



GOAL ASSESSMENT

PROGRESS ON THE NEW YORK DECLARATION ON FORESTS

Goal 9 assessment

Rewarding countries and jurisdictions for results

November 2020

The New York Declaration on Forests (NYDF) is a voluntary and non-binding international declaration aimed at halting global deforestation by 2030 with more than 200 endorsers: national and sub-national governments, multi-national companies, groups representing Indigenous and local communities, and non-governmental organizations. Published annually, the NYDF Progress Assessment evaluates the global status of forests as well as overall efforts made toward achieving the NYDF goals.

This update presents progress as of 2020 toward achieving Goal 9:

Goal 9

Reward countries and jurisdictions that, by taking action, reduce forest emissions – particularly through public policies to scale-up payments for verified emission reductions and private-sector sourcing of commodities.

Key messages

- Nearly USD 4.7 billion of results-based finance for forests have been committed by bilateral or multilateral sources since 2010.
- Over the last two years, disbursement of results-based finance has seen significant growth, with between USD 230-260 million being disbursed annually. This means that 40 percent of commitments have now been disbursed.
- Out of the 18 countries in the Forest Carbon Partnership Facility's Carbon Fund, only four have advanced to signing Emission Reductions Payment Agreements (Democratic Republic of the Congo, Mozambique, Chile, and Ghana).
- Finance channeled to forests through carbon markets is significant in volume; equal to USD 2.5 billion over the last 20 years.

- Private-sector demand for forest carbon credits is gaining momentum; however, it is unclear how the COVID-19 outbreak will impact this demand.
- Many domestic compliance schemes allow the use of carbon credits from forest projects or programs.

Overview of goal and indicators

Goal 9 calls for rewards for countries and jurisdictions that are reducing forest emissions. This can be done by either scaling-up payments for results (Criterion 1); or leveraging private sector jurisdictional sourcing (i.e. a commitment to source from jurisdictions that have reduced deforestation) (Criterion 2).

In 2017, the NYDF Assessment Partners published an in-depth review of progress toward NYDF [Goals 8](#) and 9. From 2018 on, annual updates on progress towards these goals using the revised assessment frameworks are published. Two criteria and four indicators are used to assess progress in achieving Goal 9 (Table 1).

Table 1. Criteria and indicators to track Goal 9

Criteria	Indicators
1. Public payments for verified emission reductions	1.1. International payments (non-market based) 1.2 International market-based payments 1.3. Domestic market-based payments
2. Support for supply-chain efforts to incentivize reduced forest emissions	2.1. Public- and private-sector support for jurisdictional-sourcing initiatives in the context of zero-deforestation commitments

When the concept of REDD+^a was first introduced in the international climate negotiations of the United Nations Framework Convention on Climate Change (UNFCCC), it was largely conceived as a market mechanism with the expectation for mobilizing finance via private-sector demand for carbon credits. Over the last years, REDD+ has evolved into a mechanism relying largely on results-based REDD+ approaches supported by government-to-government transactions, taking the form of international payments that are non-market based. Results-based payments are made to countries that achieve quantifiable and verifiable forest emission reductions, without the transfer of a tradable carbon credit in exchange for the payment. Some results-based forest finance payments also reward countries and jurisdictions that employ incremental measures, such as the adoption of policies.

Next to this, carbon markets – in which tradable carbon credits are used to compensate for emissions occurring elsewhere – have become a significant financier of emission reductions from forest projects and programs. These payments can be made either by international or domestic entities.

^a REDD+ stands for 'Reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries'.

Findings

Criterion 1: Public payments for verified emission reductions

Indicator 1.1: International payments (non-market based)

A large number of forest-risk countries are now covered by bilateral or multilateral financing support initiatives to tackle deforestation. The majority of results-based payments are made in the context of bilateral agreements with the Norwegian International Climate and Forest Initiative (NICFI), the World Bank's Forest Carbon Partnership Facility (FCPF) Carbon Fund, the Green Climate Fund (GCF), the BioCarbon Fund's Initiative for Sustainable Forest Landscapes (BioCF ISFL), and the REDD Early Movers Programme (REM) (Table 2). While these initiatives differ, most share a number of core characteristics regarding minimum requirements for a program to qualify for results-based payments (Box 1).

Table 2. Major initiatives offering results-based payments for countries and jurisdictions that reduce forest emissions

Initiative	Description	Pledged to date
Norway's International Climate and Forest Initiative (NICFI)	NICFI aims to promote the conservation of primary forests, and provides funding via several channels, encompassing bilateral support to partner countries, contributions through multilateral organizations, and funding of civil society's forest initiatives. Through bilateral support, NICFI encourages and rewards REDD+ partner countries that target quantifiable and verifiable emissions reduction in the forestry sector. The reported pledged values exclude NICFI payments made to the other funds listed in this table to avoid double counting.	USD 2.7 billion ^b
Forest Carbon Partnership Facility (FCPF) Carbon Fund	The FCPF Carbon Fund is designed to build on countries' REDD+ readiness achievements by remunerating countries for future REDD+ systems. The Carbon Fund is intended to incentivize recipient countries to achieve long-term goals on emissions reductions, forest conservation, biodiversity protection, and enhancement of indigenous peoples' and forest communities' livelihoods. It pilots payments for verified emissions reductions from REDD+ programs and aims to ensure that funding is disbursed among relevant stakeholders through an equitable benefit-sharing approach. The provision of funding is contingent on several requirements, including environmental and social safeguards, a formal application processes, the development of robust permanence, and leakage management.	USD 903 million ¹
Green Climate Fund (GCF) REDD+ Results-Based Payments	The GCF was set up in 2010 under the UNFCCC to assist developing countries in the mitigation of and adaptation to climate change. It serves as an operating entity of the financial mechanism of the UNFCCC and is intended to serve as a key conduit of international climate finance. To catalyze international payments for emission reductions in the forest sector, GCF launched a pilot Results-Based Payments scheme for REDD+ in October 2017. Countries that have completed the readiness and implementation phases of their REDD+ plans are eligible to apply for Results-Based Payments.	USD 500 million

^b Figure obtained from personal communications with a NICFI representative.

