Progress on the New York Declaration on Forests:
An Assessment Framework and Initial Report

Introduction

At the United Nations Climate Summit, in September 2014, over 150 governments, companies and business associations, indigenous peoples' organizations, and non-governmental organizations endorsed the New York Declaration on Forests (NYDF). Since then, the number of signatories has grown to more than 180. These signatories have each committed to do their part to achieve the ten goals that compose the NYDF.[1]

Goal 1 of the NYDF is to eliminate natural forest loss by 2030, with a 2020 milestone of a 50% reduction. A number of the other goals are subsidiary to Goal 1, including eliminating deforestation from agricultural supply chains (Goal 2), reducing deforestation from other economic sectors (Goal 3), and supporting alternatives to deforestation driven by poverty and basic needs (Goal 4). The NYDF also formulates a goal of restoring 150 million ha of degraded land by 2020 and an additional 200 million ha by 2030 (Goal 5). Another set of goals aim at improving the enabling environment and conditions that help signatories and other entities to meet the deforestation-related goals. These goals relate to putting in place a strong international framework (Goals 6 and 7), better financing (Goals 8 and 9), and improved forest governance with more secure forest and land rights for local communities and indigenous peoples (Goal 10).

The NYDF has roots in other processes, including the 2011 Bonn Challenge to restore 150 million hectares of degraded land by 2020 and the Aichi Biodiversity Targets, which include at least halving the loss of all natural habitats. The NYDF goals have considerable alignment with the Sustainable Development Goals adopted in September 2015 by the United Nations and also relate to a new climate agreement to be adopted in December 2015 in Paris. Achieving NYDF Goals 1 and 5 would translate into 4.5-8.8 billion tons of greenhouse gas (GHG) emission reductions per year by 2030.

The NYDF is ambitious, and its signatories represent a powerful and diverse coalition. Nevertheless, while the NYDF is supported by an action agenda,[2] it did not define a process or establish a forum that would monitor progress towards achieving its goals. This report aims to address that gap by proposing a robust framework for monitoring progress over time and providing an initial assessment using that framework. Annexes for each goal are available online at www.forestdeclaration.org. The individual NYDF goals follow different structures and formats and may be categorized according to the following typology:

- Quantitative output goals (1 and 5) provide numeric targets, and are timebound.
- Qualitative output goals (3 and 10) are directional, and may or may not be timebound.
- Support goals (2, 4, and 8) refer to inputs intended to contribute to achievement of the output goals.
- Policy goals (6 and 7) refer to the inclusion of forest conservation, restoration, or emission reduction in international agreements.

- Reward goals (9) refer to results-based payments to countries and/or subnational jurisdictions.

The different types of goals present distinct challenges for monitoring progress. For example, where goals are framed quantitatively, data are often missing; where goals are framed qualitatively, they can be difficult to measure progress against over time.

For this assessment we have chosen a number of indicators and proxies for measuring progress towards meeting NYDF goals. We anticipate that indicators will improve over time as data gaps are filled.

Main Findings

The short time since the adoption of the NYDF makes the assessment of progress difficult, our analysis shows however that endorsers of the NYDF have taken action and announced many important initiatives that will contribute towards achieving the goals (Table 1). Challenges however remain and progress is generally too slow to achieve the overarching target of end natural forest loss by 2030.

Table 1 Summary of Progress towards NYDF Goals

Goal		Summary of Assessment
1	Achieve a 50% or greater reduction in the annual loss of natural forests globally by 2020 and strive to end natural forest loss by 2030	The rate of net natural forest loss may be on a trajectory for meeting the milestone of halving natural forest loss by 2020, but gross forest loss as estimated data is not.
2	Support and help meet the private-sector goal of eliminating deforestation from the production of agricultural commodities such as palm oil, soy, paper and beef products by no later than 2020, recognizing that many companies have even more ambitious targets	There is a strong upward trend in private and public sector policies that support eliminating deforestation from agricultural commodity production, though efforts to track implementation are less well-developed and the overall number of companies committed to sustainable production, sourcing, and investments remains small.
3	Significantly reduce deforestation derived from other economic sectors by 2020	While there are clearly some efforts to reduce deforestation associated with infrastructure expansion and mining, there appears to be little coordination and less effort at monitoring commitments and their implementation.
4	Support alternatives to deforestation driven by basic needs (such as subsistence farming and reliance on fuel wood for energy) in ways that alleviate poverty and promote sustainable and equitable development	Support for addressing fuelwood consumption and particularly increasing the distribution of clean and efficient cookstoves is notably growing, and constitutes the principal area of measurable progress related to addressing deforestation driven by basic human needs.
5	Restore 150 million hectares of degraded landscapes and forestlands by 2020 and significantly increase the rate of global restoration thereafter, which would restore at least an additional 200 million hectares by 2030	Pledges under the Bonn Challenge are trending positively but a large shortfall remains if forest restoration targets are to be met.
6	Include ambitious, quantitative forest conservation and restoration targets for 2030 in the post-2015 global development framework, as part of new international sustainable development goals	The SDGs agreed in September 2015 include a very ambitious target of halting deforestation by 2020 but restoration, though mentioned, has no such ambitious target.
7	Agree in 2015 to reduce emissions from deforestation and forest degradation as part of a post-2020 global climate agreement, in accordance with internationally agreed rules and consistent with the goal of not exceeding 2°C warming	It is unlikely that land use emissions will be explicitly addressed at in a future climate agreement. There is however progress at the country level. Of the 122 countries that have submitted intended Nationally Determined Contributions, 40 have included specific actions on forests and land-use.
8	Provide support for the development and implementation of strategies to reduce forest emissions	Annual input-based ODA for reducing forest emissions in developing countries increased 3-5 times between 2002 and 2013.

9	Reward countries and jurisdictions that, by taking action, reduce forest emissions —particularly through public and private scales-up payments for verified emission reductions	Between 2008 and 2014 over USD3 billion in bilateral and multilateral finance was pledged for results-based finance for forest emission reductions and roughly USD1 billion was disbursed, and during the same period the market for forest carbon grew from USD32million to USD150 million, peaking at USD237 million in 2011.
10	Strengthen forest governance, transparency and the rule of law, while also empowering communities and recognizing the rights of indigenous peoples, especially those pertaining to their lands and resources	Some aspects of forest governance have improved in recent years, including slow but steady growth in legal recognition of the land rights of indigenous peoples and local communities, but rates of illegality in the timber trade and the murder of activists addressing land and resource conflicts are largely unchanged.

Goal 1: Achieve a 50% or greater reduction in the annual loss of natural forests globally by 2020 and strive to end natural forest loss by 2030

The NYDF's overarching goal, Goal 1, aims to eliminate natural forest loss by 2030, with at least a 50% reduction by 2020 as a milestone toward its achievement. The focus on 'natural forests' is a crucial component of this goal. Estimates of net global forest change mask the high global rate of *natural* forest loss. This is because tree planting and forest regeneration reduce the overall net change in forest area, despite ongoing loss of the world's natural forests – which have much higher biodiversity and climate values than replanted or regenerated forests.

To estimate the global annual loss of natural forests, we used two proxy indicators:

Indicator 1. Annual gross forest/tree cover loss[3]

Indicator 2. Annual net natural forest/tree cover change[4]

We used data from Global Forest Watch (GFW) and Hansen (2015) for Indicator 1 and from UN Food and Agriculture Organisation (FAO) (2015) for Indicator 2. Each indicator reflects different biases, and both embody substantial uncertainties (see Annex). Limitations include:

- The GFW/Hansen data set cannot distinguish between forest types such as natural forest and plantations nor can it distinguish between land use designations. This can, for example, overestimate forest loss in countries with short rotation plantations. GFW plans to delineate plantations in the future. GFW also counts forest/tree cover loss due to natural disturbances.
- FAO data relies on self-reporting, hence, the quality and methodology of FAO data varies between countries. Also, the definition of forests is determined by each country and is based on land use classification rather than land cover data.

Despite uncertainties and limitations, the two data sets show directional trends that can serve as proxies for monitoring. Additional proxy measures may emerge and should also be considered for this purpose.

Table 2 illustrates slightly higher gross forest/tree cover loss during the period from 2011-2014 than in the preceding decade (Indicator 2) with no significant progress toward halving the annual loss by 2020. Net natural forest/tree cover change is roughly 25% lower in 2015.

Table 2: Proxy data for natural forest loss from GFW/Hansen (Gross) and FAO 2015 (net)

Year	Gross forest/tree cover loss (million ha/yr)	Net natural forest/tree cover change (million ha/yr)
2001-2010	17.25	8.87
2011	17.58	n/a
2012	22.90	n/a
2013	18.67	n/a
2014	18.52	n/a
2015	n/a	6.65
2020 Target	8.62	4.43

The rate of net natural forest loss may be on a trajectory for meeting the milestone of halving natural forest loss by 2020 (FAO 2015), but gross forest loss as estimated by the GWF/Hansen data is not (Indicator 1). This divergent result reflects methodological differences and constraints described above and in the Annex.

