



NOVEMBER 5, 2019

ABB Electrification Investor Day

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Important notices

This presentation includes 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,” “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 U.S. 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.

Some of the planned changes might be subject to any relevant I&C processes with the Employee Council Europe and / or local employee representatives / employees.

On December 17, 2018, ABB announced an agreed sale of its Power Grids (“PG”) business. Consequently, the results of the Power Grids business are presented as discontinued operations. The company’s results for all periods have been adjusted accordingly. Net income, EPS and Cash flow from operating activities include results from continuing and discontinued operations.

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 the ‘Supplemental reconciliations and definitions’ section of “Financial Information” under “Quarterly results, annual reports and regulatory filings” on our website at

www.abb.com/investorrelations

Meet the Electrification team

Business lines



Alessandro Palin
Managing Director,
Distribution Solutions



Giampiero Frisio
Managing Director,
Smart Power



Oliver Ittisberger
Managing Director,
Smart Buildings



Matthias Heilmann
Managing Director,
Installation Products



Mike Mustapha
Head of Global
Markets



Maryrose Sylvester
U.S. Country Managing
Director

Functions



Christian Nilsson
Chief Financial Officer



Amina Hamidi
Chief Technology
Officer



Tarek ElHadidi
Chief Information
Officer



Andrea Menti
Head of Operations



Anton Kotov
Head of Strategy &
Digital



Monique Elliott
Head of Customer
Experience

Electrification in ABB's portfolio

Electrification



Global #2

\$160 bn

3%

Market size

Mid-term growth

2018 revenues

\$13.0 bn¹

2018 op. EBITA %

12.8%¹

Employees

~55 k

Industrial Automation



Global #2

\$90 bn

3%

Motion



Global #1

\$80 bn

3%

Robotics & Discrete Automation



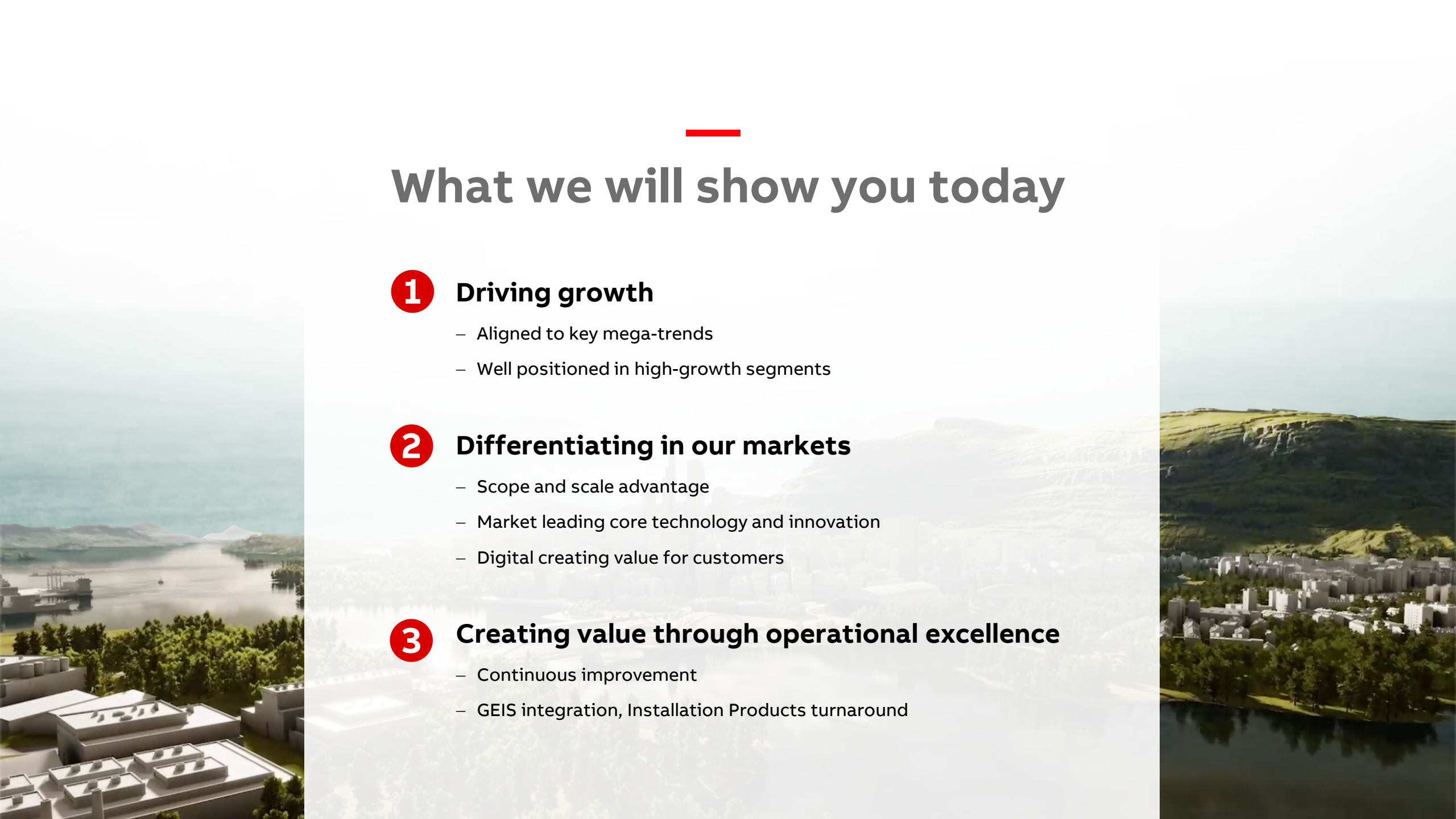
Global #2

\$80 bn

6%

Safe, smart, and sustainable electrification
for our customers and partners





What we will show you today

1 Driving growth

- Aligned to key mega-trends
- Well positioned in high-growth segments

2 Differentiating in our markets

- Scope and scale advantage
- Market leading core technology and innovation
- Digital creating value for customers

3 Creating value through operational excellence

- Continuous improvement
- GEIS integration, Installation Products turnaround

ABB Electrification

Understanding ABB Electrification

Driving growth

Differentiating in our markets

Creating value

Q&A

Serving markets from source to socket

Products, solutions and services across utilities, industry, transport & infrastructure

Utilities

Renewables
Distribution

Industry

Oil, gas & chemicals
Food & Beverage
Machine builders

Transport & infra

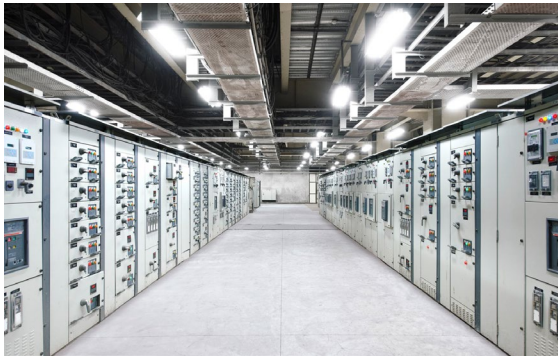
Buildings
E-mobility
Data centers



Electrification business lines

Aligned to customer needs

Distribution Solutions



~\$5 bn¹

#1 Medium voltage

Medium and low voltage control & protection products, systems & switchgear, automation & services

GEIS integration

Smart Power



~\$3 bn¹

#2 Low voltage

Low voltage breakers & switches, motor & power protection, electric vehicle charging infrastructure & service

Smart Buildings



~\$3 bn¹

Miniature breakers, distribution enclosures, wiring accessories, building automation

