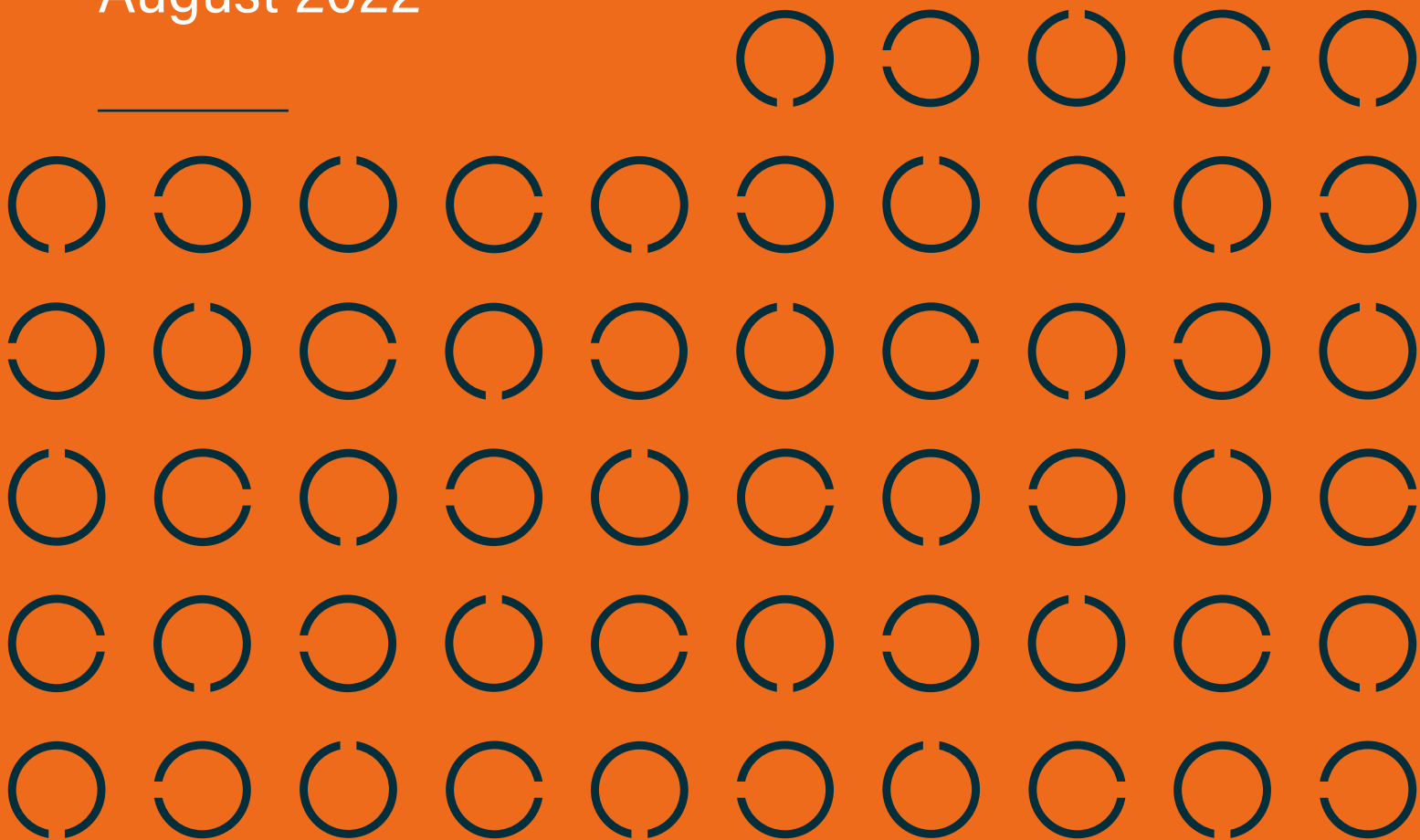


Facilitating the supply side of a Greenhouse Gas Removal (GGR) market

Bundling GGR projects to standardise
removal units

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Proposal to bundle GGR projects to standardise removal units

Different sorts of GGR projects should be ‘bundled’ to generate standardised removal units that encompass a range of outcomes, which can be issued and traded to generate market supply. Projects under the Standard will conform to minimum criteria that address the diversity of GGR characteristics, fungibility, integrity and governance issues, legal and financial certainty, and technical issues.

Achieving the objective of climate policy to limit average global temperature increase to well below 2°C by the end of this century, emissions must be reduced significantly. But it will also be necessary to draw down greenhouse gases (GHGs) already in the atmosphere. Responding to this need, governments are looking to develop GGR methods and to scale up the sector.

One way to generate the investment needed is by establishing a robust GGR market. In such a market, demand will come from legal obligations on emitters to remove GHGs from the atmosphere. Supply will be generated by GGR projects producing outcomes for which removal units are issued, then traded. The challenge is to scale up the market sustainably with a supply generated by a whole range of GGR methods with diverse characteristics.

In this context, it is proposed that GGR projects should form bundles in order to be able to

generate standardised removal units. Bundles would be made up of different sorts of GGR projects and would need to conform to a standard that addresses a range of criteria (Standard), in order to be eligible to issue standardised removal units.

The Standard could be part of a legislative package establishing the market, consisting of primary legislation (Act), secondary legislation (Regulation) and the Standard. The Standard could be developed on a national basis (which then might be adopted by other countries) or under the aegis of the International Organization for Standardization (ISO). Standardising removal units could facilitate inter-jurisdictional trading, which could enhance the capacity of the market to scale up the GGR sector.

