

# The road towards net-zero: Instruments and Pathways for CDR

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# Perspectives Climate Group

- 25 years of experience in climate policy-related work with strong expertise in the design of market mechanisms, climate finance and national and international climate policy solutions
- Multi-cultural team with diverse academic backgrounds and convincing project management capacities
- Delivery of high-quality, tailor-made consultancy services on:
  - Paris Agreement Article 6 mechanisms, CDM and voluntary markets
  - National climate policies (NDC revision and implementation)
  - Climate finance (e.g., GCF)
  - Climate negotiation support, policy instruments, UNFCCC framework)
  - Adaptation
- Close link to independent academic research due to affiliations to universities and the non-profit arm Perspectives Climate Research (PCR)



# Agenda

I. Background

II. Policy Instruments for CDR

III. How to evaluate Policy Instruments

IV. Pathways to scale up CDR

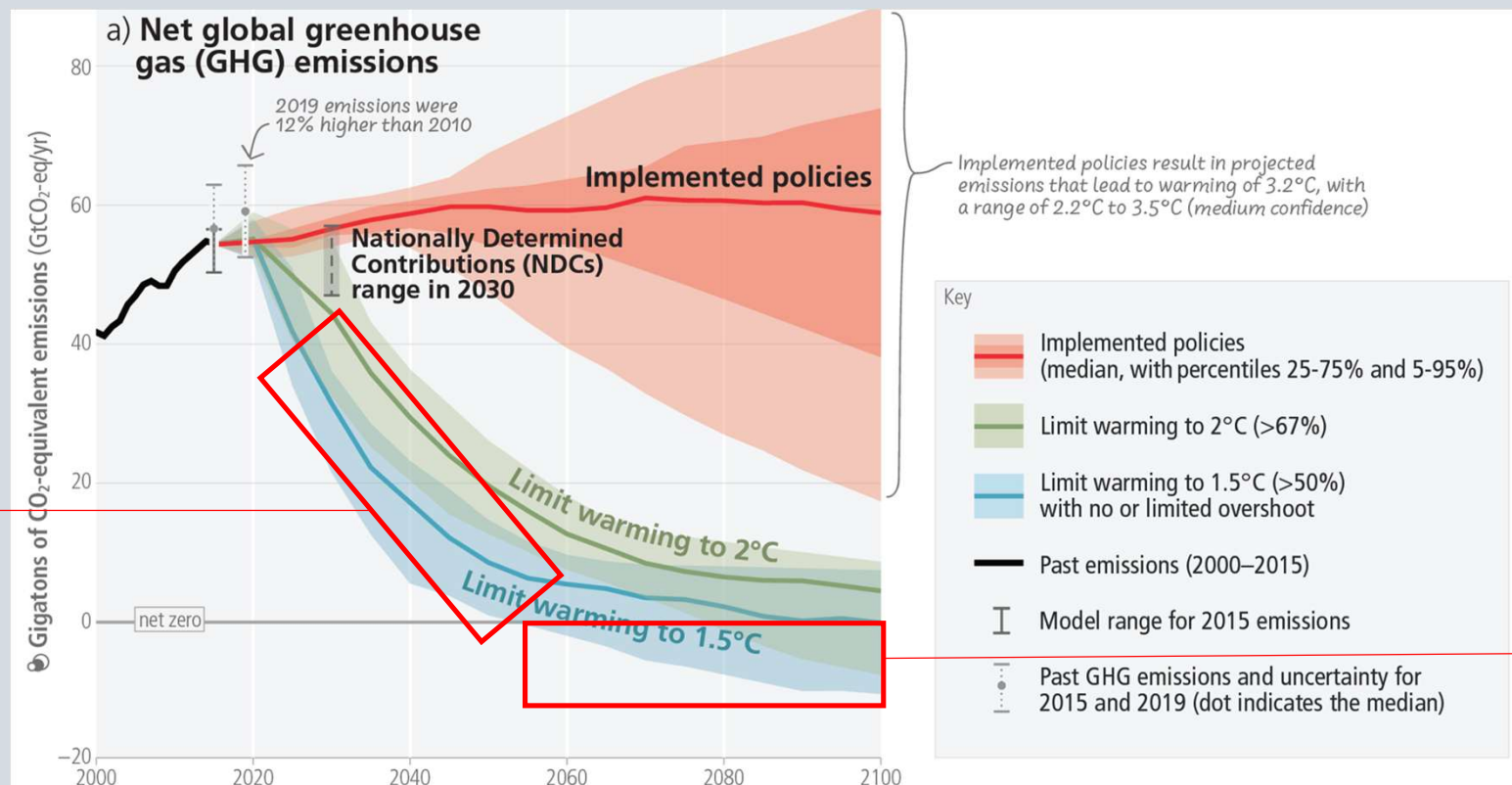
