

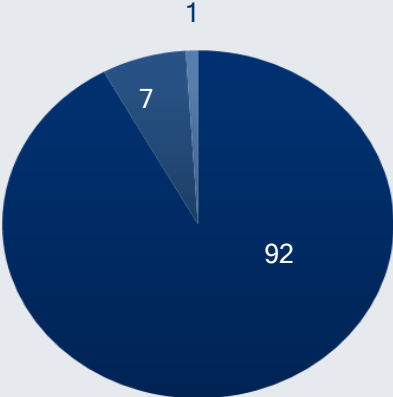
# BETRIEBLICHE E-MOBILITÄT

BOSCH  
ELECTRO\_MOBILITY SOLUTIONS

DI HANNO MIORINI

# Bosch Group Overview

## Shareholders



1% Robert Bosch GmbH  
7% Bosch family  
92% Robert Bosch Foundation

### Business sectors and divisions

- Mobility Solutions
- Industrial Technology
- Consumer Goods
- Energy and Building Technology

### Mobility Solutions

World's largest supplier of cutting-edge automotive technology

### Industrial Technology

Leading in drive and control technology, packaging, and process technology

### Consumer Goods

World's largest power tool manufacturer  
Leading the field in household appliances

### Energy and Building Technology

Leading manufacturer of thermo & building security technology; largest supplier of heat pumps

