The Carbon Credit Quality Initiative

Transparent Scores for Carbon Credit Quality

Expanded Scores Launch

31 January 2023

WWF

Environmental Defense Fund

Öko-Institut e.V.
Institut für angewandte Ökologie
Institute for Applied Ecology

CCQI
Carbon Credit Quality Initiative

Today's Speakers

John Holler

Senior Program Officer, Climate Cooperation and Sustainable Fuels

World Wildlife Fund, US

Pedro Martins Barata

Associate Vice President, Carbon Markets and Private Sector Decarbonization

Environmental Defense Fund

Dr. Lambert Schneider

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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

Our Mission: Enhance the Quality of Carbon Credits

Carbon Credit Quality Initiative (CCQI) provides transparent information on the quality of carbon credits. This enables users to identify carbon credits that deliver higher climate mitigation impacts and offer greater social and environmental benefits—and enhance the quality of carbon credits in the market.

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

What makes this initiative unique?

CCQI
Carbon Credit
Quality Initiative

- Not funded by revenues related to carbon credits
- Experts not employed by project developers or carbon crediting programs
- Scoring of credits on an interval scale, not on a binary basis
- Transparent, publicly-available methodology and assessment documents
- All scores free-of-charge

CCQI Project Team

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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

- **CCQI does not release or endorse scores for individual projects, but…**
  - Our assessment method is public and can be applied to individual projects

Current Scope of Assessments

CCQI
Carbon Credit Quality Initiative

Carbon Crediting Programs

American Carbon Registry
Gold Standard
Verified Carbon Standard
A VERRA STANDARD
CLIMATE ACTION RESERVE

