June 2021

The business case for conserving, restoring and growing a trillion trees by 2030







Forests are critical to planetary and human health



They are **natural carbon sinks**, sequestering carbon from the atmosphere



They are home to 80% of terrestrial biodiversity, which underlies healthy ecosystems and their services



They **collect and filter the water** from rainfall and recharge groundwater resources



They **regulate local and global temperatures**, by producing atmospheric moisture and rainfall



They **anchor fertile soil** and act as flood barriers to extreme weather events



We lose forests at unprecedented rates



We have **lost nearly half of the 6 trillion trees** that existed on Earth before the onset of agriculture 12,000 years ago



Habitat loss is the **primary driver of species loss and extinction** on land, with severe consequences for the provision of ecosystem services



Deforestation and forest degradation is responsible for 15% of the planet's greenhouse gas emissions



Forest loss threatens **350 million people of which 60 million are indigenous**, who rely on them for subsistence and survival

More than half our annual global GDP, or \$44 trillion, is potentially threatened by nature loss, as business depends on its services





Forests offer sustainable solutions for people and the planet



Reduce **atmospheric carbon** when appropriately managed and monitored, and paired with substantive emissions reduction



Offer **jobs and sustainable livelihoods**, that could create \$230 billion in business opportunities and 16 million jobs by 2030



Improve our **mental and physical health** by lowering heart rates, reducing stress and boosting our immune system



Represent a **treasure trove of innovation**, propelling novel drug discovery, new materials and unique approaches



Provide a **home to animals and birds** that return to restored native habitats

1t.org THEORY OF CHANGE

1t.org serves a global movement

to conserve, restore and grow

1 trillion trees by 2030



1t.org drives change through three mutually reinforcing areas of work



Raising private-sector ambition and engagement



Scaling multistakeholder action in priority regions



Unlocking innovation to resolve critical challenges

- Convene a cross-industry leadership group: 1t.org Corporate Alliance
- Advocate for credible company commitments
- Deploy the latest standards and tools for science-based, equitable implementation

- Current priorities: US Chapter, Sub-Saharan Africa, Amazon Basin
- Focus on public-private partnerships, policy levers, funding
- Foster "eco-preneurship" among youth, NGOs and local communities

- Curate the UpLink digital platform to crowdsource innovations
- Spotlight cohort of innovators through social media
- Connect innovators with each other, experts and potential funders

FAST @MPANY

08-31-20 8:00 AM WORLD CHANGING IDEA

These are the companies leading the trillion trees effort in the U.S.

As part of the effort to plant a trillion trees around the world, a group of companies is pledging to help the U.S. do its part.



Forbes

This Is Why The US Needs To Lead The World's Reforestation Project

ECONOM FORUM World Economic Forum Contributor C

By Justin Adams is Director of Nature Based Solutions at the World Economic Forum and Jad Daley is President & CEO of American Forests



DEAS . SCIENCE

Why We Believe Planting 1 Trillion
Time Trees Can Save the Planet



Jane Goodall DBE, is founder of the Jane Goodall Institute and UN Messenger of Peace
Marc Benieff is the co-owner of TIME and the chair and CEO of Salesforce

or more than six months, a pathogen has swept through nearly every country in the world, unleashing an unprecedented global health and economic emergency. At the same time, another potentially more lethal emergency continues to threaten us: the warming of the planet.

Launch of the 1t.org US Chapter





- To date, over 50 companies, cities, states, NGOs and civil society groups have pledged to conserve, restore, and grow more than 49.3 billion trees, plus enabling actions such as nursery capacity, workforce development, technology and financing
- 1t.org US Chapter is co-led by American Forests and the World Economic Forum with guidance from the US Stakeholder Council
- A vibrant Community of Practice meets via Working Groups focused on carbon finance, reforestation, urban/community forestry, US policy, communications
- Visit <u>US.1t.org</u> to see quotes, videos and leadership pledges and learn more about submitting your own

1t.org US Chapter Stakeholder Council



Harry Bader
Deputy Assistant Administrator
Bureau for Development,
Democracy and Innovation
United States Agency for
International Development
ex officio



Ara EricksonDirector of Sustainability
Weyerhaeuser



Chris French
Acting Under Secretary for
Natural Resources and
Environment
United States Department of
Agriculture
ex officio



