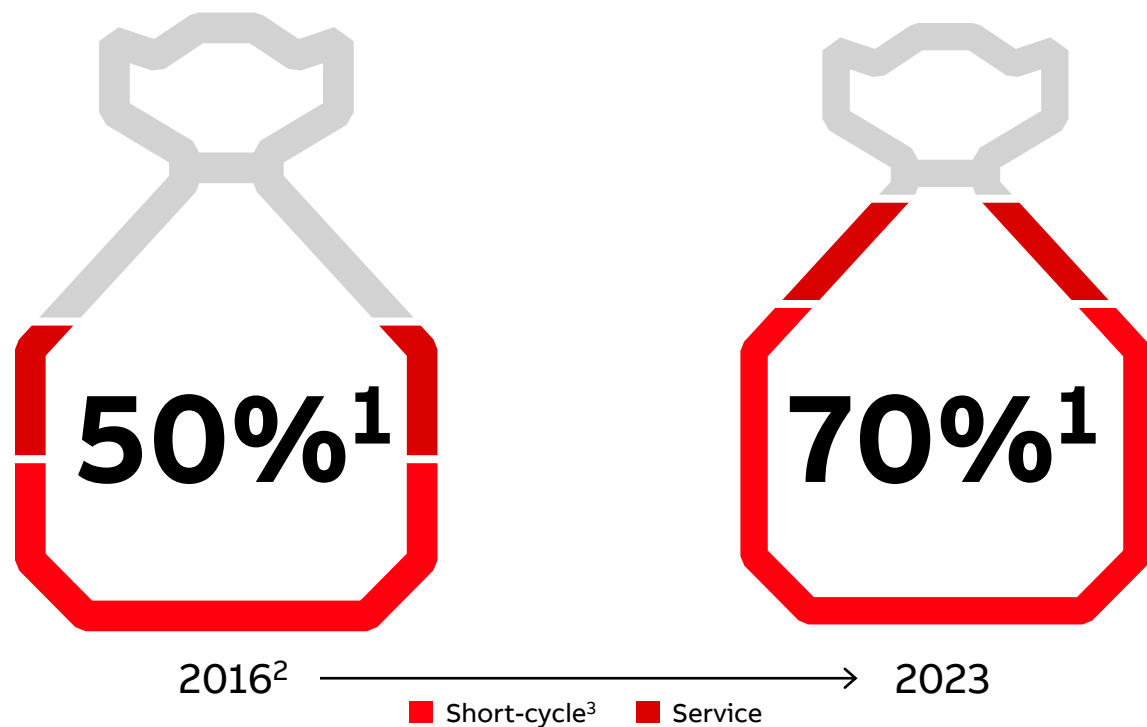
**At least high single-digit**

1. Excl. transformational acquisitions of full Division or larger than 3% of Group revenues



## Strong channel partners

Increased share of short-cycle business



1. Management estimates  
2. Non-GAAP measure. Shows as Power Grids in continuing operations – See supplemental reconciliations  
3. Orders (excl. service) converting to revenues within three to six months  
4. average quarterly difference from 2019 to end of Q3 2023  
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Higher profitability and lower earnings risk

### Better operating margin

- Short-cycle Op. EBITA ~130<sup>4</sup> bps higher than ABB group on average
- Higher degree of standardization
- Less tail risks

### Reshaped portfolio

- No more EPC projects
- Exit of automotive system business
- Increasing share of sales through distributor

### Further solidifying strong channel partners

- 1 Digital tools for right product selection, ordering, installation and service
- 2 Inventory management and on time delivery
- 3 Continuous feedback loop
- 4 EcoSolutions labelling for sustainability transparency

