

UNFCCC Standing Committee on Finance - Finance for NBS

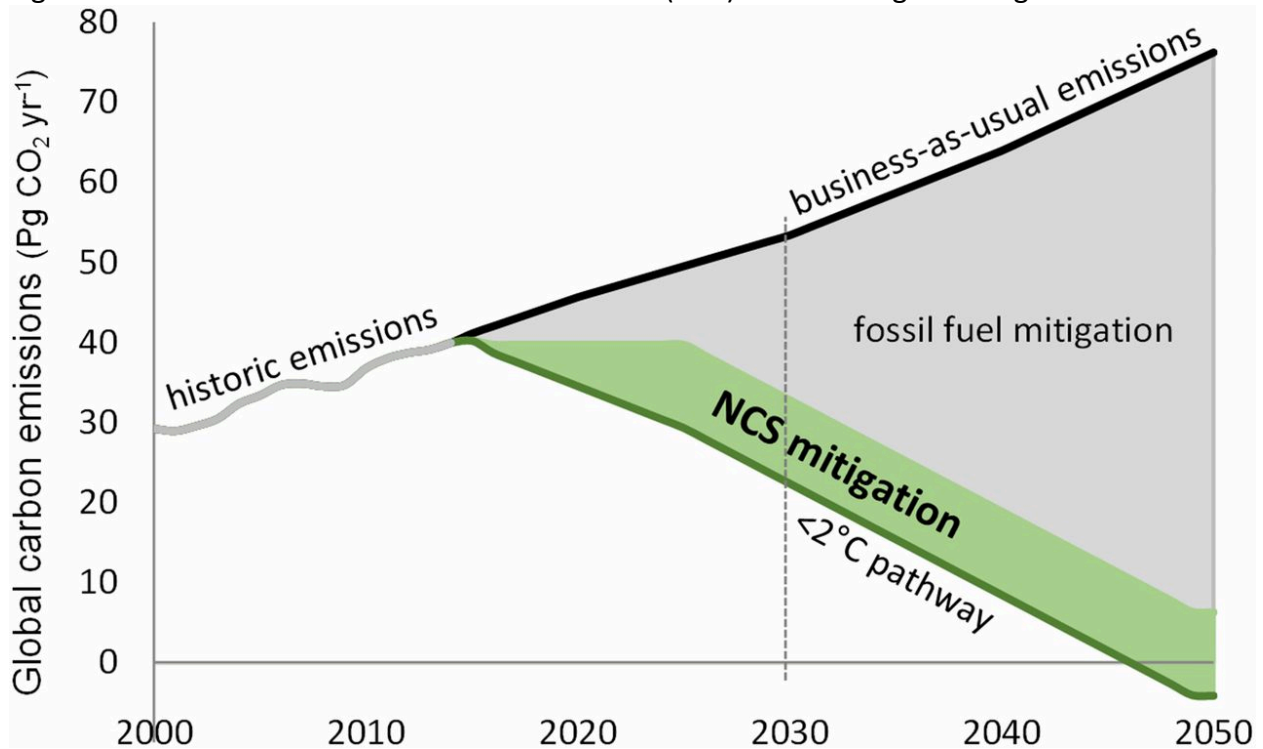
The Scale of the Opportunity

The Nature Conservancy (TNC) led pioneering [research](#) showing that Nature-based Solutions (NbS) that contribute to mitigation defined as natural climate solutions (NCS)—protecting, restoring and sustainably managing forests, farms, wetlands and grasslands—can cost-effectively provide a third of the mitigation needed to halve emissions by 2030 (see Figure 1). NbS also provide adaptation and disaster risks reduction benefits, such as sustainably using valuable ecosystems to reduce vulnerability to climate disasters that especially affect marginalized people, while providing food security, jobs, and other benefits (see Figure 2).

Yet the world is struggling to mobilize the resources needed to green the planet sufficiently. While nature can provide significant adaptation and mitigation solutions, it still attracts less than 10% of climate [funding](#). This number is insufficient, with adaptation receiving an even lower proportion of funds than mitigation.

We have existing solutions that use nature to reduce the effects of climate change and build resilience. This submission offers a number of tangible solutions that TNC already implements and that the Standing Committee on Finance can use to effectively target financial opportunities using NBS.

Figure 1: Contribution of natural climate solutions (NCS) to stabilizing warming to below 2 °C.



