ELEMENTEINS
ENERGIEWENDE MIT SEKTORKOPPLUNG
ELEMENT EINS
Intelligent Innovative Efficient

Comprehensive coupling of the energy, transport and industry sectors with power-to-gas plants

3rd Combined Energy Conference 2020
Arnheim, January 29th 2020

Thyssengas GmbH – Dr. Carsten Leder
Thyssengas connects markets today and tomorrow

Since 1960th
Natural Gas from the Netherlands

Today
Conversion L-Gas to H-Gas

Future
Transportation of climate-neutral gas

Source: http://www.fnb-gas.de/de/fernleitungsnetze/fernleitungsnetze.html Stand: 22.06.2017
ELEMENT EINS enables hydrogen development
ELEMENT EINS is ready for the next step

☑ Request for approval as investment measure (BNetzA)

☑ Successful as “Reallabor der Energiewende” (BMWI)

☑ Feasibility study finished

We can go further but …

Source: Feasibility Study ELEMENT EINS by ILF / LBST
Thyssengas will connect H$_2$-producers and H$_2$-consumers

**First expected producers**
- Netherlands
- Northern Germany / wind power
- Lignite region (2030s)

**First expected consumers**
- Chemical sites, steel factories, refineries
- Mobility

For discussion:
Which role can hydrogen play in the Dutch and NRW heat sector?
What is required to implement a first cross border hydrogen project via pipeline?
Regulated H₂-Networks guarantees

Gas infrastructure is needed in energy transition
- Existing infrastructure
- Gas storages offer required flexibility
- Public acceptance

Legal framework for regulated hydrogen networks is needed soon
- Industrial projects fail without large-scale transport
- Reliable regulated framework for the conversion of pipelines
- Provision of open grid access for all producers and consumers

For discussion:
Why should future hydrogen grids be regulated?