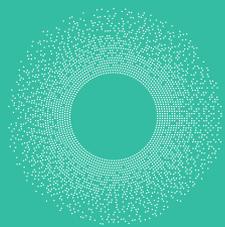




Global
Landscapes
Forum

Luxembourg 2019

White Paper



Breakthroughs in
Sustainable Finance

Carbon Financing, Offsetting and Corporate Mitigation Strategies

This White Paper was produced by the **UNREDD Programme**, a partnership between the **UN Food and Agriculture Organization (FAO)**, the **UN Development Programme (UNDP)** and the **UN Environment Programme (UNEP)**





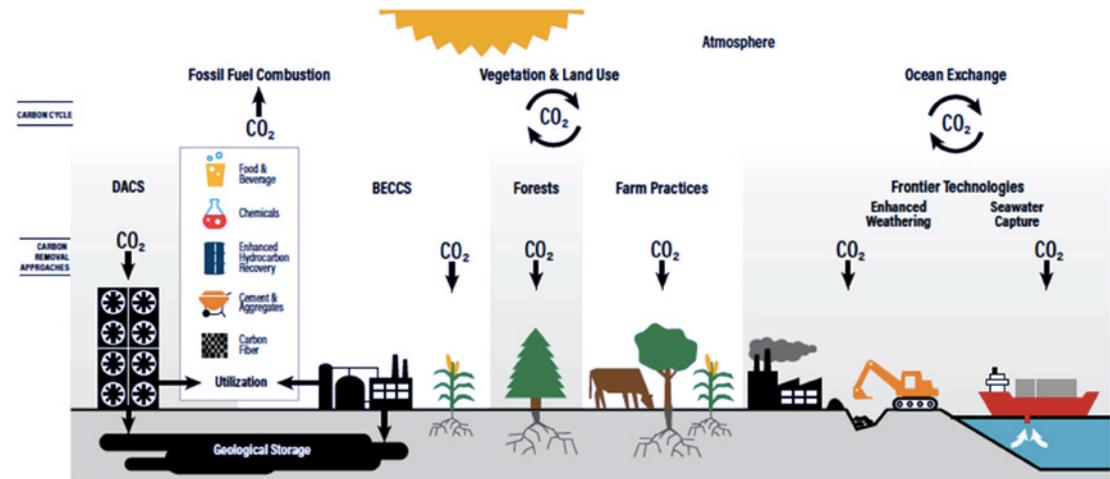
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Background

The Intergovernmental Panel on Climate Change’s (IPCC) Special Report on Global Warming of 1.5°C last year painted a stark picture of the planetary crisis. To avoid the most dangerous climate impacts, aggressive reductions in greenhouse gas (GHG) emissions and significant carbon removal are needed to achieve the goals of the Paris Agreement to limit warming to well below 2°C, with efforts to limit warming to 1.5°C. In less than 11 years,

emissions need to be 45% below 2010 levels if warming is to be limited to 1.5 °C (IPCC 2018). Translated into absolute figures, the world should cut 29-32 Gt of CO₂ emission by 2030.

There are various approaches to carbon removal from the atmosphere: from land management approaches to technological options, including carbon management in agricultural soils, forests, and agroforestry; bioenergy with carbon capture and storage (BECCS); direct air capture and storage (DACS), etc. (Minx *et al.* 2018; see Fig 1).