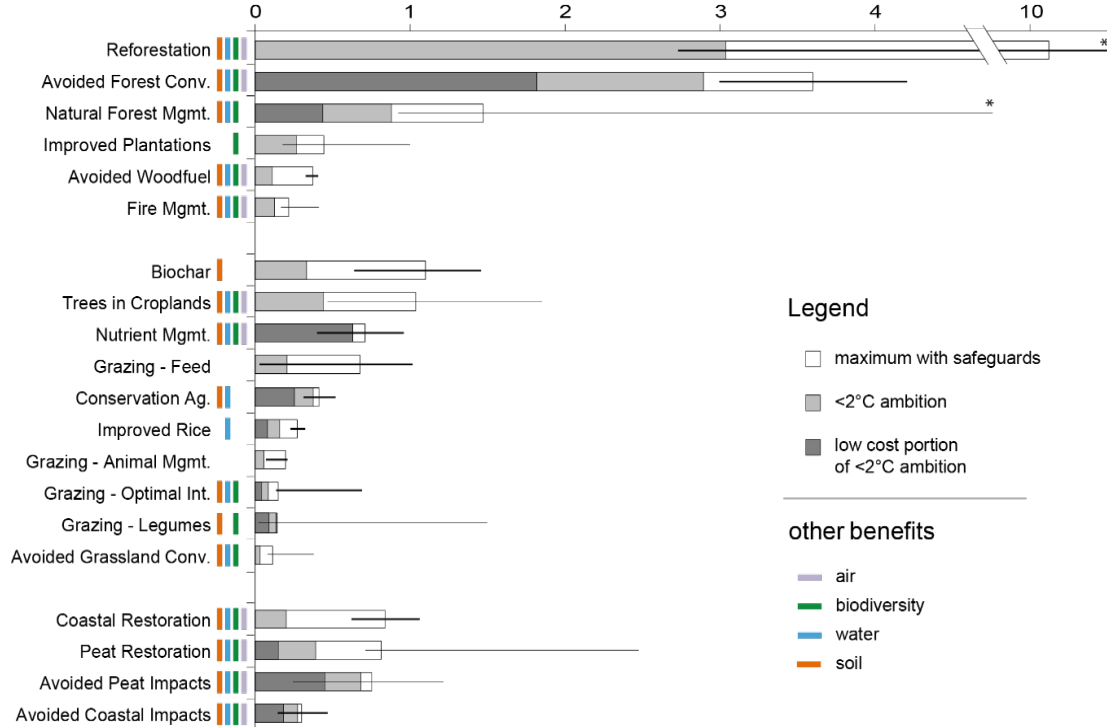
The Value of Nature

[Research](#) by the World Economic Forum (WEF) has estimated that \$44 trillion of economic value generation – more than half of the world’s total GDP – is moderately or highly dependent on nature and its services and is therefore exposed to nature loss. Industries that are highly dependent on nature generate 15% of global GDP (\$13 trillion), while moderately dependent industries generate 37% (\$31 trillion). Together, the three largest sectors that are highly dependent on nature generate close to \$8 trillion of gross value added (GVA): construction (\$4 trillion); agriculture (\$2.5 trillion); and food and beverages (\$1.4 trillion). This is roughly twice the size of the German economy.

[Research](#) commissioned by The Nature Conservancy (TNC) estimates that implementing natural climate solutions globally could contribute \$25-90 billion in annual value added by 2030 – without factoring in a carbon price. Additionally, the Economist Intelligence Unit [says](#) that the economic impacts of climate change are projected to reduce global GDP by 3% by 2050. By preventing nearly 10 billion tons of CO₂ emissions annually by 2030, natural climate solutions would help to reduce this economic burden.

[Research](#) commissioned by the Global Commission on Adaptation (GCA) estimates that investing \$1.8 trillion globally in five key adaptation approaches (early warning systems, climate-resilient infrastructure, improved dryland agriculture, global mangrove protection, and investments in making water resources more resilient) from 2020 to 2030 could generate \$7.1 trillion in total net benefits that contribute to growth and prosperity.

Figure 2: Climate mitigation potential in 2030 (PgCO₂e yr⁻¹)



Nature-Based Solutions as a driver of the NDCs and National Adaptation Plans

Two-thirds of countries included language on Nature-Based Solutions (NBS) for both mitigation and adaptation in their first Nationally Determined Contributions (NDCs). But less than a third included a quantified target or information on how they planned to achieve their goal. We need to enhance NDCs and National Adaptation Plans (NAPs). In order to enhance ambition through NBS, we need to:

- 1) **ASSESS** improved data of what policy and shovel ready interventions exist and where they are on a geospatial scale;
- 2) **INVEST** in financial instruments to enact the needed changes and to build them up to the scale needed for success; and
- 3) **MOBILIZE** greater political will to enact the needed ambition.

