# Project VERTA

# Rules on CRCF verification and registries - technical assistance

Stakeholder Workshop
23 September 2024

# Housekeeping Rules

1.  **IN-PERSON PARTICIPANTS:**
- Wear & keep your badge (V-Pass) visible and sign the attendance list

**2. ONLINE PARTICIPANTS:**
- Please leave your microphone on mute, unless you take the floor.

**3. CONSENT FOR RECORDING & PICTURES**
- Be informed that the meeting will be recorded and pictures may be taken.

**4. ASK QUESTIONS & INTERACT**
- We want to hear from you! Please ask questions & share comments!
- We will be answering some questions in the Webex chat during the Q&A. When posting a question please ensure you mention your name and company name, before typing in the question.

**5. SOCIAL MEDIA: #EUCarbonRemovals**
- Your posts and comments can help others learn more about the topic and connect with like-minded professionals in the industry.

# Today's programme

**10:00 – 10:30**

**Welcome & background on the CRCF Regulation**

**10:30 – 12:00**

**Session 1: CRCF third-party verification process**

**12:00 – 13:30**

**Lunch break**

**13:30 – 14:30**

**Session 2: Scoping of CRCF registry**

**14:30 – 14:45**

**Tea break**

**14:45 – 15:45**

**Session 3: Rules for certification registries**

**15:45 – 16:00**

**Closing and next steps**

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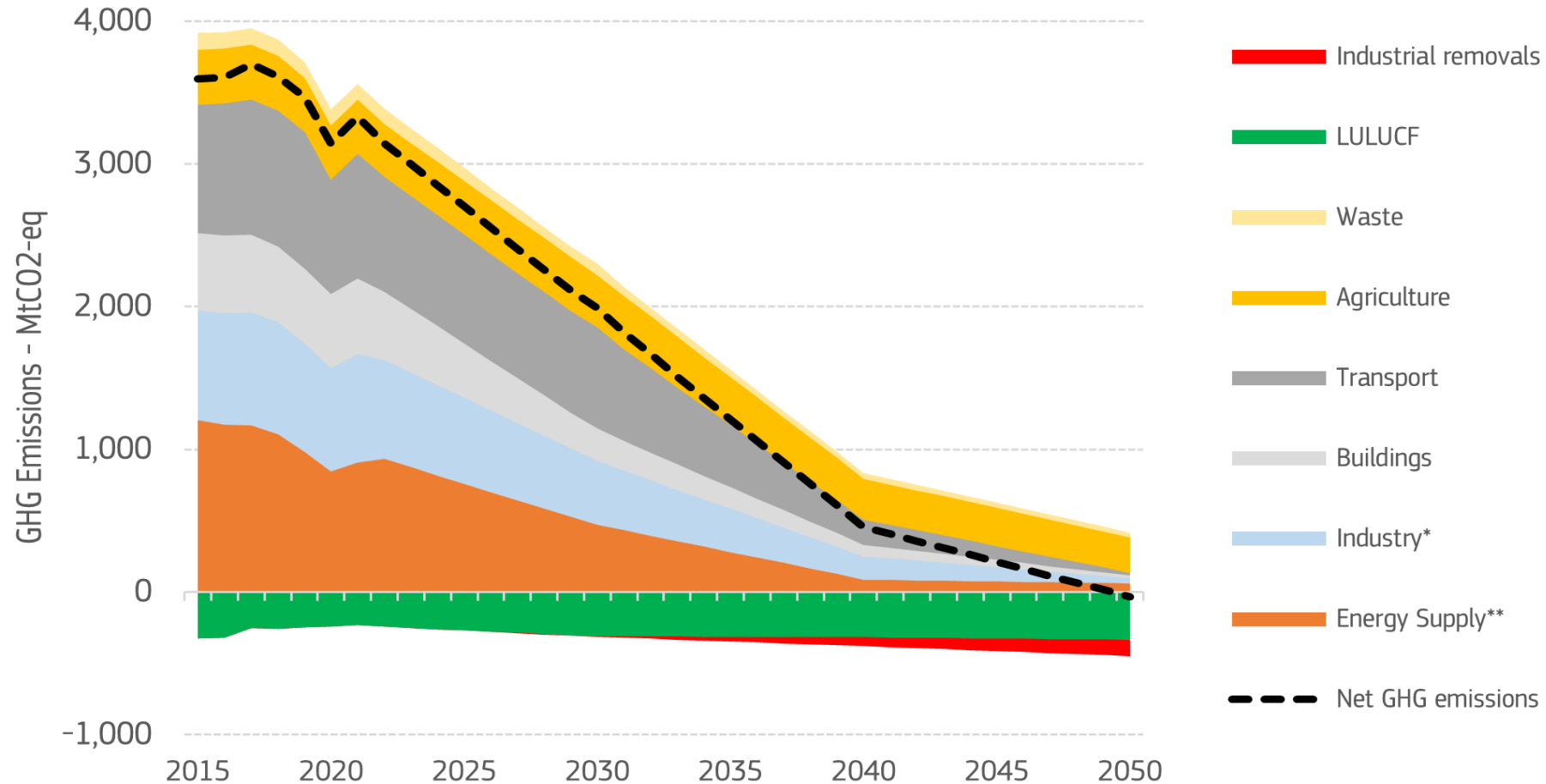# Welcome and background on the CRCF Regulation