**Lead to better quality short cycle business**

# Project selectivity

De-risking order backlog & improving profitability



Orders with high percentage of ABB Content



Strategic profitability assessed prior to order acceptance within the divisions



Price protection and escalation clauses built in to offers

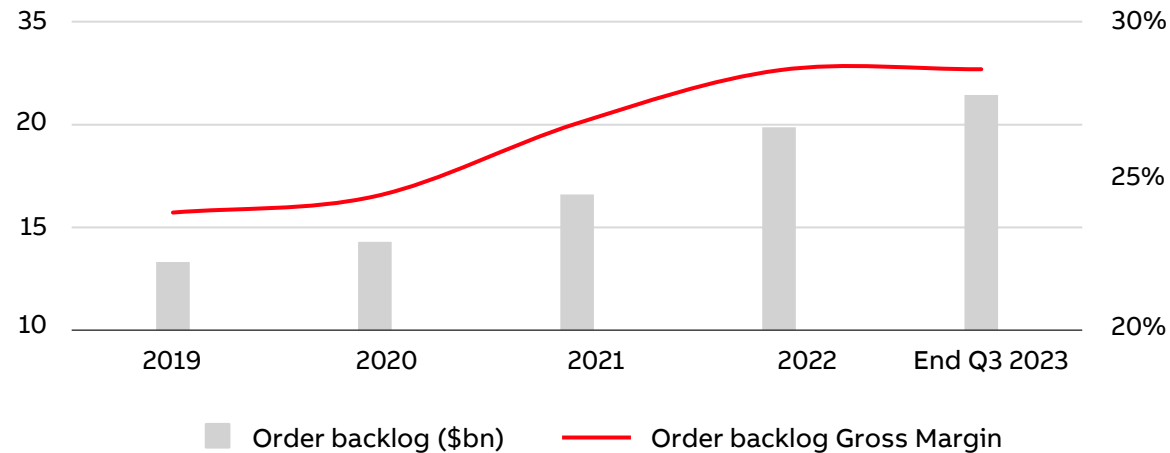


Less below the line charges and reduced earnings volatility



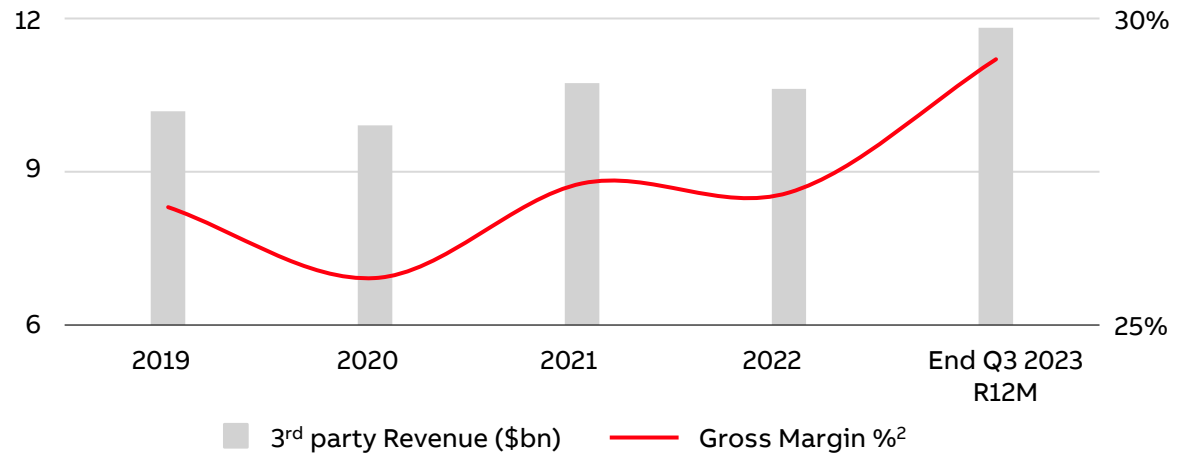
## Order backlog

\$ billions



## Project and Systems-related businesses<sup>1</sup>

\$ billions



1. Project and System related businesses defined as sum of the Distribution Solutions, Service Electrification, System Drives, Service Motion, Large Motors & Generators, Energy Industries, Process Industries, and Marine and Ports divisions  
 2. Management estimate

# Pricing excellence

01

## Empowering the divisions

Pricing officer in each division implementing clear price strategy



02

## Continuous monitoring

Ensure pricing actions have desired outcome; e.g., price more than offset inflation in 2022 and YTD end Q3 2023



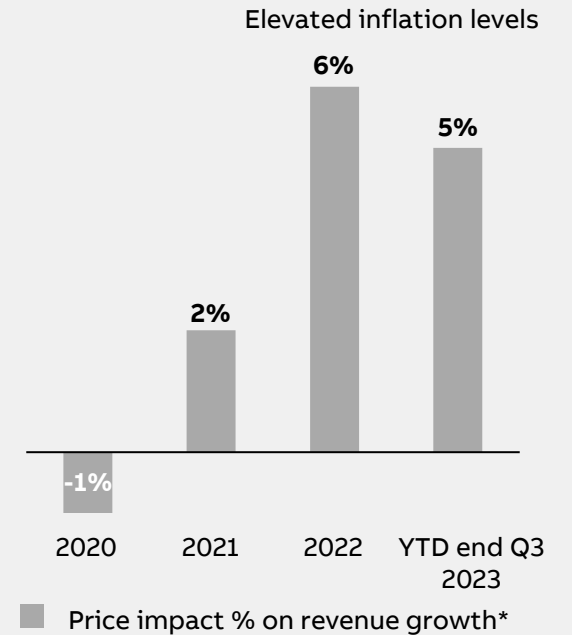
03

## Improved data analysis and transparency through ABB Way Finance Transformation

Investing to align systems and tools to the ABB Way operating model

2020-2023

2024-



**Price discussions** with customers returning to be based on value creation; normalizing after period of high inflation and tight supply chain



