

WESTKÜSTE100

Green Hydrogen on an industrial scale

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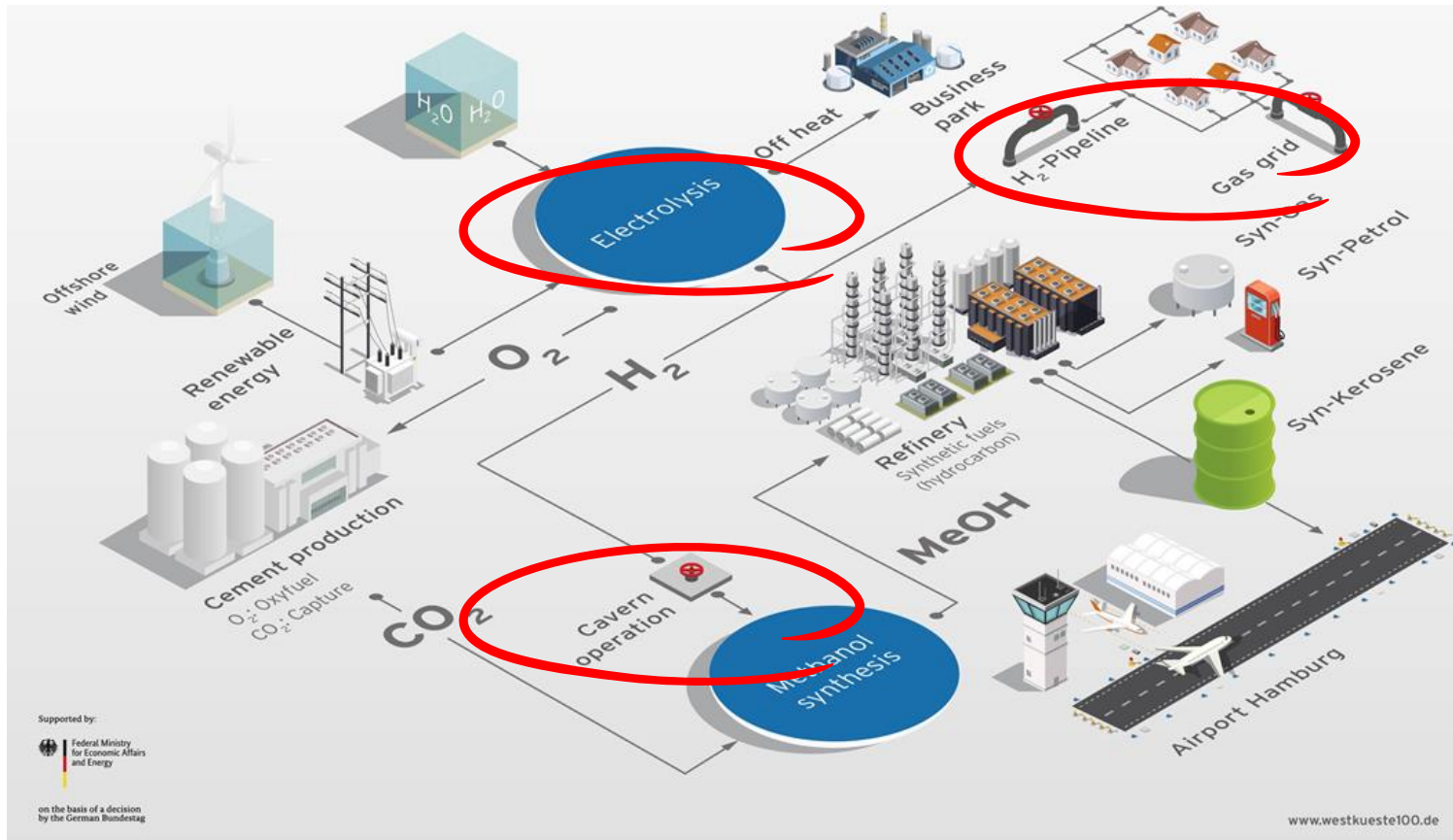
Supported by:



Federal Ministry
for Economic Affairs
and Energy

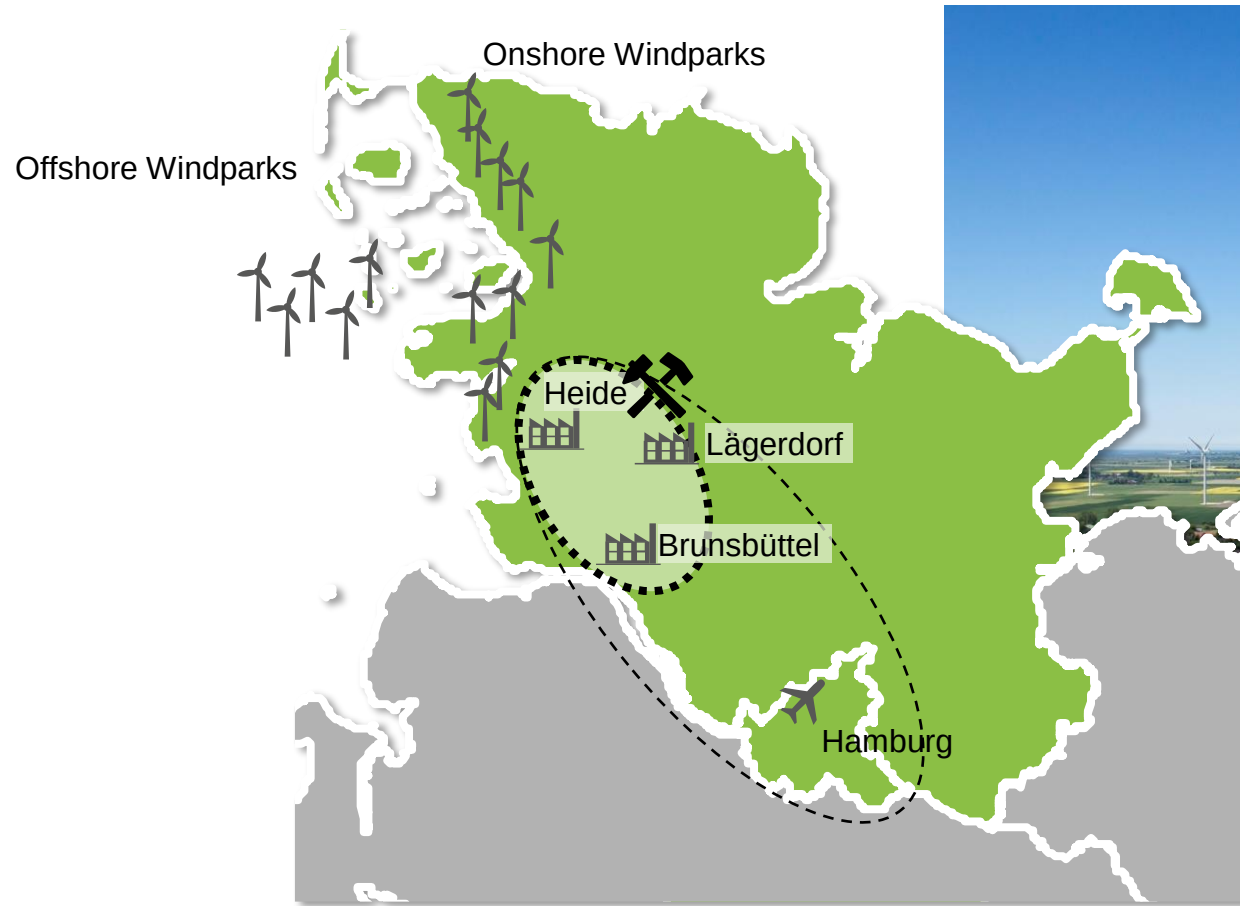
on the basis of a decision
by the German Bundestag