Complementary Standards

Climate, Community & Biodiversity Standards
SD VISta

23 Quantification Methodologies

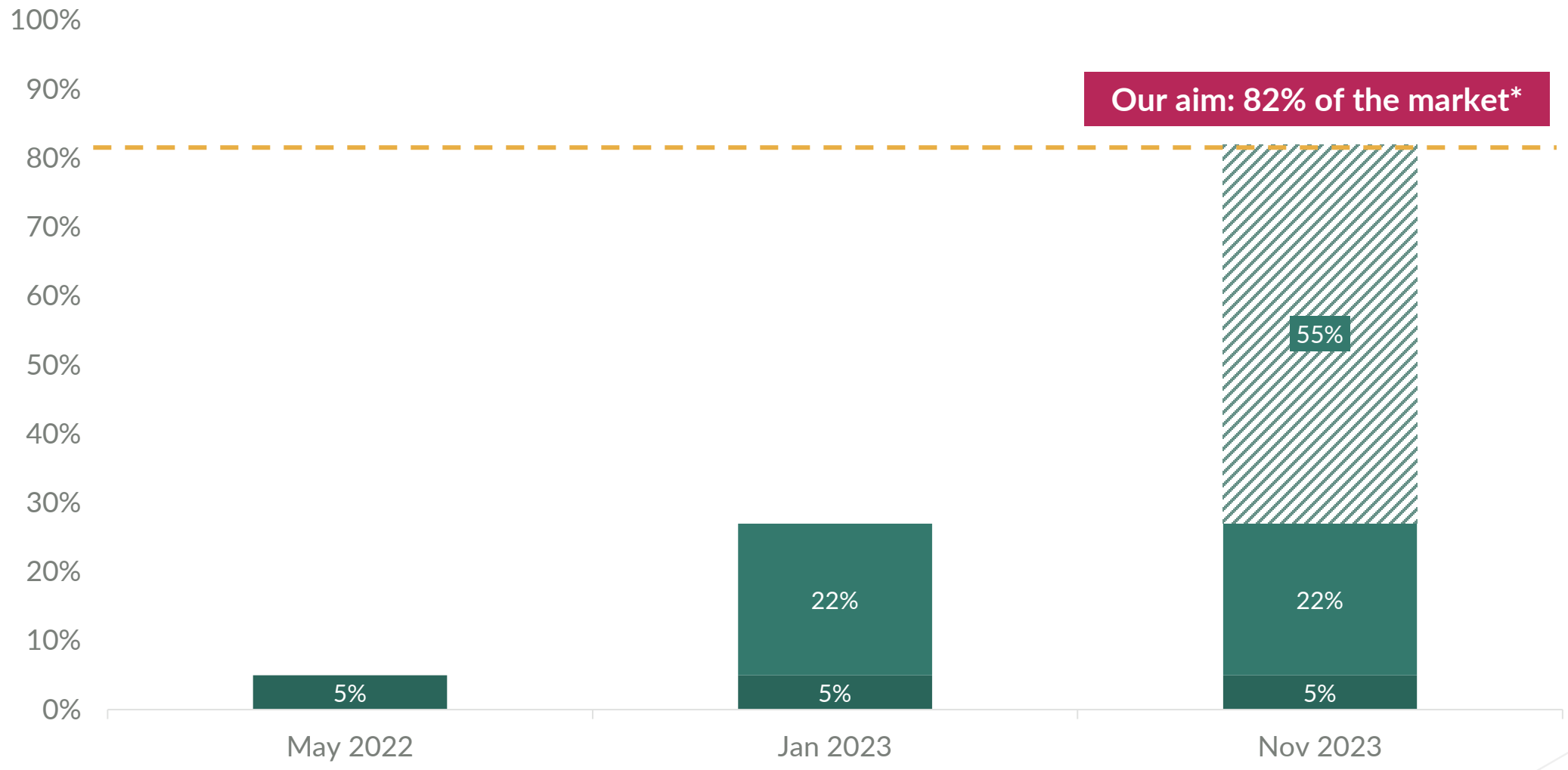
10 Host Country NDCs

Pre + Post Paris Vintages

Project Types

- Establishment of Natural Forests
- Landfill Gas Utilization
- Efficient Cookstoves
- Gas pipeline leak repair
- Solar Photovoltaic
- Wind Power (onshore)
- Household Biodigesters
- Industrial Biodigesters
- Recovery of Oil Field Gas

Our Assessments



*Based on 2019-2022 issuance volumes

How can CCQI's scores be used?

