

# Gold Standard<sup>®</sup>

**Soil Organic Carbon**  
**Marketing opportunities for credits**  
28 October 2020 | Sarah Leugers



# Importance of environmental integrity



MIT  
Technology  
Review

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## Why we can't count on carbon-sucking farms to slow climate change

Even though lots of politicians, environmentalists, and companies are eager to try.

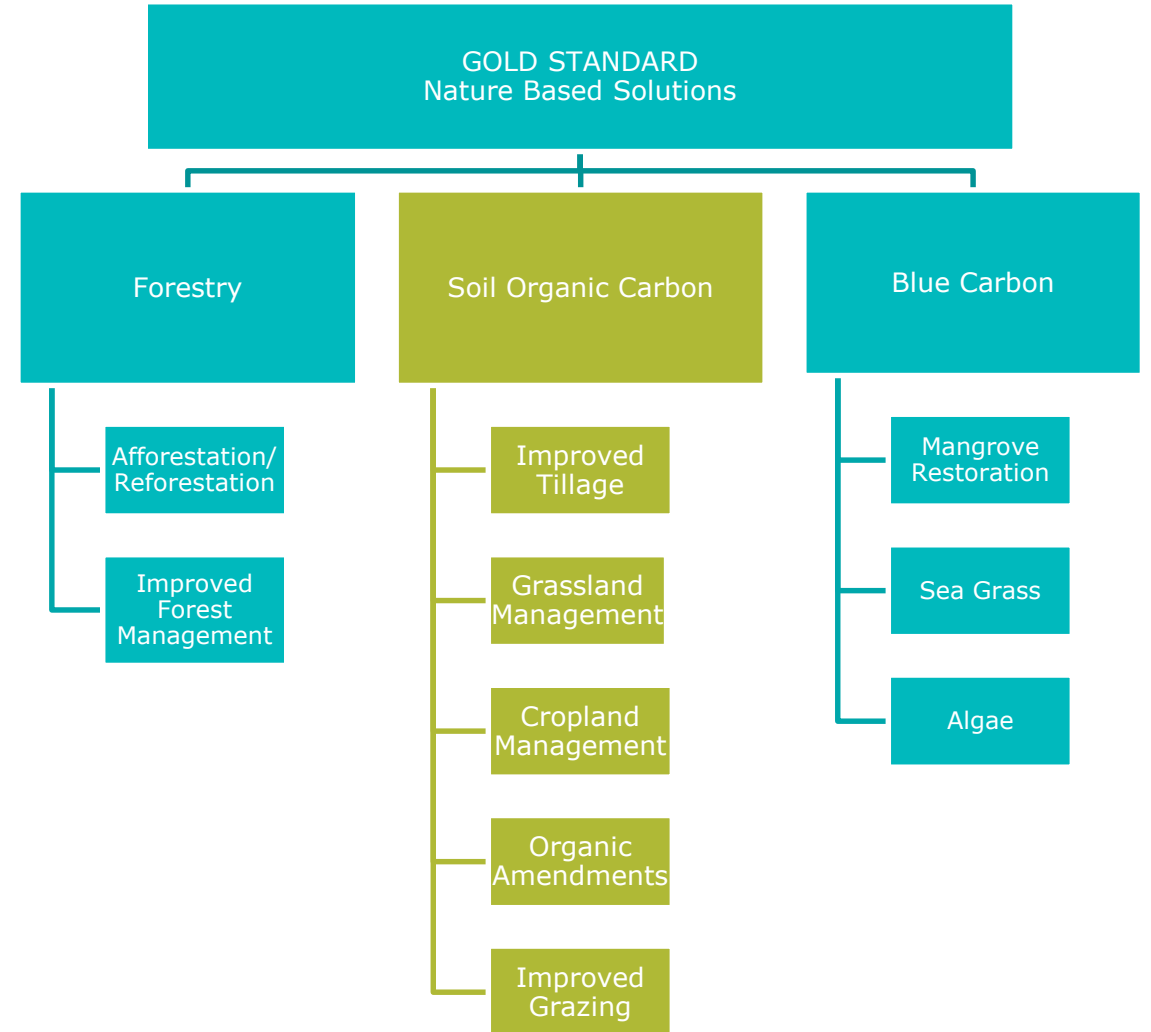
### WHY AGRICULTURE SHOULDN'T BE PART OF A CARBON MARKET

#### Inadequate measurement tools

The tools to measure soil carbon to the degree of accuracy and reliability that a market would require showed that three commonly-used measurement tools for soil carbon all yielded different results. The top 6 to 12 inches of the soil profile may overestimate the amount of carbon sequestered there. Carbon stocks differ geographically. Even in apparently uniform fields, soil carbon content may vary. Without accurate measurement tools that are accurate, quantifying soil carbon to use in a carbon market is a challenge. This is a significant barrier to achieving emissions reductions.

