

„Digital Dialogue“ Agenda | September 23, 2020

01.

8AM | 3PM

Keynote – How to achieve sustainability targets

Dr. Amina Hamidi

Chief Technology Officer, ABB Electrification

02.

9AM | 4PM

How to keep reliable electrification

Luca Cavalli

Head of Asset Management, ABB Electrification

03.

10AM | 5PM

Energy management solutions for increased efficiency

Valerio Livoti

Head of Energy Management, ABB Electrification

04.

11AM | 6PM

How to reduce cost of ownership of EV chargers

Sydney Van Bokhoven

Global E-Mobility Solutions Development Manager, ABB Electrification

Please wait. The webinar session is about to start soon!

Sydney Van Bokhoven

Global E-Mobility Solutions
Development Manager
ABB Electrification

How to reduce cost of
ownership of EV chargers

✉ sydney.van-bokhoven@nl.abb.com

 [sydneyvanbokhoven](#)





SYDNEY VAN BOKHOVEN | GLOBAL E-MOBILITY SOLUTIONS DEVELOPMENT MANAGER, ABB ELECTRIFICATION

ABB Ability™ “Digital Dialogue” webinar

How to reduce cost of ownership for EV chargers



Our vision is to achieve a zero-emission reality



Transportation

Transport emissions accounted for 24% of global CO2 emissions

International Energy Agency



Population

The global population of people increased by 1.4 billion people between 2000 to 2017

UN Study



Trend

Passenger transport emissions increased by 36% between 2000 and 2015

SLoCaT – Transport and Climate change study



Electrification

Driving on electricity emits 54% fewer carbon dioxide emissions per mile than the average new gasoline car

US Environmental Protection Agency

ABB's EV Charging Infrastructure business

Key figures



**ABB has a decade of
experience in E-mobility**



**Chargers installed in
+80 countries**



**14,000+
chargers sold**



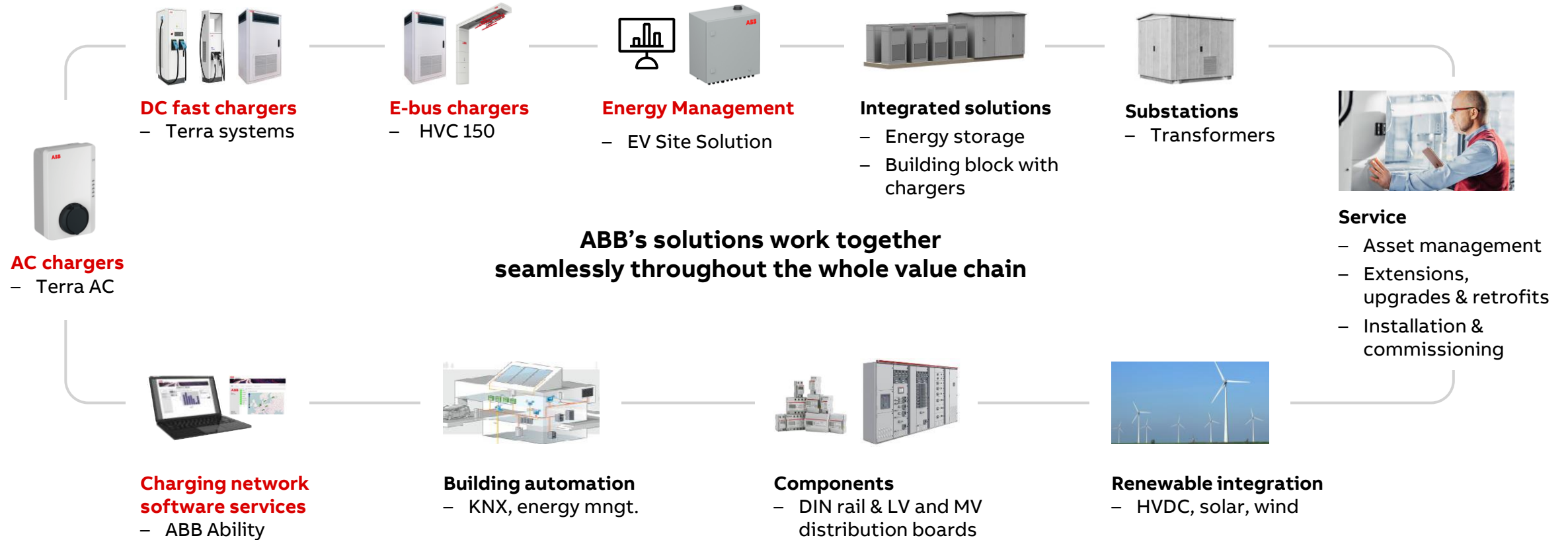
**~ 24 million charging
sessions enabled**



