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.

Key messages

- The current efforts by companies and governments are not sufficient to eliminate deforestation from the production of agricultural commodities by 2020.
- The number of companies across supply chains that have commitments to reduce or eliminate deforestation from their supply chains has barely increased in the past two years. Many companies are yet to make such commitments for cattle and soy.
- Among the companies with a commitment, several have put in place the necessary processes and systems that facilitate commitment implementation and ensure compliance in the supply chain. Reporting on the execution of these processes and on their progress toward achieving sustainability commitments, however, remains inadequate. Unless companies disclose and report progress and enable independent verification, it is impossible to track the movement toward deforestation-free supply chain goals and measure the effectiveness of their efforts.
- An increasing number of civil society organizations continue to support companies in addressing deforestation in their supply chains. Support includes technical assistance in setting and implementing company commitments and in improving monitoring and verification of compliance.
- Efforts by both producer and consumer governments to enable the implementation of private-sector commitments remain limited and mostly in the form of high-level policies and pledges. There is, however, a growing momentum at the jurisdictional level in many producer countries around collaborative actions that can be taken as a holistic approach to addressing deforestation from agricultural production. The implementation of these approaches is still in the early stages and their impact on deforestation from agriculture is yet to be seen.

Overview of goal and indicators

Commercial agriculture as a driver of deforestation

Between 2001-15, deforestation through permanent land use change for commodity production drove 27 percent of all global forest loss – equal to 72 million hectares,[1,2] an area bigger than Ireland.[3] Southeast Asia and South America are the hotspots of deforestation from commodity production. During the same period, 61 percent and 64 percent of forest loss in Southeast Asia and South America, respectively, was driven by commodity production.[4] Among commodities, the major drivers of deforestation have been palm oil, soy, cattle, and timber. In Malaysia and Indonesia, palm oil is the main driver of deforestation; however, in South America, cattle grazing and agricultural crops such as

soy are the main causes. A large part of deforestation from palm oil and soy is embedded in their exports to markets in Asia and Europe.[5]

To mitigate impacts of commodity production on forests, public- and private-sector actors have adopted strategies in the form of regulatory policies and corporate commitments with the goal of eliminating deforestation from agricultural supply chains. These strategies have the potential to make significant long-term contributions to curbing deforestation and reducing global greenhouse gas emissions but they need to be strengthened and scaled. Corporate commitments can drive change in the supply chains when they are complemented and supported by public-sector action. Governments in producer countries have taken actions to improve forest governance and increase transparency. On the demand side, governments in consumer countries started to consider putting import regulations in place and are increasingly collaborating with other supply-chain actors to address deforestation. Additionally, governments can promote mechanisms to incentivize zero-deforestation supply chains through subsidies, loan programs, and payments for ecological services schemes for both corporations and smallholders.

Assessing progress

A comprehensive assessment of progress toward Goal 2 continues to be difficult. Constraints include a lack of data on exposure of companies to deforestation-risks in their supply chains, lack of third-party verified company progress, and the lack of independent data. Most available information on private-sector progress toward their commitments is self-reported, and can be incomplete and vague. Moreover, many companies remain reluctant to share data.

For the 2016 NYDF Progress Assessment, we developed an assessment framework to measure progress toward Goal 2 based on four criteria. For the 2019 NYDF Goal 2 assessment update, we have slightly revised this framework. The revised framework considers efforts to improve and align methodologies among initiatives and organizations that track commodity supply-chain commitments. In addition to assessing the characteristics of commitments, the revised framework measures actions taken by companies and progress made toward their commitments.

Table 1. Criteria and indicators to track Goal 2

Criteria	Indicators
1. Forest-related commitments	1.1. Companies with a commitment
	1.2. Scope and specification of commitment
2. Implementation of commitments	2.1. Adoption of standards
	2.2. Engagement
	2.3. Traceability
	2.4. Monitoring and verification of compliance
3. Demonstration of progress toward commitments	3.1. Reporting and transparency
	3.2. Compliance with commitment
4. Enabling environment	4.1. Support by financial institutions
	4.2. Support by the public sector
	4.3. Support by the civil society
5. Commitment impact	5.1. Reduction of deforestation associated with agricultural commodities

Findings

Criterion 1: Forest-related commitments

Very few companies have assumed new commitments since 2016. This may be because the commitments made in the context of the NYDF, the Tropical Forest Alliance 2020, and the Consumer Goods Forum are time bound and linked to 2020, so companies have been reluctant to assume commitments unlikely to be met in the closing timeframe. However, the approaching date does not explain their reluctance to assume new commitments linked to a longer timeframe. Looking at existing commitments, only a small share of companies have a robust and ambitious commitment that sets verifiable, time-bound targets and covers all supply chains, sourcing regions, and suppliers. Across supply chains, companies continue to set more commitments for palm oil than for soy, cattle, timber, and paper.