# Ensuring integrity in nature based solutions

- Additionality
- Safeguards
- Local stakeholder inclusivity
- Credible quantification approaches
- Quantified, verified impacts for climate + minimum 2 additional SDGs



# Calibrated quantification approaches

- **Approach 1:** Direct SOC measurements – high accuracy
- **Approach 2:** SOC estimated from peer-reviewed publications – medium accuracy, deductions possible
- **Approach 3:** Default IPCC 2019 factors – low accuracy, deductions likely

Uncertainties above 20% margin of error at a 90% Confidence Interval require a deduction.

| LUF Uncertainty Requirements (20% margin of error at 90% CL) |                            |
|--|----------------------------|
| Uncertainty (U)  | Uncertainty deduction (UD) |
| $20 < U \leq 30\%$   | 50%                        |
| $30 < U \leq 40\%$   | 75%                        |
| $40 < U \leq 50\%$   | 100%                       |

Example:

Estimated mean =  $60 \pm 30$  kgCO<sub>2</sub>e

Calculate Uncertainty U =  $30/60 = 50\%$

Resulting Uncertainty Deduction UD =  $100\% * 30 = 30$  kg CO<sub>2</sub>e

# └ Crediting versus reporting

## └ SOC Framework for carbon credit issuance:

- └ Fungible quantification and requirements such as impermanence, uncertainty, additionality
- └ Issues carbon credits for use in general carbon markets, CORSIA, etc
- └ Claims: offsetting, compensation, carbon/climate neutral

*Currently separate programmes but may integrate post-pilot phase for ValueChange*

## └ Value Change for carbon company reporting or non-market financing:

- └ Follows separate requirements in pilot testing
- └ Issues statements to be used in the context of company reporting, no credits issued
- └ Claims: Lowering footprint against GHG Protocol + Science Based Targets; financing claims if beyond boundary

 **Value Change**

# Gold Standard Value Change Programme

## Phase I ✓

Value Change Guidance Development


## Phase II - In progress

Corporate Working Groups

## Phase III - In progress

Pilots

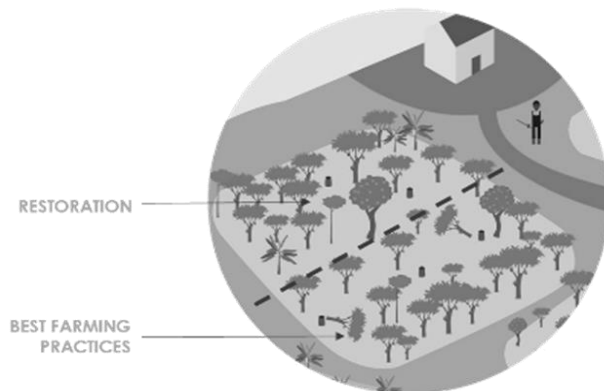


 Value Change

# Phase I: Value Chain Interventions Guidance

Gold Standard and key development partners have developed a draft Guidance document that explains how to include 'Interventions' in a company's Value Chain within the Greenhouse Gas Protocol Reporting:

Example - Corporate implements a series of restoration projects, maximizing soil sequestration



## Value Chain Interventions Guidance

- **Part 1** - How to account for intervention (boundary, scope, baseline, MRV, etc.)
- **Part 2** - How to include intervention emissions in corporate report (emission factor)
- **Part 3** - How to communicate about the intervention and its relationship with emissions reduced beyond scope 3 boundary, including carbon credits

DEVELOPED BY:



# Beyond carbon benefits

## Quantified, verified SDG impacts

- Restored soil quality
- Increased yields
- Improved farmer livelihoods
- Reduced chemical pollution
- Ecosystem and biodiversity benefits





