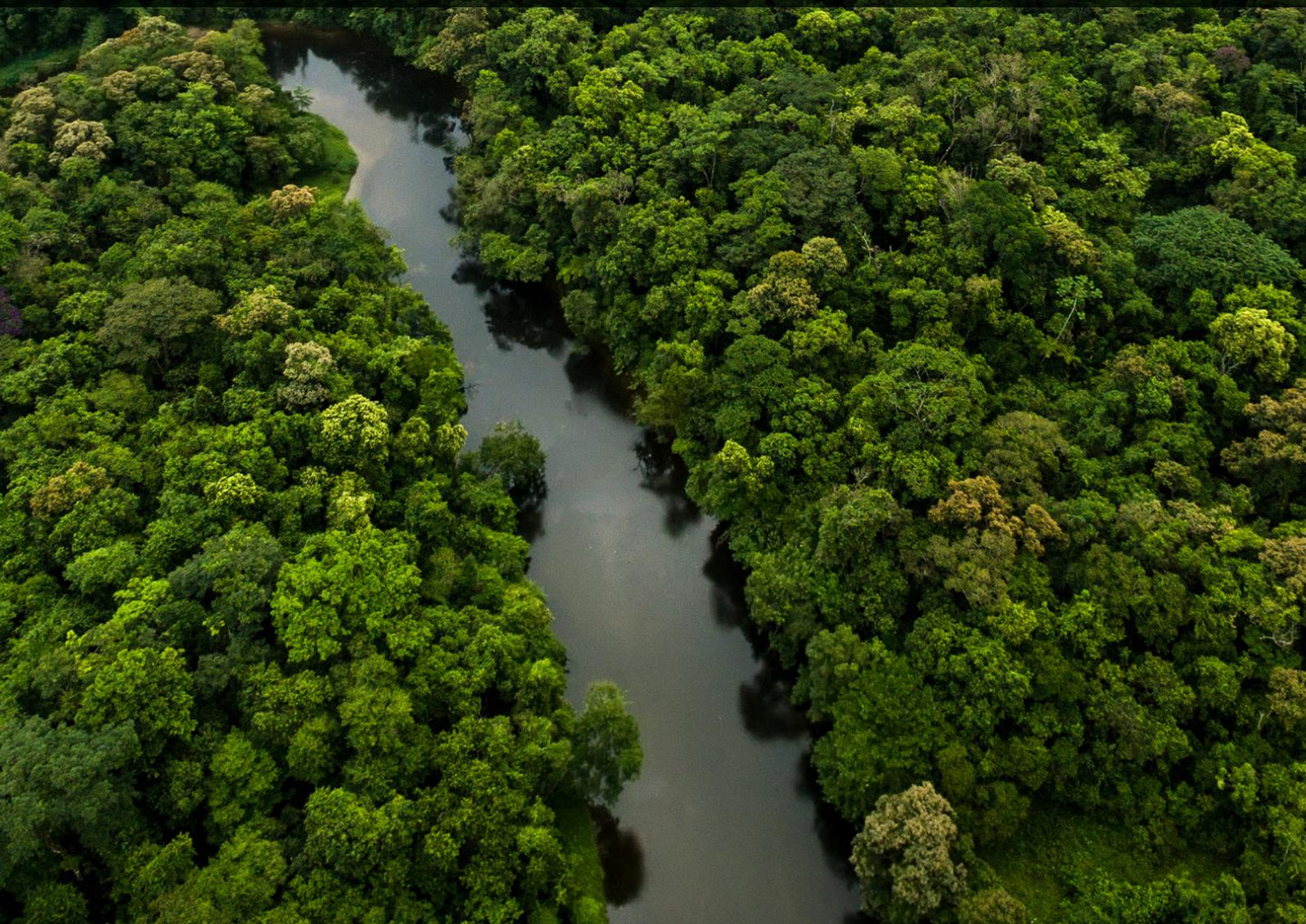


Using CDP data for nature-related risk and opportunity assessments

A review of the overlap between existing disclosure on palm oil through CDP and the components of the voluntary TNFD LEAP approach

August 2022





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Key messages



1

This report compares the disclosures on palm oil production, trade and consumption reported through the 2021 CDP forests questionnaire with components laid out in the voluntary nature-related risk and opportunity assessment process in the Taskforce on nature-related financial disclosures beta framework v0.1, referred to as LEAP.



2

The results show there is substantial overlap between the CDP forests questionnaire and the requirements of the TNFD LEAP process. Companies completing the CDP forests questionnaire will have a significant head start in completing a LEAP assessment, whilst companies completing a LEAP assessment will have a significantly broader understanding of how they interact with their environment than they can get from the CDP forests questionnaire alone.



3

However, the two processes achieve different outcomes. The CDP questionnaire tells companies where they are in their journey to removing deforestation from their supply chain. A LEAP assessment aims to provide a more comprehensive understanding of all the ways a company interacts with, and manages, relationships with nature. Completion of the LEAP process will require more data than is required for completing the CDP forest questionnaire



4

The key areas of overlap where companies are already reporting fairly comprehensively through CDP include the provision of location of assets for land-holding companies (**Locate**), assessing the environmental impacts on the company and associated risks (**Assess**) and preparing to report (**Prepare**).



5

Areas where there was some overlap, but companies reporting through CDP are likely to struggle to follow the TNFD LEAP process include the ability of downstream companies to trace commodities to the point of origin (e.g. plantations) (**Locate**).



6

Areas where the TNFD LEAP process asks for information that is not currently required by CDP at all, or is only reported to a limited level, include the requirements to assess environmental integrity at the project site and a comprehensive understanding of the full range of impacts and dependencies of the company on nature. Additional support is likely to be required if companies are to be expected to report on these issues.



7

The quality of disclosure on palm oil through CDP in 2021 also highlight potential challenges for organisations in gathering the information necessary under the TNFD LEAP process. Disclosure on palm oil is increasing and improving every year and companies disclosing on palm oil are performing better than companies reporting on other commodities. Yet companies are still not achieving the KPIs required to eradicate deforestation from supply chains, let alone the wider range of nature-related impacts and risks. Perceptions of risk also remain focused on risks to reputation and customer preference rather than the more serious physical risks to supply chain sustainability or systemic ecosystem collapses.