Goal 2: Support and help meet the private-sector goal of eliminating deforestation from the production of agricultural commodities such as palm oil, soy, paper, and beef products by no later than 2020, recognizing that many companies have even more ambitious targets

Goal 2 targets the elimination of deforestation from the production of a defined set of agricultural commodities by 2020 and reflects a pledge previously made by a private sector consortium.[5] Agriculture causes an estimated two-thirds of all deforestation in tropical countries, of which commercial agriculture accounts for 40% and subsistence agriculture accounts for 33% of the total tropical forest loss.[6] The increasing relevance of commercial agriculture as a main driver of tropical forest loss is closely linked to the growing demand for a relatively small group of agricultural commodities including soy, beef, palm oil, and timber and wood pulp.[7]

To assess progress on the private sector goal of eliminating deforestation from agricultural commodities, we selected two proxy indicators. The first measures the market share of certified sustainable palm oil, soy, paper, and beef. The second measures private companies' and governments' level of support for the production of low deforestation, or deforestation-free commodities.

Indicator 1. Market share of certified commodities (palm, soy, paper, beef)

Indicator 2. Companies' and governments' support for the production of low deforestation, or deforestation-free commodities

These indicators are imperfect measures of progress toward meeting Goal 2 (see Annex for details), but can help monitor the direction of progress.

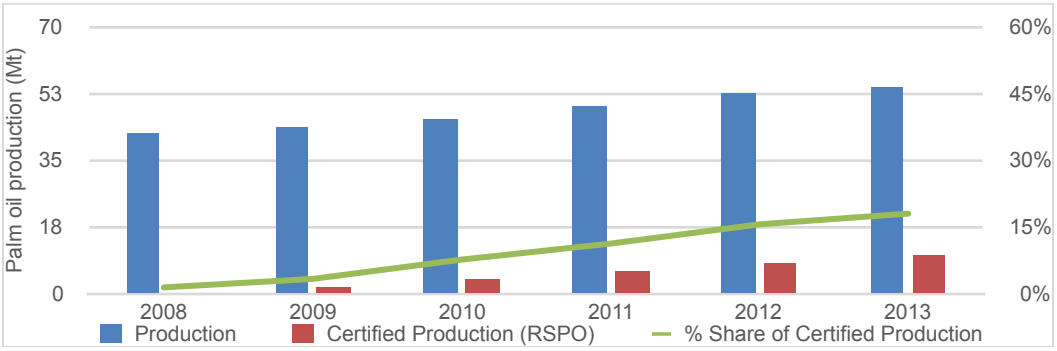
The market share of certified production varies considerably across the key commodities considered for this goal. Between 2008 and 2013, certified sustainable palm oil production increased from 0.6 to 9.8 Million tons (Mt), representing 18% of global palm oil production (see Figure 1). Most production is still uncertified in major producing countries, like Indonesia, Malaysia and Thailand.[8]

In contrast, the share of certified sustainable soybean production remained largely constant between 2008 and 2012 reaching a mere 2.1% of global soybean production by 2012. In the coming years, the Round Table on Responsible Soy expects a doubling in market share amongst its members.

According to the International Council of Forest and Paper Associations half of the total industry-managed forests supplying pulp for paper are certified. However, certification has largely plateaued since three quarters of the certified forest areas are in North America and Western Europe, unless more progress is made certifying the rest of the available wood supply which is mainly in developing countries or owned by individual landowners.

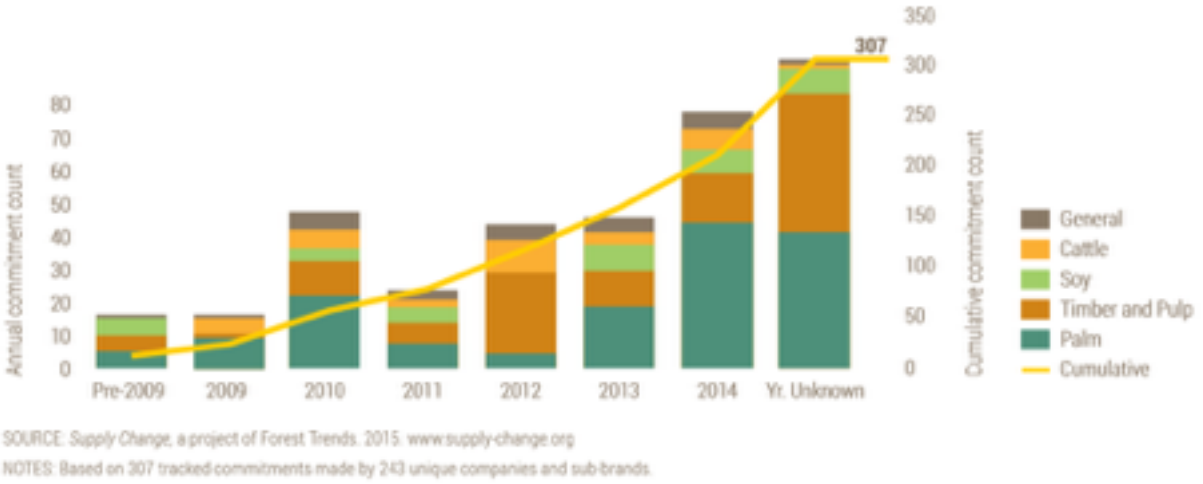
There is currently no global certification standard on sustainably produced beef with market share information. This leaves a monitoring gap in one of the major deforestation risk commodities.

Figure 1. Total and certified palm oil production, 2008-2012. Source: Climate Focus calculations based on data from FAO and the Roundtable on Sustainable Palm Oil, 2015. Production refers to the Global production of Palm Oil. Certified Production (RSPO) refers to the production that counts with a certification from the RSPO.



According to supplychain.org, the number of pledges made by individual corporations to reduce deforestation risk in their production, supply, and procurement of commodities has rapidly increased since 2009, from single digits to hundreds in September 2015 (see Figure 2).[9] However, the overall percentage of private sector actors in the major commodity supply chains that have made pledges to reduce deforestation remains low. When compared to companies from other sectors, financial institutions have made the least progress in supporting low deforestation or deforestation-free commodity production. Less than 20% of major investors have developed deforestation policies or made commodity specific pledges.[10]

Figure 2. Number of commitments to reduce deforestation. Source: Forest Trends, Supply-change.org, 2015.



SOURCE: *Supply Change*, a project of Forest Trends. 2015. www.supply-change.org

NOTES: Based on 307 tracked commitments made by 243 unique companies and sub-brands.

According to Forest 500, an initiative of the Global Canopy Programme, almost a quarter of the exporting and almost half of the importing countries have made public zero-deforestation commitments for one or more commodities (see Table 3). The initiative has assigned deforestation relevant policy scores (running from 0 to 100) to companies based on companies' revenue, governance structure, and membership in various sustainability initiatives. Companies' average policy scores across all commodities rank between 45 and 65 out of 100 points. Palm oil has the highest ranking (64.5), followed by beef (58.6), soy (55.9), and paper (48.2).[11] Conversely, The Sustainability Consortium[12] calculated Key Performance Indicators to evaluate the performance of commodity-specific deforestation commitments show that companies with sustainable paper pledges perform best, followed by companies with palm oil pledges, while those with beef pledges perform least well.

Table 3. Major exporting countries and sub-national jurisdictions with public deforestation pledges for commodity supply chains or exclusion of production in vulnerable forest landscapes. Source: Data provided by the Global Canopy Programme.

Actor	All Forest 500 powerbrokers		NY declaration signatories	
	Number	Percentage	Number	Percentage
National exporting jurisdiction (countries)	6 out of 25	24%	3 out of 7	43%
Sub-national exporting jurisdiction	2 out of 10	20%	0 out of 1	0%
National trading jurisdiction	7 out of 15	47%	2 out of 3	67%

Goal 3: Significantly reduce deforestation derived from other economic sectors by 2020

Goal 3 focuses on economic sectors other than agriculture. The most significant non-agricultural drivers of deforestation are infrastructure, human settlements, and mining, while logging is the most important driver of degradation.[13] Between 2000 and 2010, infrastructure

(construction of roads, railroads, pipelines, hydroelectric dams) and urban expansion (settlement expansion) were each responsible for 10% of all tropical forest loss, while mining accounted for 7% of all tropical deforestation.[14] During the same time period, timber extraction and logging accounted for approximately 52% of all tropical forest degradation, making them the main drivers of the total forest degradation (see Goal 10).[15]

Unfortunately, very few countries have disaggregated data that links deforestation spatially to particular drivers. The lack of such global data prevents any adequate measurement of aggregate deforestation from mining, timber, and infrastructure at this time. Given this absence of data, we do not define any indicators to track progress toward Goal 3, but rather highlight public and private sector activities that address these drivers and thereby reduce pressure on forests. The outlines of public policies and private sector led initiatives show action that has been or can be taken to support this Goal.

4 summarizes the different public and private sector led polices and activities which aim to address economic drivers of deforestation, other than agriculture.

Table 4. Public and private interventions addressing economic drivers of deforestation other than agriculture

Sector	Public	Private
Mining	• Fines, control of illegal mining, strengthening the mining approval process and improving mining practices • Integrated land-use planning • Protected area laws	• Initiatives that intend to reduce environmental and social impacts of mining through the promotion of responsible practices (e.g. Initiative for Responsible Mining Assurance (IRMA), Alliance for Responsible Mining (ARM) • Commodity-specific sustainable commitments
Infrastructure	• Environmental Impact Assessment (EIA) and the Strategic Environmental Impact Assessment (SEA) • Environmental, social and legal safeguards (e.g. World Bank's safeguards policies)	*[We do not consider private sector initiatives in infrastructure since it relies on public planning and policies covered in public policy interventions]*

Enhanced regulation and oversight can better control these drivers and, in some cases, reduce their impacts on forests. Examples of such approaches include (i) formalization of illegal activities- the Government of Peru is starting to control gold mining by introducing fines for illegal mining, strengthening its mining approval process and improving mining practices;[16] (ii) integrated land-use planning that reconciles mining development and forest conservation, - infrastructure development works associated with the Mbalam-Nabeba iron project uses an integrated land use process to take into account biodiversity and forest cover in Cameroon and the Republic of Congo;[17] (iii) designation of protected areas,- heightened protection of ecosystems is included in the Constitution of Colombia.