Installation Products



~\$2 bn¹

#2 Installation products

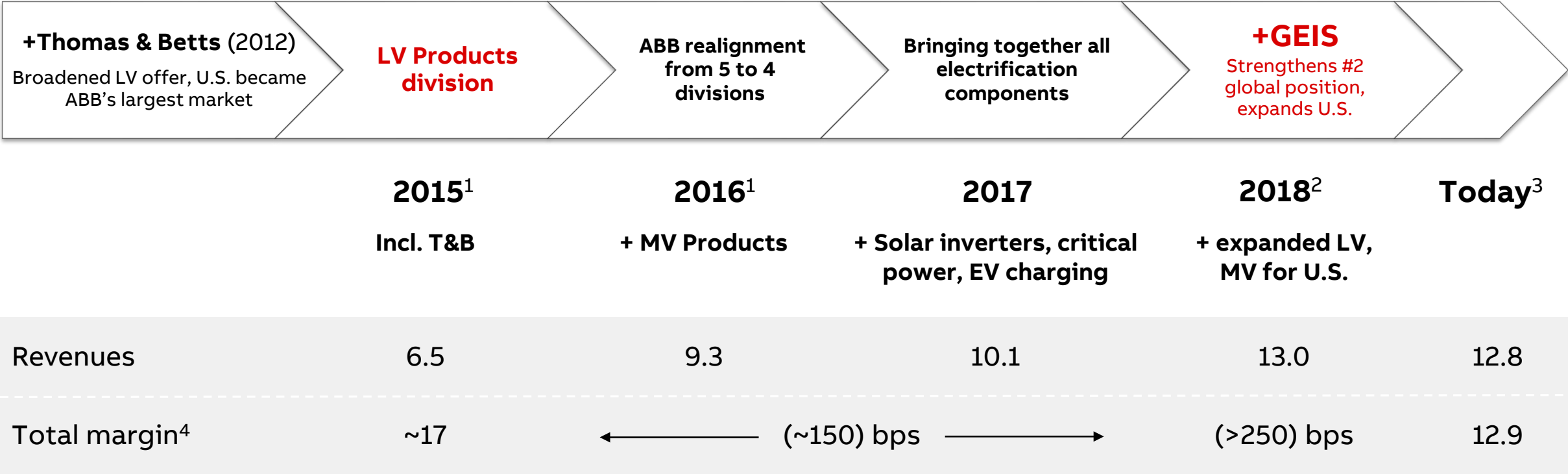
Wire & cable management, termination, fittings & other accessories

How we run our business lines

Mid-term priorities

	Distribution Solutions	Smart Power	Smart Buildings	Installation Products
Focus	Margin	Profitable growth	Profitable growth	Turnaround
Priorities	Integrate GEIS New solutions design ABB Ability™ Asset mgmt.	Integrate GEIS ABB Ability™ Energy mgmt. Solar inverter business carve-out	Integrate GEIS ABB Ability™ Building mgmt. and IoT ecosystem	Turnaround Simplify portfolio
Skills & capabilities	Distribution grids Solution architects	Digital talent E-mobility	Building automation System integration	Operational excellence Supply chain turnaround
Salesforce spend	=	++	++	-
R&D investment	+	++	++	=
Capital intensity	-	-	-	-
Cash flow	++	+	+	++

ABB Electrification build phase



(\$ bn or % terms, unless otherwise stated)

¹Not recast for later portfolio changes; ²Annualized performance for GEIS based on H2 18 contribution; ³Last twelve months to end Q3 2019; ⁴Operational EBITA margin



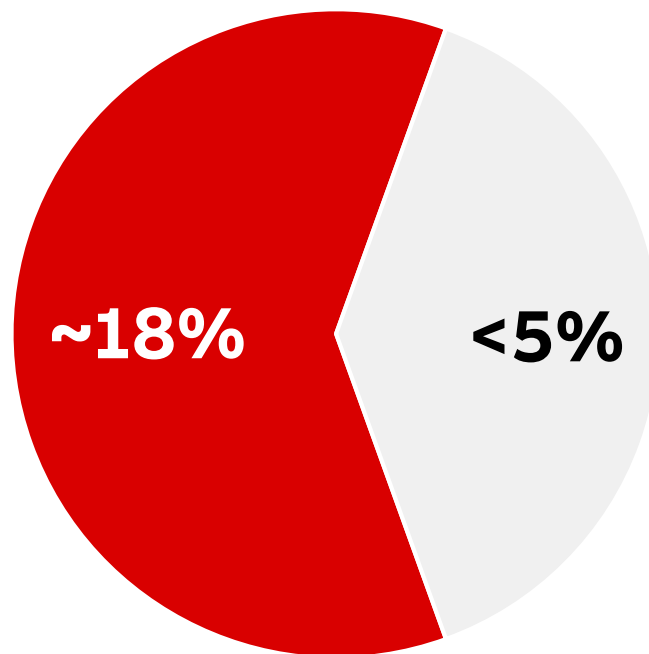
Electrification operational EBITA margin

High performing businesses (~60% revenues)

Distribution Solutions

Smart Power

Smart Buildings



12.9% operational EBITA¹

Businesses in change mode (~40% revenues)

Solar
inverters

Exit
>50 bps accretion

Installation
Products

Turnaround

GEIS

Integration into
high performing
businesses

ABB Electrification

Understanding ABB Electrification

Driving growth

Differentiating in our markets

Creating value

Q&A

Aligned to key mega-trends

The world is going digital, urban, and electric

Data and digitalization¹



7.5x

Increase in data processed
outside of originating core

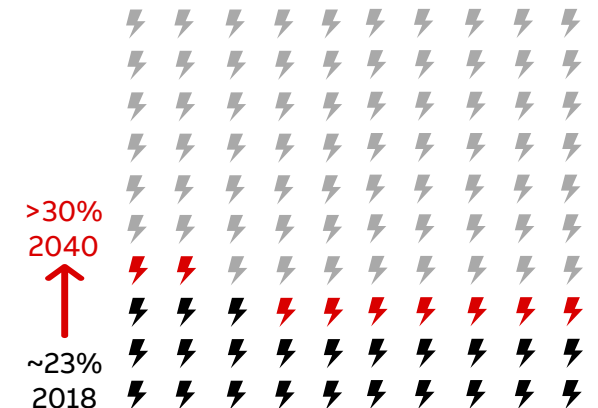
Urbanization²

+2 billion

people living in cities



Shift to electricity³

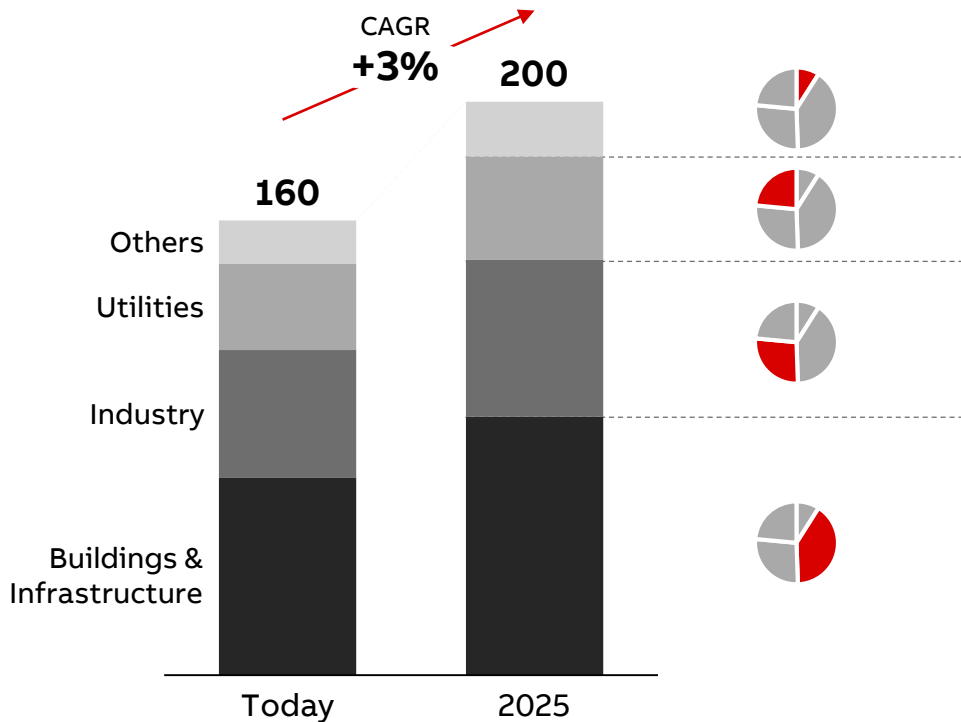


+35%

Share of electricity in the
energy consumption mix

Well positioned in high-growth segments

Global addressable market in \$ bn



Business exposure

Market growth drivers

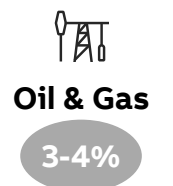
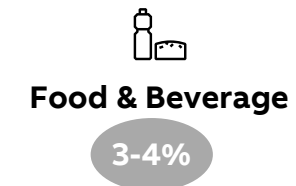
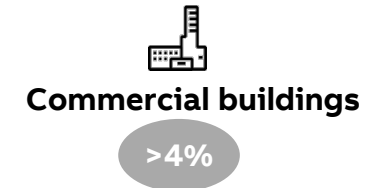
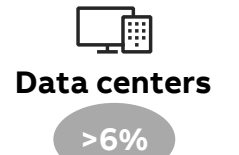
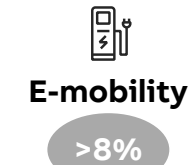
Electricity grows 2x faster than other energy sources