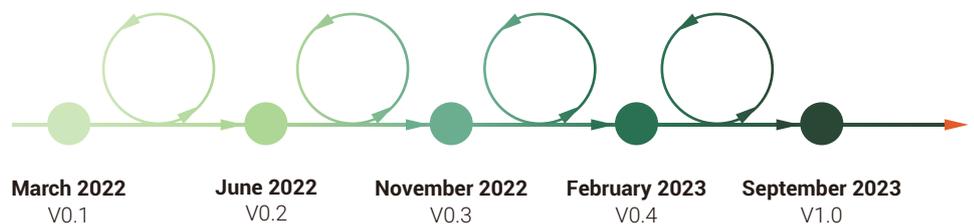
Introduction

The TNFD and LEAP

The TNFD launched in June 2021 with the aim of developing a risk management and disclosure framework for organizations to report and act on evolving nature-related risks, and ultimately shift financial flows away from nature-negative towards nature-positive outcomes.

The TNFD aims to develop a framework that is fit for purpose by releasing beta versions for wider testing and iterating these versions based on feedback received by various relevant stakeholders. The first beta version of the TNFD framework (v0.1) was released on the 15th of March 2022 and the final recommendations are expected to be published in September 2023 (Figure 1).

Figure 1. Timeline for releases of beta versions of the TNFD framework. Source: The TNFD Nature-related Risk & Opportunity Management and Disclosure Framework - Beta v0.1 Release, p.7



The first beta version (v0.1) consists of three main components:

- 1** **▼ Fundamentals for understanding nature -**
The building blocks and common language used by the TNFD to help organizations understand nature.
- 2** **▼ The TNFD Draft Disclosure Recommendations -**
The four core disclosure pillars and recommendation draft disclosures.
- 3** **▼ The LEAP Process for Nature-related Risk & Opportunity Assessment -**
A first version of a voluntary integrated nature-related risk and opportunity assessment process.

Figure 2. The voluntary TNFD LEAP process for nature-related risk and opportunity assessments

The LEAP approach



The LEAP process provides an overall framework of all the actions a company needs to do to understand, manage and report on relationships with nature. The letters represent the four phases organisations need to follow: Locate, Evaluate, Assess and Prepare (to report). It is designed to support internal, nature-related risk and opportunity assessments within corporates and financial institutions to inform strategy, governance, capital allocation and risk management decisions, leading up to the identification of the specific disclosure decisions consistent with the TNFD’s draft disclosure recommendations (Figure 2).

Introduction

CDP



Having operated for over 20 years, CDP now has one of the largest databases of corporate environmental data in the world.



13,000+

companies reported through CDP in response to requests from over 700 major investors and 200 major buyers. These disclosures represented

96%

of the FTSE100 and

64%

of global market capital.

CDP is a global not-for-profit that runs the world's environmental disclosure system for investors, companies, cities and governments to assess their impact and take urgent action to build a truly sustainable economy. Every year, CDP works with major investors and buyers to request companies to disclose their progress on climate, water security and deforestation targets through a set of comprehensive questionnaires.

The results are scored and used to drive better decision making in investment, business and policy. Having operated for over 20 years, CDP now has one of the largest databases of corporate environmental data in the world. In 2021 over 13,000 companies reported through CDP in response to requests from over 700 major investors and 200 major buyers. These disclosures represented 96% of the FTSE100 and 64% of global market capital.

The CDP forests questionnaire specifically focuses on the progress companies are making to eradicate deforestation from their supply chains. Structured around the Climate Related Financial Disclosure (TCFD) pillars of governance, strategy, risk and metrics and targets, the questions cover 15 **Key Performance Indicators (KPIs)** aligned with the principles for eradicating deforestation designed by the **Accountability Framework Initiative (AFI)**¹. The questionnaire focuses on the primary **Forest Risk Commodities (FRCs)** of

timber, palm oil, cattle, soy, rubber, coffee and cocoa, although only the first four are scored². Any company producing, trading or using any of these commodities are encouraged to complete a separate questionnaire for each commodity.

CDP's data was used to inform the development of the Taskforce for TCFD and the CDP climate questionnaire was subsequently adjusted to fully align with the final recommendations of the TCFD. A similar process is envisaged for the TNFD. CDP has been gathering nature-related data through its forests and water questionnaires for over a decade. This data will be valuable in informing the development of the TNFD. Moving forward, CDP has an ambition to expand its disclosure system to encompass a more holistic approach to nature related risks and opportunities over the next few years. The TNFD is likely to represent the most widely accepted structure for achieving this and CDP expects to align its future disclosure processes with the TNFD once it has been finalised.

1. Link to CDP Forest Questionnaire Guidance: <https://guidance.cdp.net/en/guidance?cid=31&ctype=theme&idtype=T&hemeID&incchild=1µsite=0&otype=Guidance&tags=TAG-597%2CTAG-587%2CTAG-596%2CTAG-595%2CTAG-585%2CTAG-598%2CTAG-609%2CTAG-59>

2. Forest Risk Commodities are defined as "globally traded goods and raw materials that originate from tropical forest ecosystems, either directly from forest areas, or from areas previously under forest cover whose extraction or production contributes significantly to global tropical deforestation and degradation" (Rautner M, Leggett M, Davis F: The Little Book of Big Deforestation Drivers. Global Canopy Programme. 2013; 1-102).

Introduction

Purpose of this report

The TNFD framework aims to harmonize with current reporting practices and must be usable by the market, it is therefore important to understand how current nature related reporting aligns with the various components laid out in the LEAP process.

As part of the development of the beta framework (v0.1), Global Canopy is leading a TNFD-supported pilot focused on palm oil. The pilot will test the beta (v0.1) of the framework alongside supporting technical guidance with organizations operating within, or financing, the palm oil industry. In addition to participant testing, the palm oil pilot has also commissioned several bespoke pieces of research to help further inform the development of the TNFD framework.

This report represents one of these bespoke pieces of research. It focuses specifically on data from the 2021 forest questionnaire from companies disclosing on palm

oil production or use and aims to highlight alignment between global environmental disclosure systems and the voluntary LEAP process, noting the information that is already being collected, what elements organizations may find challenging and what opportunities there may be going forward.

