

## 1t.org – FAQ

### What is the role of trees and forests for meeting global climate goals?

**Nature based solutions are an important part of solving the global climate crisis, but they are not a silver bullet.** The 2019 IPCC Special Report on Climate Change and Land highlights that about 23 percent of all emissions come from the agriculture, land use and forest sector. The report further outlines land management opportunities with benefits for food security, biodiversity, and the climate. Such land management opportunities include Nature-Based Solutions (NBS): climate change solutions that lock up carbon in the world's forests, grasslands and wetlands. It is estimated that NBS can provide up to one-third of the emissions reductions required by 2030 to meet the Paris Agreement targets. That said, NBS are not a silver bullet and must be undertaken in conjunction with decarbonization of key industry sectors such as energy, transportation, heavy industry and the financial sector, as well as - critically - alongside effective strategies to end deforestation. Indeed, to be effective, NBS such as tree planting, forest restoration and natural regeneration need to be part of a broader strategy to conserve and restore the planet's ecosystems and reduce carbon emissions in key sectors

### What is 1t.org?

**1t.org is a global multi-stakeholder platform, launched at the World Economic Forum Annual Meeting, in Davos, January 2020.** It exists to serve the global trillion tree community and catalyze policy and market change for accelerated at-scale action for science-informed reforestation, forest restoration and conservation, as part of the needed global movement for meeting climate, biodiversity and sustainable development targets by 2030. Doing so, 1t.org is designed to support major international processes such as the UN Decade on Ecosystem Restoration 2021 – 2030 (led by UNEP and FAO).

### Is 1t.org only about planting trees?

**No, 1t.org is about conserving, restoring and growing trees.** Indeed, the goal of 1 trillion trees by 2030 includes the conservation of existing trees (i.e. avoided deforestation), the restoration and natural regeneration of previously degraded forest lands, including actual reforestation and tree-planting schemes on suitable agricultural land (including agroforestry and silvopastoral strategies), as well as urban tree planting. Recent studies point to the significant technical feasibility and land potential of restoration up to 1 trillion trees ([Bastin et al, 2019](#)), as well as the important climate mitigation opportunity of nature-based solutions (NBS), including tree restoration, reforestation and conservation ([Griscom et al, 2017](#) and



[Griscom et al 2019](#)). As noted above, albeit they can provide up to one third of the emission reductions required by 2030 to meet the goals of the Paris Agreement, NBS are not a silver bullet and need to be undertaken in conjunction with decarbonization of key industry sectors.

## What are the specific goals of 1t.org?

**1t.org exists to accelerate science-informed action.** 1t.org is being created to serve all actors working on restoration, reforestation and forest conservation. It will provide a global platform for any reforestation commitment, initiative or campaign, from the grassroots level to large, multi-country efforts. It will provide a pathway and guidance for anyone to join the reforestation movement and embrace nature-based solutions as part of broader climate strategies. In particular, 1t.org will:

- **Unlock Systems Change:** 1t.org will work with key stakeholders across sectors and support key international processes such as the G20, UNFCCC, CBD and the UN Decade for Ecosystem Restoration, as well as country-specific dialogues, to help overcome the many socio-economic barriers that hold reforestation back by catalyzing top-down system change — such as policy change, incentives, market creation and access to funding and technology
- **Raise Public-Private Ambition:** 1t.org will engage with governments, companies and philanthropists to raise their level of ambition and spending, harmonize commitments and provide guidance to turn that ambition into action.
- **Mobilise and Empower:** 1t.org will encourage and enable millions more grassroots reforestation champions by providing a digital platform (UpLink) to connect them with the opportunities, tools, and resources they need to thrive

## What are the principles of forest restoration and conservation adopted by 1t.org?

**1t.org supports science-based efforts anchored in well-established principles for effective forest restoration and tree-planting.** The principles of effective and lasting forest restoration and reforestation with positive impact on nature, climate and the people are well understood. The engagement of and with 1t.org is anchored in those principles, including those identified by the [Global Partnership on Forest and Landscape Restoration](#) (p. 18-19), the [Forest and Climate Working Group](#), the [UN Decade on Ecosystem Restoration](#), and the [Society for Ecological Restoration](#). Annex 1 spells out the specific principles identified by those actors.

Those principles provide the core foundational guidance to the engagement of 1t.org with governments and companies. 1t.org further seeks to support the development of globally applicable principles for harmonized and science-based corporate restoration/ nature-based solution targets, aligned with global net-zero emission pathways.

## What is the role of local communities in forest restoration and reforestation?

**Indigenous peoples, farmers and local communities are essential partners for successful forest restoration and reforestation.** It is not only their dependence on healthy forest ecosystems for preserving livelihoods, cultures and identities, local actors and indigenous peoples also hold invaluable traditional restoration knowledge, passed on from one generation to the next. This wisdom - alongside latest science and best practices- constitutes an essential source of knowledge for effective ecosystem restoration and reforestation that is adapted to local circumstances. Furthermore, respecting community rights, seeking free, prior and informed consent and building inclusive partnerships with local communities is therefore a prerequisite for successful, lasting and socially just reforestation and restoration that is adapted to local circumstances. Actions, dialogues and programs developed under the 1t.org umbrella are anchored in this understanding. 1t.org further recognizes the central role that women play for effective forest restoration and reforestation.

