



source: BMVI

Decarbonising the transportation sector – The current situation in Germany

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Introduction

- Global challenge: climate change
- Average temperature could rise up to 4 degrees Celsius by the end of the century
- Mandatory action: cut of greenhouse gas emissions (CO₂)



source: Greenpeace

European climate targets

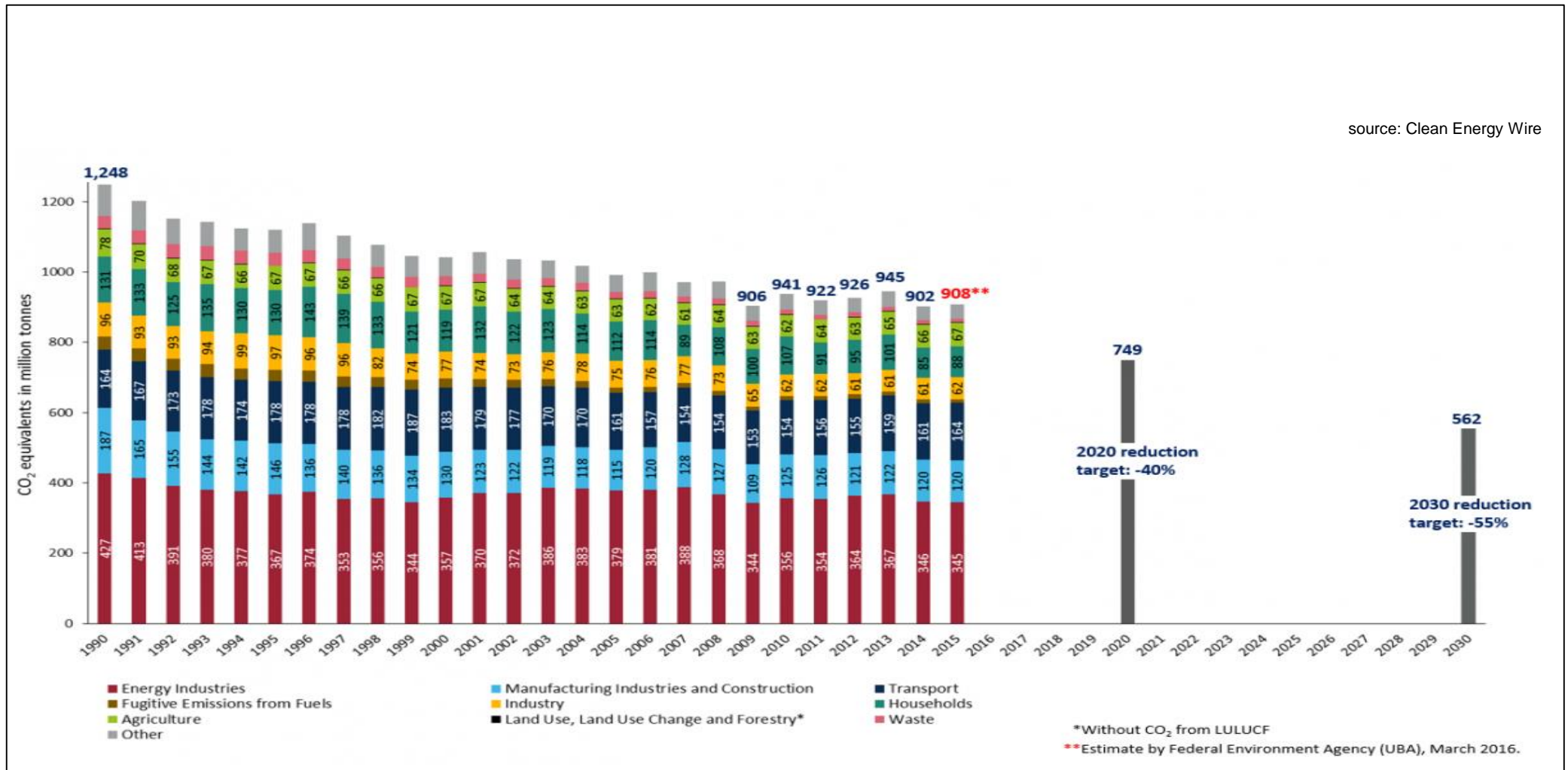
EU 2020 climate and energy package

- 20% cut in CO2 emissions (from 1990 levels)
- 20% of EU energy from renewables
- 20% improvement in energy efficiency

