<u>CRCF Hybrid Workshop: Rules on Verification and registries</u>

Monday 23 October, 09.30 - 16.00, Brussels and online

<u>Report</u>

The draft **EU Regulation on Carbon Removals and Carbon Farming (CRCF)** establishes a voluntary certification framework for permanent carbon removals, carbon farming and carbon storage in products. CRCF includes requirements for third party verification of carbon removal claims, to be further specified by means of EU Implementing Acts. To support the harmonized implementation of the CRCF requirements, the Directorate General Climate Action (DG CLIMA) of the European Commission tasked the **VERTA project to review and analyse existing best practice** on third-party verification, certification schemes and registries and make recommendations for technical rules.

Findings were presented during the VERTA project **hybrid stakeholder workshop** organised in Brussels and online. The workshop began with an introductory presentation by Christian Holzleitner (DG CLIMA) providing background information on the CRCF Regulation (<u>provisional agreement</u> and <u>Q&A</u>), followed by Guidehouse introducing the project and its findings (see <u>slides</u>), and Trinomics moderating the panel discussions: the first panel was on third-party verification rules, the second on scoping of a CRCF registry and the third on rules for certification registries. Please find below a summary of the key takeaways from each of these sessions.

<u>Session 1: CRCF third-party verification process</u>

Guidehouse introduced the overall CRCF verification process and the roles of key stakeholders, including the roles of the European Commission, (recognised) certification schemes, certification bodies, national accreditation bodies and operators. They also highlighted key aspects such as auditing cost, minimising administrative burden for operators, the availability of certification bodies and the approach to accreditation and group auditing.

Panelists for the discussion were **Amparo Arellano** (Standards and Certification Director, Roundtable on Sustainable Biomaterials (RSB), **Hugh Salway** (Senior Director, Market Development and Partnerships, The Gold Standard Foundation) and **Andreas Steinhorst** (Executive Secretary, European co-operation for Accreditation (EA)).

Q1. What are the most important elements of third-party verification?
Amparo Arellano (RSB): Many elements are relevant.
- Basic element is the clarity on directives, i.e., what does the European Commission (EC) want to achieve, and have certified and verified, and how to then translate this into standards to ensure that economic operators have clarity on the rules and requirements they need to implement.
- Capacity building of auditors/Certification Bodies is important. This includes how to audit standards. For example, certification scheme auditors currently don't have much

experience on the topic of carbon removals, e.g. FSC have forestry certification experience, but not on carbon removal methodologies. REDII requires details on capacity and training of auditors.

- Assurance should be allowed as well as accreditation. A big value to certification schemes is an oversight body to monitor actions on the ground. However, as the CRCF is drafted like REDII, it does not allow this, only accreditation is allowed. RSB would like to see more flexibility here.
- In terms of costs, EUR 2000 for an audit is expensive, in this regard, it is a good idea to look into group certification.

Q2. How do you see the recognition of Certification Bodies?
- **Andreas Steinhorst (EA):** Types of conformity assessment are certification and verification; both require the intervention by an independent conformity assessment body (e.g. Certification Body or Verification Body). It is usually required when the result is important for regulators, but also for the users. Conformity Assessment Bodies need to be competent to ensure that results are reliable and correct. The preferred and best means to demonstrate the competence of Conformity Assessment Bodies is through accreditation by National Accreditation Bodies. Accreditation in Europe is regulated under Regulation No 765/2008. In many regulated sectors, statements or reports issued by a Certification Body or Verification Body accredited in the meaning of Regulation No 765/2008 shall be recognised by the national authorities. For National Accreditation Bodies under the EU ETS, accreditation is mandatory. In the case of the EA, since it is appointed by the EC as the European Accreditation Infrastructure, one of its objectives is to harmonise accreditation across the EU, hence accreditation can provide the same level of confidence in all Member States.

