Ministerie van Economische Zaken
en Klimaat

Delta Rhine Corridor

Cross-border infrastructure connecting supply and demand

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Agenda

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3 Recent Political Decisions

4 Challenges and opportunities

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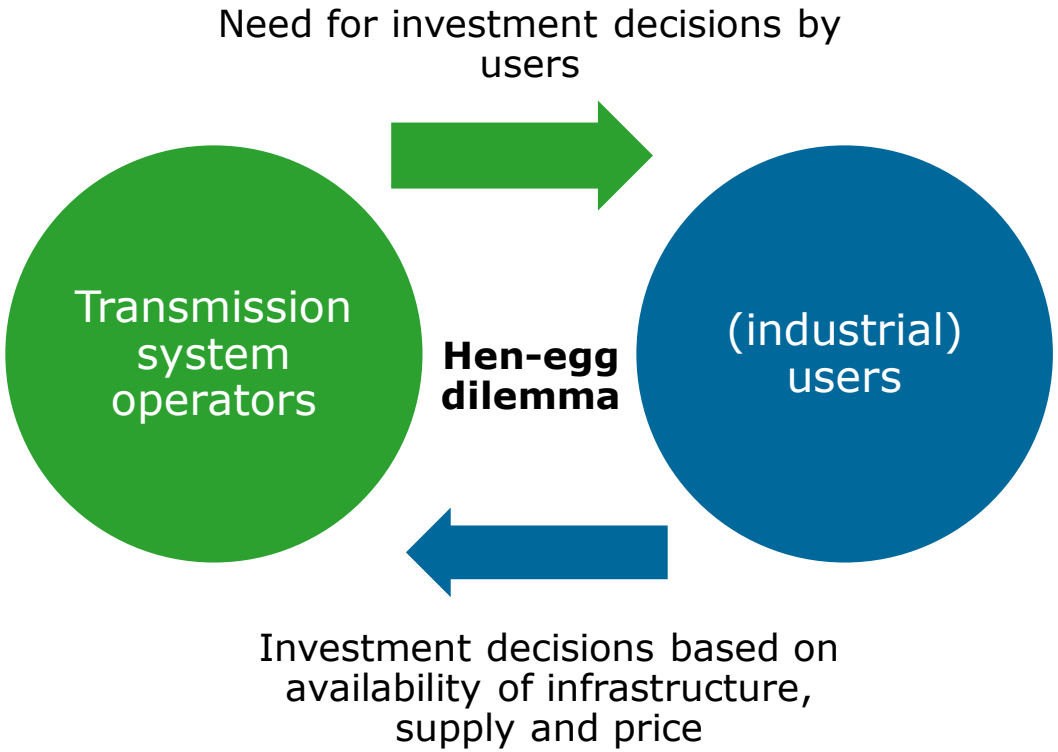
Context

- Energy transition is crucial to achieving our climate goals.
- This means a transition to varying sources of energy such as offshore wind and solar energy, nuclear power or hydrogen, supported by carbon capture and storage.
  - 2030: 70% of electricity is green
  - 2030: 4GW of h2 production growing to 8 GW in 2032
  - 2030: 19 mton industrial CO2 emission reduction via CCS
- New forms of energy require a new system of installations, pipelines and cables. A **new energy infrastructure**.

Need for acceleration

- Hen-egg dilemma delays decision-making of parties involved: TSOs and (industrial) users.
- Need for government planning and coördination on energy infrastructure:
  - Create more certainty on timely realization
  - Identify and prioritize energy projects of (inter)national importance
  - Accelerate realization of those projects.
  - Reserve space in advance for essential infrastructure, such as electrolysers, hydrogen pipelines, electricity transformation stations.



Delta Rhine Corridor

- Pipeline infrastructure from **Rotterdam** to Chemelot with a connection to **Germany** via Venlo (or existing gas IPs)
- Pipelines for hydrogen and CO2 and DC cables. Focus in Germany on hydrogen and CO2.
- Consortium of Gasunie, Tennet, OGE, Shell and BASF
- Length: +/- 270 km in Netherlands and +/- 450 km in Germany
- Planned startup end 2028 in The Netherlands
- Spatial reservation in energy infrastructure corridors
- Volumes (Mton in 2040)