Indicator 1.1 Companies with a commitment

This indicator tracks changes in the number of companies with a forest-related commitment and the number of commitments adopted over time.
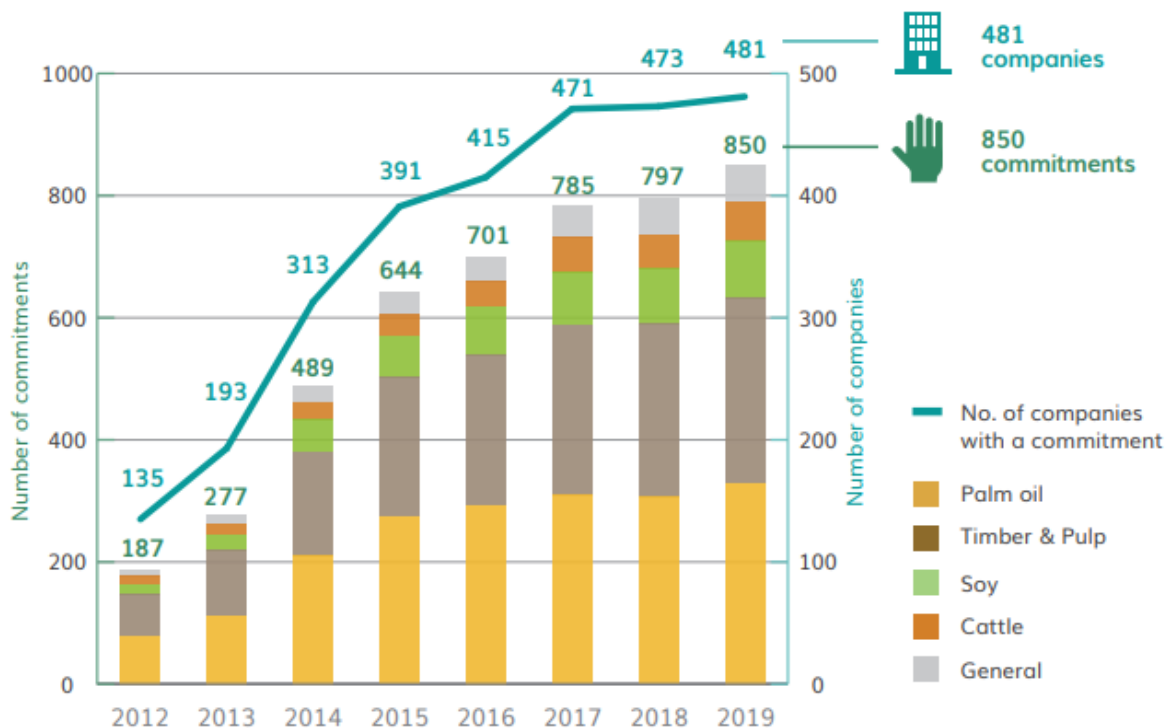
For this indicator we rely on data from:
- Forest Trends' Supply Change Initiative that tracks deforestation-related commitments of companies in palm oil, soy, cattle, and timber and pulp supply chains
- Global Canopy's Forest 500 that assesses the 350 most influential companies in palm oil, soy, cattle, paper, and timber supply chains
- CDP, a global environmental non-profit with an international disclosure platform, that collects information on behalf of investors, purchasing companies, cities, states, and regions, then reports on companies' deforestation risks and how companies are addressing these risks

According to data from Forest Trends' Supply Change Initiative, there was a small increase in deforestation-related commitments in 2019. As of May 2019, 481 companies assessed have made 850 commitments to address deforestation in their supply chains. Companies have the highest share of these commitments for palm oil and timber and pulp while they continue to lag in making commitments for soy and cattle supply chains despite being exposed to a high risk of deforestation from production of these commodities in Latin America. Based on data from Supply Change, from 866 companies that source one or more of these commodities, only a small number of those exposed to cattle (12 percent) and soy (17 percent) have a commitment, as compared to palm oil (51 percent) and timber and pulp (47 percent).

Data from Global Canopy's Forest 500 indicates a similar trend. Since 2017, the share of companies that had a forest-related commitment for at least one of the commodities they produced or sourced has remained at around 58 percent.

CDP data also shows a stagnation in the number of companies with a commitment. Since 2015, among companies that reported to CDP on their forest policies for palm oil, soy, cattle, and timber, about two thirds have had a commitment to reduce or remove deforestation and/or forest degradation from their direct operations. While the share of commitments for palm oil and timber is higher than for soy and cattle, since 2016 there have been hardly any new commitments for any of the four commodities.

Figure 1. Forest-related commitments in different commodity supply chains

Source: Compiled by Climate Focus based on data provided by Forest Trend's Supply Change Initiative.

Indicator 1.2: Scope and specification of commitment

This indicator assesses the characteristics of forest-related commitments based on their deforestation reduction goals (e.g. zero and zero net deforestation), their scope (e.g. overarching or commodity-specific), specification of implementation and compliance mechanisms (e.g. certification schemes and traceability systems), and whether they set verifiable actions and time-bound targets.