*by DG CLIMA*

**Certification framework for carbon removals and carbon farming in the EU**

*September 2024*
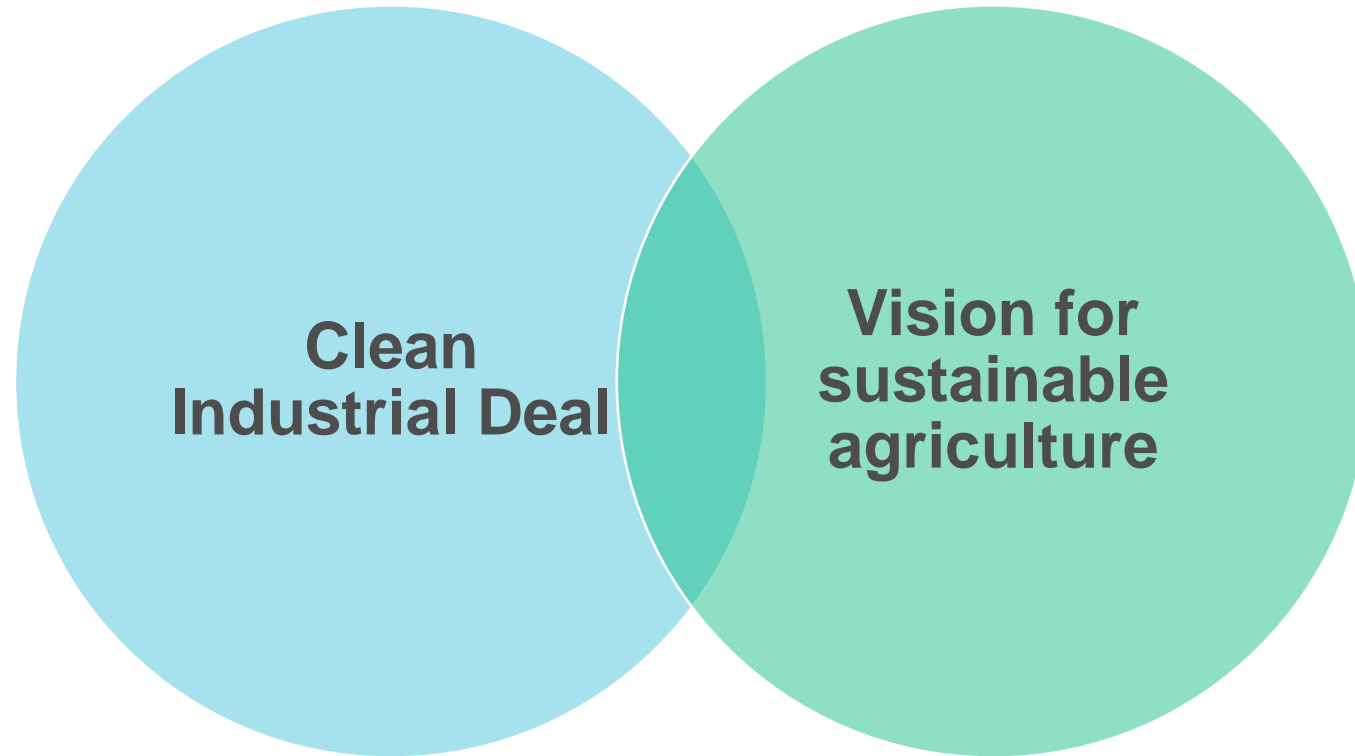
# Pathway to climate neutrality



Historical and projected sectoral greenhouse gas emissions in the period 2015-2050

Legend:
- Industrial removals
- LULUCF
- Waste
- Agriculture
- Transport
- Buildings
- Industry*
- Energy Supply**
- Net GHG emissions

Y-axis: GHG Emissions - MtCO2-eq

*Excluding non-BECCS industrial removals
**Including bioenergy with carbon capture and storage (BECCS)

European Commission

# Two keys for climate neutrality



Clean Industrial Deal

Vision for sustainable agriculture

European Commission

# Key elements of CRCF

## Two main pillars

**Quality criteria for EU-based activities**

- Quantification
- Additionality
- Long-term storage
- Sustainability

**Certification rules**

- Third party verification
- Certification schemes + bodies
- CRCF registry

## EU certification methodologies

*Operationalising the quality criteria for the different carbon removal activities*
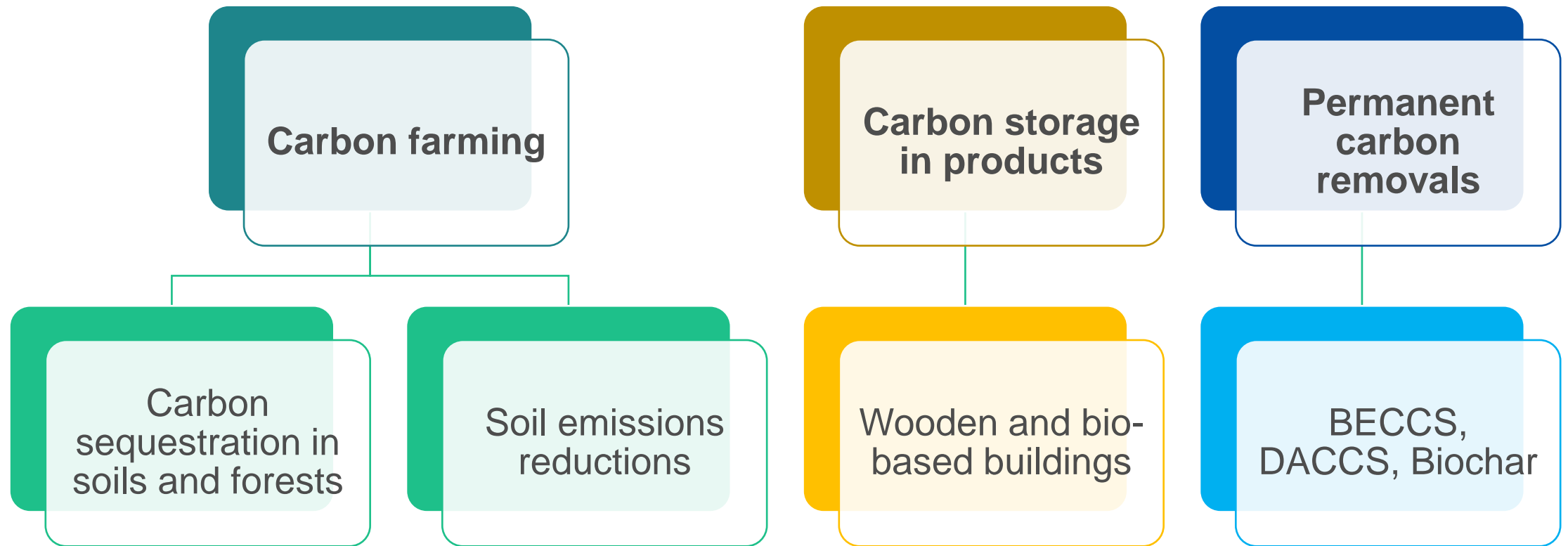