New sources of consumption

Rising importance of distributed generation

Expansion of E-commerce and digitalization

High-growth segments¹



Distinct channels and solutions

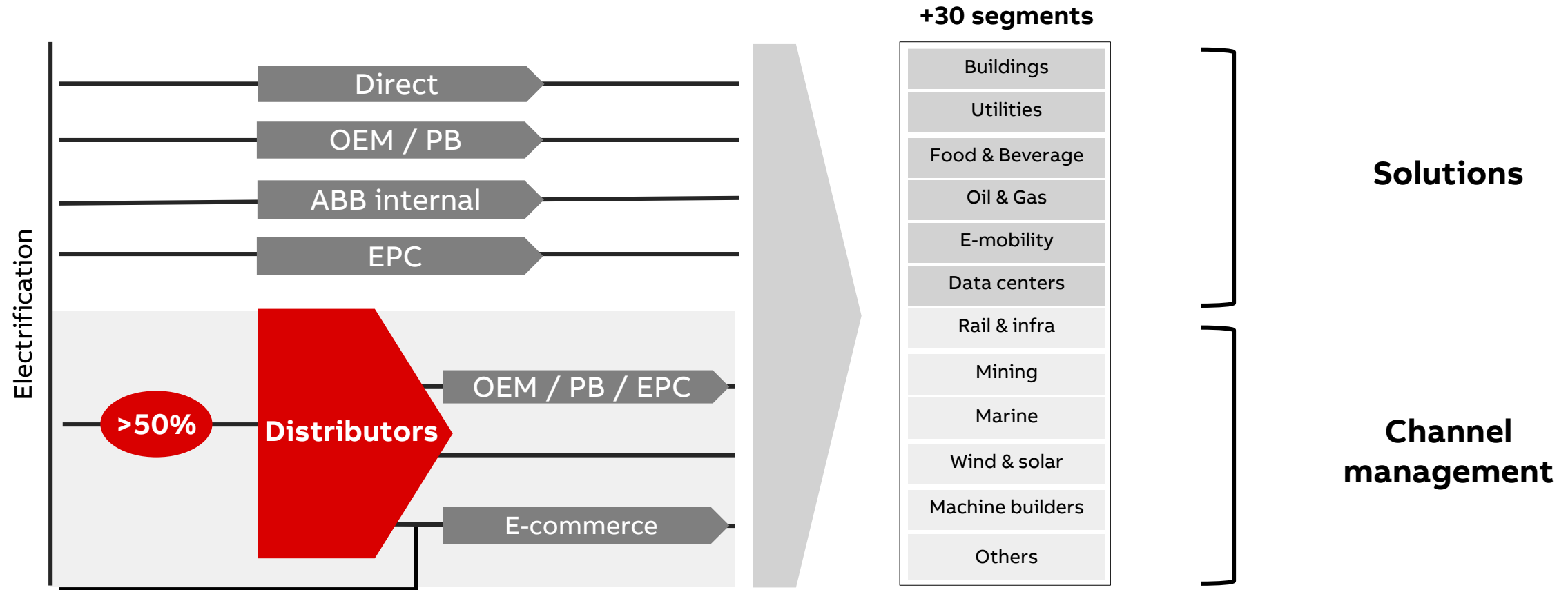


ABB Electrification

Understanding ABB Electrification

Driving growth

Differentiating in our markets

Scope and scale Innovation Execution

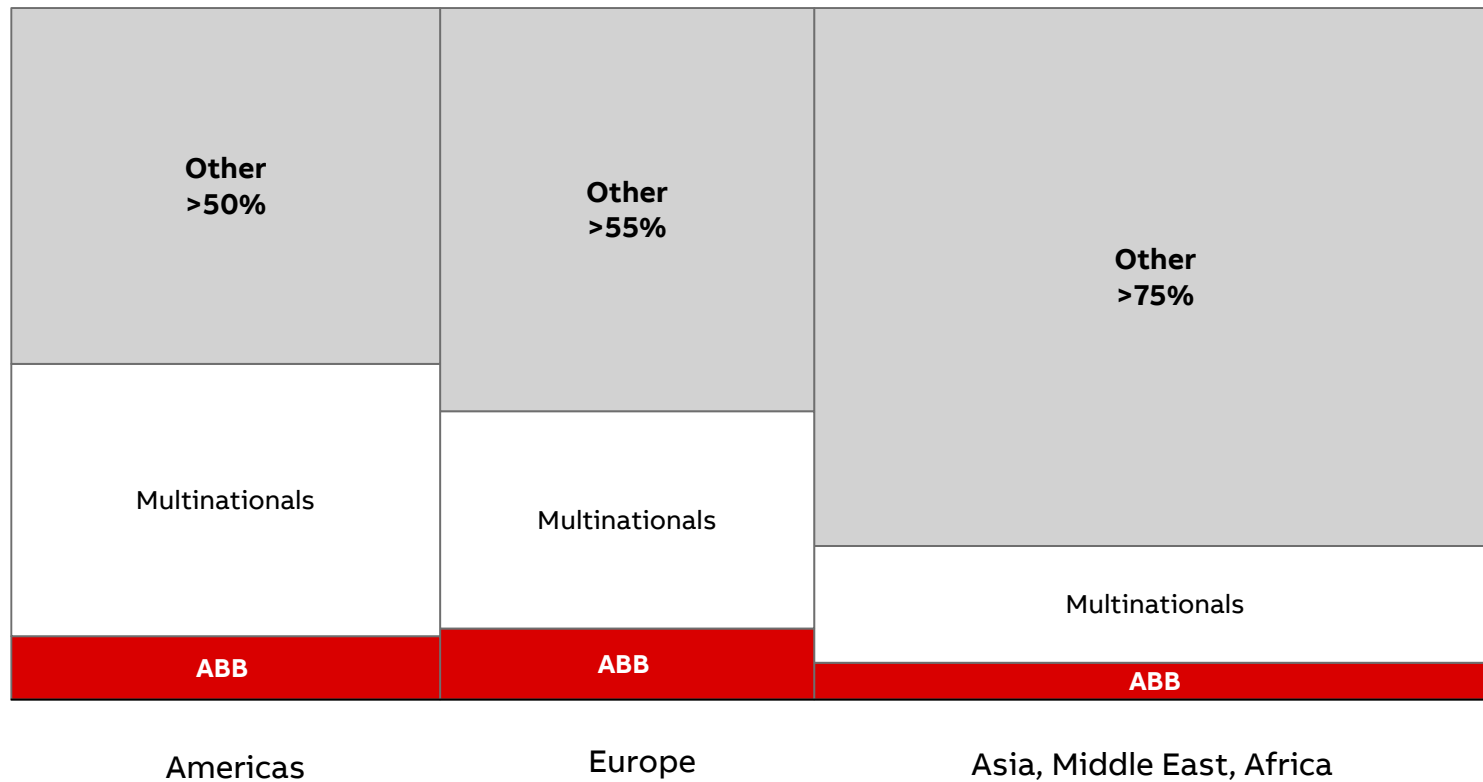
Creating value

Q&A

Scope and scale advantage

Local access combined with large scale advantage

Global electrification market structure¹



Local offers / global core

+

Manufacturing scale
(cost advantage)

