



Volkswagen

ID.

INSIGHTS

TRANSFORMATION ZWICKAU

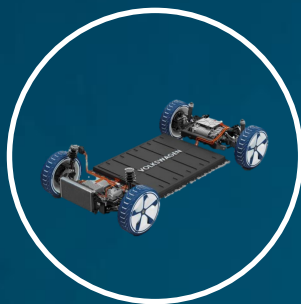
KEYNOTE
THOMAS ULBRICH

DRESDEN, NOVEMBER 2018

Our mission: Fascinating, affordable electric cars for all.



The electric offensive launched by the Volkswagen brand is based on three key strategic pillars.



1. Consistently generating economies of scale...

...by continuing to pursue our platform strategy in the e-world of the future!



2. Developing a completely new MEB product family...

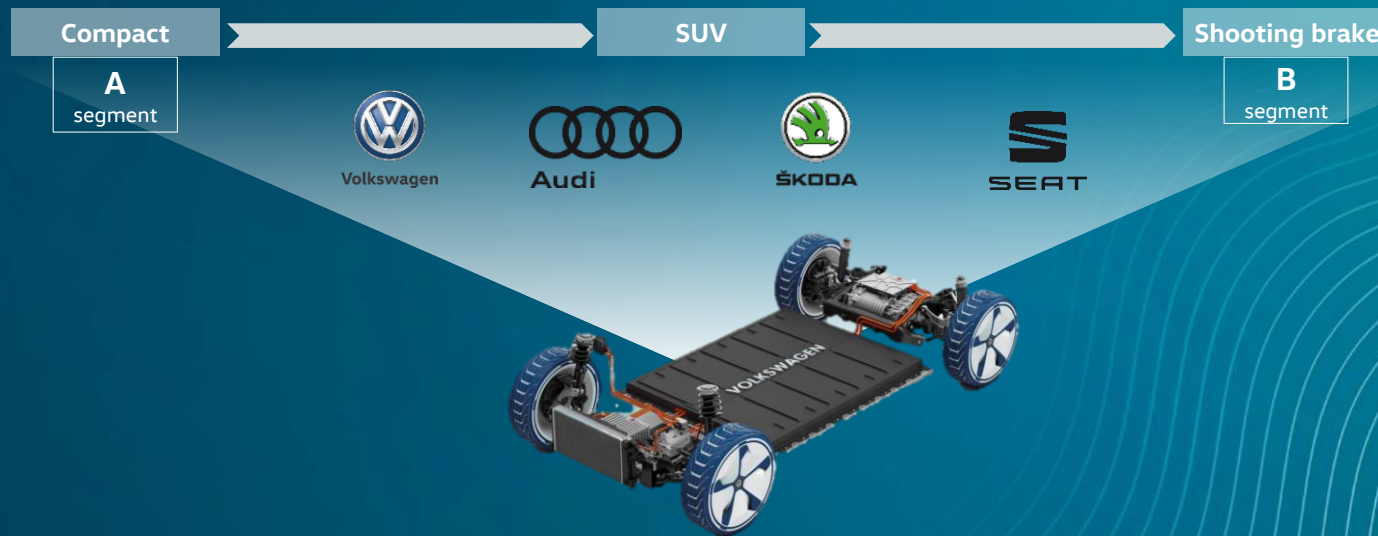
...for the age of e-mobility!



