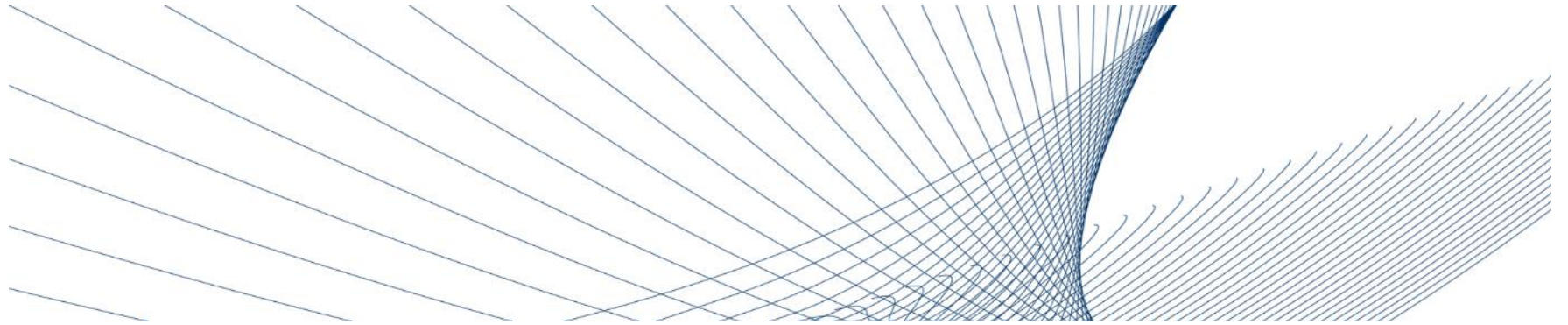


VOLKSWAGEN

AKTIENGESELLSCHAFT



Volkswagen's contribution to the Paris Agreement: our approach to decarbonization

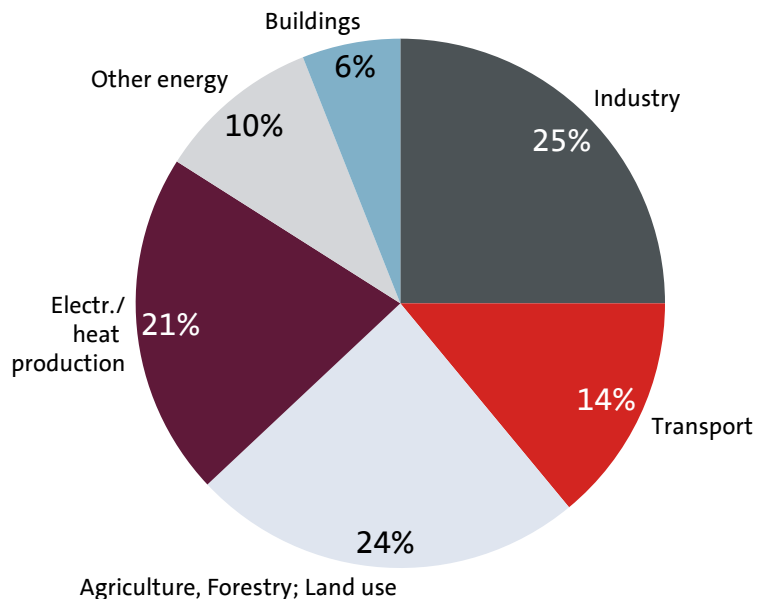
Climate HOW Symposium, Venice, February 8, 2019