**PERMANENT CARBON REMOVALS**

**CARBON FARMING**

**CARBON STORAGE IN PRODUCTS**

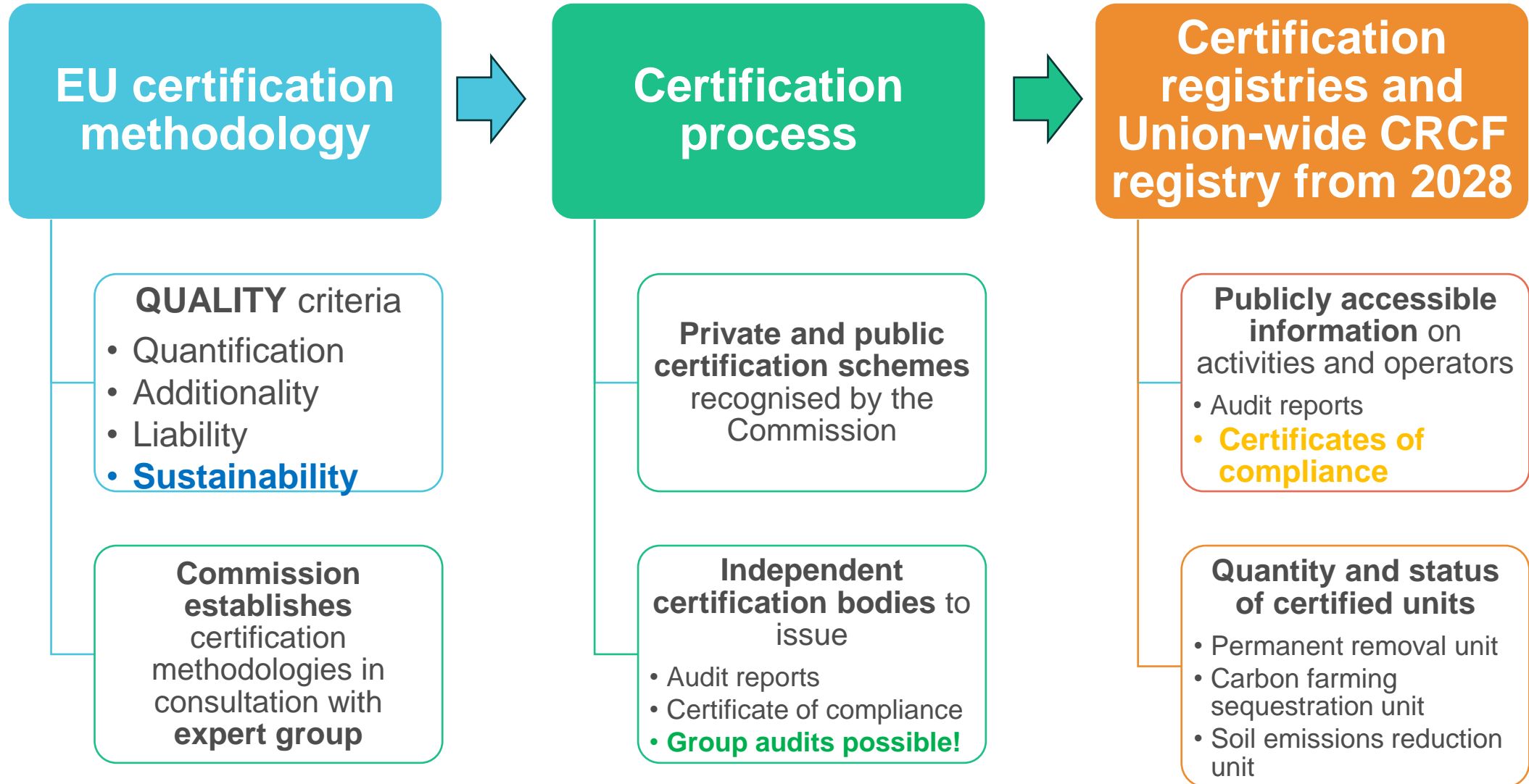**Commission to be advised by the EU Expert Group on Carbon Removals**

# Carbon Removal and Carbon Farming Regulation (CRCF Regulation)

**Carbon farming**
- Carbon sequestration in soils and forests
- Soil emissions reductions

**Carbon storage in products**
- Wooden and bio-based buildings

**Permanent carbon removals**
- BECCS, DACCS, Biochar

# How does certification work?
## CRCF Regulation

**EU certification methodology** → **Certification process** → **Certification registries and Union-wide CRCF registry from 2028**

### EU certification methodology

**QUALITY** criteria
- Quantification
- Additionality
- Liability
- **Sustainability**

**Commission establishes** certification methodologies in consultation with **expert group**

### Certification process

**Private and public certification schemes** recognised by the Commission

**Independent certification bodies** to issue
- Audit reports
- Certificate of compliance
- **Group audits possible!**

### Certification registries and Union-wide CRCF registry from 2028

**Publicly accessible information** on activities and operators
- Audit reports
- **Certificates of compliance**

**Quantity and status of certified units**
- Permanent removal unit
- Carbon farming sequestration unit
- Soil emissions reduction unit

# Role of CRCF Regulation in voluntary and regulated carbon markets

## Corporate claims and sustainable finance

- **Corporate Sustainability Reporting Directive**
  - [Sustainable Reporting Standards on Climate](#) for non-financial reporting
- **Green Claims**
  - [Commission proposal](#) from March 2023 in co-decision
- **Workshops in H1 2025 on public-private funds and common purchasing**

## Post-2030 EU climate policy

- **EU ETS review in 2026**
  - Commission to assess the inclusion of permanent removals in EU ETS
- **Review of LULUCF and Effort-Sharing Regulation in 2026**
  - Study on market-based approaches in the AGRI-FOOD value chain

# Next steps

| | | |
|---|---|---|
| 21 to 23 October **2024** | **Expert Group meeting to discuss first drafts of certification methodologies** | Permanent removals |
| | | Carbon farming |
| | | Carbon storage in long-lasting buildings |
| **2025** | **Proposal of delegated acts on certification methodologies** | |
| | **Proposal of implementing act on certification process and registries** | |
| **2026** | **Start of certification** | Approval of certification schemes |
| | | First issuance of certified units |
| **2028** | **Start of EU registry** | |

European Commission

# More information:

CRCF website

CRCF Regulation provisional agreement: Item9-Provisionalagreement-CFCR_2022-0394COD_EN.pdf (europa.eu)