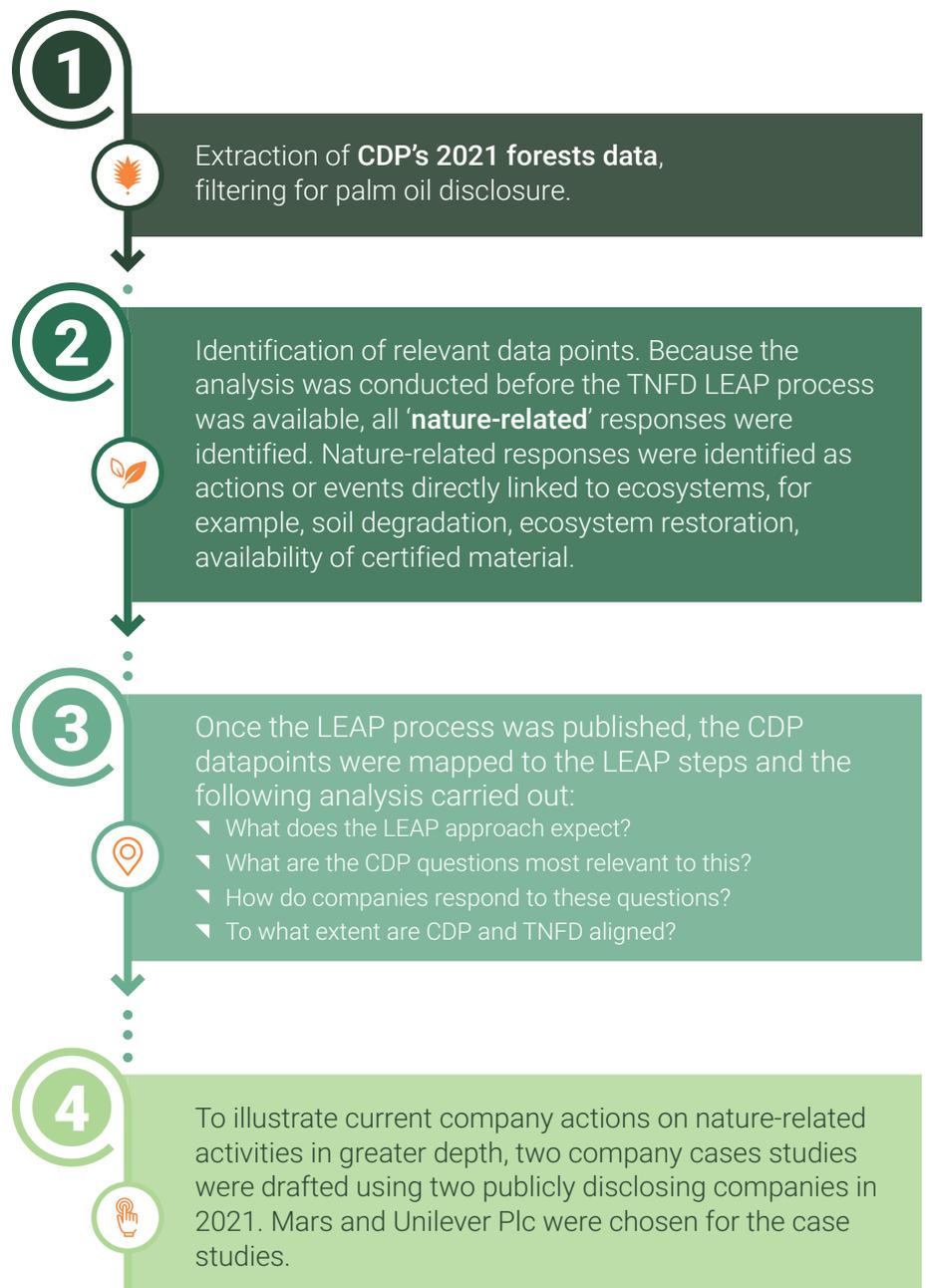
The findings from the report will be presented to both the TNFD Secretariat and Taskforce members to help provide an indication of the navigability of CDP data to the LEAP process and initial findings on the readiness of a specific industry to report information in line with the LEAP process and highlight specific recommendations for future TNFD framework development.



Introduction

Methodology

Data included in this report are collected from the palm oil disclosure from **CDP's 2021 forests questionnaire**. Companies producing, trading or using FRCs are requested to disclose, and are scored, on each separately meaning some companies disclose multiple times. The following methodological steps were taken for the report:



3. It should be noted that the analysis sifted out blank responses or responses listed as 'Question not applicable', which appeared when due to conditional logic. Furthermore, due to the number of responses being given to certain questions, the analysis predominantly focuses on the most common responses provided by companies – percentages mentioned thus do not always total 100% but indicate the most popular answers provided by companies.

Results



Data overview

In 2021,

865

organizations responded to CDP's forests questionnaire

675

of which disclosed for a forest risk commodity (FRC)

233

of these disclosed for palm oil, making it the second most reported-on commodity after timber

Responses to the CDP disclosure system have been growing every year. In 2021, 865 organizations responded to CDP's forests questionnaire, 675 of which disclosed for a forest risk commodity (FRC). 233 of these disclosed for palm oil, making it the second most reported-on commodity after timber.

The majority of disclosing companies (27.5%) were North American, closely followed by Asian and Asian Pacific (25.3%). Forty six percent of companies operate in the Food, Beverage and Agriculture sector (46%), followed by the Materials sector (27%).

Disclosures came from across the value chain, but 63% of

respondents were palm oil manufacturers. Manufacturers refers to the production of final ingredients for the food, feed and fuel sectors from raw or processed materials. In palm oil supply chains, this may include the refining of oil into shortening and the use of ingredients in the manufacture of bakery products.

Figure 2. Regional origin of Palm Oil discloser to CDP in 2021

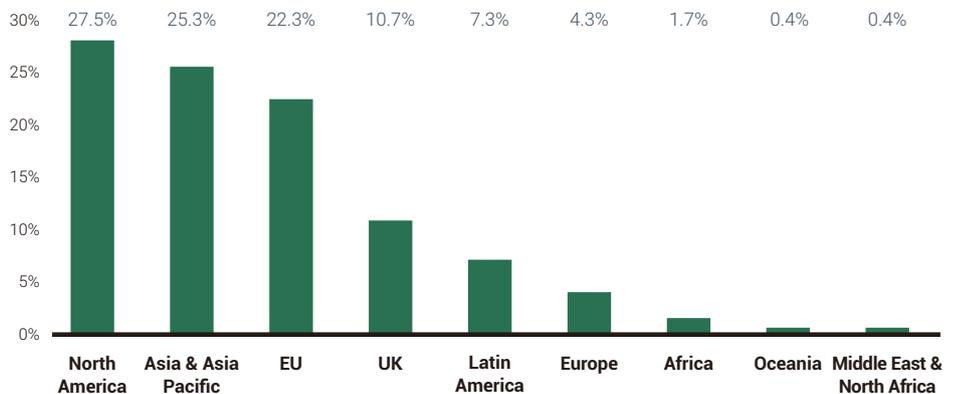
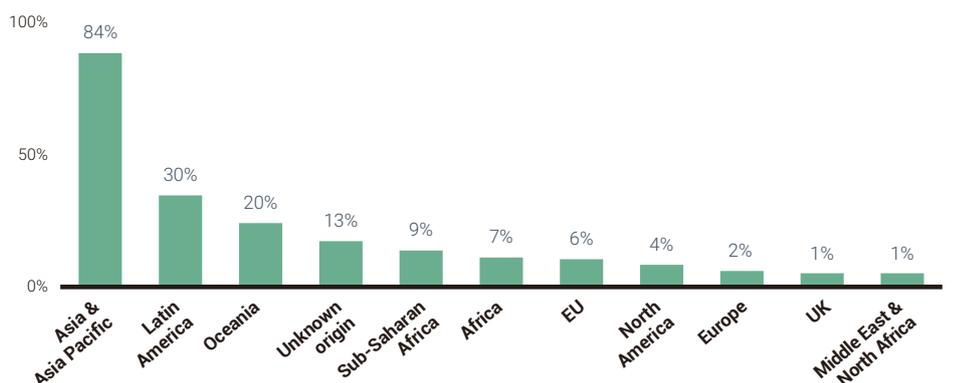


