

# CCUS policy developments in NRW and Germany

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**NRW.ENERGY  
4CLIMATE**

Landesgesellschaft  
für Energie und Klimaschutz



Carbon Storage Dialogues: Cross border  
16. February 2023, Utrecht

# Agenda

- Some (new) institutional elements for developing and implementing NRW climate policy
- Strategies for carbon management in NRW
- 2023 CCUS Policy Timeline
- Preview: German Carbon Management Strategy Process

... is the **State Agency for Energy and Climate Protection** of the state North Rhine-Westphalia and

... our goal is hence the **transformation to climate neutrality** in North Rhine-Westphalia



**Start:** January 2022



**Employees:** >80 (and growing)



**Stakeholders:** politics, businesses, municipalities, educational institutions



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... identifies required **innovations** and **policy frameworks**

... involves **engaged** actors in **scalable** projects

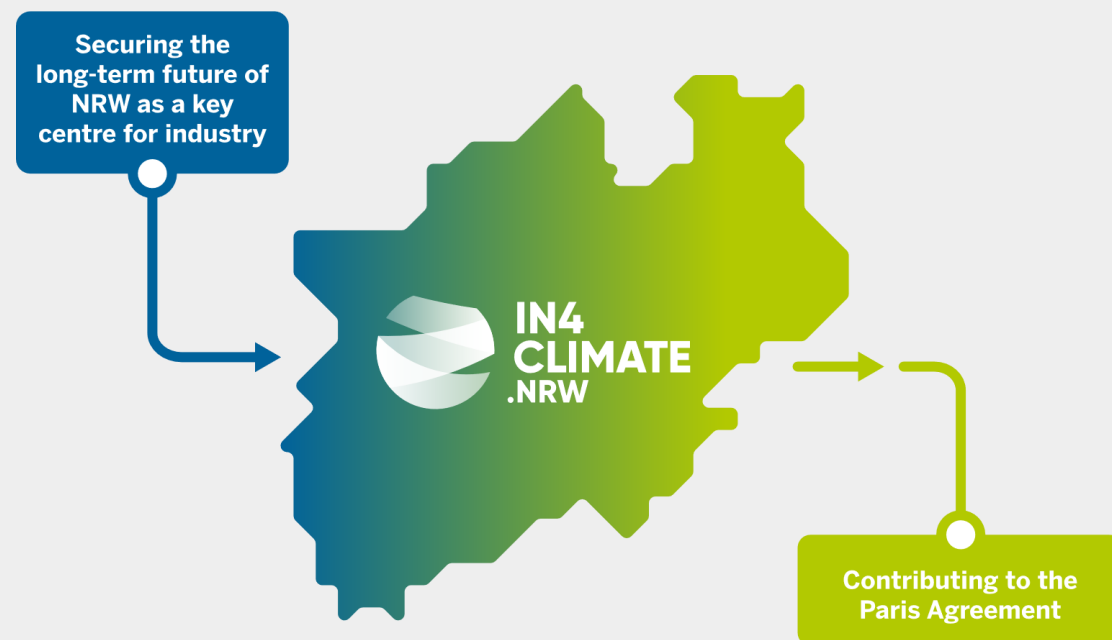
... **informs** and **raises awareness**

... is responsible for the **climate protection activities** of the state of NRW and

... **unites** politics, economy, science and society in a **joint discourse**

# Initiative IN4climate.NRW

## What are our goals?



## Who are we?



# Science backed discourse



## 4 Research fields:

- Technologies and infrastructure
- Products and value chains
- Scenarios and transformation pathways
- Economic and political framework conditions

## Consortium:



# Working group set-up



Hydrogen



Carbon dioxide economy



Political framework



Industrial process heat



Circular Economy



Permit procedure

Forum Innovation-Team

# Carbon management: alternative carbon sources and closed carbon cycles



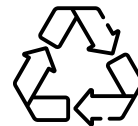
## Industrial transformation: more than H<sub>2</sub> instead of carbon