Ralf Pfitzner, Volkswagen AG

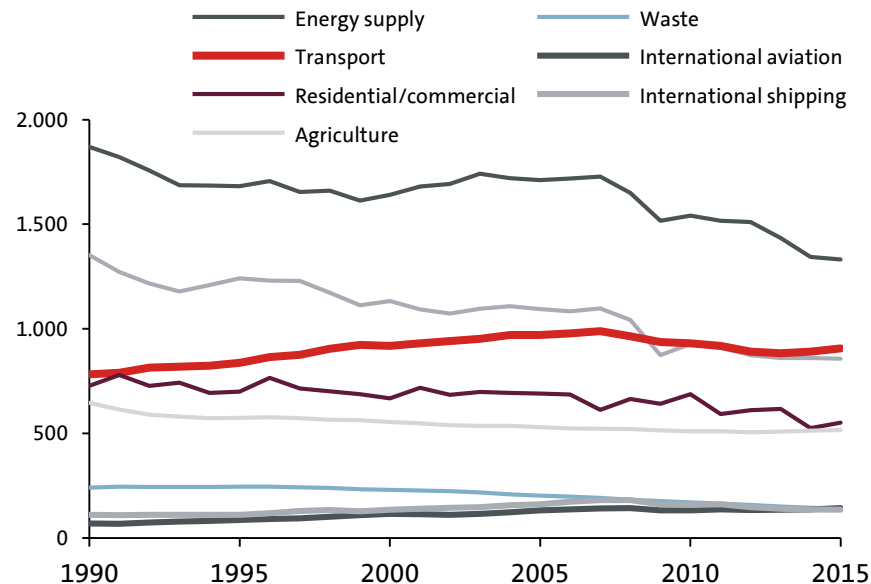
Transport Sector accounts for 14% of global GHG Emissions

In the EU, transport is the only sector with emissions increase since 1990

Global GHG-Emissions by sector



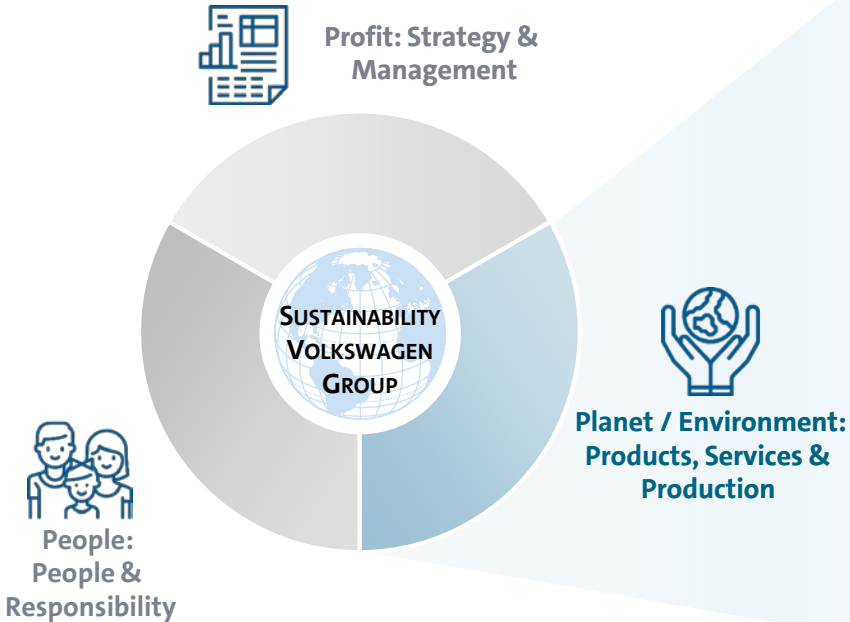
Trends in EU by sector since 1990 [MT of CO₂e]



Source: IPCC 2014, EEA 2018

Volkswagen will be part of the solution, our focus is on climate change mitigation and decarbonisation

