

Regulatory frameworks for CO₂ infrastructure

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Simple transfer of existing approaches to regulating (gas) networks is not suitable for the new CO₂ infrastructure

Governments' toolbox to render new CO₂ infrastructure affordable and investable



Risk premia

- Higher **allowed returns** compared to other networks
- „**Limited**“ regulation, e.g. cap and floor
- Pure **merchant** approach



Government support

- State **subsidises network cost** (e.g. capex subsidy, direct payment)
- State **subsidises network users/ CCS** projects
- **State investment** in network



Risk mitigation

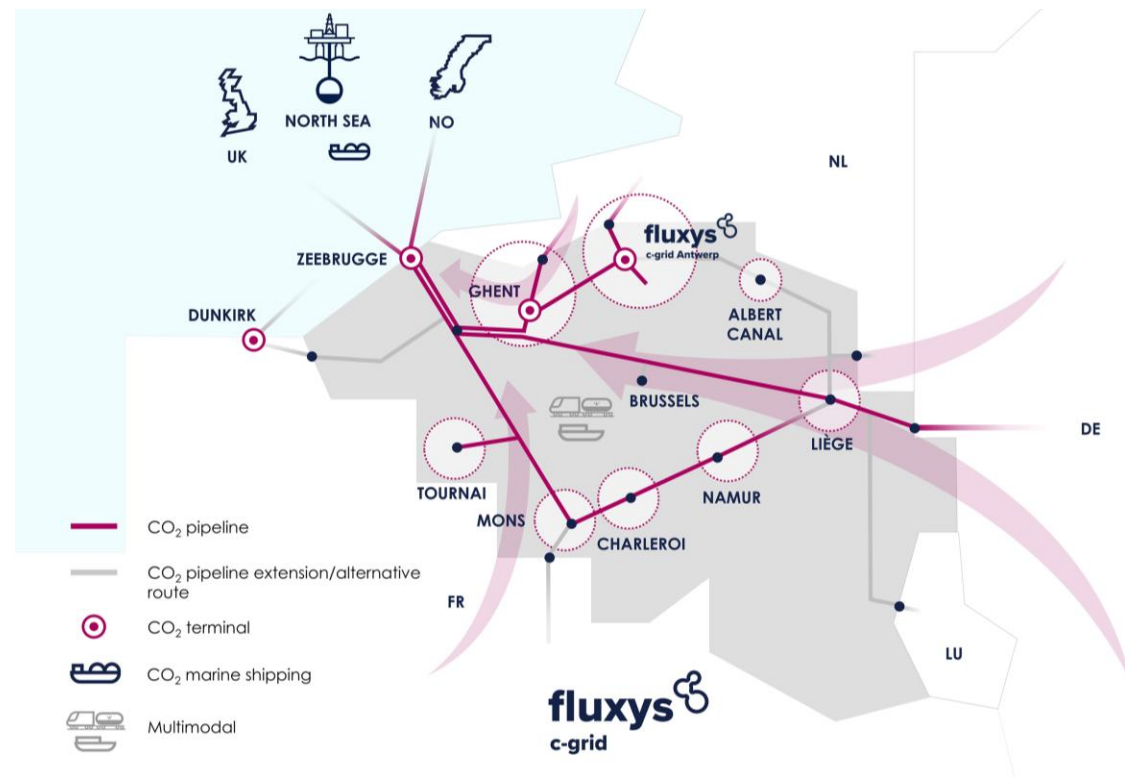
- Accounting for **ramp-up phase** in regulatory framework, e.g. with ITCA, state guarantee for regulatory account, cross-subsidisation
- **Capacity bookings** by the state
- **State guarantees**

- What are key country characteristics, what are the perimeters of the planned networks and how big is the funding gap?
- Impact of macroeconomic developments (EU ETS) on demand development and willingness to invest
- Required risk allocation and mitigation for development of CO₂ infrastructure

Combined measures can be necessary - approaches vary across countries

Example Wallonia: Regulatory framework has to account for the regional characteristics of the region

Belgium as hub for CO₂ transit and export



Source: Fluxys

Characteristics Walloon network development

- Landlocked location and no own storage facilities leads to dependence especially on Flemish ports and network development
- No existing infrastructure and high initial investments in transport system necessary
- Multiple clusters with hard-to-abate industries in varying distance to the connection point with Flanders
- Potential for transit flows from North-Western Germany via own transit pipeline corridor
- Uncertainties regarding development of demand in Wallonia and adjacent countries and storage/ export options (“Chicken-and-Egg” Problem?)
- Regulator CWaPE has mandate to develop a tariff methodology

Tariff methodology must be tailored to the Wallonia’s location, expected flow developments and dependencies

Walloon regulation is progressing: Consultation of CO₂ pipeline tariff methodology just closed