→ Decarbonisation



→ Defossilisation

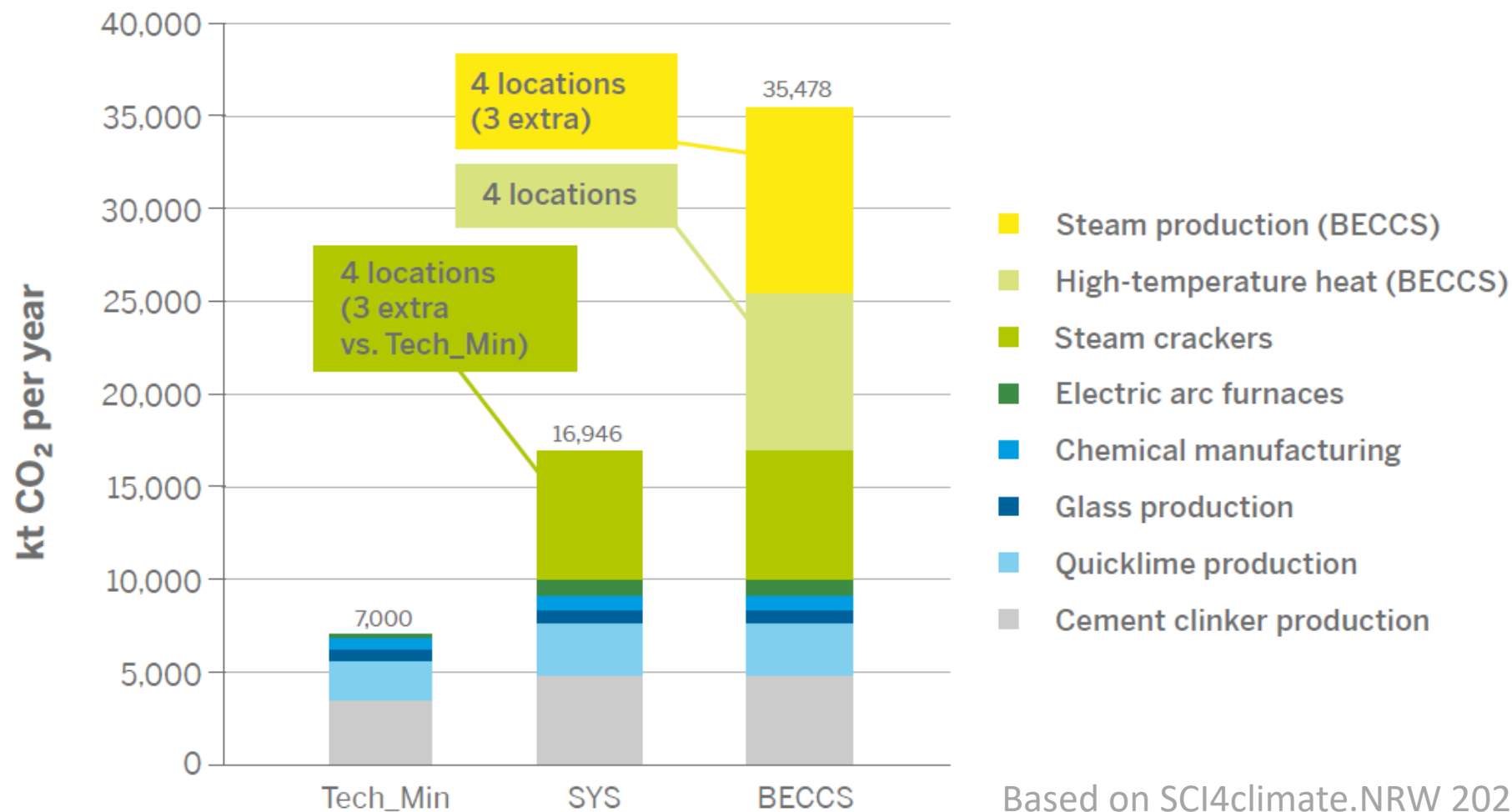


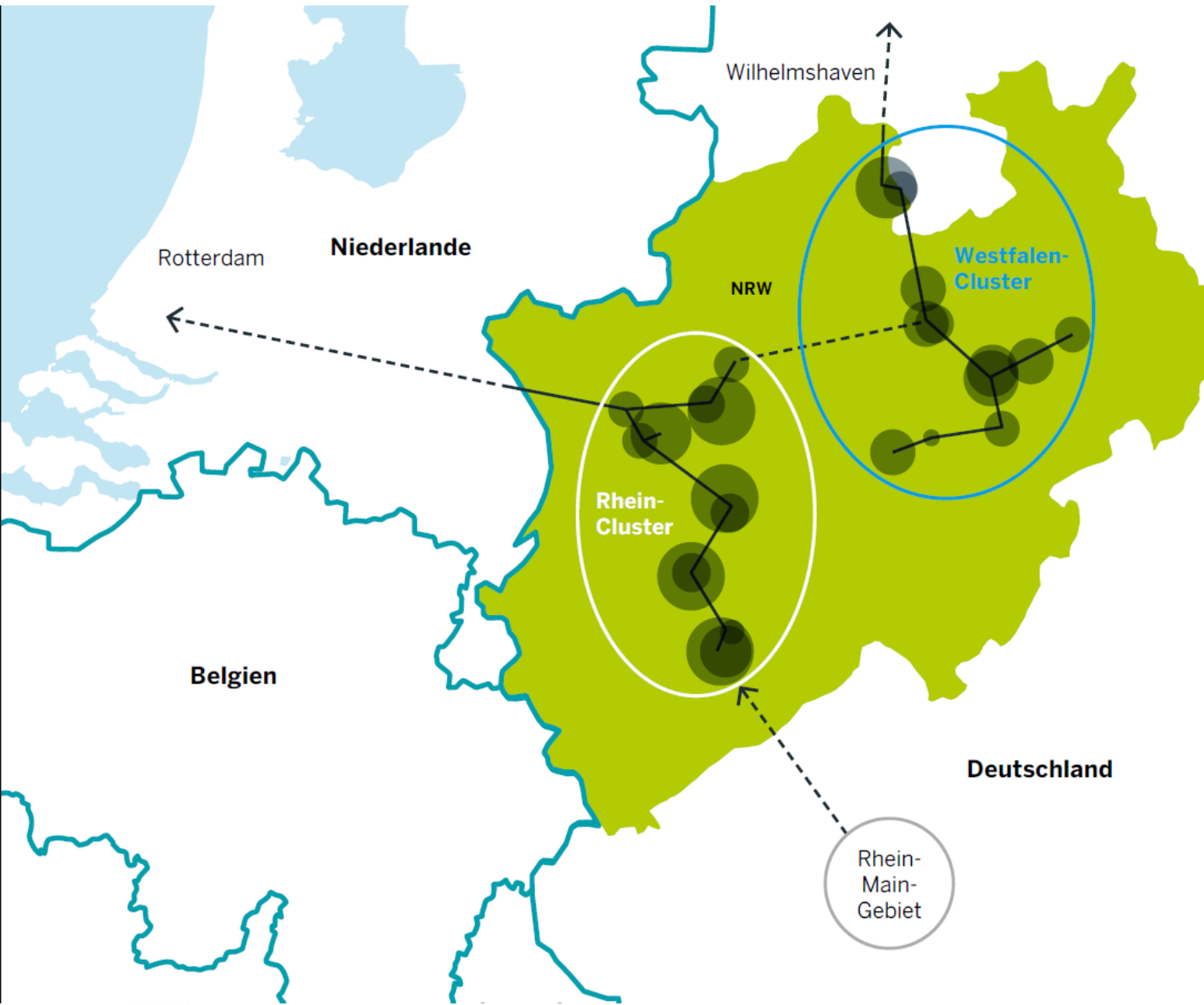
→ Recycling



→ Carbon Capture and X

# CO<sub>2</sub> amounts from industrial sources in NRW in a carbon-neutral industry by 2045





# Draft of a CO<sub>2</sub> pipeline infrastructure in