Our scores represent the expected quality for a type of carbon credit. Additional due diligence on individual projects is encouraged.

Buyers

Due diligence to understand potential risks associated with different types of carbon credits

Carbon Crediting Programs

Identify opportunities to improve a program's rules

Project Developers

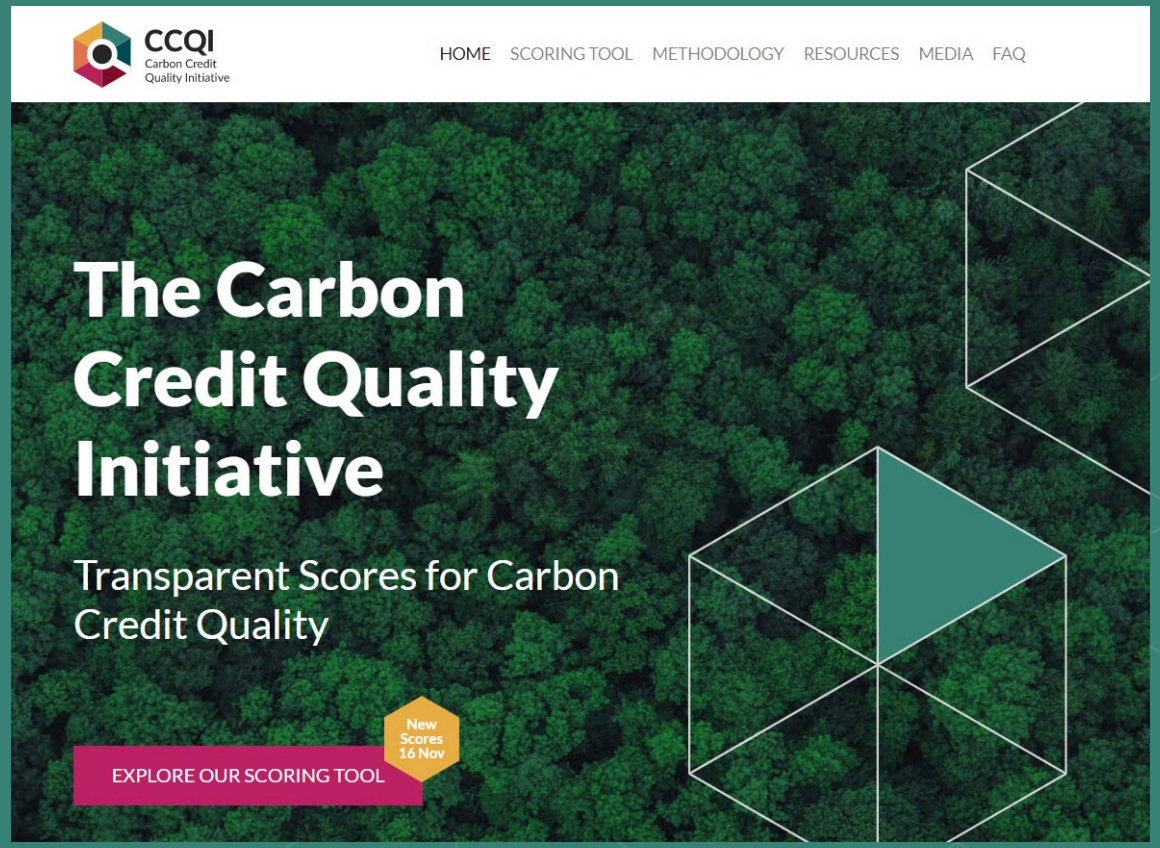
Inform how to design a project to avoid specific risks, and how to choose programs and methodologies with higher quality assurance

