ABB Electrification business

Electrification provides Safe, Smart, and Sustainable electrification to our customers and partners. The following provides an overview of the business, laying out the future direction of our market and strategy.

Electrification market overview and key trends

The electrification market is approximately $160bn projected to grow at 3% CAGR. The pace of change in the market will accelerate, and Electrification must be agile to keep in step with key macroeconomic and technological trends:

- **Data and digitalization** – Demand for data is increasing, driven by Industry 4.0, 5G deployment and the digitalization of processes, procurement, and services.
- **Urbanization** – Cities across the world are experiencing a new wave of accelerated population growth and associated infrastructure development.
- **Shift to electricity** – Electricity use is growing at two times the rate of any other form of energy. This is driven by new consumption modes, such as electric vehicles and data centers, and enabled by more efficient use, integration of distributed generation, and energy storage.

These megatrends are creating high-growth pockets within the electrification market, such as data centers, electric mobility, and commercial buildings, which we are well positioned to serve.

Safe, Smart and Sustainable electrification

Our strategy drives growth and performance by differentiating through technological and digital innovation. We aim to deliver an outstanding customer experience through operational excellence.

Innovation at the core

Electrification will focus on innovations that maintain our leading position in the core low and medium voltage products, solutions and services. With ~$400mn² R&D investment per annum, we continue bringing innovation to the market from the fastest EV chargers in 2018, to revolutionary switchgear in 2019, and beyond.

Out of 10mn connectable devices in our installed base today, 3mn are connected in the field. Embedded connectivity and intelligence in our portfolio helps customers improve their costs, productivity and efficiency.

Digitally enabled solutions

Energy, asset, and building management digital solutions that use our smart connected products deliver up to 30% energy and operational costs savings to our customers. These subscription-based SaaS applications are hosted on the ABB Ability™ platform.

We are committed to growing our digital portfolio with end-customers. For example, in mid-segment commercial buildings, we reduce energy and enhance comfort and security through the use of our innovative IoT platform, while also reducing capital investment.

¹Sources: Gartner; UN World Urbanization Prospects (2018 Revision); IEA, BP Energy Outlook 2018
²Electrification R&D spend, including GEIS
ABB Ability™ Marketplace, ABB Connect Partner Hub customer portal, and e-commerce are aimed at making it easier for customers to find, configure, buy, and install our products.

**Execution – delivering outstanding customer experience**

Speed, simplicity and quality are the center of the continuous improvement philosophy that delivers >$200mn of annual gross cost savings. This same philosophy extends to our integration of GE Industrial Solutions. A strong focus on cost, portfolio and manufacturing footprint optimization will help us deliver ~$200mn of cost synergies by 2022. In parallel, we are prioritizing the turnaround of our Installation Products business, with operational improvements and a more selective market approach.

The ABB-OS simplification program drives faster decision-making, simpler structure, and clearer accountability. It enables us to reduce reporting units, simplify supply chain, and optimize manufacturing and R&D.

All this has one single objective: to deliver an outstanding customer experience.

**Creating value**

Our market-leading business lines are well aligned to deliver on our strategic priorities.

- **Distribution Solutions** is creating scalable, modular and replicable solutions to meet customer needs in focus segments across the whole electrification portfolio, while optimizing performance and profitability.

- **Smart Power** builds on a strong product portfolio with innovative connected products that aim to become the cornerstone of electric distribution.

- **Smart Buildings**, with a strong installed base, works to create disruptive solutions for building automation.

To drive performance improvement, the GEIS portfolio, and its installed base and people, are now part of Distribution Solutions, Smart Power, and Smart Buildings business lines.

- **Installation Products** will focus on operational improvements, portfolio optimization, and selectivity.

With our differentiated products, solutions, and services we aim to deliver above-market growth, while optimizing the portfolio across our business lines and staying firmly focused on continuous improvement. We expect to reach the Operational EBITA margin corridor of 15-19% during 2020.