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by the German Bundestag

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HYDROGEN DIPLOMACY OFFICE ASTANA (H2-DIPLO: DECARBONIZATION DIPLOMACY)

@ SUSTAINABLE ENERGY DAYS IN TEMIRTAU

THE ROLE OF GREEN HYDROGEN IN DECARBONIZATION

H2-diplo – Decarbonization Diplomacy



Ongoing energy transition
towards renewables



Fossil fuel export and transit
countries face future
decrease in demand



Advancing the global
energy transition

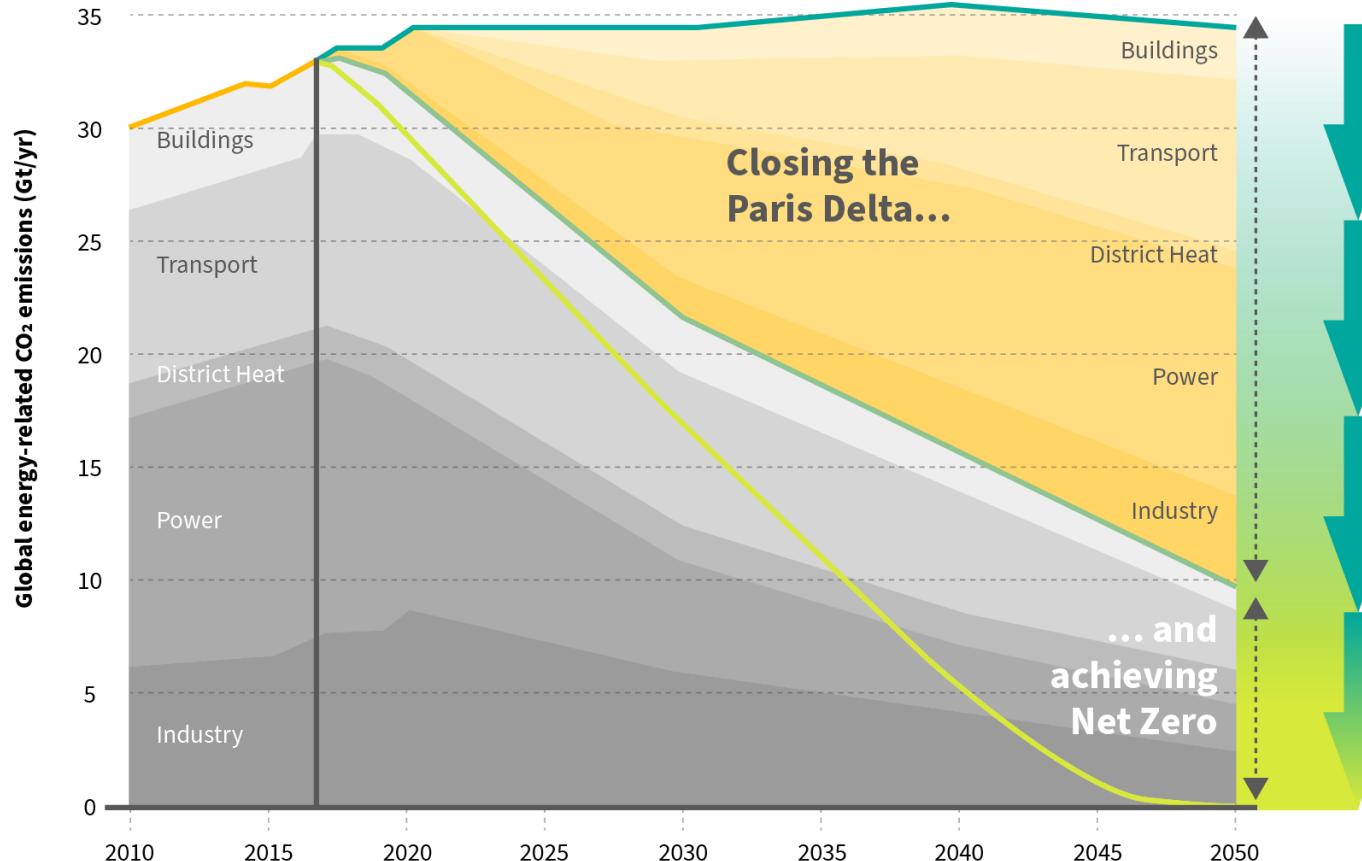
Local economy diversification,
decarbonization and value
chain integration