FAQ: a8abe1c4-a3c6-4c94-be0e-4b76f7fd0308_en (europa.eu)

Press release: Commission welcomes political agreement on EU-wide certification scheme for carbon removals

EU carbon removals newsletter

# Introduction on the VERTA project

*by Gemma Toop & Boris Lagadinov (Guidehouse)*

# VERTA project goal & objectives

The **goal** of the VERTA project is to help the Commission set the foundations for implementing rules for the **verification** of carbon removals and **certification registries**, **under the CRCF Regulation**

We will provide recommendations to DG CLIMA on the following areas:

1. Third-party verification rules

2. Operation of certification schemes for carbon removals

3. Minimum requirements for certification registries for carbon removals, including interoperability options

4. Initial scoping of the Union registry for carbon removals (CRCF registry)

**Timeline:** November 2024 – December 2025

**Project status**

**1** Review and analysis of current initiatives and their approaches/rules

- 1.1 Technical rules on the verification and certification process
- 1.2 Technical rules on the operation of certification schemes
- 1.3 Technical rules on the operation of certification registries

**2** Develop technical options papers

- 2.1 Technical options papers
- 2.2 Scoping paper for a Union registry for carbon removals

**3** Consultation of relevant stakeholders and experts

- 3.1 Stakeholder workshop
- 3.2 Online public consultation
- 3.3 Reporting Stakeholder views

**4** Final recommendations

# VERTA project timeline

**Mar 2024**

First report
(Task 1)

Expert Group
meeting
& provisional
agreement
CRCF

**Apr 2024**

**Jun 2024**

Second report
(Task 2)

Stakeholder
workshop
& begin online
consultation

**Sept 2024**

**Oct 2024**

End of online
consultation

Final Report

**Dec 2024**

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# What does the final CRCF text say?

A voluntary certification framework that supports the development of carbon removal activities or an unambiguous net carbon removal benefit, while avoiding greenwashing

| Scope | Activity period | Generation & issuance of units | Unit | Wider sustainability requirements | Biomass criteria | Durability |
|---|---|---|---|---|---|---|
| Carbon farming | > 5 years | Generation of units during activity period | $t/CO_2$ of certified **temporary** net carbon removal benefit *and* $t/CO_2$ of certified net soil emission benefit from carbon farming | Do No Significant Harm principle (DNSH) & mandates co-benefits for biodiversity incl. soil quality | REDIII sustainability requirements for operators | > 5 years unit expiry at the end of monitoring period (to be set in the methodology) |
| Storage in products | To be set in the methodology | Issuance of units only ex-post, based on valid certificate of compliance | $t/CO_2$ of certified **temporary** net carbon removal benefit | Do No Significant Harm principle (DNSH) & option to report sustainability co-benefits | Application of cascading principle as per REDIII implementation | > 35 years for storage in products unit expiry at the end of monitoring period (to be set in the methodology) |
| Permanent removals | To be set in the methodology | | $t/CO_2$ of certified **permanent** net carbon removal benefit | | | > 200 years for permanent removals |

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# Key topics for practical implementation of the CRCF verification rules and operation of certification registries

**Key topics**

**Session 1**

**Verification and certification process**

- Main stakeholders and their roles
- Process of (re-)certification, certified unit issuance
- Accreditation of CBs and auditor competency
- Group auditing

**Sessions 2 & 3**

**Operation of certification registries**

- Options for the scope of the CRCF registry
- System architecture, database ownership and management
- Minimum requirements for certification scheme registries
- Interoperability of certification scheme registries

**Lessons drawn from**

EU ETS

REDII bioenergy sustainability criteria

Voluntary carbon markets

EU Organic Agriculture

**Options & recommendations**

**Goal:**
input and options for Commission's implementing rules

# We welcome your feedback!

# Please share your feedback after the discussions today.

Feedback to be provided via the survey link:
https://ec.europa.eu/eusurvey/runner/VERTAStakeholderSurvey2024

Deadline 7 October (midnight CET)

# Session 1: CRCF third-party verification process

# Main stakeholders and their roles in the CRCF certification process

**MS & National Accreditation Bodies**

Accredit/recognise and control certification bodies.

**Certification Bodies**

Conduct certification and re-certification audits and issue certificates of compliance.

**Operators**

Monitor and report compliance based on relevant EU certification methodologies.

**European Commission**

Develops EU certification methodologies.

Recognises certification schemes.

Manages CRCF registry.

**Certification schemes**

Appoint and supervise certification bodies and oversee certification of operators.
Control certification and re-certification audits and certificates of compliance. Issue certified units and manage certification registry.

**Scheme Registry / CRCF registry (by 2028)**

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# Process for (re-)certification and issuance under the CRCF

## Certification schemes

| | | |
|---|---|---|
| Review operator application | Oversight, including:<br>• Appointing certification bodies<br>• Review (re-)certification audits<br>• Issue certificates of compliance | **Issue certified units** in **registry** |

## Certification Bodies

| | |
|---|---|
| Conduct certification audit & **issue certificates of compliance** | • Carry out **re-certification audits:** ex-post verification of generated carbon removals or emission reductions<br>• Carry out **monitoring audits:** ex -post verification of continued stored carbon |

## Operators

| | |
|---|---|
| Apply to a certification scheme & submit **activity plan** and **monitoring plan** | • **Generate units** during activity period<br>• **Monitor reversal risk** to ensure storage of carbon removals |

**Activity period**

**Monitoring period**

**Year 0**

**End of monitoring & end of validity**

September 23, 2024

23
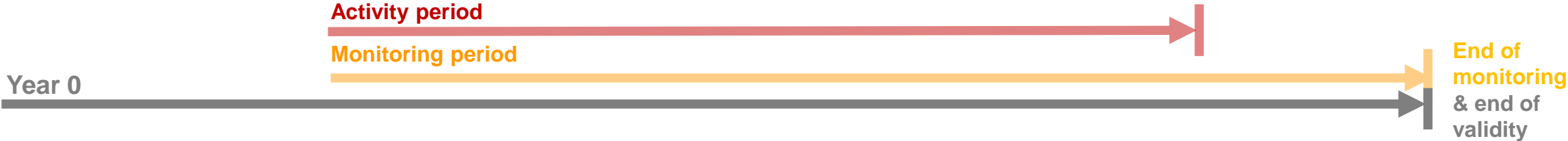
# Key messages from Expert Group panel