DIMENSIONS OF SUSTAINABILITY AT VOLKSWAGEN



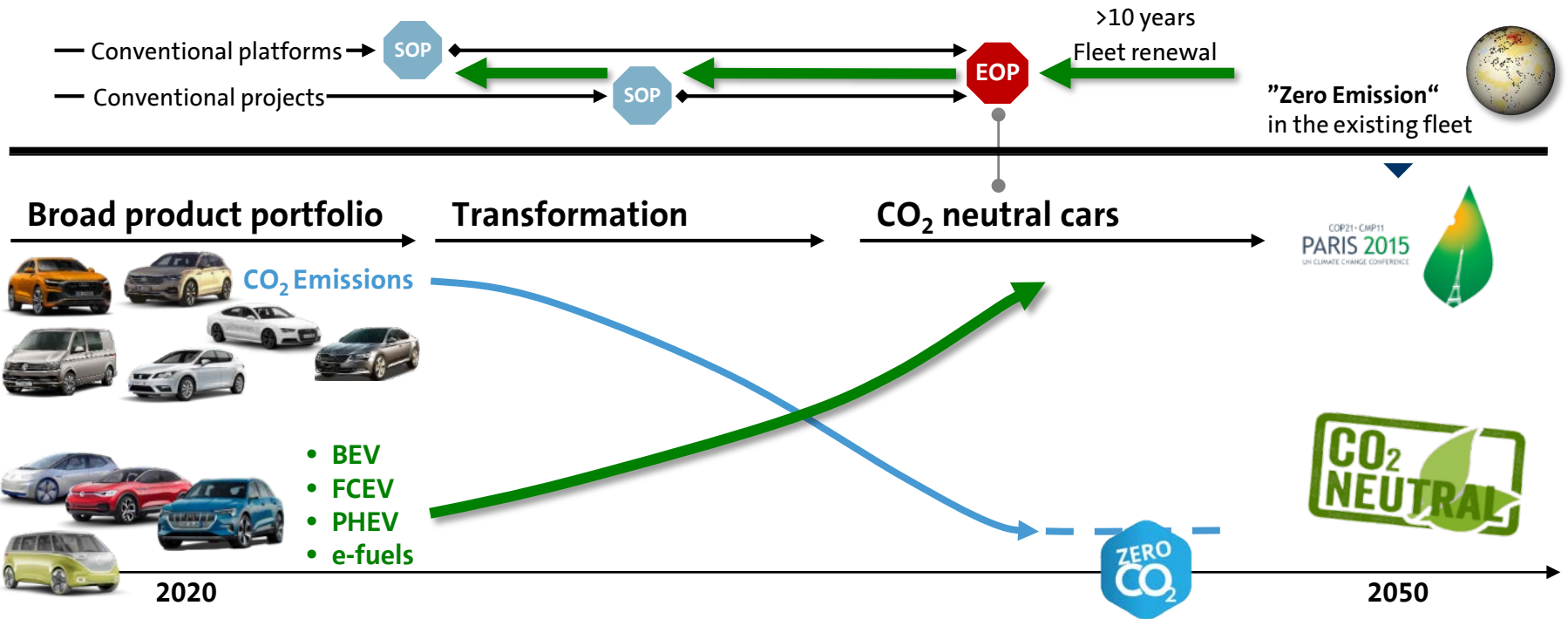
FOCUS AREA: DECARBONIZATION AND CLIMATE CHANGE MITIGATION

Why it matters to Volkswagen:

- Because of our significant influence and thus responsibility
- Because of rising stakeholder expectations
- Because decarbonization delivers direct business value

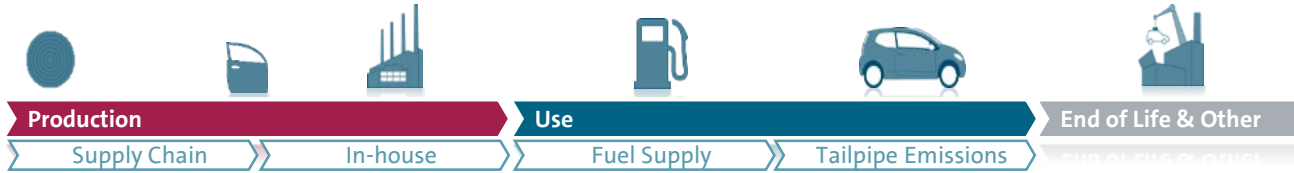
The long-term derivation of targets calls for prudent planning

