Evidence Brief for the

EU Consultation on a
Carbon Removal Crediting Mechanism
(CRCM)

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Key messages

♦ **Leadership:** The CRCM offers an opportunity for EU Leadership.

♦ **Form** follows function – the potential uses of certificates need to be clear.

♦ **Scope:** Clarify the scope regarding claims, time, and space.

♦ **Supply:** A hybrid approach to draw on methodologies a) directly, b) partially, c) blended, or d) new.

♦ **Guardrails** for baseline setting, additionality testing, quality, and permanence to ensure consistency.

♦ **Demand:** The CRCM certificates can serve a careful combination of compliance and voluntary markets.

♦ **Stability:** Embedding the CRCM in a robust policy ensemble stabilizes demand and long-term relevance.

♦ **Permanence:** Differentiate credits and their claims and use buffer stocks against reversals.

Content

1.   An Opportunity for EU Leadership

The EU´s initiative to develop a carbon removal certification mechanism (CRCM) is a welcome and timely proposal. Climate neutrality ambitions from public and private actors, and the EU´s own pledge to reach climate neutrality by 2050 demand a robust European governance framework for carbon dioxide removal.). A robust and well-functioning EU-wide certification mechanism is key for promoting a consistent and high-integrity approach to defining, quantifying, and accounting for removals, and for generating and using certificates. The opposite – multiple scattered and inconsistent certification systems – would undermine efforts to drive high-integrity removals effectively at the scale and pace needed to achieve the EU's climate neutrality targets. Certification is one of several key elements for results-based action through domestic and international carbon markets as well as results-based policy instruments. Besides fostering European efforts to incentivize removals, the CRCM could play an important role in setting a global standard for high-integrity removals. Its creation provides the EU with an opportunity to define certification in a manner that fosters "upwards spiraling" of environmental integrity beyond its own borders by demonstrating best-practice.

2.   Form follows Function: What are Potential Use Cases for CR Certificates?

The current diverse and fragmented landscape of international and European carbon certification mechanisms offers valuable lessons and insights for the EU-wide CRCM. A key lesson is that all certificates should meet certain minimum criteria relating to environmental integrity to ensure that each certificate represents at least one metric tonne of carbon dioxide equivalent (tCO_{2e}). A certificate is a type of "receipt" for one tonne of mitigation. This "receipt" can be used for various purposes, all of which aim to incentivise additional, quantified and verified mitigation outcomes (see Figure 1). The appropriate use cases for certificates depend on their attributes, such as permanence, location, and relationship with the host country's mitigation targets. For example, a certificate based on permanent mitigation that is not counted towards the host country's targets can be credibly used for complying with another country's target or making a corporate carbon neutrality claim. A certificate that is based on non-permanent mitigation may be credibly used to access specific subsidies or making claims about supporting such mitigation and related co-benefits. A certificate based on mitigation that is counted towards the host country's mitigation target can be credibly used to comply with obligations that aim to contribute to the host country's target or making claims about voluntarily helping the host country to achieve its target.

The CRCM´s function must be clearly defined, since the use (and resulting claims) of certificates defines the mechanism´s very properties. For example, is the purpose of the mechanism to issue uniform and fungible certificates, all of which would be eligible for use for compliance-based and/or voluntary offsetting? Or is the purpose of the mechanism to promote consistent quantification and accounting for various types of certificates, that are differentiated by attributes, such as permanence, and not fully fungible in terms of eligible use cases? Does the CRCM aim to align with relevant provisions for Article 6 of the Paris Agreement to enable international trading with carbon removal credits? Furthermore, does the CRCM aim to set high-level principles, and detailed guidance to implement and/or governance system to enforce these principles? To what extent, if any, would the CRCM rely on existing standards? Will the CRCM provide guidance on use cases and claims, and to which extent, if any, will it coordinate with relevant processes such as the EU green claims initiative?