1. **Auditing cost:**
   - Cost implications of auditing and necessity of limited vs. reasonable level assurance
   - Clarify how schemes are paid for the certification
   - Group certification is a promising way to include small operators
2. **Minimise administrative burden for operators:**
   - Particularly relevant for carbon farming
   - Tools: remote auditing and streamlining of calculations in the methodologies, e.g. by using standard values.
3. **Certification bodies:**
   - Availability of certification bodies may be an issue
   - Liability falls to certification bodies as clearly outlined in certification schemes
4. **Accreditation:**
   - Proportionate approach to accreditation of certification bodies and ensuring harmonised recognition by Member States
   - Need a level playing field across all Member States, whilst being aware that accreditation is a national competency
   - Certification bodies are accredited by national accreditation body for a specific scope
   - Certification bodies and accreditation bodies need to know what standard will be the basis for accreditation (e.g. ISO 17029 or 17065)

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# Accreditation or recognition of Certification Bodies (CB)

**CRCF Article 10 allows accreditation or recognition of CBs**

1. **Accreditation & competency of certification bodies:**

- Requirements on independence, impartiality and avoiding conflict of interest in decision making (as in REDII and EU ETS)
- Appropriate training specific to the scope of the certification scheme
- Accreditation by National Accreditation Body to ISO 17065 / 17029 / 14065, additionally proof of technical expertise relevant to audit scope and scheme criteria

**2. Recognition of CBs:**

- Recognition by national competent authorities also allowed
- Recognition should also be to the specific scope of the CRCF or certification scheme
- Certification bodies that have been recognised in the context of the EU ETS will have relevant skills and experience and could also serve as the basis under the CRCF

**Rationale for recommendation**

- Standardisation of accreditation requirements ensures the quality of the certification and audit process across geographies
- Accreditation to an ISO standard should be requirement, but these standards are broad, so accreditation should aim to be to the specific scope of the CRCF or the certification scheme
- Accreditation can take time – is an explicit transition period needed?

- Recognition by national competent authorities can take time and CB availability can be a bottleneck
- Similarity with EU ETS requirements means it could be an option to allow CBs recognised under the EU ETS in an interim period and to build CRCF recognition onto that to reduce recognition time
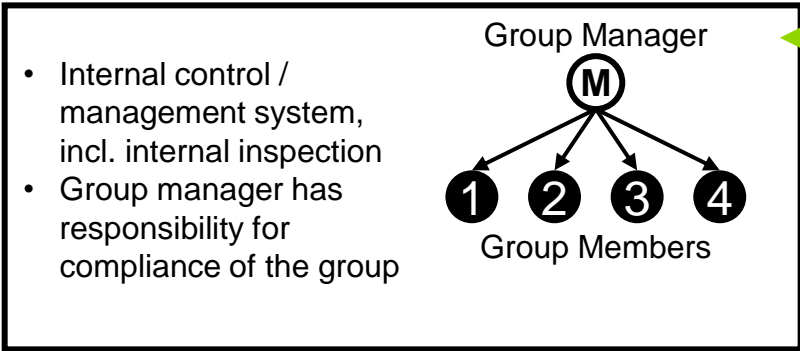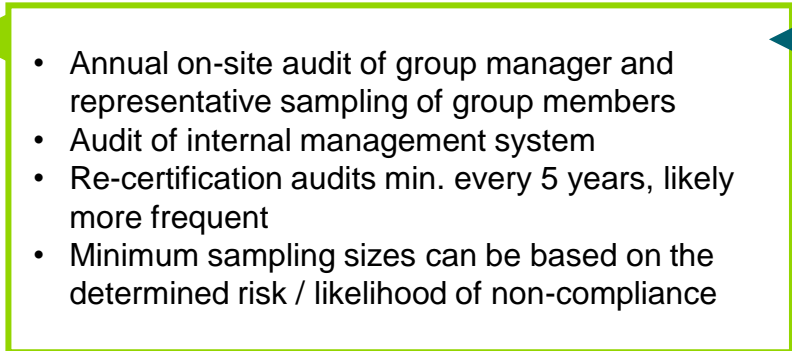
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# Group auditing for Carbon Farming

**Technical options:**

1. Groups of operators should be in similar geographical location and share similar characteristics, such as climatic or soil conditions and production activities.
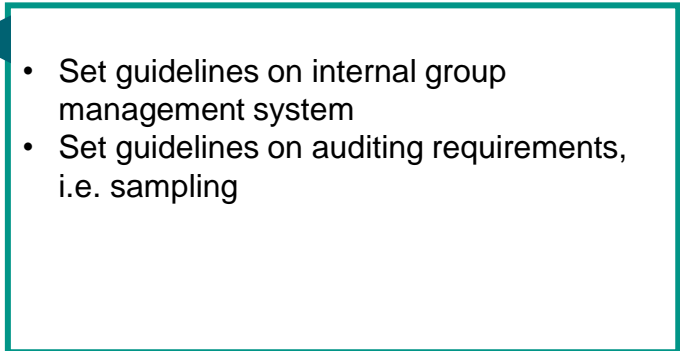2. Specific **processes and rules** should be set to govern non-conformities **for groups of operators**:

**Group of operators**

- Internal control / management system, incl. internal inspection
- Group manager has responsibility for compliance of the group

Group Manager

M

1  2  3  4

Group Members

**Certification Bodies**

- Annual on-site audit of group manager and representative sampling of group members
- Audit of internal management system
- Re-certification audits min. every 5 years, likely more frequent
- Minimum sampling sizes can be based on the determined risk / likelihood of non-compliance

**Certification Schemes**

- Set guidelines on internal group management system
- Set guidelines on auditing requirements, i.e. sampling

rationale

rationale

rationale

1. Group manager takes responsibility for the group certification and is point of contact for all requirement documentation
2. Reduces administrative burden for the group members
3. Group manager conducts internal controls to ensure compliance across the group

1. Representative sampling based on determined risk can ensure robustness while reducing burden
2. Drawing from established and tested systems: REDII & Organic agriculture

1. Auditing requirements, i.e. sampling, can be tailored to methodologies for high specificity

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# Session 1: CRCF third-party verification rules

Panel

**Amparo Arellano**
Standards and Certification Director, Roundtable on Sustainable Biomaterials

**Hugh Salway**
Senior Director, Market Development and Partnerships; The Gold Standard Foundation

**Andreas Steinhorst**
Executive Secretary, European Co-operation for Accreditation

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# Lunch break

# Session 2: Scoping of CRCF registry

# Main provisions related to the CRCF registry

CRCF registry to be **established 4 years after entry into force** of CRCF Regulation.