Paris implications and transformation path

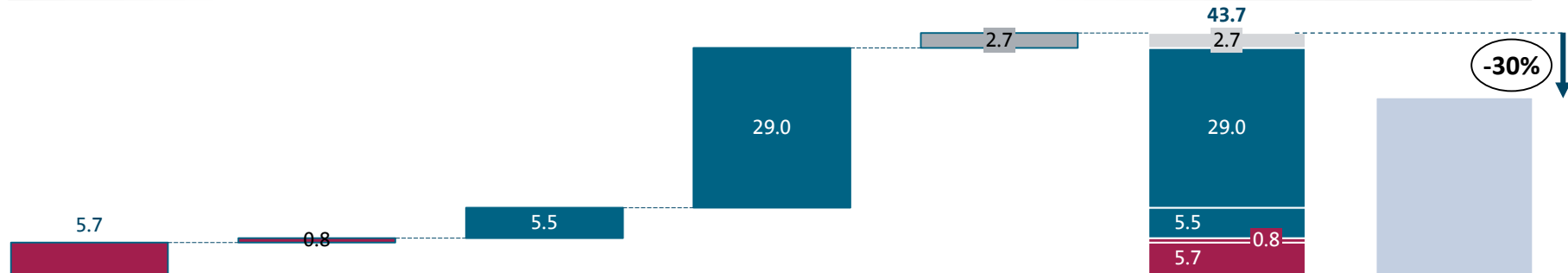


CO₂ matters across the whole lifecycle – Paris Agreement translates into a ~30% reduction need by 2025

Our Decarbonization Index allows to track improvements of CO₂ emissions [in t CO_{2e} / vehicle] of the group LDV product portfolio over the entire life cycle