**Improving tools** for further improved price management

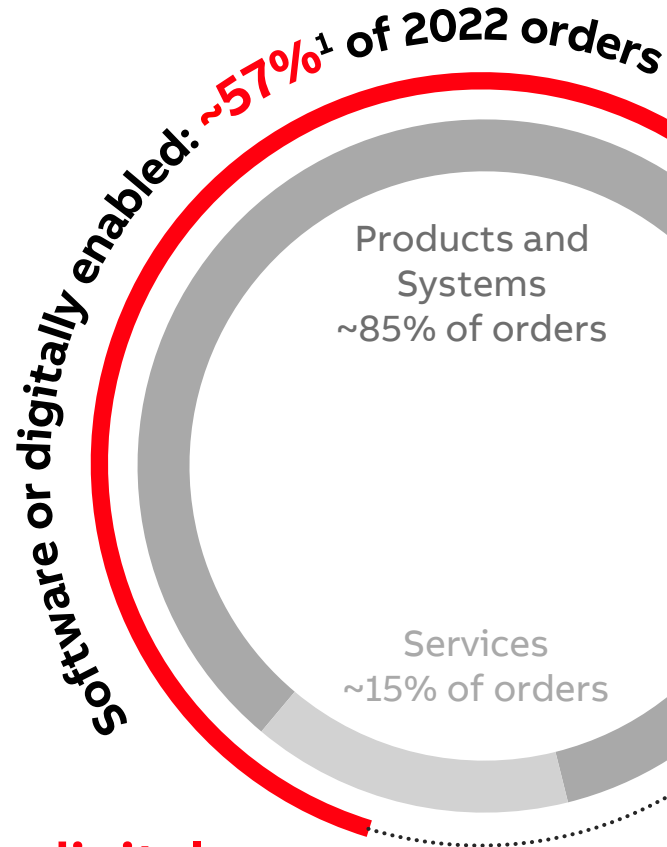
\* Management estimate

# Value from software

Embedded in products to create customer value

## Strategic priorities

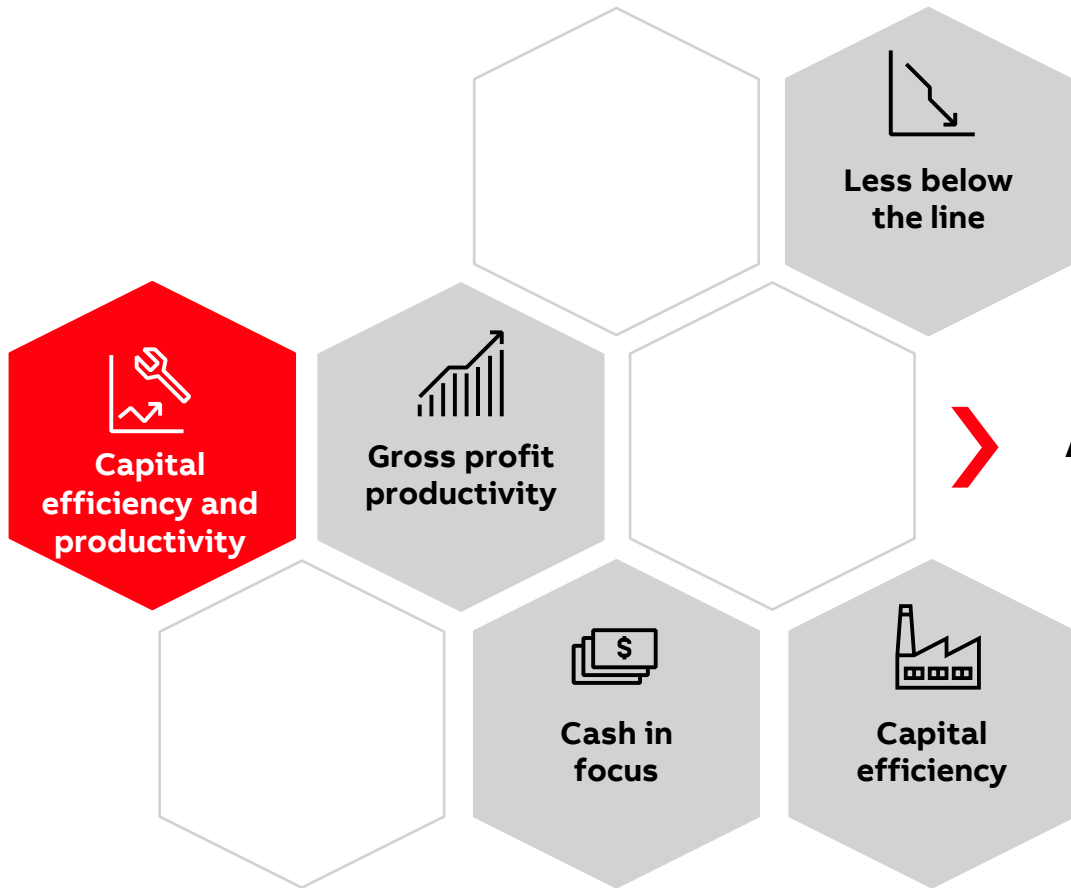
1. **Increase the digital content** in our products to support gross margin and industry leadership in technology
2. **Embedded software** enables differentiation
3. **Continue to develop** Industrial Software and Digital services organically and make bolt-on acquisitions:
  - Invest to create synergies with our offering
  - Return on investment
  - Growth



