Carbon Market Watch recommendations on carbon market infrastructure for Article 6 of the Paris Agreement

This note aims to inform countries and negotiators discussing the establishment of new infrastructure under Article 6 of the Paris Agreement regarding existing shortcomings of registries and project databases that should be improved. It can also serve voluntary market actors, in particular programmes, to improve their existing platforms and remedy some of the shortcomings identified.

This note does not aim to provide an exhaustive list of all the information that should be included in registries and project databases, but rather addresses a few specific lessons from existing practices.

Summary table

Problem	Solution
In many cases, it is impossible today to verify that companies have retired the carbon credits they claim to have retired. It also cannot be fully ruled out that brokers are selling the same carbon credit to multiple companies.	Require registries to include unambiguous information on the entity that retired a credit, the entity on behalf of whom this retirement was executed, and the purpose of the retirement/associated claim.
Registries are technical platforms that can be difficult to understand for non-experts. There is a lack of guidance, which constitutes a barrier for access.	Provide clear definitions of key terms and guidance on how to interpret serial numbers.
It is not currently possible to know who owns a given credit. While a significant supply (>500 million credits) exists today, it is impossible to tell where these credits are and who is holding them.	Include data in registries to track the evolving legal ownership of credits as they change hands, e.g. a transaction log. This will be necessary to identify any “(first) international transfer” under article 6.
Existing registries are not yet ready for the Paris world as they do not yet clearly identify whether the mitigation outcome underlying a given carbon credit is already being claimed/counted towards a climate target.	Require registries to clearly distinguish units based on whether the underlying mitigation outcomes contribute to the host country’s NDC or not, and identify these units with different names, as proposed in a draft article 6 text during COP26.
Detailed project information is often missing from project databases, including important annexes to documents that describe the project, or its local benefits.	Make all annexes to project documentation public in the programme’s project database.
Public information on projects is typically	In addition to making all the detailed

highly technical, which constitutes a barrier for third-party scrutinisation by, for example, the media.	documents public, registers should also include a non-technical summary of projects.
Accessing and combining data to create public databases on carbon credits is not straightforward, as registries lack standardisation. For example, data on baseline and project emissions is only included in project documents, which are not optimised for machine-readability.	Registries should include a machine-readable dataset, such as a spreadsheet, with key quantitative information about a specific project, such as expected and actual issuance volumes (annual and total), baseline and actual emissions, retired and cancelled credits, etc.
Not only is there very little price transparency today, it is also difficult to assess the volume of finance actually serving climate mitigation, as opposed, for example, to money collected by intermediaries.	In addition to overall improvements in price transparency, project databases should include a "project annual report" that provides, among other things, financial data on the price per credit received by the developer, and how the revenues have been used, including any benefit sharing with local communities and the share of revenues directly spent on the mitigation activity.

1. Improving and requiring retirement/use information

Currently, information contained in programme registries is not sufficient to clearly connect a company's claims to the underlying use of a specific carbon credit. For most credits, it is unclear by whom it has been retired, let alone for what purpose. This section provides a snapshot of the situation for the UN's Clean Development Mechanism, as well as for the two main voluntary programmes.

Clean Development Mechanism registry

The **Clean Development Mechanism's** registry includes a single cell for the voluntary buyer of a Certified Emission Reduction (CER) to include the "reason/beneficiary" of its retirement. Buyers can select pre-prepared options such as "*I am offsetting my Greenhouse gases [GHG] from travel*" or "*I want to contribute to climate action*", or can choose to type in their own answer. Merging "reason" and "beneficiary" into a single cell does not encourage voluntary buyers to provide precise and exhaustive information. In addition, the pre-prepared language suggests that a vague description of the use is sufficient.

Finally, the CDM registry cancellation information is spread over four different webpages: three to cover different time periods, and one specifically dedicated to cancellations made through the UNFCCC's Carbon Neutral Now platform. This makes it particularly difficult to get an overview of credit retirement, and it is in most cases impossible to clearly connect a retirement to a specific company claim.

Verra registry

The **Verra** registry includes three separate data fields related to retirement: retirement beneficiary, retirement reason, and retirement detail. While it is positive to have distinct categories, the information is often missing, and, when it is included, often unclear. For example, the "beneficiary" is typically the entity retiring the credit, but this is often done on behalf of another entity's name. This can be the case of a broker retiring a credit on behalf of its client. Entities can provide more details in the "retirement reason" and "retirement detail" categories, but these are again most often empty, or include information that is of little use.