a climate-neutral North Rhine-Westphalia (schematic)

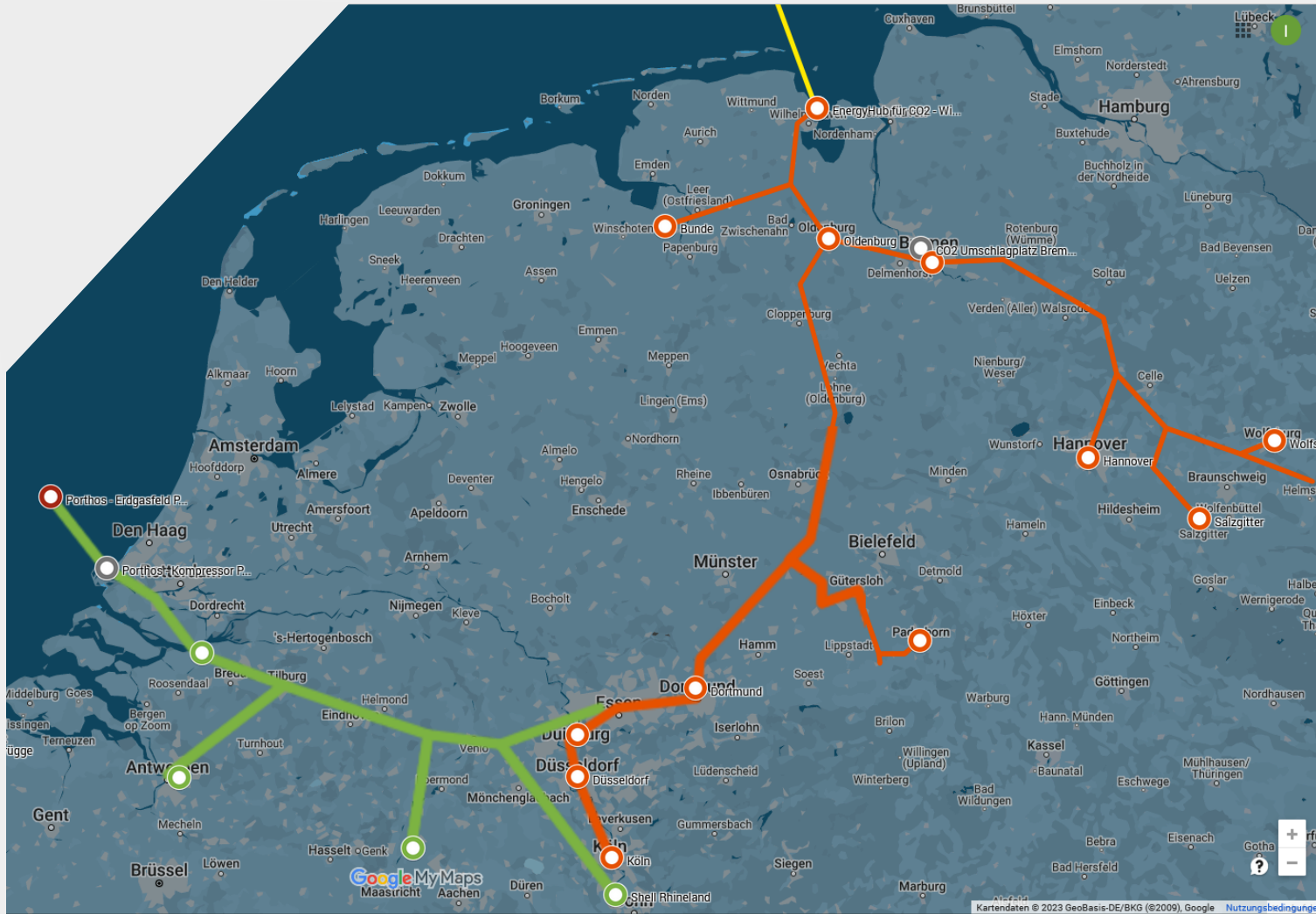
— Pipeline  
— Grenzlinie





CO<sub>2</sub>-Mengen in  
Tausend Tonnen pro Jahr



# Collection and mapping of planned CCUS infrastructure projects

<https://bit.ly/3CclRxI>








**CCU/CCS Projektsam...**  
NRW.Energy4Climate Kommunikation

Die vorliegende Karte bietet einen Überblick über die Standorte aktuell diskutierter, europäischer Carbon Capture & Storage or 804 Aufrufe  
Gestern um 09:49 veröffentlicht



**TEILEN**

☒ **Legende**

-  Abscheidung
-  Infrastruktur
-  Pipelines
-  Kohlenstoffnutzung
-  Speicherstätten