**~ 332.000 MWh
delivered**

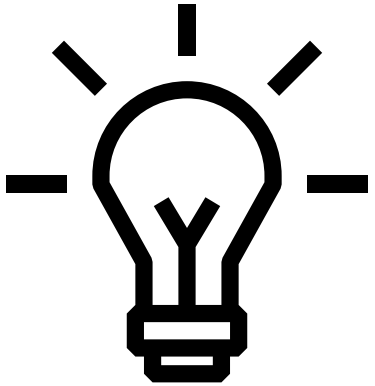
ABB offers end-to-end solutions for the complete value chain

Your one-stop shop for e-mobility infrastructure



Challenges in EV charging infrastructure

The investments made on EV charging infrastructures typically relies on **selling power** to EV drivers

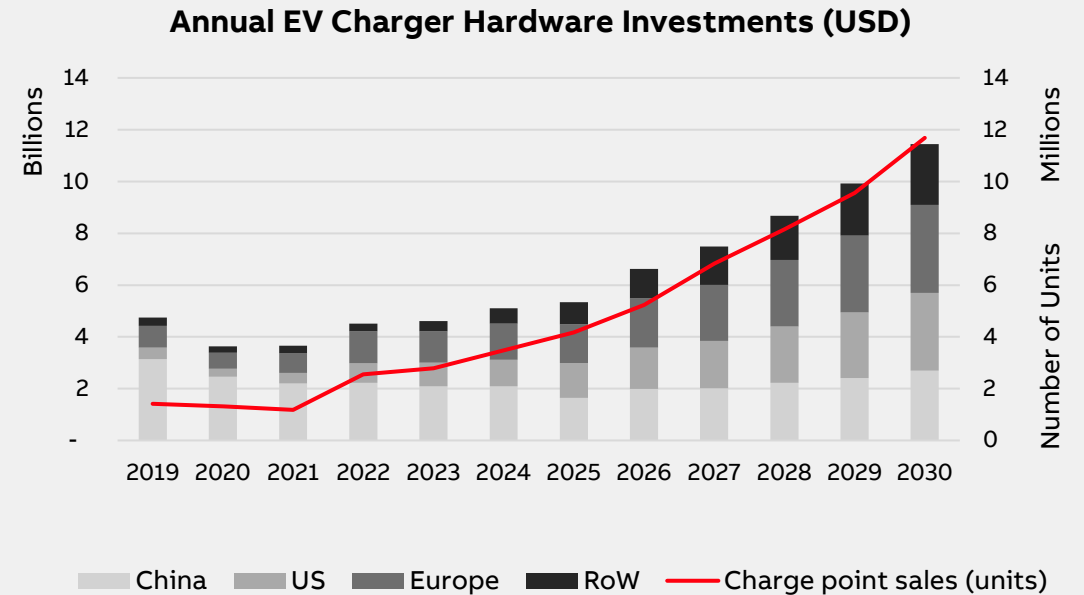


CAPEX intensive

- Hardware costs
- Installation & Integration
- Grid connection

Geographical distribution

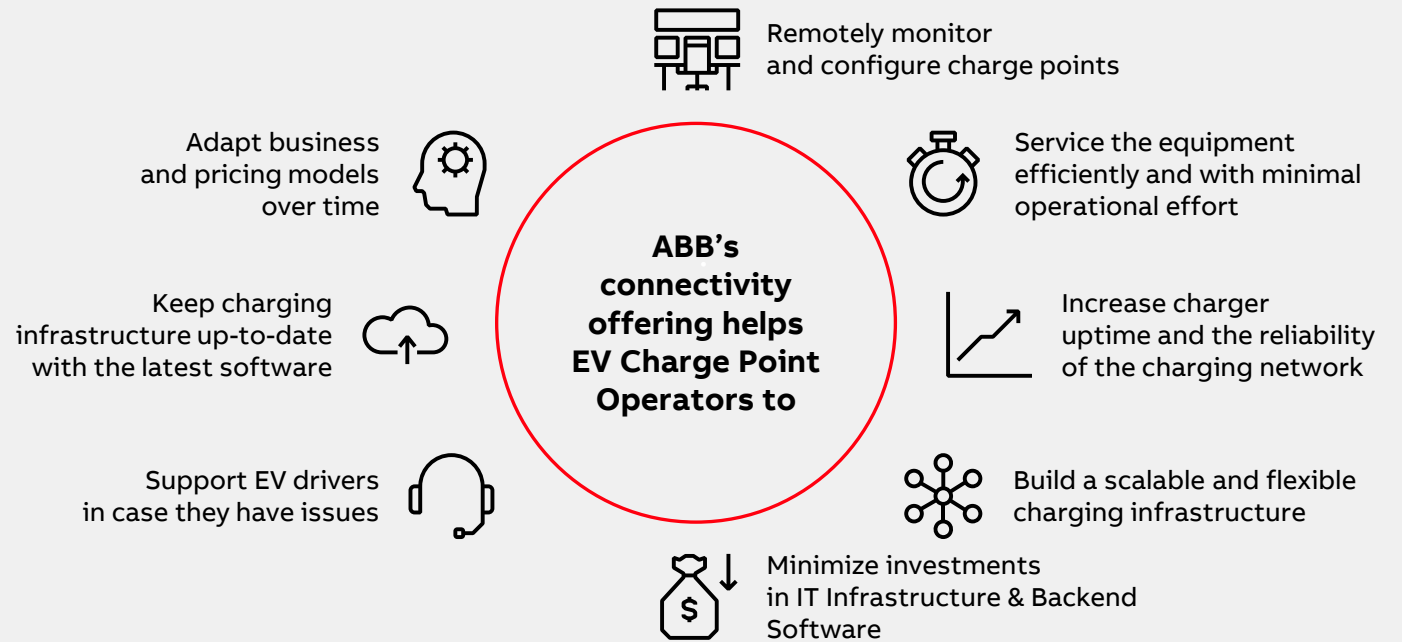
- Customer support
- Maintenance & Service
- Travel time



Connected Services are required to successfully run a commercial charger network