# Take-Home-Messages

- CDR is needed to achieve Paris goals  
→ It´s not „if“, but „how“ to govern CDR
- Heterogeneous policy instruments are available for CDR
- Assessment of policy options is complex and depends on circumstances (objectives, geographies etc.)
- Sequencing of policy instrument (mixes) will be required to scale up CDR

# I. Background

# Why do we need CDR?

- CDR represented in IPCC scenarios reaching Paris Agreement's temperature goals



Quelle: IPCC (2023) AR6 Synthesis Report

Net-negative



# Tackling the issue with science: CDRterra



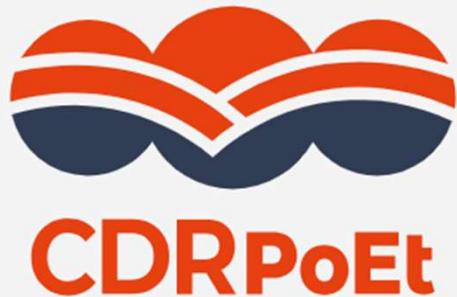
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- German Ministry for Research and Education (BMBF) set up 21 Million EUR funding line [CDRterra](#)
- CDRterra analyses political, ecological, technological, and societal questions associated with CDR methods
- 2021-2025
- 10 individual projects focus on different aspects of CDR under the funding line
- Many articles, fact sheets, policy briefs etc. [published](#) → database for CDR