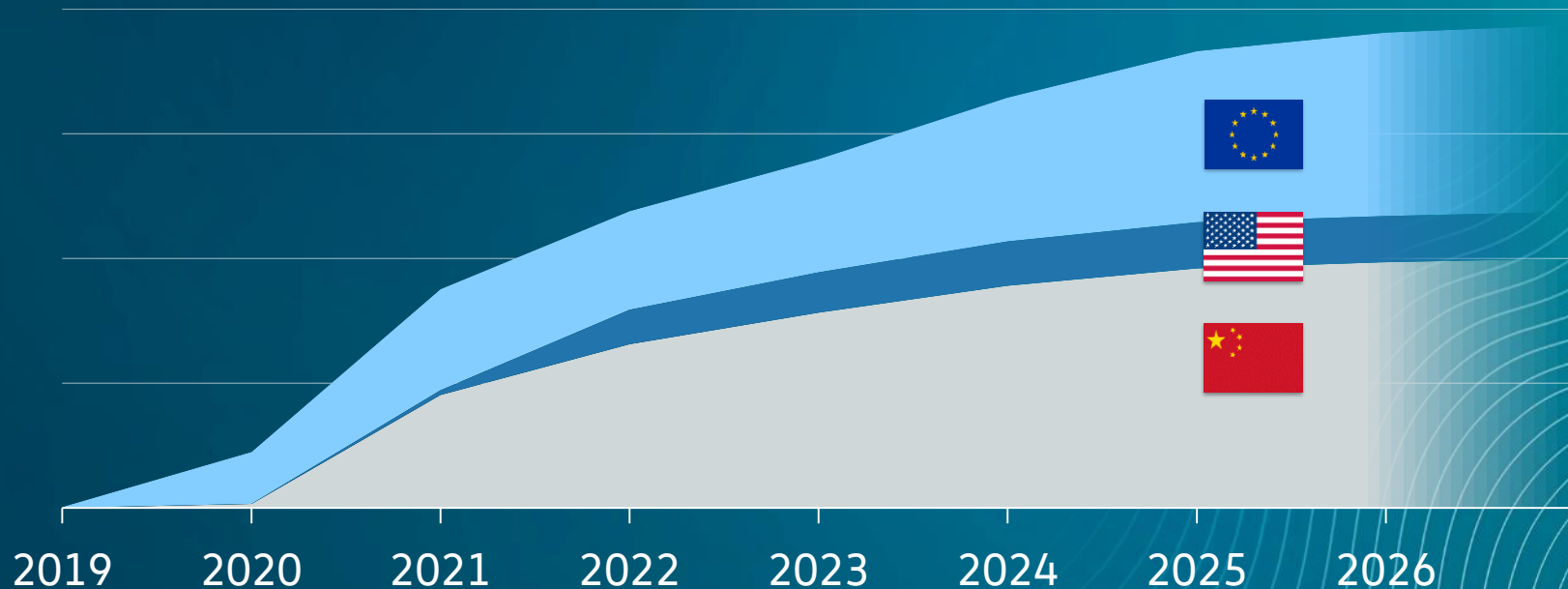
3. Networking hardware, software and services...

...for an entirely new experience of mobility!

The core of our electric strategy.



10 million electric cars based on the MEB across all the brands are currently planned in the first wave.



A total of six Volkswagen plants in Germany are involved in the development and production of the ID.



1 Wolfsburg

The ID. is developed by the technical development department (TE) and the E-Mobility series.

2 Zwickau

By the end of 2019, the ID. will be leaving the assembly line.

3 Dresden

The Gläserne Manufaktur Dresden will also be involved in the ID. production.

4 Braunschweig

Employees manufacture battery systems for the ID.

5 Kassel

The competence centre is responsible for electric drives.

6 Salzgitter

The stator and rotor for e-machines are being manufactured here.

Volkswagen Zwickau will be the largest, highest-performance electric car plant in Europe



- Worldwide lead plant for MEB production
- Up to 330,000 vehicles per year
- 6 models from 3 Group brands (Volkswagen, Audi, Seat)
- 100 % electric
- Total investment of €1.2 billion



Production as a success factor: the electric car from Zwickau is based on efficient, stable, sustainable production.



+20%

Productivity
ID. vs. Golf

3.0

Years for conversion

0,0

CO₂ emissions for
ID. production

**We are aware of the challenges posed by this transformation –
with considerable significance for all subsequent electric projects**



...