The ABB Ability™ platform: years of experience and thousands of connected EV chargers



Reliable 24/7 connectivity is fundamental for the commercial operation of a network of chargers!

Digital integration of an ABB EV charger

Combining direct OCPP with the benefits of the ABB Ability™ platform



Service & Support by ABB

- Very fast remote support by experts via web tools
- Minimized number of unplanned on site delegations¹



Low IT & Operations cost

- 24/7 Mobile network monitoring by ABB
- Fully scalable for future growth



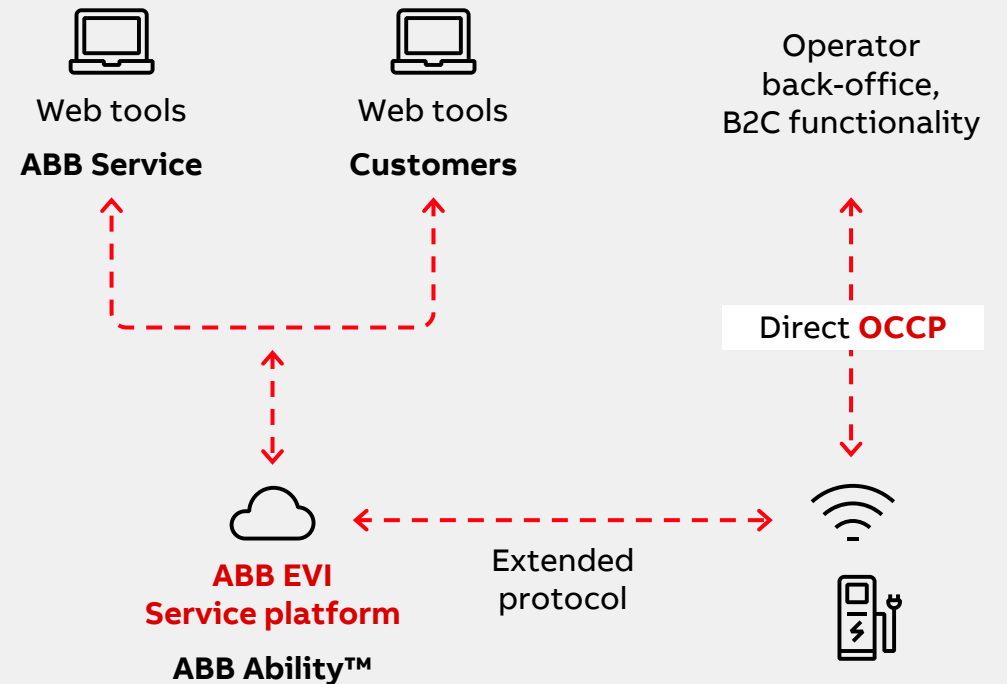
Flexible Operation Models

- Possibility to use own resources, ABB or 3rd party for all advanced service and support activities