+

R&D leverage

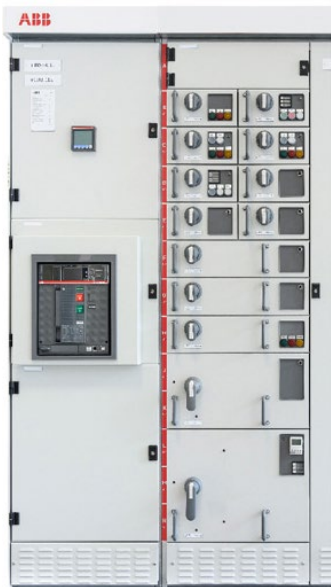
+

Global digital platform

Market leading core technology

Electrification's cutting-edge innovation DNA

NeoGear switchgear



Safest product
in the market

25%

space saving

30%

operational costs
saving

Major innovation in +\$35 bn market

Solid state breaker concept



**Architectural control
point for electrification**

Market-defining products

+

**Innovation ecosystem: >2,700
technologists in 48 centers**

+

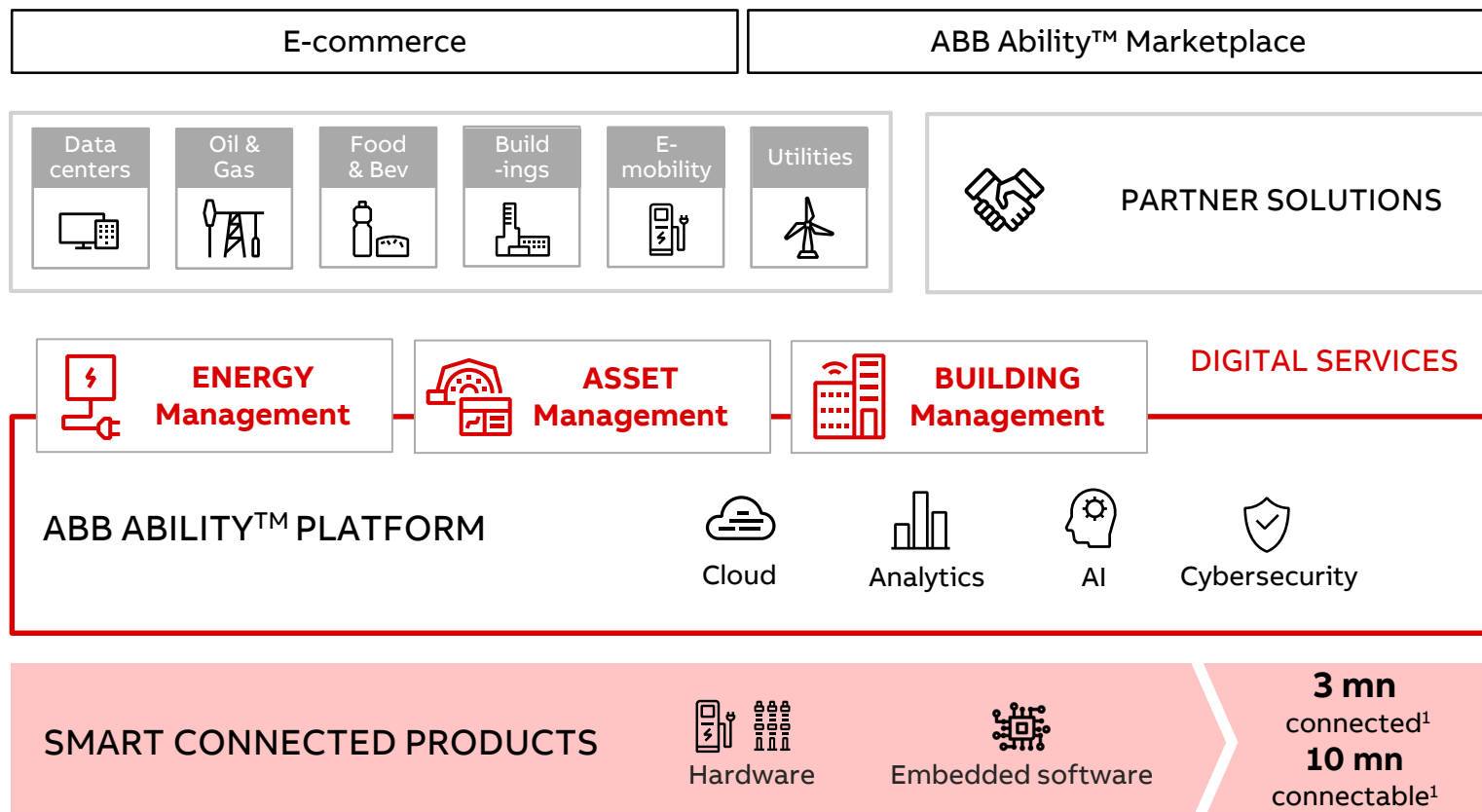
R&D investment: >\$300 mn p.a.¹

↓

**70% Net Promoter Score² for
innovation**

Digital innovation

Creating customer impact and new revenue streams



**Ease of doing business
(including E-commerce)**

+

Scalable, segment-focused solutions

+

Subscription-based SaaS

+

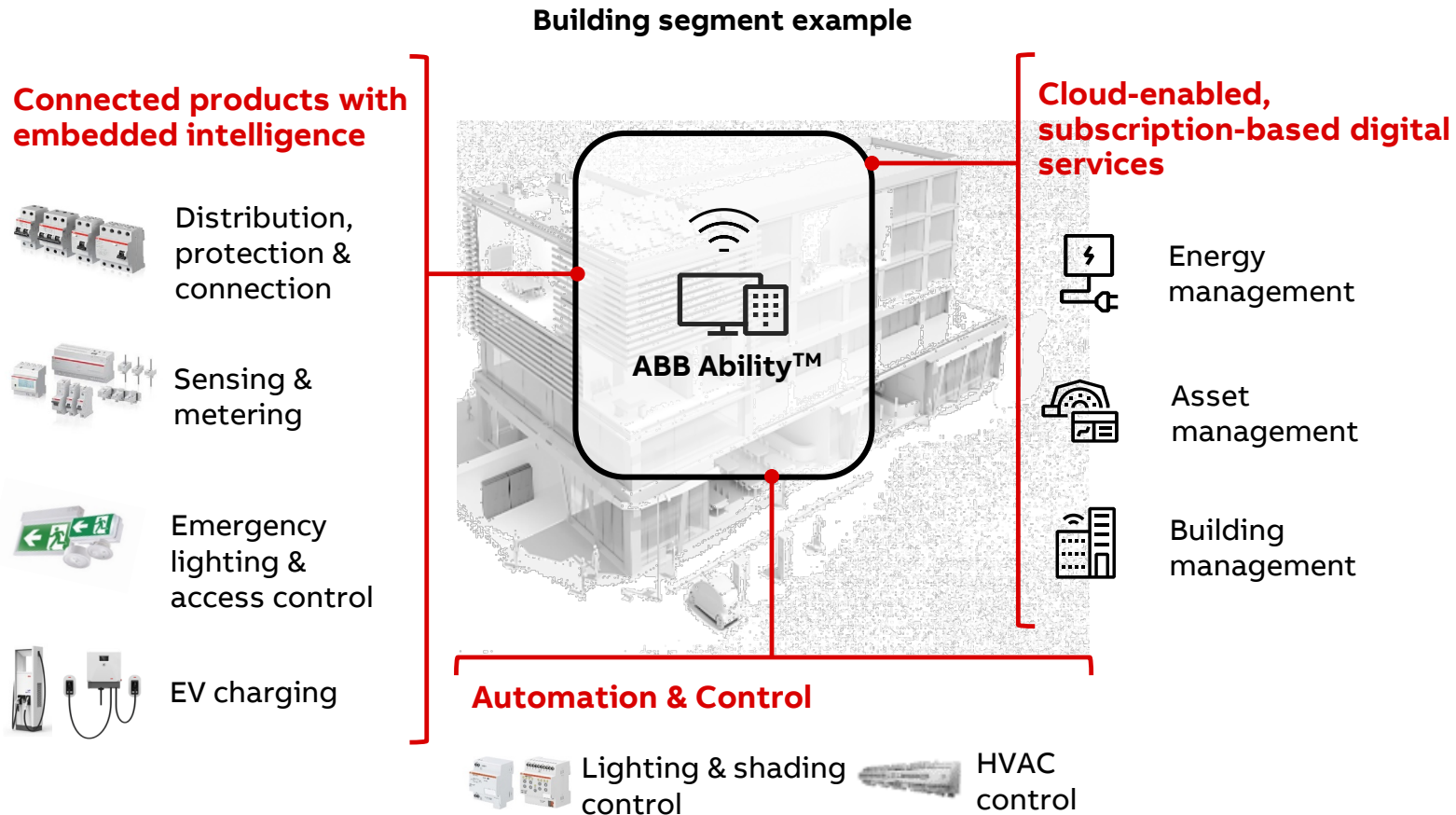
Global cloud platform

+

Products with embedded intelligence

Digital innovation

Creating value for customers



Optimize energy bill

+

Avoid energy waste

+

Reduce total cost of ownership

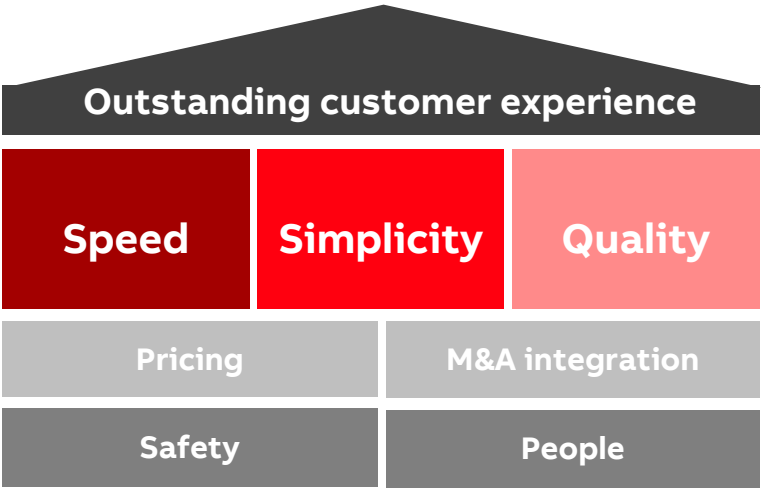
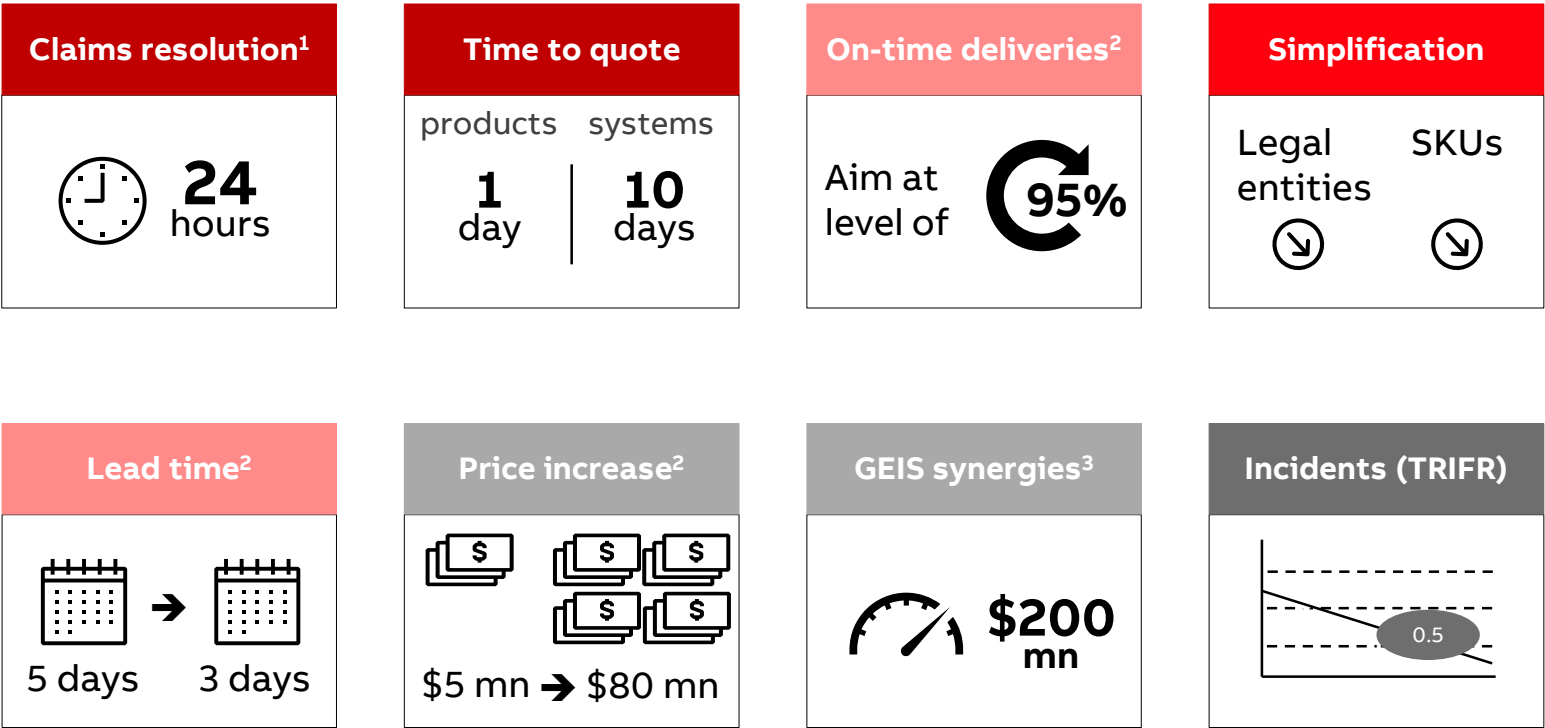
+

Maximize uptime

Driving continuous improvement

Operational excellence framework to benchmark and drive success

Operational KPI examples



GEIS integration

On track

Strategic rationale

Market access

- North America
- Global installed base

Performance improvement

- ABB technology leadership
- ~\$200 mn cost synergies by 2022

Closing portfolio gaps

- Complementary NEMA, LV products

Strategic supply partnership

Integration status

Organization

- 13k employees transitioned into ABB

Footprint and product rationalization