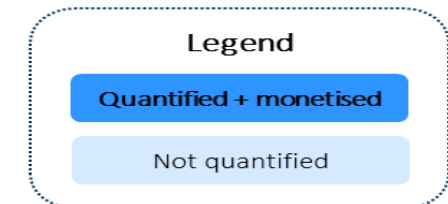
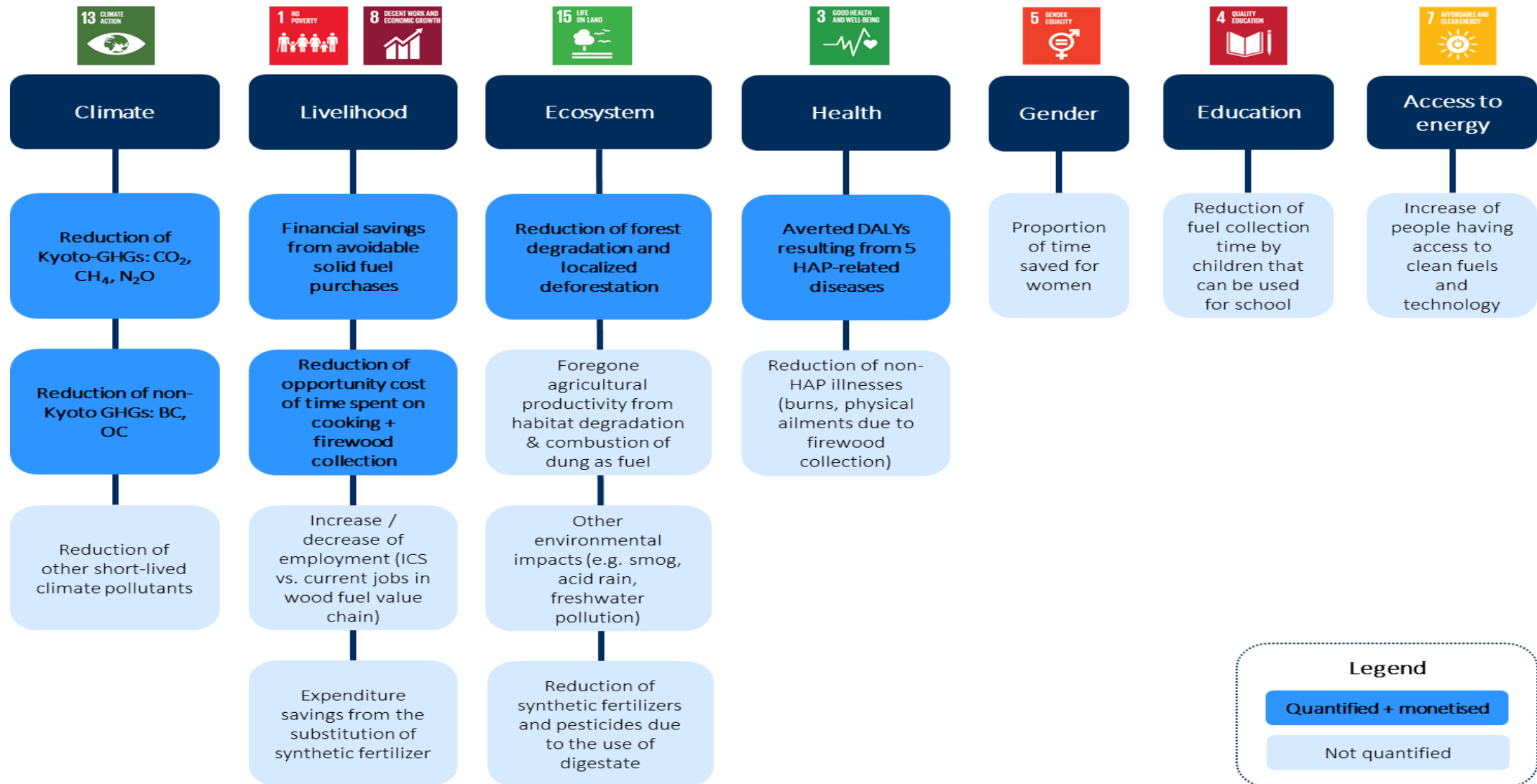
# SDG Impact Tools



