Nature 4Climate

Headline briefing | 2018

Natural climate solutions are affordable, scalable and available right now. They can deliver a third of the solution to climate change needed by 2030. But are less than 1% of the conversation and receive less than 3% of climate funding.

Don't let nature be #TheForgottenSolution

We need a transition in land use, alongside the energy transition, in response to climate change. Nature is a critical part of the solution. Something the world is in danger of forgetting.

1. The land sector is the only sector that can deliver sufficient cost-effective carbon removal in the immediate term to prevent dangerous climate change.
2. Governments, businesses and investors are not prioritizing natural climate solutions sufficiently to avoid dangerous climate change.
3. There are opportunities to reduce and capture greenhouse gas emissions across all landscapes, in countries North and South, rich and poor.
4. National and local governments can cut net greenhouse gas emissions by integrating climate-oriented management strategies into their land management policies.
5. Investing in natural climate solutions is cost-effective, can boost economies and bring multiple co-benefits for sustainable development, beyond climate mitigation.

1. The land sector is the only sector that can deliver sufficient cost-effective carbon removals to prevent dangerous climate change.

Talking point:

The land sector currently emits a quarter of greenhouse gas emissions.[1] But can deliver a third of the required solution to climate change needed between now and 2030. Natural climate solutions can deliver cost-effective mitigation for less than $100 per ton of CO_2 and without any reduction in the existing cropland area. The recent IPCC report shows that a transformation of the land sector is essential to delivering a world with just 1.5°C degree warming.

Supporting statements:

- The land sector is also a carbon sink, absorbing CO_2 from the atmosphere into biomass, dead organic matter and soil carbon.[2]
- A TNC-led study found that natural climate solutions could deliver reductions of as much as 23.7 billion tonnes of CO_2 equivalent per year, approximately 30% more than previous, less comprehensive estimates.[3]

2. Governments, businesses and investors are not prioritizing natural climate solutions sufficiently to avoid dangerous climate change.

Talking point:

Land use still receives less than 3% of public mitigation finance.[4] Nationally determined contributions (NDCs) rarely describe comprehensive approaches to land use; there are few concrete actions on the ground, and almost no specific targets.

Supporting statements:

- Only 38 out of the 160 governments who signed the Paris Agreement have specific targets for the land sector in their commitments to curb greenhouse gas emissions.[5] According to the UNFCCC NAZCA database of 12,000 subnational commitments on land use, there are just 337 actions on land use.[6]

3. There are opportunities to reduce and capture greenhouse gas emissions across all landscapes, in countries North and South, rich and poor.

Talking point:

Natural climate solutions integrate all land-use strategies, across all landscapes, from tropical to temperate forests, to wetlands, grasslands and farmlands. It's not a question of rich and poor, it's a question of knowledge and will.

Supporting statements:

- A commercially driven reforestation and forest management plan in the USA can reduce the country's total emissions by 7%, the equivalent of taking 82 million cars off the road for a year.
- **Natural climate solutions can cost-effectively cut China's total CO_2 emissions by more than 5%, the equivalent to taking 75 million cars off the road for a year.**
- The Democratic Republic of Congo could reduce one quarter of its greenhouse gas emissions by implementing cost-effective reforestation measures.

4. National and local governments can cut net greenhouse gas emissions by integrating climate-oriented management strategies into their land management policies.

Talking point:

Governments can prioritize land use strategies that both reduce emissions and absorb more greenhouse gases. This can be done through planning and zoning decisions, and by aligning fiscal or economic incentives with land use policies that benefit the climate.