# Policies and Ethics: CDRPoEt

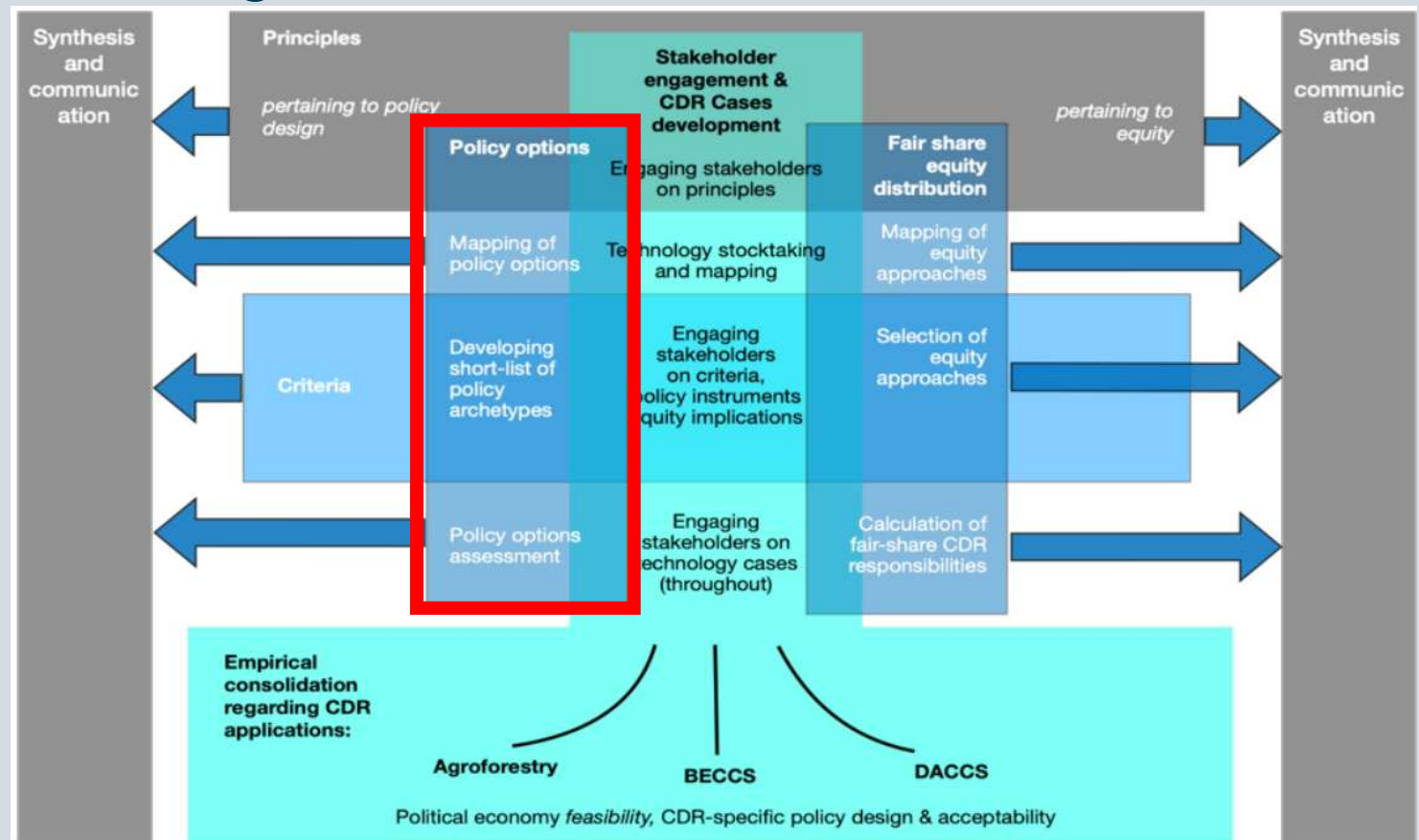


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