Advanced offering

- Case Management with ABB via web tools
- Data Analytics, Predictive Maintenance models



Demo

Overview of ABB Ability™ EV connected services Webtools

ABB EVE Portal | EV Chargers | Network Statistics | Authorization Management | Documentation

EV Chargers > Map

Chargers | **Map** | Bulk Operations | Payment Terminal - Price Setting Overview

Map

Predefined Views: [All Chargers](#) | [Available Chargers](#) | [Chargers in Error](#) | [Not Idle Chargers](#) | [Currently Charging Chargers](#) | [Favorite](#)

Filter Results

The map displays a network of EV charging stations across Europe, including the UK, Netherlands, Germany, and Luxembourg. A green circle with the number 2 is centered over Amsterdam. A legend on the right lists charging status icons: Ready for use (green), Charging is in progress (blue), Charger is reserved (blue), Emergency button / Enclosure (purple), Charger internal problem (orange), Charger is turned off (grey), Charger in maintenance (grey), and Charger status unknown (grey).

Site Energy Management Solution

Increasing charging power <> Limitation of Grid connection

- Enable additional chargers by optimized energy management
- Increase grid capacity by adding Solar and/or Energy storage
- Control and insights on site performance for investment KPIs



Reduce CAPEX investment
by energy optimization



Up to 55% savings
on energy costs

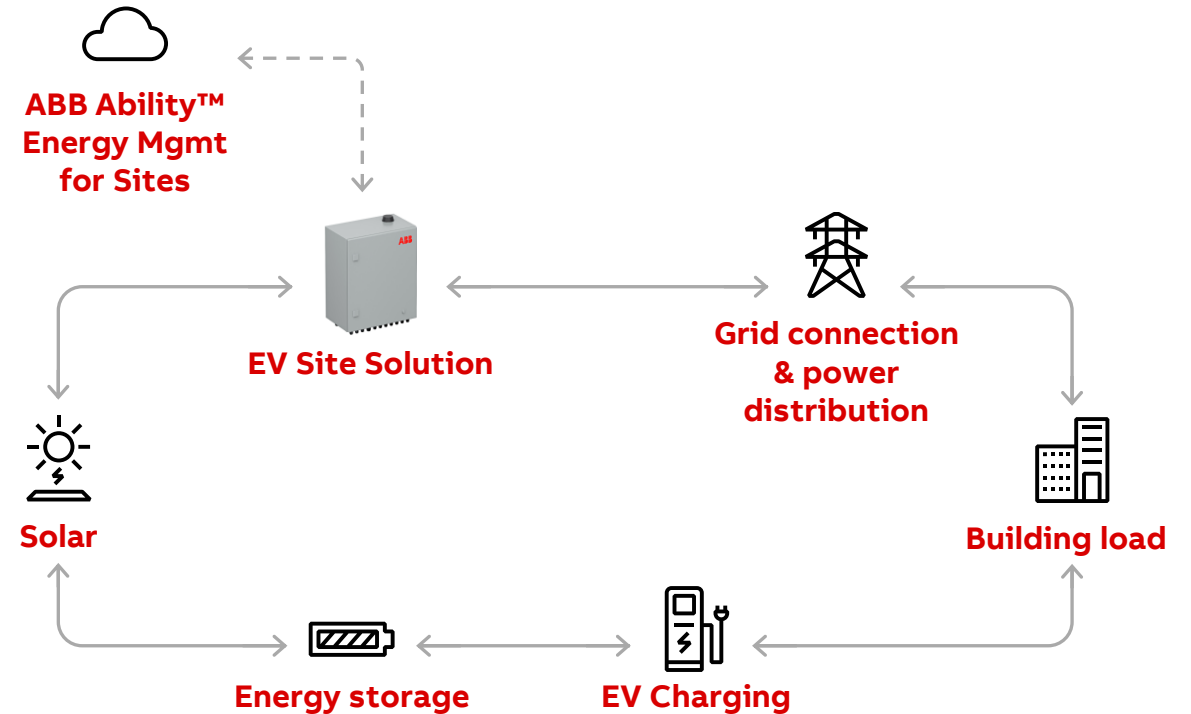


ABB Ability™ reducing TCO for EV charging infrastructure

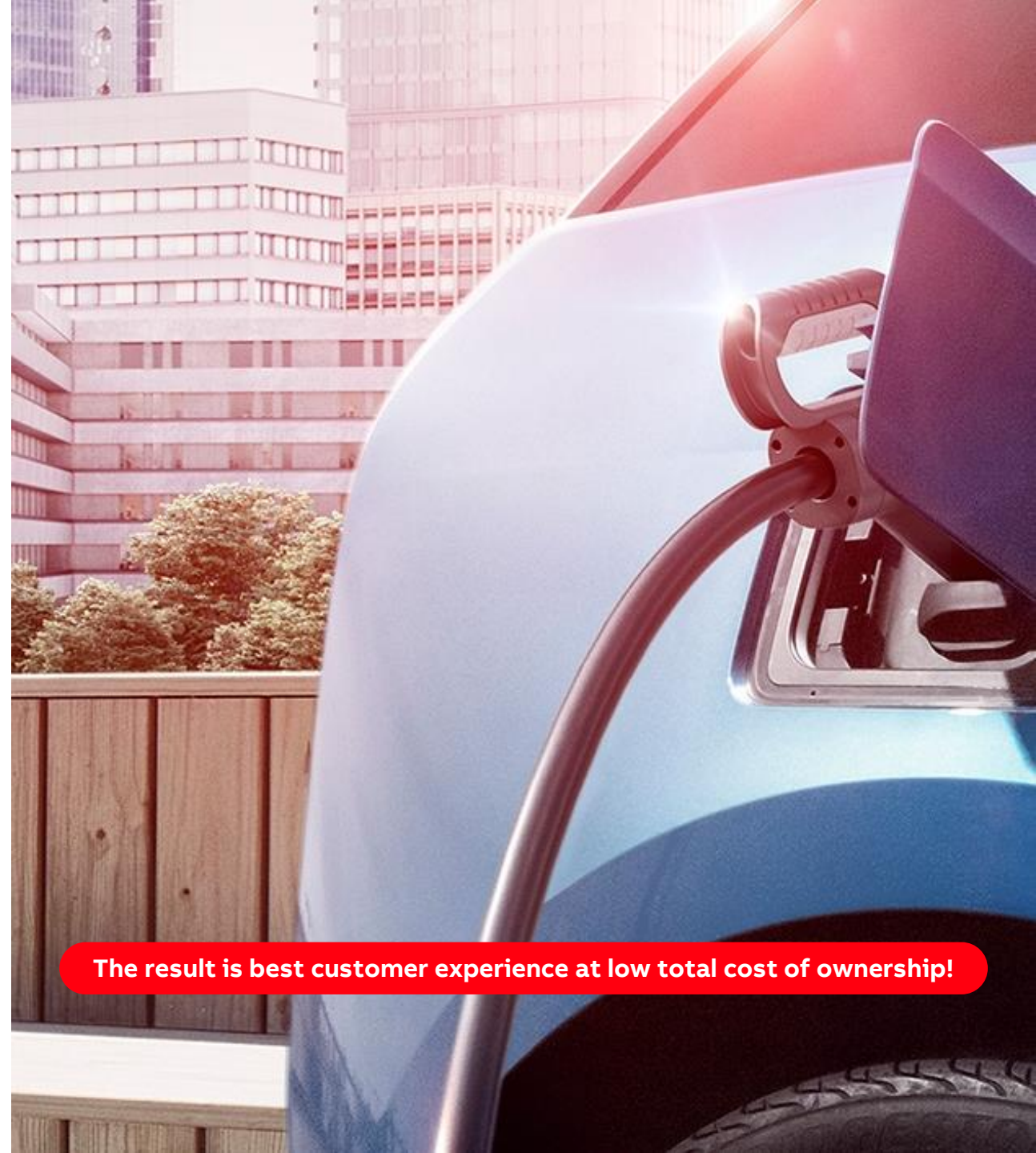
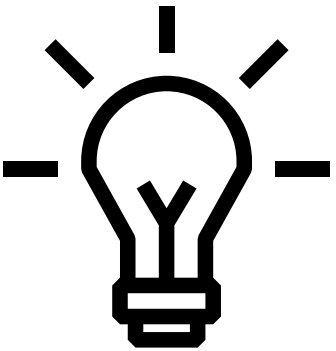
By digitalization and remote connectivity

ABB is able to **diagnose** more than 90% of the service cases remotely, **solving over 75%** of these cases without any on-site intervention

This results in **significant savings** on down-time, travelling, transportation, man-hours and resources

The webtools **increase the safety, profitability** and **availability** of our customers charging network

The Site Energy management solution enables a **growing, sustainable** network of EV charging sites



The result is best customer experience at low total cost of ownership!

Q&A



ABB