



Building the Bridges to the Sustainable Green Future

Establishment of Austria's First Regional Green Hydrogen Economy



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Codex Partnership





Building Climate Neutral and Autonomous Systems

Green Energy Center

Coverage of Demand

Coverage of Demand

Volatile Resource

„Power on Demand“
Process

Demand

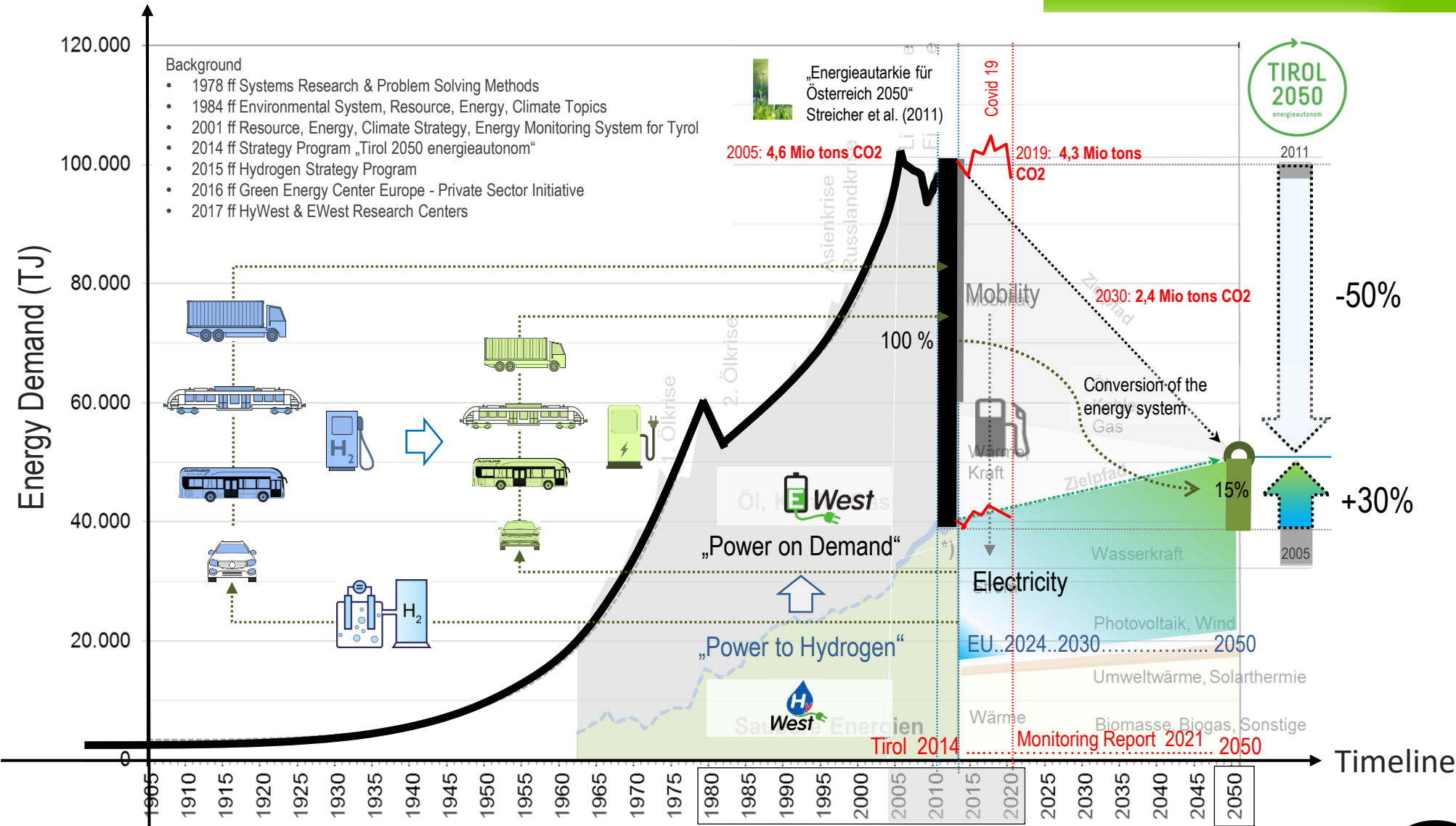
Demand

Power to Hydrogen“
Process



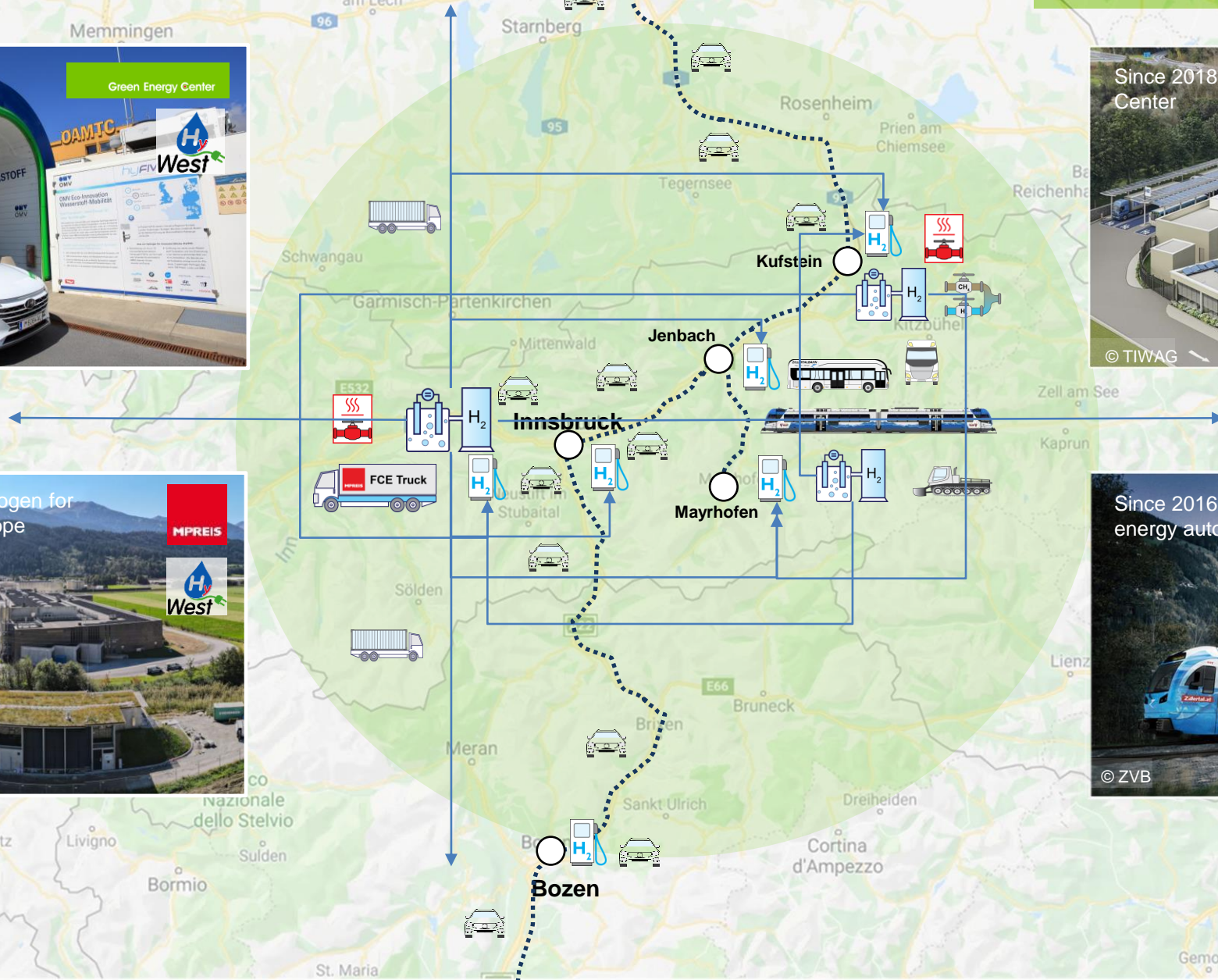
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Green Hydrogen Economy