Q3. Is remote sensing the answer to making the process cheaper? And is it still robust enough?
- **Amparo Arellano (RSB):** On GIS, it depends. For carbon removals, I don't see how satellite imagery can provide support. However, for carbon farming, GIS and satellite tools could possibly help, e.g. for peatlands/wetlands restoration (e.g. assessing total forest cover changes, determining soil erosion, water levels and whether they have increased). But it is good to note that there is a big margin of error, much more than people think. This is especially the case when it comes to forest areas and vegetation cover. The biodiversity needs to be checked on site. Another thing that needs to be taken into consideration is social values; you need to talk to the local communities and workers.
- **Hugh Salway (Gold Standard):** Gold Standard still requires onsite visits for a majority of projects within two years of registration as part of a performance review, with a requirement for such an onsite visit at least once in every five-year crediting period (this can be slightly longer for afforestation/reforestation projects, which have longer crediting periods). This is a trigger for receiving credits under the standards. However, it is important to note that cost is a real consideration when it comes to audits and the size of a project. In this regard, group auditing can be complementary to the use of technologies.

- **In person/audience comment - Andrew Voysey (Soil Capital):** Certain carbon farming practices are hard to audit, e.g. checking on whether cover crops have been established or a particular tillage practice has occurred, in these cases the timing is critical. It may be possible or not. You then may need to rely on other means, like remote sensing. This is also relevant for ongoing monitoring, e.g. if there is a concern about increased ploughing, then this can be checked remotely.

Q4. If looking at more efficient processes, would you be comfortable moving to desk-based audits?
- **Andreas Steinhorst (EA):** This already occurs partly as part of assessments undertaken by National Accreditation Bodies (NAB) and audits performed by Certification Bodies. Normally as part of any assessment and audit, there is a document review, so part of it is always a desk-based audit. However, in specific circumstances remote audits are possible, for e.g. during covid pandemic, onsite audits were not possible and remote audits proved to be effective, nonetheless it was still important to continue with onsite audits as soon as it was allowed. While remote activities can be useful in specific circumstances, they cannot be a replacement for onsite regular activities, but may be a useful supplement. Both remote and onsite audits should be monitored (and witnessed) by NABs to ensure that audits are performed according to stipulated requirements.

Q5. Does the European Commission need to develop a basic template when it comes to certificates of compliance i.e. digital and/or physical?
- **Hugh Salway (Gold Standard):** Gold Standard made their public registry accessible to all. This includes all project certification documents such as a validation reports. Here in CRCF, the validation report is called 'certificate of compliance'. It would make sense to allow existing schemes to use their current format, but within an additional standardised annex. The benefit is that this has familiarity for existing labels and credits, and that a certification scheme may have additional requirements for projects that go further than those of the CRCF, and would need to be reflected in reports. In any case, all documents should be in a digital format on the registry.

Q6. Are ISO standards essential?
Andreas Steinhorst (EA): There are a few things to note in this regard.
- Accreditation is based on harmonised standards and their reference is published in the Official Journal of the EU. Three standards are important : EN ISO/IEC 17065, EN ISO/IEC 17029, EN ISO 14065. The issue is that there are elements in the proposed CRCF regulation which relate to both ISO 17065 and others to ISO 17029. For example, issues of Claims (ISO 17029) and certified carbon removal activities (ISO 17065).
- We have dealt with this issue already for REDII. The requirements of "Commission Implementing Regulation (EU) 2022/996 on rules to verify sustainability and greenhouse gas emissions saving criteria and low indirect land-use change-risk criteria: A certification body performing audits on behalf of a voluntary scheme shall be accredited to EN ISO/IEC 17065, and when a certification body performs verification activities, either with its internal resources or with other resources under its direct

control, it shall meet the applicable requirements of EN ISO/IEC 17029 and EN ISO 14065:2020.

The certification body shall outsource verification activities only to bodies that meet the applicable requirements of ISO/IEC 17029 and ISO 14065:2020.