For this indicator we rely on the following additional data source:
- SPOTT (Sustainability Policy Transparency Toolkit: spott.org) – toolkit that assesses producers and traders on the public disclosure of their policies, operations and commitments related to environmental, social, and governance issues, and benchmarks their progress over time
- Trase – an open-access online platform that uses publicly available data to map the links between commodities from sub-national places of production via the trading companies to the countries of import
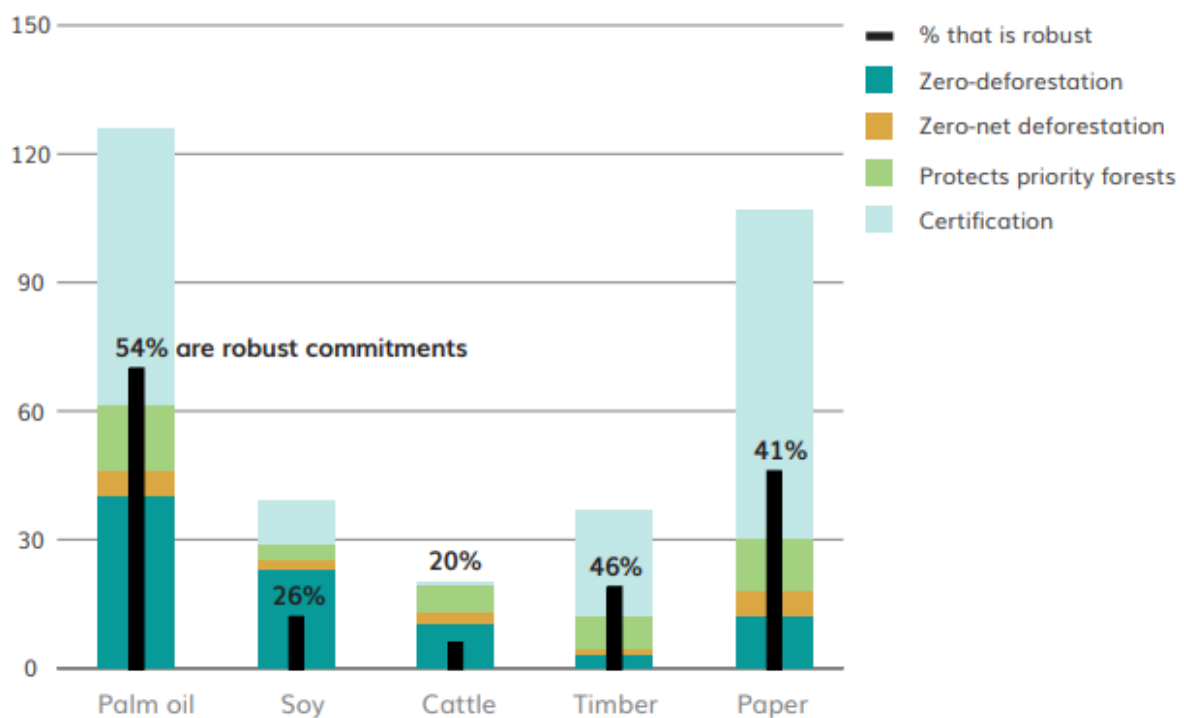
Only 12 percent of companies active in agricultural commodity supply chains assessed by Forest 500 have a zero- or zero-net-deforestation commitment that applies to all the commodities and materials they source. This leaves more than 300 companies without such an overarching commitment. For commitments to be effective, they need to cover all supply chains and sourcing regions of the company, avoiding spillovers of deforestation risks between supply chains of different commodities and between sourcing regions.

Companies set more ambitious deforestation-free targets for palm oil compared to other commodity supply chains. In 2018, among the Forest 500 companies that sourced palm oil, 20 percent had a zero-deforestation commitment (Figure 2). And among 70 palm oil producers and traders assessed on

SPOTT, two thirds of them have clear zero-deforestation commitments. Comparatively, fewer companies in soy and cattle supply chains have such ambitious commitments. In these supply chains, several companies participate in regional initiatives like the Soy Moratorium and Zero Deforestation Cattle Agreements that apply to specific regions, in this case the Brazilian Amazon.

For commodity-specific commitments, palm oil companies have more robust commitments that cover all operations, regions, and suppliers in the supply chain and include verifiable actions and time-bound targets earlier than 2025 (Figure 2). And according to SPOTT, more than half of palm oil companies with a zero-deforestation commitment extend their commitments to all suppliers. For timber and pulp, less than a third of companies that are assessed on SPOTT have a commitment to zero conversion of natural forest, and half of these extend their commitments beyond their own operations to cover out-grower schemes and independent suppliers.

Figure 2. Company commitments by commodity and content, and share of company commitments that are robust, in percent

Legend:
- — % that is robust
- ■ Zero-deforestation
- ■ Zero-net deforestation
- ■ Protects priority forests
- ■ Certification

- Palm oil: 54% are robust commitments
- Soy: 26%
- Cattle: 20%
- Timber: 46%
- Paper: 41%

Note: Total number of companies with a commitment for each commodity: Palm oil (126), Soy (39), Cattle (20), Timber (36), and Paper (107). Commitments are defined as "robust" if they apply to all regions, all operations, all suppliers, have a current deadline or at least 2025 or earlier, and specify milestones.

Source: Compiled by Climate Focus based on 2019 data provided by Global Canopy's Forest 500 Project.