There is currently no certification scheme that sets standards for sustainable mining. However, the Initiative for Responsible Mining Assurance and the Alliance for Responsible Mining promote responsible practices that reduce environmental and social impacts of mining.

Public finance institutions have environmental, social and legal safeguards to ensure their financing operations do not cause environmental and social damage. The World Bank's safeguard policies, for example, require its lending be accompanied by environmental and social risk assessments and risk reduction plans. To tackle deforestation, the World Bank puts

forward operational principles explicitly addressing forests: e.g. no funding of projects which "would involve significant conversion or degradation of critical forest areas or related critical natural habitat"[18]; no financing of "natural forest harvesting or plantation development that would involve any conversion or degradation of critical forest areas or related critical natural habitats".[19]

In addition, Social and Environmental Impact Assessment (SEAs) are often mandated by donor agencies financing infrastructure. Adopting SEA requirements may have substantial impacts on countries' national laws. For instance, as of 2008, 24 Sub-Saharan borrower countries had SEA legislation, and the majority of them incorporated the provisions of World Bank operational policies.[20]

Goal 4: Support alternatives to deforestation driven by basic needs (such as subsistence farming and reliance on fuel wood for energy) in ways that alleviate poverty and promote sustainable and equitable development

Goal 4 promotes the reduction of forest loss by supporting economically sustainable alternatives to slash-and-burn farming and unsustainable harvesting of woodfuel from natural forests. Across tropical and subtropical countries in Africa, Asia and America, small scale and subsistence agriculture has been estimated as responsible for approximately 30% of deforestation, with fuelwood and charcoal responsible for approximately 25% of forest degradation.[21]

There is however no simple correlation between smallholder activities and forest loss, and the relationship between poverty and forest loss is not linear (see Annex). Poverty and low yielding production practices can drive forest loss by increasing the land footprint required for subsistence, but not always. Conversely, increasing wealth and returns on agricultural investment can drive forest loss by increasing the financial incentive and technological capacity to deforest. The focus of Goal 4 is not just avoiding forest loss associated with poverty, but also avoiding forest loss driven by unsustainable development pathways out of poverty.

There are no global datasets that quantify government, corporate, or civil society support for alternatives to deforestation driven by 'basic needs' hence our ability at present to monitor progress toward achievement of this goal is, overall, inadequate. The only relevant area we have identified where an adequate relevant metric is available is the growth in distribution of clean cookstoves that reduce woodfuel consumption. To monitor support for reducing the role of woodfuel harvesting as a driver of forest loss, we present the following two proxy indicators:

Indicator 1. Global distribution of clean cookstoves

Indicator 2. Financial investments in woodfuel interventions

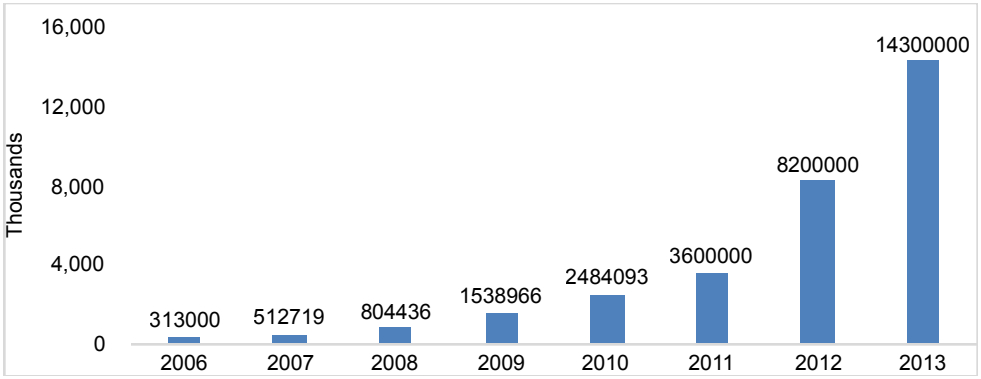
In countries where woodfuel consumption is driving forest degradation, clean cookstove programs can reduce pressure on forests, as well as improve family health by reducing their exposure to indoor smoke and pollution.

Woodfuel is any type of biofuel derived directly or indirectly from trees and shrubs grown on forest and non-forest land,[22] including firewood and charcoal. In many of the least developed countries, over 90% of households are reliant on woodfuel for cooking (WHO, Global Health

Observatory Data Repository). In some countries, estimated GHG emissions from woodfuel consumption are equivalent to, or even greater than, reported emissions from deforestation.[23]

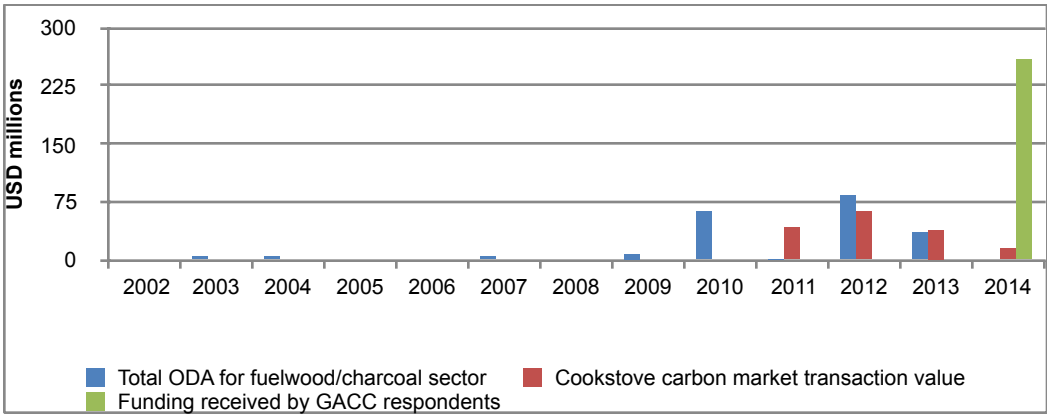
Our data analysis on the distribution of clean cookstoves (Figure 3) is limited to those countries where the link between woodfuel consumption and forest loss is well established. The Annex also identifies countries where subsistence and smallholder activities are correlated with high rates of forest loss, and includes some detailed case studies on specific interventions that aim to reduce poverty among smallholder farmers while successfully protecting the forest.

Figure 3: Estimated distribution of cookstoves worldwide reported by the Partnership for Clean Indoor Air (PCIA) and GACC partners. Source: Climate Focus graphics based on data provided by PCIA and GACC 2013



Finance for woodfuel interventions comes from a broad array of sources, including Official Development Assistance (ODA), carbon markets, as well as private investments. While measuring total finance flows is not straightforward, a number of data sources do indicate escalating sums. ODA directed to the woodfuel sector has increased from an annual average of USD 3.6 million between 2006 and 2009, to USD 47 million between 2010 and 2013. Data available from Ecosystem Marketplace indicates a ramping up of the value of carbon market transaction for cookstove projects between 2011 and 2012, with a fall back from 2013 to 2014.[24] Cookstove project developers, however, have reported far higher investments. According to a Global Alliance for Clean Cookstoves conducted market survey, cookstove project developers received approximately USD 260 million in 2014 (data provided by GACC). This figure includes ODA and carbon market flows but is significantly higher than figures for previous years.

Figure 4: Woodfuel intervention finance from multiple sources, 2002 to 2014, USD millions. Source: Climate Focus graphics based on data from OECD DAC, and that provided by the Global Alliance for Clean Cookstoves and Ecosystem Marketplace



A good example of an intervention to reduce the forest impact of smallholder activities in a country where poverty remains a major deforestation driver, is the coordinated effort between

In the Mai Ndombe region of the Democratic Republic of Congo (DRC), the main direct drivers of deforestation and forest degradation are currently slash and burn agriculture conducted largely by smallholder farmers, and charcoal production, largely to supply demand from the capital city of Kinshasa. Though forest loss from industrial plantations is currently low, studies have identified the high potential for oil palm development in the region, and its potential to encroach on high value forest (Semroc, 2015). At the same time, the absolute poverty rate in Mai Ndombe is high, and investment is needed to address acute development challenges.

A number of multilateral, World Bank led programs, have been planned for the region to address these challenges. These involve the Forest Investment Program (FIP), the Carbon Fund of the Forest Carbon Partnership Facility (FCPF), and the BioCarbon Fund. Taken together, these programs could represent an estimated USD 175.5 million investment, to be delivered between 2015 and 2020. Objectives supported by these programs include the following:

- Capacity building of institutions for sustainable land management. This involves strengthening local technical services, strengthening administrative and law enforcement capacity of decentralized agencies, and creating local development committees and other legally recognized bodies to enable communities to better manage and control land over which they exercise customary control;
- Investment in physical infrastructure. This involves improving roads, bridges and other transport infrastructure, as well as improving processing and storage facilities for agricultural products;
- Promotion of sustainable agricultural and charcoal production practices. This involves developing perennial crops (e.g., coffee, cacao, rubber and palm oil) in degraded forest areas as an alternative to slash and burn agriculture;
- Support for family planning strategies, This involves increasing access to and use of effective contraceptives by men and women; and
- Support for private sector to investment in emission reducing activities. This involves subsidizing both the production of deforestation-free commodities and wood energy products, and the generation of verified emission reductions through the protection of high risk forest.

the main multilateral REDD+ funds to reduce forest loss in the Mai Ndombe region of the Democratic Republic of Congo (see Box 1).