Mary Mitsos President and CEO National Forest Foundation



Sapreet Kaur Saluja Chief Strategic Partnerships and New Ventures Officer Girl Scouts of the USA



Arthur "Butch" BlazerFormer President
Mescalero Apache Tribe



Tony EversGovernor
State of Wisconsin



Kristina Kloberdanz
Chief Sustainability Officer
Mastercard
Chair



Michelle Patron
Director of Sustainability
Policy
Microsoft



Rajwant Singh
Founder and President
EcoSkih



Kesha Braunskill Urban Forestry Coordinator Delaware Forest Service



Karen Fang Managing Director and Global Head of Sustainable Finance Bank of America



Dan LambePresident
Arbor Day Foundation



Kevin Patel
Founder and Executive
Director
OneUpAction



Peter Stein

Managing Director

Lyme Timber Company



Suzanne DiBianca Chief Impact Officer & EVP of Corporate Relations Salesforce



Jay Farrell
Executive Director
National Association of State
Foresters



Tom Martin
President and CEO
American Forest Foundation



Alton Perry
Sustainable Forestry and
Land Retention (SFLR)
Project
Roanoke Electric
Cooperative



Chris Swanston
Director, Northern
Institute of Applied
Climate Science
USDA Forest Service



Debbie DingellCongresswoman, D-MI 12th
District
U.S. House of Representatives



Taldi HarrisonManager, Government &
Community Affairs
REI



Kevin McCarthyHouse Minority Leader, R-CA
23rd District
U.S. House of Representatives



Regina Romero Mayor City of Tucson



Examples of corporate 1t.org US pledges



Mastercard

Mastercard's Priceless Planet
Coalition is pledging to preserve
the environment through the
restoration of 100 million trees.
Priceless Planet Coalition will
lead campaigns to engage
banks, merchants, business and
consumer customers and other
partners to contribute to the
tree-planting goal.



Bank of America

Bank of America's \$300 billion commitment to mobilize capital and develop solutions to climate change will help develop the voluntary carbon offset market. Through partnerships and financial innovation they will protect, restore, conserve and expand critical healthy forest ecosystems, especially in lowincome and underserved communities.



Microsoft

Microsoft has committed to operate carbon negative by 2030, reducing emissions by over half, removing the equivalent of remaining emissions and historical emissions by 2050. They estimate needing 6 million metric tons (mt) of carbon dioxide removal (CDR) by 2030, including afforestation, reforestation, other natural climate solutions, and engineered carbon removal solutions.

Why are companies keen to join this growing movement?



Show leadership and deliver action – restoration is at the forefront of the environmental agenda for future and impact-oriented companies



Credibly reach Net-Zero targets – using nature-based solutions as part of a phase-out strategy and for hard-to-abate emissions



Beyond eliminating deforestation – once a company's supply chain is deforestation free, conservation and restoration ensures a forest's permanent protection



Brand value and trust – engage employees and consumers towards forest conservation and restoration while delivering better livelihoods to all stakeholders



Align with the Sustainable Development Goals – healthy forests offer many co-benefits covering SDGs 6, 8, 9, 11, 12, 13, 15



Who do we work with?

Cross-industry alliance dedicated to leadership, action, integrity, transparency and learning for forests

We welcome companies that:

- Have an intention to engage, having yet to formulate their commitments
- Are implementing commitments and are keen to collaborate
- Are ready to scale, who wish to share their learnings

At each stage, we offer our platform to connect corporations with other companies, governments, NGOs and experts that can help amplify their impact, both globally and in 1t.org priority regions.



































1t.org Corporate Alliance Commitment

Members of the 1t.org Corporate Alliance support 1t.org's vision to conserve, restore and grow 1 trillion trees by 2030, by committing to:

- **a.** Action for forest conservation, restoration and reforestation
- **b. Integrity** by:
 - a. Applying **ecologically and socially responsible approaches** that meet the needs of forests and local communities, informed by local knowledge and scientific evidence, such as the IUCN Global Standard on Nature based Solutions
 - b. Employing **forest positive approaches** that strive to remove deforestation, forest degradation and land conversion from company operations and value chains
 - c. Committing to set a company wide Paris Agreement aligned emissions reduction target, such as a 1.5C **Science Based Target**, or a net zero goal by or before 2050
- c. Transparency by disclosing forest related commitments through submitting a 1t.org pledge and reporting on progress annually, to foster accountability
- d. Learning by sharing experiences of successes and lessons learned, engaging in dialogue with diverse stakeholders and pioneering new approaches
- e. Leadership by inspiring and engaging others to champion a global restoration movement for people and the planet

There is increasing momentum and interest in engineered wood...