Data from Trase reveals that the most important commodity traders sourcing soy and beef from Latin America and those sourcing palm oil from Indonesia have made commitments to eliminate deforestation from their supply chains. In the past two years, a significant share of these commodity volumes exported from these regions was covered under a zero-deforestation commitment: 86 percent of palm oil exported from Indonesia in 2018; 60 percent of soy from Argentina and Paraguay in 2018; 60 percent of soy and 67 percent of beef from Brazil in 2017; and 45 percent of beef from Paraguay in 2017.

Criterion 2: Implementation of commitments

There is incremental progress in implementing commitments across the commodity supply chains, but considerable gaps remain. Implementation activities taken by companies include adopting standards

to ensure compliance with company commitments, setting up monitoring and verification systems, engaging with non-compliant suppliers, and implementing traceability systems. Depending on the commodity and the region of sourcing, companies also use external mechanisms such as certification programs or sectoral initiatives to implement their commitments. However, available information on these actions is limited and self-reported by companies, which limits scope for scrutiny and independent verification. In assessing this criterion, we use data from CDP, SPOTT, and Forest 500.

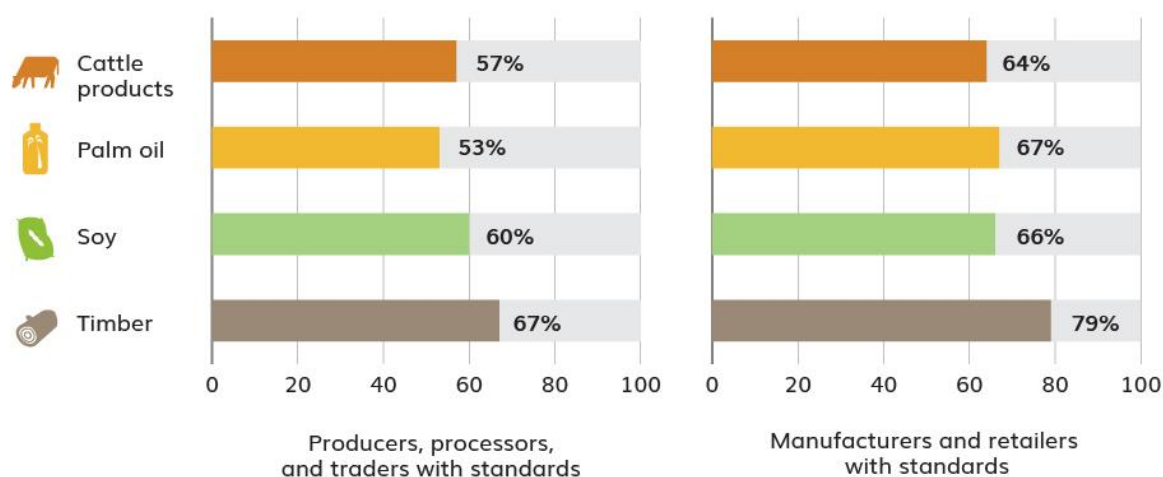## Indicator 2.1: Adoption of standards

This indicator assesses the use of internal and external standards as commitment implementation mechanisms. Companies adopt internal production and procurement standards that define the requirements and processes for producing and sourcing commodities. Company commitments also mention external incentive-based mechanisms (e.g. certification schemes) and sanction-based standards (e.g. soy moratorium) as approaches to achieving forest-related goals. These standards adopted by companies send market signals to suppliers, company partners and buyers, and consumers, which have an indirect impact on the production on the ground and on the demand from downstream in the supply chain.

Adoption of internal production and procurement standards

About 60 to 70 percent of companies with a commitment across the four main forest-risk commodities that reported on their forest policies to CDP in 2018 have adopted some form of internal production and procurement standards to implement their commitments (Figure 3).

Figure 3.

Share of companies that have adopted production or procurement standards to implement their commitments, in percent

	Producers, processors, and traders with standards	Manufacturers and retailers with standards
Cattle products	57%	64%
Palm oil	53%	67%
Soy	60%	66%
Timber	67%	79%

Note: Producers, Processors and Traders with a commitment: cattle products (7), palm oil (17), soy (10), and timber (48). Manufacturers and Retailers with a commitment: cattle products (25), palm oil (57), soy (29), and timber (97).

Source: Compiled by Climate Focus based on 2019 data provided by CDP

Adoption of certification schemes

The use of certification is more common in palm oil, timber, and paper supply chains than soy and cattle. Among the Forest 500 companies sourcing palm oil, one third of them had a commitment to only source palm oil certified under a certification scheme that protects natural forests and other high-value landscapes (see Figure 2).[6]

In palm oil, Roundtable on Sustainable Palm Oil (RSPO) is the most widely used scheme. As of May 2019, 19 percent of global palm oil production and 3.9 million hectares of palm oil plantations in Southeast Asia and Latin America are RSPO certified.[7] In 2018, RSPO adopted a total ban on deforestation within its standard.[8] RSPO's previous standards prohibited the clearing of primary forests, but they allowed for the cutting of secondary and peat forests with a peat layer less than three meters deep. Although the new criteria in the 2018 standard went into effect immediately, a one-year transition period was given to existing RSPO grower members to implement the new standards.

