

#HydrogenTrain



#HydrogenTrain / JU FCH & S2R

Starting Point: Austrian Climate & Energy Strategy #mission 2030

- ÖBB CO2 Neutrality in the Mobility Sector in 2030
 - ÖBB CO2 Neutrality in total in 2050
 - Traffic Relocation Road2Rail (Capacity through Innovation&Technology)
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- 4864 km Network (2/3 Electric)
 - 10 HydroElectric PowerPlants
 - 8+8 Terminals + Shunting Yards
 - 80 Single Wagon Hubs

Infrastructure



Production

- 6660 Trains daily / 800 Diesel
- 100 Diesel Locos Mainline
- 150 Diesel Shunters (80 E)
- 300 Diesel OTMs

- Green Power
- Reduced Maintenance
- New Design & Retrofitting
- Packaging & MGU

- Change of System
- Increased Complexity (short term)
- Cost level
- Green Hydrogen availability

- Innovation Path
- 100% Green Power
- Integrated Hybrid System
- Sector Coupling Enabler
- New Business Models

- Stranded Investments
- Legal & Safety hurdles
- Infrastructure restrictions
- Life Cycle
- (Overhead Electrification)

Timeline: From 100% Green Electric to 100% Green Power with H2



2019

2020

2021

2022

15 kW

Development Construction Demonstration Testing



Development Construction Demonstration Testing



300 kW

Development Construction Demonstration Testing

4-6MW



Thanks for Your Attention !

