Agriculture, forestry and other land use account for approximately 25% of global greenhouse gas (GHG) emissions. Forestry sector emissions predominantly come from deforestation. A fundamental transformation is needed if the sector is to play its part in the transition to net zero global GHG emissions in the second half of the 21st century. Activities such as afforestation, sustainable forest management and reducing deforestation are often lowcost mitigation options, and can play an important role in reducing GHG emissions and enhancing carbon stocks. They can also be considered win-win activities because of the multitude of environmental, social and economic benefits they bring, including supporting a country or region in its adaptation efforts.

The Paris Agreement aims to hold the increase in global average temperature to well below 2°C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels. It also calls on countries to implement and support efforts to reduce emissions from deforestation and forest degradation, and foster conservation, sustainable management of forests and enhancement of forest carbon stocks (REDD+). The urgency of a transition towards net zero global GHG emissions, and the integral role of the land-use sector in achieving this, were underlined in the 2018 Special Report on Global Warming of 1.5°C by the Intergovernmental Panel on Climate Change.

In this context, there is an increasing need to assess and communicate the impacts of forest policies to ensure that they are effective in mitigating GHG emissions, and helping countries meet their sectoral targets and national commitments. The Initiative for Climate Action Transparency (ICAT) Forest Methodology helps policymakers assess the impacts of forest policies and improve the effectiveness of policies. It can play a critical role in providing the information needed for preparing reports under the Paris Agreement's enhanced transparency framework and for the United Nations Sustainable Development Goals (SDGs).

Assessing the impacts of forest policies

Forest policies seek to incentivize mitigation practices that reduce GHG emissions and enhance GHG removals in the forestry sector. For example, a payment for ecosystem services programme may raise funds for extension services to support landowners in implementing sustainable forest management. This leads to healthy forests, with enhanced carbon stocks and reduced emissions from forest degradation.

www.climateactiontransparency.org/icat-toolbox/forest-sector

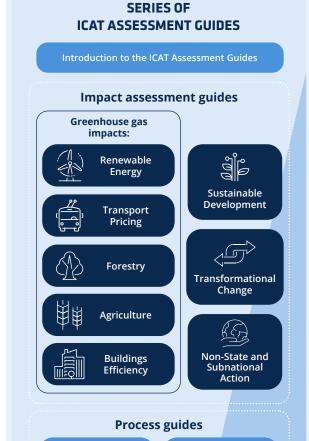
Assessing the impacts of forest policies supports evidence-based decision-making by enabling policymakers and stakeholders to understand the relationship between policies and their expected GHG and other impacts. Policymakers and other users can apply the ICAT Forest Methodology to assess these impacts, pursuing one or several of the objectives of transparency, including to:

- improve policy design and implementation by understanding the impacts of different design and implementation choices
- inform goal setting by assessing the potential contribution of policies to national goals such as national REDD+ strategies or action plans, nationally determined contributions (NDCs) and the SDGs
- track progress towards these goals and understand the contribution of policies to achieving them
- provide information for reporting domestically or internationally, including under the Paris Agreement's enhanced transparency framework
- attract finance by demonstrating the results of effective policies.

Series of ICAT assessment guides

ICAT aims to help countries assess the impacts of their climate actions, and to support greater transparency, effectiveness, ambition and trust in climate policies worldwide. The *Forest Methodology* is part of the ICAT series of guides for assessing the GHG, sustainable development and transformational impacts of policies and actions in an integrated way. The guides are a result of collaboration with technical experts from around the world.

The ICAT *Forest Methodology* can be used on its own or together with other ICAT guides.



The assessment guides have been used to support capacity-building for transparency in more than 20 countries. Case studies are available on the ICAT website. To learn more about how ICAT supports countries, visit www.climateactiontransparency.org.

Technical

Review

Stakeholder

Participation

Intended audience

The primary intended users of the *Forest Methodology* are developing country governments and their partners (domestic and international) who are planning, implementing and assessing forest policies, particularly in the context of development and implementation of NDCs, national lowemission development strategies, national REDD+ strategies or action plans, and other mechanisms. Other stakeholders who are affected by, or can influence, the policy – such as research institutions, funders, financial institutions, non-governmental organizations and companies – can also use the methodology. The methodology can be used at the national, subnational or municipal level.

Main impacts of forest policies

Forest policies can enable and incentivize the following activities:

- afforestation and reforestation establish, increase or restore vegetative cover through the planting, sowing or human-assisted natural regeneration of trees
- sustainable forest management improve forest management practices on lands managed for wood products such as sawtimber, pulpwood and fuelwood
- reduced deforestation and degradation

 reduce the conversion of forest lands with high carbon stocks to forest or non-forest lands with lower carbon stocks.

These activities can reduce GHG emissions and lead to increases in carbon stocks, particularly in above-ground biomass, below-ground biomass, soil carbon and dead organic matter.

Forest policies also contribute more broadly to sustainable development, including through positive impacts on biodiversity of terrestrial ecosystems, land-use change, soil quality, access to land, indigenous rights, resilience to dangerous climate change and extreme weather events, and economic productivity. The methodology helps identify these sustainable development impacts and links them to the SDGs. The ICAT Sustainable Development Methodology can then be used to assess these impacts. Identifying and assessing sustainable development impacts can play an important role in making the case for forest policies, and ensuring that policies are understood and supported by society.