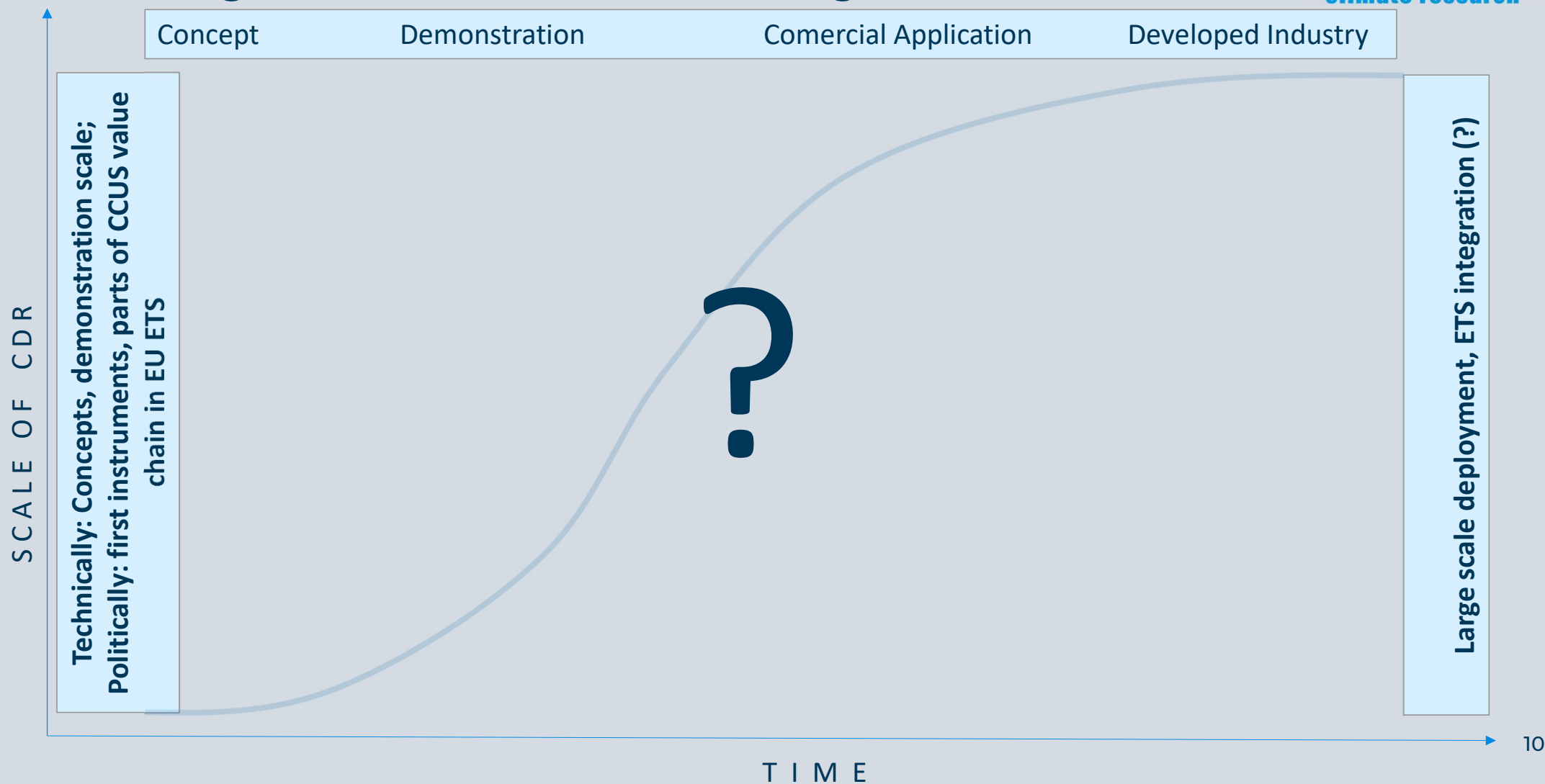
- Focus on political and ethical considerations in CDR governance