Context

- Science: Nature-based Solutions. Net-Zero
- Key trends: Continued urbanisation and construction boom; need to decarbonize
- Unlock Market and Ecological Co-Benefits
 - Engineered wood is the fastest growing building solution worldwide;
 - Well proven system in Europe
 - Carbon sink, sequestration and substitution (3S) of wood and biodiversity potential of sustainable forest products

→ Is wood the material of the 21st century?

Platforms, Alliances & Initiatives (examples)



- NBS Platform (incl. 1t.org, BiodiverCities)
- Climate Smart Forest Economy Programme ¹
- UpLink Innovation Challenges
- Future of Real Estate Initiative
- Net-Zero Carbon Cities Project
- Global Future Council on Cities of Tomorrow



Circular Bioeconomy Alliance



Forest Solutions Group







¹ In collaboration with TNC, WRI, EU-Climate KIC, Good Energies Foundation, Dalberg

The Climate Smart Forest Economy Programme – a cross-cutting collaborative effort



PILOTS/BREAKTHROUGH INITIATIVES

- Supporting pilots (i.e.,
 Breakthrough Initiatives) Providing hands-on
 support to pilots that have
 the capability of
 demonstrating potential
 success and/or
 overcoming systemic
 barriers
- Institutionalizing pilots –
 E.g., converting lessons learned from pilots to upskilling programs for engineering companies
- Scaling-up pilots Funding for an entity that aims to help 3S projects

 scale and replicate



ACADEMIC/CLIMATE RESEARCH

- Researching trusted environmental safeguards with proven effect to ensure that boosting the forest economy does not result in deforestation, biodiversity loss and other damages
- Researching metrics for progress monitoring
- Developing decision tools for a climate smart forest economy such as readiness of timber sector, construction sector growth, existing tools



BUILDING A MOVEMENT

- Corporate engagement Developing a working
 group of corporate
 champions
- Policy engagement Enabling legal, political and regulatory environments supporting greater adoption
- Investor engagement –
 Spurring investments in sustainable forest products
- Climate leader
 engagement organizing
 dialogues that
 systematically frame and
 address climate issues
 facing the forest economy



INNOVATIVE FINANCE

- Financial mechanisms Developing innovative
 mechanisms such as
 social impact bonds that
 can raise funding for a
 portfolio of forest
 economy projects (e.g., a
 SIB funded by carbon
 credits for mass-timber
 buildinas)
- Investors and investor clubs - Mobilizing angel investors and high networth individuals to invest in specific funds or projects that support the forest economy











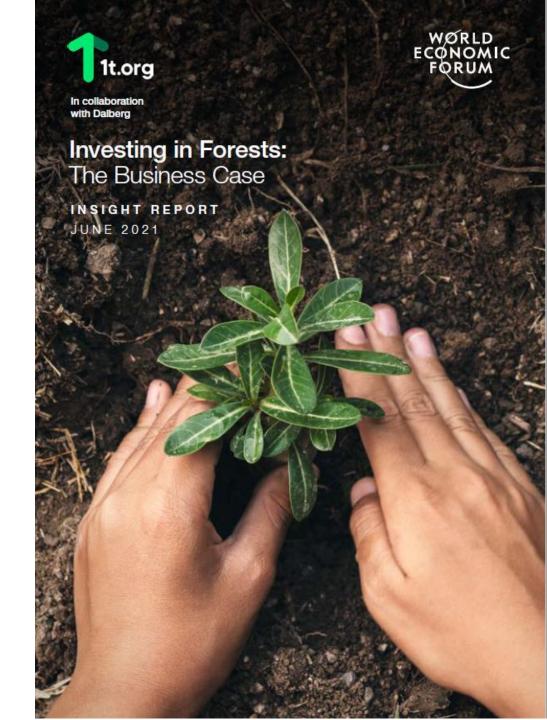




Investing in Forests: The Business Case

Beyond helping to tackle the nature and climate crises, forest conservation and restoration investments can create short-, medium- and long-term value for businesses in three main ways:

- 1. Business resilience: protects businesses against the loss of natural capital and physical effects of climate change, while preparing for shifting consumer and investor preferences
- 2. Business profitability and growth: lower costs of capital and equity, increased customer loyalty, direct environmental and commercial returns
- Values-based leadership: building long-term value with customers and communities



Reduced supply risk

Protect value chains from physical effects of climate change and loss of natural capital

Reduced demand risk

Maintain customer demand by adapting to shifting preferences

Reduced regulatory risk

Stay ahead of regulatory requirements

Reduced capital risk

Maintain access to capital

Increased growth

Seize opportunities to expand investments in new markets

Increased profitability

Increase revenue and reduce costs through direct project outputs and indirect business opportunities



Business profitability and growth



Business resilience

Values-based leadership

Increased customer trust

Ensure alignment with customer values and build trust

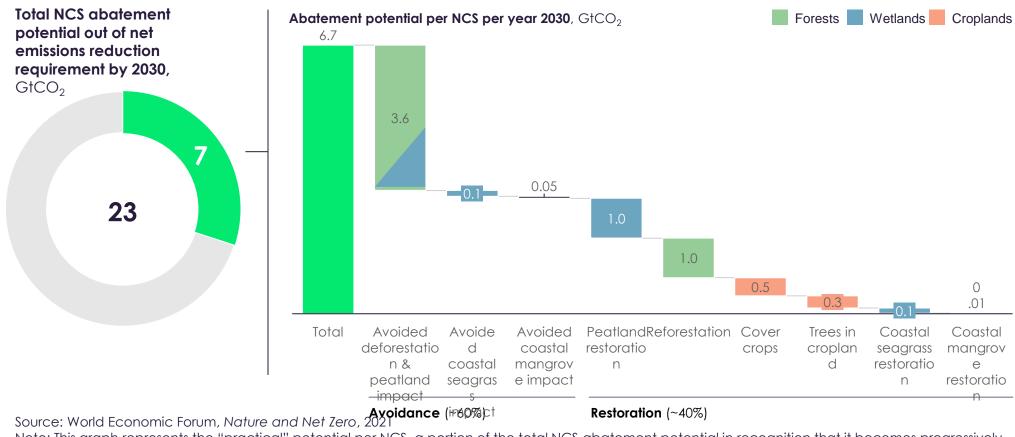
Improved talent attraction and retention

Increase employee engagement and create a soughtafter culture

Improved relationships

Expand relationships with business parters and ecosystem partners, including the communities in which they operate





Note: This graph represents the "practical" potential per NCS, a portion of the total NCS abatement potential in recognition that it becomes progressively more difficult to secure carbon credits as the total potential of each source is approached. It filters out low-feasibility lands, which are more likely to be accessed by mechanisms other than voluntary carbon markets, such as philanthropic or governmental grants. For example, the practical potential of reforestation is sized at 1.0 GtCO2 per year by 2030, which excludes 1.1 GtCO2 per year that is low feasibility according to our filter. There are many economic, political, and social lenses that can be used to determine feasibility, and in reality, these lenses would not draw a neat boundary between lands that are 'practical' or not for the voluntary carbon market; however, this analysis classifies low-feasibility lands assessing their agricultural rent as an economic barrier and proxy for feasibility.



How businesses can invest in conservation and restoration

While avoiding and removing deforestation within existing operations and value chains remains a critical priority, businesses can go further by:

- 1. Investing in **in-house conservation and restoration** along their value chains to address risks and secure new economic opportunities
- 2. Using their existing assets to support forests through their product expertise, global networks and influence, customer base and employees

and, where these options are not feasible

3. Identifying opportunities to **fund forest conservation and restoration outside of their core business** to support other strategic objectives – compensating for residual emissions, enabling community engagement etc. – as part of broader decarbonization, nature-positive and sustainability strategies.

Opportunities for 3 Types of Businesses

1. Opportunities for businesses that source their products directly from trees and forests and businesses that are reliant on forest ecosystem services or forest-risk commodities.

Relevant sectors might include forestry, timber and non-timber forest products, agriculture, consumer goods (e.g. food and beverage, apparel, beauty and personal care), health and tourism. 2. Opportunities for **businesses** that have a relatively low direct dependency on forests but have a strong solutions-focused role to play in their protection.