A few statistics from the over 450 million retired VCUs help demonstrate the lack of useful information (based on registry data downloaded in February 2022). In the category "retirement reason", three main reasons are given which cover the vast majority of retired credits, and none of them is useful to understand the purpose for which a credit has been taken out of circulation. These are "[blank]" (43% of retired credits), "other" (23% of retired credits), and "retirement for person or organisation" (22% of retired credits).

The "retirement details" section does not seem to follow a specific template, and the information is often not useful. Close to 50% of retired credits have either nothing or just "blank" in this cell of the registry. For the rest, the information can vary from very specific details, such as "retirement of XtCO2e for company Y for carbon neutrality claim in financial year 1234," to a seemingly meaningless combination of words and letters. For the vast majority of credits, it is not possible to clearly identify what a given carbon credit has been used for and by whom.

Gold Standard registry

The **Gold Standard** registry includes only one cell that seems to relate to retirement reason and ownership, which is labelled as "note". It also includes a cell to list the airline using a CORSIA-compliant credit under the International Civil Aviation Organisation (ICAO) scheme, but this is not yet being used given that no airline faces any offsetting requirement under CORSIA for now. The "note" cell is dominated by "blank" responses, which make up close to 70% of retired credits (registry data downloaded in february 2022). The remaining 30% includes, similarly to what can be found in the Verra registry, a wide array of entries, ranging from very detailed information to unintelligible wording. Overall, in the vast majority of retirements, it is not possible to clearly identify how a specific credit has been used.

Summary

The current state of registries is such that external observers can hardly verify the claims made by entities that announce to have offset their emissions. In most cases, it is not feasible to connect a claim to a specific credit retirement, and observers must hence take information communicated by companies at face value. For example, if company X claims to have offset its 2021 emissions through the purchase of carbon credits from a cookstove project registered under standard Y, it is, in most cases, not possible to verify this retirement in the programme's registry.

Even more troubling is that it is not currently possible to verify that a broker is not selling the same credit to multiple buyers. Without this check, unscrupulous brokers could sell the same credit to multiple companies and tell them that they have retired/cancelled it on their behalf in the registry of programme X. If the retirement/cancellation reason is “retired by broker Y on behalf of its client” - which is a recurring note in today’s registries - then multiple companies could be misled into thinking that they are “the client”.

This would be against the terms of use of the programmes’ registries, and the final beneficiary of a credit should in principle receive a certificate guaranteeing that a specific unit has been cancelled in their name. However, not all buyers will necessarily know this, and unscrupulous brokers could still tell clients that credits were cancelled on their behalf, without the client receiving any certificate, and just seeing in the registry that the credit has been retired.

In any case, it is problematic that this information is not made public, because it means it is de facto impossible for observers to check that a company has actually used the credits that it claims. In most cases, one must take the company’s words at face value. There is, by extension, also no way to calculate from registry data how many credits a given company purchased across projects.

Providing more standardised and detailed information on this would go a long way to improve the transparency of markets, and help prevent double use of credits.

2. **Supporting capacity building to make use of registry functions**

Registries are technical databases, and some of the information included in them is not straightforward. Efforts should, therefore, be made to help stakeholders like civil society, policymakers, researchers and the public understand what they are looking at. This includes adding a clear definition of technical terms (e.g. vintage, monitoring period, etc.). Guidance should also be provided to explain how to interpret serial numbers, as these are the key element allowing stakeholders to identify the use of specific carbon credits.

While most programmes include a glossary section on their website, this is not directly linked to or referenced on their registry page, and the glossary does not always include all the terms used in the registry. The CDM modalities and procedures include a list of the information covered by the serial number, and the VCS also provides this information. The Gold Standard has an internal document which is not yet publicly available.

3. **Enabling better tracking of carbon credits**

The voluntary carbon market today is a black box, in the sense that it is impossible to know who is the owner of a carbon credit. At best, information about the final entity retiring the credit will be shared. But between the moment when the credit is issued to the project developer, and the moment it is retired, the credit is not tracked.

One of the consequences is that, despite a current surplus of about 540 million credits on the voluntary market[1] - because issuance consistently exceeds retirements/cancellations - it is not possible to say where these credits are, i.e. who holds them. They could be held by project developers, brokers, speculators, companies aiming to retire them in the future, but there is no way to know.

This lack of transparency facilitates detrimental behaviour, such as hoarding credits to create an artificial and short-term price increase that does not directly benefit developers on the ground.