REDD Early Movers (REM) Programme	<p>The REM is an initiative of German Official Development Assistance implemented by KfW on behalf of the German Ministry for Economic Cooperation and Development. It aims to promote forest conservation by providing financial support to close the pre-2020 funding gap in the current REDD+ process. It targets pioneer countries or regions that have already taken the initiative to protect forests. As a results-based program, REM supports emission reduction efforts undertaken at a national, subnational, or biome level. Germany has entered a partnership with Norway and the United Kingdom to issue several joint statements to support ambitious and credible action on REDD+. The group will use the REM program to deliver on its intentions to scale up financial support to REDD+.²</p>	<p>USD 309 million^c</p>
BioCarbon Fund Initiative for Sustainable Forest Landscapes (ISFL)	<p>The BioCarbon Fund's ISFL is a multilateral fund offering results-based payments to incentivize and sustain program activities. It seeks to incentivize emissions reduction from land use, including avoided deforestation, forest degradation, sustainable agriculture and other land use policies. To promote sustainable and scalable models for land use, the ISFL seeks to promote public-private partnerships and has in the past organized stakeholder dialogue and entered partnership agreements with commodity sourcing companies.</p>	<p>USD 222 million³</p>

Box 1. Characteristics of results-based forest finance

There are features that are broadly similar across the different pilot initiatives for results-based forest and REDD+ finance. Although the exact requirements of the results-based initiatives vary, most require at least:

- The establishment of a **baseline** to estimate emission reductions as a result of a REDD+ program. This is done at the country, jurisdictional or nested project level and commonly termed a reference level, against which changes of forest cover and emissions are measured.
- The adoption of REDD+ **safeguard policies** to ensure programmes do not cause environmental or social harm.
- The establishment of **financing agreements** to define how finance will be spent. This can include the development of a “benefit sharing plan” that directs forest and REDD+ finance.
- Assurance of **permanence** that the supported activities will not be reversed.
- Consideration of **leakage**, which is the increase of greenhouse gas emissions outside of the boundaries of a project or program that can be attributed to the project or program itself. For example, having deforestation actors simply move their activities to another forest area that is not covered by the program.

Disbursements of results-based finance for forests is ramping up

Nearly USD 4.7 billion in results-based finance for forests has been committed by bilateral or multilateral sources since 2010 (Figure 1). Although almost no new results-based finance commitments have been made in the past year, finance is finally reaching the institutions and actors it is intended for. Over the last two years, disbursement of finance has seen significant growth, with more than USD 260 million being disbursed annually. This is up from only USD 85 million in 2017, and even smaller volumes in previous years. As of April 2020, payments of 40 percent of commitments, equal to USD 1.9 billion have been

^c Figure obtained from personal communications with a BioCarbon Fund representative.

disbursed. Over the past year, the largest increase in funding came from the GCF, which increased disbursements by over 50 percent, or USD 132 million. Disbursements from NICFI and REM also showed moderate increases, of USD 73 million and 64 million respectively. Disbursements by the FCPF Carbon Fund made to date are only cash payments, with no payments yet made for achieved emission reductions.⁴ The BioCF ISFL have yet to materialize.

Figure 1. Progress in results-based REDD+ finance (2010–2019), in million USD



Sources: Based on data obtained from personal communications with NICFI and REM; and GCF's REDD+ Results-Based Payment Pilot, BioCarbon Fund ISFL and FCPF Carbon Fund commitments retrieved from funds' official websites. FCPF Carbon Fund disbursements retrieved from their 2019 Annual Report, page 73.

Despite there being progress over the past year in disbursements of international results-based payments for REDD+, negotiating these payment agreements remains a slow process. Many countries demonstrate interest in participating in results-based payment mechanisms, but reaching the final stage of acceptance is cumbersome and exceedingly challenging. A lack of finance to support countries in moving from a readiness phase toward implementation is a key barrier (Box 2); as are the institutional demands that come with committing to a results-based payment program for REDD+, which does not always account for national circumstances. For example, out of the 18 countries selected into the FCPF's Carbon Fund, only four have advanced to signing Emission Reductions Payment Agreements (ERPAs)^d: the Democratic Republic of the Congo, Mozambique, Chile, and Ghana. None of the Carbon Fund's emission reduction finance has yet been disbursed, although these countries have begun to implement the legal, financial, and operational frameworks needed to support their programs. High levels of stakeholder consultation during the project development phase have helped accelerate these countries' program implementation, following FCPF approval. In addition, only five countries have been formally included in the BioCarbon Fund's Initiative for Sustainable Forest Landscapes since it became operational in 2013. This includes Colombia, Ethiopia, Indonesia, Mexico, and Zambia.