**~60%<sup>1</sup> of R&D employees focused on digital**

1. Management estimates  
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# Capital efficiency and productivity



New ways of working under ABB Way driving **accountability, transparency and speed**

Op. EBITA %  
annual

**16%-19%**

ROCE  
annual

**>18%**

Excluding transformational deals<sup>1</sup>

FCF conversion to net income  
annual

**~100%**

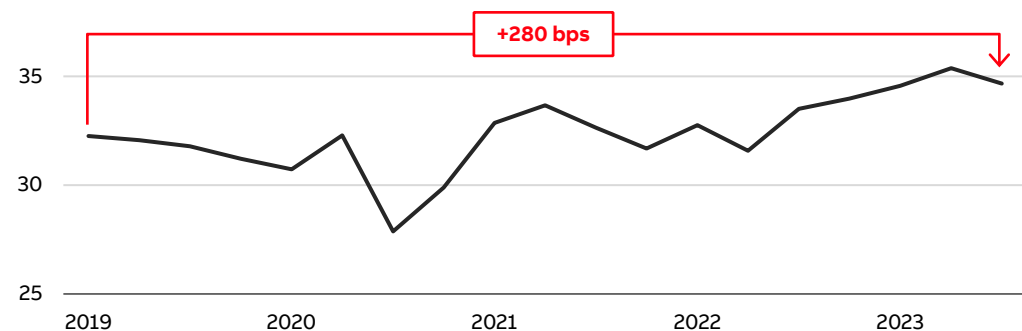
EPS growth  
Basic, through economic cycle

**At least high single-digit**

1. Excl. transformational acquisitions of full Division or deal larger than 3% of Group revenues

# Gross profit productivity

Revenues, gross margin



Revenue productivity

2020 - 2022



Gross profit productivity

2023 -

# 01

Full **accountability** of the P&L at the division level facilitates higher **speed** in decision making including for further manufacturing excellence



# 02

Investing in systems and tools for **further transparency and analysis of** variable cost items

# 03

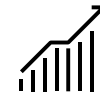
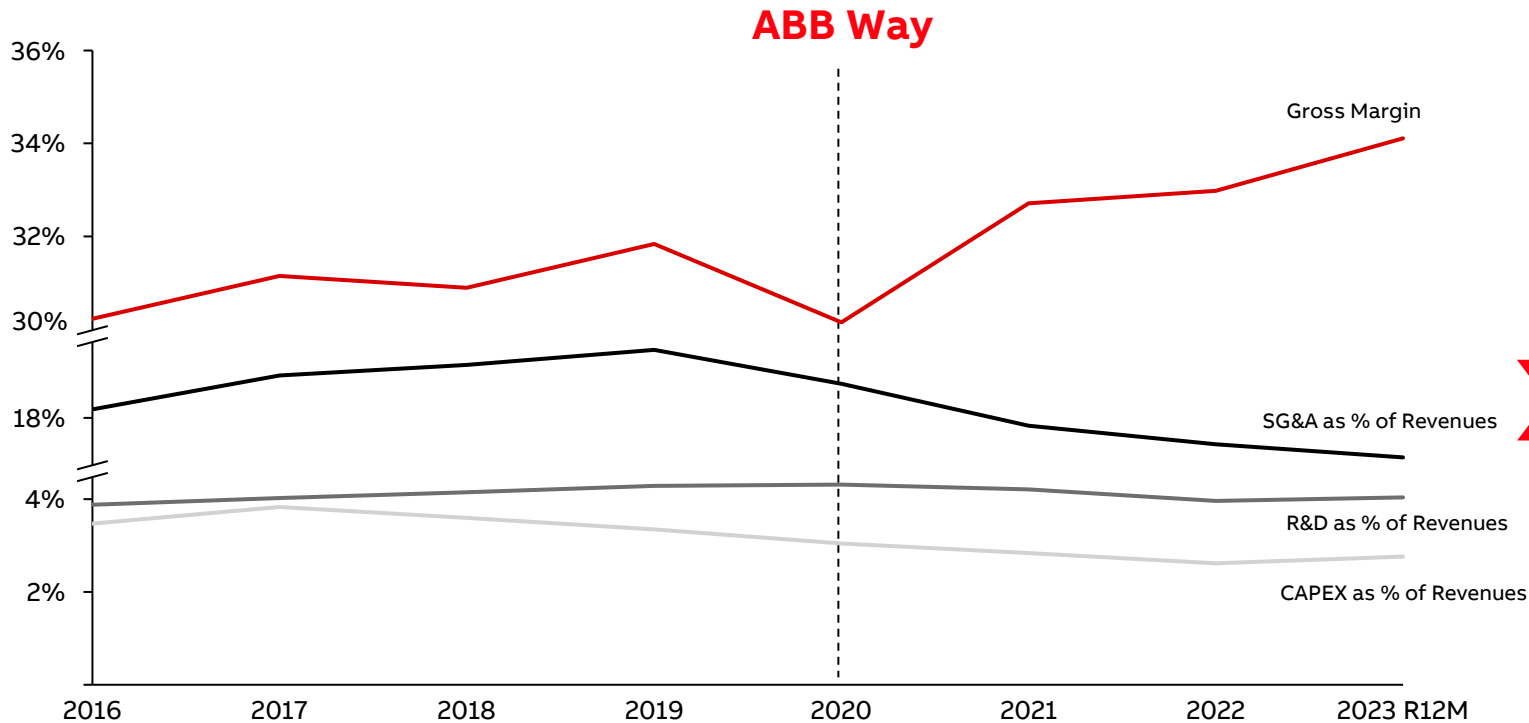
Changed construct of productivity KPI to gross profit/FTE (from revenues)

