



INDTECH2018

Innovative industries for smart growth

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Vienna, Austria

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PILLAR 1

Session 1.2

Improving the energy efficiency for vehicles – an important factor for sustainable mobility

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AVL List GmbH

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Content

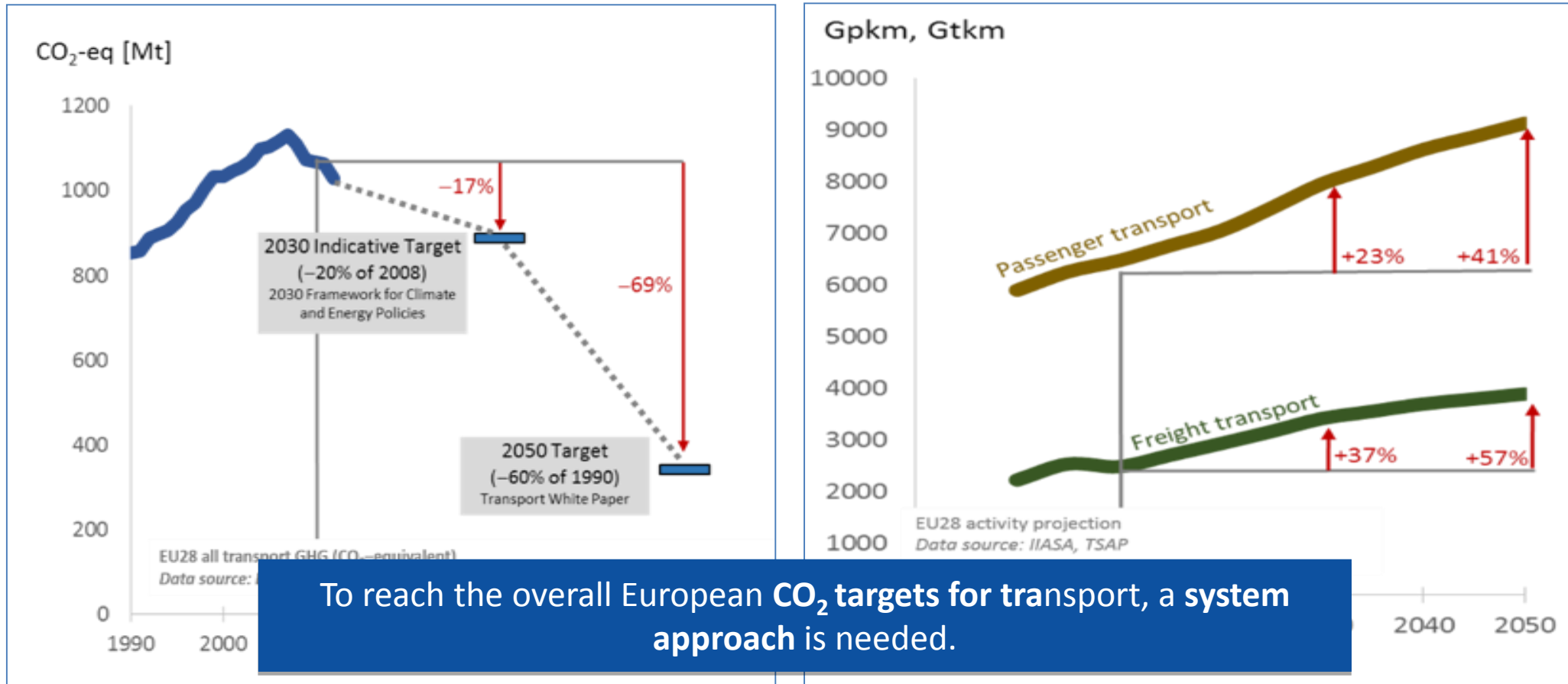
Technologies needed to realize the EC CO₂ transport targets