^d The FCPF Carbon Fund consists of four major milestones: the submission of an Emissions Reductions Program Document (ERPD); ERPD selection into the Carbon Fund portfolio; review and due diligence performed by the Carbon Fund and World Bank partners; and finally, signing of the ERPA. After signing has occurred, program implementation and payments for results are free to take place, under the direction of the Carbon Fund participants and REDD+ country authorization entity.

Box 2. Funding for REDD+ implementation is lacking

The financing of REDD+ activities involves a readiness stage (Phase 1), program implementation (Phase 2), and the payment for emission reductions achieved (Phase 3). REDD+ donors have raised finance for recipient countries in the readiness stage, as they prepare and build the capacity to enable successful program activities, and to provide payments for results related to emission reductions. Yet, finance for program implementation (Phase 2) is notably lagging behind the other phases.^{5,6} Responding to this financing gap and the expressed need of countries hoping to move beyond the readiness phase, multilateral and bilateral funders have dedicated a portion of their REDD+ grants and low-interest loans to implementation.⁷ Implementation pledges have come primarily from the Global Environment Facility, the Green Climate Fund, and the Forest Investment Program.⁸

Indicator 1.2: International market-based payments

Up until now, regulated carbon markets have allowed the transfer of carbon credits from one country to another, in which the country hosting the project or program willingly permitted the transfer of emission reductions achieved out of the country in exchange for a payment for this result. The Paris Agreement has created a new context in which all countries have put forward greenhouse gas (GHG) mitigation pledges, termed Nationally Determined Contributions (NDCs). Countries are expected to report on progress towards these pledges. However, they may be reluctant to allow the transfer of carbon credits out of their country if they can no longer claim these emission reductions as their own accomplishment. The impact this will have on international market-based payments remains to be seen (Box 3).

Box 3. Carbon credits in the context of the Paris Agreement

The Paris Agreement presents a new context in which the generation and transfer of greenhouse gas (GHG) units may occur. Nearly all countries have put forward GHG mitigation pledges and the Paris Agreement envisions a periodic ratcheting-up process to make targets increasingly more ambitious and aligned with the goal of holding the increase in the global average temperature to well below 2°C above pre-industrial levels.

Article 6 of the Paris Agreement formulates a framework for cooperative approaches among countries, which can involve the transfer of “internationally transferable mitigation outcomes” or ITMOs – GHG units in the parlance of the Paris Agreement. There is currently substantial discussion on the implementation guidance of Article 6. Its rules are supposed to be finalized next year at COP 26, in the United Kingdom, and will frame how carbon markets should operate in this new context. A number of countries and experts demand that the generation of GHG units under the Paris Agreement should go beyond the business-as-usual and lead to an increased ambition in the implementation of NDCs.

Finance channeled to forests through carbon markets is significant, at USD 2.5 billion to date

Carbon markets allow GHG emitting entities to purchase credits to meet both voluntary and compliance targets for climate change mitigation (Figure 2). They provide finance to projects or programs where emission reductions are more cost-effective, when GHG emissions caused in one country can be compensated for in another. At the same time, they provide incentives for private-sector engagement in forest protection by offering a results-based payment for mitigation outcomes through the generation of carbon credits. Involving

the private sector in REDD+ efforts has the potential to stimulate greater adoption of positive forest management practices and to enable the long-term success of REDD+ activities if prices provide the right signal and are somewhat stable.

Finance channeled to forests through carbon markets is significant in volume (Table 3). Over the last 20 years it is estimated that over USD 2.5 billion have been channeled to forest projects or programs through carbon offset transactions. Forests and land-use project types play an increasingly important role in voluntary carbon markets, with transaction volumes showing a sharp rise in 2018. Forests and land use project types accounted for more than half of all transaction volumes in 2018; at a value of USD 171.9 million (Table 4).⁹ To put this into context, transactions supporting renewable energy projects or programs – the second largest project category – accounted for only a quarter of transactions in the same year, with a value of just under USD 41 million. Most of the growth in transacted volume from forests in 2018 came from REDD+ activities in Peru, where a nested approach to REDD+ is being established, eventually allowing individual REDD+ projects to be embedded into national or subnational programs.¹⁰ Nature-based solutions to tackle climate change have seen a surge in positive media coverage over the past year, influencing voluntary buyers' preference for this project type.¹¹ Since voluntary market buyers are often offsetting as part of their corporate social responsibility initiatives and targets – such as the Science Based Targets initiative¹² – and do so publicly, projects types that have a good reputation and have easily communicated benefits that go beyond simple emission reductions are typically sought after.