**Target: 3-5% p.a.**



# Capital efficiency

make ABB better than before



Rising gross margin



Stringent G&A control



Prioritize division led R&D investments and capex



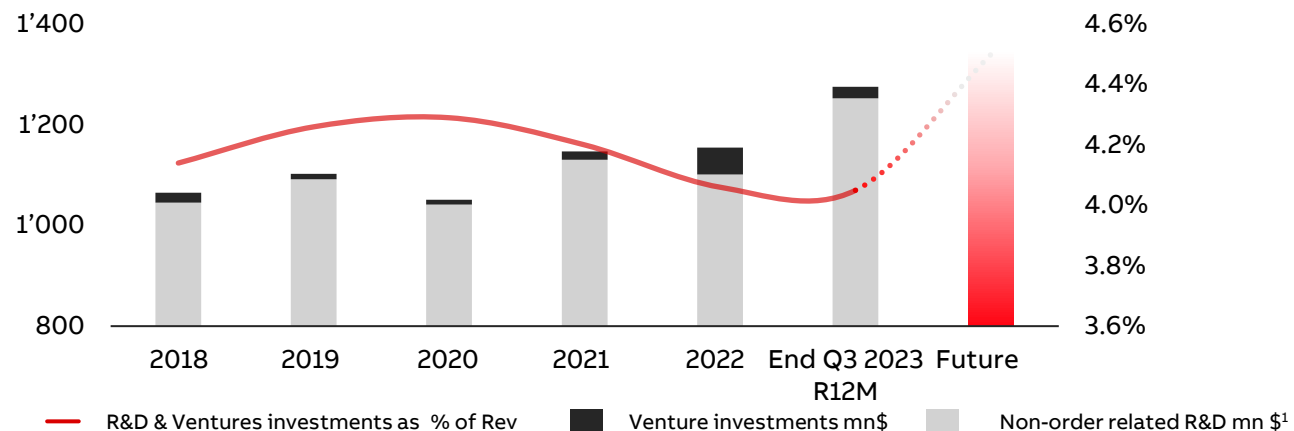
Optimizing production capacity and footprint