Tools & Resources

- Interactive scoring tool
- Downloadable Excel scoring tool
- Full methodology
- Assessment sheets

Visit us at

www.carboncreditquality.org



Our Approach to Scoring Carbon Credit Quality

Lambert Schneider, Oeko-Institut

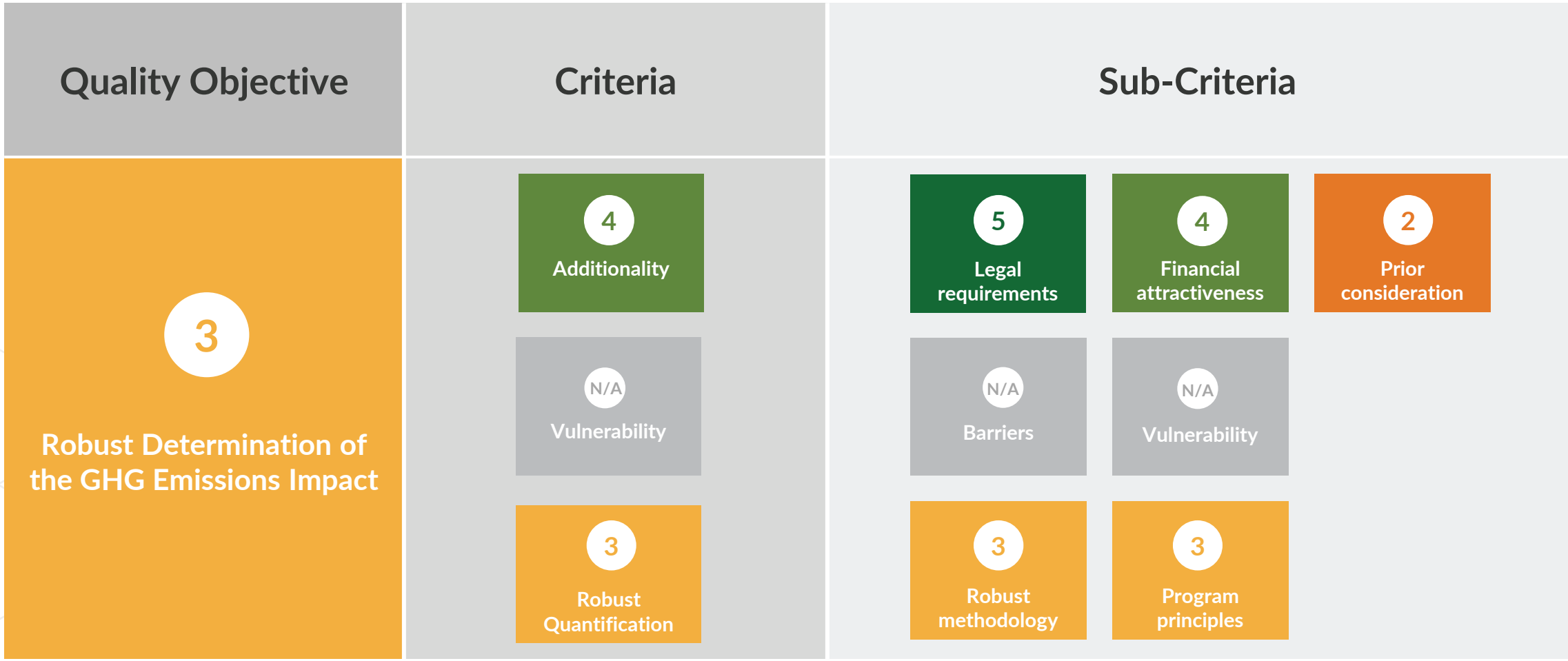
Seven Quality Objectives

Our Scoring Approach

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

Very High	5
High	4
Moderate	3
Low	2
Very Low	1

Example of How Scores Are Built



Key Findings

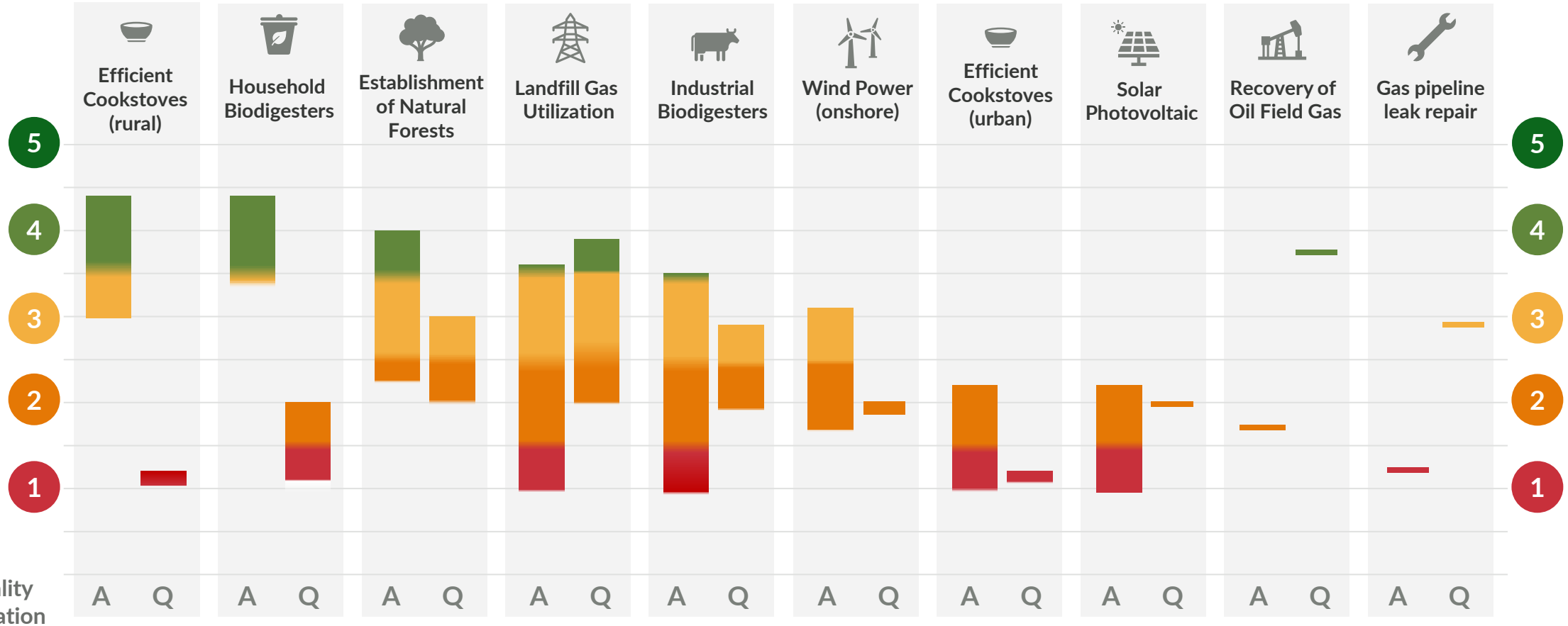
Lambert Schneider, Oeko-Institut

Questions we set out to answer

1. What is the quality of credits currently available in the market?
2. What are the differences between project types?
3. How differently or similarly do programs score?
4. What can buyers do with this information?