Generating a certificate → **Transferring a certificate** → **Using a certificate** → **Claiming a result**

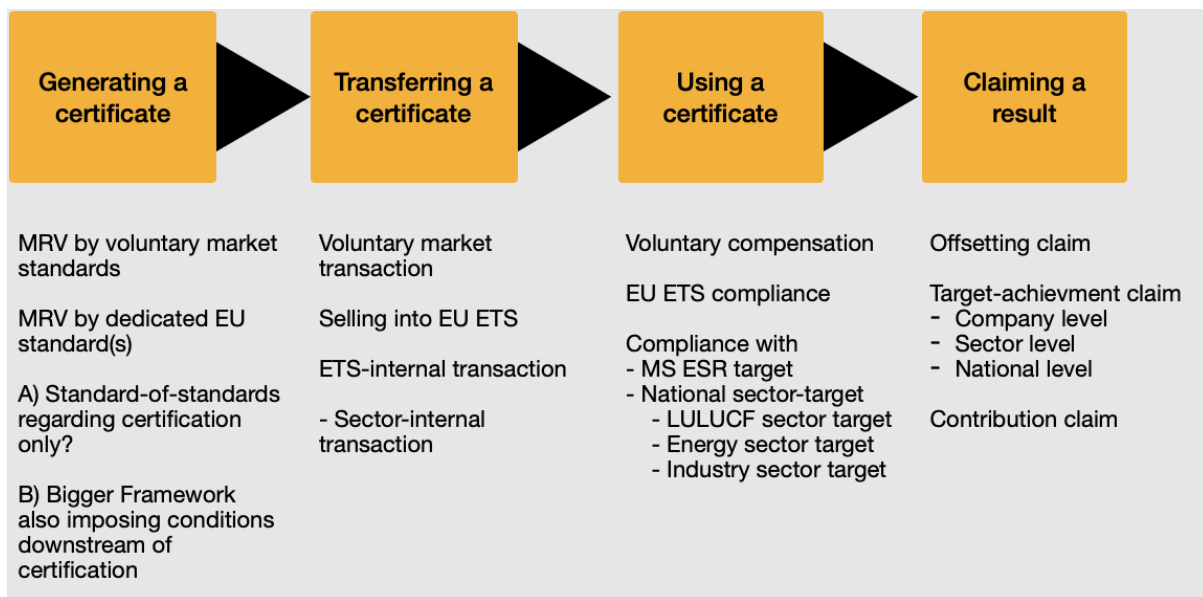| Generating a certificate	Transferring a certificate	Using a certificate	Claiming a result
MRV by voluntary market standards	Voluntary market transaction	Voluntary compensation	Offsetting claim
MRV by dedicated EU standard(s)	Selling into EU ETS	EU ETS compliance	Target-achievment claim
A) Standard-of-standards regarding certification only?	ETS-internal transaction	Compliance with	- Company level
	- Sector-internal transaction	- MS ESR target	- Sector level
B) Bigger Framework also imposing conditions downstream of certification		- National sector-target	- National level
		- LULUCF sector target	
		- Energy sector target	Contribution claim
		- Industry sector target	

Figure 1: The necessary steps to claiming a mitigation result that start with generating a certificate. It will be important for the CRCM or complementary instruments to clarify the envisaged function.

If the CRCM is to build a healthy ecosystem of CDR action, it is neither enough to focus on certification standards, nor to rely on progress and initiative in the voluntary carbon market (VCM) by adopting or rejecting its methodologies. The Commission needs to ensure the broad applicability of the mechanism and be prepared to revise existing and develop new methodologies under the CRCM. The function of the certification mechanism needs to be defined in relation to the envisaged transfer, use and resulting claims. Only then can rules and procedures be defined that serve the envisaged function, and only then can decisions be taken on adopting or rejecting individual project types and associated certification methodologies. Thus, the EU will have to accurately define the CRCM´s intention, purpose, and rules to ensure functionality, integrity, and international relevance.