We know Nature has vast economic value. We know there are financial opportunities. We now need to harness this value with existing solutions to maximize Nature’s full potential.

Below is a framework and examples of how we can do this to scale-up climate action through NBS:

ASSESS

Decision makers need good data and strategies to make good decisions. Figure 1 and Figure 2 have used greenhouse gas data to target the scientific potential of reducing emissions through nature. Using global datasets and relating cost curves based on different interventions to them, we can target the potential reductions as well as their geographic scope.

Assess and strengthen enabling conditions

Solutions that have already proven scalable and effective include: agro-forestry, reforestation for carbon or other purposes, protected areas, and some forms of community forestry. However, successful interventions to increase tree cover generally require a set of enabling conditions, including a) access to quality inputs (nurseries) and credit (bank loans); b) secure land and/or tree tenure; c) robust supply chains and markets for selling products; d) mechanisms for monitoring and conflict resolution; e) policies and regulations that do not dis-incentivize tree planting (for instance, ability to harvest is important for planting trees).

Improve and harmonize adaptation metrics and resilience ratings systems

Ratings systems can enable stakeholders to quantify the costs and benefits of investing in resilience and to track progress. Investments in data and downscaled information will be critical to allow climate to be mainstreamed into financial decisions.

Price risk to catalyze adaptation actions

Pricing risks reveals the cost of climate impacts. It informs economic analysis, improves policy decision making and shape investments. Approaches and tools most developed include insurance and catastrophe risk transfer markets. Valuing ecosystem services for risk reduction (e.g., coral reefs, mangroves, etc.) has helped inform these opportunities; however, global data on hazards and exposures, calculations of probabilities, and knowledge of local conditions and vulnerabilities, and information on how exposure is reduced through local adaptation are still needed to adequately price risk and integrate into industry risk and pricing models.

There is an opportunity to align the financial system to address the climate challenge in order to “unlock” the necessary capital—both private and public—that can support investment in adaptation and resilience. Issues focus on incorporating physical climate risks into investment decision making. Integrating climate risks into decision making has been initiated but needs to be strengthened. The necessary rules, regulations, standards, and best practices remain nascent and weakly defined. Opportunities include: acceleration and promotion of climate-relevant financial policies, development of adoption and use of climate and related risk management practices; development and adoption of adaptation metrics and standards; building capacity among all financial actors; highlighting and promoting investment opportunities; and using public institutions to accelerate adaptation investment.

INVEST

Climate finance can be catalytic and transformational. It can help unlock finance to deliver NbS at scale by encouraging responsible investment, delivering investment efficiently through voluntary and compliance markets, developing new markets, and encouraging public and private collaboration for a low carbon and resilient development. Solutions that have already proven scalable and effective include:

Enhance current public investments target climate action

Global funding mechanisms such as the Green Climate Fund (GCF) and Forest Carbon Partnership Facility (FCPF) are using billions in public funding to improve country capacity and deliver climate action. The funds should be designed to build the backbone of additional action that can be linked to transformative programs. The Green Climate Fund is building programs to help countries reduce emissions and increase resilience at great scales. The FCPF is implementing national and jurisdictional REDD+ programs with social safeguards and monitoring, reporting and verification (MRV) systems. In Indonesia, for example, the FCPF has funded development of the Forest Reference Emission Level (FREL) for East Kalimantan province and integration of the national and sub-national registry systems for MRV. Through the FCPF program, Indonesia could further receive up to US \$110 million in REDD+ results-based payments for East Kalimantan. Future public financing should, where possible, utilize these existing structures and mechanisms to enable, incentivize and reward climate action. Public investment deployed in this way can help de-risk NCS projects, making them more attractive for private financing.

Invest in and Enhance Sustainable Forests

Closed in mid-2019, the Cumberland Forest Investment Fund is structured as a \$130-million, closed-end, private investment fund that seeks to generate competitive risk-adjusted financial returns for its investors with revenues from sustainable timber harvesting, carbon capture and recreational leases. At the same time, the fund is designed to achieve specific conservation outcomes identified by TNC's decades of donor-funded scientific research and forestry expertise.

TNC's philanthropically supported staff scientists had identified the U.S. Central Appalachian region as one of the most significant biodiversity hotspots in North America and their importance as a refuge for numerous species adapting to climate change. With this scientific analysis providing clear impact goals, TNC identified the properties that would ultimately make up Cumberland Forest's 395 square miles (1,024 square kilometers) of forestland. To fund a purchase of this size, however, we needed to look beyond the traditional funding sources of philanthropy and grants.

