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 or anticipated transactions.

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
• general market conditions, 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 statements are based upon reasonable assumptions, it can give no assurance that those expectations will be achieved. We caution that the foregoing list of factors is not exclusive and you should not place undue reliance upon any forward-looking statements, including projections, which speak only as of the date made. We do not undertake or accept any obligation to release publicly any updates or revisions to any forward-looking statements to reflect any change in our expectations or any change in events, conditions or circumstances on which any such statement is based.

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 and annual reports” on our website at [www.abb.com/investorrelations](http://www.abb.com/investorrelations). Reconciliations can be found on our website under “Capital Markets Day 2021”.

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Sustainable transport = more electrification

1. Electricity demand expected to grow twice as fast as other energy sources, IEA

ABB Electrification | Tarak Mehta
- Emissions reductions \(\rightarrow\) 2x faster growth in electricity demand\(^1\)
- Market leading technology and innovation
- Growth in key segments: data centers, buildings, e-mobility

ABB E-mobility | Frank Muehlon
- Leader in EV charging infrastructure
- Investing in digital services
- Preparing for a public listing in 2022
ABB Electrification
Powering sustainable transport
Safe, smart, and sustainable electrification for our customers and partners
Powered by our people
Where we are first

For our Customers

In Innovation

In Digital
ABB is #1 in sustainable transport electrification

Business opportunities and market sizes in 2021

<table>
<thead>
<tr>
<th>Business opportunities</th>
<th>Market position</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger eCar charging solutions</td>
<td>#1</td>
<td>~$3 bn</td>
</tr>
<tr>
<td>eBus and eTruck charging solutions</td>
<td>#1</td>
<td>~$1 bn</td>
</tr>
<tr>
<td>Rail infrastructure electrification</td>
<td>#1</td>
<td>~$3.5 bn</td>
</tr>
<tr>
<td>On-shore marine electrification</td>
<td>#2</td>
<td>~$0.5 bn</td>
</tr>
</tbody>
</table>

Source: Management estimates

Business opportunities have various levels of market maturity

S-curve visual is illustrative

Source: Management estimates
For sustainable transport, we expect double digit growth rate to continue in the mid-term.

We will continue to outgrow the market.

Sustainable transport as part of our business
Orders of ~$900 mn, ~6% of Electrification order intake

Sustainable transport market growth drivers

01 Regulation
- Decarbonization
- Incentivized EV adoption

02 Technology
- Battery prices & performance
- EV charging
- Hydrogen & fuel cells
- V2G, storage & renewables converge in buildings

03 Consumer switch to electric cars
- New mobility patterns: shared and autonomous
- Growth of fleets & public transportation

04 Needed infrastructure upgrades
- Grid upgrades to support e-mobility
- Rail and airports require retrofits and upgrades

ABB EL orders in sustainable transport CAGR
- 22%

Sustainable transport market CAGR
- 11%

2017 – 2021E
Enabling smart transport through better electrification
Our references from all over the world

Rail & metro electrification
Case study:
LAX Airport light-rail, USA

Sustainable city transport
Case study:
Electric buses network, Qatar

Smarter distribution grids
Case study:
Virtual Power Plant for State Grid Jibei Electric Power, China

CO₂-free passenger vehicles
Case study:
DREEV by EDF & Nuvve vehicle-to-grid, Europe
Automated People Mover at Los Angeles International Airport (LAX)

2.25 miles for 87 million passengers a year, resulting in **117,000 fewer vehicle miles travelled**

Using Envilene Energy Storage System with **energy redundancy and robustness**
(7 MW and 2.1 MWh of traction & energy storage)

ABB backup power solution will allow trains to run for **40 minutes in the event of an outage**
Sustainable transport for cities…

Charging Qatar’s largest electric bus infrastructure project

- 25% of public bus network electric by 2022
- 100% by 2030

ABB to design, supply, test, and commission a charging infrastructure for 1,000 buses = 50,000 passengers per day

- 125 MW of charging capacity is a major country transport decarbonization effort
... creating need for grid upgrades

125 MW of charging capacity to be delivered for the e-bus project in Qatar
Smarter distribution grids

ABB intelligent distribution, metering and coordination control helps State Grid Jibei Electric Power build a Virtual Power Plant (VPP)

226 MW to be added on top of existing 26.5 MW capacity of the VPP will meet the needs of 12.4 million people living in cities of Zhangjiakou, Qinhuangdao and Langfang

ABB devices for monitoring, protection and control ensure efficient power management. Peak shaving and load transfer to enable real-time interaction between adjustable resources and power systems.
Continuous investments over years in e-mobility business start to pay off with strong growth momentum

Total investment from 2017 to September 2021, $ mn

230

including $114 mn in R&D and $116 mn in CapEx, M&A, and Ventures

Global

#1 in EV charging solutions

<table>
<thead>
<tr>
<th></th>
<th>Orders ($ mn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>116</td>
</tr>
<tr>
<td>2018</td>
<td>134</td>
</tr>
<tr>
<td>2019</td>
<td>169</td>
</tr>
<tr>
<td>2020</td>
<td>204</td>
</tr>
<tr>
<td>LTM¹</td>
<td>479</td>
</tr>
</tbody>
</table>