3.   Define the Purpose of the Certification Mechanism and Combine Forces

The definition of purpose must cover three dimensions:

Claims: What claims can be made by users of the certificates, and under which conditions? Will claims and use cases be linked to the accounting of the underlying mitigation? Will the underlying mitigation be accounted towards the Member States' targets in all use cases, or may the accounting of the underlying mitigation vary depending on the specific use case? These questions should be addressed proactively in the initial design of the mechanism to avoid future dissent and loopholes. Currently, not all standards and initiatives cover this aspect, but we are convinced it is a central question and must be addressed in a harmonized EU approach.

Time: What are the mechanisms use cases in the short-, mid-, and long-term? Is the purpose to incentivise also removals that can temporarily balance out residual emissions to "buy time" until decarbonization technologies for hard to abate sectors are developed and/or focus only on durable removals that can balance out residual emissions on a long-term or permanent basis? Could they be used to balance out only Land-Use, Land-Use Change and Forestry (LULUCF) and/or other specific sectors´ emissions? Could they be used to draw down

''legacy carbon'' before, during and/or after complete decarbonization? The answers to such questions will determine the pathways and technology mixes to be favoured, especially regarding technology specific storage permanence.

Space: Where should eligible removal activities be implemented? Shall the mechanism focus on removals only in Member States, or include also (possibly more cost-efficient) removals implemented outside the EU? Would the CRCM prioritise specific regions, member states, or landscapes?

To address these dimensions comprehensively, currently separate strands of work on removals need to be bundled: initiatives on Article 6 (relating to claims and space dimensions), EU Emission Trading System (ETS) amendment (relating to all dimensions), agricultural policy (relating to space dimension) and green claims (relating to claims dimension). Separate development of rules would create friction; a centralized approach combining forces is likely to produce more workable and efficient outcomes and avoid loopholes between the EU ETS, Effort Sharing Regulation (ESR), and LULUCF regulations.

4. Supply side: What Methodologies to draw from or develop?

Methodologies are needed for various types of removals, covering additionality testing, baseline setting, and Monitoring, Reporting, and Verification (MRV) must be addressed for each type of activity eligible to generate certificates. As removal methods evolve, methodologies will need to be revised and variants will be needed.

The EU has several options for drawing on methodologies for supplying certificates (Figure 2). One option is to develop her own methodologies and standards under the CRCM. This would allow for fully building on the European value system and requirements. The EU would be autonomous and would have a strong tool to increase the level of environmental integrity in her own hands. The downside is high transaction costs and time required for developing a new body of methodologies "from scratch".

The EU could also rely heavily on the methodologies, processes and infrastructure developed under existing crediting standards. To ensure the consistency and high quality of removals certified under the mechanism, the EU should set minimum requirements that methodologies would have to meet to be eligible to certify removals to be used in the EU: setting a standard of standards. In setting quality criteria, the EU could draw on the work by the Integrity Council for Voluntary Carbon Markets (IC-VCM) on Core Carbon Principles and the Assessment Framework relating to assessing the quality of carbon credits, activity types and methodologies, as well as the ability of crediting standards to ensure the Core Carbon Principles. Under this approach, the EU would approve methodologies that meet the EU requirements, for application under the CRCM. Only those methodologies could then be used for generating certificates under the mechanism.

In order to operationally apply the minimum requirements in the evaluation, and approval methodologies, a European governing body would need to be installed. It could take the form of an executive body for the CRCM, or a permanent technical advisory body to control the technical fit with the standard provisions. These processes can build on experiences with European environmental labelling and other crediting standards.