- Finally, it's the scheme owner who decides which conformity assessment activity shall be performed and with this defines the applicable standard for accreditation.
- ISO standards are generic, and they need to be supplemented either with specific requirements set out either in EU regulation or the related sector schemes. What should be avoided is to require the accreditation for both as a Certification Body and Verification/Validation Body) as then the bodies need to meet all requirements set out in the standards for accreditation (no exclusions are permitted). It is important to look carefully at the most relevant standard for accreditation. In my view this is IS0 17065 with some elements of ISO17029/ISO14065 (but this depends on the scheme).

Amparo Arellano (RSB): I must add that I am concerned about accreditation, as FSC, PEFC sustainable forestry management (SFM) schemes do not follow an accreditation process, but instead rely on assurance. I think in this regard, the stakeholder engagement element is very important.

Q7. What is the best way to deal with non-conformities?
- **Amparo Arellano (RSB):** This is best left to certification schemes. Ideally there should be high level guidance from the European Commission and then the schemes can make definitions based on their individual system.

In person audience and online Q&A/comments:
- **Puro.earth:** When it comes to monitoring, there should be a maintenance agreement every five years, and then if the project is not on track, they should be assessed annually to ensure that it is on the right path.

- **Online Q1. Should accreditation be at EU level and not Member State and international level?**
  - **Andreas Steinhorst (EA):** The CRCF regulation requires Certification Bodies to be accredited by the National Accreditation Body (of the Member State where they have the Head Office or are mostly active), so they can then be accepted across the EU. Alternatively, they can also be recognized by competent national authorities (e.g. Ministry of Energy or Environment). Internationally, EA members of International Accreditation Forum (IAF) are accepted at an international level. An agreement amongst Accreditation Bodies involves acceptance by Accreditation Bodies themselves, however this does not mean that other countries or regulators support certification. It depends on the third country and if there is a trade or cooperation agreement. There are some of these agreements in place for different sectors.

- **Online Q2. Does US accreditation count?**
  - **Andreas Steinhorst (EA):** A US Accreditation Body cannot accredit in the CRCF context, as it is not an EU National Accreditation Body. The European Court of

Justice has clarified this. If a Certification Body is based in a third country, can they be accredited by an EU National Accreditation Body? This is something for the EC to provide guidance, and not for the EA to decide.

Session 2: Scoping of CRCF registry

Guidehouse introduced the main provisions related to the CRCF registry, the reference systems for the CRCF registry, the two CRCF registry options (full functionality of CRCF registry and CRCF as a central repository) and a comparison of these two technical options. Panelists for the discussion were **Ieva Steponaviciute** (Director, Strategy & Outreach, Climate Action Data Trust), **Joao Rodrigues Frade** (European Commission, Digital Services - DIGIT), **Tarun Vasudev Kumar** (European Commission, DG ENER).

Q1. At CAD Trust, what do you think is key for scoping the registry in the most efficient way (also to relate it to other existing registries)?
Ieva Steponaviciute (CAD Trust): I will introduce what the CAD Trust is and then go into the scoping aspects.

- CAD Trust is a global cooperation between the World Bank, IETA, and the Singapore government to link and harmonise the data from carbon credit registries. This also integrates the vision to include Article 6 registries. The registries continue to share meta data to the CAD Trust decentralized network, and this data can be accessed via API or a public dashboard. CAD Trust is more of a register than a registry.
- When it comes to scoping the registry, it is key for the European Commission (EC) to think about the policy design of the overall CRCF system and the role EC desires to play. For instance, does the EC want to only be an oversight body for approved credits issued by a variety of partners and provide transparency or also to control the unit issuance, operate the registry, and actively link to the trading processes of these units? This may be a determining factor in how complex the design should be.
- On double counting, a framework should be established to ensure that credit comparisons can be made side by side, so that the EC can more tightly control. This approach to accounting might help to ensure no obstruction for overall EC reporting claims. For example, we have a working group developing technical rules to identify double counting – e.g., consistent guidance around using project names, crediting periods and other parameters.
- On issuance tracking, a two-way link between the carbon credit registries and the central repository may not be necessary. At the CAD Trust, we use a one-way automated link, i.e. connecting the registries to the necessary infrastructure. This way every time a carbon registry issues data and submit it to us, we issue a serial number to the projects unit blocks tracked in the CAD Trust system. This may be sufficient for oversight and may help with checks for double counting, in order to ensure it hasn't already been issued or claimed.
- Presently the CAD Trust framework is based on blockchain technology that is open source. This technology helps to confirm the source of the data when it is pushed into a central repository and ensures greater resilience in the system. This means that there are fewer 'breakage points' if registries in the system are corrupted, as the whole system has a record and helps maintain integrity of data.

