Industrial Carbon Management: The EU level building blocks

SCCS Annual Conference 2024:
Scaling Up CO_2 Transport & Storage for a Decarbonised Europe

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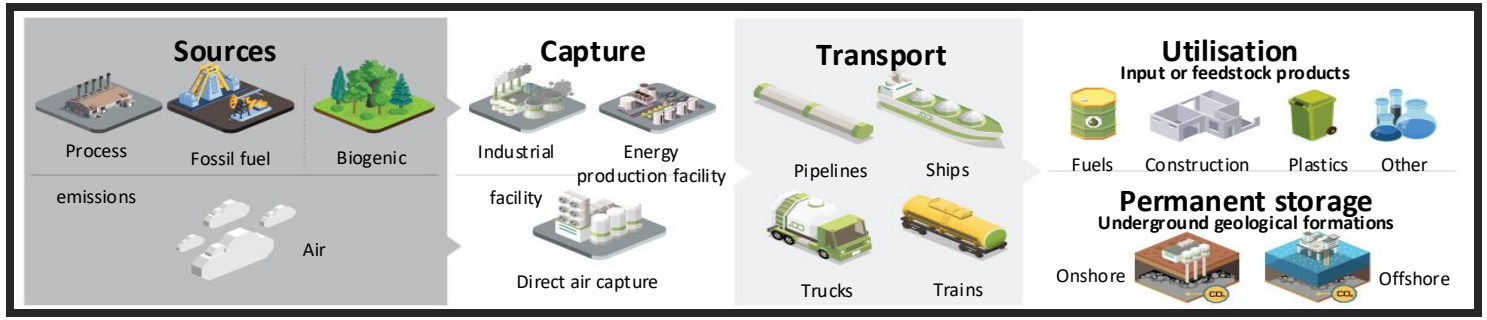
Industrial Carbon Management (ICM)

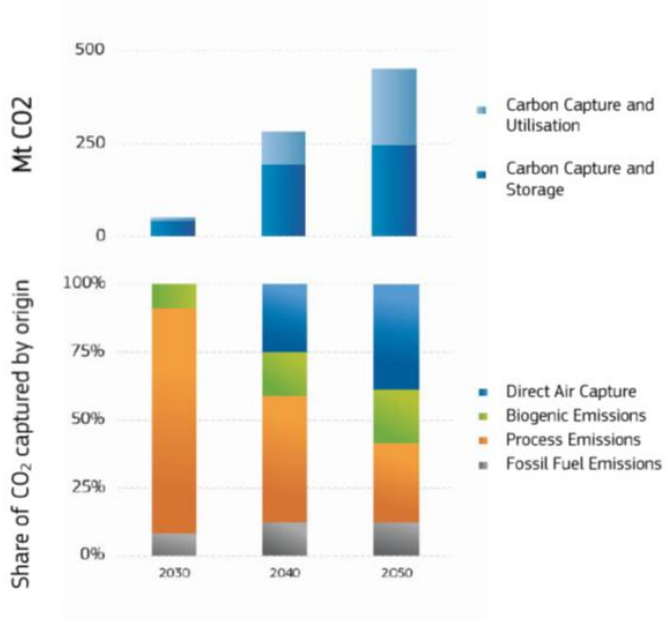
Commission Communication (6.2.2024)*, with actions for the Union and Member States to implement to reach net-zero

Three “ICM” technological pathways:

- ***Capturing CO_2*** *emissions for* ***storage*** *(CCS)*
- ***Removing CO_2*** *from the atmosphere (BioCCS and DACCS)*
- *Capturing CO_2 for* ***utilisation*** *(CCU)*

Key enabler **: CO_2 transport infrastructure**





Projected CO_2 capture needs in 2040 Climate Modelling Communication**:**

2030: ~50 Mtpa
2040: ~280 Mtpa
2050: up to 450 Mtpa

* COM/2024/62 final

**COM/2024/63 final

European Commission

Key ICM policy actions@ next Commission

CO_2 demand aggregation platform
matching storage with emitters by 2030

CO_2 Storage Atlas for the EEA
finding storage capacity for 2040

Climate law: **2040 carbon removals objective** *for climate neutrality by 2050?*

Prepare: ***future CO_2 transport regulatory package*** *& EU-wide infrastructure planning mechanism*

Develop **EU policy support options:**

- **Removals** *deployment based on market demand*
- **CCU uptake** *with accounting in the EU ETS.*

Investment and funding:

- *Work with MS, to develop* **Important Projects of Common European Interest (IPCEI)**
- *Consider* **market-based funding mechanisms** *(i.e. CO_2 competitive bidding auctions as a service)*

Creating enabling environment

- *Public awareness:* **public debate at MS level**, **rewards for local communities** *where storage happens*
- *Research and innovation (R&I) based on* **project knowledge-sharing**

European Commission

Net-Zero Industry Act (NZIA) regulation*

= the 1st legal building block for ICM

1. Legal objective for the EU to enable an **annual 50 million tonnes** of CO_2 to be stored permanently underground by 2030 **& European oil and gas** producing **industries must contribute** with their assets and/or their financial resources to develop operational geological CO_2 storage sites.