Figure 3. 2021 Regional Breakdown of Palm Oil Origin



Locate

What the TNFD asks

The Locate phase of the LEAP process is described as identifying a company's 'interface with nature'. It includes four guiding questions for corporates:

L1: Business footprint – Where are our direct assets and operations, and our related value chain (upstream and downstream) activities?

L2: Nature interface – Which biomes and ecosystems do these activities interface with? What is the current integrity and importance of the ecosystems at each location?

L3: Prioritisation – At which locations is our organisation interfacing with ecosystems assessed as being low integrity, high biodiversity importance and/or areas of water stress?

L4: Sector identification – What sectors, business units, value chains or asset classes are interfacing with nature in these priority locations?

What CDP asks

Six questions in the 2021 CDP forests questionnaire were identified as relevant to the Locate section of LEAP (Table 1).

- ▶ Three questions from the Current State module ask about the location of assets. In F1.1 companies describe whether they produce palm oil directly or source from third parties, identifying which countries they source from and the percentage of procurement spend. In F1.3 and F1.4, companies with land holdings are asked further details on the land they control under production or not under production respectively. Sub questions include the area under management, the area of natural forest present and the levels of ecosystem conversion over the previous year. Exact locations of sites can be recorded, but are not required.
- ▶ Three questions from the Implementation module explore the levels to which companies down the value chain can identify where their palm oil originates from. F6.2 asks if traceability systems are in place, F6.2a asks for levels of detail on traceability and F6.2b asks why traceability systems are not in place when absent.
- ▶ Two additional questions of relevance to the Locate phase were added in 2022 on value chain mapping, but no data are yet available for analysis.



Table 1. CDP questions relevant to the LOCATE phase of the TNFD LEAP framework

Question	Questionnaire Module	Full Question	Stage of LEAP process
F1.1	Current State	How does your organization produce, use or sell your disclosed commodity(ies)?	L1: Business footprint
F1.3	Current State	Provide details on the land area you control and/or manage that is used for the production of your disclosed commodity(ies)?	L1: Business footprint L2: Nature interface
F1.4	Current State	Provide details on the land you control and/or manage that was not used for the production of your disclosed commodity(ies) in the reporting year	L1: Business footprint L2: Nature interface
F6.2	Implementation	Do you have traceability system(s) in place to track and monitor the origin of your disclosed commodity(ies)?	L1: Business footprint
F6.2a	Implementation	Provide details on the level of traceability your organization has for its disclosed commodity(ies).	L1: Business footprint
F6.2b	Implementation	Why do you not have system(s) in place to track and monitor the origin of your disclosed commodity(ies) and what are your plans to develop these in the future?	L1: Business footprint
F2.2*	Current State	For each of your disclosed commodity(ies), has your organization mapped its value chains?	L1: Business footprint
F2.2b*	Current State	Provide details of your organization's value chain mapping for its disclosed commodity(ies)	L1: Business footprint

*Introduced in 2022 so not included in analysis

How companies respond through CDP

How much land under management is reported?

14

companies of the total sample reported almost **2.8 million hectares** of land controlled or managed for palm oil production.

19

companies in the sample report that **nearly 445 000 hectares** of land that is managed is not used for the production of palm oil, disclosing the country where this land is located and the type of control that exists (land that is owned or on concession/lease).



of these disclosed that this land was managed as set aside.



was in the 10-50,000 ha range.

How often do companies report exact locations?

F1.3

⋮

F1.4

In response to the question on control and management of land in F1.3 and F1.4, all companies are able to report down to country level. CDP does not ask beyond this level of granularity, although companies can now report more granular location data if they choose.

To what extent do companies report on the environmental condition of land controlled?



companies reported **0-25%** of their land was covered by natural forest



companies reported **75-100%** of their land was covered by natural forest

Are there any examples of companies recording other information about the state of the environment under their control?



When asked to about the certification schemes they use, **80%** of companies are able to provide this.

What % of companies have a traceability system in place?



of companies report having a system in place.

Why do some companies not trace the origins of their palm oil?



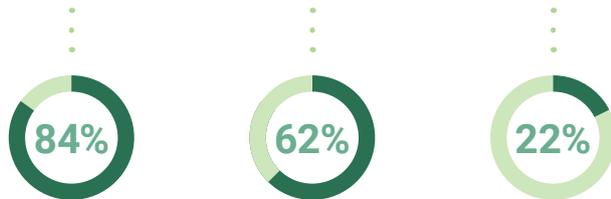
When asked why they do not have systems in place to track and monitor the origin of palm oil, the most common response given was that it's important but not an immediate business priority. This was followed by companies reporting that they plan to track and monitor within the next two years.

What proportion report sourcing to country level?



When reporting production and consumption data, every disclosing company was able to report the country of origin of palm oil.

Companies identified that



of volume was sourced from **Asia**, and

Asia Pacific

Latin America

The most commonly reported countries of origin were **Indonesia** and **Malaysia**

What % can source all their palm oil to point of origin?



Companies report being able to source some level of their commodity



oil palm disclosers can trace **90%** or more of their volumes back to municipality level.

oil palm can trace at least **50%** to municipality level.

oil palm can trace **50%** of their volumes to the plantation level.

More than a third are unable to trace at least **50%** of their volumes to any level of sourcing.