Registry will **be managed by EC and will be financed by annual fees** proportionate to the use of the registry.

**Certified units should be issued by the CRCF registry** once it has been established.

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# Reference systems for the CRCF registry

**Background**: there will be a transitional period before the establishment of the CRCF registry

**Transitional period (before CRCF registry)**    **CRCF registry established**

**2028**

**Decision on CRCF registry set-up affects approach to interoperability in transitional period**.

**The following reference systems were considered for options:**

| Reference System for:<br>1. Core registry capabilities<br>2. High level capabilities<br>3. Processes<br>4. User population & profiles<br>5. User management<br>6. Data content<br>7. Database management<br>8. Data security<br>9. External data exchange | EU ETS Union registry | Voluntary Carbon Markets | National Schemes | Climate Action Data Trust | Kyoto Protocol | California cap-and-trade |
|---|---|---|---|---|---|---|
| | • Accounting for all allowances issued under the EU emissions trading system.<br>• EU ETS & CDM: Example of linkage between a compliance and voluntary scheme<br>• EU ETS & Swiss ETS: Example if linkage between two compliance schemes | Examples are the Verra , Gold Standard, Puro.earth registries. | Label Bas-Carbone and UK Peatland Code are examples of national certification schemes. | Example of blockchain based digital infrastructure which connects different existing registries. | Registries infrastructure created under the Kyoto Protocol of the United Nations Framework Convention on Climate Change (UNFCCC). | Example of linking a compliance scheme to existing voluntary carbon certification schemes. |

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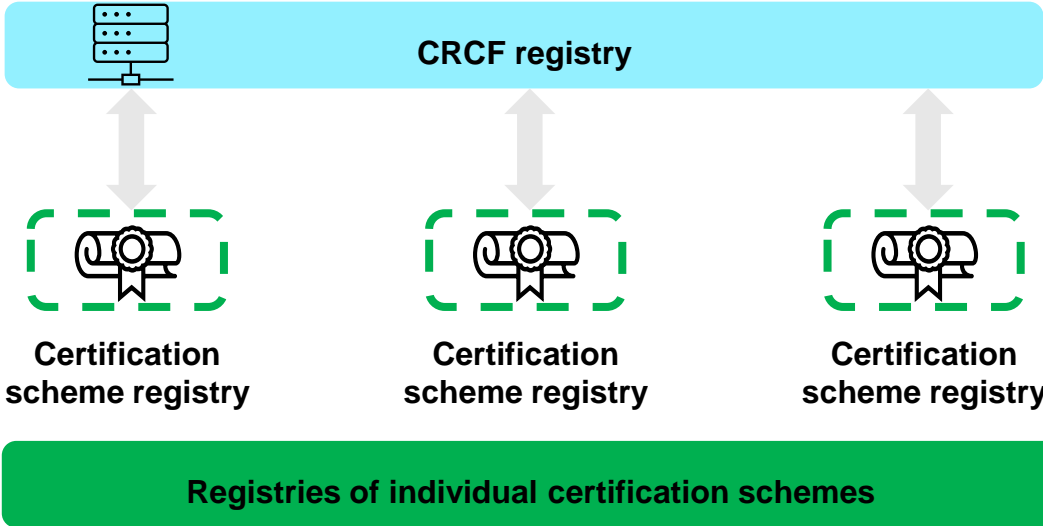
# Two CRCF registry options

## 1 Full functionality of CRCF registry

- All operations are performed within the CRCF registry.

- No link required with certification scheme registries.



**CRCF registry**

**Certification scheme registry**

**Certification scheme registry**

**Certification scheme registry**

**Registries of individual certification schemes**

## 2 CRCF as central repository

- All operations are performed in individual certification scheme registries. Issuance* performed by CRCF registry.

- Certification scheme registries share data with CRCF registry.



**CRCF registry**

**Certification scheme registry**

**Certification scheme registry**

**Certification scheme registry**

**Registries of individual certification schemes**

*Issuance to be defined, could be done without two-way link of registries.

# Comparison of two CRCF registry options

| | **1** Full functionality of CRCF registry | **2** CRCF as central repository |
|---|---|---|
| ✓ **Pros** | • Can be built bespoke for CRCF needs<br>• Possibly easier to integrate into EU regulatory framework if desired in longer term | • Faster set-up<br>• Lower set-up cost<br>• Allows existing VCM registries and markets to continue |
| ✕ **Cons** | • Longer set-up time required (although could still be done within 4 years)<br>• Likely higher set-up cost due to need to develop front-end functionality | • No centralised platform - project operators may need to have accounts in different registries<br>• May be more difficult to integrate removals in other EU policies |
| ⚠ **Risks / implications** | • High impact on business models of existing VCM who make money through registry fees<br>• Budget overruns and delays linked to complex IT development | • Limited impact on business models of existing VCM who make money through registry fees, depending on implementation<br>• Issuance to be defined in line with Regulation |

# Session 2: Scoping of CRCF registry
Panel



**Ieva Steponaviciute**
Community Manager, CAD Trust

**Joao Rodrigues Frade**
DG DIGIT, EBSI
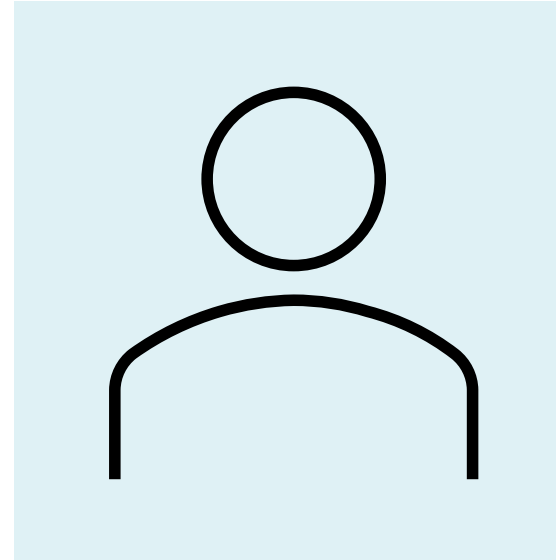
**Tarun Vasudev Kumar**
European Commission, Union
Database for renewable fuels

# Tea break

# Session 3: Rules for certification registries

# Main provisions related to certification scheme registries

Until the establishment of the CRCF registry, recognized certification schemes should **establish and maintain interoperable certification registries** that use automated systems, including **electronic templates to avoid double counting**. EC to adopt implementing acts on structure, format and technical details of certification registries.

Registries will also play an important role in **ensuring transparency** of EU carbon removals and they will need to publish certificates of compliance, certification and re-certification audit reports and non-conformity notices. In addition, rules for handling complaints and appeals, as well as appointed certification bodies, should also be made public in registries.

**Certified units should be issued by certification registries** until the establishment of the CRCF Registry. Certain certified units will need to be cancelled by registries upon expiry of the monitoring period.

# Minimum requirements for registries

**1** Registries should use **automated systems** and **electronic templates** and shall be **interoperable** with the registries of other (EC-recognised) certification schemes. Interoperability requirement is not defined, except in its objective to avoid double counting

**2** **Minimum information** included in the Union and scheme registries for each activity & certified unit:

- Name & type of activity, operator contact

- Location, start and end date of activity

- Name of the certification scheme

- Reference to the applicable certification methodology

- Expected annual net benefit

- Sustainability co-benefits

- Certification status, including certificates of compliance, certification and re-certification audit reports

- Quantity and status of the certified units

- End-use purpose of the certified units and

# Best practice examples for minimum requirements for certification scheme registries

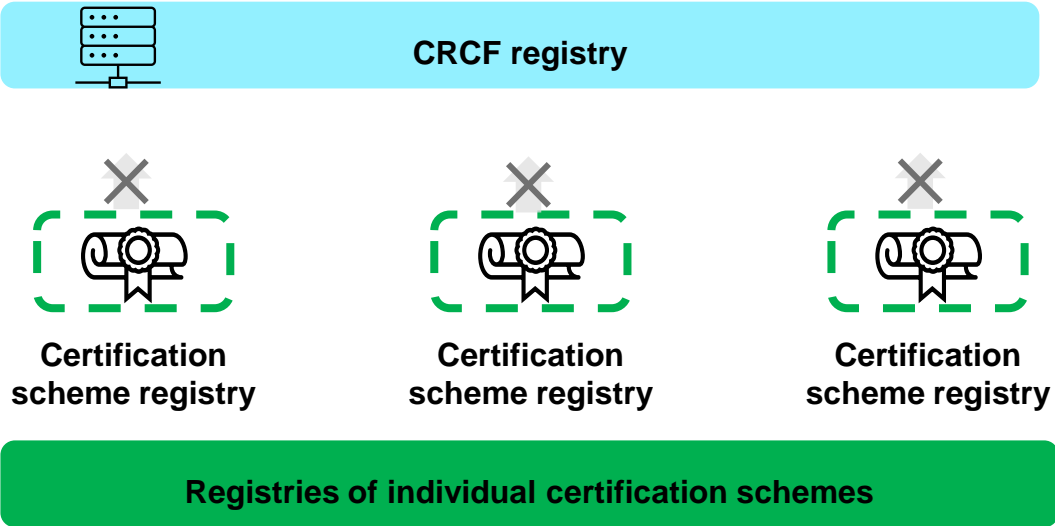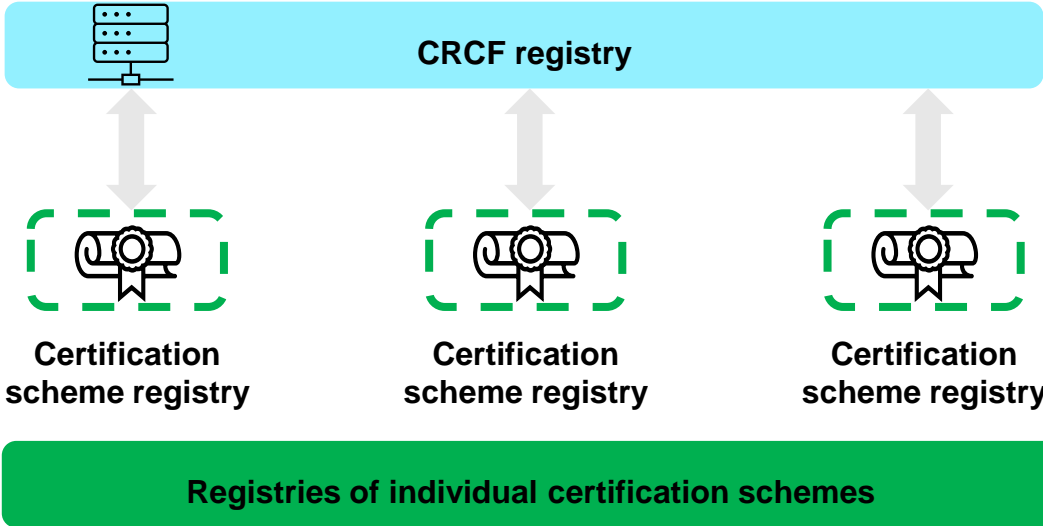| Best practice examples from reference systems |
|---|
| **Transparency**<br><br>• Crucial to enable credibility of certification schemes<br>• Publication of specific project details and certified unit information allows scrutiny of individual projects |
| **Cybersecurity safeguards**<br><br>• Safeguards are required to ensure safe storage of data<br>• Safeguards must minimise risk of double counting and fraud<br>• Considering use of state-of the art technology, e.g. CAD Trust approach using blockchain and mandatory use of eIDs |
| **Emergency operation procedures**<br><br>• Written procedures, instructions and checklists used in the event one, or more, of the registries becomes inoperable |

# Two CRCF registry options

**1** **Full functionality of CRCF registry**

- All operations are performed within the CRCF registry.

- No link required with certification scheme registries.

**2** **CRCF as central repository**

- All operations are performed in individual certification scheme registries. Issuance* performed by CRCF registry.

- Certification scheme registries share data with CRCF registry based on one-way link.