How much a company is willing to pay for offsets depends on how much it values environmental and social benefits beyond carbon. The price of forest and land-use credits is thus also affected by the co-benefits it carries beyond GHG emissions avoidance or carbon sequestration. These include biodiversity protection, water management, and other ecosystem services; as well as employment, community services, and livelihood provision. Carbon credits from forests and land use therefore attract one of the highest average prices on the voluntary carbon market – at USD 3.2 per credit in 2018; almost twice the value of carbon credits sold from renewable energy projects.¹³ This price, however, remains far below that needed to achieve the objectives of the Paris Agreement, and is too low to reduce emissions fast enough to stay within 1.5C of global warming.¹⁴ Today's carbon prices also fail to reflect the environmental and social costs of carbon emissions, including the costs to society of, for example, sea-level rise, the spread of disease, and extreme weather events. The High-Level Commission on Carbon Prices estimates that carbon prices should be at least USD 40-80 per ton equivalent carbon dioxide (CO₂e) in 2020, rising to USD 50-100 per ton CO₂e by 2030.¹⁵

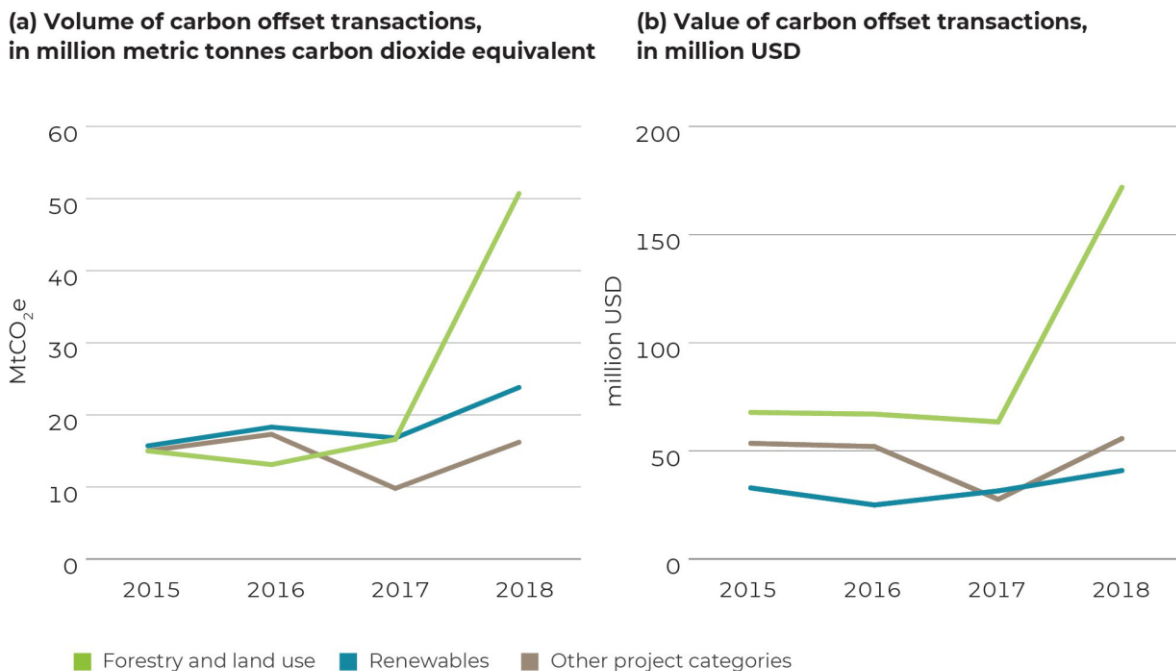
Table 3. Volume of forest carbon finance mobilized through markets¹⁶

Type of finance	Payments (early 2000s – 2017)
Voluntary forest carbon offset transactions	USD 996.6 million
Compliance forest carbon offset transactions	USD 1,573.9 million ^e

Source: adapted from Forest Trends' Ecosystem Marketplace report "Fertile Ground. State of Forest Carbon Finance 2017"

^e Includes payments made through Australia's Emission Reduction Fund for land-use offsets, worth an estimated USD 1.2 billion across all years.

Figure 2. Recent growth in volume and value of forest and land use carbon offset transactions



Source: Data compiled from Forest Trends' Ecosystem Marketplace: State of the Voluntary Carbon Markets reports 2016, 2017, 2018 and 2019.

Private sector demand for forest carbon offsets is rising

There are signs of rising private sector demand as companies announce increasingly ambitious emission reduction targets. A number of large emitters – notably petroleum companies, utilities, and airlines – have recently announced voluntary schemes to compensate for a portion of their carbon emissions, with forest projects or programs used to meet a portion of this demand (Box 4). It remains to be seen, however, the degree to which companies will follow through on implementation of these commitments in the wake of the coronavirus.

Some private sector companies – notably in high-emissions sectors – also have their emissions regulated under compliance schemes. These schemes require regulated entities to keep their net GHG emission below a certain level. And some allow regulated entities to use forest and/or land use offsets as a cost-containment measure to meet requirements of the mandatory emissions trading program^f or carbon tax^g under which they operate (Figure 3). The amount of credits a company may use to comply with the mandatory GHG obligations is usually limited by the rules of the carbon pricing scheme, and prices are strongly influenced by regulatory factors that determine the supply and demand for credits in that market.

The Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) is one example of a compliance scheme allowing regulated entities to compensate their emissions with credits from forest (and non-forest) projects. CORSIA was established by the

^f An Emissions Trading Scheme (ETS) is a mechanism where a regulator sets a cap on emissions and distributes or sells emission permits to companies that fall within the cap. Companies that emit less have an opportunity to save money by buying fewer emission permits, or by selling spare permits. As such, there is a financial incentive to emit less. Moreover, in an ETS the total number of permits that is issued normally falls over time, thereby causing total emissions to decrease as well.

^g A carbon tax is a levy that polluters are required to pay on the carbon they emit. This price on carbon encourages businesses to make low-carbon choices and investments. Moreover, government revenues generated through a carbon tax may be used to invest in, for example, mitigation activities or the development of new technologies.