☐ Abscheidung

☒ Infrastruktur

  acorn - Terminal St. Fergus

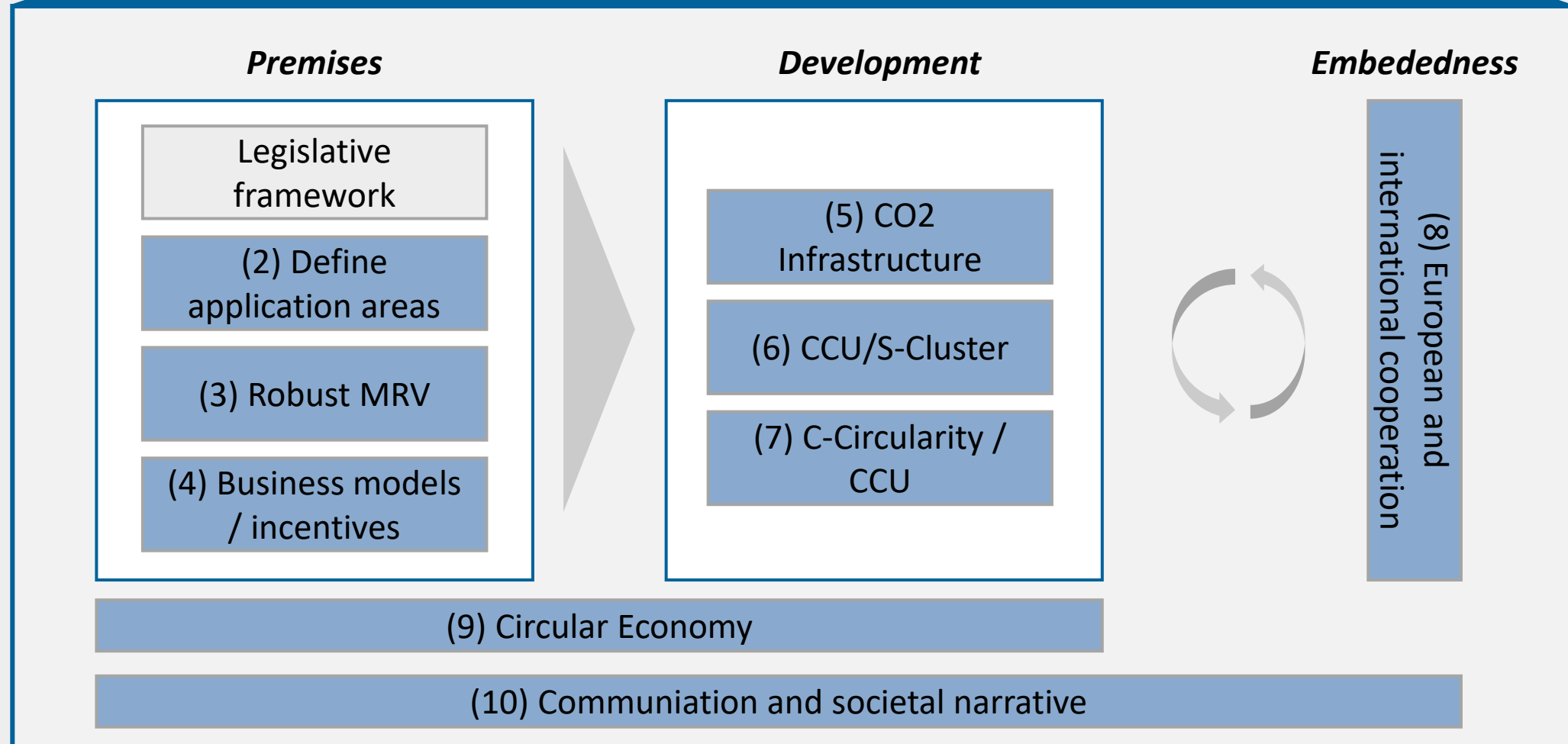
# (Selected) CCUS Policy Timeline 2023



Policy item	Q1 2023	Q2 2023	Q3 2023	Q4 2023
<b><i>EU Level Initiatives</i></b>				
<b>CCUS Forum / EC CCUS communication</b>	CO2 Infrastructure report			Forum plenary and publication of EC communication
<b>CDR cert. framework</b>	Start of expert group			
<b>PCI / PMI</b>	Public consultation			6th list publication
<b>Green Deal Industrial Plan</b>	EC Communication and Net-Zero Industry Act		EC proposal European Sovereignty Fund	
<b><i>Federal Level Initiatives</i></b>				
<b>Carbon Management Strategy</b>	Selection of consultant and initiation of formal stakeholder process		Release of strategy (summer period - indicatively)	Sources: Based on ZEP, 2023; own compilation

# German Carbon Management Strategy

## (1) Carbon Management Strategy





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Industrial energy and climate transition policy

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**Thank you for your attention!**

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