**CRCF registry**

Certification scheme registry

Certification scheme registry

Certification scheme registry

**Registries of individual certification schemes**

**CRCF registry**

Certification scheme registry

Certification scheme registry

Certification scheme registry

**Registries of individual certification schemes**

*Issuance to be defined, could be done without two-way link of registries.

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# Options for registry interoperability in the interim period

Based on preliminary assessment these options are deemed **less suitable** to support preparation for establishment of CRCF registry

| Approach | Existing example | Preliminary assessment |
|---|---|---|
| **Link via a transaction log** | Architecture created for the different types of emissions credits under **the Kyoto Protocol system of registries.** | Possible, but development will partially duplicate efforts to develop CRCF registry and likely not feasible from a timing perspective. |
| **Direct link between registries** | End-state goal of the link between **the Union Registry (EU ETS) and the Swiss ETS registry**. | Possible, but requires budget and time to develop. Link may be obsolete in 4 years once the CRCF registry is established. |

# Options for registry interoperability in the interim period

Based on preliminary assessment these options are deemed **more suitable** to support preparation for establishment of CRCF registry

| Approach | Description | Preliminary assessment |
|---|---|---|
| **One-way link to a central platform – CRCF as a Central repository** | **CAD Trust** is establishing a link with VCM registries to be able to aggregate market information in one place. | Possible, will likely take more time to implement. |
| **A document-based solution using electronic templates** | Development of **electronic template** that allows to **check** a planned project activity's main characteristics **against existing project data**. | Possible, provided robust approach to documentary exchange via electronic templates is applied. Responsibility lies with certification schemes. |
| **Current VCM approach focusing on registry transparency and robust contractual provision** | Double counting risk mitigated by **transparency** and **contractual provisions.** Each certification scheme conducts their own **manual checks**. | Does not seem aligned with the CRCF Regulation as is does not ensure that certification scheme registries are interoperable. |
| **Commission oversight role** | **European Commission conducts checks** to ensure no double registration or issuance is claimed. | Likely constrained by budget and resource availability. |

# Session 3: Rules for certification registries

Panel



**David Gazdag**
Regional Representative, Europe,
VERRA

**Andrew Voysey**
Chief Impact Officer, Soil Capital

**Juan David Duran**
CEO, EcoRegistry

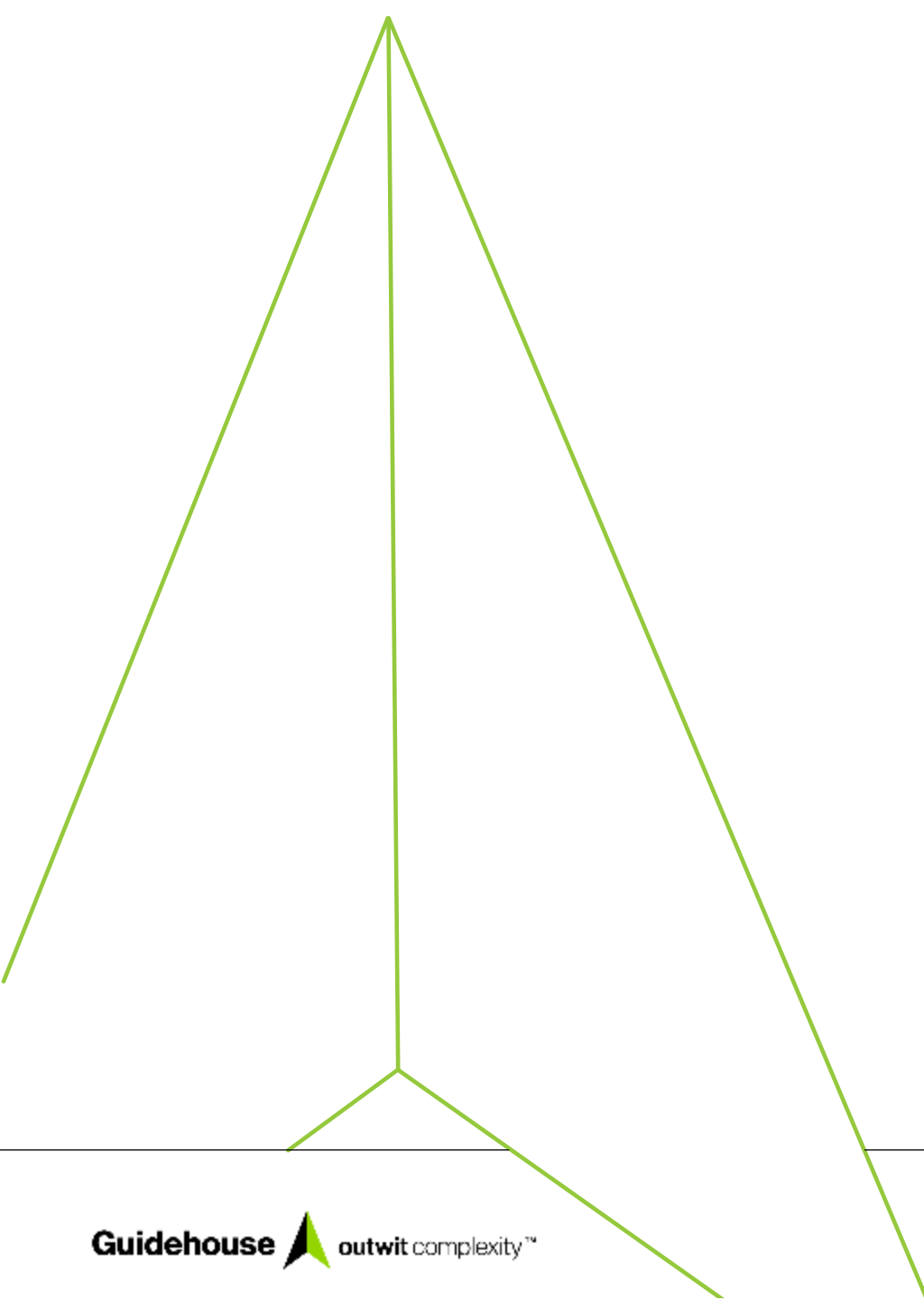# Closing and next steps

*by Hans Bolscher (Trinomics)*

# Thank you for attending!

## We welcome your feedback:

Please provide feedback on the topics discussed today via the survey link:
https://ec.europa.eu/eusurvey/runner/VERTAStakeholderSurvey2024

Deadline 7 October (midnight CET)

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# Thank You

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