TNC's impact investing team, NatureVest, then worked with state and global colleagues to develop an innovative private equity-style fund structure where TNC, a 501c3 non-profit, is the fund manager and owns the general partner. The fund raised more than \$70 million in equity from 27 investors (including TNC) and \$40 million in debt (approximately \$20 million from a Virginia state agency and \$20 million from the Doris Duke Charitable Foundation).

In connection with the \$20 million of debt from Virginia's Clean Water Revolving Loan Fund, the fund secured permanent protection on nearly 23,000 acres (9,300 hectares) under an open space easement held by the Virginia Department of Forestry. The largest conservation easement in the state's history, it helps protect the Clinch River, a globally important river for freshwater mussels and biodiversity. This demonstrates that forest conservation can be a viable and efficient use of government clean water funding that also secures significant co-benefits such as carbon sequestration and biodiversity conservation.

For more information, see:

<https://www.nature.org/en-us/newsroom/cumberland-forest-project-announcement/>

Insure nature

The major rationale for purchasing insurance is to provide cash transfers, thereby reducing post-event economic consequences of inadequate or untimely action. Insurance contracts represent a promising platform for integrating nature-based solutions, as they (1) put a price tag on risk, (2) provide incentives for risk reduction, and (3) create formalized payout structures. Innovative insurance products were developed, e.g., catastrophe bonds are useful risk transfer mechanisms for investments exposed to some measure of climate risks, and parametric insurance schemes provide immediate efficient and effective disaster relief while improving credit ratings and the credit worthiness of the insured and thus support private investment.

In June 2019, Quintana Roo's Trust for Coastal Zone Management, Social Development and Security purchased an insurance policy to cover coral reefs and beaches in the Mexican Caribbean

against hurricanes above 100 knots (Cat 3 and above). A collaboration between Swiss Re, The Nature Conservancy, and the State Government of Quintana Roo, Mexico includes a parametric insurance policy that encourages conservation and helps cover the cost of repairing a coral reef after severe hurricanes, in turn supporting the reef's capacity to protect the coast from future storms and daily beach erosion. Local teams of "Reef Brigades" have been trained and equipped to provide post-event support to the reef to aid its recovery. The fund is designed to be able to accept funding from different sources to finance conservation activities, as well as insurance premiums. This type of mechanism has the potential to fund premiums, and vulnerable communities are assisted to proactively protect important natural resources indispensable to the resilience of people, their assets and the local economy. Such insurance instruments can provide both public and private benefits: transferring risk from vulnerable local parties, protecting livelihoods and local economies as well as providing environmental benefits.

For more information, see:

<https://www.nature.org/en-us/what-we-do/our-insights/perspectives/insuring-nature-to-ensure-a-resilient-future/>

Reduce Emissions and Improve Resilience in Supply Chains

Supply chains need to be managed to reduce emissions for climate, but also to become more resilient to protect investments for the long-term. TNC is working with leading traders, input companies and banks in Brazil, for example, to create long-term lending products for soy farmers and cattle ranchers who expand on pastureland and increase yields with no deforestation. In the context of China, the largest importer of agricultural commodities from ecologically vulnerable areas such as Brazil, TNC is working with the Beijing-based Institute of Finance & Sustainability to shape China's investment flows into producer countries in support of deforestation-free approaches. Chinese foreign investment has been growing rapidly through such initiatives as the Belt and Road Initiative, and acquisitions of agribusiness companies such as Smithfield Foods, Syngenta and others, and we expect China to further increase its investment in producer countries to support its expanding food import needs in the coming decades.

Improve Resilience with Water Funds:

Globally, water protection activities in urban source watersheds can potentially provide wellbeing benefits to some 4.4 billion inhabitants of those watersheds, including some of the world's poorest, who have the most to gain from improvements in water quality and quantity. Water funds are long-term collective action mechanisms for downstream users to invest in upstream conservation to protect and restore the watershed and to ensure water security, improved water quality and flood risk mitigation for urban and peri-urban populations.

The model began with pioneering examples in New York and Ecuador mobilizing public- and private-sector partners in partnering on landscape management at the watershed level. In Quito, the local water company began exploring with TNC how to partner with other water users and upstream communities to reverse the degradation of their water sources. While the structure of subsequent water funds varies from place to place depending on local conditions, the model has since been successfully adopted in a dozen countries such as Colombia, China, Kenya and South

Africa. Catalytic water funds have demonstrated the value of protecting water at its source and fostered policy shifts to secure long-term investment in places like Peru and Brazil, where local agencies have sought the incorporation of watershed conservation in local budgets to ensure long-term investment in nature as part of water services.