While the argument of confidentiality has been used in the past, there is no clear reason why providing information about ownership of carbon credits should be deemed particularly sensitive. In addition, the benefits in terms of transparency would trump any minor concerns regarding confidentiality. In fact, at least one registry, the UK's Woodland Carbon Code registry hosted on the Markit platform - provides information about current ownership of credits.

Credit tracking for article 6
Article 6.2 provides different possible triggers for the application of corresponding adjustments by the host country, one of which is the "first international transfer" of a credit. This could be defined in various ways, but one option would be to consider the first international transfer as the first transfer from the project developer's account to an account held by an entity located in a different country. Without tracking the legal ownership of a credit, it will not be possible to use this as a trigger for the application of corresponding adjustments, because it will not be possible to know *when* a credit has been transferred, let alone *to whom*.

4. Identifying any risk of double claiming of a mitigation outcome

Today's registries were built for the Kyoto-era in which most host countries where carbon market projects were implemented did not have an emission reduction target. There was hence no risk of a single emission reduction unit being counted or claimed by both the host country and the buyer of the unit. However, this is now a risk under the Paris Agreement.

Registries should, hence, clearly identify whether the mitigation outcome underlying a given carbon credit is included in the host country's Nationally Determined Contribution (NDC). In the absence of a corresponding adjustment having been applied for a carbon credit - or an authorisation letter having been issued under Article 6 - the mitigation outcome should be considered to be contributing to the host country's NDC.

The registry should clearly distinguish between adjusted and non-adjusted units. These units should have different names, as suggested for example in an earlier draft of the Article 6 text circulated during COP 26 which proposed the terms "Paris Agreement Support Unit" and "Paris

[1] According to the Trove Intelligence platform, consulted in February 2022: https://trove-intelligence.com/modules/carbon-projects/

Agreement Adjustment Unit". We recommend keeping this language to distinguish the units in the registry.

5. **Making detailed project information available**

While all the main programmes make information about projects publicly available, important pieces are often missing. Project databases, which include specific project pages where all documents about a project can be viewed and downloaded, typically do not include annexes to project documents. Yet these documents can oftentimes include very important information, like satellite images or data that are essential to calculate baseline emissions or to understand the exact location of a project. Documents related to benefit sharing with communities are also typically missing.

Improving upon the functionalities' of today's databases should, therefore, include clear requirements to publish *all* information that is necessary for independent parties to verify the quality of a project. This includes all annexes to the document describing the projects, as well as annexes to the monitoring, validation, and verification reports.

For any document that might be deemed confidential, a detailed and specific justification should be provided by the project developer, and the degree of confidentiality should be verified by the validation and verification body.

6. **Enabling and empowering scrutiny**

Beyond making the information publicly available, current practice should also be improved when it comes to alleviating barriers for non-experts to scrutinise the quality of projects. Carbon credits are used by companies to make claims that directly target the public, and yet it is very difficult for journalists and non-specialised civil society organisations to verify the quality of projects.

Project description documents can run to several hundreds of pages long and can be extremely technical. In addition to making these documents public in full, the register should also include a non-technical summary of the project, covering the most crucial elements, such as additionality determination, baseline setting, safeguards and co-benefits. This document should allow the reader to understand the key impacts of a project, and the main assumptions used to calculate the emission reductions or removals achieved by the project. It should link and refer directly to specific sections of the more detailed documents, allowing observers to go deeper where necessary.

7. **Improving data access**

A further improvement that should be made to existing registries is to better enable external actors to provide data and analysis on carbon markets by facilitating access to project data. This could be done, for example, by including machine-readable data on the registries and/or project pages. This could be as simple as a standardised spreadsheet, providing data points such as

expected (annual and total) issuance, actual issuance, cancelled/retired credits, baseline emissions, project emissions, buffer pool contributions, etc.

8. **Financial data transparency**

Finally, the market currently severely lacks transparency in terms of tracking financial flows. This is a significant problem for a system that is built around the idea of channelling finance towards mitigation action. Without a way to measure this, it is very difficult to truly understand the scope and impact of the market.

Therefore, project databases should include a “project annual report” submitted by the project developer, which includes financial data such as minimum, maximum, and average price paid per credit to the developer. A breakdown of the use of revenues should also be provided (e.g. infrastructure cost, benefit-sharing, reimbursement of loans, profits, etc.). Ideally information on the final price paid by the user of a credit should also be published, as this can vary significantly from the revenues received by the project intermediaries. The current level of opacity when it comes to intermediary margins is not only a problem for the credibility of the market, but also for the long-term stability of project developers’ revenues.

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