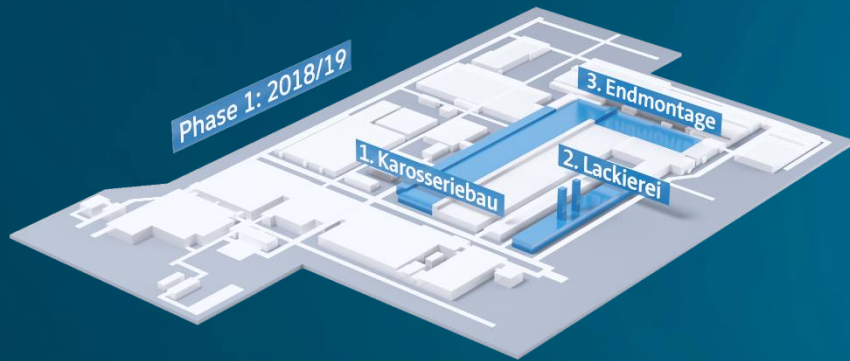
Conversion during normal operation ▶ **... thanks to effective
planning!**

Use of new technologies ▶ **... with due care!**

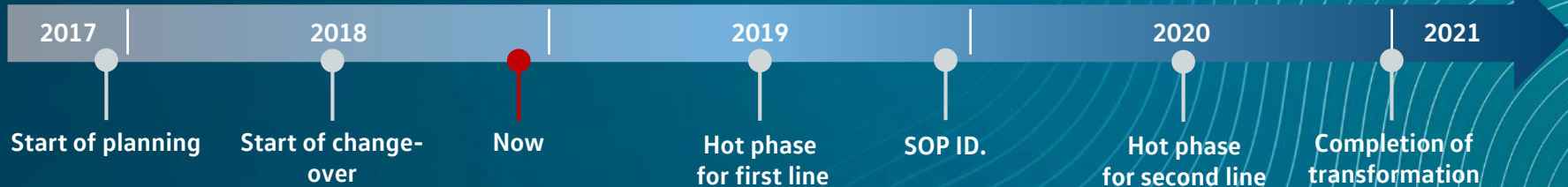
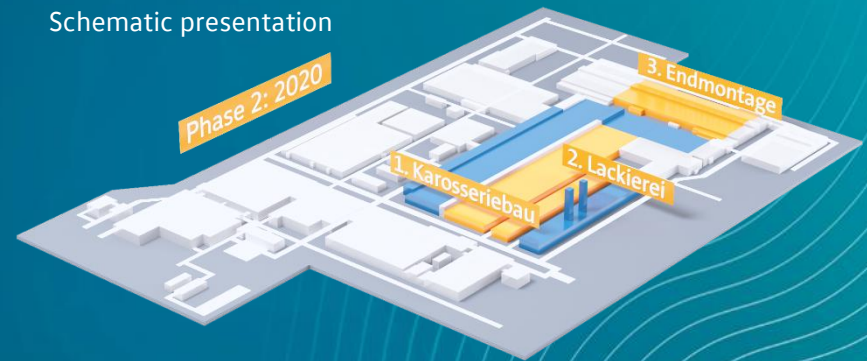
Changes for employees ▶ **... via training and long-term
prospects!**

Major transformation: for the first time, a high volume plant is to be transformed into a purely electric vehicle plant while operation continues.

Changeover of first line
Schematic presentation



Changeover of second-line
Schematic presentation



New era in automobile production: Zwickau will set new standards in digitalization and automation.



Production capacity Zwickau
(vehicles/day)

- **Industry 4.0 standard**
- **1,700 production robots**
- **Automation wave in assembly**
- **Fully automated in-house logistics**

Power in the blood: the transformation to e-mobility will be supported by a comprehensive training program.



