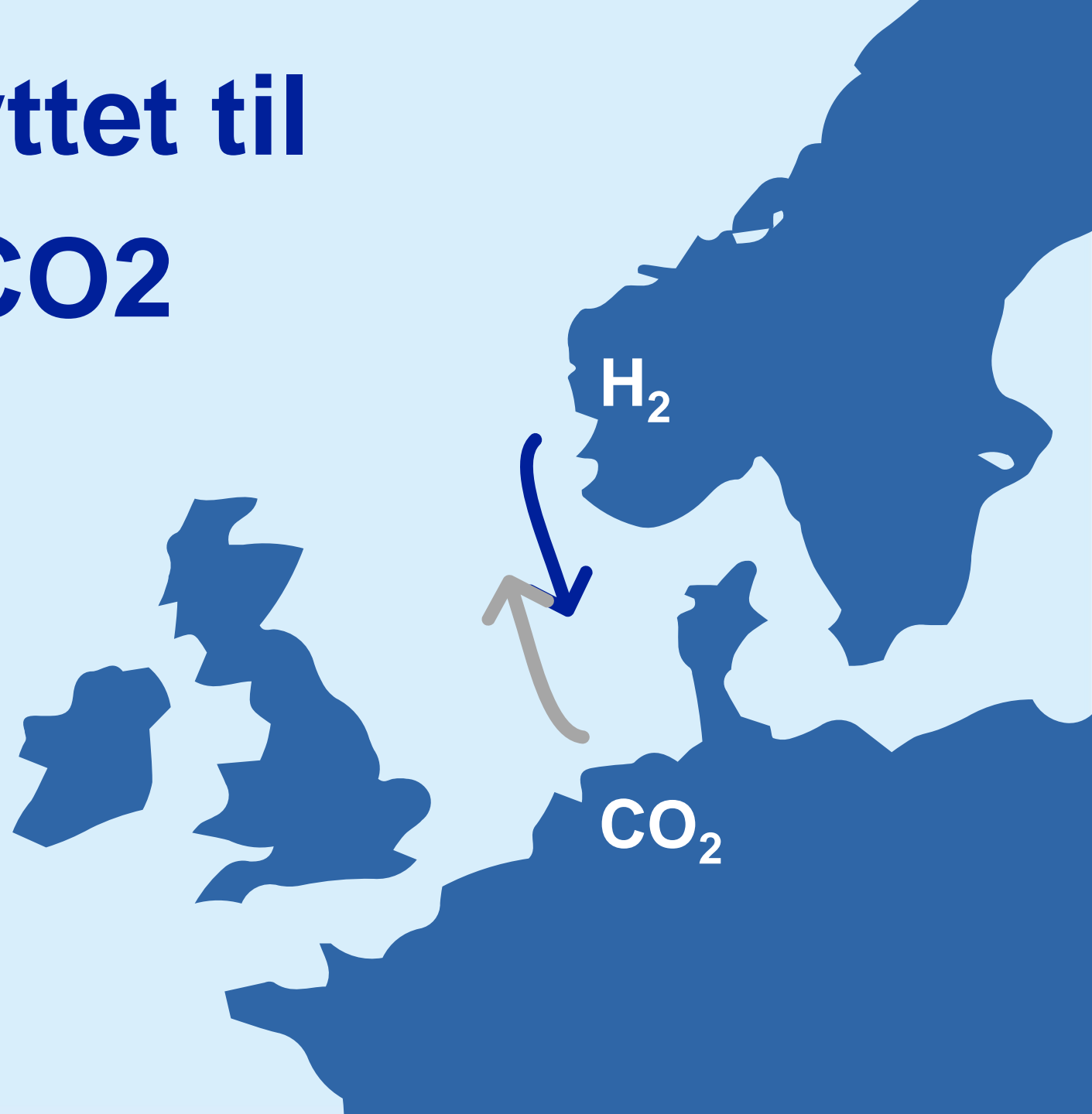


Prosjekter knyttet til hydrogen og CO₂

- Status og utfordringer

- Svein-Erik Losnegård, Gassco AS
- 30.03.2023

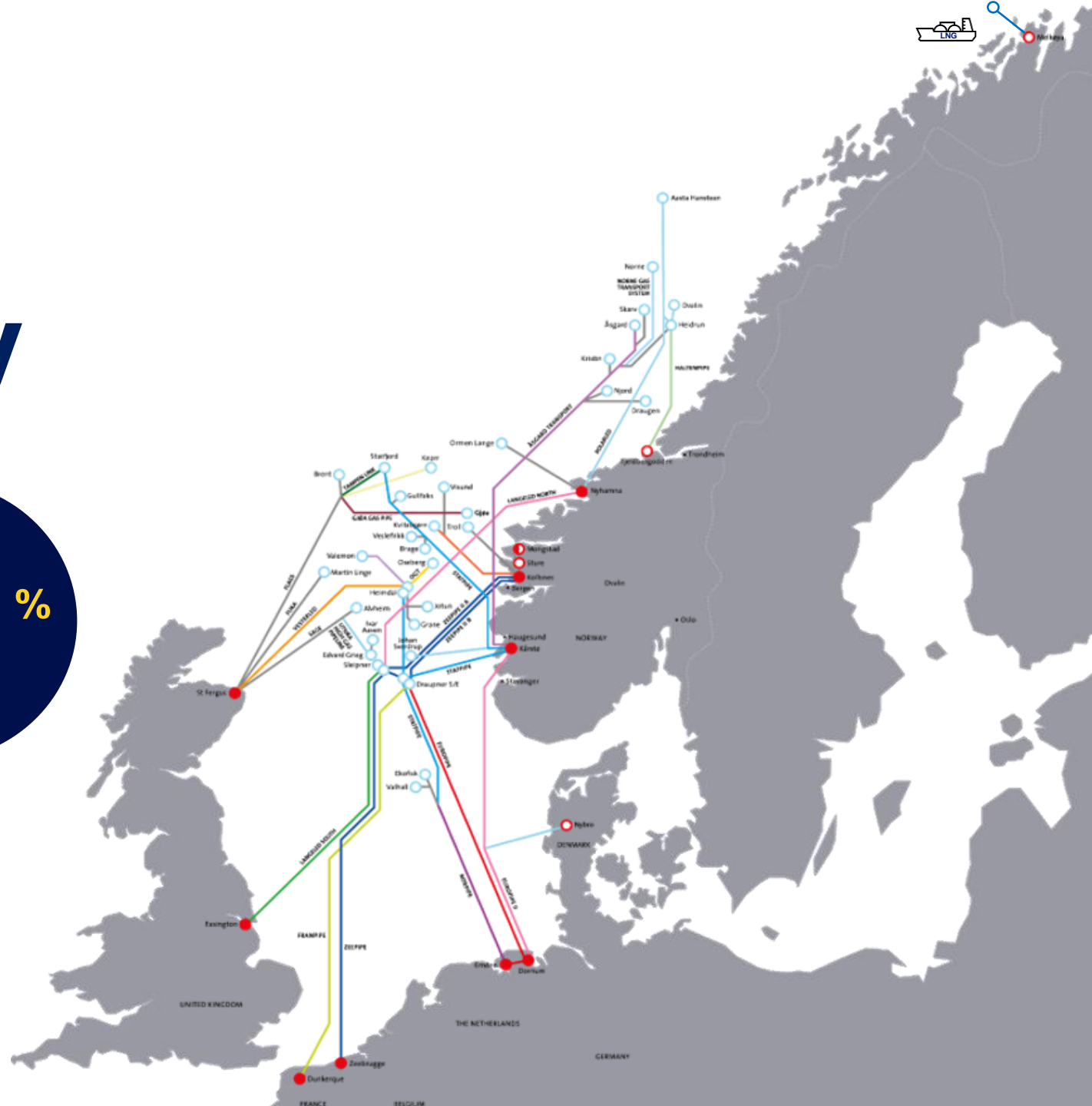


Securing Energy Supply

116,9 BCM
Gas transport

1286 TWh
Energy quantity

99,57 %
Availability





Regjeringen.no

Theme ▾ Document ▾ Applicable ▾ Department ▾ Government ▾

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[Støre met With Germany's Vice Chancellor Robert Habeck](#)