Many of the largest palm oil producers and traders have adopted the RSPO standard to achieve their zero-deforestation goals. Among companies assessed on SPOTT, about half have achieved RSPO certification of nearly three million hectares. However, few companies have achieved certification of their smallholder suppliers. Smallholders face several financial and technical constraints in implementing certification standards; and for companies to achieve full certification and thereby ensure compliance with their commitments, they need to work with smallholders to help them comply with these standards.[9]

In timber, pulp, and paper supply chains, Forest Stewardship Council (FSC) and Programme for the Endorsement of Forest Certification (PEFC) are the most widely used certification schemes, but only six percent of their certified forests are in forest-risk tropical countries.[10] Among 50 timber and pulp producers assessed by SPOTT, 40 percent of companies with a commitment to zero conversion of natural forest have certified more than 75 percent of their area under the FSC.

In the soy supply chain, while a significant number of companies use certification, the total volume of certified soy in the market is still very small. Among the Forest 500 companies, a third of them with forest-related commitment for soy have adopted the Round Table on Responsible Soy (RTRS) certification standard – the only standard with a zero-deforestation criterion. However, at the global level, volumes of soy certified under RTRS remain less than one percent despite certified soy volumes in the market growing by 28 percent in 2018 compared to the preceding year.[11] Certification is even lower for cattle products as only two cattle companies from the Forest 500 companies use certification standards to implement their commitments.

Participation in sectoral initiatives

In soy and cattle supply chains, companies also participate in regional initiatives like the Amazon Soy Moratorium and the Zero Deforestation Cattle Agreements to achieve deforestation-free supply chains. These initiatives provide robust monitoring and verification to implement company commitments. Participants in these agreements account for a significant share of the soy and cattle produced in Brazil. The Amazon Soy Moratorium that effectively banned the sourcing of soy from deforested areas remains one of the most successful strategies to curb deforestation in the Amazon. However, sectoral initiatives have exhibited some weaknesses. For example, while the cattle agreements' original intent was to include both direct and indirect suppliers, until recently, technical limitations only allowed for the verification of direct suppliers (though the industry has moved to begin addressing indirect suppliers through, for example, the Indirect Suppliers Working Group).[12]
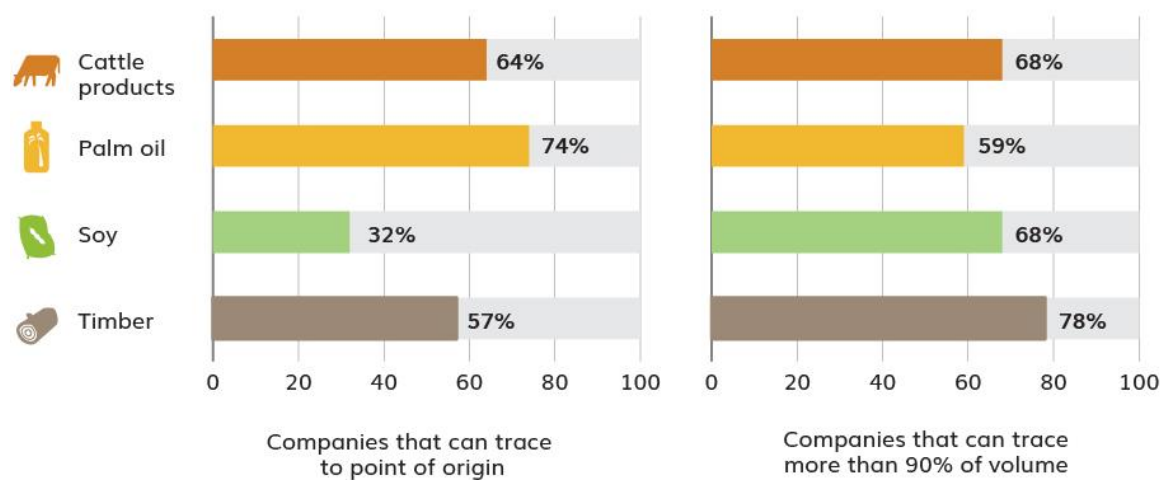
Indicator 2.2: Traceability

Traceability mechanisms that track a product from its origin to consumption are important tools to monitor deforestation risks and compliance with company commitments by linking suppliers to a specific place. CDP data shows that the majority (81 to 94 percent) of companies with a commitment to eliminate or reduce deforestation from their supply chains had a traceability system in 2018. But how well traceability systems can map the supply chain is not clear. They may include sophisticated

geo-spatial mapping systems or may be based entirely on reports by the suppliers downstream in the supply chain, which cannot necessarily guarantee the acquired information is entirely correct.[13]

Traceability is more effective if it covers all suppliers and reaches back to the point of origin of a given product or commodity beyond direct suppliers.[14] While about two thirds of companies with a commitment in cattle, palm oil, soy, and timber supply chains reported having the capacity to trace at least 90 percent of their commodity volumes, fewer companies can trace their products to their point of origin, which does not always extend to indirect suppliers (Figure 4). Depending on the commodity, region of sourcing, and degree of control of upstream suppliers, this may or may not be problematic.

Figure 4.