- **Largest “training camp” in the automotive industry**
 - E-mobility training centre: 3,000 employees
 - High-voltage “license”: 1,500 employees
- **13,000 training days up to the end of 2019**
- **Content: basic principles of e-mobility, handling high voltages, MEB production**

We want to deliver ID. vehicles produced in a carbon-neutral way to our customers



Target: sustainable mobility

How we will reach it

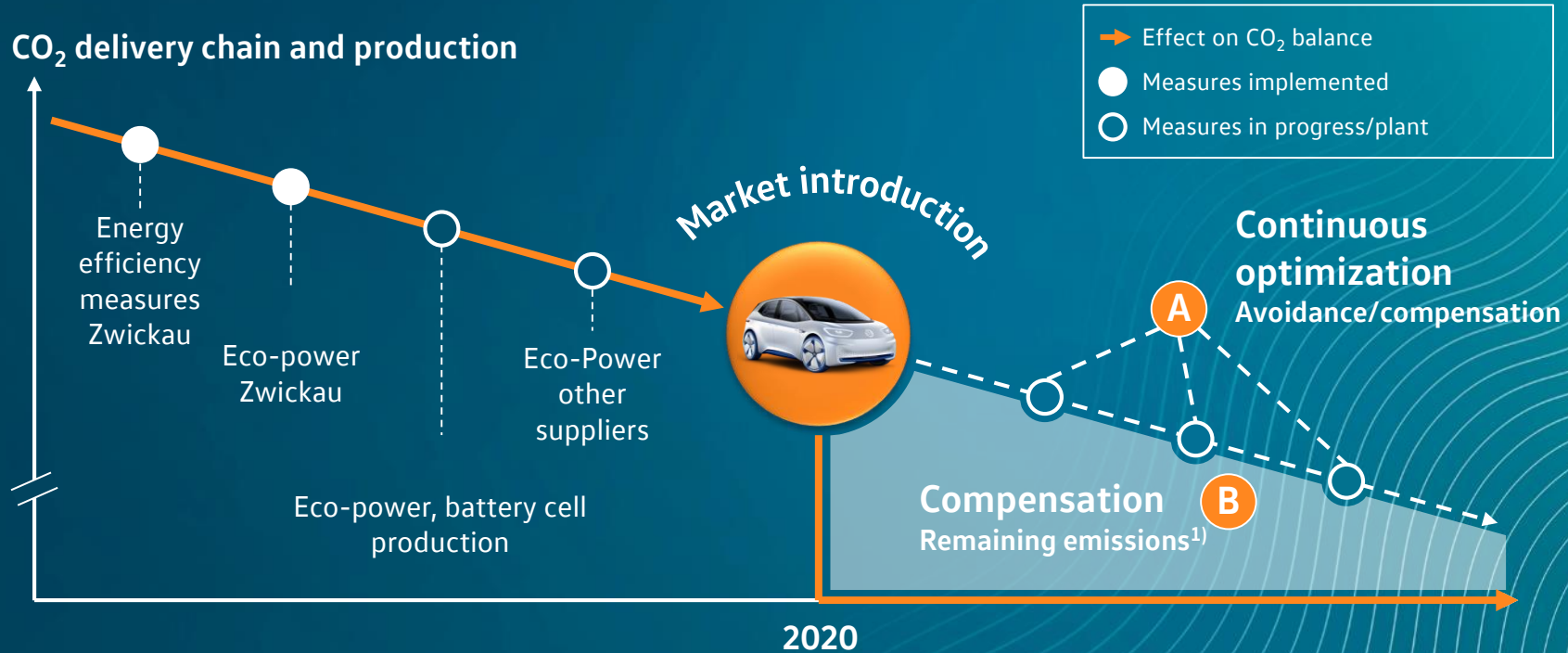
Carbon-neutral production



principles:

- 1 First avoid CO₂ ...
(e.g. use of eco-power)
- 2 ... then reduce
(e.g. energy efficiency measures)
- 3 ... and then compensate for unavoidable emissions
(e.g. protection of tropical rainforests)

The CO₂ emissions of the ID. will be continually reduced – and remaining emissions will be compensated for



1) By certified projects – e.g. VCS (Verified Carbon Standard) or REDD+ (reducing emissions from deforestation and forest degradation)

Summary



- E-mobility must be attractive, affordable and clean.
 - Efficient, stable production is a key to electric cars for everyone.
 - The Zwickau plant will be the nucleus of our Group-wide electric offensive.
 - We are well within the schedule.
- ➔ **We make electric cars for millions – and not just for millionaires**



Volkswagen

Thank you.