Støre met With Germany's Vice Chancellor Robert Habeck

News | Date: 3/16/2022

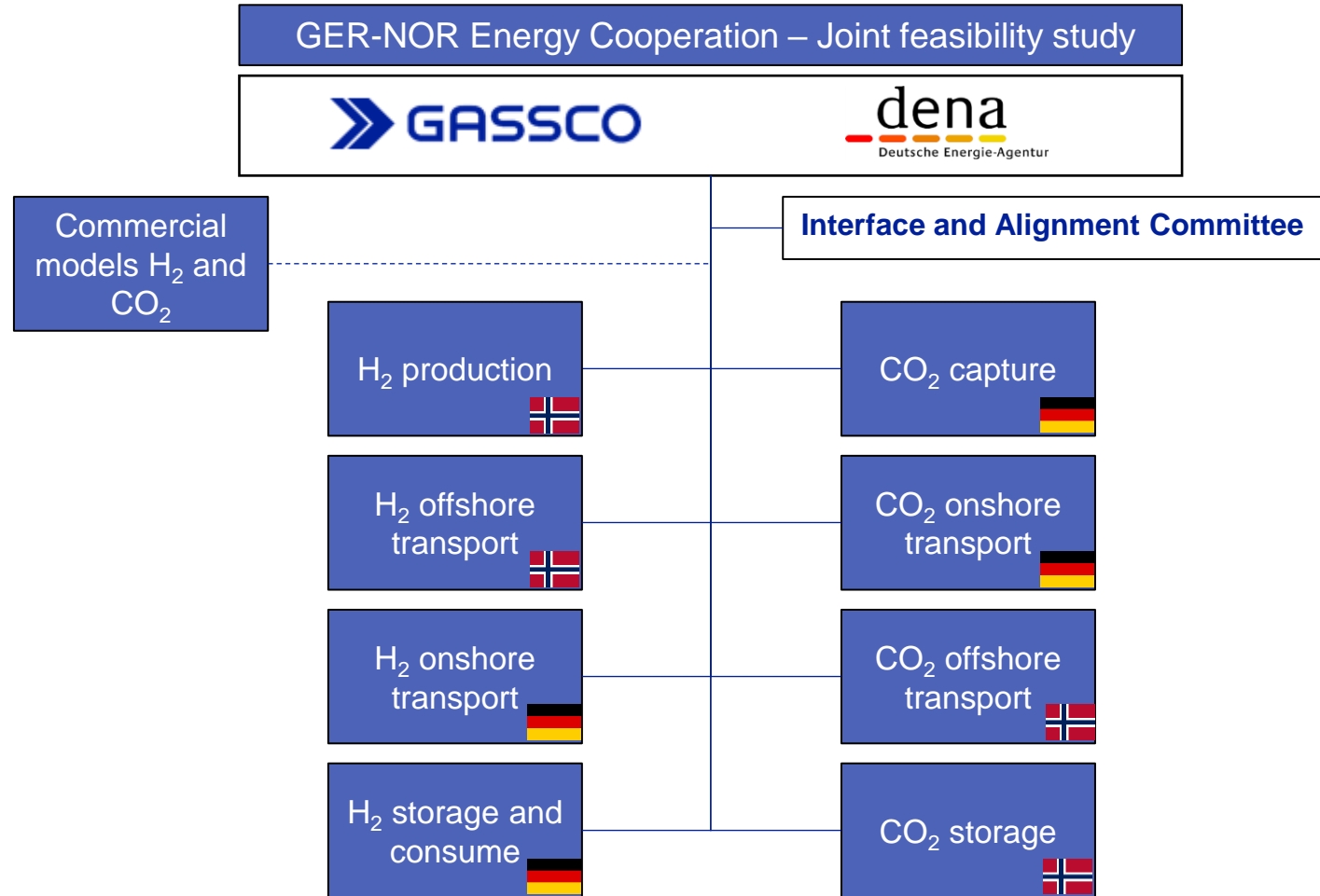
Today's meeting between German Vice Chancellor Robert Habeck and Prime Minister Jonas Gahr Støre, Minister of Trade and Industry Jan Christian Vestre and Minister of Petroleum and Energy Terje Aasland will further strengthen the close partnership between Germany and Norway on energy, climate change and industrial restructuring.

In January, Chancellor Scholz and Prime Minister Støre agreed to strengthen German-Norwegian cooperation on the green transition and establish a long-term and structured dialogue in the industrial and energy field.

«..Germany would like to see Norway become a future partner for the production and supply of hydrogen..»