Introducing our Real Lab



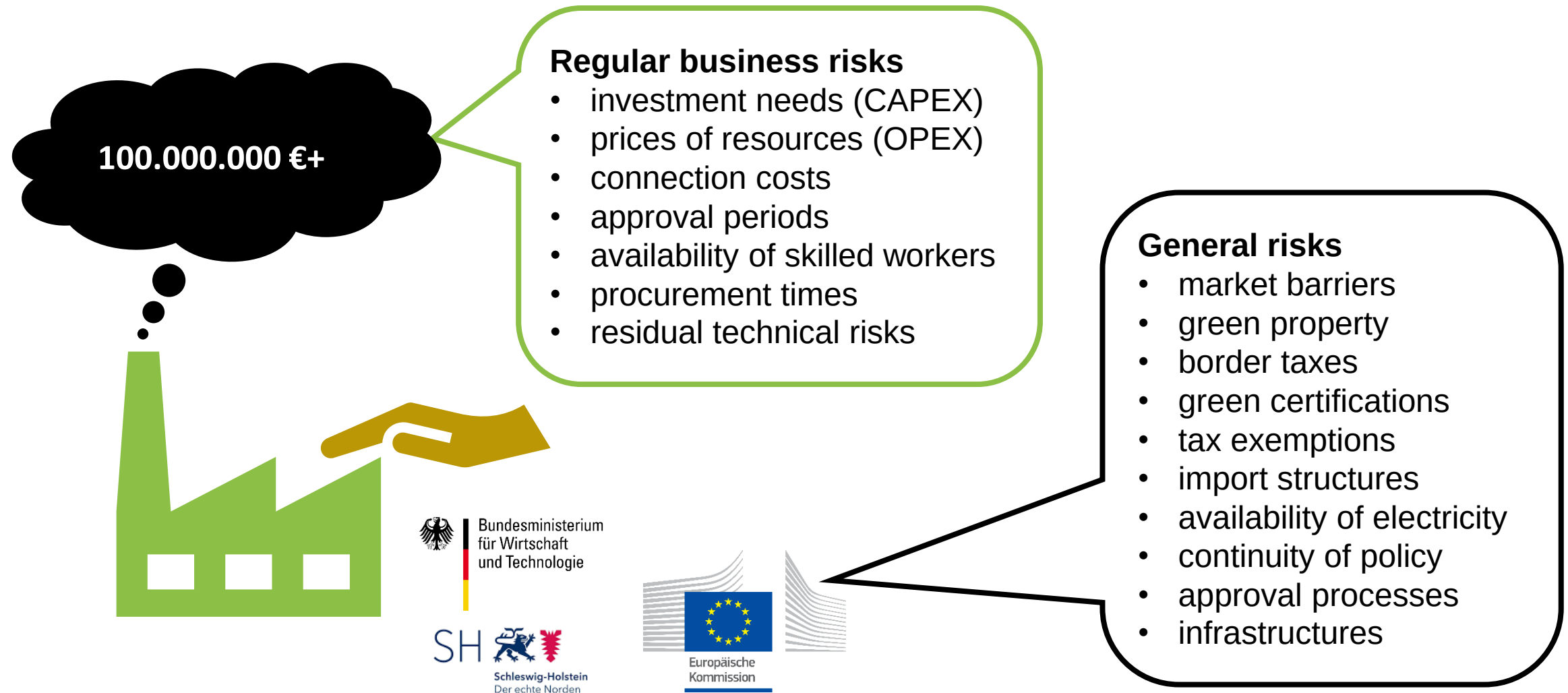
- Research on 30 MW electrolysis
- Consideration of H_2 - O_2 - heat
- Research on H_2 cavern storage
- Test of urban gas supply network
- Integration of cement industry as an unavoidable source of CO_2
- Engineering of scaling up to 700 MW+ electrolysis
- Integrating offshore wind power
- Regulatory learning
- Overall economic scenarios