CDP does not ask where the locations are, only if the company can trace supplies to this level

CDP-TNFD alignment

CDP's forest questions partially cover the Locate phase of the TNFD approach.

Companies are already used to reporting on much of the information required for L1 (Business footprint) through CDP. Companies with land holdings are generally able to report on the location and size of land they control, either for palm oil production or for other purposes, although at present they are not required to provide exact locations to CDP and confidentiality may be an issue for reporting these publicly. However, TNFD is likely to require more granular traceability for companies sourcing palm oil from third parties, with a relatively small proportion able to trace the majority of their volumes to the point of origin.

In contrast, CDP's forests questions provide a relatively low level

of information for L2 (Nature interface). Some information of relevance is collected, such as the extent of natural forest cover on land managed, but comprehensive information on the type, condition or integrity of ecosystems around the assets held, or sourced from, overlap with protected areas or other information that would likely be required for a comprehensive LEAP assessment, is not currently within scope of the CDP questionnaire.

For this reason, the CDP questions also only partially cover L3 (Priority Location Identification) and L4 (Sector identification) phases. Identifying priority locations and the sectors that lie within them requires data on the location of assets (covered in L1 and the CDP questionnaire) but will also require far more comprehensive data on the state of the local ecosystems.

Evaluate

What the TNFD asks

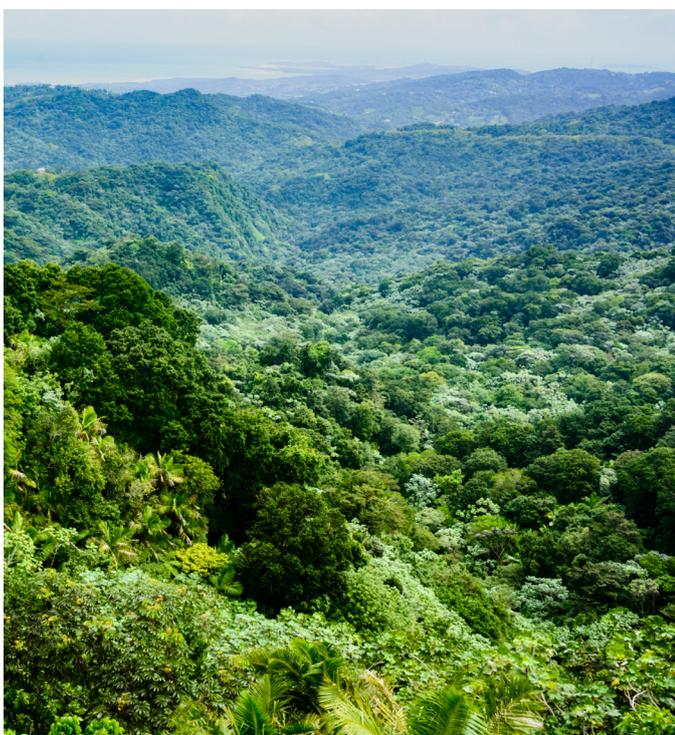
The Evaluate phase focuses on understanding the nature-related impacts and dependencies at the sites identified in the Locate phase. Four questions guide what is required:

L1: Identification of environmental assets and ecosystem services – What are the business processes and activities at each priority location? What environmental assets and ecosystem services does the company have a dependency or impact on at each priority location?

L2: Identification of dependencies and impacts – What are the nature-related dependencies and impacts across our business at each priority location?

L3: Dependency analysis – What is the size and scale of the dependencies on nature in each priority location?

L4: Impact analysis – What is the size and scale of the nature impacts in each priority location?



What CDP asks

There are a variety of questions in the CDP forests questionnaire on 'impact', but these largely focus on the impacts of the environment on the company, not the impacts of the company on the environment. However, whilst there are no questions in the CDP forests questionnaire that explicitly ask about impacts and dependencies of the company on the environment, seven questions were identified as providing data that would be relevant to such an assessment, with one new question due to be introduced in 2022 also noted as relevant (Table 2).

- ▶ Questions F1.2 and F1.5a-c look at the revenue from palm oil consumption and actual palm oil consumption respectively. F1.5b specifically asks for details on consumption from high-risk deforestation areas. These questions therefore indicate an initial judgement on the level of dependence of the company on the environmental services required to produce palm oil.
- ▶ Question F2 focuses on the risk assessments conducted by companies, with F2a specifically asking if the risk assessment covers the impact of the business on forests and other natural systems.
- ▶ Question F4.5a is asked of companies reporting they have a policy on forests and asks them to specify whether the policy covers recognition of the importance of forests and other natural ecosystems for their business and the potential impacts of their business on the same systems.
- ▶ F1.7 is a new question that has been introduced to the 2022 CDP questionnaire for the first time so there are no data yet to analyse. It asks companies to indicate whether they have assessed the deforestation or conversion footprint for their disclosed commodities over the past 5 years, or since a specified cut-off date, and to provide details, which will also provide direct information for assessing impact.

Table 2. CDP questions relevant to the Evaluate phase of the TNFD LEAP framework

Question	Questionnaire Module	Full Question	Stage of LEAP process
F1.2	Current State	Indicate the percentage of your organization's revenue that was dependent on your disclosed forest risk commodity(ies) in the reporting year	E2: Identification of dependencies and impacts E3: Dependency analysis
F1.5	Current State	Does your organization collect production and/or consumption data for your disclosed commodity(ies)?	E2: Identification of dependencies and impacts E3: Dependency analysis
F1.5a	Current State	Disclose your production and/or consumption figure, and the percentage of commodity volumes verified as deforestation- and/or conversion-free.	E2: Identification of dependencies and impacts E3: Dependency analysis
F1.5b	Current State	For your disclosed commodity(ies), indicate the percentage of the production/consumption volume sourced by national and/or sub-national jurisdiction of origin	E2: Identification of dependencies and impacts E3: Dependency analysis
F1.5c	Current State	Why is your organization not disclosing production and/or consumption data for your disclosed commodity(ies)?	E2: Identification of dependencies and impacts E3: Dependency analysis
F2.1b	Current State	Which of the following issues are considered in your organization's forests-related risk assessment(s)?	E2: Identification of dependencies and impact
F4.5a	Governance	Select the options to describe the scope and content of your policy.	E2: Identification of dependencies and impacts
F1.7*	Current State	Indicate whether you have assessed the deforestation or conversion footprint for your disclosed commodities over the past 5 years, or since a specified cut-off date, and provide details.	E2: Identification of dependencies and impacts

*Introduced in 2022 so not included in analysis

How companies respond through CDP

What % of companies are able to estimate revenue from palm oil?



of companies are able to disclose their percentage revenue from palm oil.