Box 1: Tackling drivers of forest loss in Mai Ndombe, DRC

Goal 5 Restore 150 million hectares of degraded landscapes and forestlands by 2020 and significantly increase the rate of global restoration thereafter, which would restore at least an additional 200 million hectares by 2030

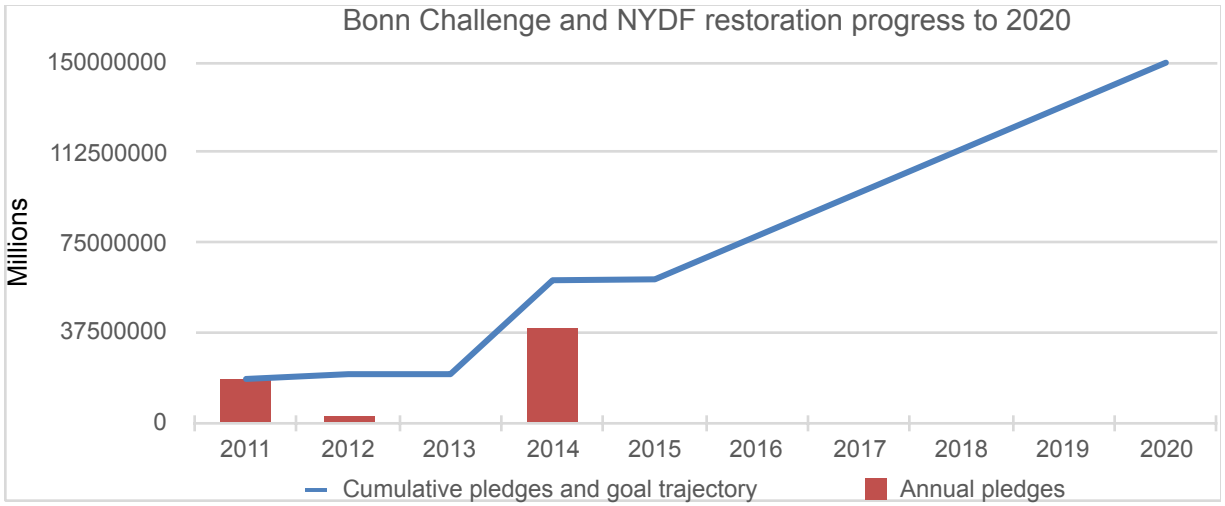
Goal 5 adopts the Bonn Challenge target set in 2011 of restoring150 million hectares of forest by 2020, and extends it to restore an additional 200 million hectares by 2030. Together, these initiatives represent a 'goal continuum' of 350 million hectares. A methodology for tracking progress toward these goals is under development by the International Union for the Conservation of Nature (IUCN) as part of the Bonn Challenge, and its release is expected shortly. Implementation of Goal 5 can be monitored once that methodology becomes available. In the meantime, the number of restoration pledges made under the Bonn Challenge is used as an imperfect proxy to signal progress, although as yet, implementation of pledges cannot be tracked.

Indicator. Forest restoration pledges under the Bonn Challenge

Under the Bonn Challenge, forest landscape restoration is defined as "the long-term process of regaining ecological functionality and enhancing human well-being across deforested or degraded forest landscapes." Pledges made include activities such as: restoration on forest lands (including planted forests, natural regeneration, or silvicultural enhancement); restoration on agricultural lands (including agroforestry and improved fallows); and restoration on protective land and buffers (including mangrove restoration, watershed protection, and erosion control).[25] IUCN and the World Resources Institute (WRI) have developed a Restoration Opportunities Assessment Methodology (ROAM), and are currently implementing country assessments to help identify where restoration activities should take place.

Figure 5 displays the size of the Bonn Challenge pledges and the year they were made. Since 2011, 9 countries, 2 sub-national regions, and 1 multinational region have pledged to restore 59.58 million ha of forests under the Bonn Challenge—equal to 40% of the 150 million ha 2020 restoration target. While the number and size of pledges have increased over time, they have been clustered around major, multi-stakeholder commitments, primarily the start of the Bonn Challenge in 2011 and the NYDF in 2014. Further pledges to the Bonn Challenge and NYDF will need to be made at a faster rate to meet the remaining 60% of the restoration target by 2020.

Figure 5: Current status of Bonn Challenge pledges relative to the 2020 target to have 150 million ha under restoration pledges by 2020.



Goal 6: Include ambitious, quantitative forest conservation and restoration targets for 2030 in the post-2015 global development framework, as part of new international sustainable development goals

The Sustainable Development Goals (SDGs) were adopted on September 25th, 2015, and replace and amend the Millennium Development Goals, which expire in 2015. Currently, indicators to monitor implementation and report on progress toward meeting the SDGs and related targets are under development by an Inter-Agency and Expert Group. Pending completion of the work of this group, we assess the extent to which NYDF Goal 6 is reflected in the SDGs based on two indicators:

Indicator 1. Inclusion of an ambitious, quantitative 2030 target for forest conservation in the SDGs

Indicator 2. Inclusion of an ambitious, quantitative 2030 target for forest restoration in the SDGs

SDG 15 aims to:

> Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

Two of the nine targets under SDG 15 relevant to the NYDF are Targets 15.1 and 15.2:

> Target 15.1
>
> By 2020, ensure the conservation, restoration, and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains, and drylands, in line with obligations under international agreements.
>
> Target 15.2

> By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests, and substantially increase afforestation and reforestation globally.

'Halt deforestation' by 2020 in Target 15.2 is a forest conservation target. It is quantitative and seeks to reduce global deforestation to zero by 2020. This would require rapid success in reducing deforestation. It is more ambitious than the target under the NYDF Goal 1, which aims to halve deforestation in natural forests by 2020, and represents a significant increase in ambition from earlier SDG proposals to halt deforestation by 2030.

In contrast, the SDG sub-targets on the restoration of degraded forests and for "substantially" increasing reforestation are not quantitative targets. A placeholder for a quantifiable target ('increase reforestation by [x]%') was in all iterations of the draft text from initial proposals made in July 2014 up to the final stage of the negotiations in July 2015. The absence of quantifiable targets for forest restoration and reforestation signals a significant lack of ambition considering other global targets (NYDF, Bonn Challenge and Aichi Targets) all include quantifiable targets on forest restoration.

Goal 7: Agree in 2015 to reduce emissions from deforestation and forest degradation as part of a post-2020 global climate agreement, in accordance with internationally agreed rules and consistent with the goal of not exceeding 2°C warming

Goal 7 aims for the inclusion of forest-related mitigation measures in a post-2020 global climate agreement, the draft text of which is still subject to intense negotiations but expected to be completed in Paris in December 2015. This so-called Paris Agreement is expected to be high-level in nature, build on existing decisions of the UN Framework Convention on Climate Change (UNFCCC), and to be accompanied by bottom-up commitments of countries to domestic mitigation efforts (communicated through Nationally Determined Contributions, or NDCs).

We have chosen two indicators that assess whether and to what extent a Paris Agreement provides a framework that promotes a reduction of emissions from deforestation and forest degradation (REDD+). These indicators describe three complementary elements – a high-level agreement to address land-use, specific mitigation targets and an operational framework – that we consider would collectively amount to a successful agreement on land-use sector mitigation within the Paris Agreement.

Indicator 1. References to land use (including REDD+) in the Paris Agreement text

Indicator 2. References to land use (including REDD+) in submitted intended NDCs

We have further reviewed progress towards the finalization of an operational framework in support of REDD+.

Throughout 2015, various versions of the negotiating text have included proposals for the inclusion of the land use sector, including in the preamble and in the context of accounting rules and market mechanisms.[26] At present, the overall structure and substance of the agreement is intensely debated, and major changes to the text can be expected in Paris. While the final text may contain references to the land-use or forest sector, Parties may settle the main

implementation questions in later decisions of the Conference of the Parties, e.g. principles of accounting for land-use emissions. The latest version of the negotiation text outlining the structure of a Paris Agreement does not include any reference to REDD+, forests, or land use beyond a general reference to consider forests in the allocation of climate finance.[27] Hence, it is unlikely that the main agreement will include more than a high-level reference to forests.

With respect to the operational framework for REDD+, the Subsidiary Body for Scientific and Technological Advice adopted three new methodological decisions on REDD+ in 2015, essentially completing the REDD+ methodological framework. The Green Climate Fund is, however, still in the process of completing its modalities for defining how it would make results-based payments for REDD+. It is as yet not yet clear if Parties will formally recognize existing UN Framework decisions in the text of the Paris Agreement, a move that would clarify the continuity and validity of these decisions.

By October 2015, 122 countries have submitted intended NDCs and so, while more are likely to come and existing INDCs may be changed before a new international climate change agreement is reached, some initial assessment is already possible. Forty Parties have included specific actions on forests and land-use in their intended NDCs, which are framed in a wide variety of ways, with a majority of the remainder having submitted economy-wide targets. The content of these targets varies widely, from specific emission reduction targets to reductions in deforestation, increases in forest cover or increasing the share of protected areas. A large number of these do not specify an additional target, but rather state the proportion of their overall emission reductions that they intend to achieve through the land-use sector. Some 18 countries have, in addition, specifically excluded the land-use and/or forest sectors from their target

Goal 8: Provide support for the development and implementation of strategies to reduce forest emissions

We understand NYDF Goal 8 to commit signatories to provide financial and other support for efforts to reduce forest emissions, whether through policies, laws and government programs, or private sector initiatives, efforts of local communities and indigenous peoples or local projects. Such broad interpretation of the Goal reflects the diversity of signatories to the NYDF and the range of their capacities to deliver on this Goal.