approx. **390,000** associates

**73.2** billion euros in sales in 2015

# Electromobility

## Ladesäule im Betriebsgelände



# Future Mobility

## Electrified, automated and connected



costs    hybrid    e-motor  
eBike    power electronics

**electrified**

plug-in    eScooter    range  
fun-to-drive    battery  
charging infrastructure

legislation    driver assistance  
emergency braking    autopilot

**automated**

highway-pilot    sensors  
redundancy    electric steering  
valet parking

electronic horizon  
smartphone integration

**connected**

eCall    cloud  
services    fleet management  
car2car    augmented reality



# Electromobility

## Electrified Vehicles



eBikes

eScooters, light  
eMobility vehicles and Pods

electric vehicle/  
HEV, PHEV

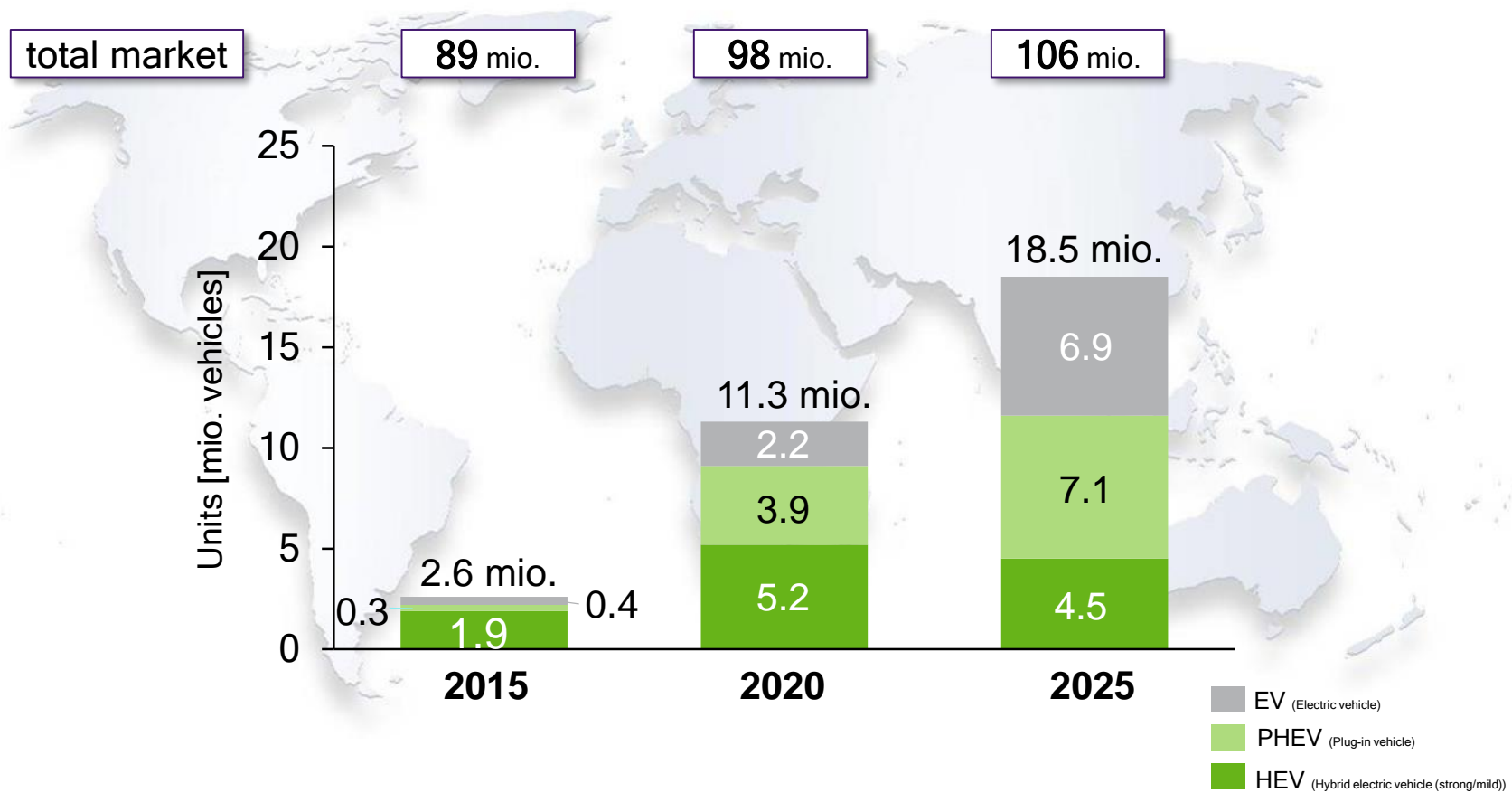
# Electrified: Solutions beyond the car



# Electromobility

## Bosch market view - electrified powertrain

Vehicle sales passenger cars\* (incl. LCV<6t)