Self set German goals:

- 40% cut in CO2 emissions (from 1990 levels) until 2020
- 80 to 95 % by 2050

National emission reduction targets for Germany



Decrease of carbon dioxide within the transportation sector

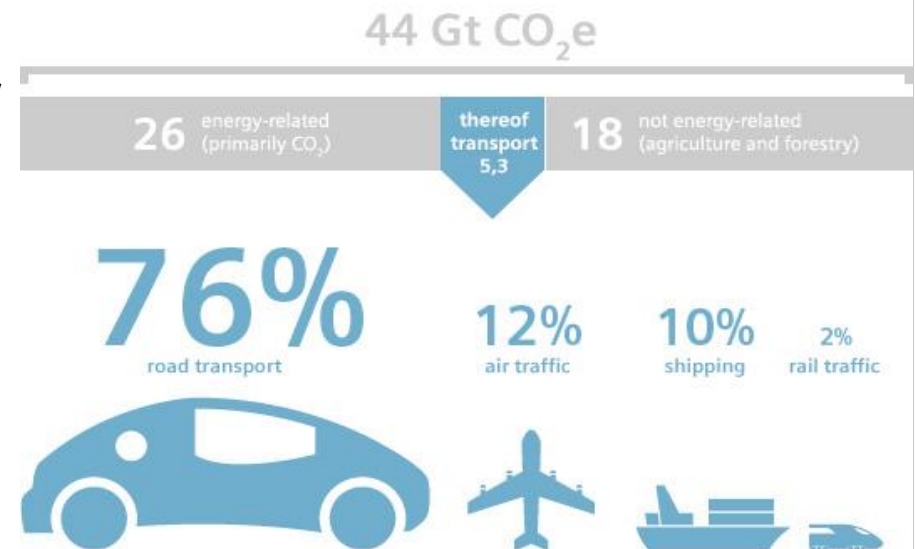
I. Current situation in Germany

- Record high of 187 million tons in 1999
- Phase of decrease from 2000-2009
- Increase again since 2010

source: World Energy Outlook

II. Proportions within the transportation sector

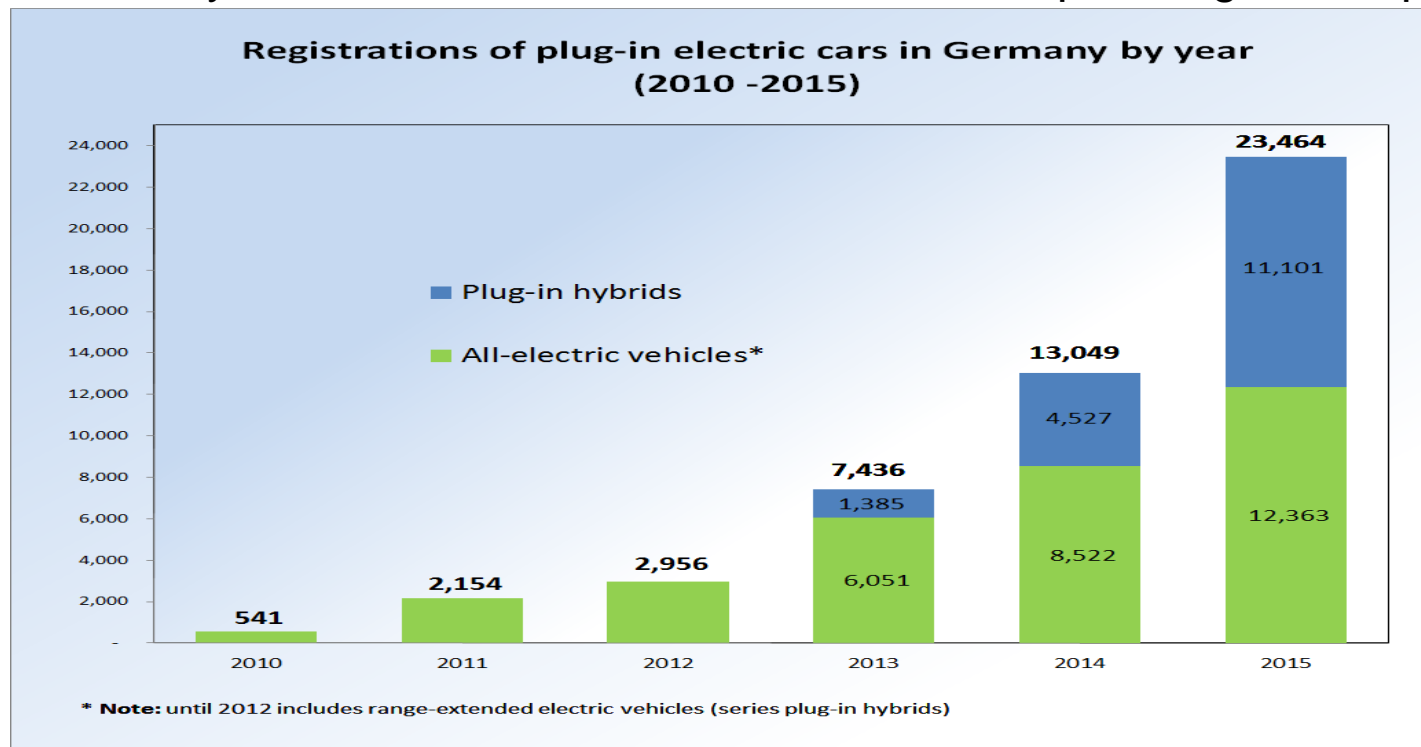
- Cars take up the by far greatest proportion
- All other means of transportation have in summa relatively low emissions