International Civil Aviation Organization in 2016 as a market-based measure to offset emissions from the international civil aviation industry, and stabilize emissions from 2020 onwards. Airplane operators from countries participating in the scheme are required to monitor and report on fuel use, and offset emissions from a level calculated by multiplying the operator’s annual emissions times its growth factor. Participation in the scheme is optional for airlines up to 2026, unless the country in which they are located has opted into the scheme, under which circumstances compliance is mandatory. From 2027 onwards, compliance is mandatory across the sector. The scheme allows some reforestation and forest management project types, but avoided deforestation projects may be permitted if nested within the host country’s forest accounting (i.e. “stand-alone” projects are not permitted).¹⁷

Figure 3. Map of compliance policy programs that allow the use of forestry and/or land use offsets



Note: Not included is Taiwan’s Cap-and-Trade scheme which is currently under development. Early action under the scheme permits credits from domestic forestry-related activities.

Source: Adapted from Forest Trends’ Ecosystem Marketplace report ‘Fertile Ground. State of Forest Carbon Finance 2017’ and World Bank (2020) State and Trends of Carbon Pricing 2020.

Box 4. Large corporate emitters announce their intention to use carbon offsets

In 2019 and early 2020, the airlines easyJet, British Airways, Air France, Delta and Etihad Airways all made announcements to either start or ramp up their use of carbon offsets to compensate for their greenhouse gas (GHG) emissions. Most will meet a portion of this demand with forest carbon offsets. easyJet plans to offset carbon emissions from all of its flights globally, and is expecting to need 7.5 metric tons CO₂e annually to do so.^{18,19} Both British Airways and Air France made announcements to offset emissions from all domestic flights from 1 January 2020.^{20,21} Delta plans to be a carbon-neutral airline from March 2020, and will use offsets from forestry and carbon removal project types to do so.²² And Etihad Airways plans to have zero net carbon emissions by 2050.²³ Airlines made these announcements in anticipation of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), which will require airlines to reduce and compensate for their GHG emissions.

A handful of petroleum companies have also made announcements to compensate for their GHG emissions. Notably, Shell announced that it would invest USD 300 million in natural ecosystems to contribute to its three-year target to reduce its Net Carbon Footprint by two to three percent.²⁴ BP uses its carbon offsetting to invest in projects that promote forest management or reduce pressure on forests through the provision of cooking solutions that move away from the use of firewood or charcoal for cooking.²⁵ In 2019, Total also committed to investing USD 100 million per year into forest protection and reforestation.²⁶ The finance channelled through these commitments is significant, with estimates suggesting that only five national governments provide more annual finance to forests than Shell and Total's combined contributions.²⁷

Indicator 1.3: Domestic market-based payments

Many domestic compliance schemes allow the use of carbon credits from forest projects or programs

A number of countries allow the use of forest carbon credits in their domestic market-based emission reduction schemes. Establishment of domestic payment schemes that allow the use of offsetting from non-regulated sectors facilitates cost-effective compliance for regulated entities, especially at the start of a scheme that may face industry resistance. Adopting a phased approach till full implementation for regulated entities is common. Domestic payment schemes, depending on their design, can also transfer finance from polluters directly to "green projects".

While it is not presently possible to provide a valuation of total domestic payments made to forests through compliance schemes, we report on established compliance schemes to highlight progress toward this indicator. These are summarized in Table 5. Estimating the total volume of finance transferred to forests through these schemes is challenging as the prices paid for forest carbon offsets are not always available. Average prices for all project types under these schemes range broadly, from approximately USD 1 per tons of CO₂e under China's ETS, to approximately USD 85 under Switzerland's scheme. Methodologies eligible under the schemes are also highly variable; although reforestation and improved forest management are cited most frequently, occurring in approximately half of the schemes presented. These project types are easier to implement and quantify than projects in avoided deforestation, and are therefore more popular in regulated markets.

Table 5. Overview of domestic compliance schemes in which forests are eligible, in tons CO₂e