Advancing global trade
of green hydrogen

The Role of Green H2 in Decarbonization



Green H2 as part of the solution



- 1 Improving energy efficiency in all sectors
- 2 Reaching 100 % renewable energy
- 3 Electrifying all sectors such as heating and light-duty transport
- 4 **Power-to-X** for the sectors and industries that cannot directly electrify

The Role of Green H₂ in Decarbonization



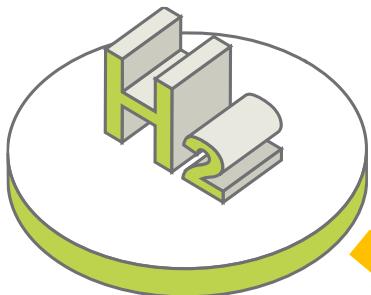
Green Steel in Sweden



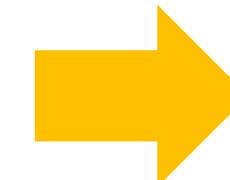
VATTENFALL



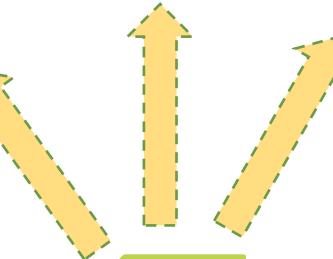
LKAB
Iron ore sourcing



Iron
production
(sponge iron)