Supporting statements:

- Act to avoid perverse policy outcomes (e.g. agriculture subsidies, land permitting) and create and align incentives for NCS (e.g. carbon pricing, tax incentives, public funding programs).
- Build the business case—help direct mainstream capital and subsidies to support (as opposed to limit) natural climate solutions, from promoting green bonds, while increasing funding for climate science and innovation to support the deployment of NCS.
  - Support the forestry sector in embracing and accelerating reforestation and sustainable timber practices through innovation, new markets and enhanced demand for sustainable products.
  - Encourage the agricultural sector to fully embrace natural climate solutions by cutting sectoral emissions, removing deforestation from supply chains, and improving soil health and grazing practices.
- Monitor development and ensure robust and transparent rules. Use real-time data to monitor developments impacting on habitat change and to protect the rights of indigenous and other communities. Ensure robust and transparent rules for land sector carbon in the Paris Rulebook (e.g. trading mechanisms defined by Article 6).

5. Investing in natural climate solutions is cost-effective, can boost economies and bring multiple co-benefits for sustainable development, beyond climate mitigation.

Talking point:

A third of cost-effective reductions through natural climate solutions could cost less than $10 per ton of CO_2 equivalent saved. Natural climate solutions provide value for money, create jobs and improve local livelihoods, helping us meet the Sustainable Development Goals.[7] They provide additional benefits such as reduced flooding, improved air and water quality; soil health; biodiversity; and increased adaptation and resilience to natural disasters associated with a changing climate.

Supporting statements:

- Worldwide, 2 billion people depend directly upon the land and coast for subsistence. Sustainable forestry and improved framing practices can revitalise rural economies and help meet the growing demand for food without expanding the footprint of farming.
- **Restoring nature is also great for jobs: in 2014, it employed over 120,000 people in the U.S., significantly more than iron and steel production or coal mining.[8]**
- The total economic value of nature is estimated at between $44–125 trillion, but the total economic cost of maintaining biodiversity to achieve this value is estimated at only $150–440 billion.[9]
- Healthy forests help clean our air and restore natural rainfall patterns. Wetlands boost the land's ability to filter freshwater. Regenerative agriculture will boost productivity and improve water use efficiency. Fertiliser management helps protect the water supply from nitrogen runoff and conserve soil and increase its carbon.
- Conserving and restoring natural lands protects native habitats for plants and animals. Support adaptation and build resilience to unavoidable climate impacts. Better managed mangroves and protecting wetlands provide more nurseries for fish and safer, more resilient coastal communities to rising sea levels and severe storms.

[1] The land sector is responsible for almost a quarter of global GHG emissions around 10–12 gigatonnes of CO_2 equivalent per year, or 24% of total emissions, IPCC www.ipcc.ch/pdf/assessment-report/ar5/wg3/ipcc_wg3_ar5_chapter11.pdf

[2] IPCC www.ipcc.ch/pdf/assessment-report/ar5/wg3/ipcc_wg3_ar5_chapter11.pdf

[3] Griscom et al, (2017) Natural climate solutions, PNAS: http://www.pnas.org/content/114/44/11645

[4] Land use still only receives about 2.5% of public mitigation finance - Climate Policy Initiative https://climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2015/ Whereas 86% of Private investment in climate action from green bond issuances is invested in energy and transport, with land use attracting only 0.9% - Climate Bonds Initiative (2016). Bonds and Climate Change: The State of the Market in 2016: https://www.climatebonds.net/files/files/CBI%20State%20of%20the%20Market%202016%20A3.pdf

[5] Forsell et al, (2016) Assessing the INDCs' land use, land use change, and forest emission projections, Carbon Balance and Management: https://link.springer.com/article/10.1186/s13021-016-0068-3

[6] UNFCC NAZCA database: http://climateaction.unfccc.int/

[7] Natural climate solutions are relevant to SDG 1, 2, 3, 6, 8, 10, 11, 13 and 15.

[8] Todd BenDor, T. William Lester, Avery Livengood, Adam Davis, Logan Yonavjak (2015). Estimating the Size and Impact of the Ecological Restoration Economy. PLoS ONE 10(6) http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0128339

[9] CBD (2012). Report of the High-Level Panel on Global Assessment of Resources for Implementing the Strategic Plan for Biodiversity 2011-2020, CBD, Montreal, UNEP/CBD/COP/11/INF/20.