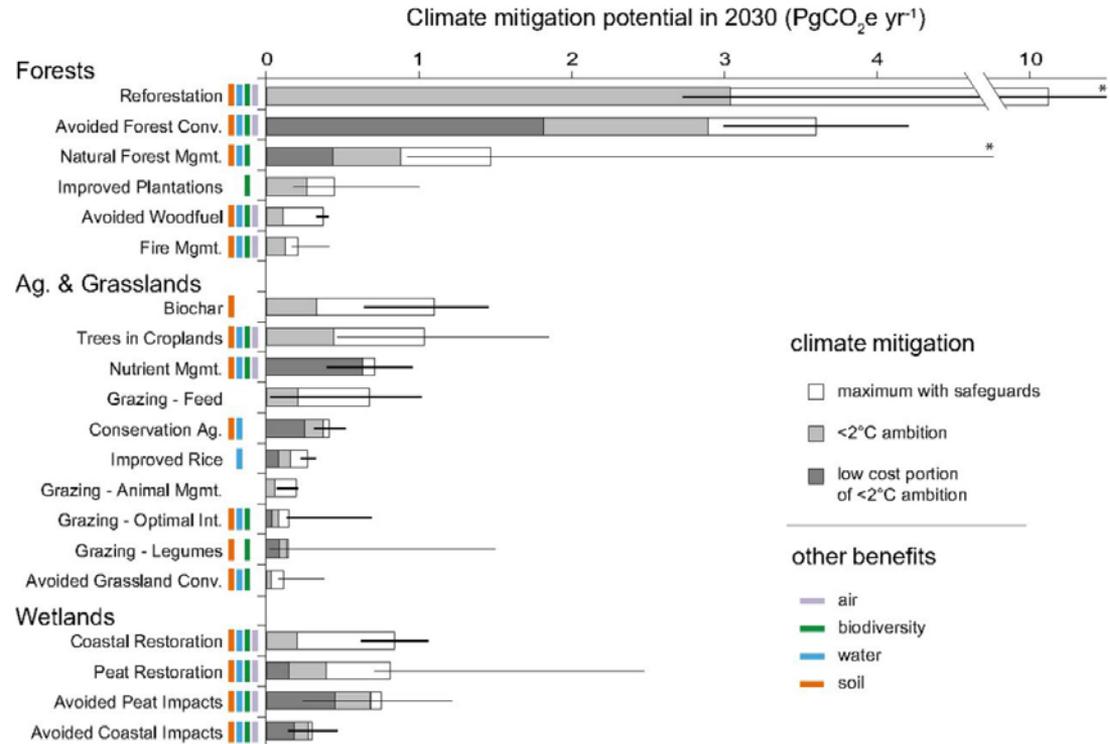
Source: Adapted from Minx *et al.* 2018.

Figure 1. Approaches to carbon removal

There is a growing consensus that Natural Climate Solutions (NCS) such as restoring, re-establishing and protecting forests, peatlands, mangroves and other landscapes, can provide about a third of the greenhouse gas (GHG) emissions reductions needed by 2030 for a good chance of holding warming to below 2°C (see Fig. 2). Reducing emissions and removing carbon from the atmosphere through halting forests loss and restoring forests can contribute 5.3 GtCO₂e/year by 2030. The approach provides the greatest opportunities for mitigation at the scale required, the technology most readily at hand and a bridge to a fossil fuel-free world (Griscom et al. 2017). Yet to date, NCS have only received about 2.5% of the funding allocated for climate mitigation globally.

“We need to massively increase investment in nature to maintain the ability of the planet to sustain humanity [...] investment in nature conservation has so far been limited in scale and too risky for most big investors.” Naoko Ishii, CEO and Chairperson, Global Environment Facility in: Stephensen *et al.* no year

Climate mitigation potential of 20 natural pathways.



Bronson W. Griscom et al. PNAS 2017;114:44:11645-11650

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Figure 2. NCS and climate mitigation potential

How can we move sustainable land-use financing into the mainstream?

The private sector is becoming an increasingly important potential source of REDD+ finance. According to an analysis by Forest Trends' REDDX Initiative and Ecosystem Marketplace on REDD+ finance commitments across 13 countries, the private sector provided about 10% of the US\$ 4 billion committed to REDD+ in those countries between 2009 and 2014. It is estimated that the private sector has the potential to deliver an additional US\$13 billion per annum by 2020. However, for forest ecosystem restoration at scale with a target of 350 million hectares of restored land, total investments above US\$837 billion are likely needed between now and 2030. New financing models are required. Offsetting, if done correctly, could be one of them.

Over the past decade forward looking companies have taken steps to move towards low carbon business models – either by developing ambitious strategies or by making public commitments to ambitious long-term measures, or both. The growing public