Hydrogen Highway Green Corridor



2014
EU Project „HyFive“
110 Hyundai ix35 FCEV
6 New Refuelling Station

2014-2018:
~500 FCEV in Europe

2015:
Hydrogen Highway Munich Verona

2016:
Green Energy Center Europe
Friendly Users Hydrogen Families

2018:
Launch of Hyundai Nexso
Green Energy Center Europe

2018-2021:
~2500 FCEV in Europe



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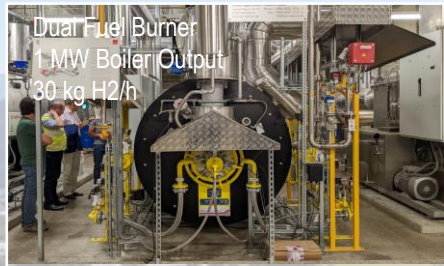
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Green Hydrogen for MPREIS, Tyrol & Europe

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Gas
12 GWh/year
2,400 tons CO2 equivalent/year

Diesel
1,6 Mio l Diesel/year
4,200 tons CO2 equivalent/year

Convenience

Butchery

Cooling

Bakery

Hydrogen Heat

Hydrogen Storage

Hydrogen Logistic

Green Hydrogen Production

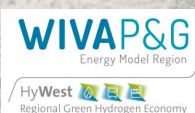
3 MW Alkaline Electrolyser up to 1,4 tons H2 per day