## II. What policy Instruments are available to govern CDR?

# Challenge: From low-scale to large-scale CDR



# Policy Instruments for CDR

- CDR policy instruments must comply with ethical dimensions ([Honegger et al., 2022](#)):
  - fair sharing of costs and benefits
  - environmental effectiveness
  - Feasibility
  - participation
  - alignment with SDGs
- Policy Instrument classifications and assessment frameworks so far focus on emission reductions (not removals)
- CDR presents unique challenges (e.g., permanence, reduction deterrence) requiring specific assessment and analysis



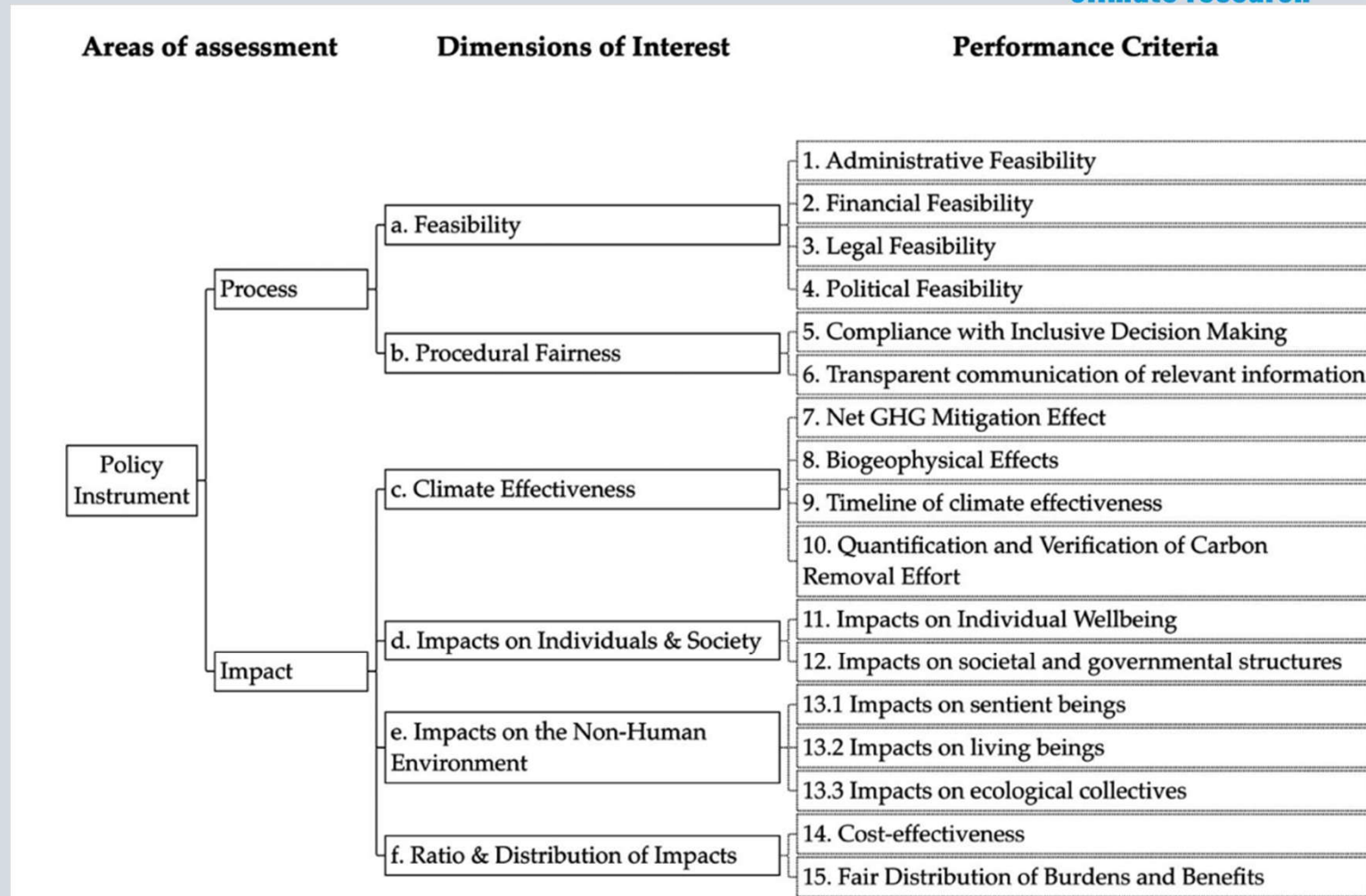
# III. How can we evaluate policy instruments?

# Evaluation of Policy Instruments

- Each policy instrument can be evaluated along a set of criteria
- This can help identifying those instruments serving the respective **political objective, circumstances, CDR method...**  
**=> objectives etc. need to be defined first!**

# Assessment Framework

- Covers
  - **FEASIBILITY** (what can we do?)
  - **DESIRABILITY** (what do we want to do?)
- Distinguishes
  - process
  - Impact
- Tool for structuring, reasoning, deciding, communicating



**Figure 1.** Assessment Framework for Policy Instruments Governing CDR.

Source: [Holland-Cunz and Baatz \(2025\)](#)



# Application example

Example: SWOT analysis for „Carbon Contracts for Difference“ (exemplary results)

## Strengths

- Publically acceptable (two way system avoids windfall profits, burden shared between public and private finance) (Feasibility, Distribution of Impacts)
- End date defined → no „open-end funding“, incentive to drive down costs (Feasibility, Climate Effectiveness)
- Create sustainable demand-pull → scale up CDR solutions (Climate Effectiveness)

## Opportunities

- Functioning ETS market offers sustainable business case for CDR providers (Feasibility, Climate effectiveness)
- Scale up creates job opportunities, tax revenues etc. (Impacts on Individuals+Society)
- Offsetting opportunity for hard to abate sectors (Distribution of Impacts)

## Weaknesses

- Burden on public finance + tax payers (Impacts on Individuals+Society)
- Adding subsidized mitigation options into ETS leads to interference with markets → inefficient use of mitigation options (Climate Effectiveness)