What sort of production/consumption and revenue values are companies reporting for palm oil?



Out of the **233** palm oil disclosers, **180** reported they had consumption data available and went on to disclose it.



This was followed by **27** companies that had the data but chose not to report it on the platform. Production data was reported less commonly – **15** companies chose to report both sets of data, while **21** disclosed production data only.



Hence **36** out of **233** companies in total that managed palm plantations reported production data.



For those companies that chose not to disclose their production/consumption data, CDP's questionnaire gives an opportunity to provide a reason. Only **27** companies of the sample chose not to disclose; **19** of these gave data confidentiality as the main reason, while **5** reported they had only completed a partial scoping of their FRCs in products and supply chains.



CDP's question on production and consumption data gives companies an opportunity to disclose the volume of product consumed, irrespective of metric,



were able to provide a numerical value.



Companies were also able to disclose whether this figure covered entire or partial activity for commodity production/consumption



this value covered their entire activity.

What % report on volumes from high deforestation risk areas?



of companies report palm oil origin from high forest-risk countries.



When asked to specify state or jurisdiction and volume within these countries,



of companies are able to provide this breakdown of percentage volume and state.

What % of companies include recognition of impacts on environment as part of risk assessment?



of companies report including impacts on the environment in their risk assessment procedures. These are classed as impact on ecosystems and habitats and impact on water security.

What % of companies have a policy that recognises the importance of forests to their business and/or recognises impacts on natural ecosystems?



Companies are able to select multiple aspects of their policy as a response. Across the sample of **233** palm oil disclosers,



recognise eliminating deforestation and protecting natural ecosystems as part of their policy.

CDP-TNFD alignment

CDP's forest questions only cover a small proportion of the analysis required to carry out the Evaluate phase of the TNFD approach.

The CDP forests questionnaire is designed to look at the impacts of the environment on the company. It does not specifically look at the impacts of the company on the environment, nor the dependencies of the company on the environment. Nevertheless, several questions do obtain data that could feed into the analysis recommended in the LEAP process for E2 or E3. Companies are already very familiar

with calculating the volumes and revenues associated with palm oil sourcing, which is the first indication of the extent to which the company is potentially causing impacts or reliant on dependencies, particularly when it is specified the proportion of which comes from high-risk deforestation areas, although companies are not always willing to publicly disclose such data. Furthermore, CDP questions on risk analysis and policy development refer to the existence of impact and dependency analyses, with 64% companies indicating they have completed these.



Assess

What the TNFD asks

The Assess phase investigates how the impacts and dependencies identified in the Evaluate phase translate into risks and opportunities for the company and the extent to which these are being managed.

Five guiding questions are asked:

A1: Risk identification and assessment –

What are the corresponding risks for our organisation?

A2: Existing risk management – What existing risk mitigation and management approaches are we already applying?

A3: Additional risk management – What additional risk mitigation and management actions should we consider?

A4: Materiality assessment – Which risks are material and should be disclosed in line with the TNFD disclosure recommendations (Strategy A)?

A5: Opportunity identification and assessment – What nature-related opportunities does this assessment identify for our business?



What CDP asks

CDP asks about risks and opportunities in the present (described as impacts on the business) and in the future (described as risks and opportunities). The Assess phase of the LEAP process is therefore covered by three modules of the CDP questionnaire: F1 Current State, F2 Procedures and F3 Risks and Opportunities.

The Current State module looks at existing environmental impacts on the business and also covers some of the responses in the land management questions. F1.6 and F1.6a ask about forest-related detrimental impacts. Companies can detail if impacts are physical, regulatory, reputational and market-related or technological, and select from a dropdown what the primary impact drivers and primary impacts are. Drivers under these four categories include a rise in mean temperatures, negative media coverage, increased cost of certified sustainable material, increased severity of extreme weather events and forest fires. Primary impacts include brand damage, impact on company assets, close of operations, increasing operating/production costs and constraint to growth. Questions F1.3 and F1.4, which were also relevant for the Locate phase, provide details on land controlled, including how the companies are managing the land, for example through the use of High Conservation Value Forest assessments or similar.

▼ In the Procedures module, F2.1 asks about the company's risk assessment processes for identifying future risks. Companies are asked which value chain stage the assessment addresses, its level of coverage of activity, as well as frequency of assessment. They are also asked to share how far into the future risks are considered, details of tools and methods being applied and issues and stakeholders being considered. Issues include availability/quality of forest risk commodities, regulation, climate change and impact on water security, while the stakeholder list includes, customers, investors, suppliers, employees and local communities.

▼ In the Risks and Opportunities module, F3.1 asks for further details about the risks identified, their financial implications and how they are being managed. Similar to the risk assessment, companies are asked what the risk type is (acute physical, chronic physical, regulatory, etc) where in the value chain does the risk occur, and its geographical scale (does it have an impact globally, a country or a specific plantation). Categorised by the risk types mentioned earlier, companies are then asked to report primary risk drivers from a list of dropdowns; isolated events like cyclones, floods and drought are listed as acute physical risk drivers, while increased severity of extreme weather events, soil degradation, coastal erosion and changes in precipitation patterns are listed under chronic physical risk drivers. Other drivers are listed under technological, reputational and regulatory categories, but these provide less nature-related dropdown options. Once the risk drivers have been reported, the primary potential impact is requested, similar to the field in the prior risk assessment question and includes similar dropdown options. Following the detail of risk drivers and impact, companies are asked to disclose the timeframe of the exposure to the risk, the magnitude of its impact (high, medium, low, etc), its likelihood of occurrence and finally, if potential financial impact figures can be provided. F3.1c also asks why no risks have been recorded, if that is the case.

▼ In F3.2, companies are asked to disclose any forest-related opportunities they have identified, specifically what type of opportunities (efficiency, resilience, products & services or financial incentives, etc) and then selection opportunities from a list of dropdowns: these include nature-based solutions, increased demand for certified materials, and ensuring supply chain resilience. Other details requested here are similar to those requested in the risk question in F3.1b: value chain, likelihood of occurrence, estimated timeframe, magnitude of impact and potential financial impact figure. If no opportunities are identified, F3.2c asks why not.