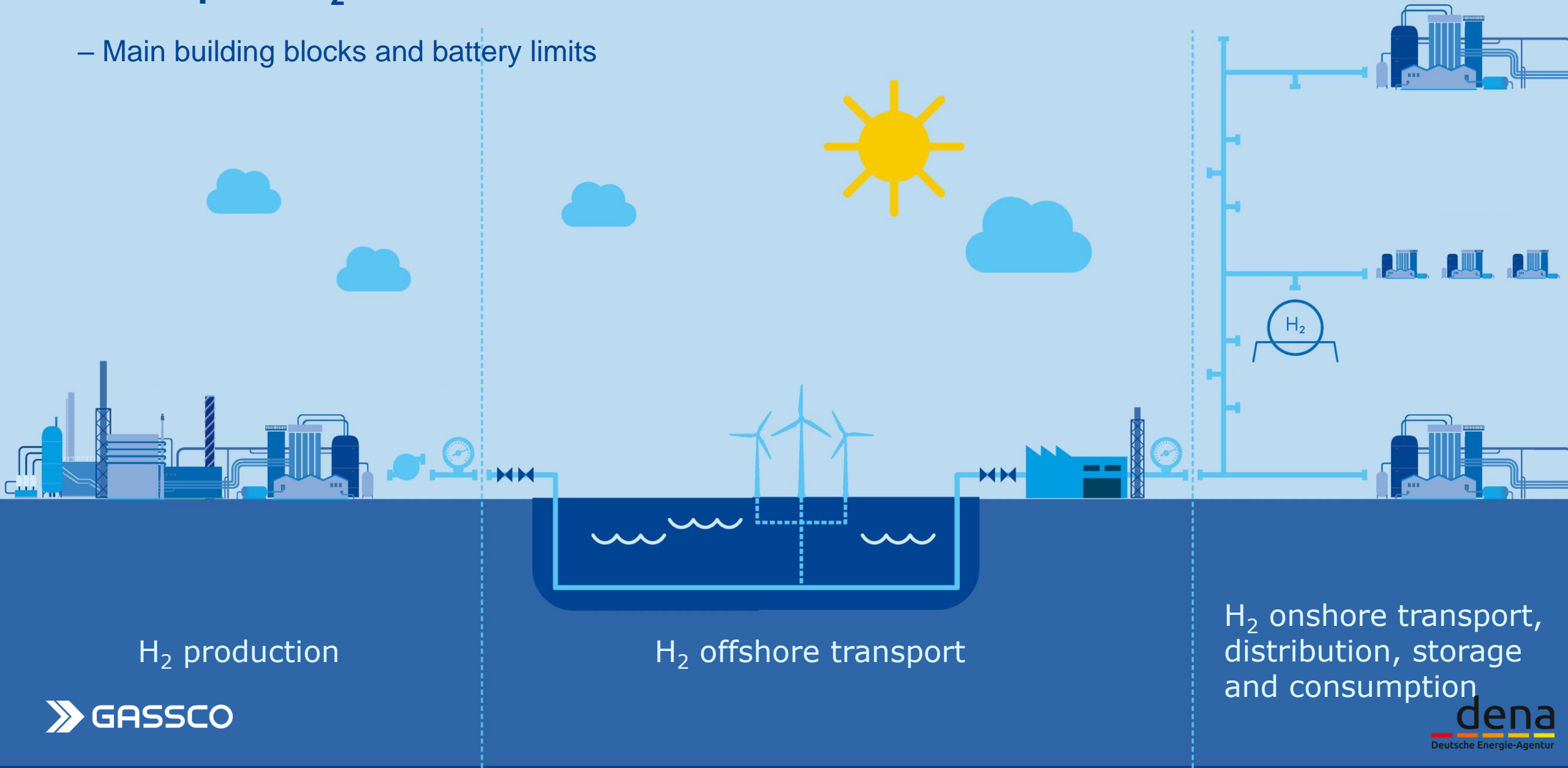
- Joint statement -

GER-NOR Energy Cooperation – Joint feasibility study



Conceptual H₂ value chain infrastructure

– Main building blocks and battery limits



H₂ production

H₂ offshore transport

H₂ onshore transport,
distribution, storage
and consumption

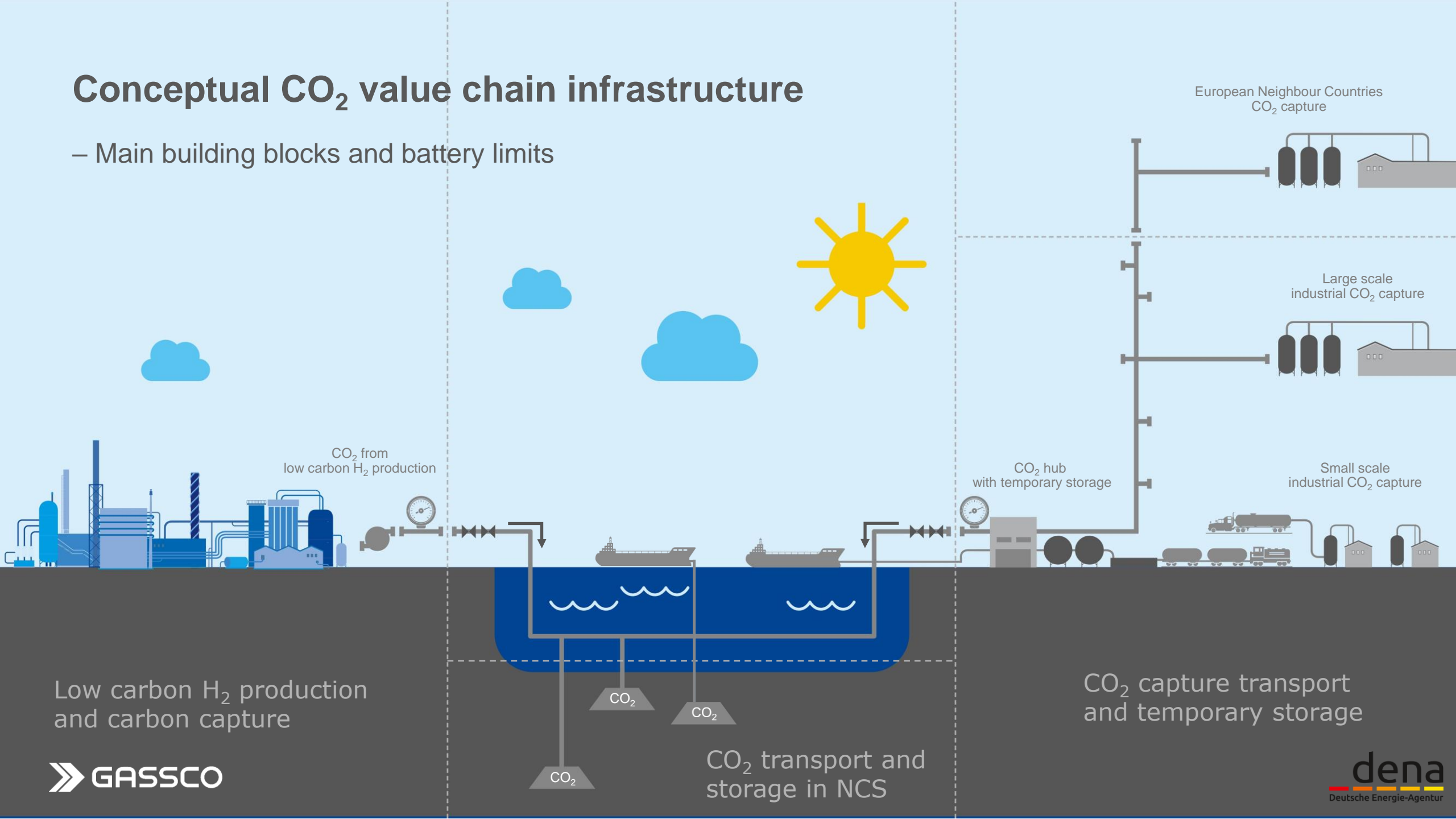
H₂ production and transport scenarios



	Repurposed pipeline
	New pipeline
	Hydrogen Reformer
	CO ₂ Storage
	Offshore Wind Park
	Hydrogen Electrolyzer
	Hydrogen Receiving

Conceptual CO₂ value chain infrastructure

– Main building blocks and battery limits



Low carbon H₂ production and carbon capture

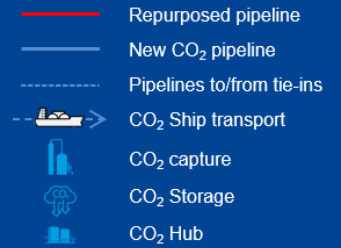
CO₂ transport and storage in NCS

CO₂ capture transport and temporary storage

CO₂ offshore transport scenarios

Overall framing of scope:

- Integrated, large scale transport solution connecting hubs in Europe to storages on the NCS
- Transport from two onshore hubs: Base case assumption is Wilhelmshaven (GER) and Zeebrugge (BEL)
- Capture volumes at hubs: 20-30 Mt/a per hub (TBD)



Alternative A (base case)

- New pipelines from hubs in Germany and Belgium to connection structure south in the North Sea
- Larger diameter pipeline from connection structure to NCS storages



Alternative B1

- Dedicated new pipelines from hubs in Germany and Belgium to NCS storages



Alternative B2:

- Repurpose EP1 for CO₂ transport from Germany
- New pipeline from hub to repurposed pipeline
- New pipeline from Draupner to NCS storages
- New pipeline from hub in Belgium to NCS storages