Photovoltaics 1 GWh/year

TIWAG Hydropower

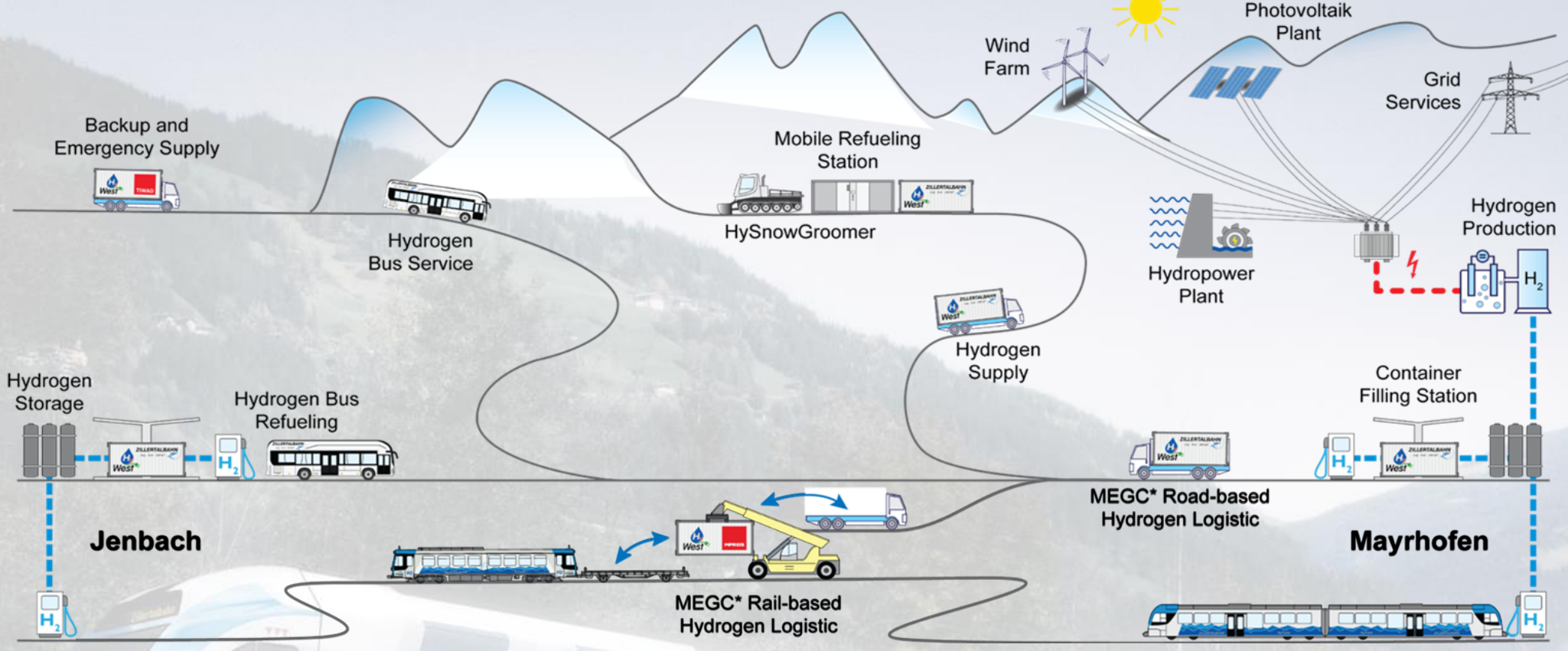
Regional Hydropower Plant

Substitution up to 6,600 tons CO2 equivalent/year





Zillertalbahnhof 2020+ Energy Autonomous with Hydrogen within the Hydrogen Valley Zillertal



„Zillertalbahnhof 2020+ energy autonomous with hydrogen“

Substitution: 900.000 Liter Diesel/year = 2.400 tons CO2 equivalent/year





Power2X Hydrogen Center Kufstein

Green Energy Center

TIWAG

WIVAP&G

Energy Model Region

HyWest
Regional Green Hydrogen Economy

P2X Sector coupling plant up to 12,4 MWeI

• Power2Gas (Hydrogen)

up to 5 MWeI

- **PEM-Elektrolysis**
up to 900 tons H₂/year
- **Storage**
up to 53,000 m³
- **Hydrogen Refueling Station**
for cars, trucks, vehicles, buses
- **Trailer Station**
for mobile storage solutions (trailer)
500 kg / 300bar