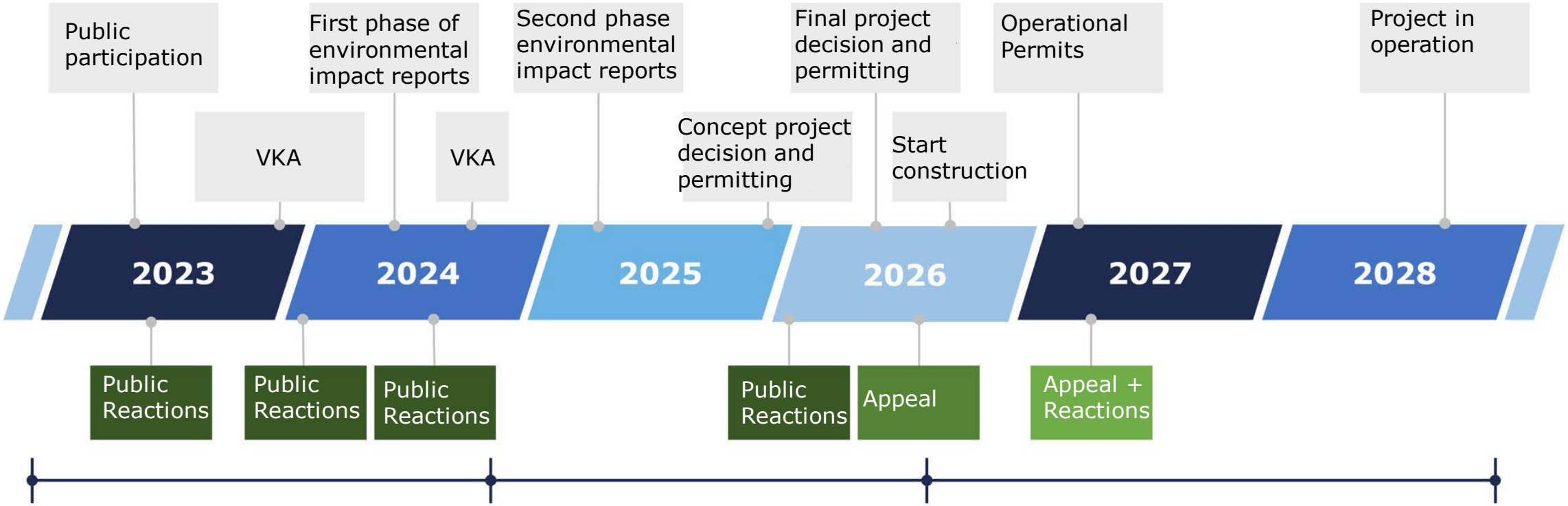
	Netherlands	Germany
CO2	5,5	9,4
Ammonia	6,1	16,8
Hydrogen (year 2030, source social cost benefit analysis phase 1)	0,13	0,62

(source: draft social cost benefit analysis DRC)

Government support

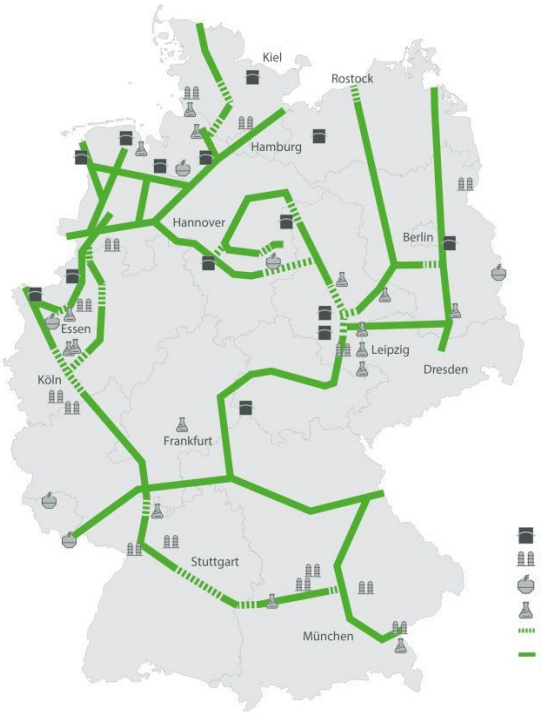
- TSOs and private sector are project initiators and will build and operate pipelines and cables
- DRC public project department to help solve the hen and egg problem by **acceleration** of planning and realization.
- 4 support tracks:
  - Spatial planning procedure under national supervision (Government Co-ordination Scheme)
  - Exploration of options for financial support
  - International collaboration
  - Internal policy advocay

Spatial planning in government coordination scheme



International collaboration

- Focus in Germany on H2 and CO2
- Set-up crossborder cooperation between authorities in both countries aimed at:
  - Political support (all levels)
  - Favourable policy conditions for H2 and CO2 (focus on federal level)
  - Alignment of planning (States North Rhine Westphalia and Rhineland Palatinate)
- Close cooperation with border region North Rhine Westphalia: regular high-level meetings to monitor progress



Recent political decisions

- Government decision on September 18:
  - Narrow support for scope of DRC to: hydrogen, CO2 and direct current. Leave out LPG, propene and natural gas.
  - Keep ammonia in the spatial planning process, to keep space for a future pipeline. Further develop a policy framework for ammonia transport.
- Explore options for crossing Hollands Diep, including financial mechanisms.
- Strengthen bilateral cooperation with Germany: first step is signing of Joint Declaration of Intent by the Netherlands and Northrhine Westphalia, with the aim to express bilateral support for the project,

Challenges and opportunities

DRC

- Interaction pipelines and DC cables
- Issuemanagement spatial planning energy infrastructure corridor
- Regional support
- Business case leading to FID for individual pipelines
- Lack of ammonia policy and external safety framework

Supply chain

- Decarbonization of industry through tailor-made approach
- Ramp-up European hdyrogen market (price, volumes and purity)
- Connecting CO2 storage facilities to inland industry (via Aramis)
- H2 import terminals, purchasing contracts (H2 Global) and cracking facilities

Next milestones

- Signing of Joint Declarations of Intent by King Willem Alexander in Northrine Westphalia in November 2023
- Spatial planning milestone [cNRD] expected Q1
- Government meeting on DRC progress in Q2
- Next steps in Germany:
  - Legal framework H2 and CO2
  - Start spatial planning procedures in Germany by OGE

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More info?

www.rvo.nl/onderwerpen/bureau-energieprojecten/lopende-projecten/drc

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Thanks for your attention

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