There is some overlap between NYDF Goal 8 and several other NYDF Goals, and we have therefore made some effort to avoid double-counting by excluding financial support for payments for Verified Emissions Reductions, which is covered by Goal 9.

Within that context, we present here three proxy indicators for monitoring such support, recognizing that some overlap with other NYDF Goals may still remain:

Indicator 1. Climate relevant Official Development Assistance for forests committed by OECD donor countries and multilateral institutions

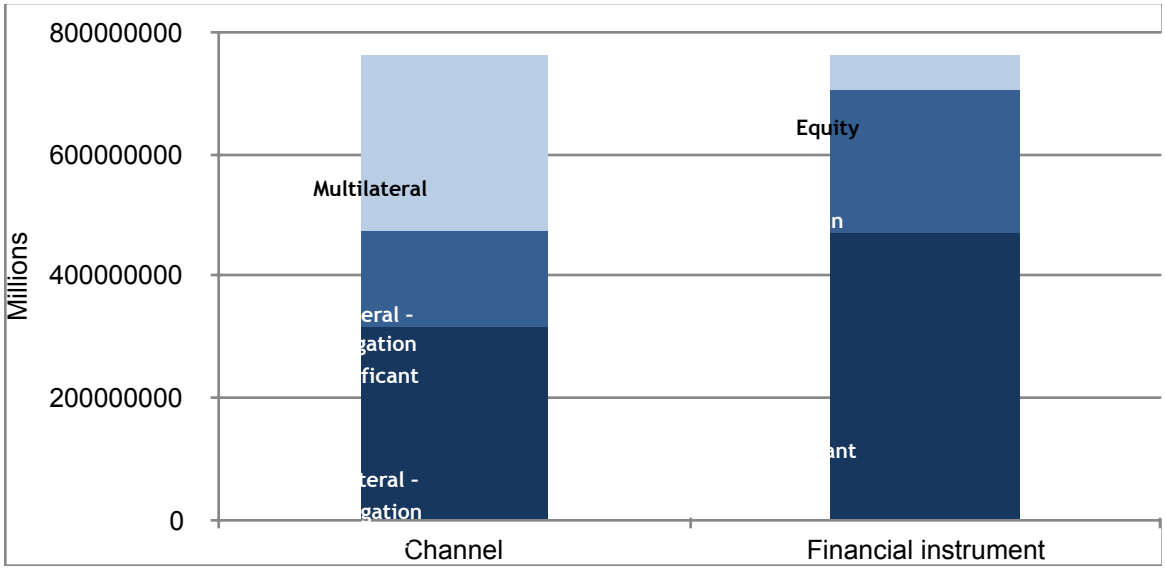
Indicator 2. Domestic public spending in NYDF signatory countries that includes intent to reduce forest emissions

Indicator 3. Private (for profit, not-for-profit) support for strategies to reduce forest emissions

In addition, we have looked at South-South cooperation in support of forest protection, contributions by indigenous peoples, and contributions by non-governmental organizations (NGOs). These are presented in more detail in the Annex.

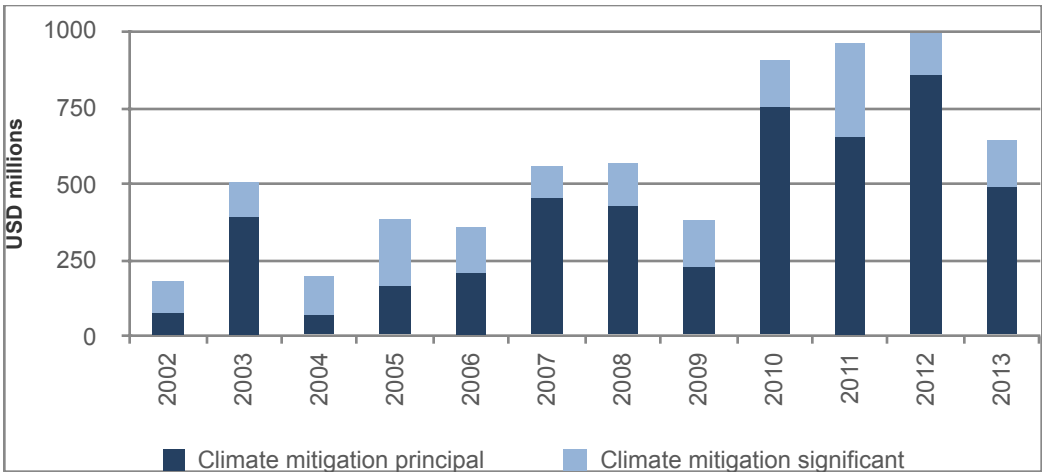
In 2013, the OECD Development Assistance Committee presented for the first time an integrated picture of bilateral and multilateral commitments of climate relevant ODA.[28] This reveals that in 2013, bilateral and multilateral climate mitigation forestry ODA was USD 763.5 million (excluding results-based payments for REDD+). The majority (62%) came from bilateral sources, and the majority (also 62%) was reported as a grant (see Figure 5).

Figure 5: Total bilateral and multilateral ODA to all developing countries committed to the forestry sector in 2013 with climate mitigation as a principal or significant objective, excluding REDD+ results based payments, in USD millions, broken down into channel and financial instrument. Source: Climate Focus calculations based on OECD-DAC, Climate Related Development Finance for 2013.



From 2002 to 2013, though varying significantly from year to year, bilateral ODA for reducing forest emissions in developing countries increased from USD 182 million in 2002 to USD 649 million in 2013 after reaching a peak of USD 993 in 2012, coinciding with the end of the fast-start finance period (see Figure 6).[29] Indications are that 2014 commitments were the largest to date, though this has yet to be captured in OECD DAC reported figures.

Figure 6: Total bilateral ODA to reduce forest emissions, committed to all developing countries from 2002 to 2013. Broken into ODA for which climate mitigation was a principal objective, or a significant objective, in constant USD millions (2013 value). Source: Climate Focus calculations based on OECD DAC dataset: Aid Activities targeting Global Environmental Objectives



While no global data set reports relevant domestic public spending, there is evidence of increased spending on forest management in the United States and Europe. Domestic public spending on forest conservation in developing countries is significant and in a number of important cases, very large compared to that received from international sources (see Annex for details).

Impact investments in forest conservation and the production of sustainable forest-related commodities, while still relatively small, are growing. Large investors, including major international banks and sovereign wealth funds, are developing sustainable investment policies that may reduce emissions from deforestation, although these policies are still aspirational, and their impact is, as yet, difficult to assess. NGOs and indigenous peoples also make significant contributions toward strategies to reduce deforestation. Between 2007 and 2013, four international NGOs contributed an estimated USD 100 million towards reducing deforestation in the Amazon Basin (see Annex for details).[30]

Goal 9: Reward countries and jurisdictions that, by taking action, reduce forest emissions —particularly through public and private scaled-up payments for verified emission reductions

Goal 9 encourages signatories to put in place financial incentives that reward tropical forest countries and jurisdictions through payments, especially for verified emission reductions (VERs) from forests. Over the past decade, a range of approaches to making private and public payments for ecosystem services have been developed. Payments for VERs is one type where, it is typically assumed that forest emissions reductions, measured against a baseline or reference level, will ultimately qualify for payment. There is a small but growing body of experience with payments for VERs as part of REDD+ result-based payment schemes, including Norway's bilateral partnerships with Brazil, Indonesia, and Guyana, as well as the

German REDD+ Early Movers Program. There is also private sector interest in rewarding VERs through carbon markets.

We propose two indicators to track progress on Goal 9:

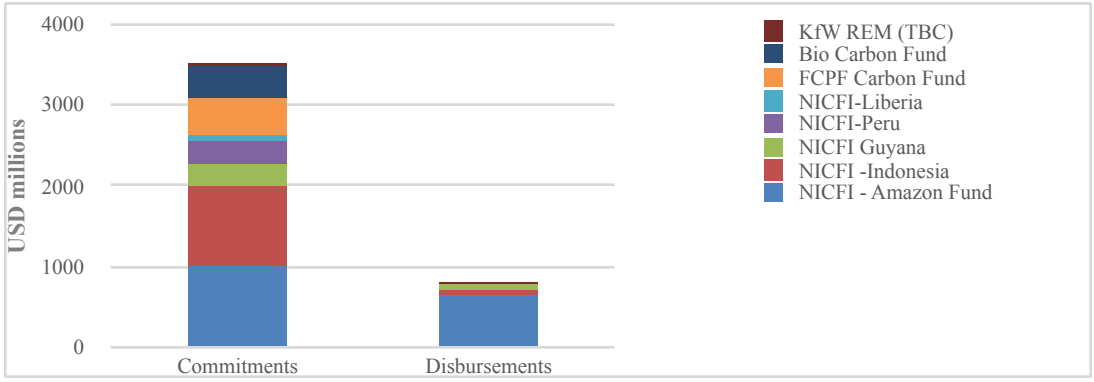
Indicator 1. International payments for VERs disbursed through multilateral and bilateral funds and public programs

Indicator 2. The value of purchases of forest VERs through voluntary and compliance markets

Between 2008 and 2014, a number of bilateral and multilateral results-based programs for reducing forest emissions were established, with over USD 3 billion committed (see Figure 7). These have been funded, to a large extent, through Norway's International Climate and Forests Initiative, although Germany, the UK, and other donor countries have also made significant contributions. Norway's contribution to Brazil's Amazon Fund is a preeminent example of performance-based payments for avoided deforestation (see Box 2).