Table 3. CDP questions relevant to the Assess phase of the TNFD LEAP framework

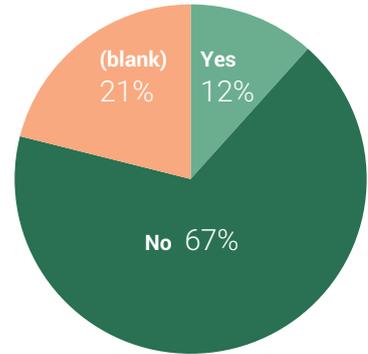
Question	Questionnaire Module	Full Question	Stage of LEAP process
F1.3	Current State	Provide details on the land area you control and/or manage that is used for the production of your disclosed commodity(ies)?	A2: Existing risk management
F1.4	Current State	Provide details on the land you control and/or manage that was not used for the production of your disclosed commodity(ies) in the reporting year	A2: Existing risk management
F1.6	Current State	Has your organization experienced any detrimental forests-related impacts?	A1: Risk identification and assessment
F1.6a	Current State	Describe the forests-related detrimental impacts experienced by your organization, your response, and the total financial impact	A1: Risk identification and assessment A2: Existing risk management A3: Additional risk management A4: Materiality assessment
F2.1	Procedures	Does your organization undertake a forests-related risk assessment?	A1: Risk identification and assessment
F2.1a	Procedures	Select the options that best describe your procedures for identifying and assessing forests-related risks.	A1: Risk identification and assessment
F2.1d	Procedures	Why does your organization not undertake a forests-related risk assessment?	A1: Risk identification and assessment
F3.1	Risks and Opportunities	Have you identified any inherent forests-related risks with the potential to have a substantive financial or strategic impact on your business?	A1: Risk identification and assessment
F3.1b	Risks and Opportunities	For your disclosed forest risk commodity(ies), provide details of risks identified with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.	A1: Risk identification and assessment A2: Existing risk management A3: Additional risk management A4: Materiality assessment
F3.1c	Risks and Opportunities	Why does your organization not consider itself to be exposed to forests-related risks with the potential to have a substantive financial or strategic impact?	A1: Risk identification and assessment
F3.2	Risks and Opportunities	Have you identified any forests-related opportunities with the potential to have a substantive financial or strategic impact on your business?	A5: Opportunity identification and assessment
F3.2a	Risks and Opportunities	For your selected forest risk commodity(ies), provide details of the identified opportunities with the potential to have a substantive financial or strategic impact on your business.	A5: Opportunity identification and assessment
F3.2b	Risks and Opportunities	Why does your organization not consider itself to have forests-related opportunities?	A5: Opportunity identification and assessment

How companies respond through CDP

What % of companies experienced detrimental forest-related impacts?

Only **12%** of companies (27) reported experiencing detrimental forest-related impacts

Is your organization exposed to forest-related detrimental impacts?



To what extent are companies recognising physical risks (impacts) compared to transitional, regulatory etc?



(20 of 27) of report that impacts are reputational or market driven.



Less than **20%** reporting physical impacts.

Regulatory and technological impacts were only reported by one company each.

What are the key risks (impacts) perceived?

12

companies reported increased production or operating costs, while

6

companies identified brand damage.



Impact related to company sales (change in revenue mix and sources, disruption to sales, constraint to growth and impact on company assets) was reported by six companies in total as well. Interestingly, disruption to the supply chain, and reduction/ disruption to production capacity were only identified by one company respectively. Overall, the trend seems to be that mid and downstream activities are more heavily identified as having been impacted than upstream.

What are the drivers behind these risks (impacts)?

The most common response (by 6 companies) was reported to be increased stakeholder concern or negative stakeholder feedback. Five companies then reported that the increased cost of certified sustainable material was a key driver, while availability of such material was identified as an issue by only one company. Increased commodity prices were also only identified by one company. Three companies reported that uncertainty about product origin and/or legality was an impact driver. Furthermore, if considering drivers related more closely to nature and climate, these were identified by 6 companies in total; these included increased severity to extreme weather events, limited access to drought-resistant crop varieties, encroachment, use of fire by surrounding communities and rising mean temperatures. These were all flagged as drivers by companies in the food, beverage and tobacco sector, predominantly food processors and animal farmers.

What is the financial cost of these risks?

The estimated financial costs range from

\$2000 to \$614 million

Companies have flexibility to report in their currency of choice, this range is provided by



70% of companies in the sample in USD equivalent.

What are the main responses?

10

companies highlight engagement (with suppliers and by taking part in multi-stakeholder initiatives), while

7

report that increasing the use of sustainable certified materials and greater traceability of FRCs, as viable actions.

6

companies disclosed responses linked to setting standards and commitments;



this includes establishing no-deforestation/no-conversion commitments, enforcing tighter supplier performance standards, creating an internal standard from scratch, and establishing a company target to phase out palm oil feedstock.

What % are doing risk assessments?



(182) reported they had undertaken a forest-related risk assessment.



When asked why they do not undertake a forest-related risk assessment, 17 of the 49 companies reported that they plan to introduce a risk assessment process in the next two years. **15** companies recognised that it was important but did not deem it an immediate business priority. **Five** judged it to be unimportant.

What do the risk assessments cover?

154

companies provided further details of what their risk assessment procedures cover.



of palm oil companies met the levels required to pass the AFi-aligned KPI for what a risk assessment should cover, whilst many companies conduct some form of risk assessment.

Companies are able to disclose procedures for different stages of their value chain separately. With regards to coverage,



80%

of companies reported that their risk assessments fully cover all their activities.

17%

of companies reported partial coverage.



When providing details of the risk assessment procedure being undertaken, the majority of companies (**57%**) reported they carried out a risk assessment on an annual basis, closely followed by companies conducting it more than once a year (**31%**).



It is important to have an outlook on how far into the future risks are considered, and companies are asked to disclose the number of years their risk assessment procedures look forward to. The most common response is greater than **6 years (48%)** which means companies are implementing a long-term horizon.



The most common response tools used for conducting risk assessments were internal methods (31%), followed by making use of external consultants and collaborations with NGOs or industry (21%). Global Forest Watch Pro was mentioned as the next common tool (8%) after internal methods and external consultants.

To what extent are palm oil companies recognising environmental risks?

Out of **233** Palm oil disclosers,



165 report that they have identified risks with a potential to have a substantive financial or strategic impact on their business,



while **67** report they haven't identified risks. Out of these,



Out of these, **51%** report that risks exist, but no substantive impact is anticipated from them.

The second most common response was that risks had not yet been evaluated (30%) while 9% reported that their evaluation was in progress.

What sort of risks are being identified? What % are identifying physical risks (from dependencies) as opposed to transitional?

For Palm oil,



of risks were Reputational and Market related.