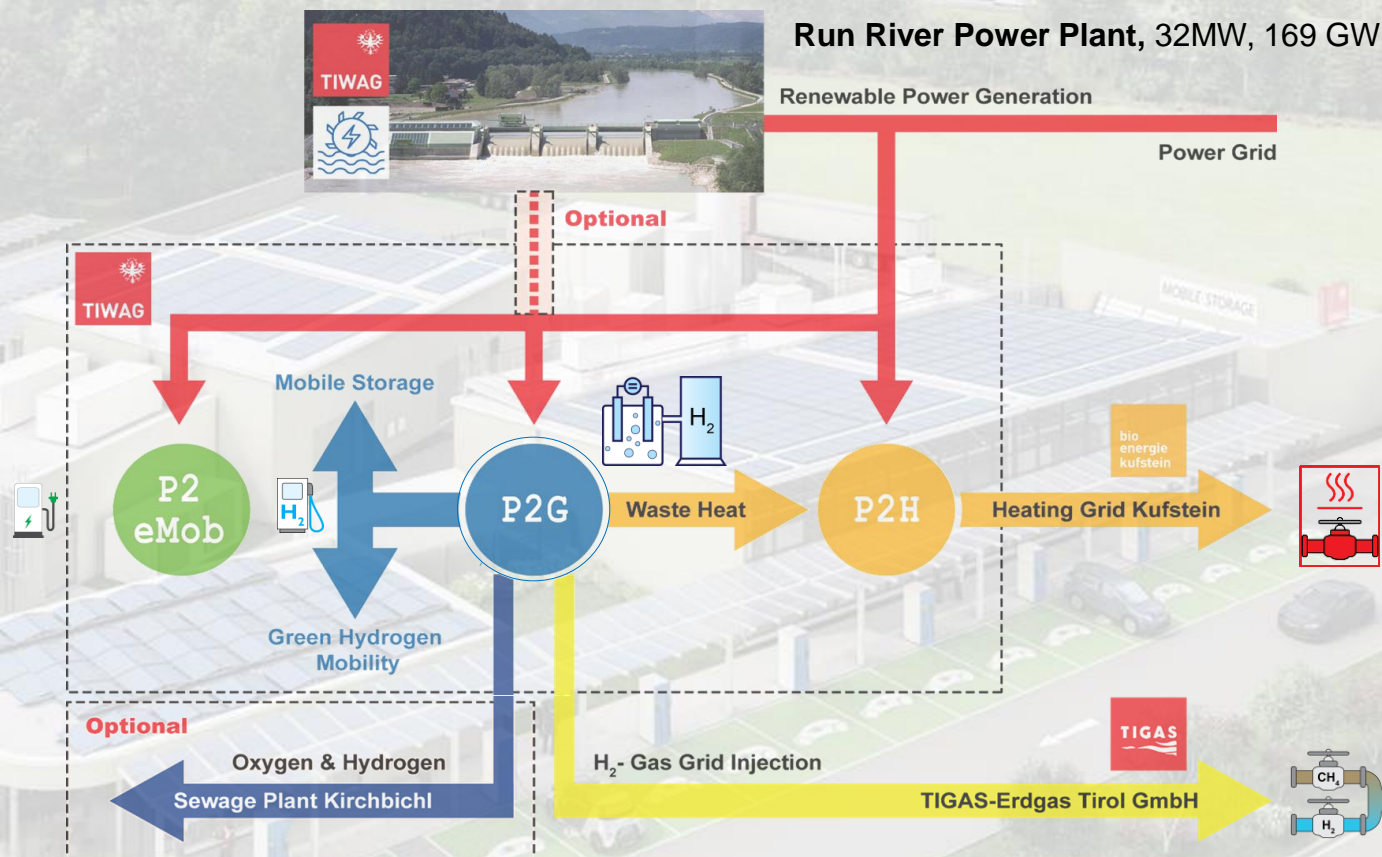
• Power2Heat

up to 1MWeI

• Power2Mobility

up to 2 MWeI
up to 17 charging points
for cars, trucks, vehicles, buses

Substitution potential up to 6, 3 Mio Litre Diesel/year = up to **17.000 tons CO₂** equivalent/year



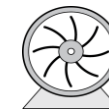
Identify & Assess Project Power to Gas for Austria

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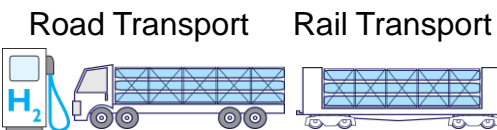
Excess Energy (APG)