Quality objective 1: Robust determination of GHG emission impact

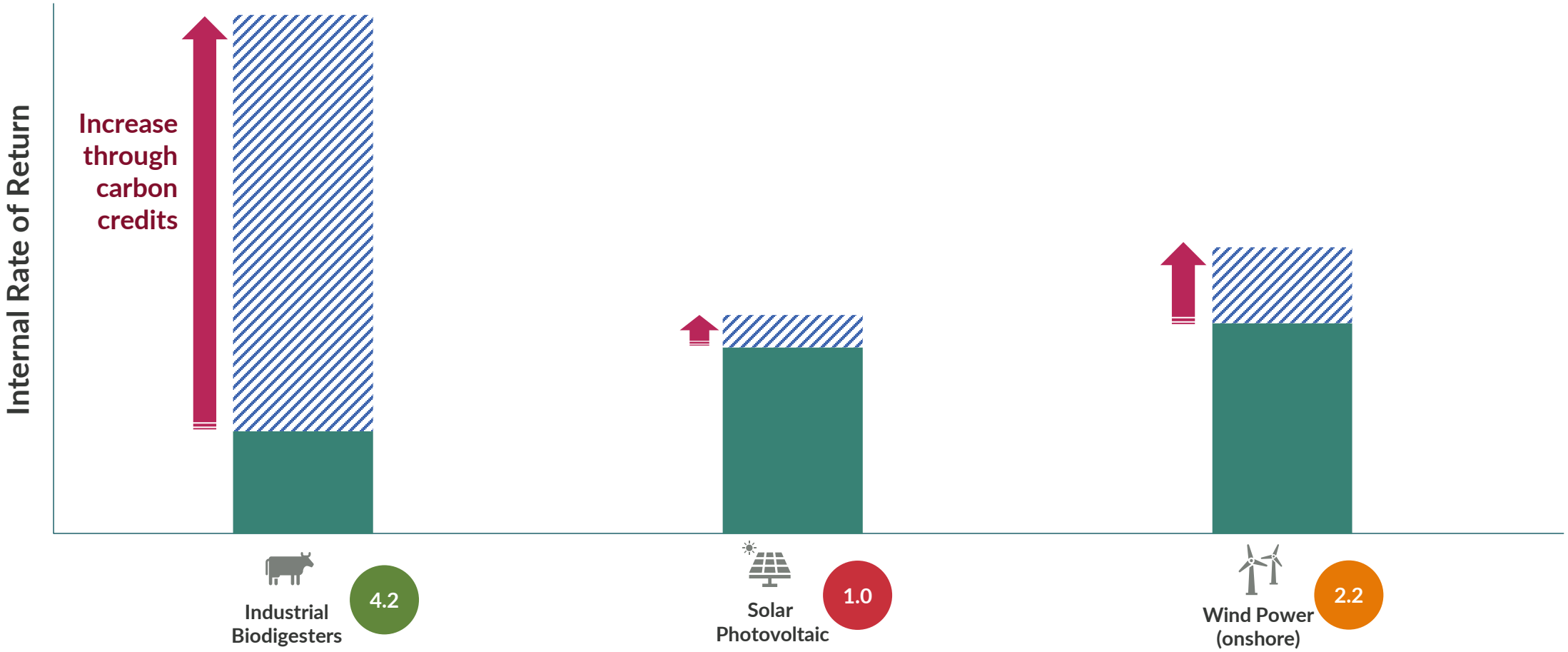
Additionality and Quantification



A = Additionality
Q= Quantification

Note: This slides has been updated compared to the version presented online on 31 January 2023. This revised slide shows only MAX scores in cases where the results significantly differ among methodologies and carbon crediting programs.