Q2. How do you ensure minimum standards, and do you issue any credits?
Ieva Steponaviciute (CAD Trust): We do not issue credits or create or hold underlying assets. The CAD Trust holds digital "twins" of data that already exist in registries, it is hence a reflection of the data. Since we operate on a global level, the focus is on helping the public understand what credits and carbon crediting programs are operating. There is no methodological screening before the data is shared, however we do ensure basic know your customer (KYC) requirements before the data is shared publicly on our Dashboard. Overall, we believe greater transparency is important.

Q3. Is blockchain going to be a necessity?
Joao Rodrigues Frade (European Commission, DIGIT): There could be two scope options for the CRCF registry. It could either be full functionality, and hence be used for both front and back office, or a central option, where there is only back-office services. In my opinion, blockchain could support both options and be the basis of the CRCF registry back-office services. Furthermore, the European Blockchain Service Infrastructure (EBSI) is a viable blockchain to implement these services on. Since blockchain has already gone beyond the aspirational phase and is used by millions of people in many different contexts, it should be taken seriously. There are many examples of how to use blockchain technology in a peer-to-peer context and in an efficient way. A hybrid use of blockchain and classical technologies could also be considered. Furthermore, wallets will be used increasingly as the end-User interface to manage different types of tokens, and we will see more "tokens" in the future, in that context if we can leverage these developments that would prevent the creation of a highly tailor made CRCF registry.

Q4. How do you see the linkage of registries?
Tarun Vasudev Kumar (European Commission, DG ENER): Under the revised EU Renewable Energy Directive (REDII), the certificates of compliance issued into the Union Database (for biofuels and renewable fuels) could work through online application or through the backend. This process can bring harmonisation of how data between the certification schemes (recognised by the Commission) is understood. The Union Database acts as a central hub for certificates. The second aspect to take into consideration related to the regarding traceability of sustainable biofuels. This information starts at the point of origin of the biofuel feedstock and gets transferred multiple times before biofuel is put on the market. Here transactions are registered by economic operators (the certified companies), either online or via a service provider. It is good to note that the Union Database is simply digitizing what is already happening in practice with physically trading fuels. This digitisation is helping the Union Database to bring in traceability and avoid double counting of renewable fuels.

Q5. How can you avoid double counting?
Tarun Vasudev Kumar (DG ENER): personally I would prefer a centralized hub that can harmonise information, similar to what we have for the Union Database. We could study the inclusion of additional checks focused on the identity of economic operators, this could be in the form of multiple certificates and conversion checks that go into the issuance of carbon removal credits to help avoiding double counting. While blockchain technology was considered for the Union Database, it was finally decided not to go with it, since it is more

helpful after the issuance of credits. The use of blockchain technology may be considered in a later stage. UDB is a blockchain compatible system, which means blockchain applications can provide required datasets for compliance purposes.

Q6. If the EC develops the registry, what is the best way to integrate it with existing ones?
Ieva Steponaviciute (CAD Trust): The first step we have used is to ensure mapping between the registry and the CAD Trust. We then create a node to publish data to CAD Trust. This process is automated and the public can access it. It is necessary to focus on the alignment of data, technological capacity, as well as take into consideration the legal and policy context on data sharing and use. In addition to these aspects, standardisation on the backend is also important, so that all registries know what to expect.