Even if the EU would rely fully on methodologies developed by other standard-setting bodies it should put in place and oversee additional, enhanced safeguards to ensure high integrity in their use.
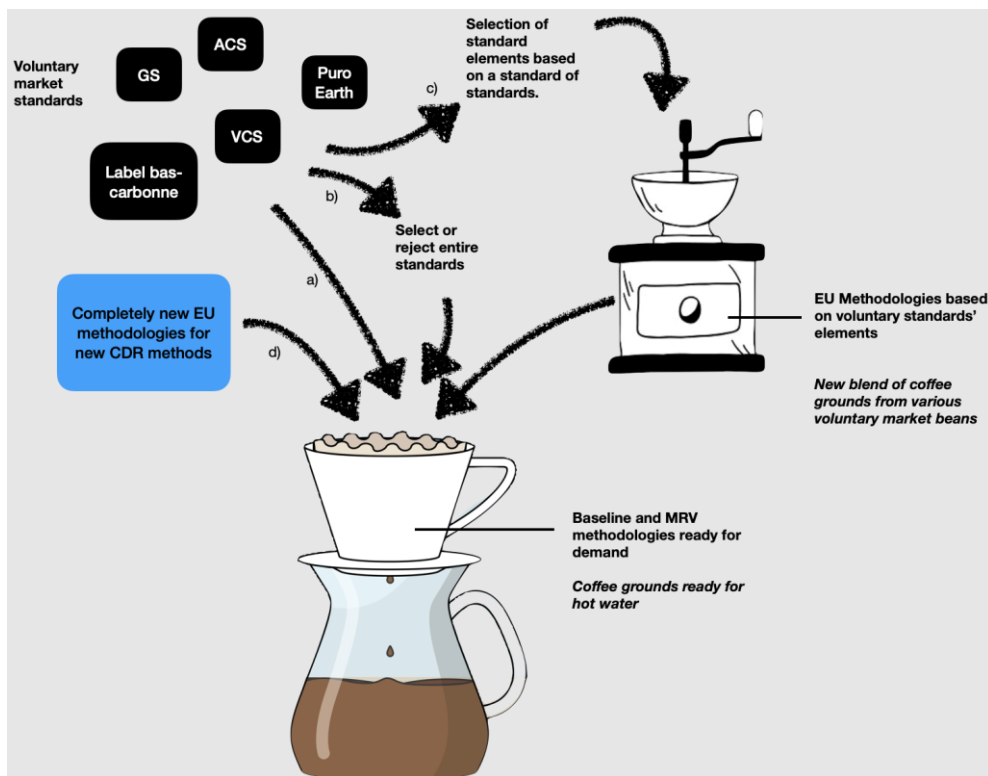
Figure 2: The supply of certificates can be fulfilled in various ways – much like supplying coffee. a) Indiscriminately use all available coffee grounds. b) Select a brand of coffee. c) Select a particular quality of beans across all brands. d) Where a flavour is missing, cultivate a new type.

We recommend the EU pursue a hybrid of these two approaches, allowing for EU approval of methodologies developed by third parties, which meet the mechanisms' requirements as well as the development and approval of new methodologies under the certification mechanism.

While the development of methodologies and proposing new project types is be best done by private sector actors and while third-party verification can similarly be outsourced to accredited entities, the definition of requirements regarding the three abovementioned dimensions, and the overall responsibility for ensuring the high integrity of removals cannot. This is critical also regarding the use and claims associated with the certificates. There is no harmonized approach present, and the EU should take the opportunity to install a best practice in this regard to meaningfully contribute to improving the international standard on environmental integrity regarding claims.

5. Demand side: Who are the Potential Buyers of EU Removal Certificates?

The EU will have to decide which markets credits should target: This decision affects the requisite levels of stringency. Options are voluntary and compliance use cases or combinations thereof.

For compliance use (namely the EU ETS and ESR targets), results would appear in national inventories, while the private actors achieving them would likely also want to claim them. Double claiming of the removals would have to be avoided with clear rules on the claims at the EU level.

Generally, demand for EU-certified carbon credits can stem from several directions:

1. Allowing their use in the EU ETS would initially lead for high demand, as the ETS cap trends toward net-negative. Compliance markets are much larger than voluntary ones and tend to involve lower price fluctuations given that demand stems from long-term mitigation targets. The ETS would have to be amended to allow for removal certificates to count towards its targets; this would require careful alignment of EU ETS reform and CRCM development.

2. The non-ETS sectors regulated by the ESR could be allowed to purchase certificates toward their own mitigation targets.