Disbursements to payment for performance schemes, at just under USD 1 billion, have generally lagged behind donors' financial commitments. This has been due, in part, to constraints in the capacity of some tropical forest countries to satisfy the administrative requirements of funds, or to actually implement effective programs that reduce emissions from deforestation and forest degradation. In some cases, internal procedures of donor have also delayed disbursements.

Figure 7: Commitments to and disbursements from international payment for performance funds as of 2014 in USD millions.



Box 2: The Amazon Fund

Indicator 2. Between 2005 and 2008, the value of the forest carbon market expanded steadily from USD 8 million to USD 32 million (see Figure 8). The market then expanded rapidly up to 2011, climbing to USD 237 million over three years, representing an average annual growth of 90%. This was driven primarily by an increase in the size of the voluntary carbon market, which in 2011 represented 73% of the forest carbon market. However, this increase has not continued

The Norwegian Government, through its International Climate Forest Initiative (NICFI), committed to provide up to USD 1 billion by 2015 for avoided forest emissions, at USD 5 per tonne. Transfers are formalized in donation agreements between the government of Norway and BNDES, the state owned Brazilian development bank. At the time of writing, almost USD1 biillion has been disbursed by NICFI, with the German development bank KfW and Petróleo Brasileiro S.A., a.k.a. Petrobras, a majority state owned oil and gas company, also providing minor contributions.

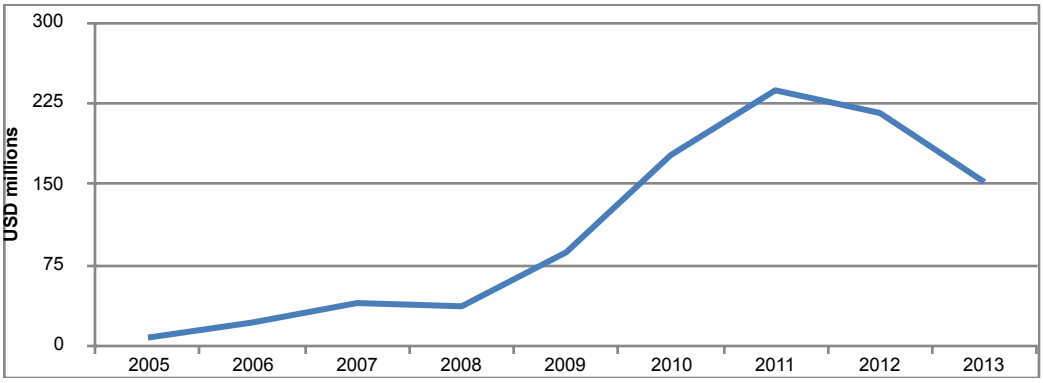
Data source: Donations listed on Amazon Fund website

Brazil has responsibility for measuring, reporting and verifying avoided emissions, which are estimated by the Ministry of Environment and are based on data supplied by the National Institute for Space Research and the Brazilian Forest Service. Emission reductions are calculated as the difference between the historical average rate of deforestation and the deforested area measured in the relevant year, multiplied by the amount of carbon present in the biomass in tonnes of carbon per hectare (the emission factor). Annual deforestation rates are compared with the average deforestation rates for 10-year periods, and are updated every five years.

Under the Amazon Fund, there is no transfer of title to an emission reduction. Rather, BNDES issues non-transferable, nominal diplomas in exchange for donations. Though the Amazon Fund receives international support on a payment for performance basis, it disburses 'input' based grants to forestry projects for activities including sustainable forest management and biodiversity conservation.

to 2013, when the value of the forest carbon market fell back to approximately USD 150 million.[31]

Figure 8: Size of the forest carbon market from 2005 to 2013 in value (USD millions). Source: Climate Focus calculations with data provided by Forest Trends State of the Forest Carbon Market 2014 (excluding REM payments, which are recorded under Indicator 1)



Greater market demand for forest VERs will require the integration of forest carbon credits into emissions trading systems, which will encourage entities covered under an Emission Trading System to purchase credits as offsets. However, market-based systems such as the Clean Development Mechanism (CDM) and the European Emission Trading System have restricted the generation and use of forest carbon credits due to concerns over the permanence of emission reductions represented by forestry activities, and the potential for an oversupply of REDD+ credits to remove incentives for other offset projects. Though California's Cap-and-Trade Program does not currently allow for the use of international forest offsets, this may change in the future. Similarly the International Civil Aviation Association may provide opportunities for airlines to use forest VERs to offset airline emissions.

Goal 10: Strengthen forest governance, transparency and the rule of law, while also empowering communities and recognizing the rights of indigenous peoples, especially those pertaining to their lands and resources

Goal 10 draws attention to the need for improving forest governance. Particular focus is given to transparency, rule of law, community empowerment, and indigenous peoples' rights – especially their rights to land and resources.

Forest governance is an encompassing concept that includes transparency and rule of law. Community empowerment and the land and forest tenure rights of local communities can also be considered as one of the component elements of forest governance. Recognition of these rights can often lead to better governance overall, for example through enabling community law enforcement and through solving disputes through legal processes of rights recognition.

Given the complex nature of this goal, efforts to monitor it are bound to be imperfect. For the purposes of this assessment, we have chosen three proxy indicators for which some relevant data are available:

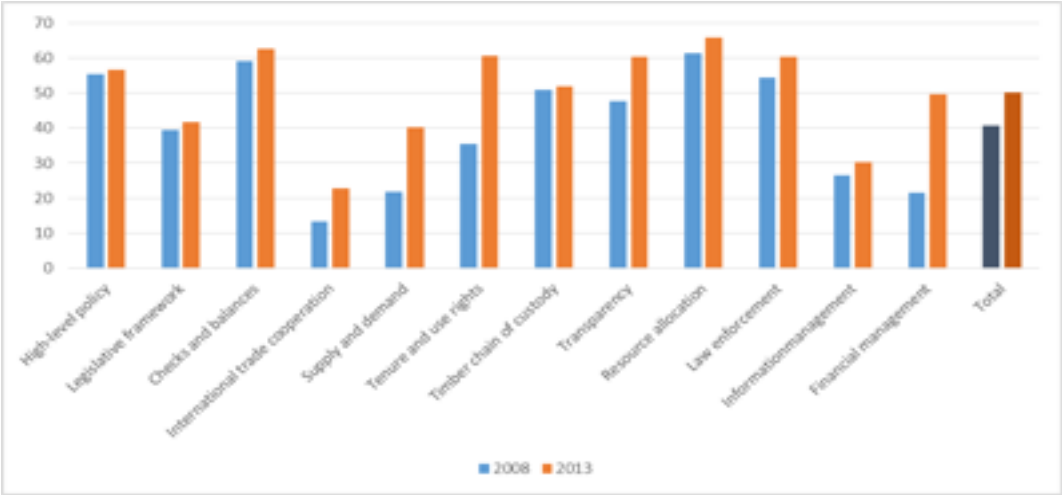
Indicator 1. Improvement of forest governance through the strengthening of institutions and policies

Indicator 2. Extension and strengthening the rule of law, as indicated by illegal logging as percentage of total logging, the quantity of imports of timber with high risks of illegality and the number of killings related to land disputes

Indicator 3. Recognition of indigenous peoples' and local communities' rights to land and forest resources.

Many countries have made progress in strengthening institutions and policies related to forest governance.[32] The governance frameworks across five timber producing countries (Brazil, Cameroon, Ghana, Indonesia and Malaysia), measured in policy scores by Chatham House, experienced – on average – notable overall progress between 2008 and 2013 (Figure 13), though levels of improvement vary substantially between countries. The strength of demand-side policy frameworks governing the timber trade across the seven consumer and processor countries (China, France, Japan, the Netherlands, UK, US, Vietnam) also increased (Figure 9).

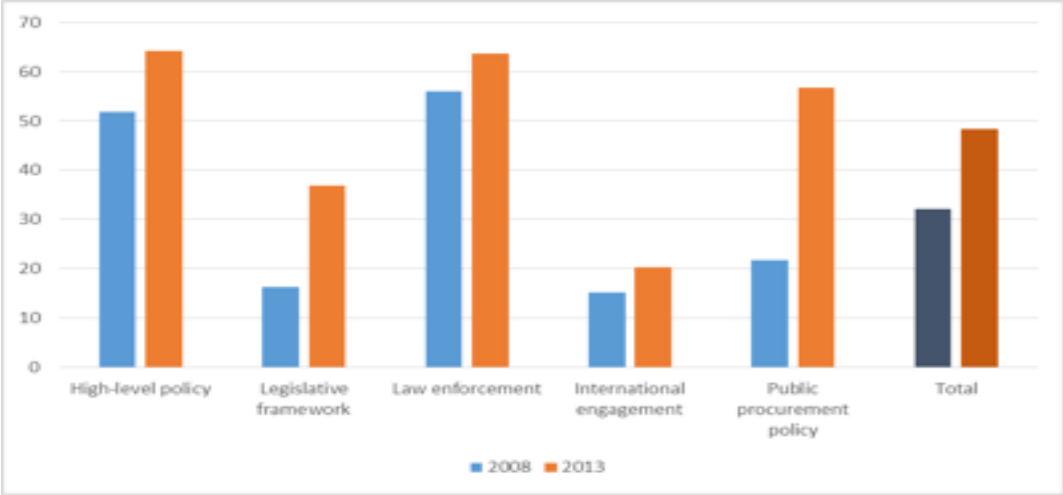
Figure 9. Weighted average policy scores across five producer countries in 2008 and 2013. Climate Focus calculations based on data provided by Chatham House.