Battery vehicle issues – sustainability aspects for Research and Development

Automated Driving / CAD / Digitalization



European CO₂ targets for transport





Efficient vehicles



Intelligent traffic management



Better infrastructure



Public transport and intermodality

ERTRAC
System approach



Improved logistics



Infrastructure for connected & automated vehicles

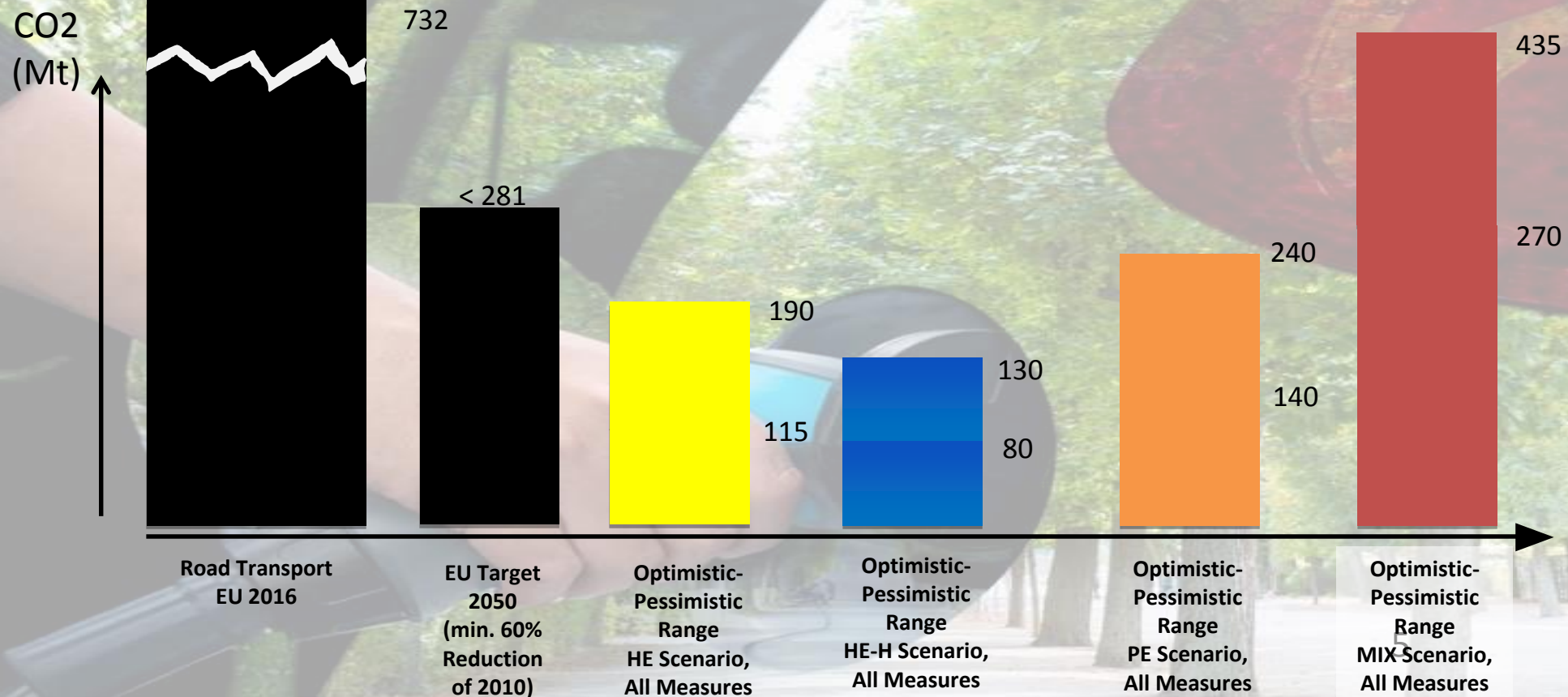


Decarbonised Energy / fuels



Flexible and shared mobility services

2050 Total CO₂ Emissions Road Transport EU Fleet Mix scenarios + all efficiency measures





Key factors for sustainability of battery- technologies for vehicles



Request for sustainability of future vehicles