Relevant sectors might include financial services (e.g. banking, private equity and venture capital), technology, consulting and business services, and insurance. 3. Opportunities for businesses with high and hard-to-abate greenhouse gas emissions.

Relevant sectors might include energy, transport (e.g. aviation, shipping), construction, mining and manufacturing (e.g. chemicals, cement and metals).



3.1 Opportunities for businesses with high dependency on forests

Particularly relevant for: businesses that source their products directly from trees and forests; businesses that are reliant on forest ecosystem services (e.g. for pollination, water availability, soil quality and stability) or are reliant on forest-risk

commodities (e.g. soya, palm oil, rubber, cocoa, cattle etc.). Relevant sectors might include forestry, timber and non-timber forest products, agriculture, consumer goods (e.g. food and beverage, apparel, beauty and personal care), health and tourism.

FIGURE 6

Why businesses with high dependency on forests invest in conservation and restoration

Business resilience

Opportunity 1

Reduced supply risk

Protect value chains from physical effects of climate change and loss of natural capital

Reduced demand risk

Respond to consumer demand for action from businesses that depend on forest products or services

Business profitability and growth

Opportunity 2

Increased profitability and growth through agroforestry, sustainable timber management, sustainable non-timber forest products and regenerative business models

Values-based leadership

Opportunity 3

Improved relationships with partners by designing and implementing conservation and restoration activities in partnership with suppliers and communities



3.2 Opportunities for businesses with low dependency on forests

Particularly relevant for: Businesses with a relatively low direct dependency on forests, yet strong solutions-focused potential e.g. financial services (banking, private equity and venture capital etc.), technology, consulting and business services, and insurance.

FIGURE 7

Why businesses with low dependency on forests invest in conservation and restoration

Business resilience

Opportunity 1

Reduced demand risk by keeping up with competitors who are making strong progress against net-zero targets

Business profitability and growth

Opportunity 2

Increased profitability and growth by developing products to enable more effective forest conservation and restoration

Values-based leadership

Opportunity 3

Increased customer trust
Improved talent attraction
and retention
Improved relationships wit

Improved relationships with business partners and ecosystem partners

3.3 Opportunities for businesses with high greenhouse gas emissions

Particularly relevant for: sectors that face challenges with high greenhouse gas (GHG) emissions, e.g. energy, transport (e.g. aviation, shipping), mining, construction and manufacturing (e.g. chemicals, cement and metals).

FIGURE 8

Why businesses with high greenhouse gas emissions invest in conservation and restoration

Business resilience

Opportunity 1

Reduced regulatory risk

While avoiding and reducing their emissions as a priority, businesses can stay ahead of new regulations by mitigating their emissions in the short term

Reduced capital and demand risk

Businesses can respond to investor and consumer pressure to mitigate their residual emissions as part of a broader net-zero strategy