Average scores have increased across all policy areas, with particular progress achieved in policies to ensure greater matching of (legal) supply and demand, and to strengthen tenure and use rights and financial management regimes. Substantial gains have also been made in increasing transparency. Efforts toward international trade cooperation, while still nascent, have also seen notable improvement, in large part through the development of systems under the EU Forest Law Enforcement Governance and Trade (FLEGT) bilateral Voluntary Partnership Agreements. In other areas progress has been relatively limited, and in several countries policy frameworks in several areas have weakened over time.

Looking at specific policy areas by far the most notable gain was made in public procurement policy, in large part explained by measures by China – which in 2013 accounted for 50.4% of all wood imports – and where no procurement policy was in place in 2008. The substantial improvement in legislative frameworks, in contrast, reflects broad improvements across almost all consumer and processor countries, with the exception of China, where legislation to address illegal imports is largely absent.

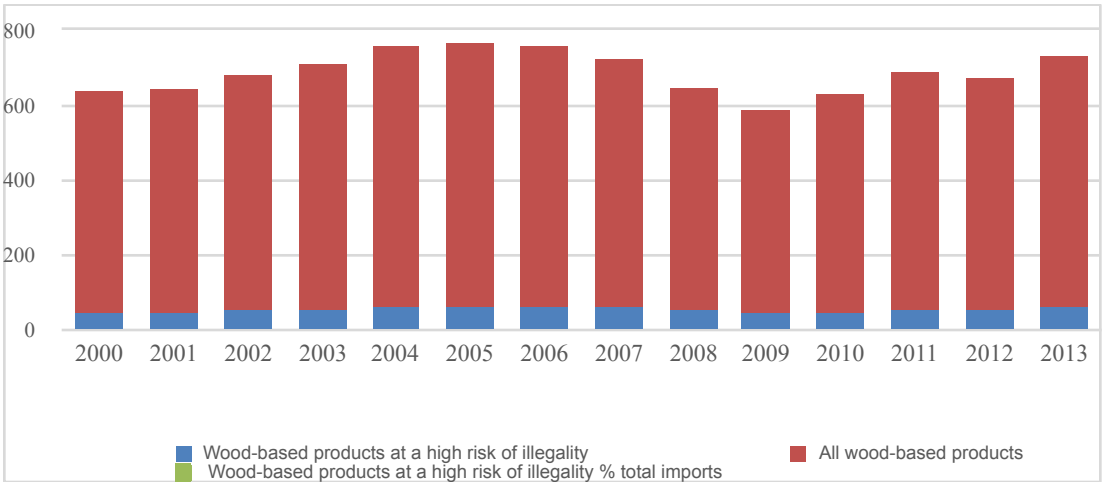
Figure 10. Weighted average policy scores across seven consumer and processor countries in 2008 and 2013. Source: Climate Focus calculations based on data provided by Chatham House



Though it is not possible to accurately quantify international finance flowing toward forest governance and tenure, indicative evidence shows that, since 2002, the number of bilateral and multilateral programs that explicitly fund the improvement of forest governance and land rights has increased significantly. The emerging importance of REDD+ finance has further increased attention being paid to governance and tenure issues. A substantial portion of finance dedicated to funding national Readiness Preparation Programs – including USD 360 million under the Readiness Fund of the Forest Carbon Partnership Facility and substantial co-financing from the UN-REDD Program and other donors – has been channeled toward governance, typically 16-20% of national readiness budgets. The World Bank's Forest Investment Program has established a USD 50 million Dedicated Grant Mechanism for Indigenous Peoples and Local Communities to support their participation in the FIP, while an International Land and Forest Tenure Facility established by the Rights and Resources Initiative in 2015 aims at a budget of USD 20-50 million/year for the next five years to unlock financing for land rights, though at present it has only raised a fraction of this amount.

According to Chatham House, the proportion of imports of wood-based products at high risk of illegality has fluctuated <0.5% in the decade between 2003 and 2013 (Figure 11).

Figure 11. Levels of overall imports and imports at a high risk of illegality into the 10 importing countries, expressed in terms of million m^3 of RWE and in percentages. Source: Climate Focus calculation based on data provided by Chatham House.



Introducing greater control over the timber trade and banning the import of illegally harvested wood can reduce the level of imports associated with deforestation. The United States, the European Union and Australia introduced import bans for illegal timber and timber products in 2008, 2010 and 2012 respectively. The US Lacey Act, the EU Timber Regulation and the Australian Illegal Logging Prohibition Act require operators to exercise due diligence in not placing illegally harvested timber or timber products on the market. Policies like the EU's FLEGT Action Plan also focus on reducing deforestation in exporting countries. FLEGT is the largest global initiative to support sustainable timber production, creating Voluntary Partnership Agreements with timber producing countries, and it is a key complement to the EU Timber Regulation. Revision of procurement rules by governments may also prevent tropical forest loss. According to a UN study, 56 countries had adopted laws on green public procurement by 2012, including Brazil and China (see Table 5).[33]

Table 5 Public and private interventions addressing illegality and forest degradation

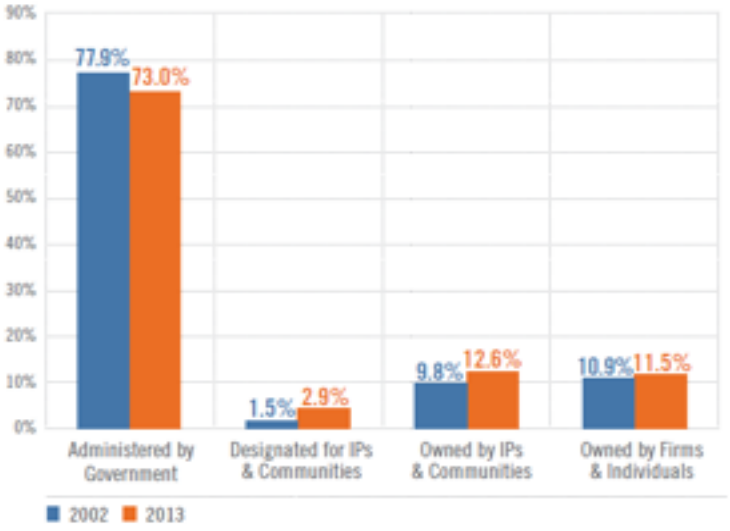
Sector	Public	Private
Timber and Logging	• Import bans for illegal timber and timber products: US Lacey Act, EU Timber Regulations, and Australian Illegal Logging Prohibition Act. • Policies focusing reducing deforestation in exporting countries (EU's FLEGT) • Revision of procurement rules (e.g. EU's Public Procurement Directive	• Voluntary certification schemes and voluntary sustainability pledges (e.g. FSC and PEFC) • Voluntary sustainability commitments by companies on deforestation-free timber and other wood products (e.g. IKEA)

As a direct index of forest governance, few metrics are more tangible than the incidence of violence related to conflicts over land and resources.[34] From 2010-2014 at least 523 activists working on land/resource conflicts were murdered.[35] There is no clear trend in the annual data, which very likely under reports the extent of the violence (see Annex for details).

The share of the proportion of total forests over which indigenous people and local communities have recognized rights increased 38% over the period 2002-2013. The vast majority of forest lands with rights recognized for indigenous peoples and local communities are in low and middle income countries, where such rights exist over 30.1% of forest land. While this share has increased from 21.2% in 2002, the rate of recognition has slowed dramatically since 2008, with less than half the area recognized between 2008 and 2013 compared with 2002-2008.

Figure 12 compares the percentage of land area falling under the respective ownership categories identified by the Rights and Resources Initiative in 40 countries for which data is available for both 2002 and 2013.[36] It shows that, while the proportion of total forests over which indigenous peoples and local communities have recognized rights remains relatively small at 15.51%, the share has increased by a third over the period 2002-2013.

Figure 12 Global change in statutory forest land tenure 2002-2013, by percent. Source: RRI, 2014a.



Conclusions

One year after the adoption of the NYDF, it is to soon to assess on-the ground progress made by signatories in working towards the goals. In the last year however many important new initiatives have been launched, pledges have been made, and programs started. It will take months, sometimes years before these initiatives translate into measurable progress. They are however important first steps towards achieving the NYDF goals.

It is also remarkable that action has been taken across all sectors and geographies. Governments work towards strengthening forest governance and supporting REDD+ strategies (through payment for VERs or otherwise). An increasing number of private sector actors has started to promote sustainability across their supply chains, and civil society works across all goals in support of Governments and private actors. Action has also been seen among developed as well as developing countries and across all continents.

Overall, we conclude that, across the diverse set of goals, the data are mostly trending in the right direction. Yet, more needs to be done. Table 6 summarizes the progress assessed against the listed indicators. It shows that important challenges that will need to be overcome if the

promise of the NYDF is to be delivered. It will require a major cooperative effort among all endorsers of the NYDF to reach the ultimate target of eliminating the loss of natural forests while protecting forest biodiversity and ensuring sustainable development for indigenous and local communities.

There is a strong upward trend in private and public sector policies that support eliminating deforestation from agricultural commodity production, though efforts to track implementation are less well-developed.

