Gold Standard®

Soil carbon: Role in climate strategies, challenges and opportunities

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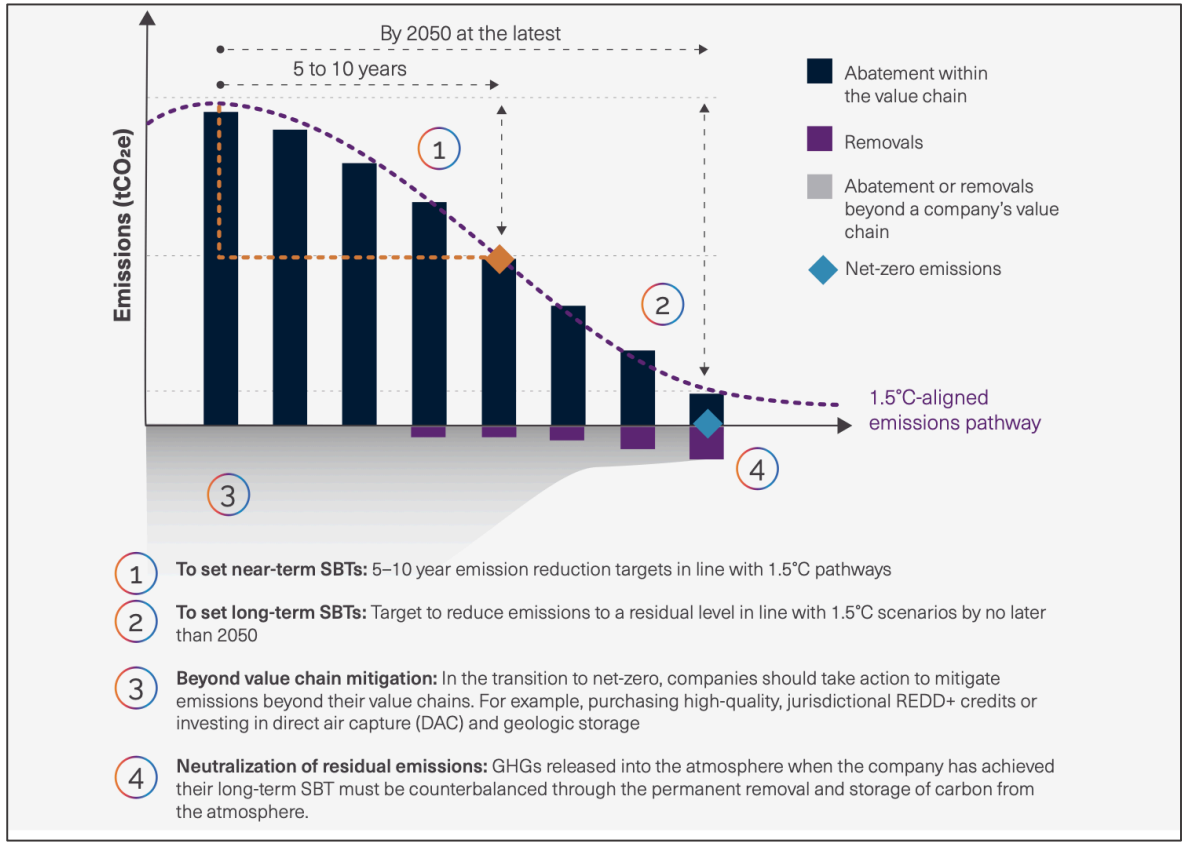
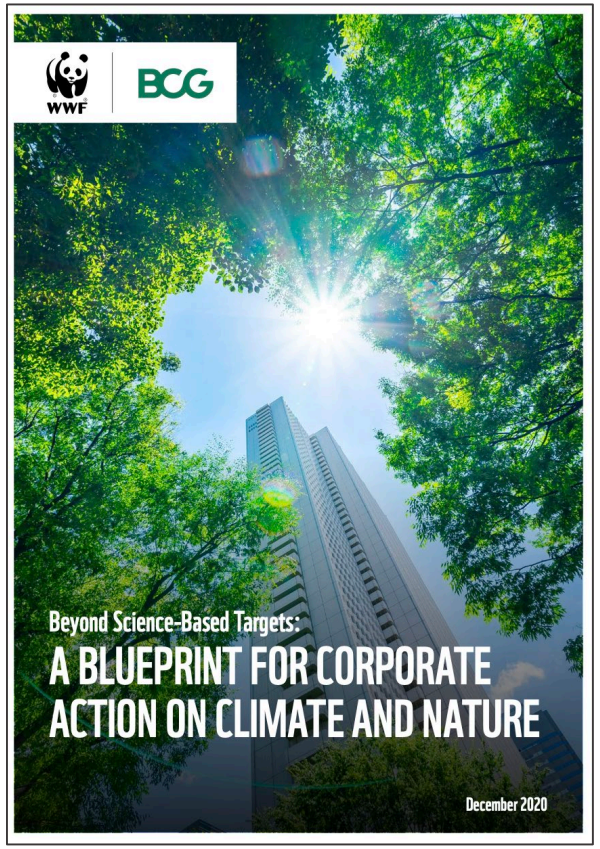
Climate Mitigation Hierarchy in the science-based era

The Science Based Targets Initiative sets this out in their Net Zero standard:



WWF set out a credible vision for corporate action in their blueprint:



Role of Soil Carbon in Corporate Climate Responsibility

Soil Carbon improvements used as:

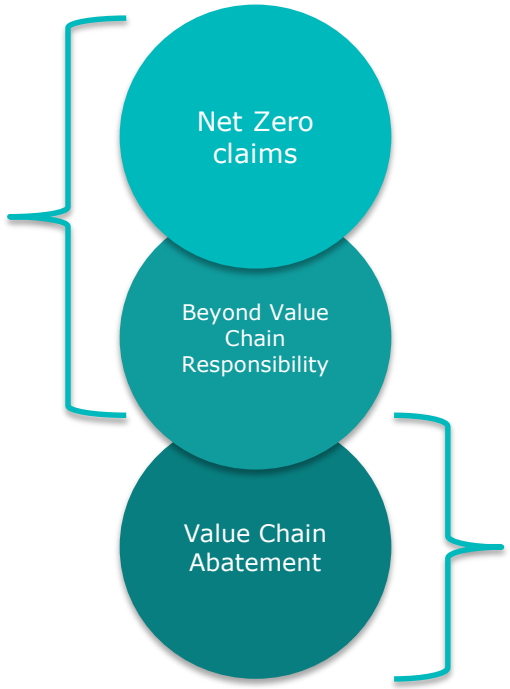
1 – **Offsetting** residual emissions whilst on a science-based value chain abatement journey as a form of responsibility for residual emissions (for e.g. 'carbon neutrality' claims)

AND/OR

2 – **Contribution to global Net Zero** claims as a form of responsibility for residual emission (new use, claims emerging)

OR

3 – **'Neutralising'** (a form of offsetting) emissions once value chain inventory is aligned with science in order to claim Net Zero status



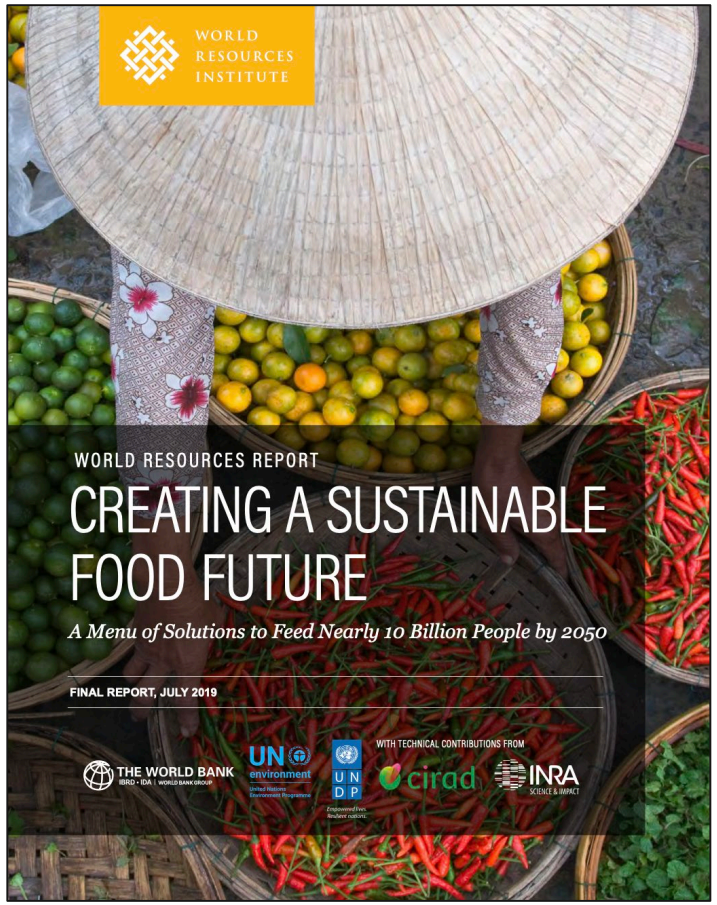
Soil carbon improvements reported as:

- Scope 1 inventory – for example for producers
- Scope 3 inventory – for example for purchasers of agri-commodities

Gold Standard for the Global Goals

Certifies projects, programmes and portfolios for use in corporate applications and claims

MENU FOR CHANGE



WRI (2019). Creating a Sustainable Food Future: A Menu of Solutions to Feed Nearly 10 Billion People by 2050. World Resource Institute.

How do you feed 10 billion people AND avert climate breakdown:

1. Demand: Reduce demand, waste, eat more efficiently, more plant-based diets etc.
2. Production: Increase productivity without further loss/conversion

AND

1. Protect and restore nature
2. Increase fish production (and other non-trad approaches)
3. Reduce agricultural emissions
4. **Increase biogenic carbon sequestration**

Defining environmental integrity

1 – the attributes and data quality of the 'unit' of allocation add up to the purpose intended

AND

2- the use of the 'unit' of allocation is applied to make a true and accurate report against a target and/or make a valid claim

AND

3 – the mechanism/unit/use does not cause perverse outcomes for any other mechanism or outcome, particularly the mitigation hierarchy

AND

4 – makes a difference (and more difference than either not using the mechanism, or having a more appropriate mechanism

‘Unit’ Attributes – key challenges for soil carbon

Attribute	Comment
Causality of impact by activity	• Required for offsetting/contribution/neutralization claims only • Requires strong methodology to demonstrate, due to range of influences on soil carbon accrual
Monitoring/Reporting	• Currently requires on site sampling as maturity of model-based approaches some way off/requires strong calibration
Additionality of activity	• Required for offsetting/contribution/neutralization claims only • Some debate around activity penetration thresholds vs financial additionality
Permanence	• Required for all use cases but may be treated differently, permanence or permanence equivalent required for offsetting/neutralization claims • Inherent impermanence and short crediting periods likely a major challenge for offset/neutralization claims
Uniqueness of claims	• Required for offsetting/neutralization claims • Double counting/claiming likely a perfect storm due to interest from Government/NDC, corporate inventory (SBTi) and carbon markets
Sustainable Development	• Has great potential if linked to optimized activity design and proper safeguarding

THANKS!

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