Allowed revenues: Cost plus regulation

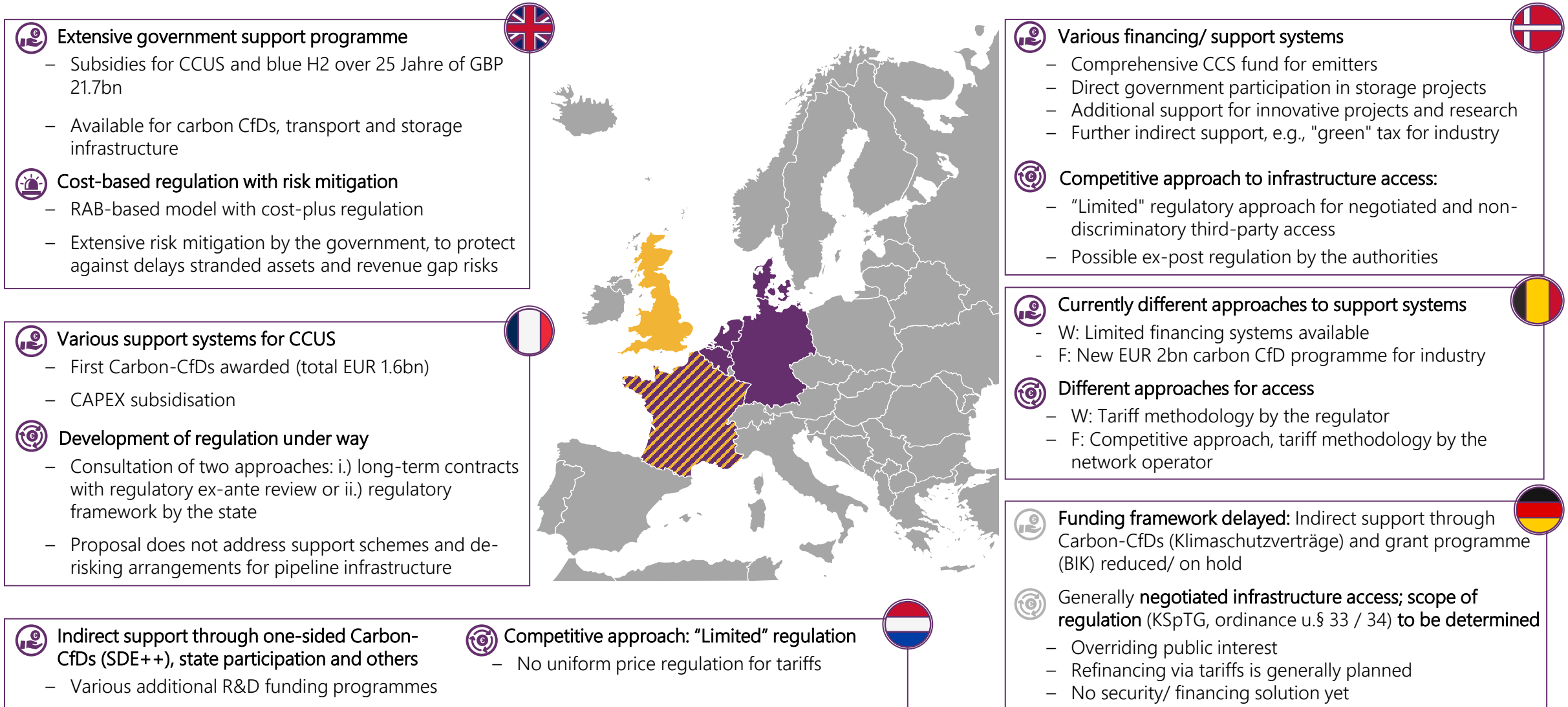
- Common in network regulation allowing network operators to recover their cost plus a fair return on investment
 - Limited incentive for cost efficiency during ramp-up phase
- WACC proposed at 7.065%
- RAB based on 10y network development plan with annual ex-post cost assessment
- Regulatory accounts: i.) initial funding gap between cost and budgeted ITCA returns and ii.) annual regulatory balance

Tariff design

- Uniform tariff
- Intertemporal cost allocation mechanism and periodical tariff revisions to manage ramp-up and burden on early users
- Tariffs may vary by max. +/- 2.5% p.a. (excl. inflation)
- Specific rules for RP1 (May 2026- Dec 2031):
 - Max. tariff increase of 15%
 - No connection fees
- Penalties for non-development/ non-operation of the network

CWaPE i.) acknowledges policy-driven investments and ii.) seeks to balance (future) interests of network operators and users during ramp-up phase

Most states currently try to develop a CO₂-transport infrastructure using a market-based approach combined with government support



- Extensive government support programme**
- Subsidies for CCUS and blue H₂ over 25 Jahre of GBP 21.7bn
 - Available for carbon CfDs, transport and storage infrastructure
- Cost-based regulation with risk mitigation**
- RAB-based model with cost-plus regulation
 - Extensive risk mitigation by the government, to protect against delays stranded assets and revenue gap risks

- Various support systems for CCUS**
- First Carbon-CfDs awarded (total EUR 1.6bn)
 - CAPEX subsidisation
- Development of regulation under way**
- Consultation of two approaches: i.) long-term contracts with regulatory ex-ante review or ii.) regulatory framework by the state
 - Proposal does not address support schemes and de-risking arrangements for pipeline infrastructure

- Indirect support through one-sided Carbon-CfDs (SDE++), state participation and others**
- Various additional R&D funding programmes

- Competitive approach: "Limited" regulation**
- No uniform price regulation for tariffs

- Various financing/ support systems**
- Comprehensive CCS fund for emitters
 - Direct government participation in storage projects
 - Additional support for innovative projects and research
 - Further indirect support, e.g., "green" tax for industry
- Competitive approach to infrastructure access:**
- "Limited" regulatory approach for negotiated and non-discriminatory third-party access
 - Possible ex-post regulation by the authorities

- Currently different approaches to support systems**
- W: Limited financing systems available
 - F: New EUR 2bn carbon CfD programme for industry
- Different approaches for access**
- W: Tariff methodology by the regulator
 - F: Competitive approach, tariff methodology by the network operator

- Funding framework delayed:** Indirect support through Carbon-CfDs (Klimaschutzverträge) and grant programme (BIK) reduced/ on hold
- Generally negotiated infrastructure access; scope of regulation (KSpTG, ordinance u.§ 33 / 34) to be determined**
- Overriding public interest
 - Refinancing via tariffs is generally planned
 - No security/ financing solution yet



Kontaktieren Sie uns gerne

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