## What role can technology play?

**The application of new technologies can drive significant improvements in the understanding of reforestation and restoration potential, the effectiveness and efficiency of action and monitoring of programs on the ground, and other critical aspects related to the goals of 1t.org.** Consequently, 1t.org embraces the technologies of the fourth industrial revolution (4IR) as part of the evolving solution space for restoring, conserving and growing one trillion trees by 2030. For example, the application of new technologies can unlock unprecedented positive impact on the following areas:

- **Mapping and Monitoring:** Remoting sensing and satellite imagery, coupled with artificial intelligence and machine learning, are now opening up unprecedented opportunities for “precision forestry”, mapping of restoration and reforestation potential as well as assessing and monitoring tree and soil carbon sequestration over time in a radically more effective and efficient way.
- **Mobilizing finance:** platform solutions and crowdfunding are proven effective solutions for engaging millions of retail and institutional investors in reforestation and restoration initiatives. Platforms such as Ant Forests, Plant-for-the-Planet and others are proving the unprecedented potential of App-based crowdfunding for reaching millions of investors and unlocking millions of investments in a short time. Also, DLT applications can help build trusted markets and improve the bankability of actors with limited access to the traditional banking system.
- **Connecting people:** Mobilizing and empowering millions of grassroots champions is one of the core goals of 1t.org. A new digital collaboration platform UpLink, co-developed by the World Economic, Salesforce, Microsoft and Deloit will encourage and enable millions more grassroots reforestation champions to connect, share



opportunities and knowledge, resources and tools for forest restoration, reforestation and conservation.

- **At scale tree planting:** Large-scale reforestation requires the participation of masses, as shown by various examples, such as the 23 million Ethiopians planting 350 million trees in one day. Mass-participation and continued engagement of people to nurture and grow trees is indispensable. To increase the speed of planting and reach difficult to access landscapes, technologies such as seed-firing drones can in some special cases complement human-powered actions and radically increase the number of seeds planted in a short amount of time. Drones can for example also be an effective tool for monitoring canopy cover.

## **Annex 1 – Guiding Principles for Reforestation and Forest Restoration that are informing the work of 1t.org**

A number of organizations and initiatives have developed globally applicable guidance principles for reforestation and forest restoration. This includes for example the following for leading organizations and initiatives, whose principles are cited below:

- A. UN Decade on Ecosystem Restoration (5 basic rules for getting tree-planting right)
- B. Global Partnership on Forest and Landscape Restoration (Principles of Forest and Landscape Restoration)
- C. Society for Ecological Restoration (The International Principles and Standards for the Practice of Ecological Restoration)
- D. Forest and Climate Working Group

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### **A. UN Decade on Ecosystem Restoration: 5 basic rules for getting tree-planting right<sup>1</sup>**

- 1. Consider the Roots.** Planting trees is likely to benefit people and nature in most situations. But it might not halt the degradation that has prompted you to act. Deforestation can result from many factors, including ignorance, poverty, market forces, political interests, weak regulations or a lack of capacity to enforce them. As well as planting trees, consider if you can tackle the root causes and protect existing forests and woodlands.
- 2. Work with Nature.** Trees are most likely to thrive in places where they are used to growing naturally. For this reason, it is usually best to plant trees on former forest land. The worst option is to convert other natural ecosystems such as grasslands, peatlands or wetlands to forest. These are also threatened habitats that need protection. Secondly, use native tree species. These are adapted to the local climate and soil, and likely support far more biodiversity than exotic species. Once established, native trees will spread naturally if there is space. A mix of species brings more benefits.
- 3. Work with People.** Gaining access to good locations for tree planting and ensuring those trees can grow undisturbed may require the support and agreement of others, from officials and community leaders to farmers and other land users. Stakeholder forums are a key feature of successful restoration projects. In larger-scale efforts, a landscape approach can help maximize the benefits and avoid trade-offs between different interests.

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<sup>1</sup> <https://www.decadeonrestoration.org/Interactive/tree-planting-and-ecosystem-restoration-crash-course>

- 4. Ask an expert.** There are thousands of experts around the world who have dedicated their professional lives to the protection and restoration of ecosystems, and who can provide advice on where and how tree planting can be helpful—ask them! See a list of expert networks below—there might be one near you. Also, use the further guidance below to read up on the topic and join the growing network of people working to find the best way forward.
- 5. Plan ahead and be patient.** Restoring degraded ecosystems can yield steady improvements over long timeframes. It is a process, rather than an end goal. You can measure your success by identifying a few key indicators that are important to local communities. Taking time to plan will avoid costly mistakes. Economists estimate that investments in ecosystem restoration can generate multiple benefits for societies worth US\$10 for every US\$1 invested.