Share of companies with a commitment that can trace their commodities, in percent

Companies that can trace to point of origin — Companies that can trace more than 90% of volume

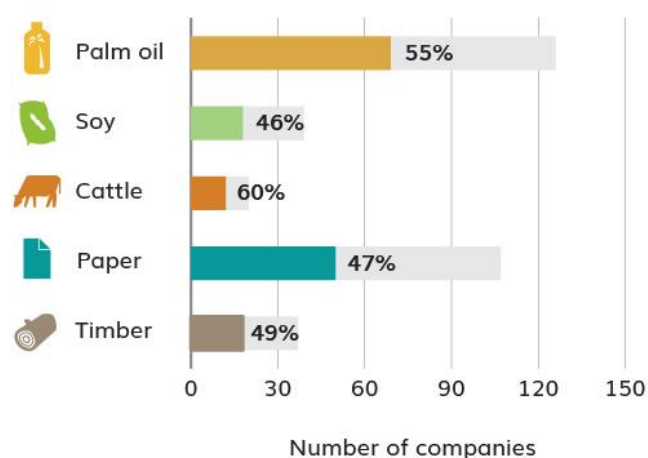|	Point of origin	More than 90% of volume
Cattle products	64%	68%
Palm oil	74%	59%
Soy	32%	68%
Timber	57%	78%

Note: Total: palm oil (58), soy (28), cattle products (22), and timber (101). Point of origin is farm or slaughterhouse for cattle; forest management unit, mill, and plantation for palm oil; farm, mill and plantation for soy; and forest, forest management unit, mill, or plantation for timber.

Source: Compiled by Climate Focus based on 2019 data provided by CDP

Indicator 2.3: Monitoring and verification of compliance

Among the Forest 500 companies that have a forest-related commitment, 45 to 60 percent of them monitor and verify compliance of their suppliers against their commitments (Figure 5). The implementation of monitoring and verification is higher among those that have more ambitious commitments like zero or zero net deforestation. Monitoring and verification is essential to assess and demonstrate compliance, performance and progress with respect to supply-chain commitment. The robustness of these systems is not always clear and can significantly vary across supply chains and companies.

Figure 5.

Companies with forest-related commitments that monitor and verify compliance, in percent

Note: Total companies: Palm oil (126), soy (39), cattle (20), paper (107), and timber (37)

Source: Compiled by Climate Focus based on 2019 data provided by Global Canopy's Forest 500 Project

Indicator 2.4: Engaging suppliers

This indicator assesses companies' engagement with their suppliers in managing and mitigating deforestation risks in their supply chains, and in working with them to increase compliance with company commitments. Support to suppliers who face constraints in complying with company commitments, especially smallholders who lack adequate technical and financial capacity, is crucial to achieve deforestation-free supply-chain goals.

According to CDP data, most of the companies with a commitment (85-97 percent) across palm oil, soy, cattle, and timber supply chains that reported on their progress in 2018, support their direct suppliers to improve their capacity to produce sustainable commodities.

Among the palm oil producers and traders that SPOTT assessed in 2018, more than half (56 percent) of those with a zero-deforestation commitment had a process to prioritize, assess, and engage their suppliers' compliance with these commitments. For these companies, it is also crucial to work with their smallholders to support best practices to implement their zero-deforestation commitments as almost 40 percent of world's palm oil is produced by smallholders.[15] According to SPOTT, 63 percent of these palm oil producers and traders has a program to support their scheme smallholders and 54 percent of them support their independent smallholders.[16]

However, data from Forest 500, which includes a larger group of companies, indicate that when it comes to non-compliant suppliers, lower levels of engagement is seen by companies. It is particularly low for companies in cattle supply chains, where instead of engaging with non-compliant suppliers, their exclusion from the supply chain is used as a strategy to reduce deforestation-risks. Among these companies, engagement is lower for cattle (20 percent), timber (32 percent), and soy (33 percent) compared to palm oil (53 percent) and paper (43 percent).

Criterion 3: Demonstration of progress toward commitments
Criterion 4: Enabling environment

Indicator 4.1: Support by financial institutions

Financial institutions such as banks are exposed to deforestation risks through their investment and financing of companies that source deforestation-risk agricultural commodities. According to Forest 500's assessment of the 150 largest financial institutions that finance companies in palm oil, soy, cattle, paper, and timber supply chains, 65 percent of these institutions do not have any commitments for any forest-risk commodities that they finance.[17] Financial institutions still lag in setting clear commitments and financing policies to remove deforestation from their investments and in engaging with the companies they finance to ensure compliance with these investment policies (see NYDF Goal 8 update).

Indicator 4.2: Support by public sector

Both producer and consumer governments continue to make pledges to end deforestation driven by agricultural commodities and to improve forest governance at national and local levels in forest-risk regions. They are taking steps to implement these commitments (see NYDF Goal 10 update).

Supply-side measures

In the producer countries and regions, a growing number of public- and private-sector actors see initiatives at jurisdictional or landscape level as a holistic approach with the potential to address the systemic challenges that drive deforestation. Such an approach can consolidate various supply chain sustainability efforts to target all parts of the system including governance, supply chains, and communities, as well as to accelerate progress to ensure deforestation-free supply chains.[18] The jurisdictional approach can create market drivers for improved governance as deforestation-free commodities preferentially sourced from jurisdictions that eliminate deforestation would be more attractive to companies that demand sustainability and deforestation-free commodities.