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Rationale

In developing a GGR market, factors to be addressed concerning the traded unit include:

- the integrity of the outcomes for which removal units are issued;
- the definition of the removal units (that is, what the removal units physically represent);
- definition of the legal and financial nature of the removal units;
- fungibility of removal units (that is, interchangeability with units from other carbon trading schemes); and
- liability in the event that outcomes underlying the issue of the removal units fail.

In terms of integrity, the removal units need to be real, permanent and verified. Monitoring, reporting and verification (MRV) will need to be carried out and be credible. As GGR projects involve both the removal of the GHGs from the atmosphere and their safe storage for a significant period of time, 'permanence' will need to be defined. As each GGR method has its own particular average storage lifetime capability, length of storage will, in the first instance, be a function of the GGR method applied.

Identifying the legal nature of the removal units as property (or as having rights in the nature of property rights) will facilitate not only greater investment in GGR projects, but also the unwinding of interests; for instance, in the case of insolvency, as well as in relation to taxation, the resolution of litigation or in the case of criminality.

Characterisation of a removal unit as a financial instrument will enhance the market by invoking financial regulatory measures to avoid market manipulation, as well as know-your-customer (KYC) and anti-money laundering (AML).

The different characteristics of the GGR methods, particularly in relation to permanence of GHG storage and risk factors that might impinge upon that storage over time, give rise to two important issues: namely the fungibility of the removal units

– will units generated by different methods be interchangeable? – and liability in the event that storage leaks or fails.

Additionally, the different GGR methods may, in some instances, give rise to impacts that will need to be managed (e.g., competition for land use or for resources), while in other instances, can afford benefits that need to be encouraged and recognised (e.g., environmental rehabilitation, biodiversity stimulation, social benefits).

The rationale for this proposal is to provide a feasible and coherent response that addresses all these issues, impacts and benefits.

Purpose of the Standard

The purpose of the Standard is to define minimum criteria for bundling/pooling GGR projects and specify outcomes that the bundle/pool should achieve in order to be able to generate standardised removal units.

Objectives of the Standard

- To ensure uniformity and consistency of outcomes across all bundles/pools of projects;
- To address identified risks and shortcomings of individual methods through the bundling approach to facilitate issuance of fungible, high integrity removal units;
- To ensure a cross-section of methods is represented in each bundle; and
- To ensure appropriate governance and high-level oversight and management of GGR project development within the jurisdiction (e.g., to avoid imbalances in land uses and/or GGR methods; ensure distribution of GGR projects conforms to objectives of planning laws).



Image: Scientist assessing carbon sequestration rates in the sediment of mangroves. Monitoring, reporting and verification (MRV) of GGR projects will need to be carried out and be credible.

Elements of the Standard

The Standard might include the following elements:

- a minimum set of criteria for constituting the bundle;
- minimum criteria for the outcomes the bundle would need to achieve;
- criteria addressing long-term management of the bundle; and
- elements addressing governance requirements.

Additional criteria

In addition, it is expected that the Standard would:

- (a) indicate how the number of standardised removal units that a bundle might issue would be calculated;
- (b) set out delivery risk management requirements;
- (c) set out any other risk management requirements; and
- (d) indicate requirements pertaining to formation and management of the bundle.

Legislative package and other elements: Act and Regulation

The Standard will be supported by primary and secondary legislation. By enacting the primary legislation and developing the Standard, as well as releasing a draft of the Regulation, in the short term, a clear pathway for the transition to a competitive market-based framework will be established. This will provide the necessary long-term policy signal to engender investor confidence and allow a trial period for learning-by-doing.

The legislative package should include:

- establishment of a trading exchange where the standardised removal units are listed;
- a registry to record certification of project bundles that satisfy the Standard and the issuances they make;
- the obligations of prescribed entities to report emissions and acquire and cancel standardised removal units;
- standardised removal units to be generated and issued only by bundles of GGR projects that have been certified as satisfying the requirements of the Standard;
- long-term obligations on bundle management companies;
- definitions of 'permanence', 'co-benefit' and other significant terms;
- defining the legal nature and rights attaching to a standardised removal unit; and
- defining a standardised removal unit as a financial instrument.

Conclusion

The primary reason for proposing the Standard is to address the diversity of characteristics across GGR methods in order to arrive at a standardised removal unit commodity to facilitate trading and so help the scaling up of the GGR market and GGR sector. However, the Standard can provide much more, not least a mechanism to ensure that in the event of GHG storage leaking or failing, the responsibility and legal liability is with the party best placed to address the problem, with the closest financial interest.

Bundling also ensures an opportunity for all potential GGR methods to have access to funding, in the first instance. Over time, some may fall away; however it is important that methods which are slower or less efficient, but may also provide important co-benefits, are not disregarded for financial reasons. Bundling introduces potential benefits from the greater pooled knowledge and resources across the bundle, as well as opportunities for knowledge sharing.

By establishing an approach based on bundles of projects, each managed by a bundle management company that has obligations including to meet requirements of the Standard (especially in relation to MRV), physical and financial risk management, and long-term storage responsibility, bundling and the Standard could give impetus to development of a professional class of GGR managers. The development of a professional class of GGR project bundle managers would encourage better governance of projects, project outcomes and the market.

“The primary reason for proposing the Standard is to arrive at a standardised removal unit commodity to facilitate trading and so help the scaling up of the GGR sector. However, the Standard can provide much more.”

This policy briefing has emerged from research carried out on fungibility, liability and bundling by CO₂RE’s legal research team.

Further detail and information on this briefing is available on request. Please email j.d.macinante@ed.ac.uk.



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Funded through the UKRI SPF Greenhouse Gas Removal Demonstrators (GGR-D) Programme, CO₂RE co-ordinates the Programme and conducts solutions-led research to evaluate a balanced portfolio of economically, socially and environmentally scalable Greenhouse Gas Removal options, with associated policy design, engagement and outreach.



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