HYDROGEN: PAN-EUROPEAN COOPERATION, SECTOR INTEGRATION

ACER – Energy Community webinar

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Ten-Year Network Development Plan 2020 scenarios

National Trends
- Policy Scenario based on member states’ National Energy and Climate Plans (NECPs)
- EU 2030 Energy and Climate Framework (-40% CO2, 32 % RES, 32.5 % energy efficiency)
- EC 2050 Long-Term Strategy: 80 – 95 % CO₂ reduction

COP 21 scenarios
+1.5°C (66.7 % probability)
Carbon neutrality by 2050
Benchmarked with EC LTS

Distributed Energy
De-centralised approach to the energy transition:
active customers, small-scale solutions, circular approach

Global Ambition
Centralised approach to the energy transition:
large-scale renewables, imports and decarbonisation

To reach Net Zero 2050, all renewable and decarbonisation technologies are needed and hydrogen plays a major role
Energy System Integration in TYNDP

Hydrogen plays a central role in gas and electricity interactions

Direct and indirect interactions

Heating mix (gas boilers, HPs, hybrid HPs, ...)
Transport mix (oil, electricity, gas...)

Electricity Demand 2017
Gas Demand 2017
Role of gas in an integrated system

Renewable and decarbonised gases, incl. hydrogen, are needed to support the decarbonisation of all sectors.

A net zero energy system with high level of electrification requires a high level of flexibility incl. seasonal and daily.
Thank you for your attention

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