Do Carbon Credits Make a Difference Financially?



The contribution of carbon credits to financial attractiveness strongly varies among project types.

Counting Carbon: Methodologies Deep-dive

4

AM0009 v7

CDM
Recovery of Oil Field Gas

Risk of overestimation
- Neglecting fugitive emissions
- Lack of provisions limiting gas-lift-gas production

Potential for underestimation
- Assumption that recovered gas replaces methane
- Neglecting emissions from venting and methane slip from baseline
- Upstream emissions not considered in baseline
- Requirement to account recovered gas as project emissions

Overall conclusion
High likelihood of conservativeness

1 2

ABM v1

GS
Household Biodigesters

Risk of overestimation
- Fraction of non-renewable biomass
- Omission of several sources
- Methane leakage inappropriately considered

Potential for underestimation
- Upstream emissions not considered in baseline

Overall conclusion
Emission reductions very likely to be (significantly) overestimated

3

Landfill Project v2

ACR
Landfill Gas Utilization

Risk of overestimation
- Oxidation factor lower than observed in literature
- Risk of perverse incentives

Potential for underestimation
- Neglecting emissions for displacement of fossil fuel use

Element with unknown impact
- Estimation of emissions from any pre-project devices

Overall conclusion
Emission reductions likely accurate but associated with significant uncertainty

Criterion 1.3.2: Robustness of quantification methodologies

Counting Carbon: Methodologies Must Improve

Emission reductions are/have a…	CCQI Score	Number of methodologies per score category
Very likely conservative (90% probability)	5	
OR Likely conservative (67% probability) Approximately accurate with low uncertainty (10%)	4	1
OR Low degree of overestimation (up to 10%) Approximately accurate with medium uncertainty (up to 50%)	3	10
OR Medium degree of overestimation (up to 30%) Approximately accurate with large uncertainty (more than 50%)	2	6
High degree of overestimation (more than 30%)	1	5

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

Note: The methodologies TPDDTEC and AMB encompass two different approaches which result in two different scores. The graph includes the respective lower ones.

Counting Carbon: Methodologies Must Improve

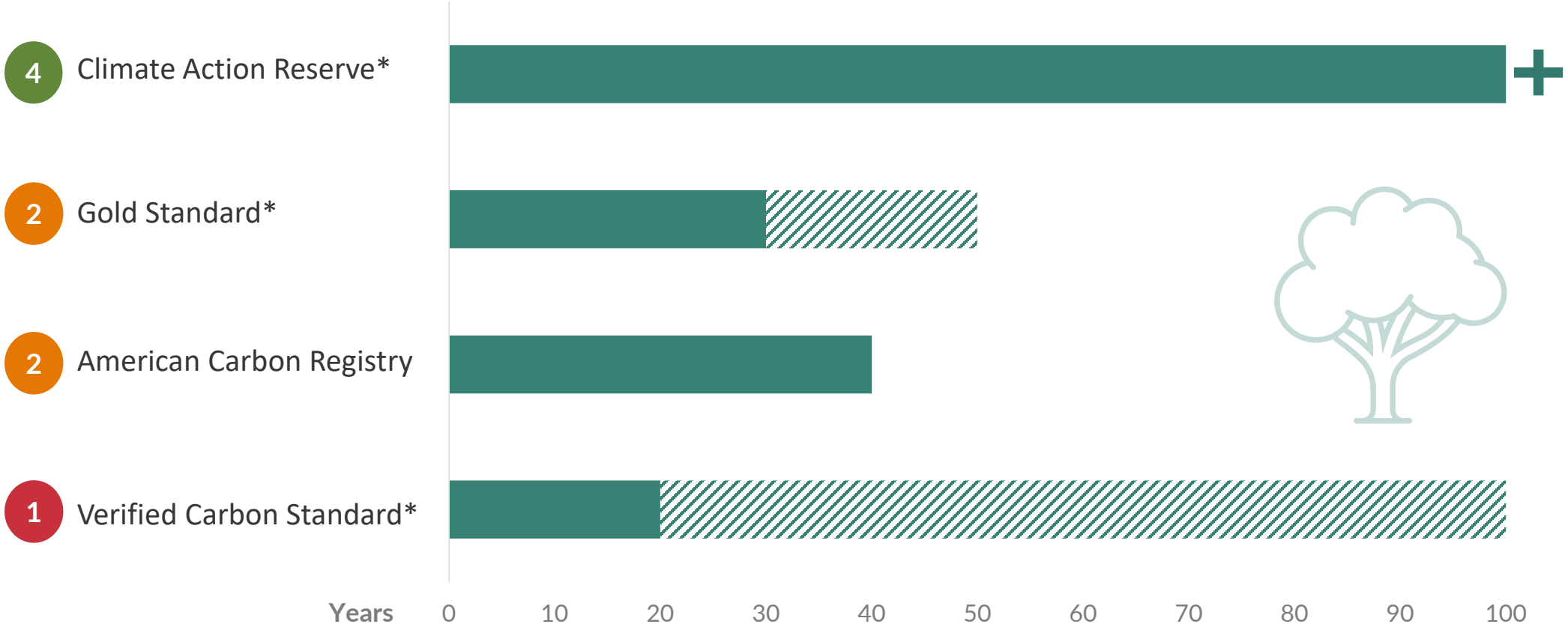
Overview of scores for methodologies assessed to date

