

Success factors for accelerating the realization of the hydrogen value chain in Belgium

Transforming society together

Hydrogen and derivatives value chain

Overview



FEASIBILITY AND BUSINESS CASE
LICENSE TO OPERATE
ENGINEERING AND CONSTRUCTION

Local production

Understanding the local context is key



Heat

Oxygen

Regulatory framework and guided subsidies

Upscaling production capacity versus long lead items

Changing market approach for design & construction

GREEN H₂
PRODUCTION
25–100 MW

VOLTH2
Vlissingen Terneuzen

Import of hydrogen

Cost efficient transport mode is key



Cooperation and development in export countries

Transport mode vs conversion vs efficiency

Technology readiness level

TERMINALLING
TRANSITION
MOLECULES IN
HARBOURS

Infrastructure for distribution

Timing and permitting are key



Constructability in a dynamic and complex environment

Environmental impact versus repurposing

Open access network versus quality

LONG DISTANCE
UNDERGROUND
PIPELINES

Fluvius
Antwerp - Bluegate



Industrial consumption of hydrogen

Operational continuity is key



Regulatory and subsidy framework guarantees of origin

Modification of standard operational procedures

Nitrogen emissions and permitting



DECARBONISATION
HIGH TEMPERATURE
PROCESSES AND
FEEDSTOCK

Heavy transport consumption

Hydrogen quality is key



Fuel cost versus operational impact

Fuel cells demand high purity of hydrogen

Multimodal hubs in port areas

CONSUMPTION OF
E-FUELS IN SHIP

Decarbonisation of
DAB VLOOT

An aerial photograph of a dense, vibrant green forest. A winding river or stream flows through the center of the forest, reflecting the sky. The trees are in various shades of green, from deep forest green to bright yellow-green, suggesting a mix of species or perhaps the beginning of autumn. Soft, white mist or fog hangs in the air, partially obscuring the forest floor and creating a dreamy, ethereal atmosphere. The overall scene is peaceful and natural.

Are you ready to
transform society together?

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