2. More **transparency for investors** on:

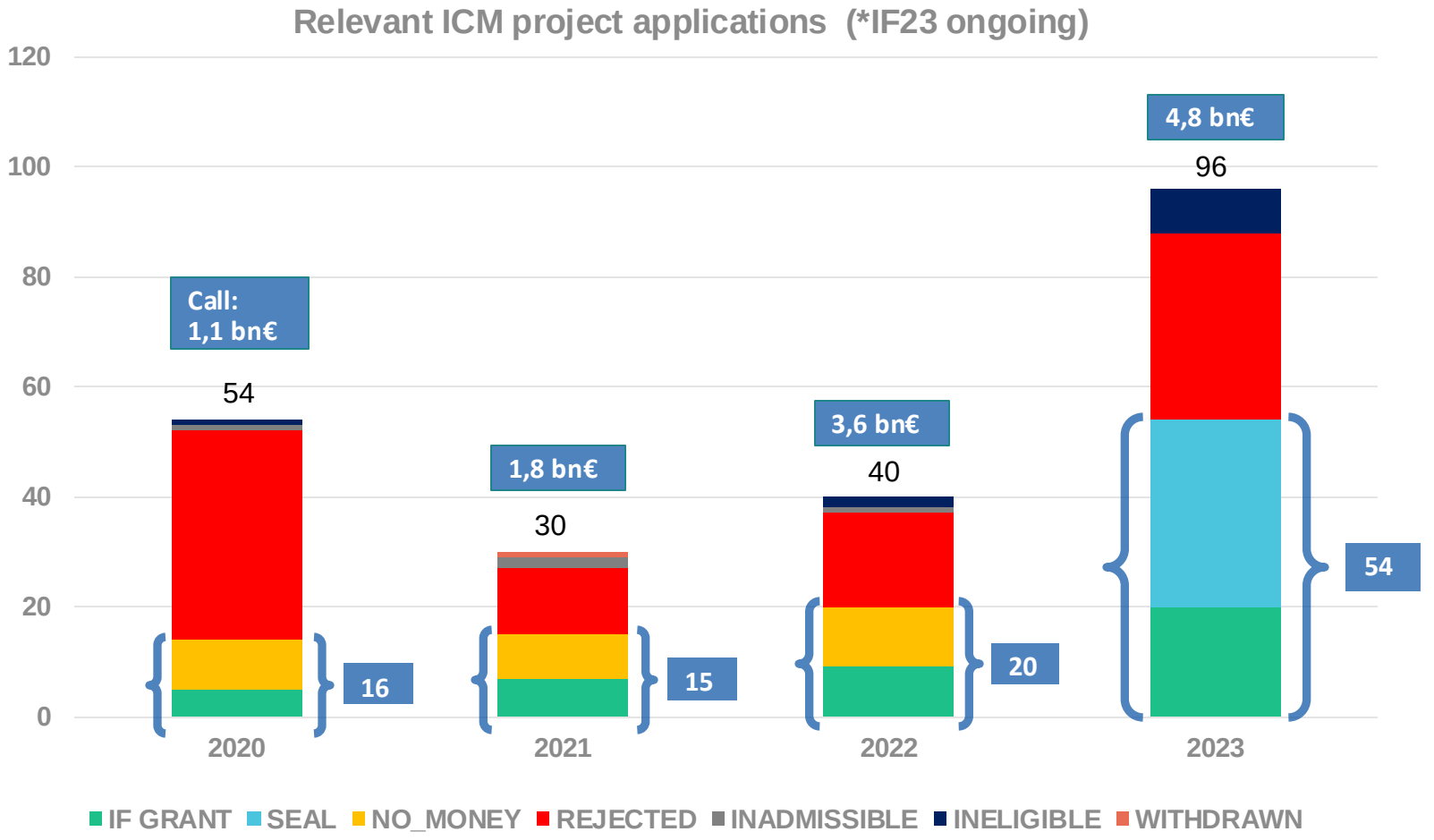
- **Demand and supply**: CO_2 storage, CO_2 capture, and CO_2 transport in the Member States.
- **Geological data** for future storage sites to be made public
- **Annual progress report** of ongoing CO_2 value chain projects