Domestic compliance scheme	Description	Average or range price per tCO ₂ e (all project types)
Alberta Offset Credit System	Alberta's offset credit system, established 2007, is a compliance mechanism for entities regulated under the mandatory GHG emission regulatory system. As of February 2020, approximately 55 MtCO ₂ e in offsets had been issued, <1 percent of which were from forestry activities (ie changes in forest harvesting).	Set at USD 21.64 (2017 - present) ^h
Australian Emission Reduction Fund (ERF)	Australia's ERF involves government purchase of emissions reductions using a reverse auction to select projects. It allows credits from assisted regeneration, avoided deforestation, reforestation, afforestation, soil carbon sequestration and cattle herd management, certified as Australian Carbon Credit Units (ACCUs). It is a voluntary scheme which largely provides landholders a fiscal incentive to improve land management practices. Emissions reduction projects under the fund are already contracted to deliver almost 193 million tonnes of reductions, 65 percent of which are from vegetation projects. It is estimated that more than USD 1.2 billion has been transferred to domestic forest projects through the scheme. ²⁸ Demand for ACCUs is also created by Australia's Safeguard Mechanism, which is a national scheme that mandates high emitting facilities (>100,000 tCO ₂ e per year) to keep emissions below a certain threshold. ²⁹	USD 9.25 (2019) ⁱ
British Columbia Climate Action Plan	All territories in Canada are required to possess a carbon pricing system. British Columbia has compliance and voluntary mechanisms covering four forestry project types: afforestation, reforestation, improved forest management, and conservation/avoided deforestation. The Carbon Tax, established in 2008, applies to the purchase of fossil fuels and covers approximately 70 percent of provincial GHG emissions.	USD 28.83 (2019) ^j
California Cap-and-Trade	California is the only US state with an economy-wide cap-and-trade program. Effective since 2013, it has three operational forestry and land-use carbon methodologies: US forestry, urban forestry, and rice cultivation, which allow credits from reforestation, improved forest management and avoided forest conversion. US-based forest projects account for 83 percent (126 MtCO ₂ e) of all compliance carbon credits issued under the scheme to date. Although credits are currently restricted to domestic activities, the use of international credits from tropical forest operations is currently under development.	Average USD 13.69 (2015-20)
China ETS	China's ETS, launched in 2017, regulates approximately 1,700 companies from the power sector generating >26,000 tCO ₂ per year, accounting for 30 percent of national emissions. The scheme operates at the provincial level, in which only some branches are geared towards the forestry sector. The Fujian ETS Pilot in particular aims to develop forestry projects to cover approximately 2 million acres of forest and achieve around 1 million tons of emission reductions on an annual basis. Companies can meet up to 10 percent of their emission reduction obligations using forestry offsets called Fujian Forestry Certified Emission Reductions (FFCERs) and 5 percent if they decide to also purchase credits from other project types.	Fujian ETS: USD 1.18 (2020) Between 2017 and 2020, prices ranged between USD 1-5.00

^h USD equivalent calculated 30 April 2020, at a rate of 1 CAD to 0.72 USD.

ⁱ USD equivalent calculated 30 April 2020, at a rate of 1 AUD to 0.65 USD.

^j USD equivalent calculated 30 April 2020, at a rate of 1 CAD to 0.72 USD.

Colombian Carbon Tax	Established in 2017, this carbon tax covers 16 percent of Colombia's total emissions and 50 percent of the emissions generated from fossil fuels. Eligible offsets must be from projects implemented inside Colombia. Eligible forest project types include afforestation, improved forest management, and REDD+.	USD 5.00 (2019) The Colombian carbon tax is set to increase annually by 1 percent plus inflation until the price reaches approximately USD 10/tCO _{2e} .
Japan ETS	Launched in 2010, the Tokyo-Saitama cap-and-trade is Japan's first mandatory ETS, which applies to all commercial and industrial facilities consuming over 1,500 kiloliters crude oil equivalent per year. Both allow the use of domestically-produced offsets, and Saitama's ETS permits the unrestricted use of forestry credits. Japan also a government-managed voluntary 'J-Credit' system, through which companies can purchase Japanese-produced credits to offset their emissions, including through two forest-related methodologies: afforestation and forest management.	USD 5.50 (2019)
Korea ETS	South Korea's ETS, founded in 2015, covers approximately 70 percent of national GHG emissions. The scheme allows credits from afforestation, reforestation, and forest restoration projects, produced domestically or overseas. South Korea also operates a dedicated Forest Carbon Offset Scheme where companies, organizations, and individuals can purchase offsets voluntarily from forestry projects across the country. Projects under the programme are expected to sequester a total of 1.5 MtCO _{2e} over their life span.	Korea ETS: USD 32.95 (2020) Between 2017 and 2020, prices ranged between USD 17-33
Mexico's MEXICO2	Mexico has placed a tax on carbon from fossil fuel use, charging USD 3.50 per ton of CO _{2e} . To counter costs imposed by the carbon tax, regulated entities may purchase credits through MEXICO ₂ , a voluntary domestic carbon trading platform founded in 2014. Buyers can buy offsets from 14 projects located across the country, one of which covers reforestation and another improved forest management.	Set at USD 3.50 (2014-present)
New Zealand ETS	The New Zealand ETS was the first in the world to regulate for the forestry sector, and is designed to increase carbon stocks in existing forests. Forest owners can participate in two ways: either on a voluntary basis using post-1989 forest land, or on a mandatory basis using pre-1990 forest land that is deforested. All projects must be based in New Zealand. Error! Bookmark not defined.	USD 13.64 (2020) Between 2010 and 2010, ranged between USD 11-19. The ETS currently has a fixed ceiling price of NZD 25, but will be replaced by a Cost Containment Reserve from 2021.
South Africa Carbon Tax	South Africa's carbon tax, established in 2019, is a compliance mechanism for all direct and fugitive emissions arising from fossil fuel combustion, and other industrial processes. Offsets from forest credits certified by the Verified Carbon Standard (VCS), the Clean Development Mechanism (CDM) and Gold Standard are permitted.	Started at USD 6.59 ^k and increases annually by 2 percent, plus inflation. Until the tax comes into full force in 2022, there is a tax-free allowance of between 60-95 percent, dependent on sector and performance. ³⁰

^k USD equivalent calculated 30 April 2020, at a rate of 1 ZAR to 0.055 USD.