# Continued focus on Research & Development

Moving towards 5%

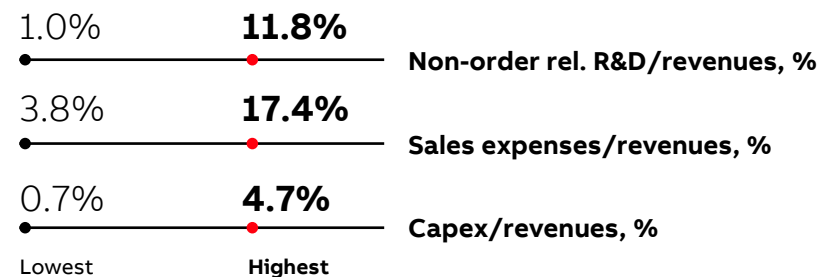


Investing proportionately more in R&D year-on-year than SG&A expense

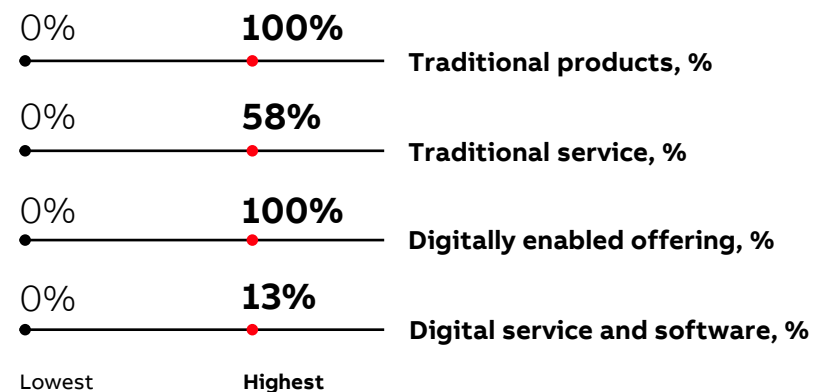


1. Non-order related R&D excluding completed divisional exits 2. End Q3 2023 R12M 3. Management estimates for 2022 orders

Different investment needs across divisions<sup>2</sup>...



...as the offerings are different<sup>3</sup>





# Improving performance

## Operational EBITA margin

10.9% – 11.7%

2016-2018

11.1% – 17.0%

2019 – YTD END Q3 2023

16% – 19%

2024-

EPS growth  
At least high single digit growth through cycle

**Below 100bps variance between Op. EBITA and EBITA margin as from 2025**

Variance between Op. EBITA and EBITA

2018-2022

• 470bps Avg.

2023 -2024

• ~130bps

Onwards

• <100bps

01

BELOW THE LINE

ABB Way transformation, ~145 mn in 2024, and ~70 mn in 2025

Normal run-rate of restructurings

02

MID-TERM

Remaining project exposures, unchanged at maximum 100 mn

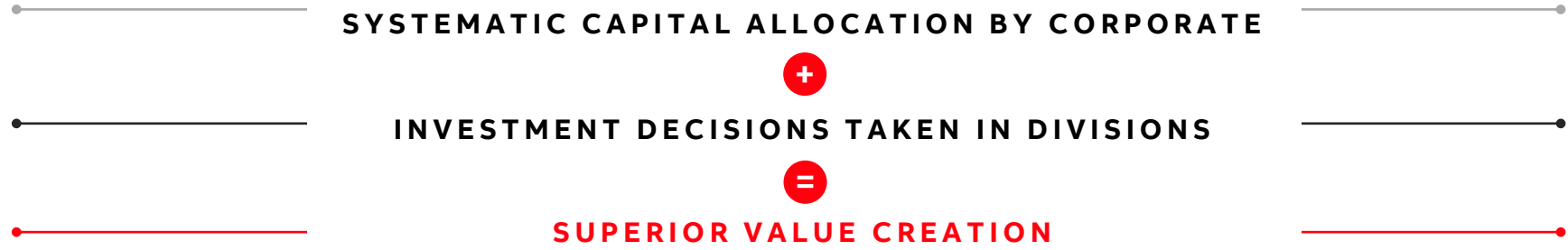
Review policy of what goes below Op. EBITA to potentially further shrink gap between Op. EBITA and EBITA

03

ADDITIONAL CHANGES

Sustainability reporting transferred to finance team to align focus and ways of working

# Superior capital returns

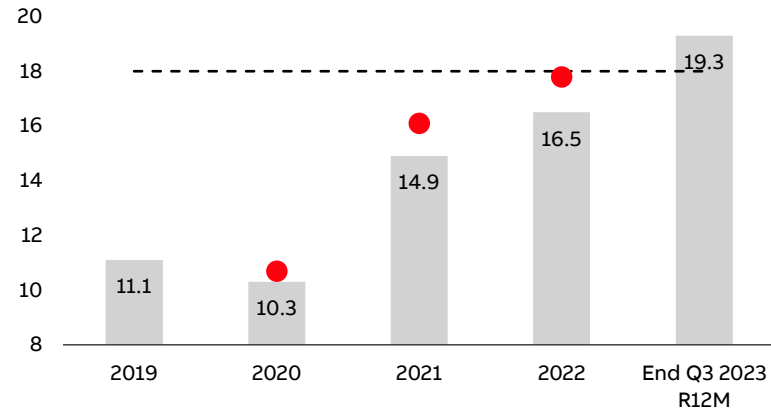


ROCE, annual

>18%

Excl. transformational acquisitions of full Business Area or Division or larger than 3% of Group revenues

## ROCE

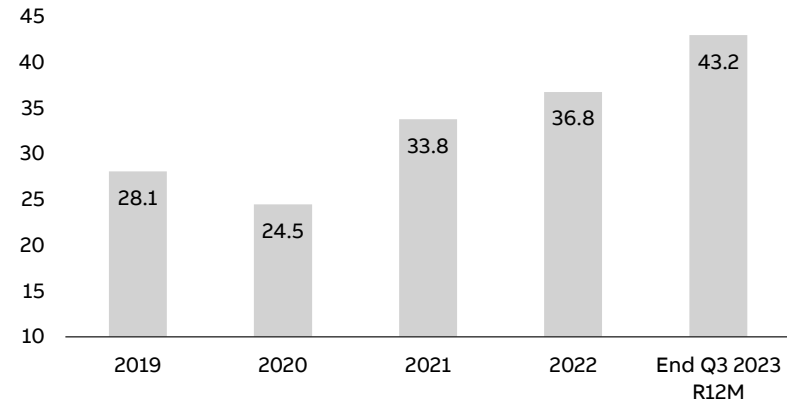


● Excluding impact of PG JV ownership interest

■ ROCE

--- Target range >18%

## ROCE on operating assets



So far, ROCE increase driven by margin improvement...