Origin	Efficient Cookstoves (rural)	Establishment of Natural Forests	Household Biodigesters	Industrial Biodigesters	Landfill Gas Utilization	Gas pipeline leak repair	Recovery of Oil Field Gas	Solar Photovoltaic	Wind Power (onshore)
ACR		A/R Methodology			Landfill Project				
CAR		Forest Protocol		U.S. Livestock Mexico Livestock	U.S. Landfill				
CDM	AMS-II.G	AR_ACM0003	AMS-I.C AMS-I.E	ACM0010 AMS-III.D	ACM0001 AMS-III.G	AM0023	AM0009	ACM0002 AMS-I.D	ACM0002 AMS-I.D
GS	TPDDTEC	A/R Methodology	TPDDTEC AMB	GS-ACM0010					

CCQI Scores 5 4 3 2 1

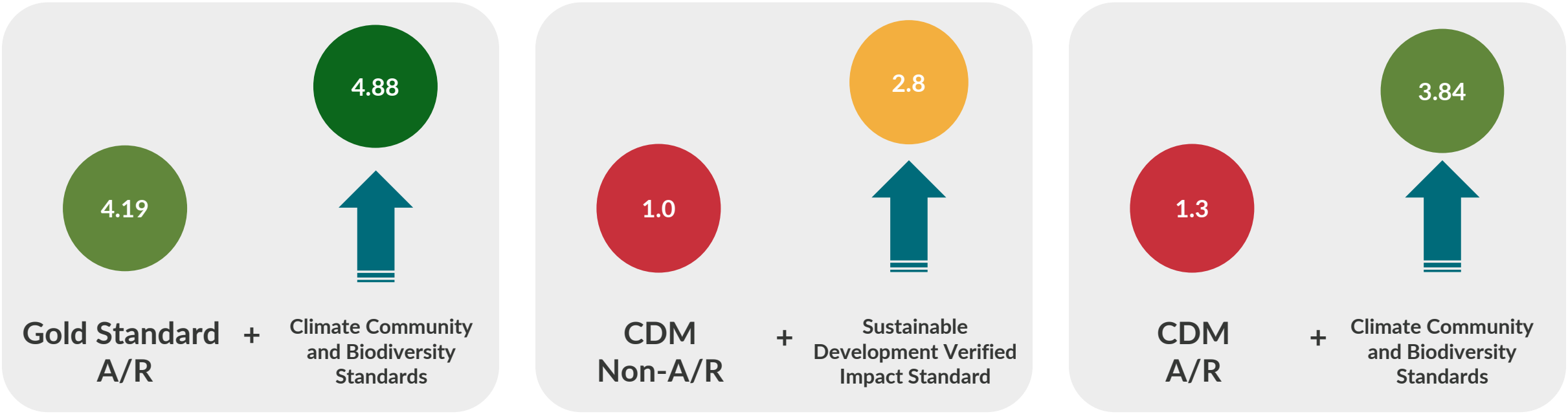
Indicator 3.2.1.1: Time horizon for monitoring reversals

Required Minimum Periods for Addressing Reversals



* Depending on crediting period, methodology and/or credit vintage

Environmental and Social Safeguards



Complementary standards boost scores for programs' environmental and social safeguards

What Do These Results Mean?

