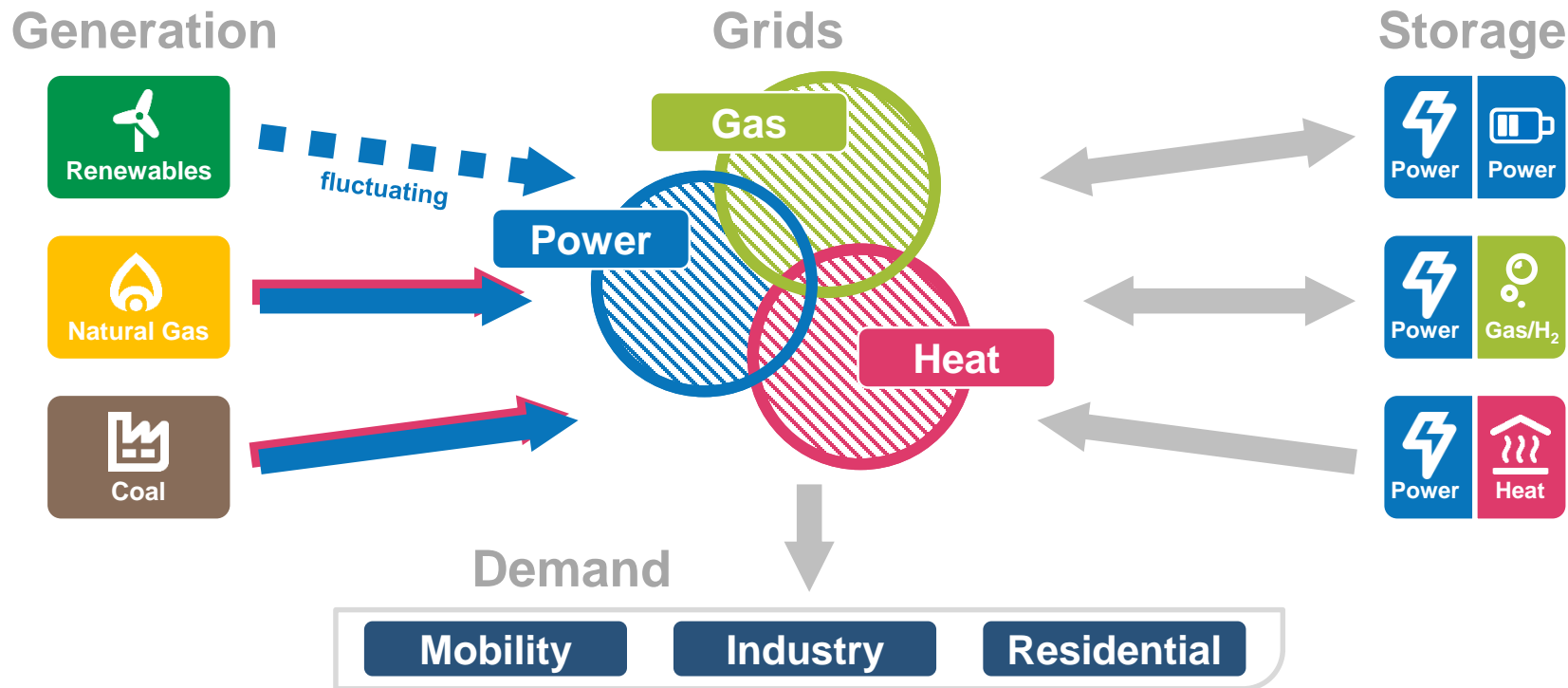




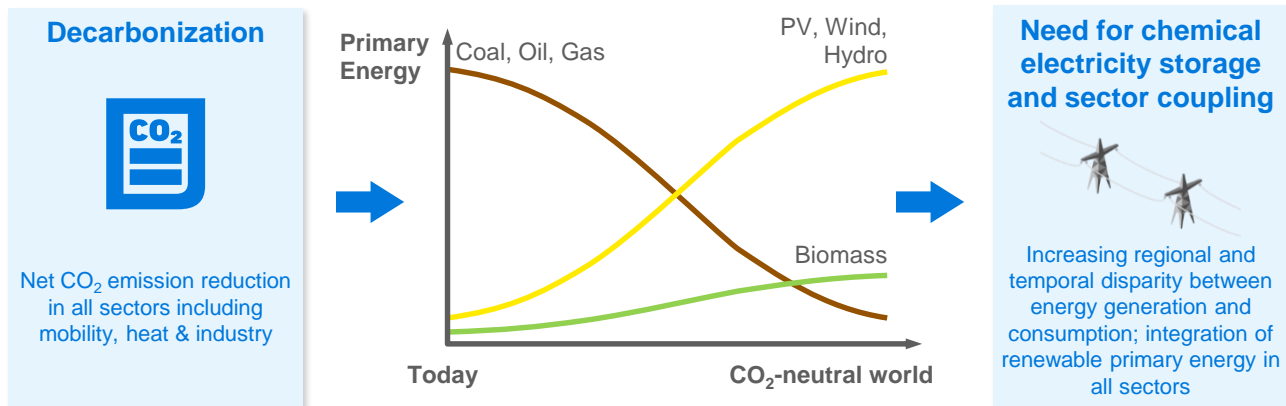
Sector Coupling with Hydrogen & Power to Gas