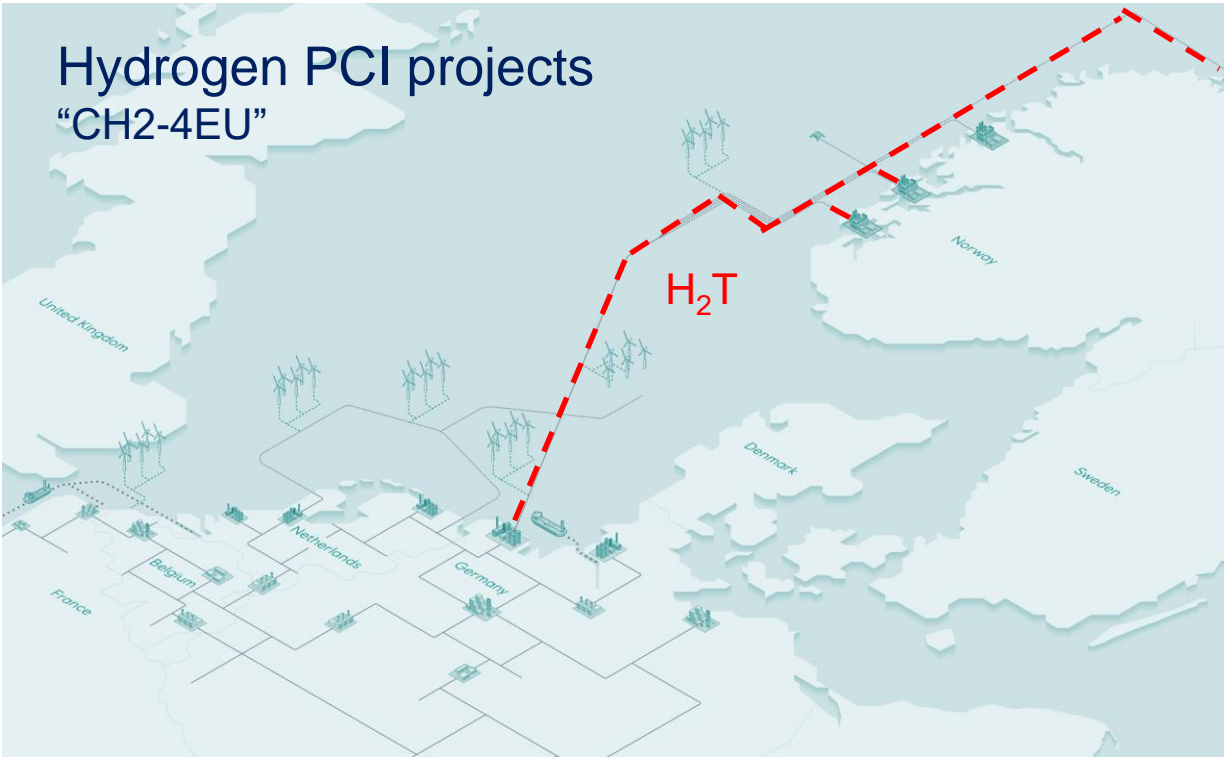
Alternative C:

- Ships from hubs in Germany and Belgium to NCS storages
- Includes loading and offloading facilities