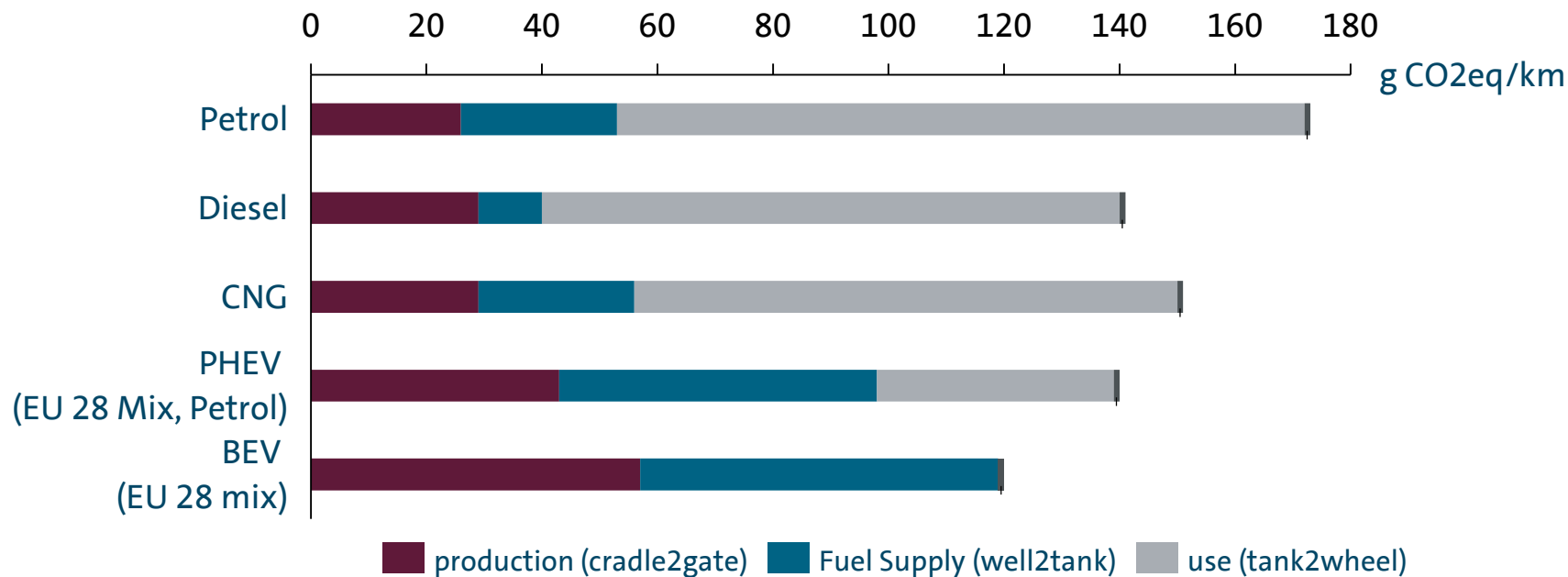


2015 DK1
t CO_{2e}/vehicle



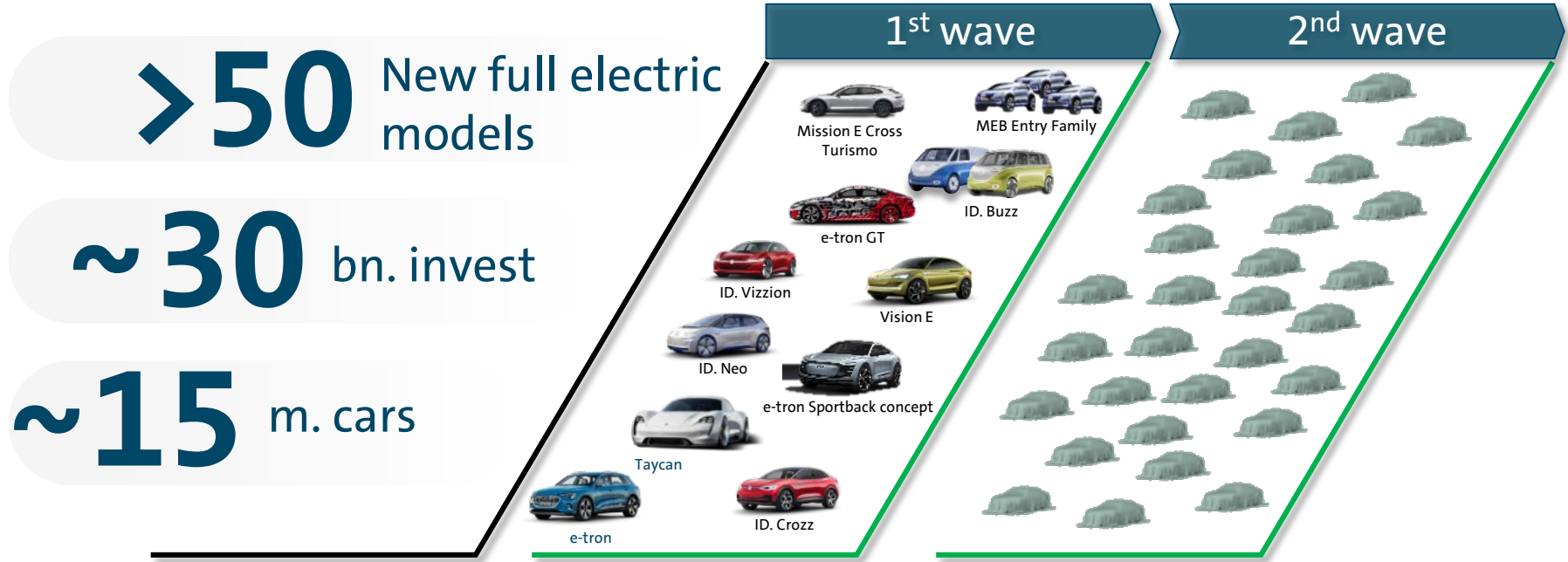
Results for average Volkswagen Group vehicle across all brands

BEV today already first choice in CO₂ over lifetime – example current Golf class car