- 13 facilities announced for closure
- Product substitutions ahead of plan

Investing for growth

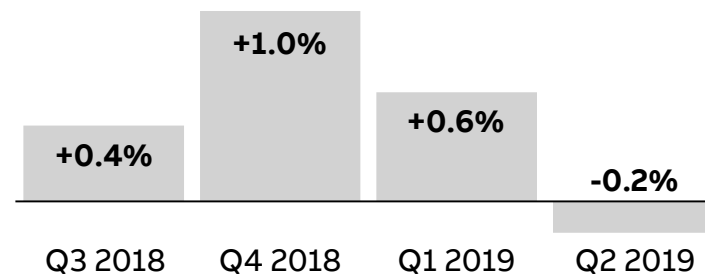
- Expanding 4 facilities in North America
- On track with ~\$480 mn¹ investment

'Best of Both' = success

Cross-selling

>\$70 mn cross-sales YTD 2019

Market share growth²



~2x market growth → total share gain ~0.5%

1/3 complete

Installation Products turnaround

In progress

Restoring the basics 2019

Addressing issues

- Price / commodities mismatch
- Unfavorable mix
- Cost to serve

Actions taken

- New leadership, simpler structure: +\$21 mn cost saving
- Net pricing +\$13 mn 2019 benefit
- Portfolio review

2020-21 actions

Optimize sales and channel structures to most profitable products

Strengthen pricing

Reduce cost to serve

Optimize manufacturing footprint

Talent upgrade

Future direction

Shift product mix

- Invest, expand specialty ‘Power Brands’ globally



- Scale up differentiated products

Selective market approach

- Broad portfolio in North America
- Tailored offer globally
- Transition out of non-core countries

Re-establishing profitable growth in attractive segments

ABB Electrification

Understanding ABB Electrification

Driving growth

Differentiating in our markets

Creating value

Q&A

ABB Operating System (ABB-OS)

ABB Operating System

Speed

- Empowerment: faster decision making
- Shared service centers report to business
- Alignment on capital allocation

Simplification

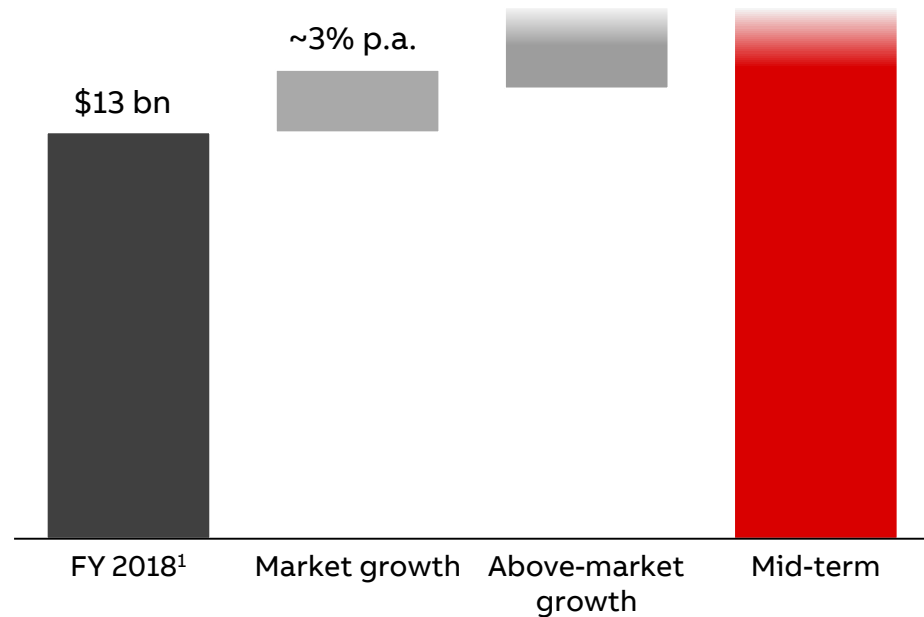
- From 6 to 4 operating business lines
- Integration of GEIS into business lines
- Reduction of legal entities