Strasbourg, 26.11.2019

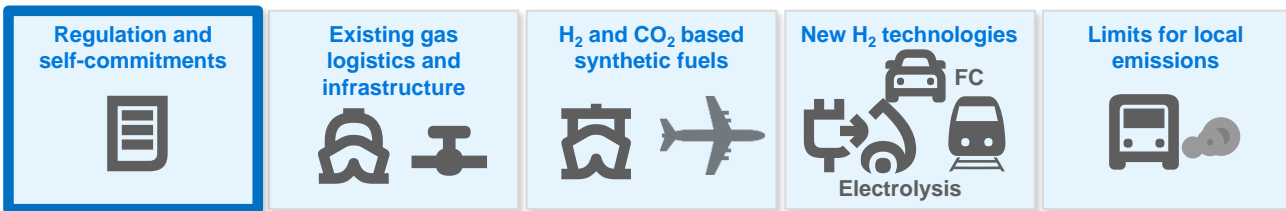
Sectorial integration – using today's infrastructure



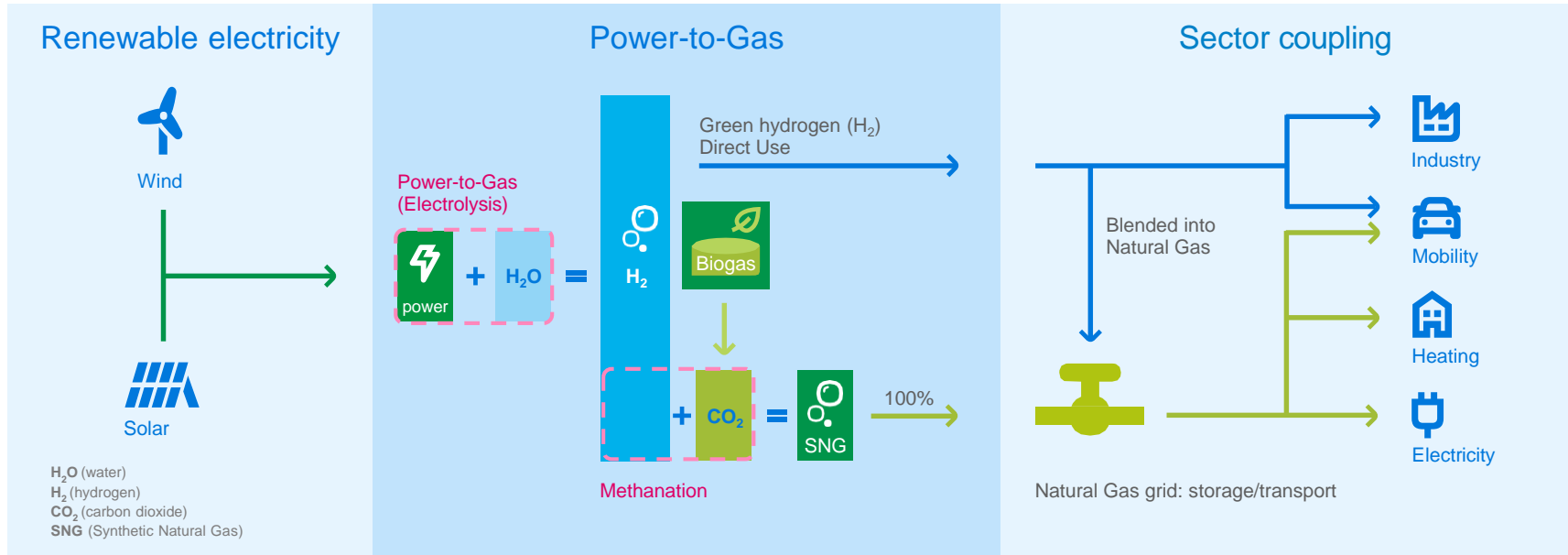
Main driver for H2 growth is climate protection



Further key enablers for hydrogen



Power-to-Gas: Green electricity gets a „second life“



With its energy storage projects, Uniper is actively contributing to the energy transition

WindGas Hamburg



- 1.5 MW_{el} (stack) / 290 m³/h H₂
PEM electrolysis
- Start of operation: 2015
- H₂ injection into gas distribution pipeline

WindGas Falkenhagen



- 2 MW_{el} / 360 m³/h H₂
Alkaline electrolysis
- Start of operation: 2013
- 3 years of very successful operation, >8GWh H₂ produced, >10,000 operating hours, >800 starts/ stops
- H₂ injection into gas transportation pipeline

STORE&GO



- Expand WindGas Falkenhagen by 1 MW catalytic **methanation** plant
- Start of operation: 2018
- Input: Renewable H₂: 210 m³/h, Biogenic CO₂: 52.5 m³/h
- Green SNG (54 Nm³/h) injected into the grid

Thank you

Interested in the topic and want to know more about it?

Please get in touch with us:

hydrogen@uniper.energy

This presentation may contain forward-looking statements based on current assumptions and forecasts made by Uniper SE management and other information currently available to Uniper. Various known and unknown risks, uncertainties and other factors could lead to material differences between the actual future results, financial situation, development or performance of the company and the estimates given here. Uniper SE does not intend, and does not assume any liability whatsoever, to update these forward-looking statements or to conform them to future events or developments.