Electrolysis 50 MWeI

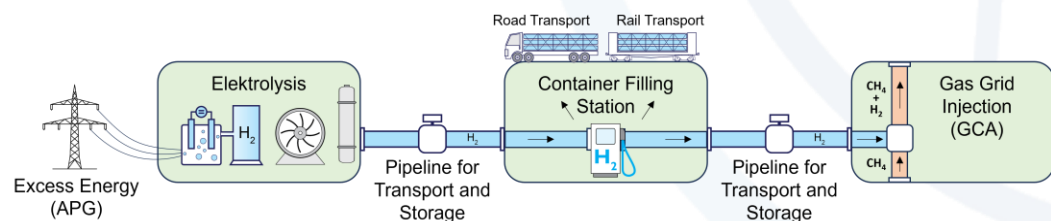


Pipeline
10 km for Transport &
Storage 11,3 – 23,0 tons H₂

Container Filling Station



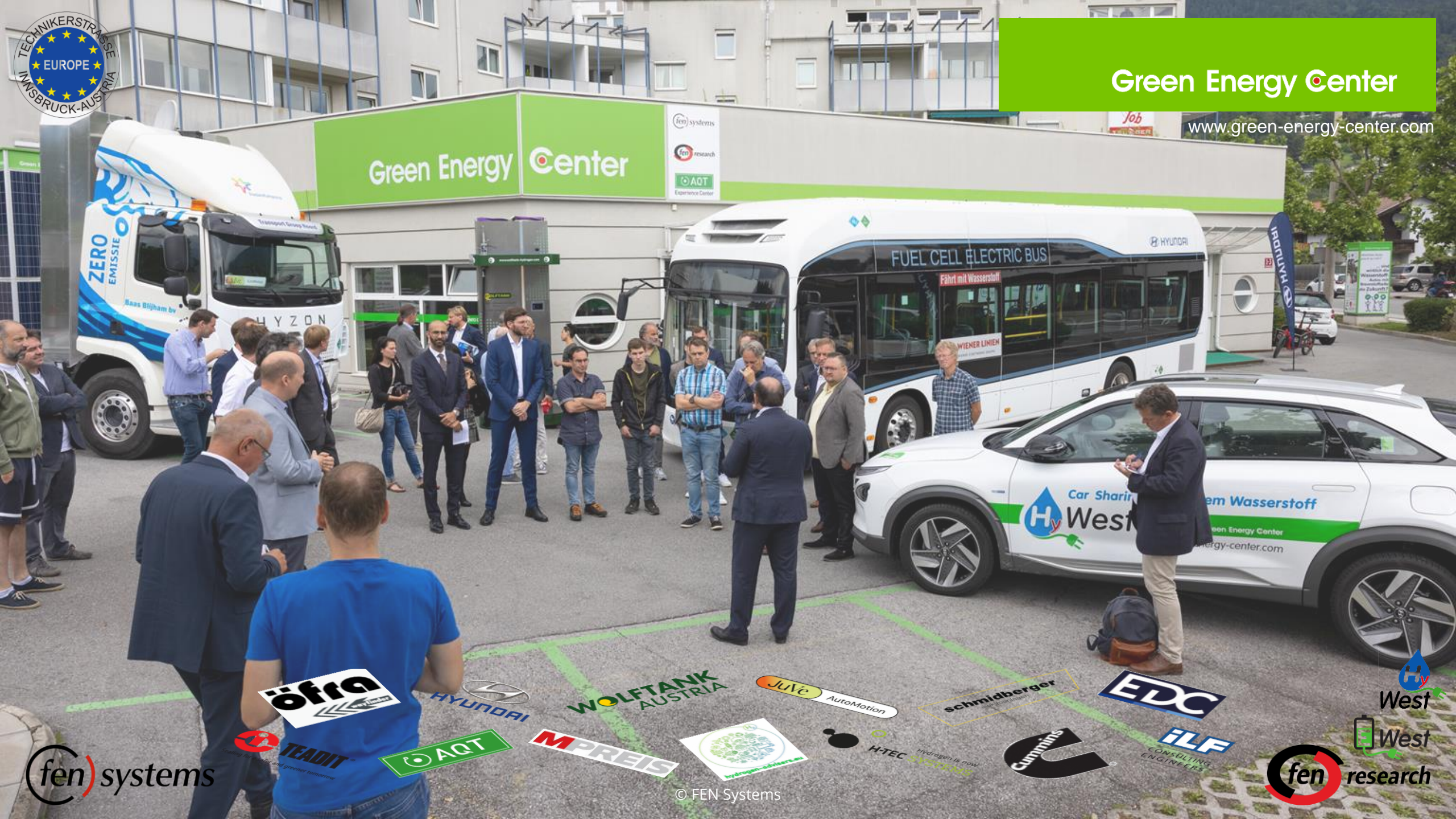
Gas Grid Injection





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