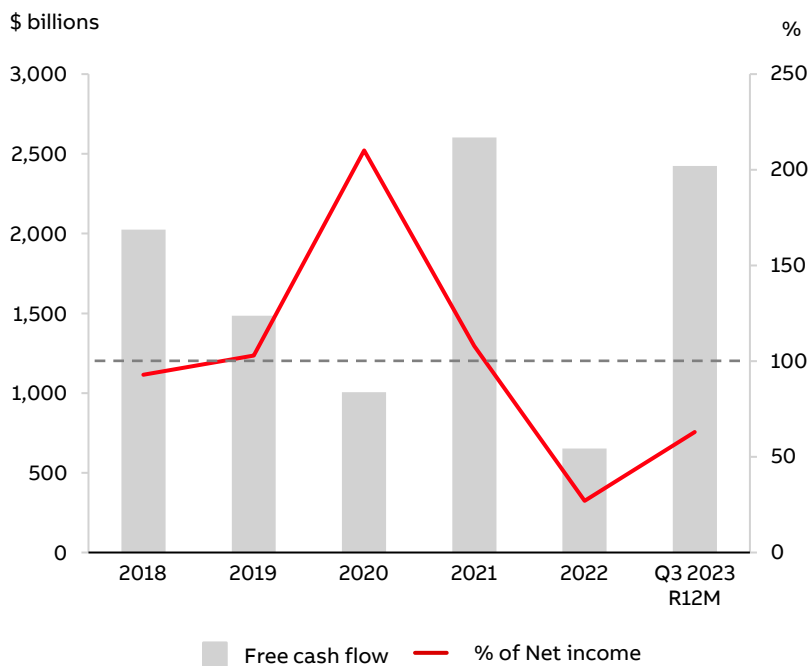
...going forward, increased focus on return on capital, incl. in incentives



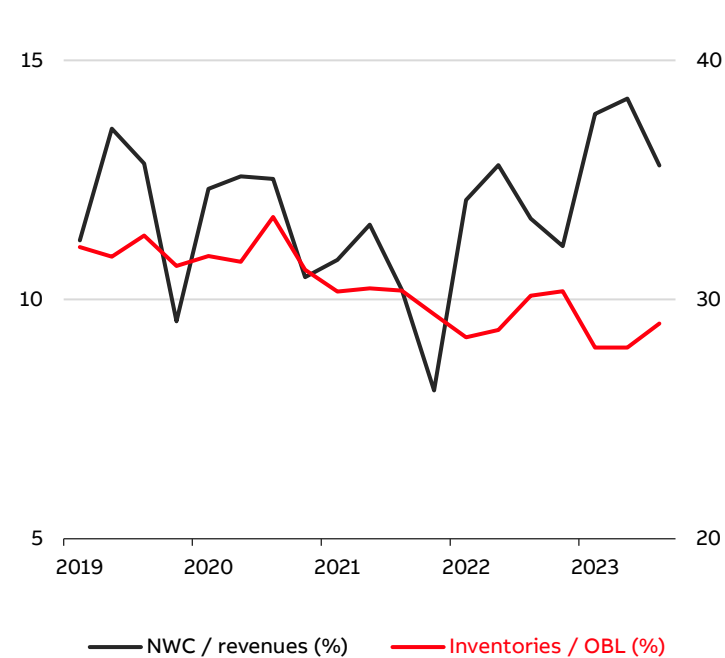
Goodwill now carried by the acquiring division