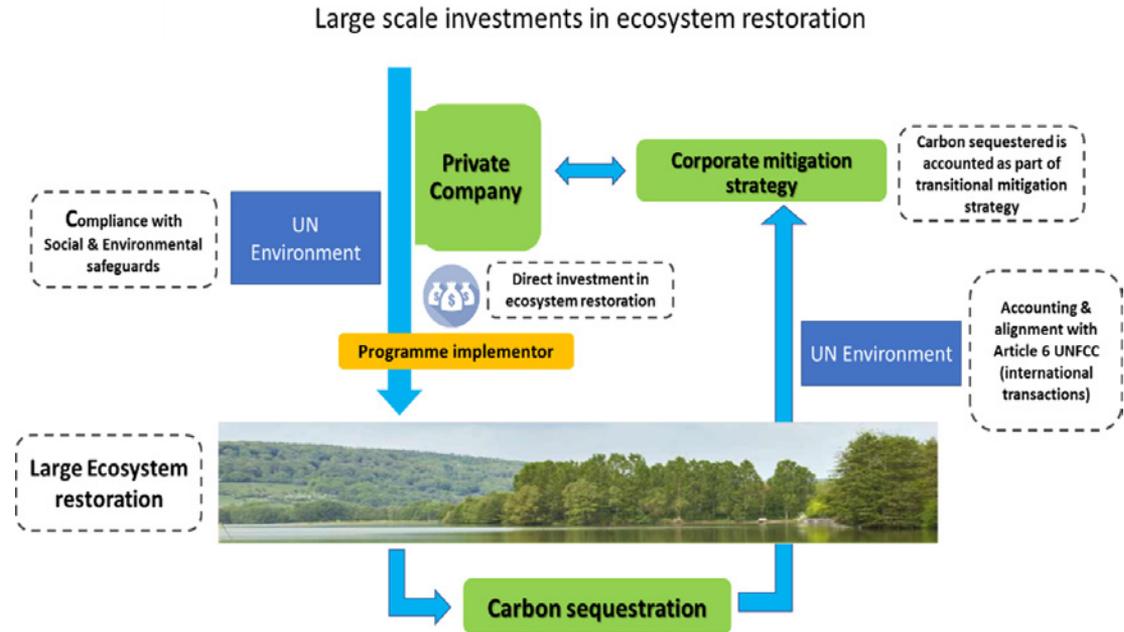


Figure 3. Offsetting and NCS

and political demands on climate change are galvanizing further actions. However, some industries are challenged to demonstrate their mitigation efforts in the short to medium term. For these industries, direct investment in forest ecosystem restoration can be a transitional strategy towards ambitious low-carbon business models. In simple terms, a UN company or financier

may commit to supporting forest ecosystem restoration and or conservation and retain a share of the carbon offsets generated after the necessary discounts for risks and benefit sharing.

The GLF Luxembourg session on *Carbon Financing, Offsetting and Corporate Mitigation Strategies* discusses the issues that the private

sector needs to consider for offsetting investments into forest restoration and conservation. These issues can make a difference between an investment that constitutes a durable part of corporate mitigation goals (and also be perceived by the public as a genuine contribution to the 2030 mitigation targets) and one that rapidly loses investment value (perceived by the public as environmentally weak at best, or greenwashing at worst).

In the session we will address the question, *what are the necessary conditions and opportunities for investments in forest-based natural climate solutions?* A sub-optimal understanding of the variables that can decide the fate of investments is a non-trivial barrier to scale up private participation in NCS. The session will focus on the most important ones to take into account: **trends in the price of carbon, alignment with Article 6, and factors affecting the social and environmental integrity of investments.**

What do participants need to know about the topic?

Carbon prices

The model presented in Figure 3 may fit a private company under pressure to undertake mitigation actions and facing technological limitations to cut down emissions significantly in the near or medium term. It may become even more attractive if the future supply of affordable high-quality offsets becomes limited and the carbon price increases.

Offset prices on voluntary carbon markets can vary substantially. Ecosystem Marketplace has tracked average prices of \$3-\$6/tCO₂e with actual prices ranging from under \$0.1/tCO₂e to just over \$70/tCO₂e. This broad range may be attributed to several factors, including perceived quality of the emission reduction, project costs (varying with project's location and activity); buyer's preferences (e.g., specific location, project type, co-benefits, or other buyer criteria), and the type of the transaction (offsets bought in bulk at lower prices than smaller quantities). Volumes in voluntary carbon markets are small. Annual issuances reached a record high of 62.9 MtCO₂e of offsets in 2017 with the trend continuing into Q1 2018 with 15.8 MtCO₂e issued (Hamrick and Gallant 2018).

With the increased interest of private companies in offsetting, and the potential limited supply of high-quality offsets, it is an open question whether average prices in the voluntary market will remain within the observed range.

Alignment with Article 6

The Paris Agreement has the most potential to impact future forest carbon finance. Although key decisions on Article 6 (referred to as "markets article") of the Rulebook are still pending it builds on prior market approaches under the Kyoto Protocol and lays out potential options for offset trading. Through Article 6.2, countries intend to establish a unit of emissions reductions (called Internationally Transferable Mitigation Outcomes, ITMOs) that could be traded between countries. Article 6.4 proposes the creation of a centralized, global mechanism to trade ITMOs, which may allow to transition from voluntary offsets into an international, centralized compliance market. If voluntary offsets are covered in this proposed global mechanism, non-state participants like companies or individuals could purchase and retire offsets. This would ensure that emissions reductions occur above and beyond what countries have promised (Hamrick and Gallant 2018).