SSAB

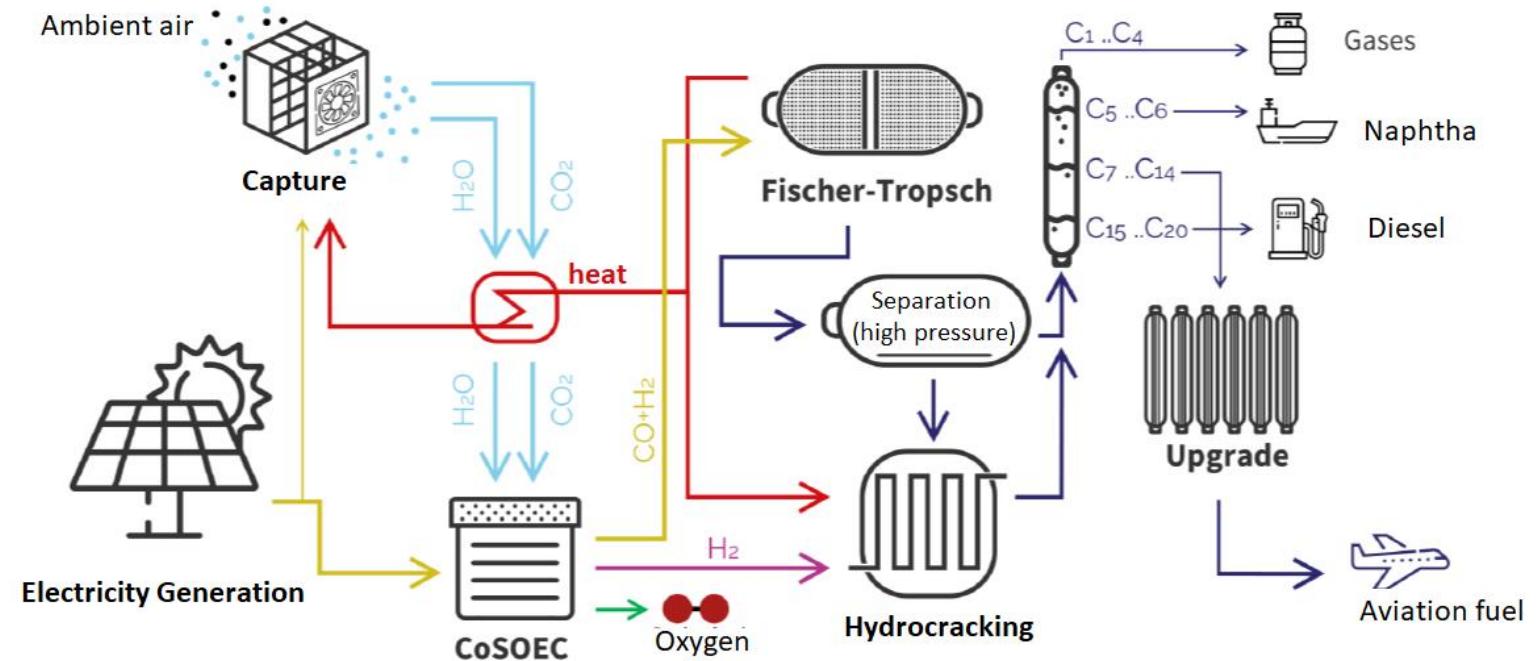


The Role of Green H₂ in Decarbonization



Synthetic Aviation Fuel
in Brazil

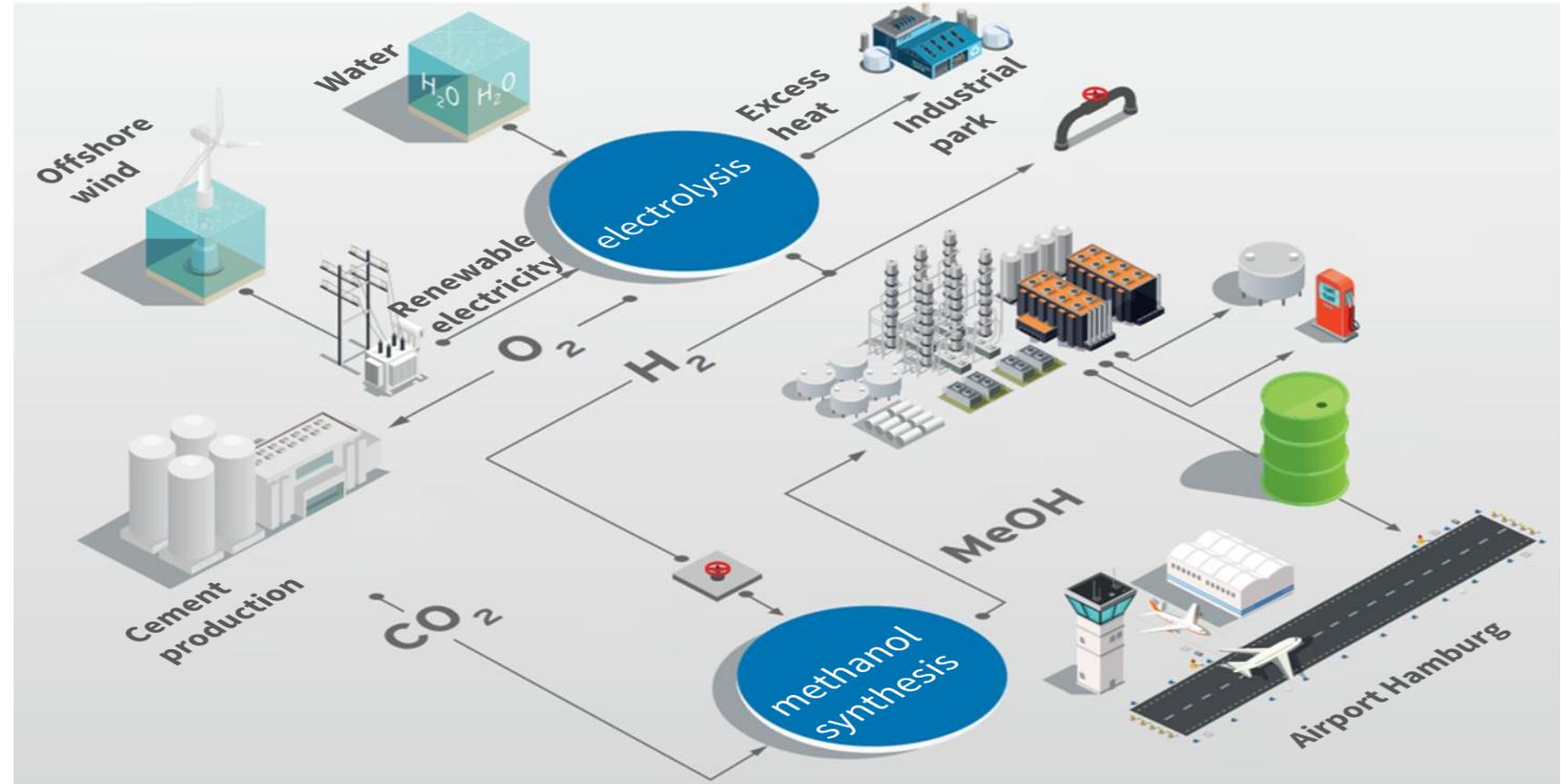
Model of the plant