# Cash in focus

## Improving FCF track record



## Deploying NWC for revenue growth



## Cash drivers

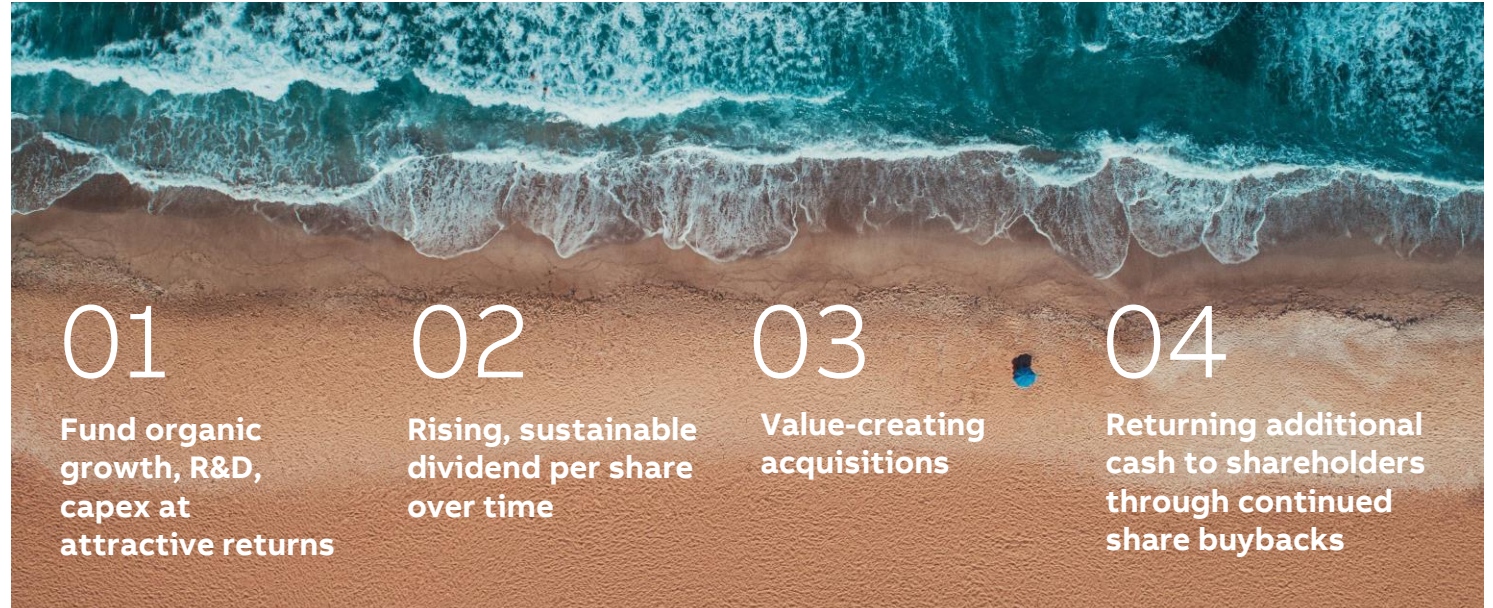
- **Improved profitability** from businesses with profitability mandate
- **Profitable growth** from businesses with growth mandate
- **Strong focus on cash conversion** and net working capital
- **Fewer non-recurring items**
- **Steady capex profile**



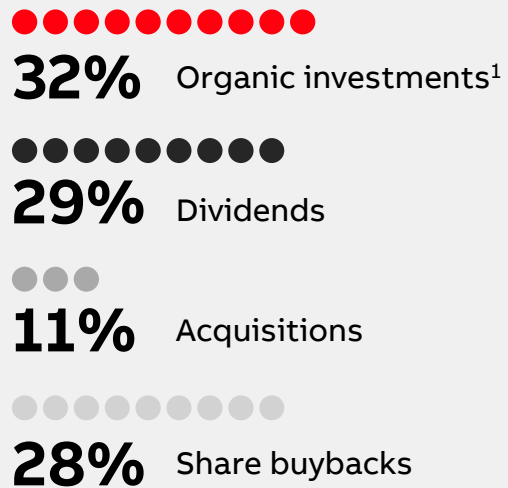
~100% FCF conversion to net income

# Capital allocation principles remain unchanged

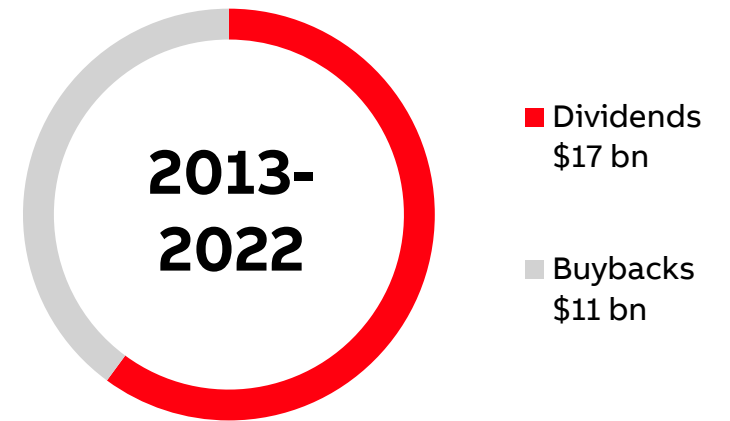
Maintain strong investment grade



## Historical capital allocation, 2018-2022



>\$28 bn cash returned to shareholders over last 10 years



1. Includes capital expenditures and Non-order related research & development

**ABB**