<p>Switzerland's CO₂ Attestations Mechanism</p>	<p>Since 2012, emission reduction projects and programs in Switzerland can receive “attestations” under the national CO₂ Act and CO₂ Ordinance. The scheme allows companies that produce or import fossil motor fuels to purchase credits to fulfil their compliance obligations. Credits are issued to domestic activities across seven sectors, including forestry, which in 2020 accounted for 41 percent of issued credits.</p>	<p>USD 83–85 (2019)</p>
<p>Taiwan Cap-and-Trade</p>	<p>In 2018, Taiwan's 'GHG Reduction Action Plan' was published, which outlines a cap-and-trade system, currently under development. Early action under the scheme can be certified under domestic certifications or the CDM, which covers two forestry-related methodologies, eligible if undertaken in Taiwan. As of August 2016, 68 million early action credits had been issued.</p>	<p>No information</p>

Criterion 2: Support for supply-chain efforts to incentivize reduced forest emissions

Indicator 2.1: Public-and private-sector support for jurisdictional sourcing initiatives in the context of zero-deforestation commitments

Support for jurisdictional initiatives comes in many forms. Actors from across sectors are increasingly turning to jurisdictional approaches to [implement supply-chain commitments](#) because they provide an opportunity for actors to come together to realize zero-deforestation commitments, avoid potential leakage, and efficiently scale implementation.¹ [Goal 2](#) of the New York Declaration on Forests is designed to measure efforts which are aligned with meeting the private-sector goal of eliminating deforestation from agricultural commodity production by the end of 2020.

For more information on progress towards supporting supply-chain efforts to incentivize reduced forest emissions, please refer to our [Goal 2 assessment](#).

¹ For the purposes of this assessment, we define active jurisdictional approaches by the Environmental Defense Fund definition which states that programs should meet the following three conditions: (1) have government involvement/leadership; (2) are commodity specific or have a link to specific commodities of focus (cattle, soy, palm oil, cocoa, timber/pulp); and (3) have documented action to date (progress beyond the conceptualization phase).

Endnotes

- ¹ Forest Carbon Partnership Facility. (2019, July). *FY19 Budget Status and FY20 Proposed Carbon Fund Budget*. Presented at the Twentieth Meeting of the Carbon Fund (CF20), Washington DC, USA. https://www.forestcarbonpartnership.org/system/files/documents/CF20%20Virtual%20Carbon%20Fund%20FY20%20Budget_062619.pdf.
- ² KfW Bank aus Verantwortung. (2018, May 11). REDD Early Movers (REM) Programme. April 19, 2020, <https://www.kfw-entwicklungsbank.de/International-financing/KfW-Development-Bank/Topics/Climate/REDD/>.
- ³ BioCarbon Fund Initiative for Sustainable Forest Landscapes (ISFL). (2020, June 9). BioCarbon Fund Initiative for Sustainable Forest Landscapes (ISFL). April 17, 2020, <https://www.biocarbonfund-isfl.org/who-we-are>.
- ⁴ Forest Carbon Partnership Facility. (2019). *Forest Carbon Partnership Facility 2019 Annual Report*. https://www.forestcarbonpartnership.org/system/files/documents/FCPF_Annual%20Report_2019.pdf.
- ⁵ Lujan, B., & Silva-Chávez, G. (2018). *Mapping Forest Finance: A Landscape of Available Sources of Finance for REDD+ and Climate Action in Forests*. https://www.forest-trends.org/wp-content/uploads/2018/04/doc_5734.pdf.
- ⁶ Green Climate Fund (GCF). (2019). *Accelerating REDD+ implementation* (Working Paper No. 2). <https://www.greenclimate.fund/sites/default/files/document/accelerating-redd-implementation.pdf>.
- ⁷ Lujan, B., & Silva-Chávez, G. (2018).
- ⁸ Lujan, B., & Silva-Chávez, G. (2018).
- ⁹ Forest Trends' Ecosystem Marketplace. (2019). *Financing Emissions Reductions for the Future: State of the Voluntary Carbon Markets 2019*. <https://www.forest-trends.org/wp-content/uploads/2019/12/SOVCM2019.pdf>.
- ¹⁰ Forest Trends' Ecosystem Marketplace. (2019).
- ¹¹ Forest Trends' Ecosystem Marketplace. (2019).
- ¹² Science Based Targets. (2017, February 28). Science Based Targets. May 15, 2020, <https://sciencebasedtargets.org/>.
- ¹³ Forest Trends' Ecosystem Marketplace. (2019).
- ¹⁴ Intergovernmental Panel on Climate Change (IPCC). (2018). *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change*. <https://www.ipcc.ch/sr15/>.
- ¹⁵ Stiglitz, J. E., Stern, S., Duan, M., Moyer, E., Edenhofer, O., Pangestu, M., et al. (2017). *Report of the High-Level Commission on Carbon Prices*. https://static1.squarespace.com/static/54ff9c5ce4b0a53decccfb4c/t/59244eed17bffc0ac256cf16/1495551740633/CarbonPricing_Final_May29.pdf.
- ¹⁶ Hamrick, K., & Gallant, M. (2017). *Fertile Ground: State of Forest Carbon Finance 2017*. https://www.forest-trends.org/wp-content/uploads/2018/01/doc_5715.pdf.
- ¹⁷ Carbon Offsetting and Reduction Scheme for International Aviation (CORSA). (2020, March). *CORSIA Eligible Emissions Units*. https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/TAB%202020/ICAO_Doc_CORSA_Eligible_Emissions_Units_March_2020.pdf.
- ¹⁸ EasyJet. (2019, December 24). Sustainability. May 10, 2020, <https://www.easyjet.com/en/sustainability>.
- ¹⁹ British Airways. (2020, January 1). British Airways' UK offsetting scheme takes off. *British Airways News Releases*. <https://mediacentre.britishairways.com/pressrelease/details/86/Sustainability-401/11944>.
- ²⁰ British Airways. (2020, January 1).
- ²¹ Air France. (2019, December 23). Air France to begin offsetting 100% of CO2 emissions on its domestic flights on 1st January 2020. *Air France Press Releases*. <https://corporate.airfrance.com/en/press-release/air-france-begin-offsetting-100-co2-emissions-its-domestic-flights-1st-january-2020>.
- ²² Delta Air Lines. (2020, February 14). Delta commits \$1 billion to become first carbon neutral airline globally. *Delta News Hub*. <https://news.delta.com/delta-commits-1-billion-become-first-carbon-neutral-airline-globally>.
- ²³ Etihad Airways. (2020, January 15). Etihad targets zero net carbon emissions by 2050, in expanded commitment to environmental sustainability. *Etihad Airways Latest News*. <https://www.etihad.com/en/news/etihad-targets-zero-net-carbon-emissions-by-2050-in-expanded-commitment-to-environmental-sustainability>.
- ²⁴ Shell Global. (2020, May 15). Nature-based solutions. <https://www.shell.com/energy-and-innovation/new-energies/nature-based-solutions.html>.
- ²⁵ bp. (2019, June 28). bp Target Neutral. May 10, 2020, https://www.bp.com/en_gb/target-neutral/home.html.
- ²⁶ Oil giant Total's chief announces new unit to invest in forests. (2019, July 6). France24. <https://www.france24.com/en/20190706-oil-giant-totals-chief-announces-new-unit-invest-forests>.
- ²⁷ Climate Change: Can Oil and Aviation Fuel a Marshall Plan for Forests? (2019, September 17). Ecosystem Marketplace. <https://www.ecosystemmarketplace.com/articles/shades-of-redd-can-oil-and-aviation-fuel-a-marshall-plan-for-forests/>.
- ²⁸ Hamrick, K., & Gallant, M. (2017).
- ²⁹ Australian Government - Clean Energy Regulator. (2019, May 2). The safeguard mechanism. September 11, 2020, <http://www.cleanenergyregulator.gov.au/NGER/The-safeguard-mechanism>.
- ³⁰ Henry, S., Diemert, A., & Rentel, F. (2020). *Carbon Market Business Brief: South Africa* [Brief]. https://www.ieta.org/resources/Resources/CarbonMarketBusinessBrief/CarbonMarketBusinessBrief_SouthAfrica2020.pdf.