Public- and private-sector support for jurisdictional initiatives in the context of zero-deforestation commitments are gaining momentum. But implementation of this jurisdictional approach is complex and will take time, and there are still uncertainties around the roles of various public- and private-sector actors and the mechanisms for companies to support such initiatives.[19] Below is a summary of some of the jurisdictional initiatives that focus on different regions and supply chains.

IDH's Verified Sourcing Areas (VSA)[20] brings together private, public, and civil society stakeholders to collaboratively develop a compact that identifies sustainability priorities within a specific landscape. The VSA Compact empowers buyers, traders, and others to support a specific jurisdiction in meeting five sustainability goals through direct involvement in the goal-setting and implementation processes: forest and peat protection, good governance, labor, land tenure, and transparency. Buyers are thus able to make better informed supply-chain decisions in line with sustainability commitments by sourcing from those VSAs. Currently, the VSA approach is being piloted in high-deforestation jurisdictions in Brazil and Indonesia.

Verra's Landscape Sustainable Production Standard[21] provides a standardized framework against which to assess sustainability within a specific landscape. Both local and international stakeholders can use the values, goals, and indicators set forth by the Standard to benchmark and compare regional progress toward sustainability goals. The Standard enables local governments and communities to improve their performance to attract finance and support businesses in understanding the

sustainability contexts involved with sourcing from a given jurisdiction. The Standard is currently being piloted in Mexico, Guatemala, Costa Rica, Peru, Ghana, Ethiopia, Kenya, and Indonesia.

The Commodities/Jurisdictions Approach[22] was developed by a network of stakeholders from governments, companies, civil society, and international organizations to help Unilever and Marks & Spencer achieve their commitment to reduce deforestation in their supply chains. The Commodities/Jurisdictions Approach empowers global supply chains and producer countries to better assess and select among jurisdictional programs that support forest conservation according to independently-developed criteria. The assessments allow companies to identify prioritized sourcing programs that align with their supply-chain goals, while incentivizing countries to better protect forests and reduce emissions. Currently, two standards have been recognized as meeting the criteria for the Commodities/Jurisdictions Approach: Forest Carbon Partnership Facility's Carbon Fund Methodological Framework and Verra's Jurisdictional and Nested REDD Framework. In 2019, the Commodities/Jurisdictions Approach is piloting the assessment process for individual jurisdictions not included under the Forest Carbon Partnership Facility or the Jurisdictional and Nested REDD Framework.

Mato Grosso's Produce, Conserve and Include (PCI) Approach[23] is based on a set of indicator targets seeking to promote sustainable low-carbon production, environmental conservation, and social productive inclusion. These targets include reducing deforestation by 95 percent and recovering one million hectares of degraded Permanent Protected Areas by 2030 among other conservation targets. The PCI Monitoring and Evaluating Working Group, formed in 2017, evaluates progress toward these targets in the Mato Grosso region. Since its inception, the Working Group released a definition and baseline of indicators, as well as a 2018 progress report highlighting the 0.3 million hectare increase in area under forest management.

Demand-side measures
Governments of major consumer countries of forest-risk commodities are also making pledges and developing strategies to eliminate imported deforestation from these commodity supply chains.

In timber supply chains, demand-side regulatory measures by importing countries that have driven interventions to improve forest governance and curb illegal logging in the deforestation-risk countries have been successfully tested. The Lacey Act in the US and the EU Timber Regulation in Europe put the onus on importers to prove the legality of the timber that enters the US and the EU, respectively (see **Goal 10**). Importing countries in Europe and the State of California in the US have adopted similar strategies for other commodities as well. France has introduced legislation requiring companies to implement due diligence to avoid environmental damage in their supply chains.[24] And California passed the California Deforestation-Free Procurement Act that requires all companies contracting with the state government in the provision of tropical deforestation-risk commodities like cattle, palm oil, soy, paper/pulp, rubber, and timber to demonstrate deforestation-free supply chains.[25]

The Amsterdam Declarations signed by major European countries in 2015 commit signatories to coordinated demand-side efforts to eliminate deforestation from the palm oil and other agricultural supply chains, restating the NYDF's goals. In December 2018, the European Commission published a roadmap on 'Stepping up EU Action against Deforestation and Forest Degradation' which seeks to eliminate deforestation from supply chains through public-private partnerships and public financial support and is expected to be adopted in the second quarter of 2019. While the roadmap is seen as a positive step forward, some consider it insufficient to achieve change; and commentators have called for firm regulatory measures like the approach taken in the timber supply chain to ensure the action plan succeeds.[26]

Indicator 4.3: Support by civil society

Civil society organizations continue to support companies in setting and implementing deforestation-free supply chain commitments, and in monitoring and reporting progress on these commitments. Examples include:

The Accountability Framework initiative: The Accountability Framework was developed by environmental and social NGOs in close consultation with companies, governments, and other stakeholders in response to the need for clear and consistent guidance on settting, implementing, and demonstrating progress toward supply-chain commitments. The Framework provides a common set of definitions, norms, and guidance for companies and others working to address deforestation, ecosystem conversion, and human rights violations. Companies can use it to help inform how they establish or refresh their commitments, take actions toward implementation, monitor and report progress, and support broader impacts. The Framework was officially launched in June 2019. To complement the guidance provided to companies by the Framework, together with the Rainforest Alliance on behalf of the Accountability Framework initiative, several organizations that track and assess corporate progress and outcomes around deforestation-free supply chains developed a Common Methodology to improve consistency in the current tracking of corporate efforts to reduce deforestation in agricultural and forestry supply chains.