## Threats

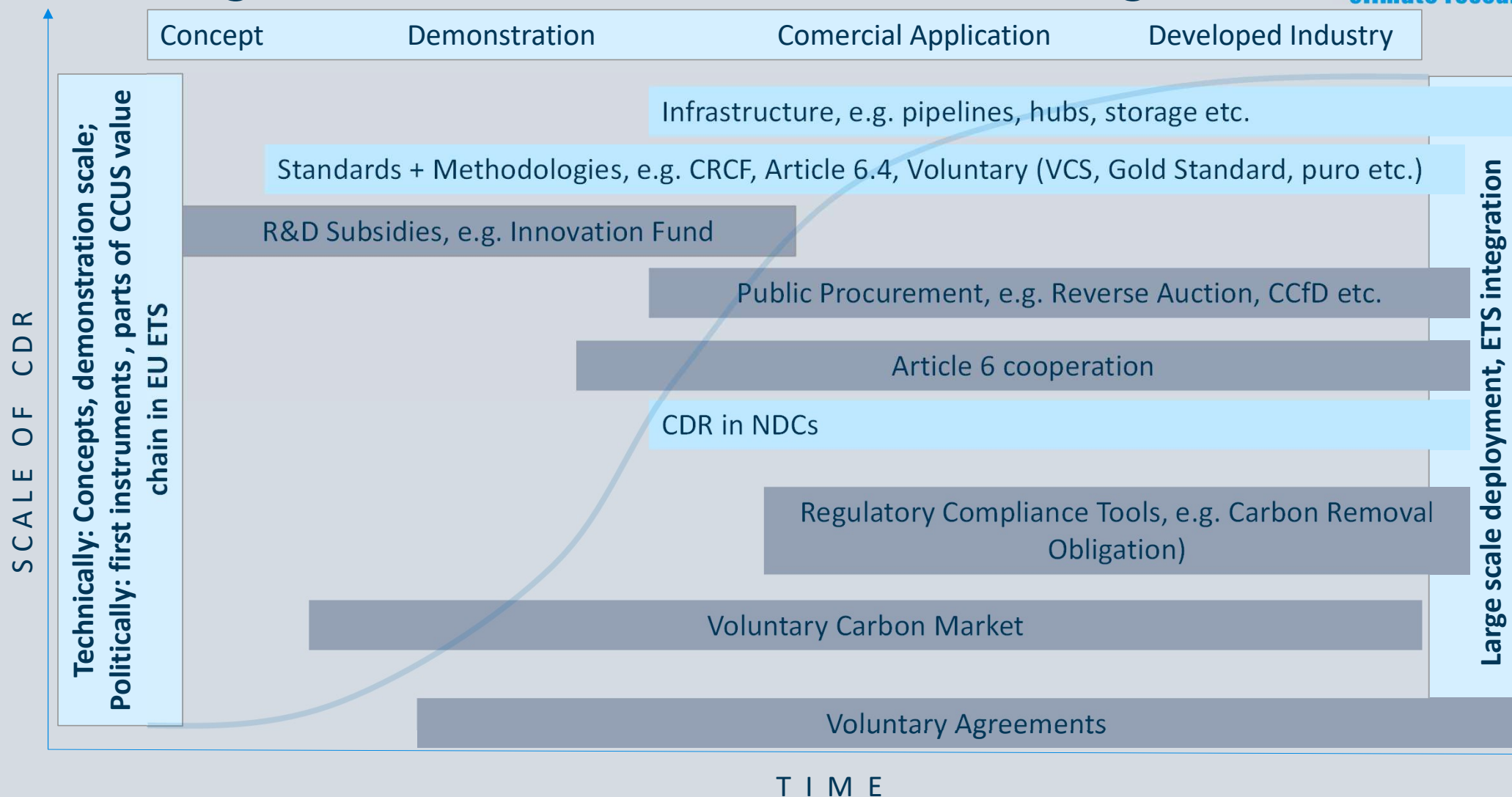
- Later integration of CDR into ETS could lead to „mitigation deterrence“ (Feasibility, Climate Effectiveness)
- Failure to lower costs could lead to stranded assets (and potentially continuation of public support) (Feasibility, Climate Effectiveness)
- Offsetting could lead to continued use of fossil fuels (Distribution of impacts)

## IV. Pathways to scale up CDR

# Sequencing CDR Policies

- There ´s no “silver bullet” instrument
- Tradeoffs between dimensions (+ criteria)
- Portfolio of instruments cushions risks and costs, and expands advantages and synergies
- Depending on timelines, targeted CDR methods, policy objectives etc., a **sequence of policy instruments** is required

# Challenge: From low-scale CDR to ETS Integration



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Thank you for your attention!

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