\* based on Bosch estimation



# Electromobility

## Bosch Electrification - Activities

### 48V System



### Battery for EVs



### eDrive for Passenger Car Hybrids, Plug-in & EVs



### Power Train for E-Bikes



### Starters and Generators for Start/Stop- and 12V Recuperation Systems



### Regenerative Braking Systems



### Navigation Systems

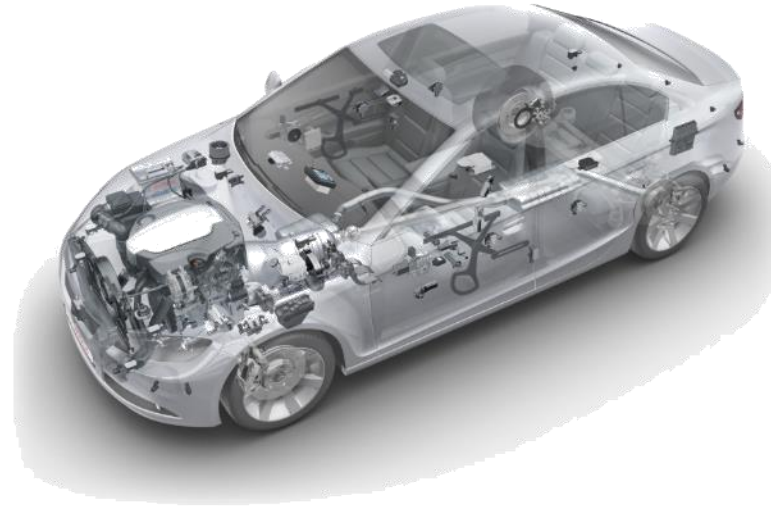
### Charging Solutions



### Software for Infrastructure Integration



### Research & Advanced Engineering for future Electric Vehicle Concepts





LIGHT  
ELECTROMOBILITY

BOSCH EBIKE SYSTEMS

# Light Electromobility - Bosch eBike Systems



# Light Electromobility - Bosch eBike Systems

## eBike Components





# Light Electromobility - Bosch eBike Systems

## eBikes at work





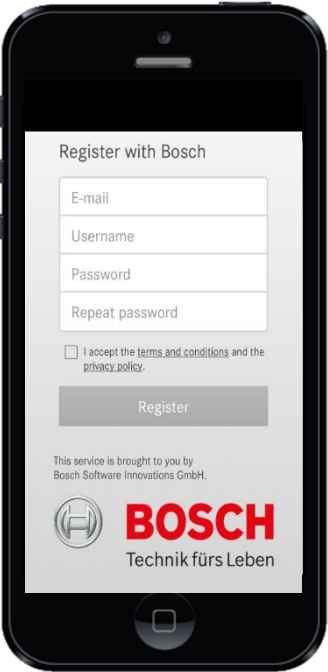
# ELECTROMOBILITY SERVICES

# Electromobility Charging Services

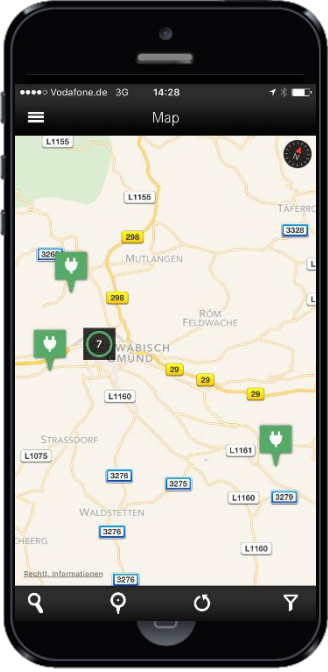


# Electromobility

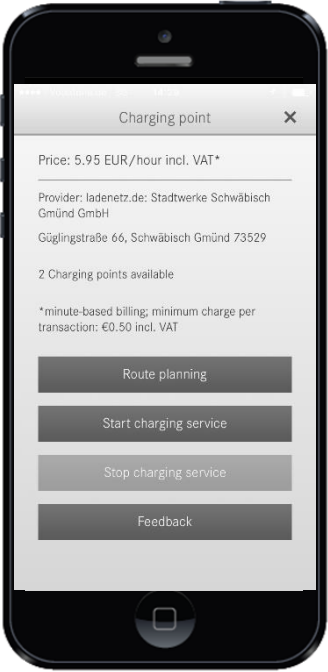
## Charge and Pay App



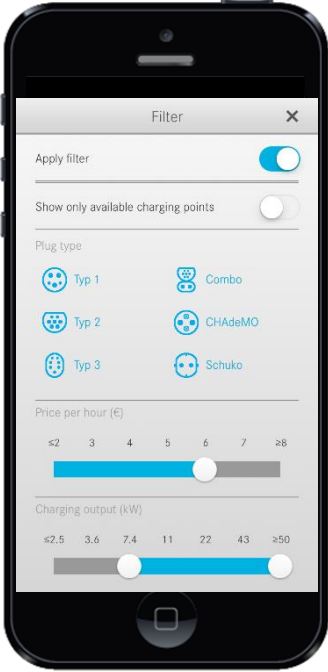
Registration



Search charging point



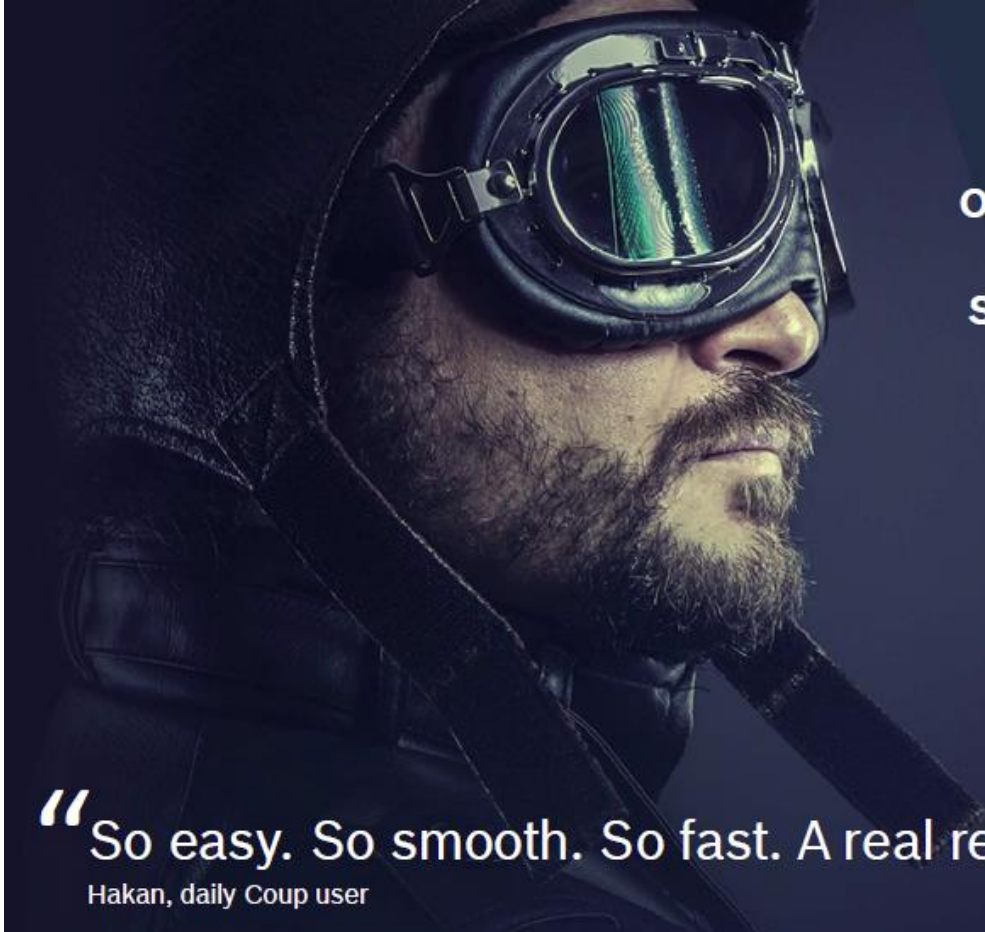
Control charging process



Pay

# Electromobility

## Bosch eScooter Hiring Service in Berlin



**On demand eScooter sharing pilot (200 vehicles)**

**Successful 1<sup>st</sup> season**, very positive market echo

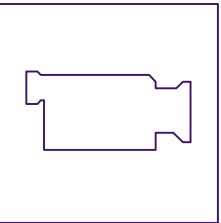
**Conversion:** 1 out of 3 website visitors sign up

**Traction:** > 20,000 rides in just three months

**Stickiness:** 70% + of trial users continued

**“So easy. So smooth. So fast. A real revelation.”**

Hakan, daily Coup user





**VIELEN  
DANK**