- **There is a real problem**
  - Credit types have different strengths and weaknesses – but none do everything well
  - Good performance in one area cannot make up for bad performance in another
  - Likelihood of overestimating climate impact unacceptably high
  - Quality differs considerably among project types and programs

- **It's possible to do better**
  - Crediting programs can fix most weaknesses identified in these assessments
  - Picking the best approaches from each program would significantly improve quality
  - Crediting programs can learn from each other

What Can Buyers Do With This Information?

- **Identify credit types with comparatively lower integrity risks**

- **Understand and manage specific risks of credit types**
  - Use scores in your project-level due diligence to identify high risk area
  - Individual projects may outperform our scores in some areas

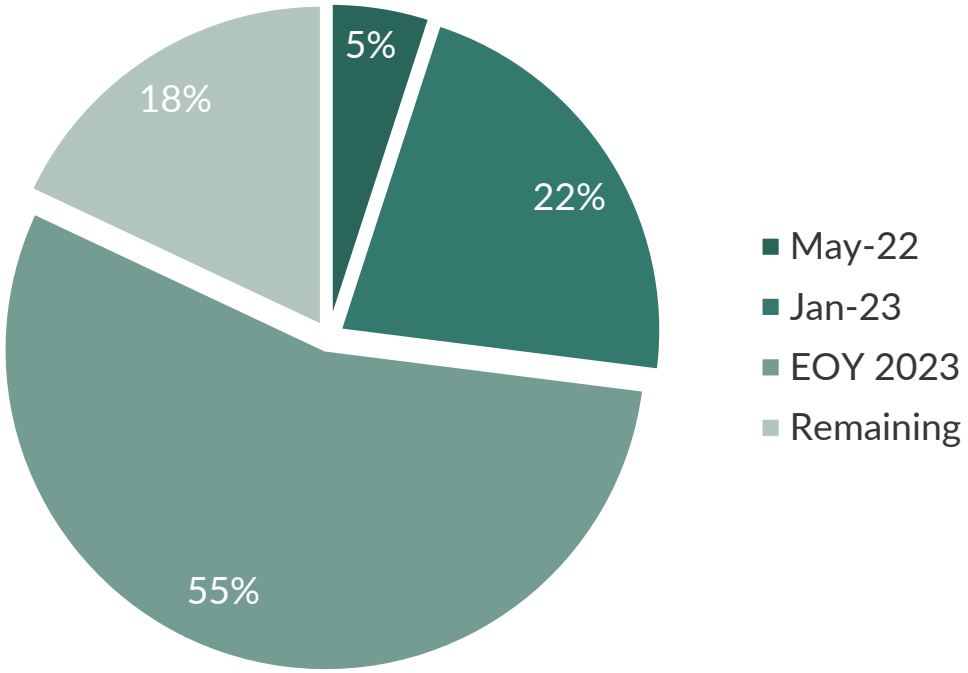
- **Which credits types to buy may depend on your priorities and how you use them**
  - Are you looking to support projects that align with your values?
  - Are you looking to claim emissions reductions or financial contributions?
  - How do you communicate about the use of the credits?

Next Steps

John Holler, World Wildlife Fund, US

What's next for CCQI?

▶ Maximize market coverage



▶ Assess 4 new project types:

- Hydropower
- Project-based REDD+
- Improved forest management
- Commercial afforestation

What's next for CCQI?

- **Simplified project type profiles for actionable due diligence**
- **Regular insights on our blog**
- **Data visualizations**

We want to hear from you:

What do you want to see from CCQI?

How do we make this more accessible?

What questions do you have?

CCQI
Carbon Credit
Quality Initiative

Questions?

Thank you!

Website:

www.carboncreditquality.org

Contact:

carboncreditqualityinitiative@gmail.com

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