

26th World Gas Conference

1 – 5 June 2015 – Paris, France



WOC 5 – 4

First commercial POWER TO GAS-Project
in Germany

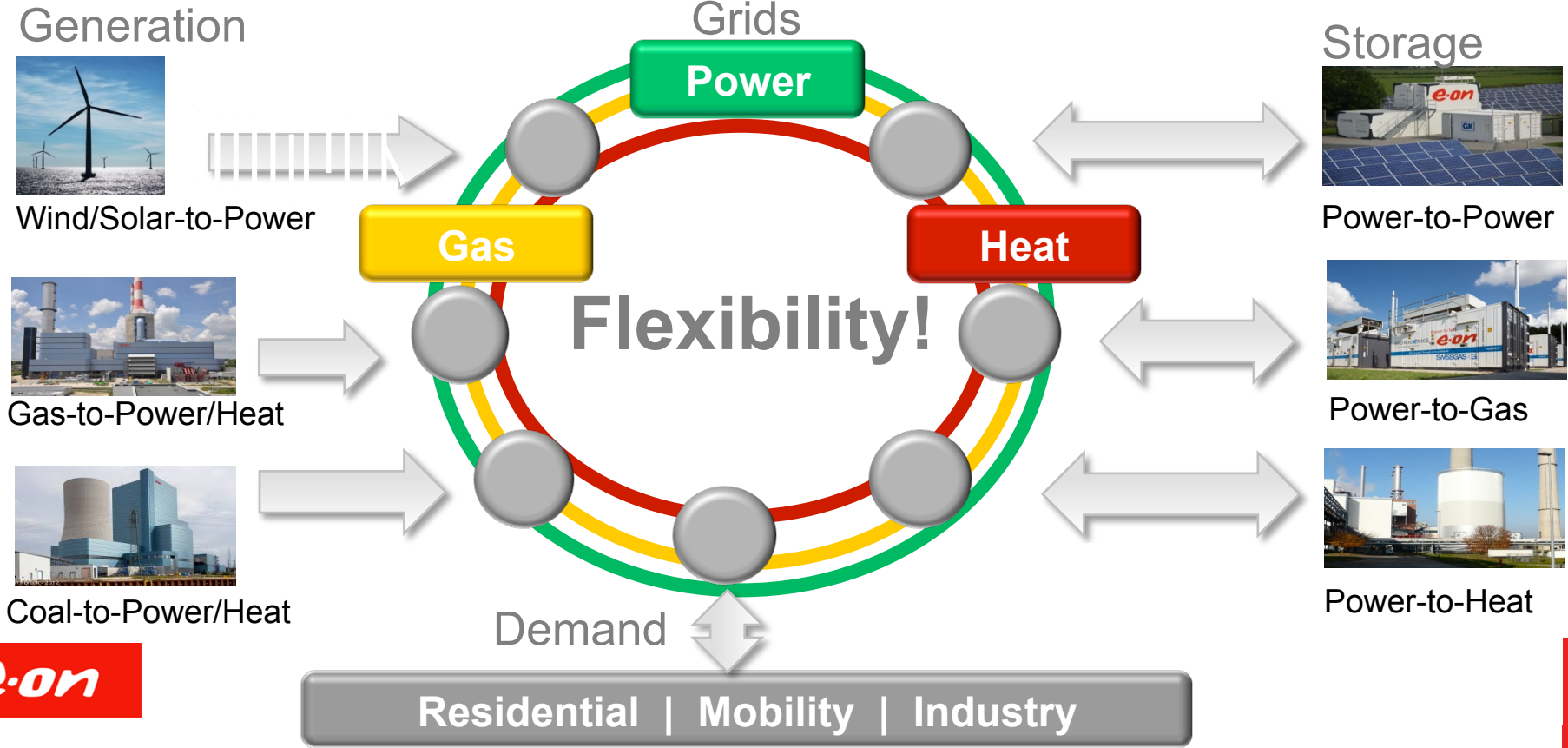