Accountability

- Country structure integrated into business
- Tailored employee incentives
- Direct owned costs vs. allocated costs

Driving above-market growth

Mid-term revenue development



Approach

Scope and scale

- Common sales organization across business lines
- Local sales coverage in +100 countries

Innovation

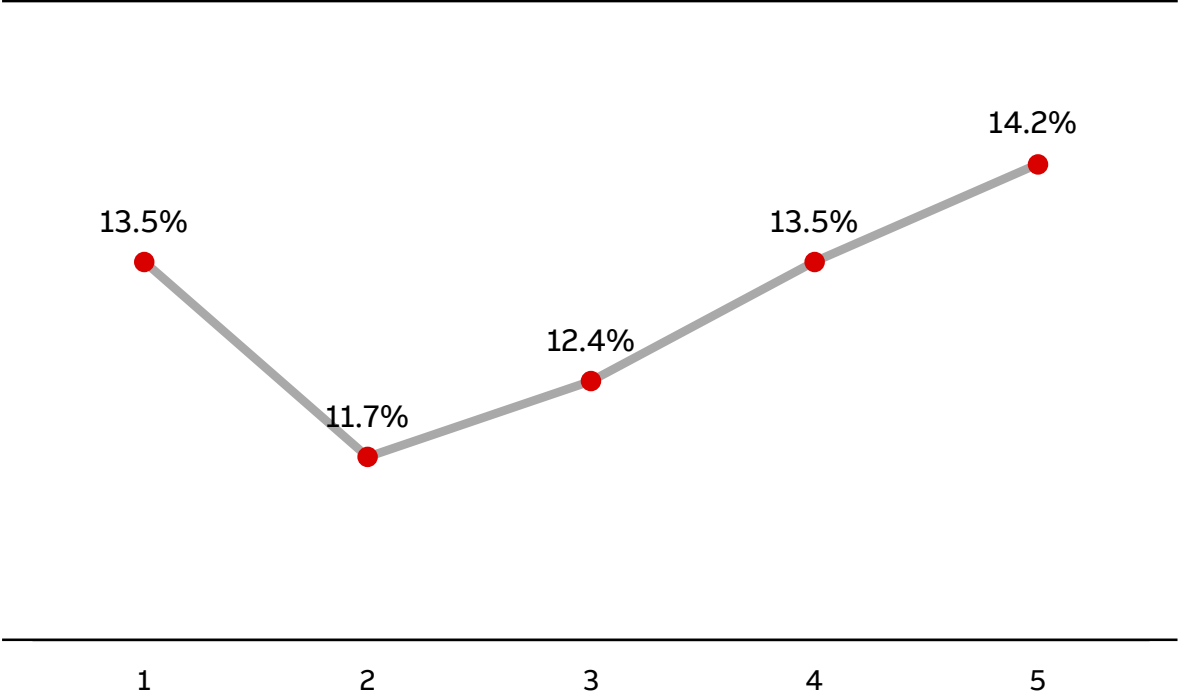
- Core technology innovation
- Scalable solutions for key segments
- Digital services on ABB Ability™

Execution

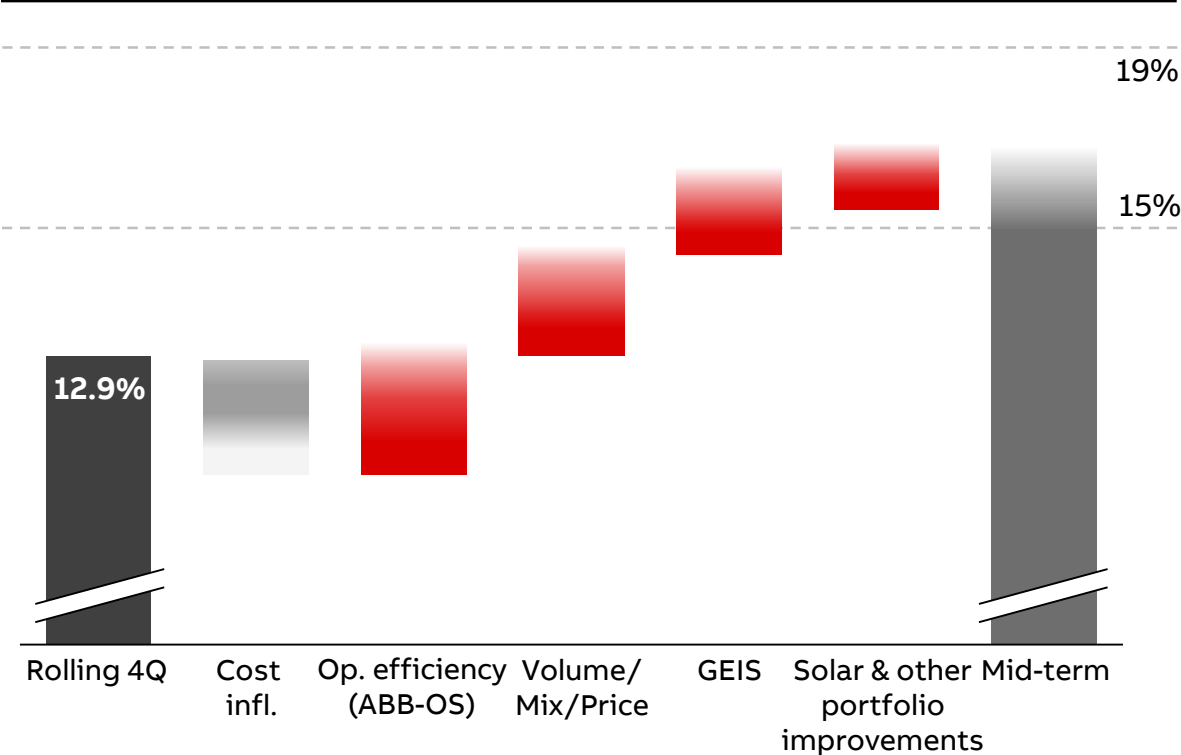
- GEIS integration: 'Best of Both'
- Customer focus via ABB-OS simplification