Implemented in the right way, forest policies can lead to significant change. If this is fundamental and sustained change that disrupts established high-GHG emissions pathways and contributes to zero-carbon development, it can be considered to be transformational change. Changes in land-use practices are at risk of reversal, so understanding the extent to which a proposed forest policy is likely to have long-term, sustained impacts can provide valuable insights for policy design and implementation. The ICAT Transformational Change Methodology provides a way to assess these transformational impacts. As with the *Sustainable* Development Methodology, it is designed to be used in conjunction with the Forest Methodology.

Types of policies covered by the methodology

The methodology can be used to assess any policy that targets afforestation and reforestation, sustainable forest management, or reduced deforestation and degradation. Common forest policy instruments include:

- regulations and standards, such as standards for timber management practices
- subsidies and incentives, such as payments for ecosystem services
- voluntary agreements or actions, such as zero-net-deforestation commitments
- information instruments, such as programmes for environmental labelling of forest products
- trading programmes, such as nutrient trading programmes
- research, development and deployment **policies**, such as introducing new practices to land managers via extension services and other programmes
- financing and investment, such as lowinterest rate loans for land managers who implement sustainable timber management practices.

The methodology can be used to assess a single policy or a package of related policies.

Advancing climate action through the enhanced transparency framework REPORTING **REVIEW National** National **GHG** inventory inventory report Progress made in implementing and achieving NDC Support **Biennial** Technical Global transparency expert review and received report Facilitative, Climate change Update NDC multilateral impacts and adaptation of progress Adaptation communication Reporting inputs and aspects Reports under the of the transparency framework transparency framework

By helping policymakers assess the impacts of policies, the ICAT assessment guides can help countries track progress in implementation and further develop their NDCs towards enhanced ambition. The ICAT assessment guides can also help provide the necessary information for countries to report under the Paris Agreement's enhanced transparency framework including estimating baseline emissions, estimating policy impacts, estimating resource needs, conducting projections, and monitoring progress in implementation over time. This enables countries to plan their actions, account for their contributions, and track progress towards implementation and achievement of their NDCs.

ICAT assessment guides can help with reporting inputs and aspects of the transparency framework

Using the methodology during policy design and implementation

The methodology can be used at different stages of a policy design and implementation cycle: before, during or after policy implementation. It can be used to conduct forward-looking assessments of future impacts, as well as backward-looking assessments of past impacts.

A country's needs and objectives will determine when to use the methodology. For example, if a country wants to improve the design of a policy or set forestry sector goals for its NDCs, the methodology would be used before policy implementation.

If a country wants to track progress in implementing its NDCs and report the results under the enhanced transparency framework, the methodology would be used during or after policy implementation. For demonstrating the results of a policy to a funder, the methodology would likewise be used during or after policy implementation.

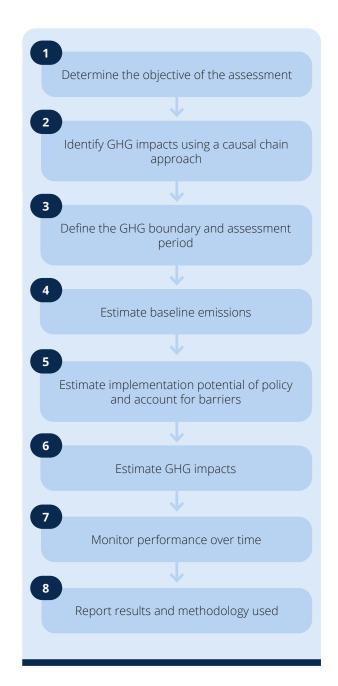
If the methodology is used at multiple stages in a policy design and implementation cycle, it becomes an iterative process, such that previous experience informs improvements to policy design and implementation, and the development of new policies. For example, the GHG impacts of a forest regulation that requires landowners to conserve native vegetation on a certain percentage of their land could be assessed, and the policy could be adjusted or new policies could be developed in light of the results.

Main steps of the methodology

The methodology provides a stepwise approach to estimating the GHG impacts of forest policies.

A key step is to develop a causal chain, which is illustrated by a conceptual diagram representing the sequence of changes that are expected to occur as a result of a policy:

• Identify intermediate effects. These are the changes in behaviour, technology, processes or practices that are triggered by the activities that take place as part of the policy. For example (as shown in the diagram below), under a payment for ecosystem services programme, taxes are collected, contracts are set up with landowners, and extension services are provided to help forest owners implement sustainable forest management. These activities lead to intermediate effects, such as healthier



forests with sustainable yields. They can also potentially lead to undesirable effects, such as reduced supply of wood products that cause increases in timber harvesting outside the geographic area of the policy by other forest owners. Important to this step is identifying stakeholders affected by, or with influence over, the policy, so that the full range of intermediate effects can be identified and captured. Stakeholders include communities, indigenous peoples and marginalized groups who depend on forest resources; producer associations; civil society organizations; farmers and ranchers; commercial forest companies; and government agencies responsible for forest management.

Identify GHG impacts. Intermediate effects lead to the policy's GHG impacts. Continuing with the example, implementation of sustainable forest management and changes in supply of wood products (the intermediate effects) lead to the GHG impacts of increased CO₂ removals from carbon sequestration

and reduced CO₂ emissions from forest degradation, but also increased CO₂ emissions from timber harvesting outside the geographic area of the policy.

The methodology contains numerous worked examples to illustrate how it can be used.