source: IEA World Energy Outlook, Vattenfall, Siemens

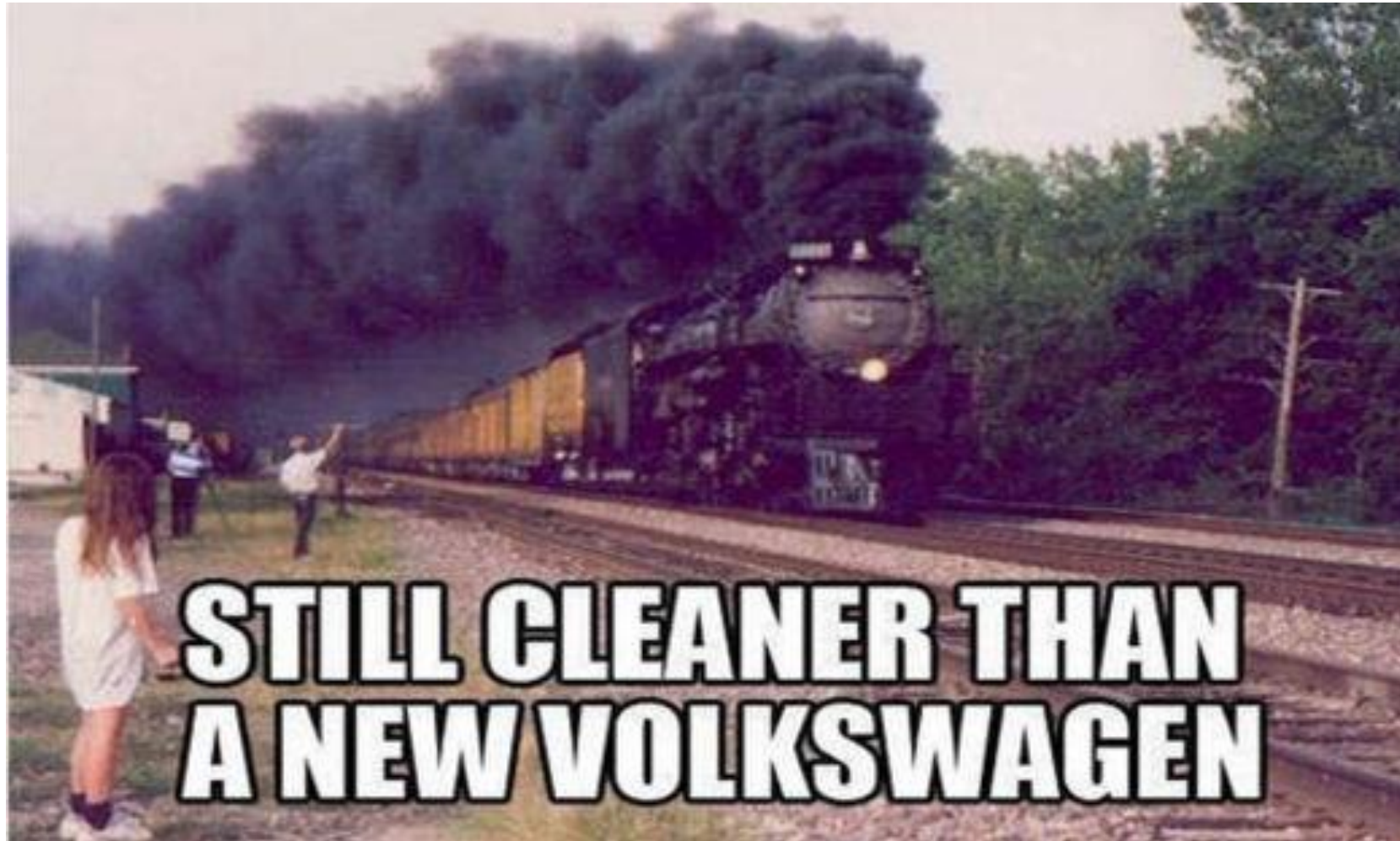
Reduction potentials within the transport sector