Results-based payment in a nutshell

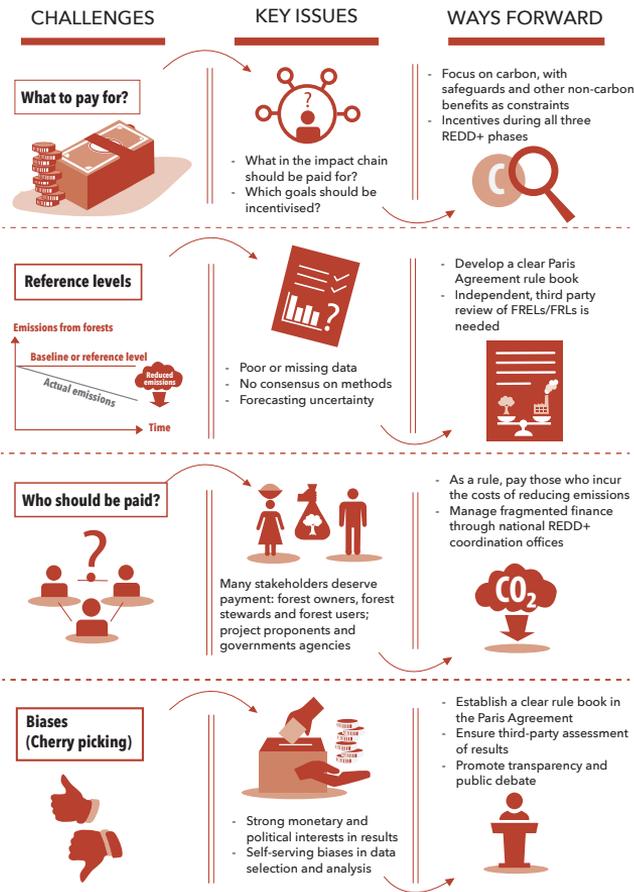


Figure 4. Results-based payment – challenges, key issues and ways forward

Source: Angelsen *et al.* 2018

As highlighted by Hamrick and Gallant (2017) there are still unknowns regarding the potential global carbon offset market: What will be the scope of international carbon trade? What will be the types of offsets recognized in international carbon trade? Which social and environmental safeguards should be applied? Now that governments must submit climate change mitigation plans under the Paris Agreement, would countries give up their forest carbon emissions reductions by allowing the sale of forest offsets internationally? What happens if they do so partially? Arild Angelsen *et al.* (2018) believe that the key challenges for results-based payments are: what to pay for; how to set reference levels; and whom to pay (see Fig. 4).

These issues are being discussed as part of the Rulebook for the Paris Agreement. A solid understanding is key to ensure effectiveness and efficiency of investments in NCS, particularly forest restoration and conservation.

Social and environmental integrity of investments

In addition to the financial challenges, carbon offsets from forest conservation or restoration continue to be challenged regarding social safeguards for local and indigenous populations, technical issues around monitoring, reporting and verification (MRV), accounting (measuring), leakage and permanence of carbon stocks and additionality. In response, countries have improved their national monitoring capacities and understanding of drivers of forest deforestation and degradation, increased stakeholder involvement in forest management, and there also is a platform for indigenous and community land rights under REDD+ (Pham *et al.* 2018). Forest landscape systems are complex as they involve multiple actors, values, interests and processes, including cross-sectoral and value chain dynamics that put pressure on the resources available from these landscapes. Tackling deforestation requires aligning behavioral and institutional change (Kessler and Nelson 2019). Ensuring that no social or environmental abuses have taken place during the period of emission reductions is key to ensure legitimacy of investments.

The way ahead for UNREDD

As a contribution to the the UN Decade of Ecosystem Restoration 2021–2030, and given the recent impetus of the UN Secretary General’s Climate Summit that underscored the role for nature based solutions (NBS) in climate mitigation and adaptation, UN Environment seeks to broker a number of agreements with private sector companies interested in CO₂ mitigation through forest ecosystem restoration. We look forward to reach one Gigatonne of CO₂ emissions removed by 2025. This would provide proof of concept for the private sector to adopt a model of investment that ensures social and environmental integrity in restoration and conservation of forest ecosystems.

The UNREDD Programme, a partnership between the UN Food and Agriculture Organization (FAO), the UN Development Programme (UNDP) and the UN Environment Programme (UNEP), is committed to catalyze financing at scale for forest ecosystem restoration and conservation, assure appropriate monitoring, reporting and verification, and guarantee social safeguards. As part of the UNREDD Programme, UNEP will partner with private companies and provide technical advice and knowledge sharing on investments to ensure compliance with established social and environmental safeguards, alignment with Article 6 of the Paris Agreement and provision of both carbon and non-carbon benefits. UNEP would also facilitate negotiations with intermediaries and governments in structuring investments. In order to retain independence and institutional integrity, investment in ecosystem restoration will be channeled through independent delivery vehicles. UN Environment would cover its operational costs from sources outside these deals.

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