Dr. Peter Klingenberger

E.ON Gas Storage GmbH and E.ON Innovation Center

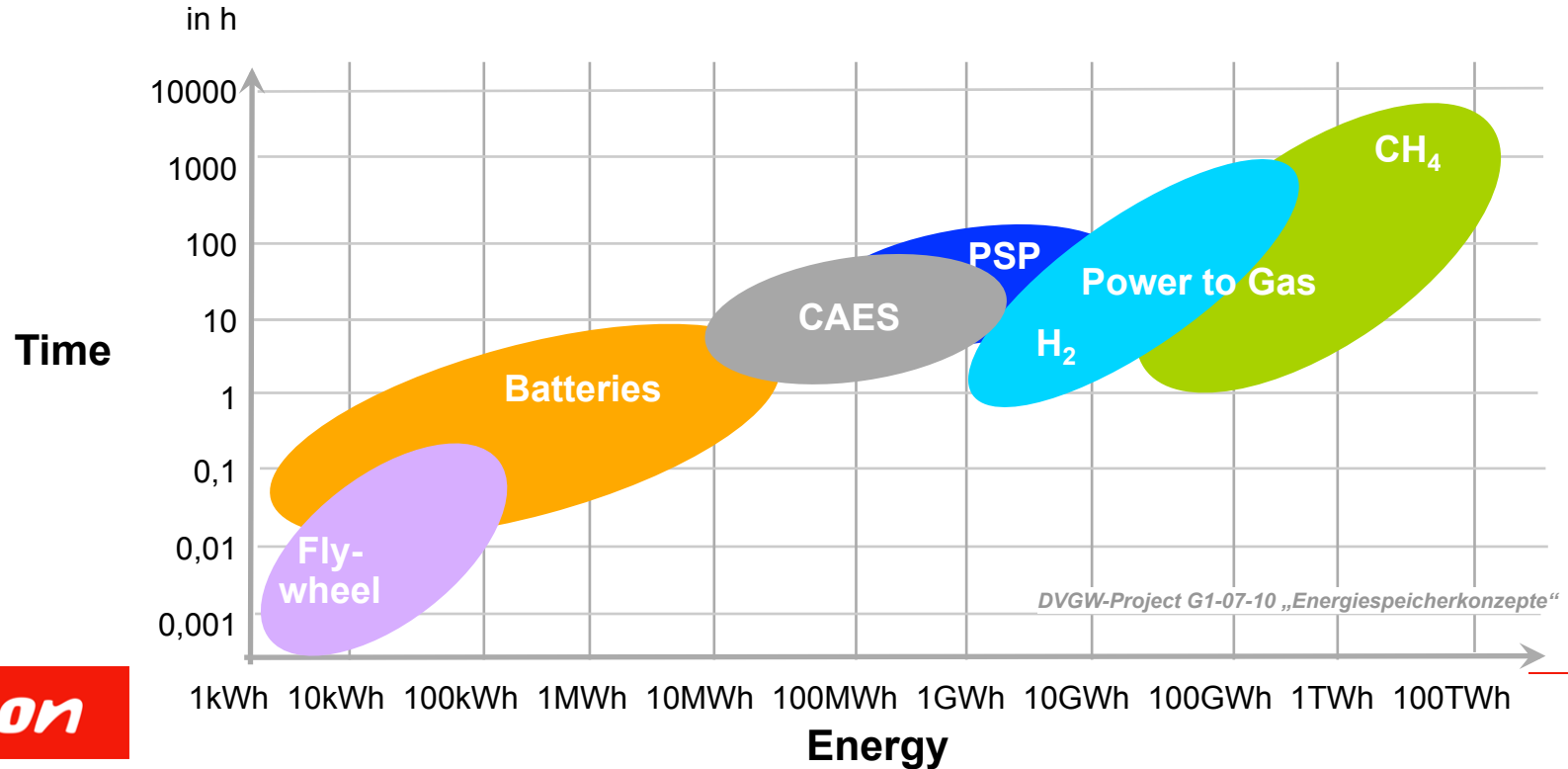


POWER TO GAS

What does the transition to wind and solar mean?