Acknowledgments

Authors:

Hilda Galt and Imogen Long (Climate Focus)

Contributors:

Ane-Broch Graver (Norway's International Climate and Forest Initiative), Charlene Watson (ODI), Erin Matson (Climate Focus), Franziska Haupt (Climate Focus), Haseeb Bakhtary (Climate Focus), Helen Burley (Global Canopy), Johannes Berliner (KfW), Kiryssa Kasprzyk (Conservation International), Philip Rothrock (Forest Trends), Roy Parizat (World Bank), Sarah Rogerson (Global Canopy), Simon Henry (International Emissions Trading Association), Thiago Chagas (Climate Focus)

About the NYDF Progress Assessment:

The NYDF Progress Assessment is a continual and collaborative process achieved collectively by partner organizations and researchers. Since 2015, the NYDF Assessment Partners have annually published updates on progress toward each of the ten goals of the NYDF. Working groups for individual goals form the basis for developing and revising goal-specific assessment frameworks. They also generate key data and analytics on findings, attempting to narrow knowledge gaps. All assessment findings undergo a rigorous peer review process conducted by experts across the globe.

The NYDF Assessment Partners include:

CDP, Center for International Forestry Research (CIFOR), Chatham House, Clean Cooking Alliance, Climate Focus, Conservation International (CI), Environmental Defense Fund (EDF), Fauna & Flora International, Forest Foundation Philippines, Forest Trends, Global Canopy, Institute for Global Environmental

Strategies (IGES), Instituto de Manejo e Certificação Florestal e Agrícola (Imaflora), The Alliance of Biodiversity International and the International Center for Tropical Agriculture (CIAT), International Union for Conservation of Nature (IUCN), Levin Sources, National Wildlife Federation (NWF), Overseas Development Institute (ODI), Rainforest Alliance, Rights and Resources Initiative (RRI), Stockholm Environment Institute (SEI), The Nature Conservancy (TNC), The Sustainability Consortium (TSC), Woodwell Climate Research Center, World Resources Institute (WRI), World Wildlife Fund (WWF-US), Yiaku Laikipiak Trust, and the Zoological Society of London's (ZSL) Sustainability Policy Transparency Toolkit (SPOTT) initiative.

Design and figures: Imaginary Office

Copy editor: Emily Steadman

Date of publication: November 2020

This report belongs to the public domain.

Users are welcome to download, save, or distribute this report electronically or in any other format. A digital copy of this assessment, along with progress assessments on all goals of the New York Declaration on Forests, are available at www.forestdeclaration.org.

Please use the following citation:

NYDF Assessment Partners. (2020). *Goal 9 assessment: Rewarding countries and jurisdictions for results*. New York Declaration on Forests Progress Assessment. Climate Focus (coordinator and editor). Accessible at www.forestdeclaration.org.