



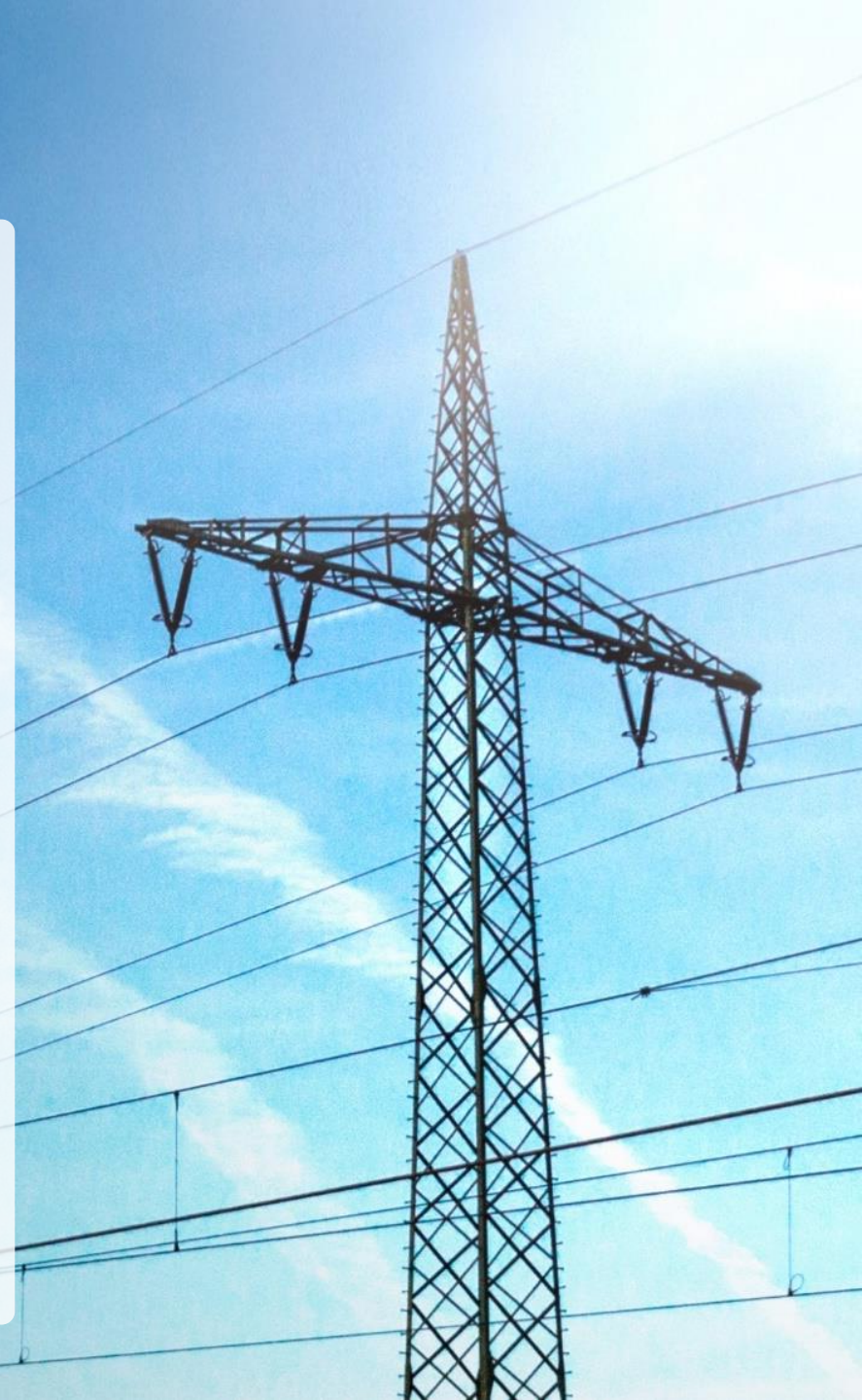
**NETZE**

# **Railway Electricity Supply**

Market & Regulation



9 December 2022, Florence



# DB Energie is the Energy Manager of Deutsche Bahn AG



DB Netze Track

**DB Netz AG**

DB Netze Energy

**DB Energie GmbH**

Revenue 3.3 Bio. Euro

1.900 employees

DB Netze Stations

**DB Station & Service AG**

## Traction energy



### 16.7 Hz traction electricity

Reliable, sustainable railway power in Germany



### Battery trains

Infrastructure for battery trains



### Refueling services

Rail filling stations for supply of diesel, ad blue and synthetic fuels



### Hydrogen

Infrastructure for hydrogen trains

## Non-traction energy



### Electricity

Risk management and supply for industry and commerce



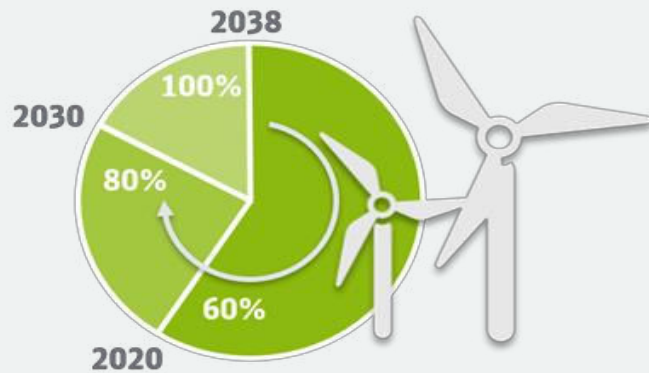
### Gas

Risk management and supply for industry and commerce

## Greening of traction electricity

Growth of our green power portfolio and infrastructure for electric railways

**61% renewable energies** in traction electricity mix in 2020

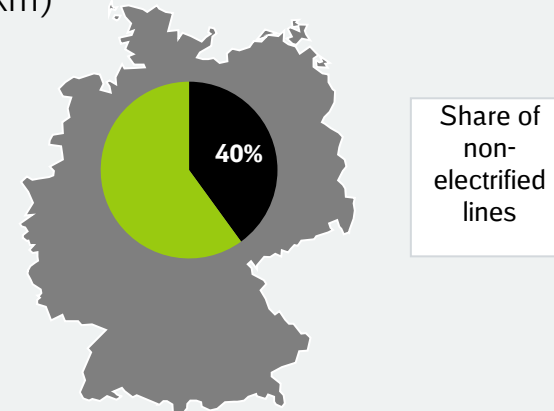


**100% renewable energies** in traction electricity mix by 2038

## Diesel replacement in rail traffic

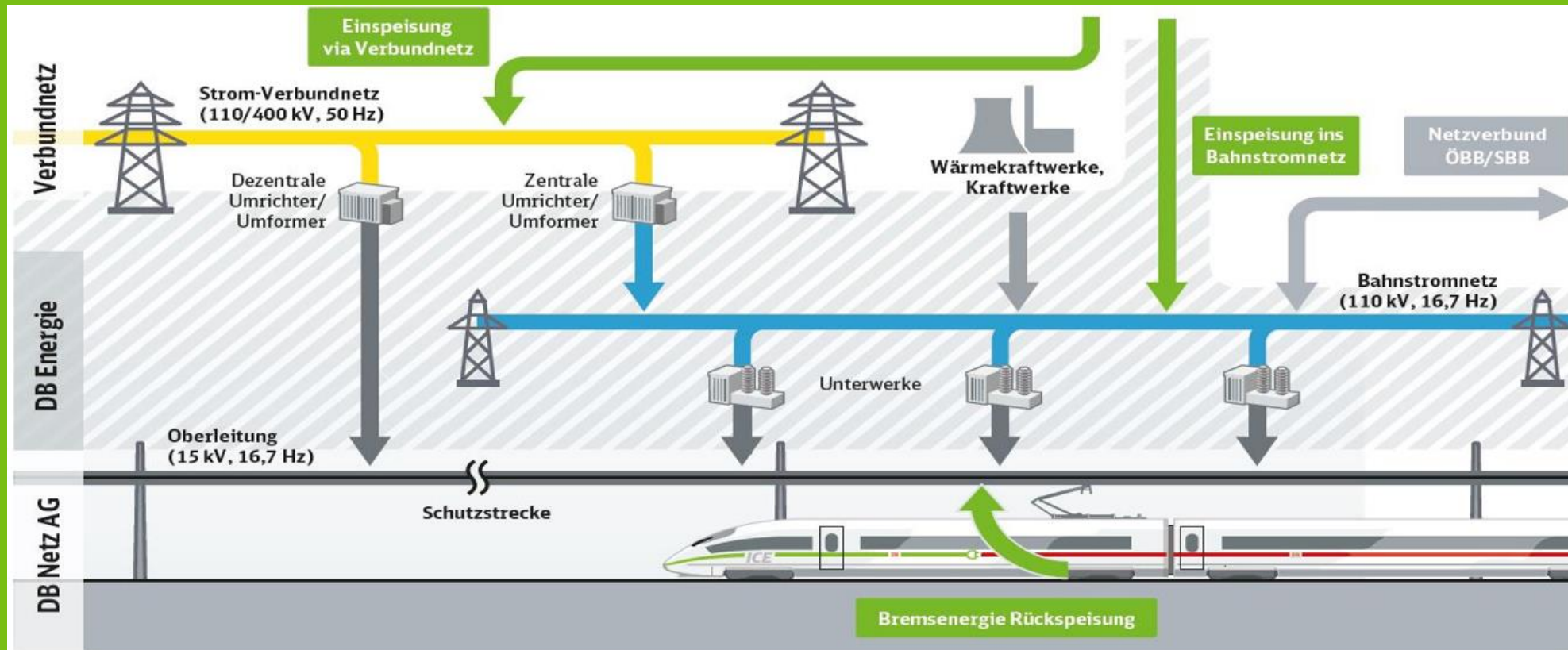
Infrastructure for supplying alternatively powered rail vehicles

Around 24 % of rail transport in Germany is still based on **diesel traction** (in transport-km)



Implementation of **alternative drives** on non-electrified lines – biofuels, battery trains and hydrogen trains

# Traction Power is distributed via the DB 110 kV electricity grid



- DB railway electricity grid 110 kV/ 16,7 Hz
- Legally classified as public distribution grid
- Full regulation of access, conditions, prices

- Railway undertakings with free choice of electricity supplier (TPA)
- Around 12 railway electricity suppliers active in the market

# Railway energy management - Is there need for further regulation?

- 1. Regulation of electricity generation:** wholesale revenue shaving based on EU Directive 2022/1854 “crisis mechanism as reaction to high energy prices” from Oct. 6, 2022
  - 2. Regulation of distribution grids** based on EU Internal Market for Electricity Directive (2019/944/EC)
  - 3. Regulation of end-user prices** by price caps for households, commerce and industry - including railways (draft Strompreisbremsegesetz)
- We are already entering full scale regulation from top to bottom and at least during the energy crisis there is no room left for further regulation