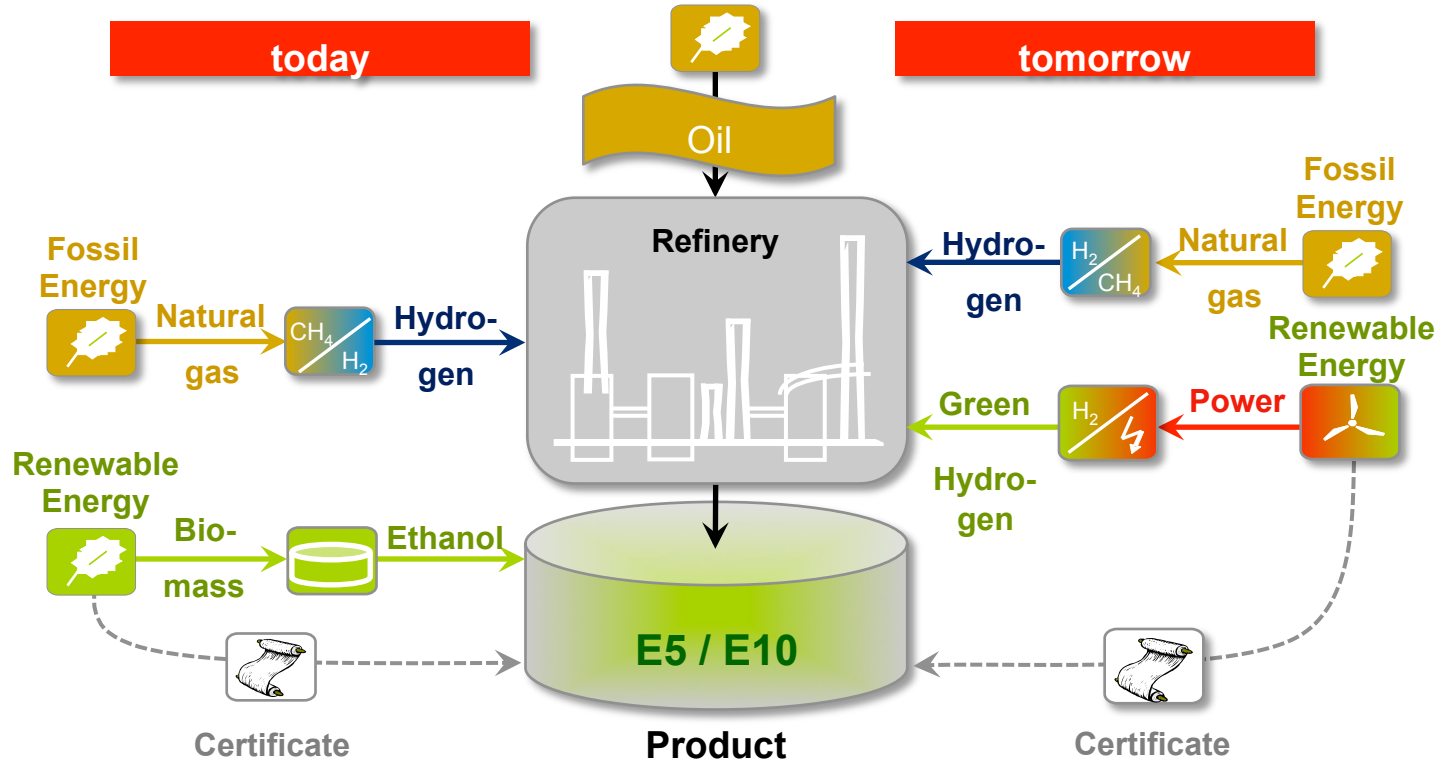


Different capabilities & applications



POWER TO GAS

Example: Power to Gas for Refineries



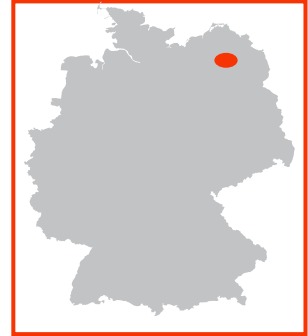
Storage effect = Integration of Renewables

POWER TO GAS

Example: Power to Gas pilot "WindGas Falkenhagen"

Key Parameters

- **Power: 2 MW_{el}**
- **Hydrogen production: 360 m³/h**
- **Fed into the local gas grid** (ONTRAS Gastransport)
- Start of construction: 08/20/2012; Start of operation 08/28/2013
- Owner is E.ON Gas Storage



Goals

- **Demonstration of the process chain**
- Optimize operational concept (fluctuating power from wind vs. changing gas feed)
- Gain experience in technology, costs, consenting



e-on

In cooperation with

SWISSGAS 

POWER TO GAS

Example: Power to Gas pilot "WindGas Falkenhagen"



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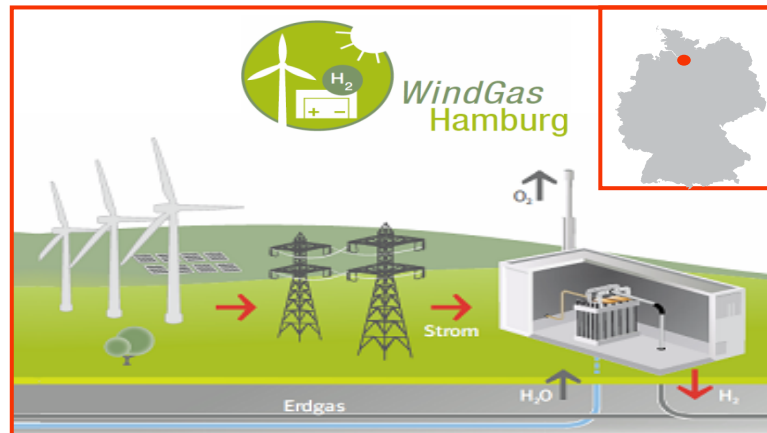
Example: „WindGas Hamburg“

Key Parameters

- Public funding from BMVDI
- **Power: 1 MW_{el} (stack)**
- Hydrogen production: 265 m³/h
- Fed into the local gas grid
- Planned start of operation: 2015

Goals

- **Utilization of high efficient “Proton Exchange Membrane“ electrolysis (PEM)**
- Demonstration within E.ON infrastructure
- Business development



Funding &

Gefördert durch:



Bundesministerium
für Verkehr und
digitale Infrastruktur

Koordiniert durch:



HYDROGENICS
SHIFT POWER | ENERGIZE YOUR WORLD



Deutsches Zentrum
für Luft- und Raumfahrt



European discussion

- Green Hydrogen as an Advanced Biofuel in the mobility sector (FQD, RED)
- Energy Storage Definition
- Ownership-Question for Energy Storages
- Quotas for hydrogen in the gas grid

POWER TO GAS



Thank you for your kind attention.

E.ON Gas Storage GmbH

Dr. Peter Klingenberger
Chairman of the Board of Management