Reaching margin corridor during 2020

Momentum since GEIS acquisition



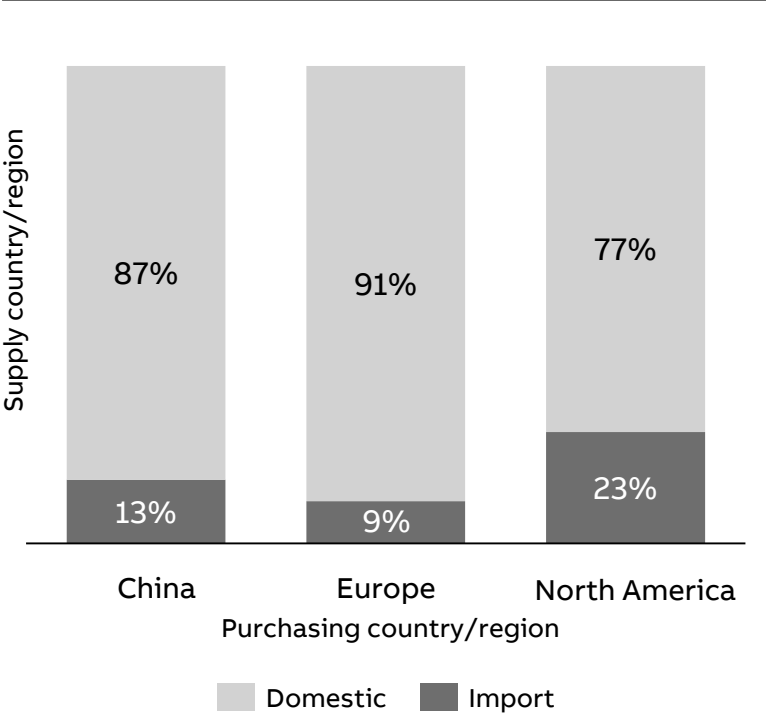
Mid-term outlook



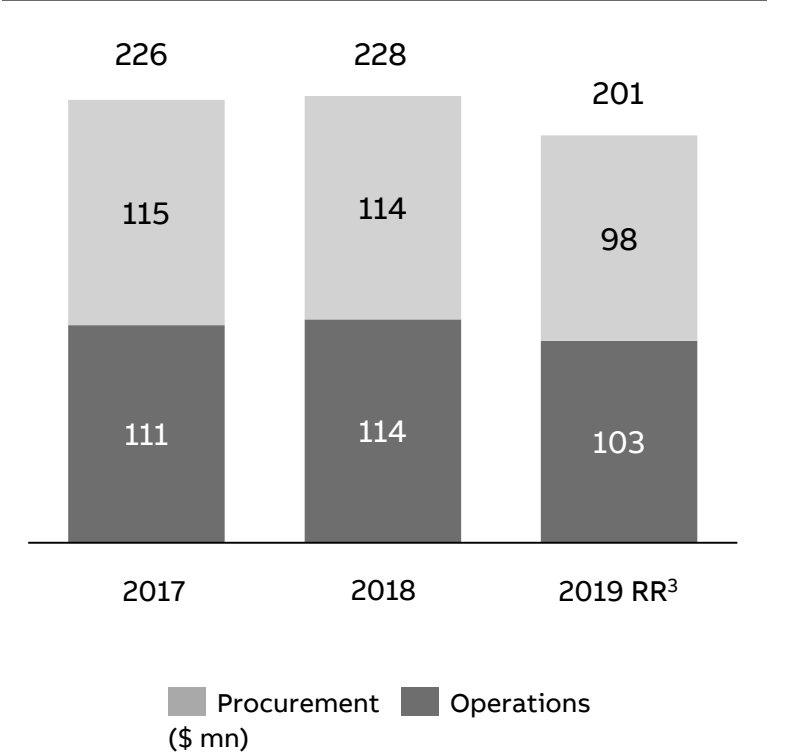
Optimizing gross margin

Cost management and pricing strategy

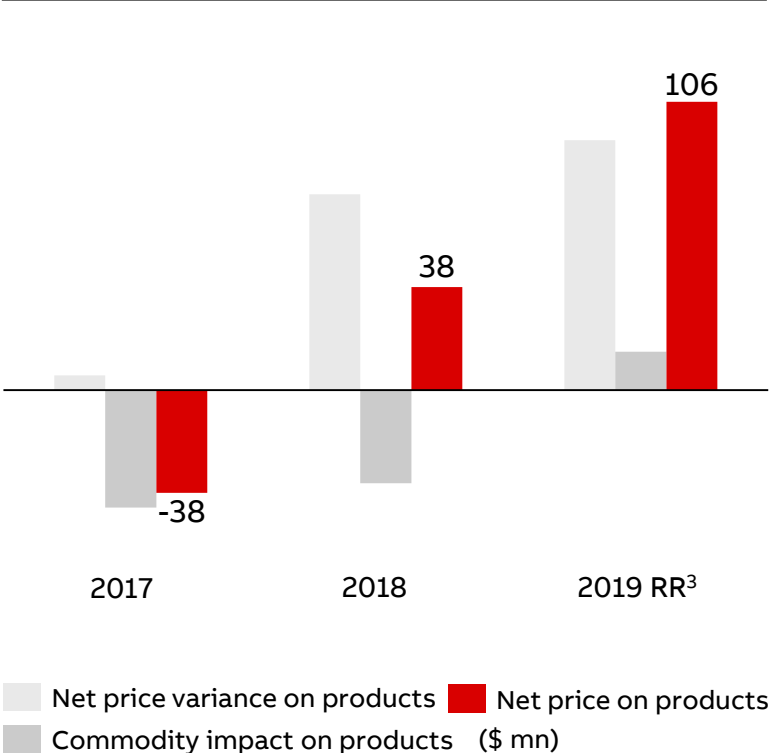
Balanced material distribution¹



Procurement & op. productivity savings



Product pricing actions²

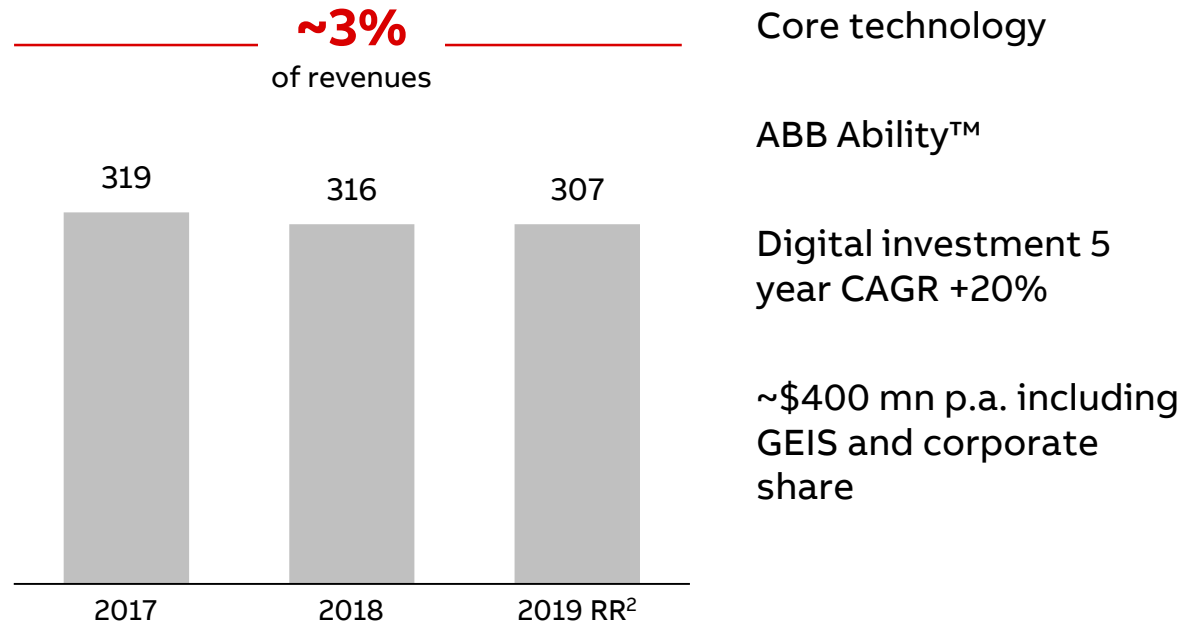


Note: calculations excluding GEIS unless otherwise stated
¹Geographic distribution of tier 1 suppliers to North America, China and Europe as at end H1 2019. Includes raw and direct material purchases for consolidated Electrification; ²Excludes Distribution Solutions and Solar inverter business lines; ³2019 run-rate as at end Q3 2019