The Nature Conservancy builds on experience acquired through the establishment of water funds to support other water sector actors, including water companies and their financiers, practitioners, and government agencies to invest at scale in nature-based solutions as a robust and cost-effective alternative to deliver water security and climate resilience.

For more information, see:

<https://www.nature.org/en-us/about-us/where-we-work/latin-america/stories-in-latin-america/water-funds-of-south-america/>

<https://www.nature.org/en-us/what-we-do/our-insights/perspectives/providing-water-security-in-an-uncertain-world/>

<https://www.nature.org/en-us/what-we-do/our-insights/perspectives/nature-based-solutions-for-european-water-security/>

Protect Livelihoods and Resilience Through Marine Conservation:

Marine biodiversity is one of the Seychelles' most important natural assets, supporting a luxury tourism industry and over eight different fisheries. Concerns about sustainability, impacts on biodiversity, and climate change impacts resulted in a government commitment to designate 30% of its waters in new or expanded marine protections by 2020 and to develop a marine plan to support the Blue Economy Roadmap for the entire Exclusive Economic Zone.

The Seychelles Marine Spatial Plan (SMSP) process began in 2014 as a condition of a 'debt-for-conservation' deal that Seychelles signed with TNC in February 2016, the first such deal for marine conservation. The government passed a new Act to create the Seychelles Conservation and Climate Adaptation Trust (SeyCCAT) in 2016, which provides long-term financing for ocean conservation and sustainable economic development activities. Under the debt-for-conservation deal, private philanthropic funding and loan capital was raised for Seychelles Conservation and Climate Adaptation Trust (SeyCCAT), which then extended loans to the Seychelles Government to enable the purchase of \$21.6 million of sovereign debt at a discount. The Government now repays SeyCCAT on more favorable terms, and the Trust then directs a portion of repayments to immediately fund marine conservation and climate change adaptation projects and develop long-term financing to implement the Plan in 2021.

The SMSP is government-led and facilitated by TNC, and the public, participatory process involves more than 11 sectors, including fishing, tourism, conservation, petroleum, recreation, maritime safety, ports, and renewable energy. Robust stakeholder engagement and consultation, a decision-making framework, a three-category zoning framework, an adaptive GIS spatial database, and numerous decision-support tools all assist with the development of the plan. The third milestone of the SMSP was completed in March 2020 with the gazetting of 410,000 square kilometers in new marine protections. The Marine Spatial Plan for the entire Exclusive Economic

Zone of the Seychelles will be completed by December 2020. This SMSP process has contributed to the advancement or evolution of MSP for tropical and Small Island Developing States and is a new model for MSP involving climate change adaptation and innovative financing that supports long-term conservation, sustainable economies, and management of the oceans.

For more information, see:

<https://www.nature.org/en-us/about-us/where-we-work/africa/stories-in-africa/seychelles-conservation-commitment-comes-to-life/> and www.seymsp.com

MOBILIZE

Future opportunities to scale and enhance investments that target climate action can occur with private sector investment. We need to utilize nature in building back after COVID-19, and build a healthy planet overall. The Standing Committee on Finance has an opportunity over the next year to showcase and build coherence between different financial opportunities to use Nature-based Solutions.

In particular, there is potential to grow investments in carbon credits via fair and equitable rulesets developed through Article 6 and through the implementing of the International Civil Aviation Organization's Carbon Offsetting program (CORSIA). By establishing global rules for trading emissions reductions, Article 6 and CORSIA can help bring climate finance to scale and realize economic cost-efficiencies. Including NCS emissions reductions and removals, especially from REDD+ programs, can help realize landscape-scale change within countries and transform forestry and agriculture sources into sinks.

Meanwhile, as the world's first sectoral compliance market, decisions about eligible offsets in CORSIA will likely set the standard for regulations elsewhere. Continuing to ensure high-quality programs are eligible for CORSIA can increase global finance for climate action. These programs should build off existing programs in country. NCS standards such as ART/TREES, FCPF, and Verra's JNR could be critical in unlocking supply needed by airlines in this market.

Increased political will is needed to systematically address climate change. Finance is necessary, but political commitments will make investments last. The world needs to see enhanced NDCs and NAPs delivered in 2020. Countries can do this through their own effort and financing, by providing the enabling environments for private finance to make impacts, and they can do so by increasing international cooperation for the efficient use of existing finance.