## **B. Global Partnership on Forest and Landscape Restoration: Principles of Forest and Landscape Restoration (FLR)<sup>2</sup>**

- 1. Focus on Landscapes.** FLR takes place within and across entire landscapes, not individual sites, representing mosaics of interacting land uses and management practices under various tenure and governance systems. It is at this scale that ecological, social and economic priorities can be balanced.
- 2. Engage Stakeholders and Support Participatory Governance.** FLR actively engages stakeholders at different scales, including vulnerable groups, in planning and decision making regarding land use, restoration goals and strategies, implementation methods, benefit sharing, monitoring and review processes.
- 3. Restore multiple functions for multiple benefits.** FLR interventions aim to restore multiple ecological, social and economic functions across a landscape and generate a range of ecosystem goods and services that benefit multiple stakeholder groups.
- 4. Maintain and enhance natural ecosystems within landscapes.** FLR does not lead to the conversion or destruction of natural forests or other ecosystems. It enhances the conservation, recovery, and sustainable management of forests and other ecosystems.
- 5. Tailor to the local context using a variety of approaches.** FLR uses a variety of approaches that are adapted to the local social, cultural, economic and ecological values, needs, and landscape history. It draws on latest science and best practice, and traditional and indigenous knowledge, and applies that information in the context of local capacities and existing or new governance structures.
- 6. Manage adaptively for long-term resilience.** FLR seeks to enhance the resilience of the landscape and its stakeholders over the medium and long-term. Restoration approaches should enhance species and genetic diversity and be adjusted over time to reflect changes in climate and other environmental

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<sup>2</sup> [http://www.forestlandscaperestoration.org/sites/forestlandscaperestoration.org/files/resources/GPFLR\\_FINAL%2027Aug.pdf](http://www.forestlandscaperestoration.org/sites/forestlandscaperestoration.org/files/resources/GPFLR_FINAL%2027Aug.pdf)

conditions, knowledge, capacities, stakeholder needs, and societal values. As restoration progresses, information from monitoring activities, research, and stakeholder guidance should be integrated into management plans.

### C. Society for Ecological Restoration: The International Principles and Standards for the Practice of Ecological Restoration<sup>3</sup>

#### Ecological Restoration...

- 1) **... engages stakeholders:** Ecological restoration projects recognize and acknowledge the interests and contributions of diverse stakeholders, particularly local stakeholders, and actively seek their direct involvement to provide mutual benefits to both nature and society.
- 2) **... draws on many types of knowledge:** The practice of ecological restoration benefits from a combination of acquired practitioner knowledge, Traditional Ecological Knowledge, Local Ecological Knowledge, and scientific discovery
- 3) **... is informed by native reference ecosystems, while considering environmental change:** The use of reference models enhances the potential for native species and communities to recover and continue to reassemble, adapt, and evolve
- 4) **... support Ecosystem Recovery Processes:** Practitioners enhance the natural recovery carried out by plants and animals in interaction with each other and their shared environment.
- 5) **... is assessed against clear goals and objectives, using measurable indicators:** In the planning phase of restoration projects, the project vision, targets, goals, and objectives are clearly identified, along with specific indicators used to measure progress.
- 6) **... seeks highest level of ecosystem recovery possible:** Ecological restoration aims for the highest practicable level of recovery appropriate to the circumstances.
- 7) **... gains cumulative value when applied at large scales:** Ecological restoration projects can have beneficial outcomes regardless of their spatial scale. However, many ecosystem processes operate at larger spatial scales, such as the watershed or basin level, and scaling-up restoration actions is required to address some ecological and global sustainability needs.
- 8) **... is part of a continuum of restorative activities:** Ecological restoration is one of many strategies that can, to varying degrees, contribute to biodiversity conservation, increase carbon sequestration and the delivery of other vital ecosystem services, improve human health, wellbeing, and livelihoods, and enhance positive human connections with nature.

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<sup>3</sup> [https://cdn.ymaws.com/www.ser.org/resource/resmgr/docs/standards\\_2nd\\_ed\\_summary.pdf](https://cdn.ymaws.com/www.ser.org/resource/resmgr/docs/standards_2nd_ed_summary.pdf)

#### **D. Forest and Climate Working Group<sup>4</sup>**

- 1) Climate change is real, and forests must be part of our nation's response.
- 2) Keeping forests as forests is the foundation to all forest-climate solutions. More than 30 million acres of U.S. forests are projected to be lost to development.
- 3) Forests can do even more to slow climate change if we provide the right science and financial incentives to help private forest owners and public land managers plant and re-plant forests, and manage with an eye to carbon.
- 4) Protecting forests from climate change is equally as important as trapping more carbon in forests. Many forest resources could be lost to the stresses of climate change, and cutting edge-science has showed that U.S. forests will lose their capacity to store carbon, and release lots of carbon already stored, if we don't help forests adapt.

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<sup>4</sup> The Forest-Climate Working Group (FCWG) is the nation's only forest sector coalition to represent every aspect of U.S. forests' government agencies, landowners, forest products, conservation and wildlife groups, academics, and carbon finance experts: <https://forestclimateworkinggroup.org/about/>