Score Overview

Project-based Avoided Planned Deforestation
Project-based Avoided Unplanned Deforestation

2 July 2024
Today’s Speakers

Pedro Martins Barata
Associate Vice President, Carbon Pricing
Environmental Defense Fund

Felix Fallasch
Senior researcher, Energy and Climate
Oeko-Institut

Dr. Lambert Schneider
Research Coordinator for International Climate Policy
Oeko-Institut
Agenda

1. About CCQI
2. Our Approach
3. Key Findings
4. Next Steps
5. Q&A
About the Carbon Credit Quality Initiative

Pedro Martins Barata, Environmental Defense Fund
### What is the Carbon Credit Quality Initiative?

**Why?**
- Carbon markets are facing a resurgence
- Mixed quality of carbon credits currently transacted
- Buyers face reputational risks if emissions reductions are not credible

**What?**
- Enhance the integrity of carbon credits
- Encourage carbon crediting programs, project developers and other market participants to pursue the highest standards

**How?**
- Independent, user-friendly scorings to assess the quality of carbon credits

**For whom?**
- Countries, companies, investors, and individuals

**Founders**
- EDF, WWF-US and Oeko-Institut

**Partner technical assessments**
- Carbon Limits, GHGMI, INFRAS, SEI-US, independent carbon markets experts
How does CCQI fit in the carbon credit quality landscape?

Threshold benchmark

Differentiated scores

Carbon credit types

Individual projects

Information publicly available

Fee-based rating service
Our Assessments

May 2022: 5%
Jan 2023: 5%
Sept 2023: 11%
Feb 2024: 7%
Q2 2024: 28%

> 80% of the market*

*market shares based on MSCI Carbon Markets, issuances 2019-2023
Tools & Resources

- Full methodology
- Interactive scoring tool
- Detailed evaluations underlying our scores
- Factsheets

Visit us at www.carboncreditquality.org
CCQI’s Approach to Scoring Carbon Credit Quality

Felix Fallasch, Oeko-Institut
What does CCQI assess?

CCQI publishes scores for carbon credit types, as defined by their underlying features:

- Type of project (e.g., landfill gas utilization)
- Carbon crediting program (e.g., Verified Carbon Standard)
- Quantification methodology (e.g., CDM ACM0001)
- Host country...and more

Some components are assessed at program/project type level (e.g., Additionality / Sustainable Development), others at methodology level (Robust Quantification)

CCQI does not release or endorse scores for individual projects, but...

- Our assessment method is public and can be applied to individual projects
## Seven Quality Objectives

<table>
<thead>
<tr>
<th>Quality Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robust Determination of GHG Emissions Impact</td>
</tr>
<tr>
<td>Avoiding Double Counting</td>
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<tr>
<td>Addressing Non-Permanence</td>
</tr>
<tr>
<td>Facilitating Transition towards Net Zero Emissions</td>
</tr>
<tr>
<td>Strong Institutional Arrangements and Processes</td>
</tr>
<tr>
<td>Environmental and Social Impacts</td>
</tr>
<tr>
<td>Host Country Ambition</td>
</tr>
</tbody>
</table>
# Example of How Scores Are Built

<table>
<thead>
<tr>
<th>Quality Objective</th>
<th>Criteria</th>
<th>Sub-Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robust Determination of the GHG Emissions Impact</td>
<td>Additionality</td>
<td>Legal requirements</td>
</tr>
<tr>
<td></td>
<td>Vulnerability</td>
<td>Financial attractiveness</td>
</tr>
<tr>
<td></td>
<td>Robust Quantification</td>
<td>Prior consideration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Barriers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vulnerability</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Robust methodology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Program principles</td>
</tr>
</tbody>
</table>
Our Scoring Approach

Confidence or likelihood that the assessment subject meets the criterion or quality objective:

<table>
<thead>
<tr>
<th>Rating</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very High</td>
<td>5</td>
</tr>
<tr>
<td>High</td>
<td>4</td>
</tr>
<tr>
<td>Moderate</td>
<td>3</td>
</tr>
<tr>
<td>Low</td>
<td>2</td>
</tr>
<tr>
<td>Very Low</td>
<td>1</td>
</tr>
</tbody>
</table>
### Completed Assessments

<table>
<thead>
<tr>
<th>5 Carbon Crediting Programs</th>
<th>14 Project Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Credit Quality Initiative</td>
<td><strong>Efficient Cookstoves</strong></td>
</tr>
<tr>
<td><strong>Carbon Crediting Programs</strong></td>
<td><strong>Establishment of Natural Forests</strong></td>
</tr>
<tr>
<td><strong>5 Carbon Crediting Programs</strong></td>
<td><strong>Gas pipeline leak repair</strong></td>
</tr>
<tr>
<td><strong>2 Complementary Standards</strong></td>
<td><strong>Hydropower</strong></td>
</tr>
<tr>
<td><strong>33 Quantification Methodologies</strong></td>
<td><strong>Industrial Biodigesters</strong></td>
</tr>
<tr>
<td><strong>2 Complementary Standards</strong></td>
<td><strong>Landfill Gas Utilization</strong></td>
</tr>
<tr>
<td><strong>33 Quantification Methodologies</strong></td>
<td><strong>Recovery of Oil Field Gas</strong></td>
</tr>
<tr>
<td><strong>10 Host Country NDCs</strong></td>
<td><strong>Solar Photovoltaic</strong></td>
</tr>
<tr>
<td><strong>Pre + Post Paris Vintages</strong></td>
<td><strong>Wind Power (onshore)</strong></td>
</tr>
<tr>
<td><strong>10 Host Country NDCs</strong></td>
<td><strong>Commercial Afforestation</strong></td>
</tr>
<tr>
<td><strong>Pre + Post Paris Vintages</strong></td>
<td><strong>Improved Forest Management</strong></td>
</tr>
<tr>
<td><strong>10 Host Country NDCs</strong></td>
<td><strong>Avoided Planned Deforestation</strong></td>
</tr>
<tr>
<td><strong>Pre + Post Paris Vintages</strong></td>
<td><strong>Avoided Unplanned Deforestation</strong></td>
</tr>
</tbody>
</table>
CCQI Forestry Project Type Classification

- Establishment of natural forests
- Commercial afforestation
- Improved forest management
- Avoided planned deforestation
- Avoided unplanned deforestation

- Legally authorized and planned
- Driven by commercial agents
- Driven by multiple, mostly local agents
- Often combine different activities
Key Findings

Felix Fallasch, Oeko-Institut
Lambert Schneider, Oeko-Institut
Additionality

Project type risks mostly low
Program rules would benefit from further strengthening

Financial attractiveness
Project type level assessment

- High likelihood that activities need revenues from carbon credits, with exceptions:
  - APD: Project areas without access to infrastructure → opportunity cost likely low
  - AUD: Projects implemented by commercial actors

Legal requirements
Program level assessment

- Non-additionality risks due to program rules
  - Activities mandated by legal requirements are eligible if requirements are not systematically enforced
  - Projects eligible for listing up to 3 years after start of emission reduction activity
Sustainable development impacts

High potential – fragile ecosystems require careful project design

**Project type level assessment**

**Avoided Planned Deforestation**

| 1.4 | 3.1 |

**Avoided Unplanned Deforestation**

| 1.0 | 2.0 |

- **High potential for strong contributions to sustainable development**
  - Zero hunger, clean water and sanitation, life on land, creation of jobs, biodiversity
  - For APD especially strong if forests are transferred to protected status

- **Projects take place in fragile ecosystems and socio-economic contexts**
  - Important to clarify land rights and introduce alternative income sources or benefit sharing
  - Good design important to avoid negative impacts on inequality, peace, justice and gender equality
## Robust Quantification

### Quantification methodologies assessed

<table>
<thead>
<tr>
<th>Methodology</th>
<th>Version</th>
<th>Active Period</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Avoided Planned Deforestation</strong></td>
<td>VM0007</td>
<td>Version 1.7, Active from 11/2023 – 06/2024</td>
</tr>
<tr>
<td></td>
<td>VM0009</td>
<td>Version 3.0, Active from 06/2014 – 11/2023</td>
</tr>
<tr>
<td><strong>Avoided Unplanned Deforestation</strong></td>
<td>VM0006</td>
<td>Version 2.2, Active since 03/2017</td>
</tr>
<tr>
<td></td>
<td>VM0007</td>
<td>Version 1.7, Active from 11/2023 – 06/2024</td>
</tr>
<tr>
<td></td>
<td>VM0009</td>
<td>Version 3.0, Active from 06/2014 – 11/2023</td>
</tr>
<tr>
<td></td>
<td>VM0015</td>
<td>Version 1.2, Active since 12/2023</td>
</tr>
<tr>
<td></td>
<td>VM0048</td>
<td>Version 1.0, Active since 11/2023</td>
</tr>
</tbody>
</table>

**New Verra methodology released in November 2023**

- Will replace older methodologies
- Currently only applicable to AUD
Approaches for determining baseline deforestation

- Reference regions
- Flexibility to select favorable reference regions likely leads to very large overestimation

Jurisdictional baseline
- Allocation of deforestation risk to pixels across the jurisdiction
- Baseline deforestation data provided by Verra
VM0048: How is the jurisdictional baseline determined?