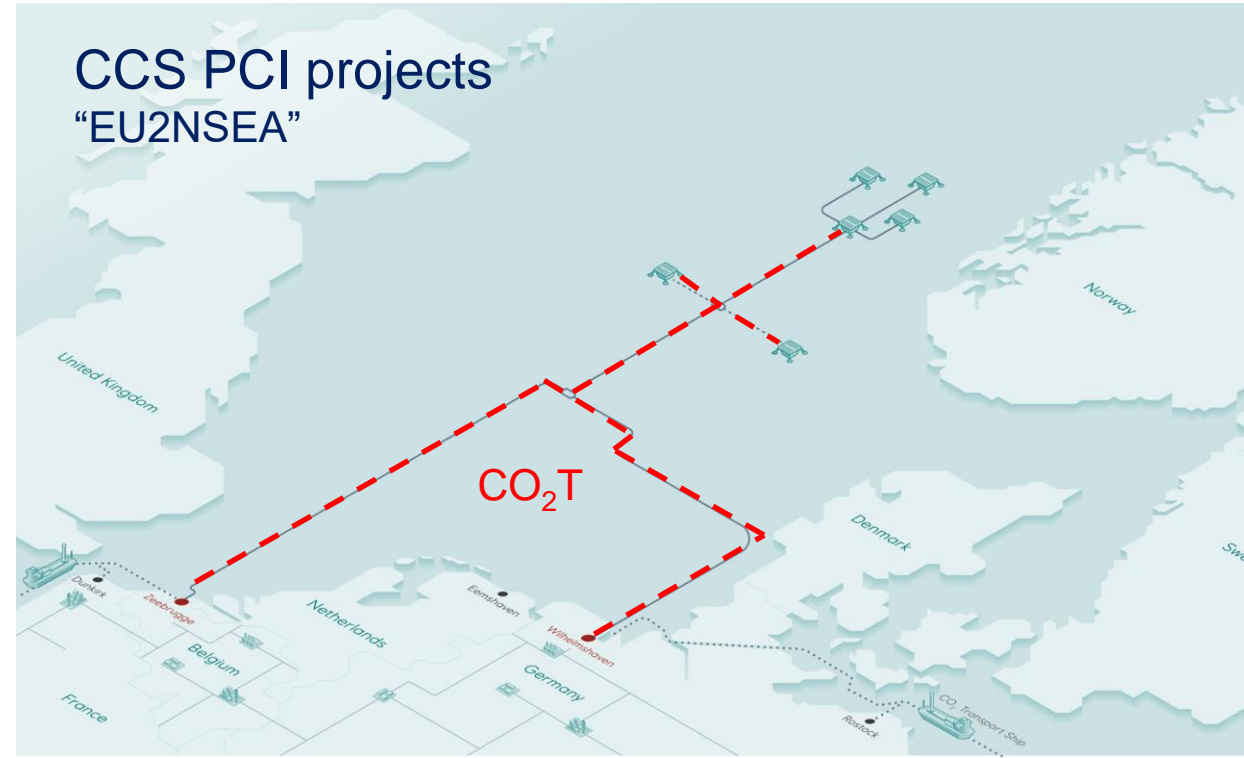


Building new value chains together

Hydrogen PCI projects
"CH2-4EU"



CCS PCI projects
"EU2NSEA"