Table 6: NYDF goals summary [WILL BE CONVERTED INTO A GRAPH]

Goal		Indicator	Results
1	Achieve a 50% or greater reduction in the annual loss of natural forests globally by 2020 and strive to end natural forest loss by 2030	Annual gross forest/tree cover	The rate of net natural forest loss is largely on a trajectory for meeting the milestone of halving natural forest loss by 2020 (FAO 2015).
		Annual net natural forest/tree cover change	Gross forest loss as estimated by the GWF/Hansen data remains a signifant problem and is not on track.
2	Support and help meet the private-sector goal of eliminating deforestation from the production of agricultural commodities such as palm oil, soy, paper and beef products by no later than 2020, recognizing that many companies have even more ambitious targets	The market share of certified sustainable commodities in palm oil, soy, paper and beef	Palm Oil: A significant increase between 2008 and 2013 from 3.4% to 18% In the same period, the market share for certified soy and paper remained stable, albeit on very levels: soy around 2%, paper around 50%. There are no reliable data on sustainably produced beef.
		Support for the production of low deforestation, or deforestation-free commodities by companies and governments	From 2009 to 2015, the number of pledges made by corporations to reduce the deforestation risk in the production, supply, and procurement of commodities has risen from single digits to above 300, among those recorded by supplychain.org. The overall percentage remains however low. According to Forest 500, almost a quarter of the exporting and almost half of the importing countries have made public zero-deforestation commitments for one or more commodities.
3	Significantly reduce deforestation derived from other economic sectors by 2020	No indicators, given weakness of data. Provide examples from mining and infrastructure sectors	Example presented of sustainable mining initiatives in Peru. Discussion of social and environmental impact assessment requirement for publicly financed infrastructure development.
4	Support alternatives to deforestation driven by basic needs (such as subsistence farming and reliance on fuel wood for energy) in ways that alleviate poverty and promote sustainable and equitable development	No robust indicators, given absence of data. Proxy indicator on fuel wood: global distribution of clean cookstoves	From 2006 to 2013 cookstove distribution has increased from 313 thousand cookstoves, to 14.3 million cookstoves annually.
		Financial investments in woodfuel interventions	Financing has increased from an annual average of USD 3.6 million between 2006 and 2009, to USD 47 million between 2010 and 2013, with USD 260 million reported for 2014.

5	Restore 150 million hectares of degraded landscapes and forestlands by 2020 and significantly increase the rate of global restoration thereafter, which would restore at least an additional 200 million hectares by 2030	Restoration pledges under the Bonn Challenge	Since 2011, 9 countries, 2 sub-national regions, and 1 multinational region have pledged to restore 59.58 million ha of forests under the Bonn Challenge—equal to 40% of the 150 million ha 2020 restoration target. Future pledges to the Bonn Challenge and NYDF made between 2016 and 2020 will need to be made at a faster rate to meet the remaining 60%.
6	Include ambitious, quantitative forest conservation and restoration targets for 2030 in the post-2015 global development framework, as part of new international sustainable development goals	Inclusion into the SDGs of an ambitious, quantitative 2030 target for forest conservation	The mandate to 'halt deforestation' by 2020 in Target 15.2 of the adopted SDGs is ambitious and quantitative.
		Inclusion into the SDGs of an ambitious, quantitative 2030 target for forest restoration	The sub-target on the restoration of degraded forests in the adopted SDGs cannot be considered ambitious or quantitative.
7	Agree in 2015 to reduce emissions from deforestation and forest degradation as part of a post-2020 global climate agreement, in accordance with internationally agreed rules and consistent with the goal of not exceeding 2°C warming	References to land use or REDD+ in the agreement text	Too early to say, though unlikely that the main agreement will include more than a high-level reference to forests.
		References to land use or REDD+ in submitted intended NDCs	Of 122 countries to have submitted intended nationally determined contributions by October 2015, 40 have included specific actions on forests and land-use in their intended NDCs, which are framed in a wide variety of ways, and 18 have excluded the land-use and/or forest sectors from their target.
8	Provide support for the development and implementation of strategies to reduce forest emissions	Climate relevant Official Development Assistance for forestry committed by OECD donor countries and multilateral institutions	In 2013, bilateral and multilateral climate mitigation forestry ODA was USD 763.5 million (excluding results-based payments for REDD+). From 2002 to 2013, bilateral ODA has increased from USD 182 million to USD 649 million in 2013 after reaching a peak of USD 993 in 2012. Early indications are that 2014 commitments were the largest to date.
		Domestic public spending in NYDF signatory countries that includes an intent to reduce forest emissions	No reliable data across countries. There is evidence of increased spending on forest management in the United States and Europe. Domestic public spending on forest conservation in developing countries is significant compared to that received from international sources.
		Private (for profit, non-for-profit) support for strategies to reduce forest emissions	No reliable data. Evidence that impact investments are growing. Large investors, including major international banks and sovereign wealth funds are developing sustainable investment policies (though largely aspirational). NGOs and indigenous people organizations also make significant own contributions.

9	Reward countries and jurisdictions that, by taking action, reduce forest emissions —particularly through public and private scales-up payments for verified emission reductions	International payments for verified emission reductions disbursed through multilateral and bilateral funds and public programs	Between 2008 and 2014, over USD 3 billion committed. Disbursements, at just under USD 1 billion, have lagged behind commitments.
		The value of purchases of forest emission reductions through voluntary and compliance markets	Between 2005 and 2008, the value of the forest carbon market expanded from USD 8 million to USD 32 million . The market then expanded rapidly up to 2011, climbing to USD 237 million by 2012. In 2013, the forest carbon market fell back to approximately USD 150 million.
10	Strengthen forest governance, transparency and the rule of law, while also empowering communities and recognizing the rights of indigenous peoples, especially those pertaining to their lands and resources	Improvement of forest governance through the strengthening of institutions and policies	Average scores (provided by Chatham House) have increased across all policy areas, with particular progress achieved in policies to ensure greater matching of (legal) supply and demand, and to strengthen tenure and use rights and financial management regimes. Since 2002, the number of bilateral and multilateral programs that explicitly fund the improvement of forest governance and land rights has increased significantly.
		Extension and strengthening the rule of law, as indicated by illegal logging as percentage of total logging, the quantity of imports of timber with high risks of illegality and the number of killings related to land disputes	The level of imports of wood-based products at high risk of illegality has remained relatively constant. The proportion of (likely) illegal imports remained relatively stable between 2000 and 2013. From 2010-2014 523 persons were recorded as murdered in a case with a clear and documented link to a forest or land issue. This is likely to be a large underestimate.
		Empowerment of indigenous communities through recognition of land and forest rights	The share of the proportion of total forests over which indigenous people and local communities have recognized rights increased 38% over the period 2002-2013. The rate of recognition has slowed since 2008, with less than half the area recognized between 2008 and 2013 compared with 2002-2008.

[1] See UN Climate Summit, 2014, Section 1, New York Declaration on Forests, available at http://www.un.org/climatechange/summit/wp-content/uploads/sites/2/2014/07/New-York-Declaration-on-Forest-%E2%80%93-Action-Statement-and-Action-Plan.pdf

[2] Ibid.

[3] Gross tree cover or forest loss measures the magnitude of annual change, counting all tree cover or forest area lost over a given period, whether or not it is later replaced.

[4] Net forest change provides a periodic snapshot in time of overall forest cover. The distinction between measuring gross and net forest loss is analogous to counting the total number of deaths in a country annually (gross) versus counting the change in total population size annually (net).

[5] See Consumer Goods Forum, Board of Directors, Resolution on Deforestation, November 2010, available at http://www.theconsumergoodsforum.com/sustainability-strategic-focus/sustainability-resolutions/deforestation-resolution

[6] Hosonuma, N., Herold, M., De Sy, V., De Fries, R. S., Brockhaus, M., Verchot, L., Angelsen, A., Romijin, E. (2012): An assessment of deforestation and forest degradation drivers in developing countries. Environmental Research Letters.

[7] Boucher D., Elias, P., Lininger, K., May-Tobin, C., Roquemore, S., and Saxon, E. (2011), The Root of the Problem: What's Driving Tropical Deforestation Today, available at http://www.ucsusa.org/sites/default/files/legacy/assets/documents/global_warming/UCS_RootoftheProblem_DriversofDeforestation_FullReport.pdf

[8] Potts, J., Lynch, M., Wilkings, A., Huppé, G., Cunningham, M., Voora, V., (2014): The State of Sustainability Initiatives Review: Standards and the Green Economy. State of Sustainability Initiatives SSI, available at https://www.iisd.org/pdf/2014/ssi_2014.pdf

[9] The Supply Change project is an initiative that provides information on the extent of commodity specific commitments made by governments, companies, investors and civil society. The project is in the early stages of development and so far only provides information on the number of commodity specific commitments made by businesses.

[10] Rautner, M., Lawrence, L., Bregman, T., and Leggett, M. (2015): The Forest 500. Global Canopy Programme. See website at http://forest500.org/

[11] Ibid.

[12] The Sustainability Consortium (TSC) is a private global organization dedicated to improving the sustainability of consumer products while representing the 100+ of the world's largest organizations. TSC brings together Sector and Consortium Working Groups to work collaboratively to create sustainability-related knowledge about particular product categories. TSC continuously adds to the scope of products covered by TSC's Sustainability Measurement and Reporting System (SMRS) and creates sustainability-related knowledge about particular product categories.

[13] Hosonuma et al., 2012.

[14] Ibid.

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