- Newer, more efficient technologies
- Development of alternative fuels
- The systematic introduction of electric cars in passenger transport



Aim for 2020:
one million
electric cars

source.: Wikipedia



source: giffgaff

Provisions to promote the spread of electromobility

- 1) Buyer's premium (up to 4,000 EUR; 50% by Federal Government and 50 % by industry, in total 1.2 billion EUR; maximum net purchase price EUR 60k)
- 2) Reducing regulatory burdens and standardization (of charging infrastructure, payment systems)
- 3) Public investment of 300 million EUR in the charging infrastructure until 2020 (incl. R&D on induction systems) and granting access to public ground (law on electromobility)
- 4) Tax subsidies
- 5) Retooling 20% of the federal transportation fleet into electric vehicles until 2017

source: Tagesschau



Important factor for German automotive industry

- Deutsche Post produces Streetscooter (until 2016: 2,000 cars, as of 2017 production of 10,000 cars per year)
- Daimler plans to introduce 6 – 9 new models until 2024
- Volkswagen plans to introduce up to 30 new models until 2020 and to sell one million electric cars until 2025. With regard to the Chinese market it plans a strategic alliance with Jianghuai Automobile (JAC)
- BMW announced to change its electromobility strategy end of September
- Battery production - VW plans to develop a battery which can be charged up to 80% in 15 minutes

Problems in the spread of electro-mobility

- After one month: only 6.6 million of the 1.2 billion EUR subsidy amount are applied
- In July/August: only 3,000 applications (1,800 for private and 1,200 for commercial usage)

Reasons High costs

Range anxiety

Battery life

Maintenance costs

Lack of charging stations

Uncertain resale value

Slow charging

Lack of (interoperable) infrastructure

Some facts:

- 6,517 public charging stations as of June 2016; 5,836 as of January 2016
- Range anxiety: Tesla Model S P85D 500 km, Chevrolet Bolt 400 km, VW eGolf 190 km
- EU aiming on standardization of charging plugs and simplification of payment methods
- E-roaming models
- Simplified regulations for operation of charging infrastructure (operator as end-consumer)



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source: ntv

Germany's Federal Minister for the Environment, Barbara Hendricks, attended the ceremony of the United Nations in New York at the end of April. Signing the Paris Agreement, she made Germany one of the first signatory states of the climate agreement. The agreement is the first to place all countries of the world under a joint obligation.

Role model Norway



source: Manager Magazin

- Every 6th registered new cars is electric
- Various and high incentives for consumers
- Plan: from 2025 on all new cars shall be electric

Thank you for your attention!

- Energy Law
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Our Locations