Technology Qualification Program Hydrogen



Important areas

Compression

Materials

Metering

Monitoring

Detection

Inspection

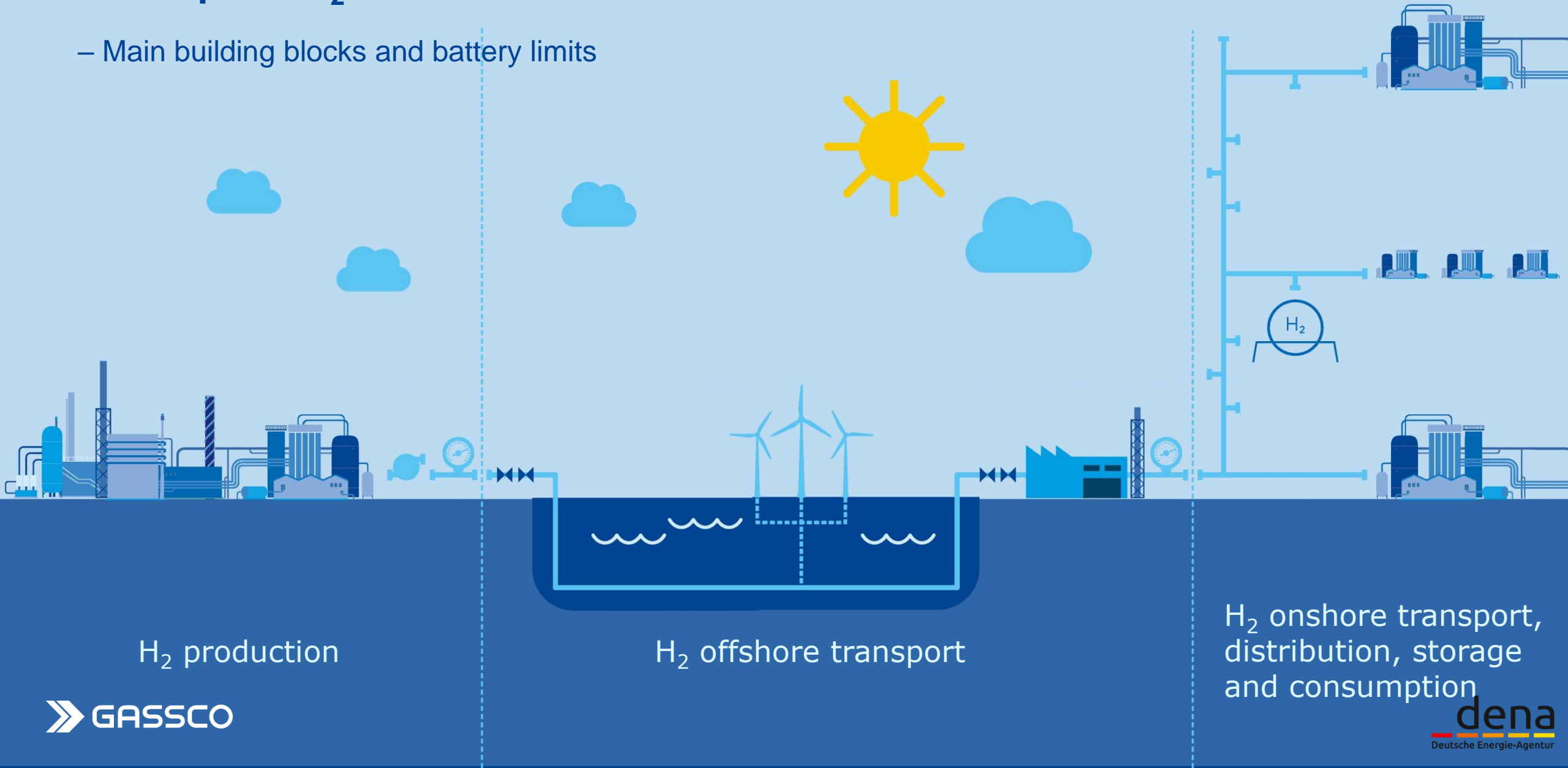
Modelling

Flow Assurance

Safety

Conceptual H₂ value chain infrastructure

– Main building blocks and battery limits



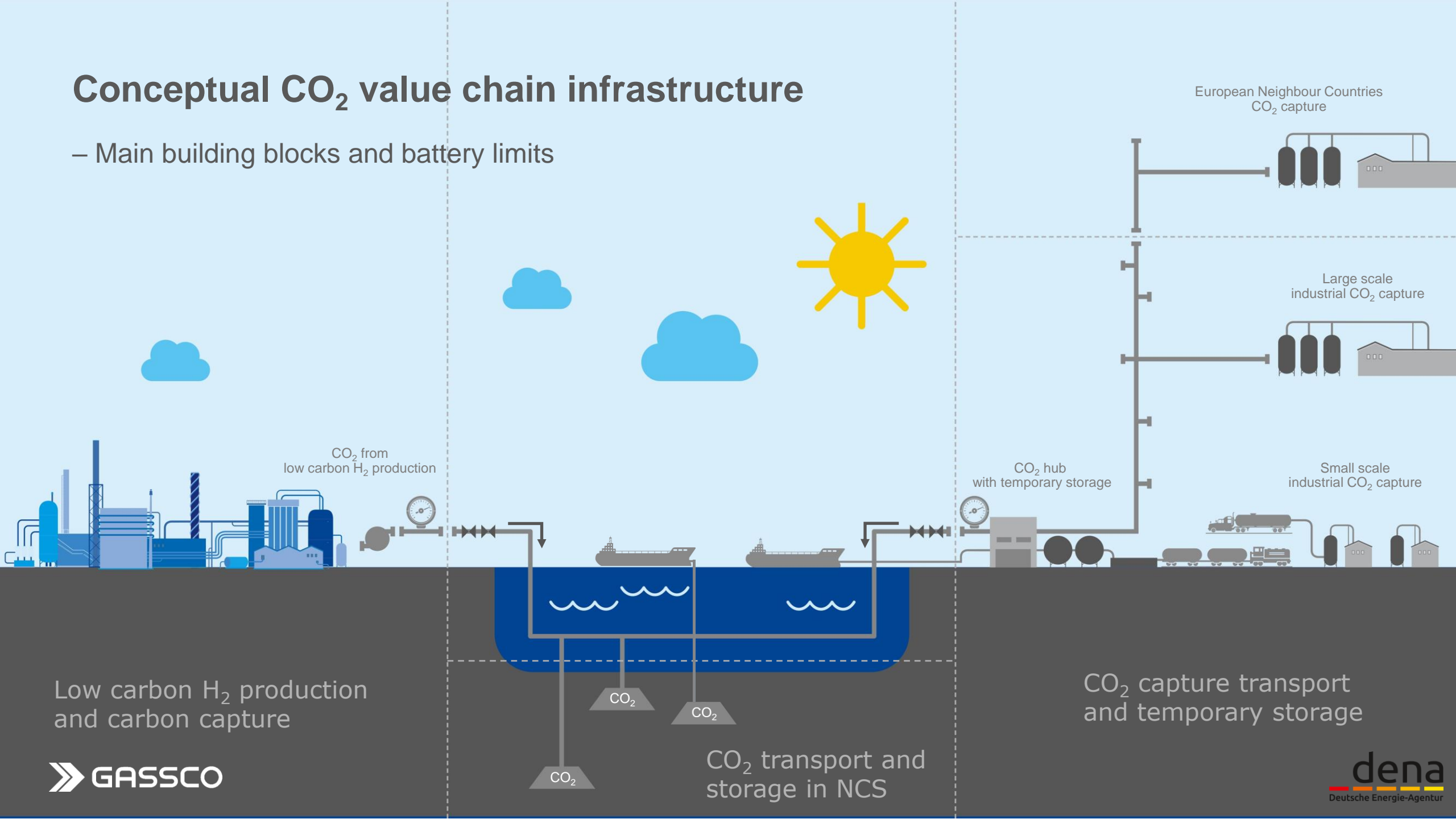
H₂ production

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Conceptual CO₂ value chain infrastructure

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Thank you