Why in this Region? Most favourable conditions

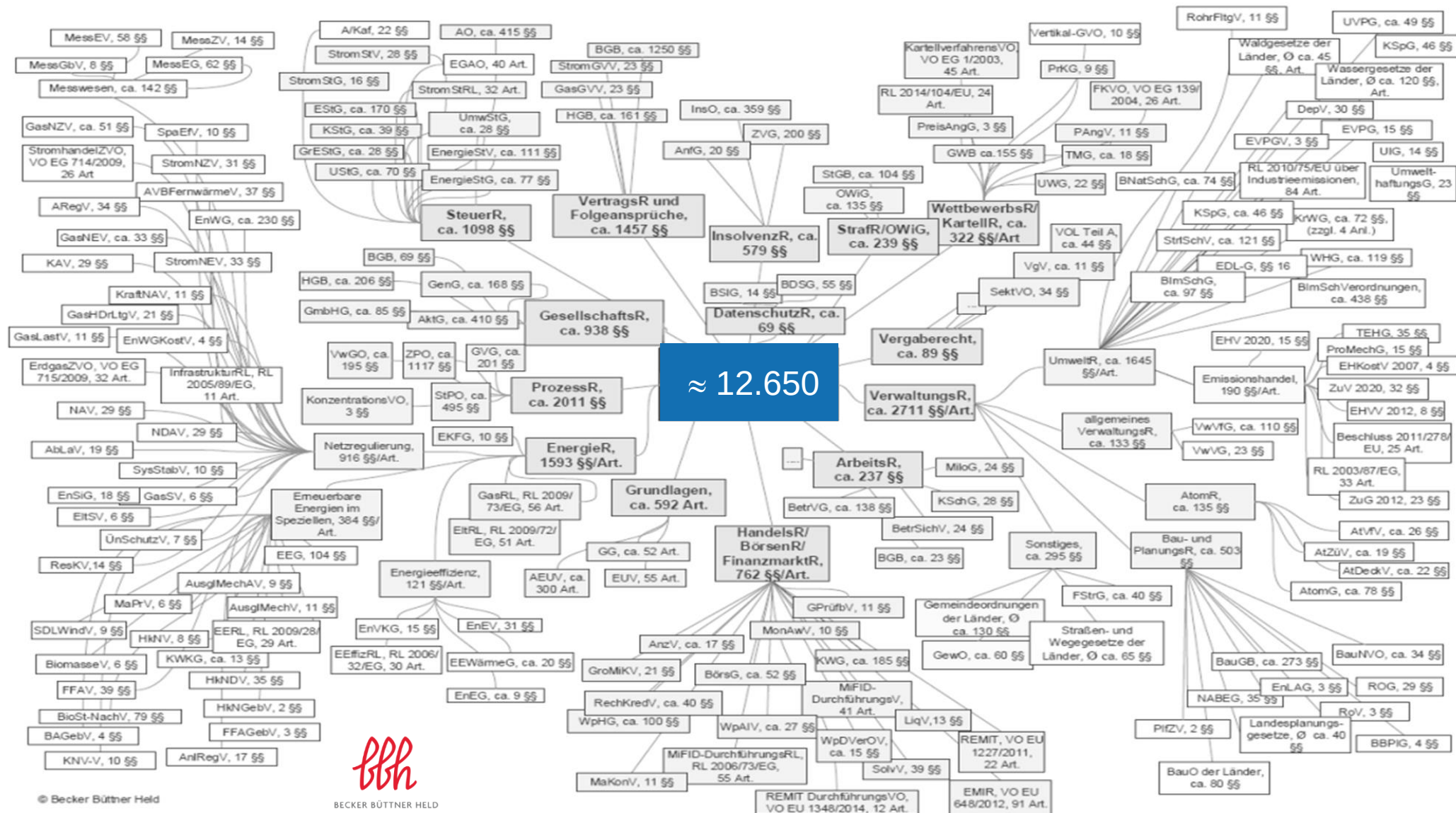


Green Energy (5 GW now, 10 GW expected) + heavy industry + large caverns
+ customers (other industry, mobility train/plane/ship) + experts