In person audience and online Q&A/comments:
- **In-person Q1. Pannonia, bioethanol producer:** Since we ferment a lot of material and work within the voluntary certification schemes under the RED, including the Union Database, we have seen that there is a big problem in trust. This is especially as oversight of the work of Certification Bodies falls between the European Commission and the Member States. Hence no one is sure who is in control. If this happened under the CRCF, then this would really damage trust in the certification system. To illustrate this, I believe that every year 10 times more used cooking oil is collected or supplied from Malaysia then would be available.
  - **Tarun Vasudev Kumar (DG ENER:** In the Union Database, all points of origin need to be registered, and certification schemes are required to audit all points of origin. The issuance of unidentified ones and/or capacity can also be checked to see whether this is plausible.
  - **Giulio Volpi (DG CLIMA):** The need to avoid the risk of double issuance has been looked at carefully and resulted in the latest amendments to RED and the establishment of the Union Database to track and trace renewable fuels. We can build on this experience for the future robust implementation of the CRCF. In the case of the CRCF, we already had a mandate to set up the CRCF registry from the start so that the tracing system is transparent and robust.

- **In person Q2. Ministry of Finance, German:** CRCF is neutral on trading. There are some governments that are reluctant to open the market for certificates. The European Commission President wrote to the proposed Commissioner of Agriculture to look at a report on strategic dialogue to reward certificates under the Common Agricultural Policy.
  - **Giulio Volpi (DG CLIMA):** The CRCF Regulation focuses on the supply side, it does not regulate end use claims on carbon removals. This is rather regulated by horizontal EU legislation such as the proposed Green Clams Directive, focusing environmental claims from companies to consumers.

- **Online Q1. There are some environmental concerns on the energy use of blockchain as a technology, any thoughts on this?**
  - **Joao Rodrigues Frade (DIGIT):** This is a relevant concern. However, EBSI uses a consensus mechanism which spends as much energy as a conventional

IT system. In other words, while there are other alternatives, these would be consuming a similar amount of energy. When you think about server farms and data central deployment, all technologies can be energy intensive.

- o **Ieva Steponaviciute (CAD Trust):** On the environmental impact, I echo what Joao said since this was part of the selection criteria that the expert panel used to develop CAD Trust. You can ask providers to comment and validate against this. Deploying a system that has a lower environmental impact is possible and should be key to address.

Session 3: Rules for certification registries

Guidehouse introduced the main provisions related to certification scheme registries, minimum requirements for registries, best practice examples for registries, as well as options for registry interoperability in the interim period. Panelists for the discussion were **David Gazdag** (Regional Representative, Europe, VERRA), **Andrew Voysey** (Chief Impact Officer, Soil Capital), **Juan David Duran** (CEO, EcoRegistry).

Q1. Will Verra meet the quality level for recognised Certification Schemes and the CRCF registry?
David Gazdag (Verra): Verra has been operational for 17 years. Verra is already active in Europe with almost 100 projects in our registry at different stages. We are here in Europe and here for Europe. In the future we see the importance of an alliance with CRCF. The most important projects under Verra will be eligible under CRCF and we hope to be a long-term partner in the process. In terms of the timeline, it can take more than two years from design to implementation of a project, since we need to make sure all the projects, standards and methodology are already working on ground, and we do not have two years to lose under the climate emergency. Existing project developments must not halt during the transition period.

Q2. How do you look at interoperability?
Andrew Voysey (Soil Capital): Trust is very important. There are a few key aspects to note.
- Double issuance could arise if a single field/project is in more than one system (certification scheme) at once. The registries rely on contracting rules. And as of today, there is not much interoperability. I feel like we cannot rely on contracts alone today, this is why we built the FarmVault platform.
- Data protection is a very important design consideration, it is similar to a transaction log but happening earlier in the process. In our case, when any scheme meets a farm, they obtain the VAT number and input it into FarmVault, this then registers whether there is compatibility with the scheme, thereby indicating a green light or flagging whether to look further into it. Through this platform we have 2500 farms that are actively present. It was relatively easy to set up and is already spotting some risks of double issuance. If it can help on scenarios for EU registry, at least on double issuance, then we are happy to support.
- I also want to add that I am more in favour of a central repository, i.e. to explain further FarmVault is an example of how to do something centrally without it being too burdensome.