3. Removal certificates could be used to count towards LULUCF targets. Already now, the LULUCF includes debits (i.e., emission sources) and credits (i.e., emission sinks), which are offset against each other. LULUCF credits can to some extent be counted towards ESR targets, thereby linking these two pillars of EU climate policy. If credits from the CRCM would target LULUCF, this would imply that more LULUCF credits were free to be counted towards ESR targets. Thus, even if CRCM credits were not intended to target ESR, the connection via LULUCF credits could still make CRCM credits available for the ESR. Clarity would be required as to the level of fungibility (which would in return depend on the solution for achieving storage permanence in LULUCF removal certificates).

4. EU member states could also use certificates to count towards their national targets beyond their EU-assigned targets. Results-based payments by governments against certificates could serve as a form of public procurement / subsidy of removals.

The EU should take a key role in setting standards with environmental integrity, and account for heterogeneity in permanence. Clear rules and well-defined processes within the regulation must ensure transparency and consistency. The mechanism could offer a range of possible claims based on permanence, but it would need to do so very transparently. Furthermore, different strategic goals regarding the time dimension targeted by the mechanism can be reached with different technologies. Depending on the defined purpose of the mechanism, a portfolio of removal technologies could take different forms over time. Buffer stocks to equalize potential CO_2 releases can be established to upvalue credits generated based on CDR methods characterized by low permanence, namely land-based ones. Minimum standards for these buffer stocks must be established within the CRCM, either by the EU or a private entity. Furthermore, to avoid a "valley of death", prices for carbon credits under the EU´s mechanism must not be prohibitively high. The treatment of heterogeneous permanence as well

as triggering demand from various directions enables the market to set prices that reflect the attributes of removals.

Regardless of the approach to permanence, reliable and long-term demand is crucial to ensure long-term commitment of developers, providing technological progress, opportunities for scaling up, and competitive price levels. Government engagement, be it via purchase of credits or via allowing their use in the EU ETS could promote demand and price stability. Should the certification mechanism primarily address the VCM price stability and levels would likely be insufficient for many removal methods.

6. Recommendations

1. Join forces across emerging initiatives to ensure relevance
The CRCM is being developed in a dynamic setting involving all central European climate policies (ETS, ESR, LULUCF) and many of the current "hot topics" of international climate policy (Article 6, net-zero targets, VCM). Joining forces from developments and initiatives from all these strands will be crucial to create a functioning mechanism, which is smoothly embedded in European and global climate policy architecture and avoids loopholes, double counting, and perverse incentives.

2. Define the purpose of the mechanism at the start
The purpose of the CRCM needs to be clear in regards to the question: *who can make what claim based on ownership of a certificate or credit resulting from the mechanism*? The purpose must be clear early on as it shapes fundamental assumptions and stringency levels. Defining the purpose – particularly if it includes use toward (sectoral) compliance targets – might also raise new questions that will need to be resolved in its operationalization.

3. Aim for high environmental integrity
CRCM development is a chance for the EU to establish an international standard with a strong focus environmental integrity. Installing a harmonized mechanism will affect international standard setting, and the EU should ensure this effect will lead to an "upwards spiral" by setting stringent conditions for key dimensions of certification (transparency of process, additionality, baseline setting, quality of MRV methodology) and embedding the mechanism in a transparent framework for the use and results-claiming.

4. Aspire to a high-quality hybrid system
The EU should find a balance in drawing on lessons and existing procedural and methodological carbon market elements while also using its authority for ensuring its own values, institutions, and responsibilities are well reflected in the CRCM. Therefore, we propose a hybrid system: The EU can make use of the many available methodologies by setting a "standard of standards". At the same time, the EU should commission development of dedicated methodologies where they are missing or failing to meet the EU quality expectations.

5. Establish strong institutions
In order to enforce the CRCM, the EU will have to install a new institution – an expert body representing EU authority – to approve methodologies, overlook MRV, implement and maintain a detailed registry, and commission certain tasks to private entities.