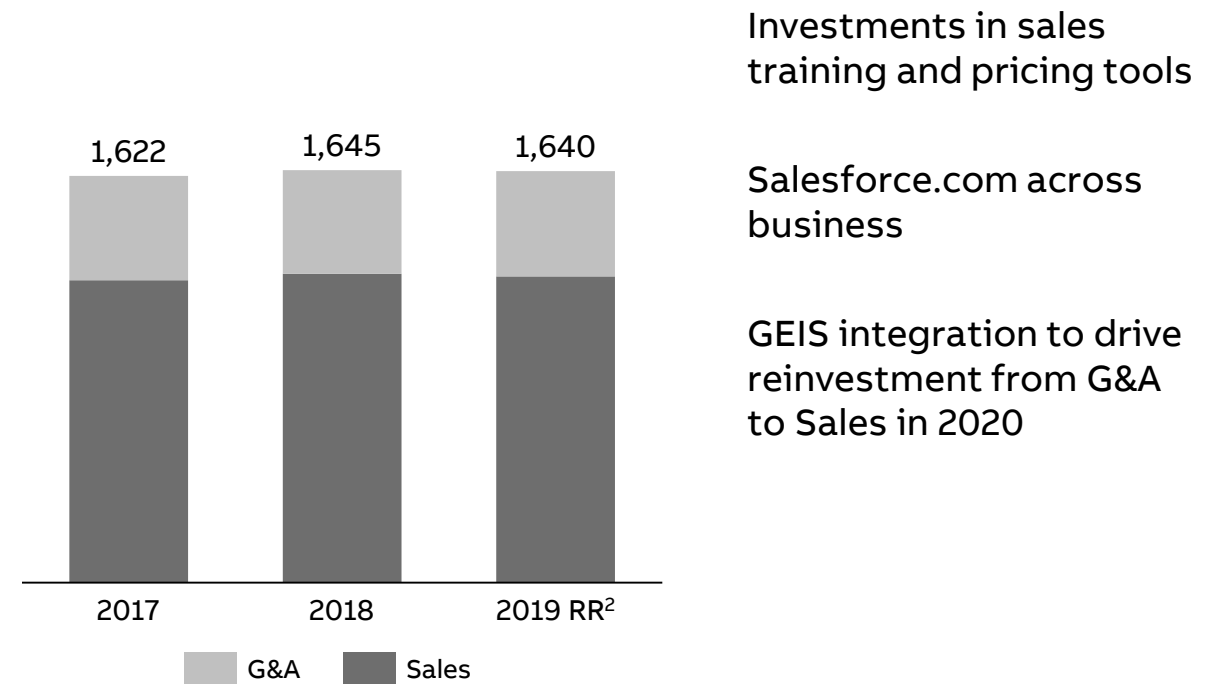


Managing growth investment

R&D investment (\$ mn)¹



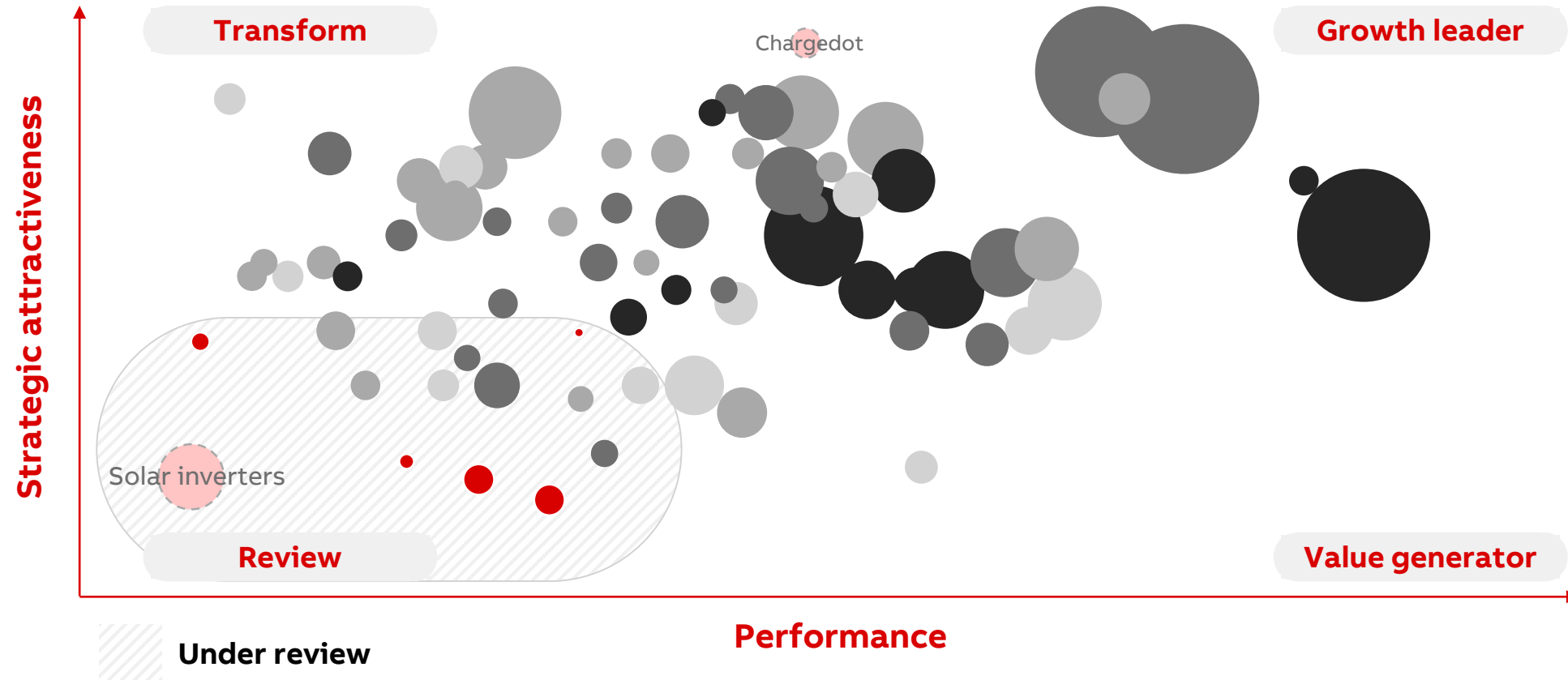
SG&A investment (\$ mn)³



Enhancing our portfolio

Continuing systematic portfolio management down to a product line level

Illustrative



Electrification CFO priorities

Attractive growth



Above market growth
Continuously reinvesting in R&D, digital and sales

Disciplined execution



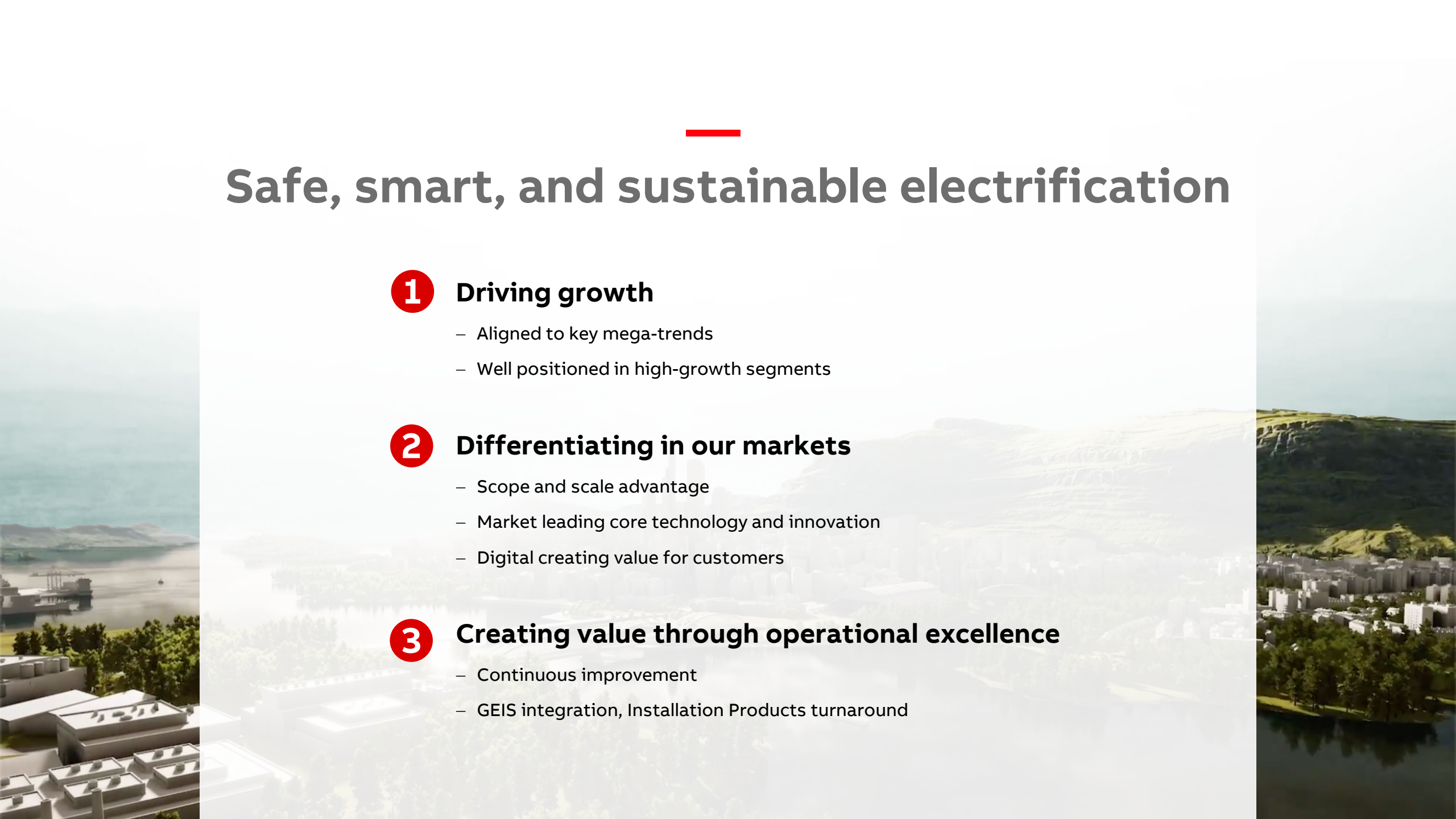
Delivering ~\$200 mn GEIS cost synergies
Pricing, operational efficiency, cash generation

Continuous portfolio management



Solar inverter exit agreed
Other portfolio actions ongoing

Reaching operational EBITA margin corridor of 15-19% during 2020



Safe, smart, and sustainable electrification

1 Driving growth

- Aligned to key mega-trends
- Well positioned in high-growth segments

2 Differentiating in our markets

- Scope and scale advantage
- Market leading core technology and innovation
- Digital creating value for customers

3 Creating value through operational excellence

- Continuous improvement
- GEIS integration, Installation Products turnaround

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