Scaling up Industrial Carbon Management: Eurogas recommendations

Industrial carbon management (ICM) technologies are crucial for achieving the EU's climate neutrality target by 2050, enabling emissions reductions while ensuring a globally competitive European economy.

However, fragmented policies at EU and Member State level, and the absence of a comprehensive regulatory framework, create uncertainty and delay investments in key projects.

Ahead of the CO_2 Regulatory Package and building on the EU Industrial Carbon Management Strategy, Eurogas stresses the need to **establish a robust and non-discriminatory CO_2 market** through the swift adoption and entry into force of a coherent legislative framework.

Drawing on its expertise in gas and hydrogen, Eurogas recommends balancing **regulation** and **market flexibility** to attract investment and drive industrial decarbonisation by focusing on the following priorities:

	Objective	Challenges
Business Case (Financing, funding & de-risking)	**Pave the way to make CCUS cost-competitive**	*Lack of a strong business case, high costs for infrastructure and technology deployment, limited market incentives via the EU ETS, and significant regulatory uncertainties/gaps are hurting investor confidence.*
	Recommendations:	
	▪ Ensure adequate **public funding** is available without undermining a level-playing field with other technologies (i.e., time-limited **to kick-start the market** and until economies of scales are achieved). This could involve establishing a **dedicated EU funding programme** for CO_2 infrastructure, which currently competes with electricity, gas, and other sectors on the PCI-PMI list. Additionally, Member States should be encouraged to initiate the Important Projects of Common European Interest (IPCEI) process for CCUS across the entire value chain. ▪ Promote the uptake of **Carbon Contracts for Difference** (CCfDs) and/or tax credits. ▪ Establish **reliable use cases** for **Carbon Removals** (e.g., future usage to cover compliance in EU ETS and/or to fulfil NDCs). ▪ Foster sufficient **cooperation** and **risk-sharing** across all segments of the CCUS value chain, including a supporting role of the State in risk mitigation.	

	▪ Increase funding and investments in **research and innovation** for CCUS value chain in general, at both the EU and national level. ▪ When designing financing, funding and de-risking mechanisms, account for the **necessary timeline** for setting up large-scale CCUS infrastructure and value chains.	
Transport and storage of CO_2	**Objective**	**Challenges**
	Deploying interconnected, cost-effective infrastructure for CO_2 transport and storage	*Lengthy permitting, costly infrastructure, fragmented regulations, lack of clear policy drivers, limited demand, slow progress on CO_2 standards, insufficient cross-border coordination for transport and storage (e.g. London protocol and NZIA), unresolved liability issues for stored CO_2.*
	▪ Develop common rules on CCS infrastructures **third-party access**, building on what is already established under the CCS Directive. ▪ Build upon the principles of transparency and non-discriminatory access to infrastructure in the CCS Directive to establish clear **guidelines for setting charges, while ensuring flexibility** for national and regional regulation when needed to support market development. ▪ Consistently recognise **various modes of CO_2 transport** as per Net Zero Industry Act (NZIA) and TEN-E. ▪ Provide **supportive tools for cost-efficient mapping and planning infrastructure** (including cross-border backbone pipelines), while ensuring sufficient flexibility for the market to scale up and incentivising the development of CO_2 hubs. ▪ Adapt the EU and international regulatory framework to **streamline infrastructure planning** and/or **permitting** with respect to CO_2 transport and storage, to provide legal certainty and more flexibility. ▪ Similarly to H_2 and LNG, leverage CO_2 infrastructure as **'undertaking in overriding public interest'** to achieve accelerated permitting processes. ▪ Establish a clear and proportionate approach to address **liability issues**. ▪ Set **EU common standards** for **interoperability** and efficient **cross-border CO_2 transport and trade**, to be developed when necessary to ensure consistency. Such standards should consider elements such as pressure, purity, temperature or other emissions such as NO_x and SO_x content thresholds.	

CCU	**Objective**	**Challenges**
	Unlock the full potential of CCU technologies	*Only permanent (ETS MRR) and long-lasting (CRCF) CCU recognised under EU law.*
	Recommendations	
	▪ Support **all types of applications of captured** carbon whether in gaseous or solid form, as well as carbon utilisation e.g., long-term binding of CO_2 and carbon in products, production of plastics, chemicals, synthetic fuels and fertilisers. Additionally, promote CCUS in **waste incineration**, in line with the EU objective of enhancing circular economy. ▪ Incentivise the use of **biogenic CO_2** in CCU processes by acknowledging its potential as a feedstock, and to achieve **negative emissions** through permanent CCU. ▪ Provide clear guidance regarding the role and **accounting of non-permanent CCU** under EU law. ▪ Incentivise and support the uptake of CCU products on the demand side.	
Sources of CO_2	**Objective**	**Challenges**
	Leverage the potential of industrial and biogenic CO_2 to drive circular economy and EU's decarbonisation	*Challenging sunset clause for CO_2 from ETS sources under both RFNBO and draft Low Carbon Delegated Acts, no guidance on the certification of biogenic CO_2, no recognition of negative emissions under the EU ETS, lacking incentives for BECCS,*
	Recommendations	
	▪ Enable **all capturing opportunities** e.g., industrial CO_2 from ETS activities (including power generation), biogenic CO_2 from bioenergy production or combustion, CO_2 captured from process emissions, solid carbon resulting from turquoise hydrogen production, CO_2 captured directly from the atmosphere. This should be done by preventing any double counting. ▪ Address the issue raised by the **sunset clauses** under the RFNBO and draft Low Carbon Fuels Delegated Regulations for **EU ETS** sources, by protecting early movers through a grandfathering clause for projects for which FIDs have been taken before 2035. ▪ Provide a **certification framework for biogenic CO_2** emissions, and a clear definition with respect to their **accounting** under the EU	

	ETS. ▪ Clarify **BECCUS** regulation and incentives to promote and expand the use of sustainable biomass to generate negative emissions in the EU.
CDR	**Objective** / **Challenges**
	Incentivise the role of Carbon Dioxide Removals (CDR) / *Lack of structured and comprehensive regulatory framework, absence of long-term planning and incentives for a strong business case.*
	Recommendations
	▪ Fully recognise and support the **potential of CDR,** as this technology can help address both residual and historical CO_2 emissions already in the atmosphere. ▪ Provide strong **regulatory and financial incentives** for carbon removals. ▪ **Ensure consistent, streamlined and practical carbon accounting,** by building on the CRCF and other existing mechanisms to develop carbon removal certificates and establish a policy framework to promote their tradability. This may include integrating such certificates into carbon pricing mechanisms, such as the EU ETS while safeguarding market stability and EU ETS integrity.
Solid Carbon	**Objective** / **Challenges**
	Recognise and incentivise the potential of solid carbon / *Regulatory gaps for solid carbon, largely excluded from the scope of EU ETS.*
	Recommendations
	▪ Authorise **further applications of solid carbon** (e.g., soil improver for agriculture, material and construction sectors etc.) and account for its emissions savings under the EU ETS or other CO_2 accounting frameworks (e.g., CRCF).