Proforest Soy Toolkit: The Toolkit was developed to provide a guide for companies and decision-makers on how to decouple soy production and trading from deforestation. It offers a wide range of existing and emerging solutions that can be implemented at the key stages of the soy supply chain; and includes local tools relevant to their soy sourcing regions or supply chain. The Toolkit provides information on available solutions, thus supporting companies to build their capacity to implement their deforestation-related commitments using these solutions.

Supply Chain Solutions Center (SCSC): SCSC facilitated by the Environmental Defense Fund, is a digital hub for sustainability resources and best practices around sustainable supply-chain management that aims to support and improve the development of companies' sustainability plans as well as implementation of their sustainability criteria within their supply chains. The 'Thriving Forests' pillar aims to compile relevant resources to assist companies in setting and exceeding ambitious deforestation goals. Companies can access the pool of resources and filter them according to their individual needs to develop, implement and monitor their sustainability criteria.

ZSL SPOTT: SPOTT is currently expanding to assess and engage more timber and pulp companies, especially producers operating in FLEGT-partner countries at various stages of Voluntary Partnership Agreement (VPA) development – specifically Indonesia, Cameroon, Republic of Congo, and Gabon – and traders in China that source timber from Africa. To inform this expansion and increase stakeholders' engagement, SPOTT organized five multi-stakeholder workshops in each of its target geographies in February and March 2019. Additional workshops in these countries will be organized in 2020.

Criterion 5: Commitment impact

There is limited data and information to assess the impacts of deforestation-free supply-chain commitments on forests and deforestation. However, efforts to improve forest monitoring have yielded new tools that can enable measuring deforestation from the production of specific agricultural commodities and help to assess the progress of supply chain efforts to reduce and eliminate deforestation. Recent developments in such tools include:

Trase – an open-access online platform that connects different data sources to map commodities from subnational places of production via the trading companies to the countries of import. Since its launch in 2016, more forest-risk commodities and countries have been added to Trase. It shows the links between consumer countries, trading companies and deforestation risks in sub-national regions of production of soy in Brazil, Paraguay and Argentina; cattle in Brazil and Paraguay, Indonesian palm oil;

and Colombian coffee. In addition, Trase has mapped national trade flows for Bolivian soy, Ecuadorian shrimp, Paraguayan corn, Peruvian coffee, shrimp, and cocoa, and Brazilian chicken, cocoa, coffee, corn, cotton, palm oil, wood pulp, and sugarcane from the port of export to the importing country via the trading companies. New dashboards and improved profiles make it easier to explore the data on Trase, allowing users to identify and compare risks for specific companies, countries and regions of production, and see changes over time.

Global Forest Watch (GFW) Pro – an online management application for companies and financial institutions designed to support them in managing deforestation risks in their portfolio. Using GFW Pro, they will be able to plot the location of thousands of farms, production facilities, or municipalities; save location data securely; access a dashboard of alerts to track environmental risks occurring in these areas, such as tree cover loss, fires, and more; spot trends in risky areas; and monitor progress over time. Though the information will likely remain proprietary, it should inform decision-making and mitigate or eliminate reputational and operational risks for organizations working to eliminate deforestation from commodity supply chains.

Agrodeal – a free online, territorial intelligence system developed by a joint initiative of companies, NGOs, banks, and research institutions. The online system supports decision-making and territorial assessment of socio-environmental risks associated with investments in the soy and beef sectors. It allows access to structured spatial information, at city and sub-city scale, and generates reports, maps, graphs, and spreadsheets that help in the land use planning of soybean and cattle production. It covers the soybean beef supply chains in Brazil. In the future, the platform aims to include important information for the soy sector in the Chaco biome, in Argentina, and for the cattle sector in the Paraguayan Chaco.

Endnotes

[1] Curtis, P. G., Slay, C. M., Harris, N. L., Tyukavina, A., & Hansen, M. C. (2018). Classifying drivers of global forest loss. *Science*, *361*, 1108–11.

[2] This includes long-term, permanent conversion of forest and shrubland to a non-forest land use such as agriculture (including oil palm), mining, or energy infrastructure.

[3] The combined area of Sweden (450,295), the United Kingdom (242,495) and Belgium (30,528) is 723,318 square kilometers and total deforestation from commodities between 2001-15 was 720,000 square kilometers.

[4] Curtis, P.G., et al. (2018).

[5] Trase data (2019).

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[16] Schemed or associated smallholders are structurally bound by contract, a credit agreement, or planning to a mill. They do not choose which crop they grow, are supervised in their planting and crop management techniques, and are often organized, supervised or directly managed by the managers of the mill, estate, or scheme to which they are structurally linked. Independent smallholders are self-financed, managed, and equipped and are not bound to any one mill. They may deal directly with local mill operators of their choice or process their own palm oil using personal or community manual palm oil presses (more common in Africa).

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