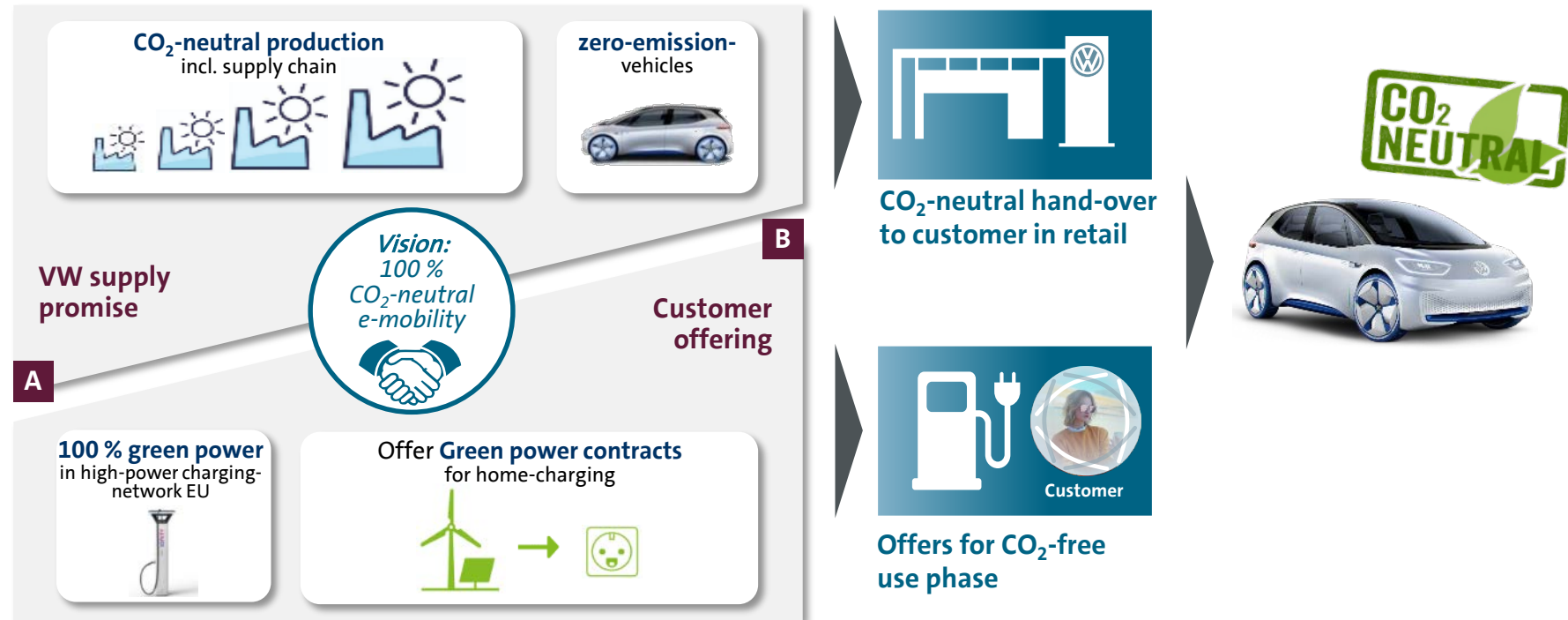
Source: Volkswagen K-GEGU 2019, "Klimabilanz Antriebe"; Compact Car (Golf-class),
LCA, use phase acc. to WLTP, 200.000 km life

The plan for the electric offensive starts in the launch phase with a portfolio of over 50 vehicles and a project volume already exceeding 15 million