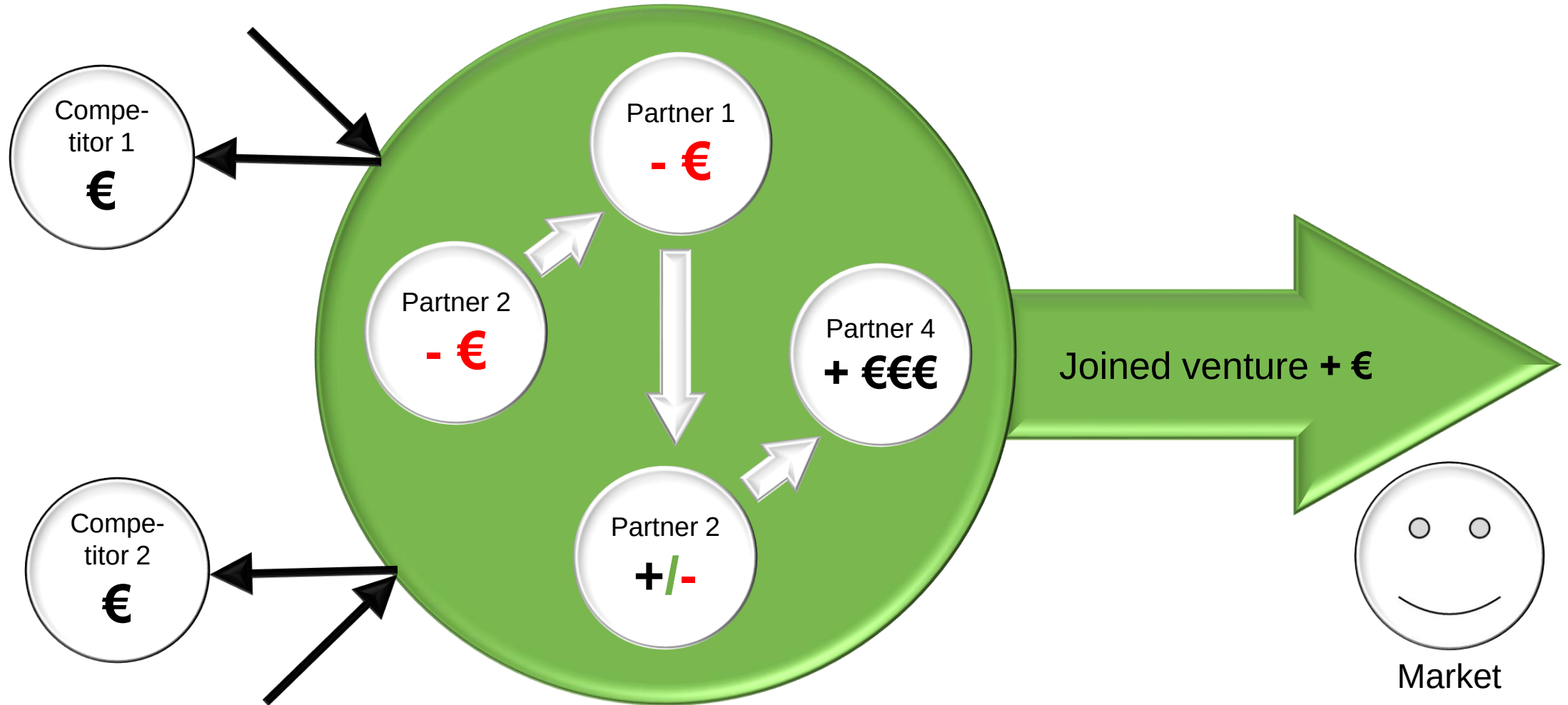
Why a Real Lab? General risks ahead



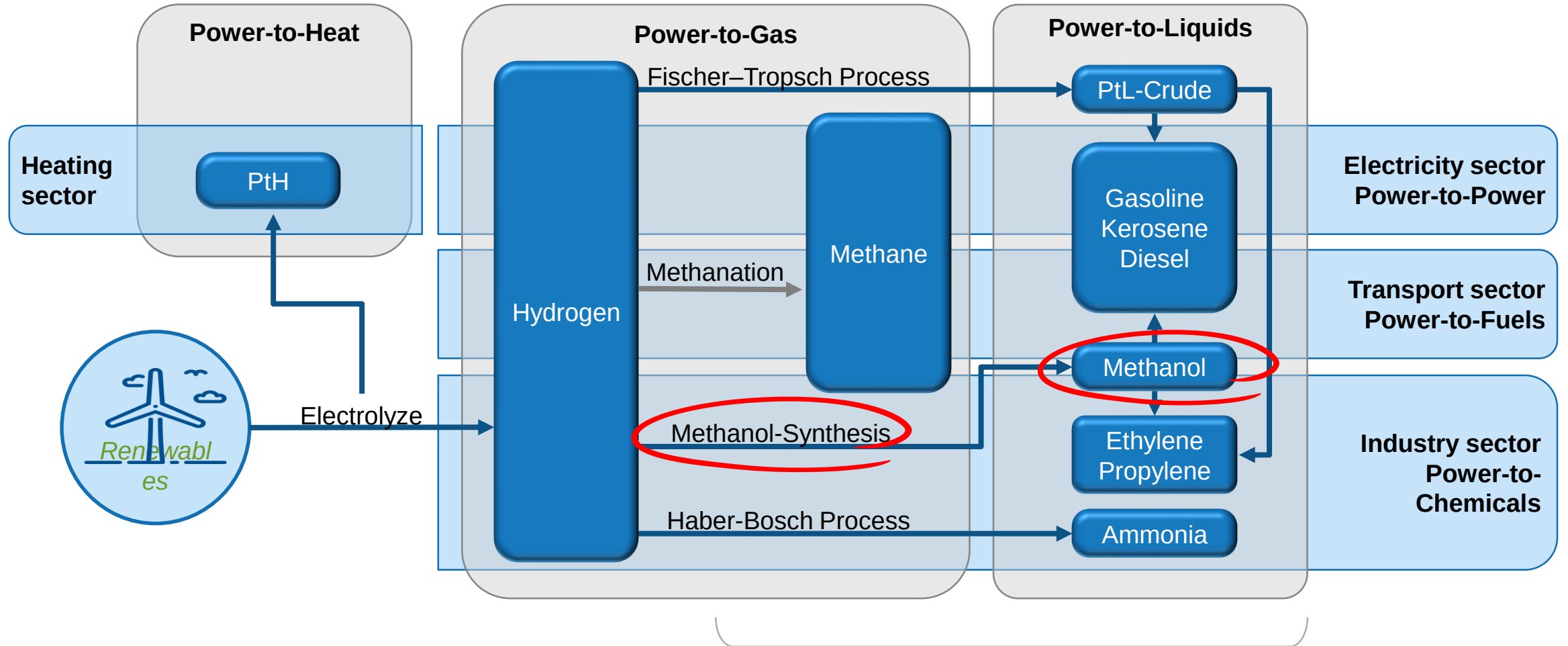
General risks? For instance a forest of regulations



Chicken & egg? Building a temporary ecosystem



Currently Low Margins? Finding the most profitable way



pure CO₂ for synthesis (capture end of process)

Scaling up: Changing the game, changing the region



WESTKÜSTE100

30 MW

- > Main application in refinery process
- > Parallel tasks on H₂ storage, oxygen and waste heat

PILOT PLANT

Some 500 MW

- > Applications: industry, mobility, gas grid
- > Research and development on e-fuels and e-chemicals

UPSCALING

Some 2.000 MW

- > Holistic applications of green H₂ and e-fuels in all sectors

>1 MW class

>10 MW class

>100 MW class

>1000 MW class



Please stay in touch!

 <https://www.westkueste100.de>



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