1. Last twelve months ending 30 September 2021
ABB E-mobility transformation is ongoing
From hardware solutions to digital services and future mobility

- High-growth business
- R&D intensive
- Direct and distribution-led

Differentiation and profit opportunity

1. Different Business Metrics
   - From CapEx to CapEx + OpEx
   - Charging-as-a-Service business model
   - V2G

2. Business Model Transformation
   - Keep attracting best talent
   - Acquire HW & SW companies
   - Crystallize valuation

Potential listing in 2022
ABB E-mobility: The world leader in EV charging solutions
A pioneer of the green mobility revolution

- $230 mn
  Total investment by ABB from 2017 to Sep-21

- $263 mn
  LTM revenue

- ~57%
  2017-LTM revenue CAGR

- >500k
  AC chargers sold

- >25k
  DC chargers sold

- >300
  Granted patents

- >85
  Present countries

- ~1,000
  Employees

- ~300
  R&D engineers

- $479 mn
  LTM order intake

- 37%
  CPO

- 21%
  Public transport

- 16%
  Destination & home

- 18%
  OEM

- 8%
  Fleet

- $263 mn
  LTM revenue

- Europe 56%

Note: Unless specified, figures are as of today; financial information is in draft form and is subject to completion and amendment
1. Total investment includes R&D, CapEx, M&A, and other financial investments
2. Last twelve months ending 30 September 2021
3. Operational presence
4. Includes contractors
5. Charge Point Operator
6. Split excludes unassigned segment and sales via ABB given no visibility on end-customer
7. Based on revenue, footprint and product breadth
8. Asia, Middle East, Africa
Mission-critical element of EV consumer experience
Central role in a complex ecosystem

**Automotive Industry**
- Material mining
- Battery manufacture
- Battery management systems
- Raw material manufacture
- Tier II
- Tier I
- Connectivity
- OEM

**Energy Industry**
- Distributed generation
- Retail
- Wholesale and trading
- Distributed storage
- Smart grid
- Transmission
- Centralized generation

**EV Charging Solutions**
- Site maintenance
- Digital services
- Install and maintain
- Charge point aggregator
- Charging-as-a-Service
- Connectivity for GPS
- Hosting platforms for EV and CPOs
- Data monetization
- User interface
- Data services

**EV Data and Services**
- Focus areas for ABB E-mobility software
- Focus areas for ABB E-mobility hardware
Vertically integrated offering across smart and connected EV charging solutions

1. AC & DC charging hardware
3. Advanced energy & fleet management
### Widest portfolio of public and commercial EV charging hardware

Addressing key customer needs globally across use-case, vehicle type and brand

<table>
<thead>
<tr>
<th>AC</th>
<th>DC Fast</th>
<th>DC High Power¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-22 kW</td>
<td>50-180 kW</td>
<td>150-600 kW</td>
</tr>
<tr>
<td>4-16 hours</td>
<td>15-60 min</td>
<td>5-20 min</td>
</tr>
<tr>
<td>Home &amp; work</td>
<td>Commercial</td>
<td>Highway</td>
</tr>
</tbody>
</table>

1. Includes heavy and commercial vehicle charging using a pantograph charger

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Charging power and time designed for customer needs

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Complete offering based on ABB-defined standards allowing for scalability and efficient serviceability

---

- Bi-directional

---

AC

- 3-22 kW
- 4-16 hours
- Home & work

DC Destination

- 20-25 kW
- 1-3 hours
- Parking

DC Fast

- 50-180 kW
- 15-60 min
- Commercial

DC High Power¹

- 150-600 kW
- 5-20 min
- Highway
Fully integrated into a variety of B2B and B2C networked solutions
Comprehensive digital services and recurring software offering, connecting backend for >50 B2B customers
Emission-free passenger vehicles

ABB Vehicle-to-Grid (V2G) brings bi-directional charging with DREEV

- ABB will supply its brand-new **11 kW bi-directional charging V2G technology**

- V2G is expected to become the **dominant technology within 5 years** with 33% of global fleet expected to be electric

- V2G charging **reduces total cost of ownership** and helps manage demand
Differentiated and open innovation platform and roadmap
Institutional focus on technology development and patented innovations

- 8 R&D sites
- ~300 R&D engineers
- 17% R&D expense as % of LTM revenue
- $114 mn R&D expense from 2017 to September 2021
- >300 Granted patents

EV fleet management platform with Amazon AWS
Acquisition of smart energy control platform Enervalis

Selected planned innovations

Virtual utility
Smart grid
Bi-directional
Smart city

One megawatt charging systems
Load aggregation & energy balancing
Smart home charging

Noted: Financial information is in draft form and is subject to completion and amendment
1. As of today; includes contractors; additional R&D center in Switzerland will be transferred from ABB research center by end of 2021
2. Last Twelve Months ending 30 September 2021
Proven track record of top-line growth with strong outlook
Revenue driven by consistent R&D investment, explosive market growth and proven ability to scale

Note: Financial information is in draft form and is subject to completion and amendment
LTM = Last Twelve Months ending 30 September 2021

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5.4x or 57% CAGR
ABB E-mobility
Powering the e-mobility revolution

- Global leader in a fast-growing market
- Recognized technology innovator
- Sustainability is in our DNA
- Unique opportunity to realize our full potential