**Impact assessment and reporting tools that enable projects to report their climate and SDG contributions:**

- Simplify and standardize quantification of SDG impact
- Streamline reporting and certification process
- Enhance transparency and comparability
- Facilitate comparability and aggregation of SDG impacts for reporting at a portfolio level and performance comparability
- Avoid “SDG washing” and projects overclaiming impacts

# Impact mapping and quantification



# Compelling impact reporting

## ECOSYSTEM PROTECTION

300 Hectares of forest conserved  
10% increase of UN Red List species

[View monitoring report>>](#)

## STRENGTHEN CLIMATE RESILIENCE

Successful introduction of new crop rotation strategy for 20% increased yield

[View monitoring report>>](#)

## GENDER-SENSITIVE DESIGN

Equal representation of women and men  
Appointment of 3 female community ambassadors with paid positions

[View stakeholder consultation report>>](#)

## INCREASED ACCESS TO CLEAN WATER

Additional 30MM cubic meters of drinking water available to 4 local villages

[View monitoring report>>](#)



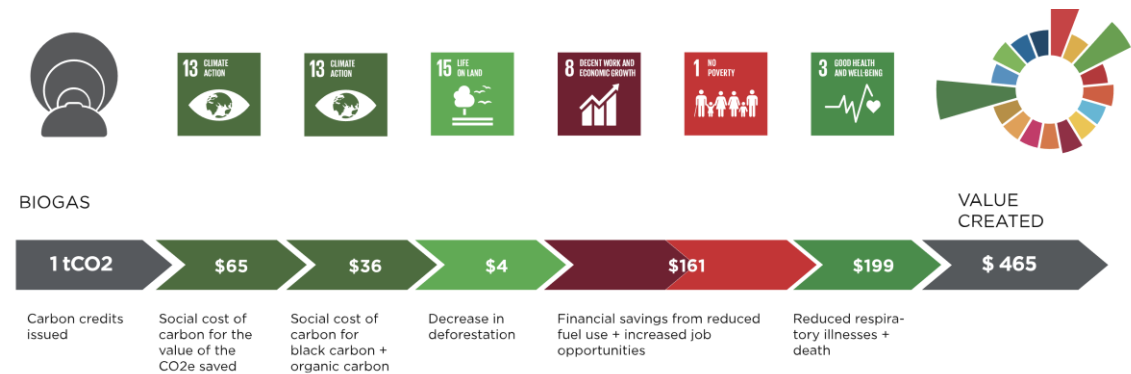
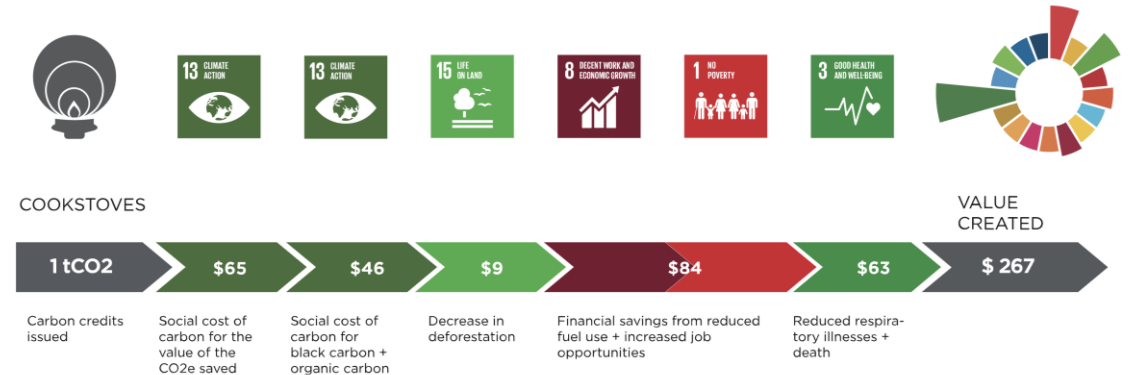
# Shared value calculation

Average economic value created per credit:

- ▮ Clean cookstove project = \$267
- ▮ Biogas projects = \$465

Net benefit of Gold Standard's improved cooking solutions portfolio:

- ▮ \$2.6 billion per annum



# Questions?



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