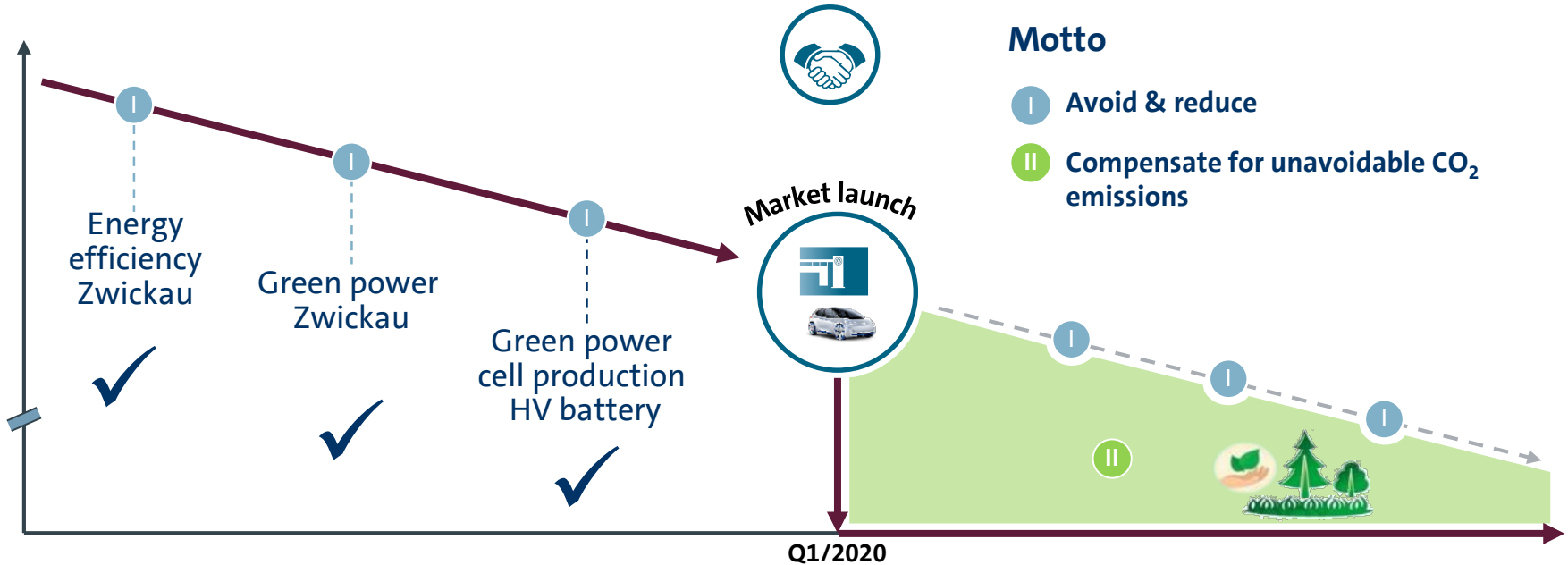
The first steps towards a CO₂-neutral society have been taken

Objective



CO₂-neutral hand-over of the ID. to European customers decided

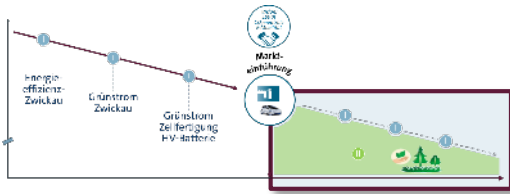
A Principle & roadmap CO₂ supply chain & production Europe



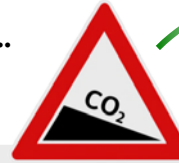
Additional offsetting during production and green power during use phase make the ID. CO₂-neutral over lifecycle

CO₂ neutrality ID.

A Production phase



Unavoidable CO₂ emissions...



...will be offset by investments in forest conservation or reforestation

B Use phase



When charged with green power...

...the ID. will be CO₂-neutral over its entire lifecycle

Decarbonization: We address an entire ecosystem and go beyond the vehicle itself

Supporting the Energy transition



- Conversion of power plant, saving 1,5 mn tons of CO₂ by 2022, corresponding to emissions of 870,000 cars per year
- Volkswagen with 37% renewable energy in manufacturing (as of 2017)

Lower emission products



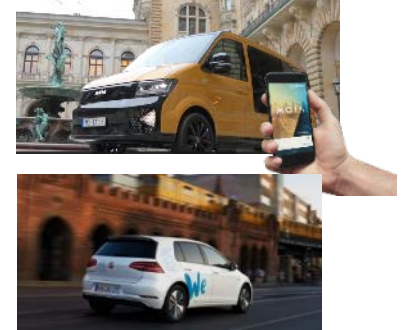
- Further emission reductions
- Alternative fuels (e.g. Audi e-gas)
- Extended portfolio of electric vehicles

Charging infrastructure



- Joint venture for rapid charging network in place
- ELLI, offering home charging with green electricity

Mobility Services



- MOIA electric shuttles in first cities
- All-electric car-sharing Volkswagen We share Q2/2019 in Berlin