Increase of renewable energy

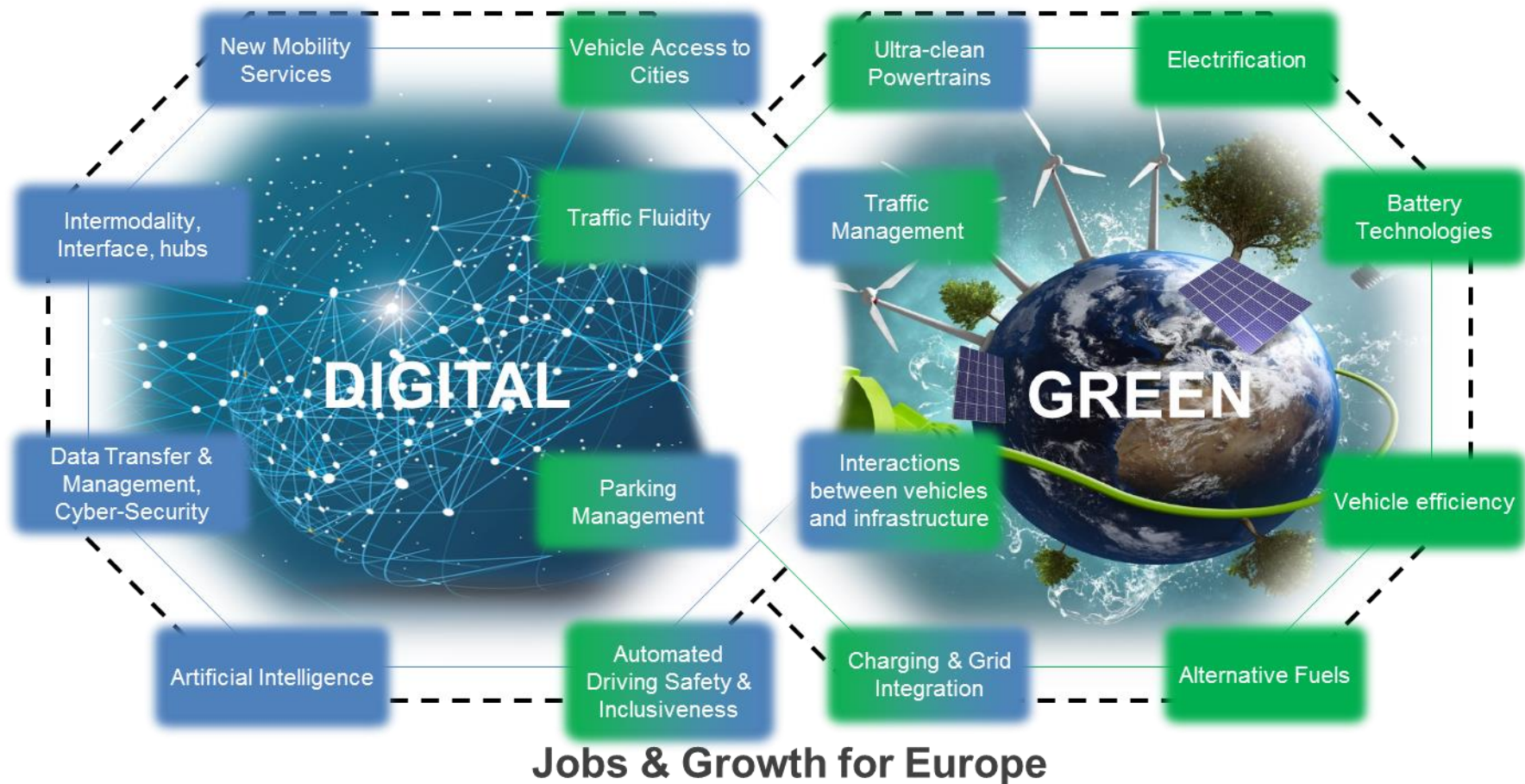
Battery technology

Hydrogen / Fuel-Cell technology

CO₂ neutral fuel / E-fuel

Automated & connected vehicle technologies, digitalization

ROAD TRANSPORT LANDSCAPE

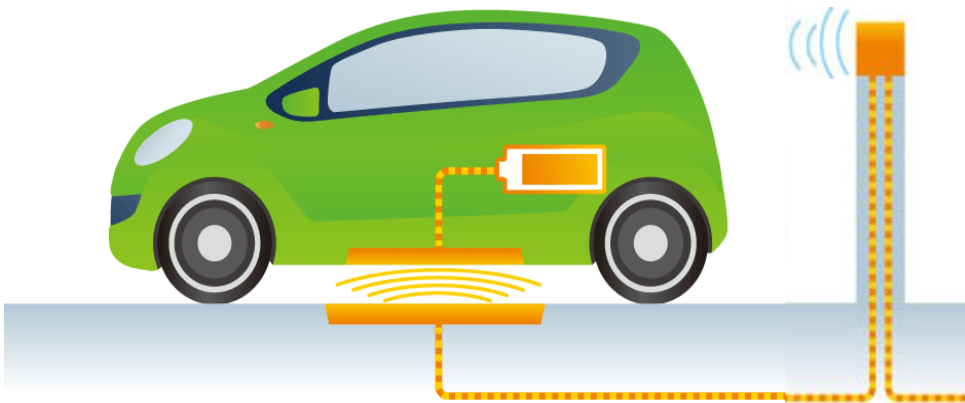


Significant synergies and overlaps between “green” and “digital”

Automated Driving - links between vehicle, infrastructure & cloud



Digitalization & Charging



- ▶ Info charging stations
- ▶ Info fast charging, low charging – communication between vehicle & infrastructure
- ▶ Parking in the area of charging station
- ▶ Automated Driving to charging point & charging performance
- ▶ Parking & information to the driver
 - ▶ GPS system