- Jurisdictional baseline
  - Corresponds to the average annual deforestation in the last 10 years
  - Updated every 6 years

=> Common practice in jurisdictional (carbon crediting) standards

- For any baseline validity period, this approach could lead to...
  - Underestimation if deforestation increases over time
  - Overestimation if deforestation decreases over time
Robust Quantification

VM0048: Uncertainty in the jurisdictional baseline

Simplified application of the baseline approach to 54 jurisdictions

- Deforestation increases in some countries, and decreases in others
- Jurisdictional baseline may be significantly under- or overestimated

Source: Own calculations based on JRC data for Tropical Moist Forest countries (direct and indirect deforestation)
Key questions

- Does baseline uncertainty impact integrity?
- What are the implications if there are any longer-term deforestation trends?
VM0048: Potential implications of large baseline uncertainty

VM0048 accounts comprehensively for data uncertainty – but does not adjust for baseline scenario uncertainty

- **Project with moderate impact on deforestation**
  - Overestimated baseline
  - Over-crediting
  - Actual reductions
  - True (but unknown) baseline
  - No credit issuance
  - Underestimated baseline
  - Deforestation in project scenario

- **Project with strong impact on deforestation**
  - Overestimated baseline
  - Over-crediting
  - Actual reductions
  - Underestimated baseline
  - Credits issued

- **Large baseline uncertainty could undermine the integrity of a portfolio of projects**
- **Risks are lower if projects have large impacts and baselines are conservative**
Robust Quantification

VM0048: Implications if deforestation rates decline

- Baseline reflects trends only with a delay
- Jurisdictional baseline is
  - Conservative if deforestation increases and is never halted
  - Not conservative if deforestation declines
- It seems plausible that deforestation may halt at some point in time
### VM0048: Other important methodological elements

<table>
<thead>
<tr>
<th>Category</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baselines</strong></td>
<td>• Uncertainty in allocating deforestation risk across the jurisdiction</td>
</tr>
<tr>
<td></td>
<td>• Limited consideration of degradation in emission factors</td>
</tr>
<tr>
<td></td>
<td>• Uncertainty discounts</td>
</tr>
<tr>
<td><strong>Project boundary</strong></td>
<td>• Possible exclusion of various carbon pools / emission sources</td>
</tr>
<tr>
<td></td>
<td>• Adverse selection of favorable project areas</td>
</tr>
<tr>
<td></td>
<td>• Ex-post changes to project area</td>
</tr>
<tr>
<td><strong>Carbon quantification</strong></td>
<td>• Flexibility in determining various parameters (e.g. allometry)</td>
</tr>
<tr>
<td></td>
<td>• Uncertainty discounts</td>
</tr>
<tr>
<td><strong>Leakage</strong></td>
<td>• Flexibility in choosing historical records and other key data</td>
</tr>
<tr>
<td></td>
<td>• No accounting for international leakage</td>
</tr>
<tr>
<td></td>
<td>• No accounting of any negative leakage</td>
</tr>
</tbody>
</table>

Verra announced updates of some underlying modules and tools.
## Robust Quantification

### Methodologies across project types must improve

<table>
<thead>
<tr>
<th>Emission reductions are/have a...</th>
<th>CCQI Score</th>
<th>Number of scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very likely conservative (90% probability)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Likely conservative (67% probability)</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Approximately accurate with low uncertainty (10%)</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Low degree of overestimation (up to 10%)</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>Approximately accurate with medium uncertainty (up to 50%)</td>
<td>1</td>
<td>16 2 5</td>
</tr>
<tr>
<td>Medium degree of overestimation (up to 30%)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Approximately accurate with large uncertainty (more than 50%)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>High degree of overestimation (more than 30%)</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Many methodologies either overestimate emissions reductions, or there is large uncertainty.

There is large divergence within the score 1 category.
## Summary of main findings

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
</table>
| **Additionality** | - Projects likely need revenues from carbon credits to be financially attractive  
                    - VCS rules allow listings with start dates up to 3 years in the past |
| **SDG impacts**   | - SDG impacts highly contextual  
                    - Good project design critical for positive impacts and avoiding harm |
| **Quantification**| - Old methodologies likely to vastly overestimate emission reductions  
                        - VM0048 is a significant improvement but needs further strengthening |
| **Non-permanence**| - Minimum period to address reversals increased from 20 to 40 years  
                        - Ongoing work on longer-term monitoring |
| **Governance**    | - VCS program rules on double counting, overall governance and environmental and social safeguards largely solid, with exceptions |
What’s next for CCQI?

- Jurisdictional REDD+
- Scoring tool enhancement
- More project types
- Blog articles
- More factsheets