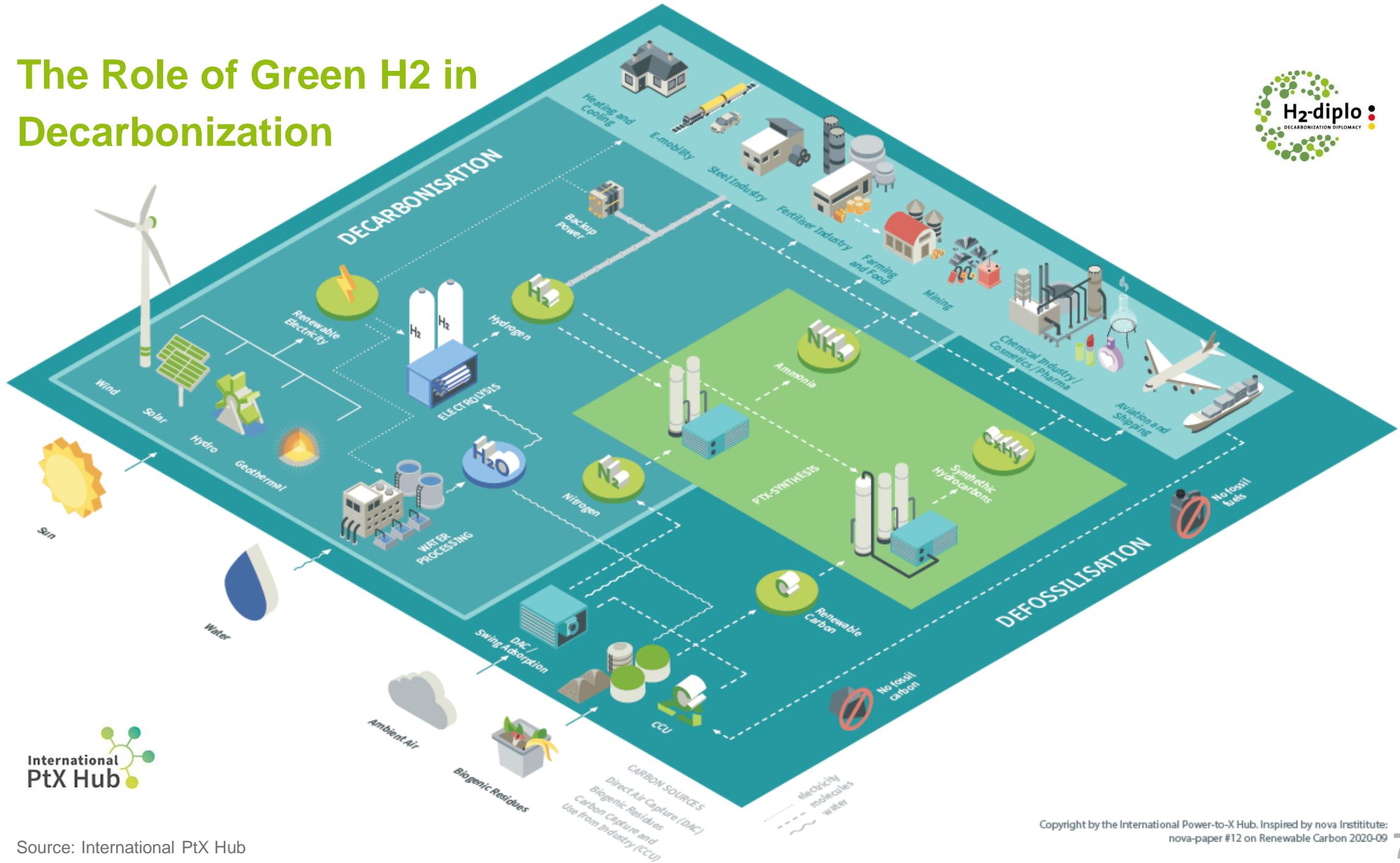
The Role of Green H₂ in Decarbonization



Industrial cluster with green H₂ in Germany – Westküste 100



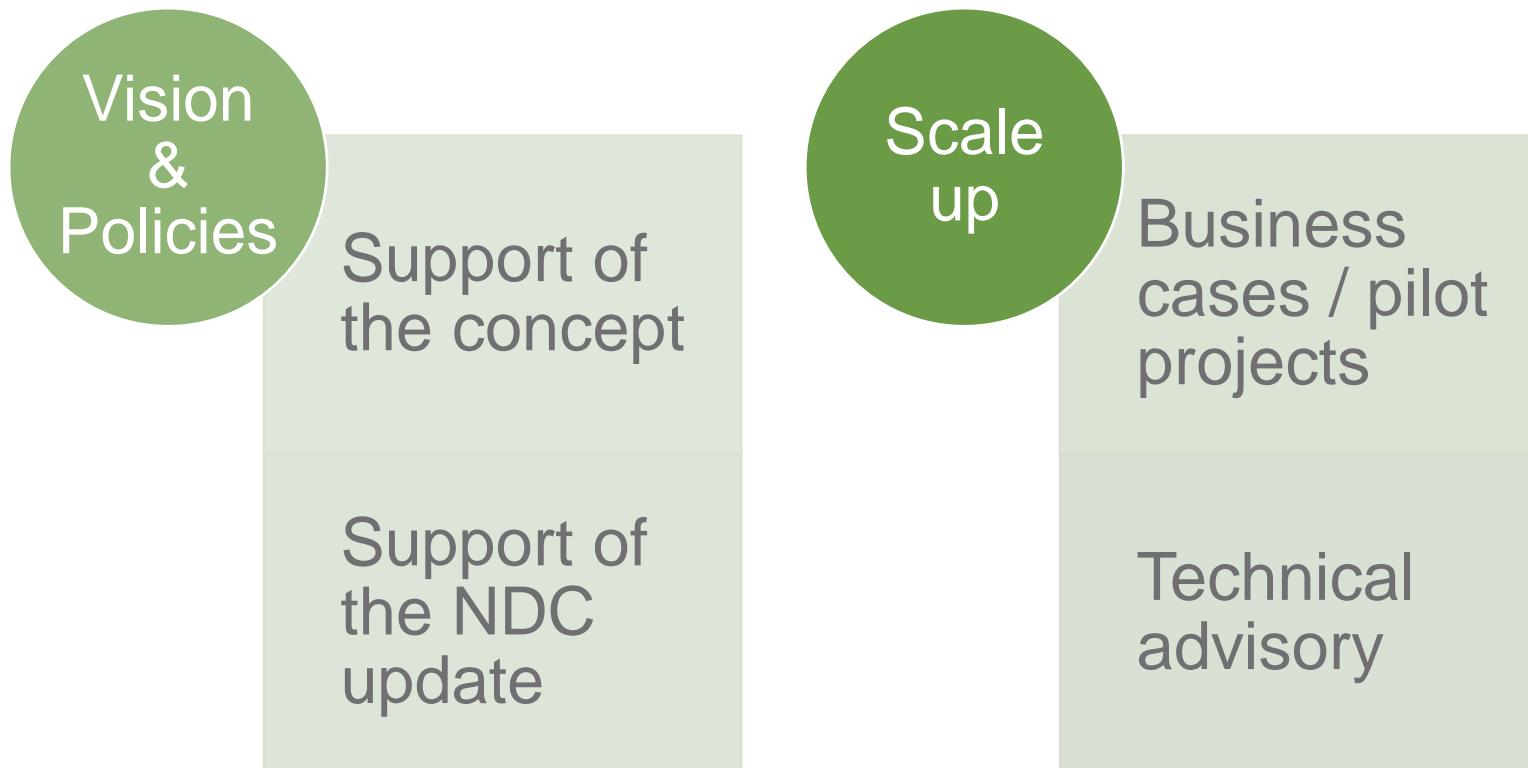
The Role of Green H₂ in Decarbonization



The Role of Green H2 in Decarbonization



H2-diplo + H2-PEP



Спасибо! Рақмет! Thank you!

**For any questions, please contact the
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