Q3. What do you see as the biggest risk or opportunity under CRCF?
Juan David Duran (Ecogistry): There are a few things to note.

- The problem with GHG crediting programmes is that it does not always have outputs on how much reduction was achieved, but has models and methodologies to estimate this. When it comes to 'static' and 'dynamic' data and the resulting input and output variables, we need a common information model, like in the energy sector. Something like a central repository, where the CAD Trust is making a central report for everyone to use is an opportunity that should be leveraged. Once the data is available in a standardised manner, you can easily compare projects.
- On the accounting side, blockchain technology has the structure of a database without giving away personal or specific data on companies involved in transactions and therefore not infringing any laws.
- In terms of the preparation in connecting to different platforms, as fast and as easy as possible, CAD Trust or other marketplaces use an Application Programming Interface (API) format and it is possible to 'train the solution' to adapt fast. Since the policy has not been defined yet, we should have an API that can be quickly modified.

Q4. Since double issuance was discussed, what about double claiming?
Andrew Voysey (Soil Capital): From a registry point of view, there is a need for dedicated rules to adapt according to a use case, in order to prevent double claims. For instance, some registries are designed to deal with Scope 3 emissions. This is also why I am more in favour for a central repository, as it would be more difficult to implement for a fully functional registry.

David Gazdag (Verra): Most important aspect is transparency. There should be a system in place that allows every credit to be followed back to where it was produced. At Verra, we have the ability once a credit is transferred between accounts to trace it back to its origin. Every project needs to include information on how issuance is done for every credit, also cross checks will be essential on project components. There should be no two projects at the same location, which is why I also support a central repository, since this can have coordinates for every project in a file.

Q5. What is most complicated to set up the registry?
Juan David Duran (Ecoregistry): As of now central repository is the best choice, as it will be able to avoid double counting. In this regard, need to make sure that a unit is not listed in more than one registry, and in the transaction side, we need to make sure, we are not using the same unit twice. Under the CRCF regulation, having a central repository will ensure being able to check the origin of every unit. The use of blockchain technology ensures the ability to count units, but not disclose the user (this is important from a data management policy perspective). Also tracing the origin of the unit right up to the beneficiary, this is missing in the recommendations under the CRCF Regulation. Independent of the technology used, each unit needs to be addressed with the use of standardised information through the systems.

Q6. What should we avoid when setting up a registry?
- **Juan David Duran (Ecogistry):** Any sort of manual approaches, for instance dealing with manual oversight of documentation is very difficult.

- **David Gazdag (Verra)**: Double issuance and double counting. It would be important to ensure trust in the system and ensure no gaps for project developers in Europe.
- **Andrew Voysey (Soil Capital):** Important to avoid designing this system for single use cases and to avoid reinventing the wheel and ruining choice and competition in the name of standardisation.

In person audience and online Q&A/comments:
- **KZR INiG:** What about double claiming in the context of accounting CO2 in multiple legal acts (e.g. RED, CRCF)? Can you account for the same CO2 for different legal acts?
  - **Giulio Volpi (DG CLIMA):** yes in principle, the intention is not to count the same CO2 twice. This accounting/quantification issues will be discussed at next meeting of the EU Carbon Removal Expert Group on 21-23 October.

- **Online Q1**. **Where should certification schemes and their registries be located?**
  - **Giulio Volpi (European Commission, DG CLIMA):** Given that the CRCF focuses on carbon removal projected located in the European Union, also certification schemes should be operating/been registered in one of the Member States of the European Union.

<u>Next steps</u>

The chair thanked all panelists and participants for the very informative and constructive exchange. He invited everyone to respond to the online survey on the VERTA background papers - which will be circulated by email to all workshop participants. The outcome of the survey will inform the final report of the VERTA project, due in December 2024. All workshop proceedings will be available on the workshop webpage: [CRCF Hybrid Workshop: Rules on Verification and registries - European Commission (europa.eu)](europa.eu).