Business profitability and growth

Opportunity 2

Increased profitability and growth through shaping new markets



Science-Based Targets and net-zero targets





BUSINESS 1.5°C

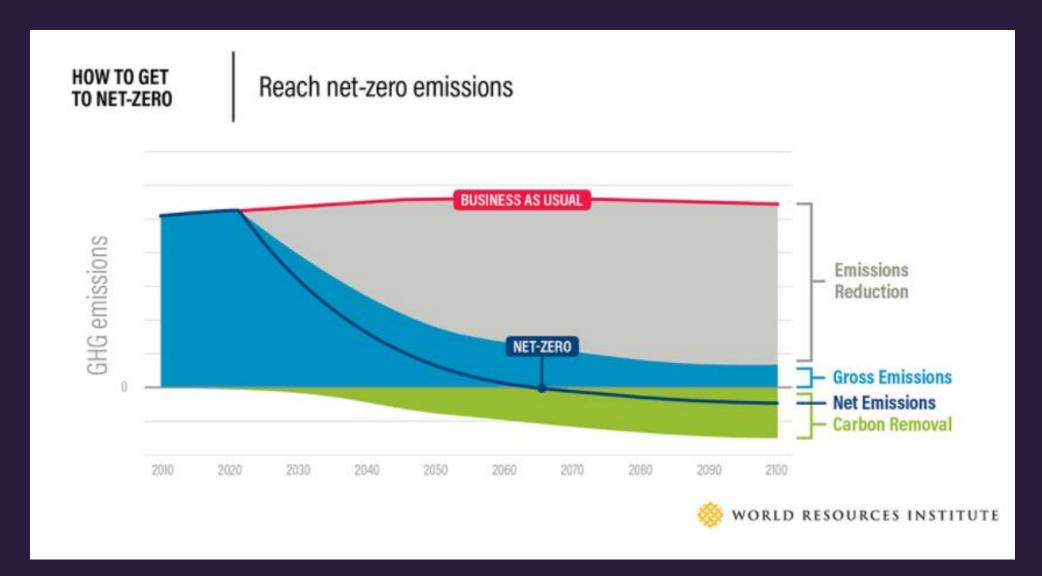




RACE TO ZERO

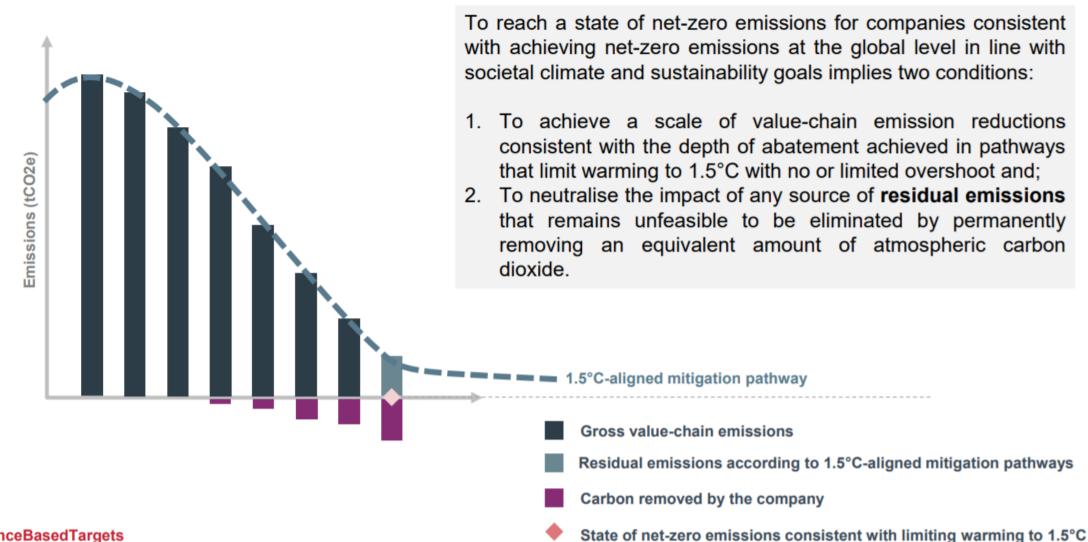


How do we reach net-zero emissions

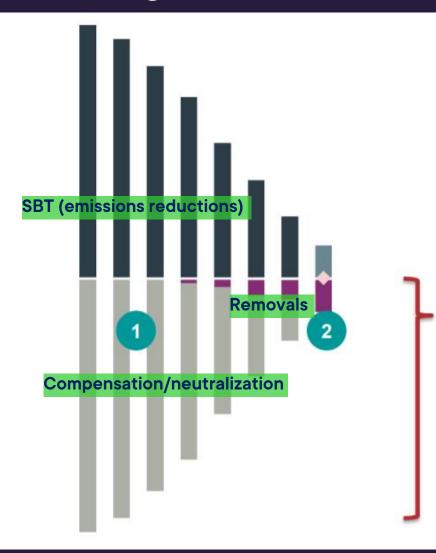




What does it mean for a company to reach net-zero emissions?



The role of nature-based solutions and offsetting in Science-Based Net-Zero Targets



Generally speaking, offsetting can play two roles in sciencebased net-zero strategies:

- In the transition to net-zero: Companies may opt to compensate or to neutralise emissions that are still being released into the atmosphere while they transition towards a state of net-zero emissions;
- At net-zero: Companies with unavoidable residual emissions within their value chain are expected to neutralise those emissions with an equivalent amount of carbon dioxide removals.

Both compensation and neutralisation measures by companies can play a critical role in accelerating the transition to net-zero emissions at the global level. However, they do not replace the need to reduce value-chain emissions in line with science.

Learning more...

NOVEMBER 2020

TASKFORCE ON SCALING VOLUNTARY CARBON MARKETS



Road to 2022 milestones

1t.org will build momentum for forest conservation and restoration by linking with the following key summits:





