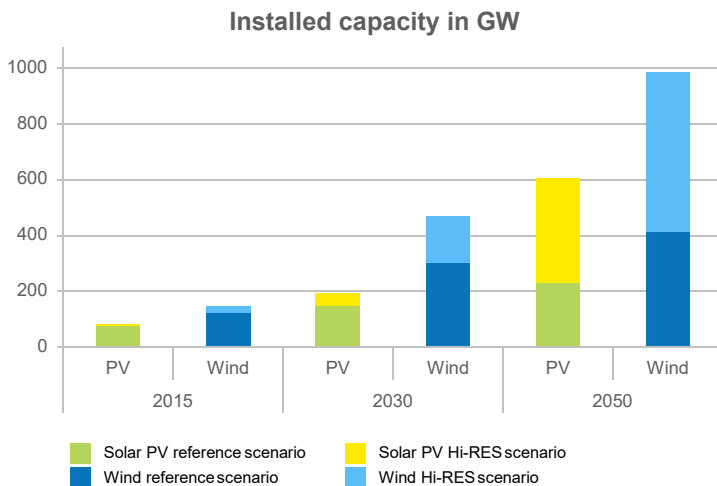


“Flexibility for the Energy System”

Dr Axel Wietfeld (MD Uniper Energy Storage)

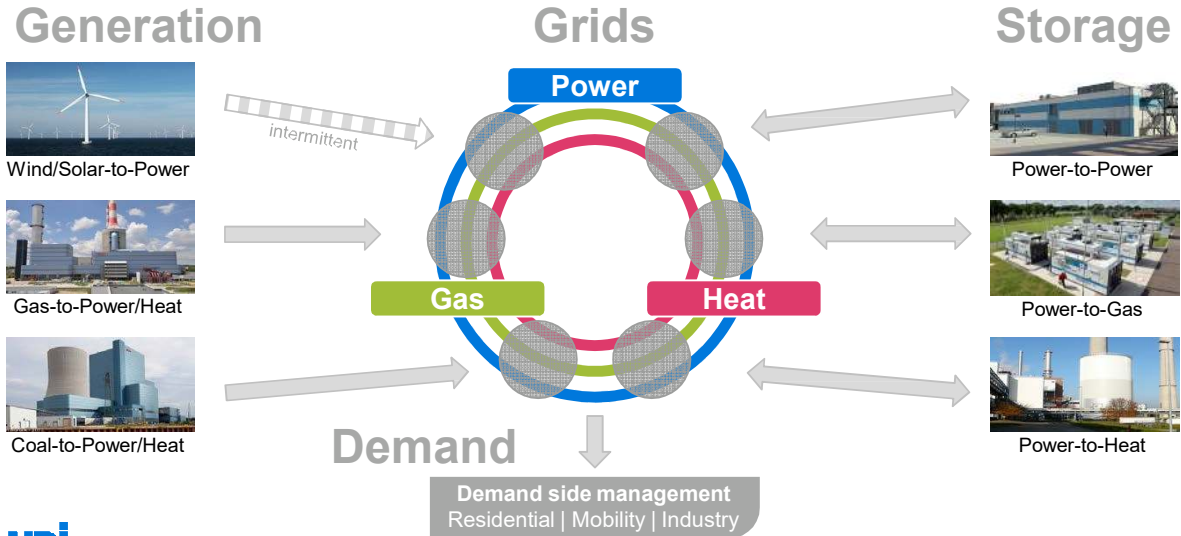
Eurelectric Annual Conference
Ljubljana, 4-5 June 2018

Increase of intermittent renewables in Europe

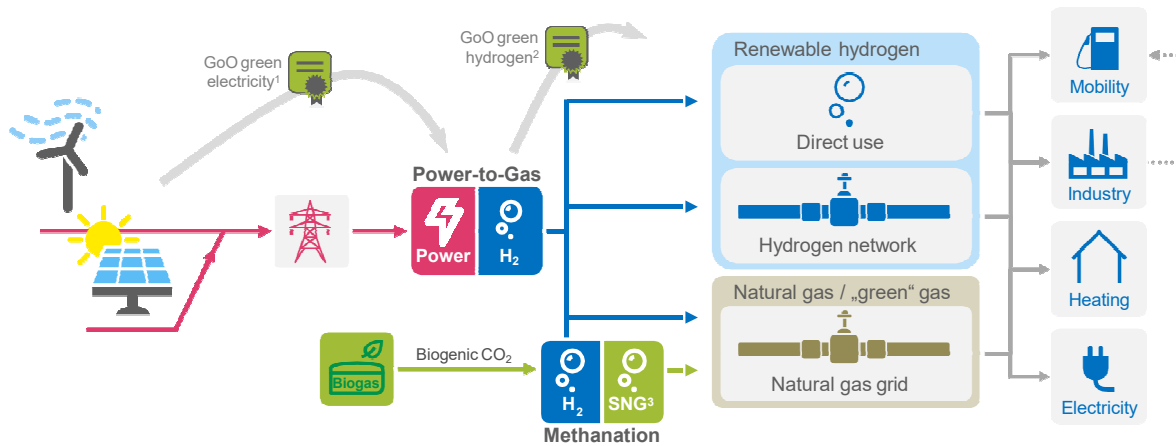


- **Share of electricity** from renewable sources shall increase to
 - 36% until 2020
 - 45-60% until 2030
 - > 80% until 2050
- **Demand-side flexibility:** with limitations
- **Supply-side flexibility:** more difficult in future, not remunerated reliably

Flexibility from all components of the energy system



Power-to-Gas supports the integration of renewables but requires a change in the regulatory framework



¹ The Guarantee of Origin (GoO) for green electricity is an instrument defined in European legislation, that labels electricity from renewable sources to provide information to electricity customers on the source of their energy. ² A corresponding GoO-system for hydrogen is under development in the EU-project Certify. In Germany a certificate for hydrogen as biogas is already in use. ³ SNG = Synthetic Natural Gas