3. Permitting support for **manufacturing** of ICM technologies **& Deployment** of **Net-zero strategic projects** (full value chain with capture, transport & storage)

* Entered into force on 29 June 24, final text here

European Commission

EU Innovation Fund (IF): ICM demand 2020-23
= *ETS & NZIA drives reduction of hard-to-abate emissions*

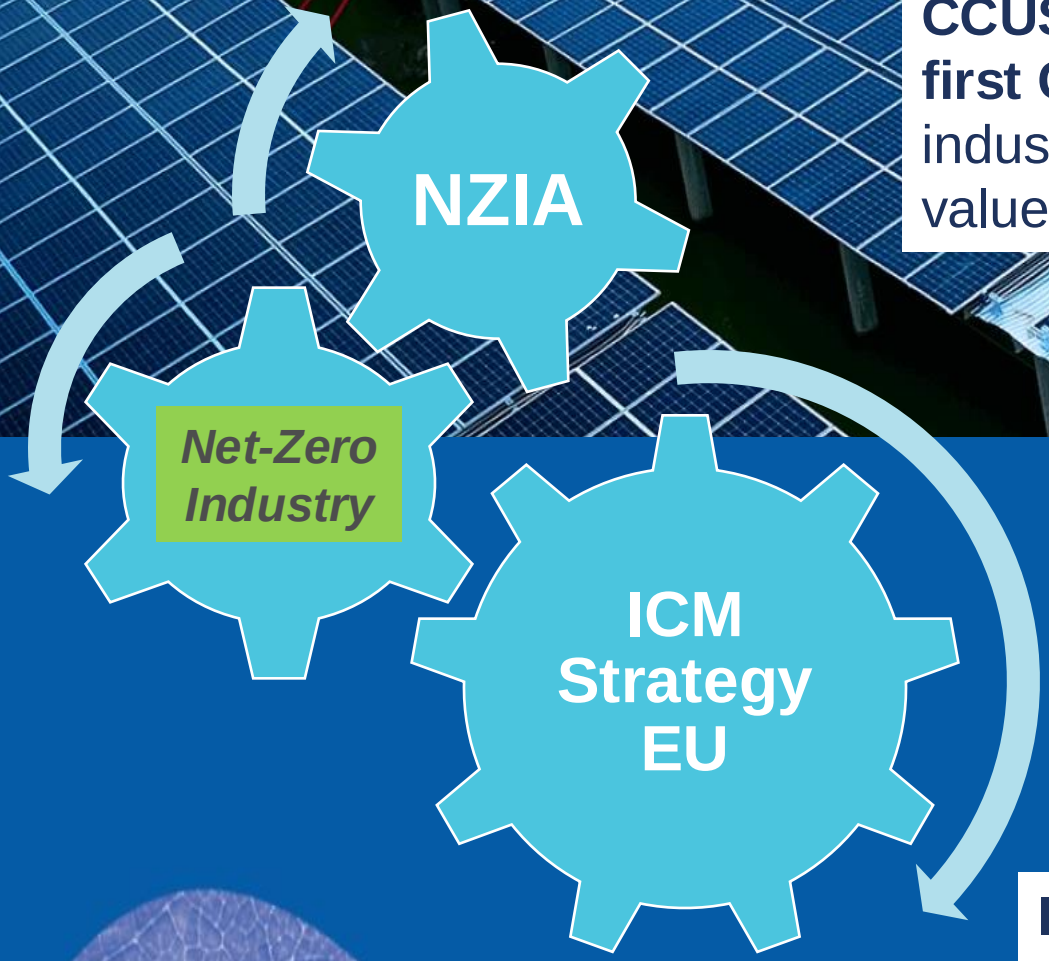


IF ICM portfolio:

- up to **18.6 Mtpa captured** *(37% of NZIA target use)*
- up to **11.7 Mtpa in CO_2 injection capacity** *(23% of NZIA target supply)*
- **>5 bn€ in IF support** for 41 projects*

European Commission

Regulation 2024/1735 (NZIA): strategic recognition of CCUS as **net-zero technologies** for the EU; **deployment of first CO_2 storage sites** by 2030; obligation to oil and gas industry to play their part; annual progress reporting on CO_2 value chains in MS.



Innovation Fund support for industries that need to capture and store their **hard to abate process emissions** (limestone, cement, chemicals) to reach net-zero & **storage sites and transport means for** captured CO_2.

Industrial Carbon Management (ICM) Strategy Communication (COM(2024) 62 final): CCS, CCU, Removals/CDR as important pathways to reach net-zero in the EU and cross-border CO_2 transport infrastructures as key enabler.

Thank you for your attention!

More Information:

https://climate.ec.europa.eu/eu-action/industrial-carbon-management_en

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European Commission