...



were Physical in nature.

...



Nearly two thirds of these occur along the companies' supply chain.

...



occur in the direct operations.

What are the primary risk drivers?



When assessing the primary risk drivers, the most commonly reported was increased stakeholder concern/negative feedback

⋮



⋮

– if considering risks specifically related to nature, the top five were increased severity of extreme weather events, availability of certified sustainable material, increased ecosystem vulnerability, changes in precipitation patterns and forest fires.



These five make up **28%** of all risk drivers.

Over what timeframe are risks perceived?

When asked about the timeframe of these nature-related risks, there is a split between the length of time companies report the top 5 nature-related risks are identified as being both **long-term (6 years or greater)** but also **short to medium term (1-3 years)**. When magnitude of impact is assessed for these risks, the most common response (**27%**) is that the impact is Medium-High. This is then followed, however, by companies identifying impact as Low (**20%**), creating a split between the perception companies have of the level of impact these risks hold. With regards to likelihood of occurrence, there was little correlation identified in company response; increased severity of extreme weather events, and availability of certified material were reported at varying likelihoods across the company sample, from 'about as likely as not' to 'very likely'. The only risk that was identified as being 'virtually certain' was Increased ecosystem vulnerability.

How are risks being managed?

- There is a mix of companies assessing the risk against an internal framework or measurement tool before determining the course of action, and others viewing the potential financial impact of the risk first, before deciding whether to respond. For example, one company reported having an internal company framework which categorises level of risk impact (insignificant, 'minor', 'moderate', 'major' and 'critical') and these in turn have different levels of input being required from senior company members (Board, Executive team, etc). Other companies choose to evaluate impact through different areas: Brand and Reputation, Legal and Regulatory, Health and Safety and Environment and Sustainability – and financial and strategic change is evaluated in these areas before determining their level of impact and necessary action in response.
- Another company has designed a risk score to maintain a consistent approach – scales have been developed for 'probability' and 'impact' and are logged into a risk register, where any relevant KRIs (Key Risk Indicators) are identified. A risk coordinator is appointed each to monitor and implement action plans. Additionally, a company has reported that a risk is only recognised as requiring action if it a) has an impact of greater than 5% on their adjusted EBITDA (earnings before interest, taxes, depreciation, and amortization), which is used as an indicator of the overall profit of a business, or b) directly impacts brand value, corporate reputation or employee wellbeing.



Engagement with suppliers (23%) was the most common response,



followed by increasing the use of **sustainably sourced materials** (21%),



engagement in **multi-stakeholder initiatives** (9%),



supplier diversification (6%)



and implementation of **environmental best practices in direct operations** (6%).

Three of these five responses are linked directly to the company supply chain.

What % are identifying opportunities?

Of the **233** reporting companies,



155 disclosed that they had identified opportunities related to deforestation.



The majority of these opportunities sit in the company supply chain,



relate to direct operations.

What sort of opportunities are being identified?

The top five opportunities identified were increased brand value, demand for certified materials, greater supply chain transparency, ensuring supply chain resilience an expansion into new markets. Together, these make up **73%** of disclosed opportunities.

How valuable were the opportunities being identified?



of companies reported that they did not have a financial estimate while

In USD equivalent, the potential financial impact of opportunities reported range from

⋮



were able to provide an estimate.

\$125,000 to \$2bn

Why were some companies not identifying opportunities?



reported their most common reason for not reporting was that while they realise opportunities exist, they did not see that these had the potential to have a substantial impact on the business. Other companies reported that the evaluation had not yet been evaluated or was currently underway.

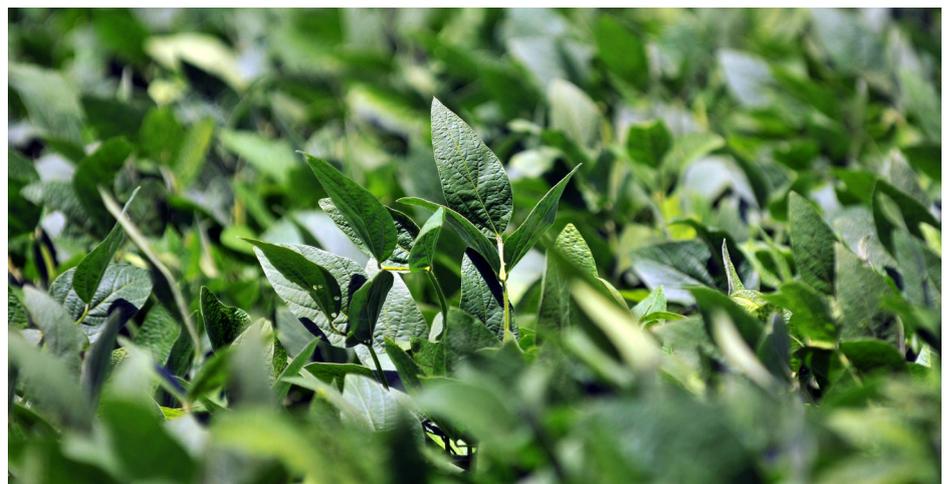
CDP-TNFD alignment

CDP's forest questions cover much of the analysis required to carry out the Assess phase of the TNFD approach, covering all five guiding questions to some degree.

CDP divides what TNFD describes as 'risks' into impacts (current implications for the business) and risks (future implications for the business). The relevant questions on risk identification, quantification and response are therefore divided across modules looking at Current State, Procedures and Risks and Opportunities. Between them, CDP cover all the LEAP guiding questions with the possible exception of 'additional management actions' since CDP does not specifically differentiate between existing and planned management responses.

However, the answers to CDP suggest that many companies currently underestimated the risks and opportunities faced by forest or nature-related issues. Just 29% of risk assessments met the range of criteria required to meet the CDP

Risk Assessment KPI. Furthermore, most companies reported they are not currently impacted by nature-related risks, and those that were primarily identified transitional risks such as reputational damage. Very few identified physical risks suggesting low perception of physical dependence on the environment. Looking forward, most companies do now conduct risk assessments and most identified some nature-related risks as a result, but significant numbers still carry out no assessment, or identified no nature-related risks. Even for those that did, the primary risks were still seen to be transitional, based on perceptions of stakeholders or prices of certified materials. The risks of dependence on an agricultural commodity that is clearly biologically dependent on a functioning environment are still largely unrecognised. It is possible that companies going through the more comprehensive steps required of the LEAP process may well find they reveal a range of different risks and opportunities.



Prepare

What the TNFD asks

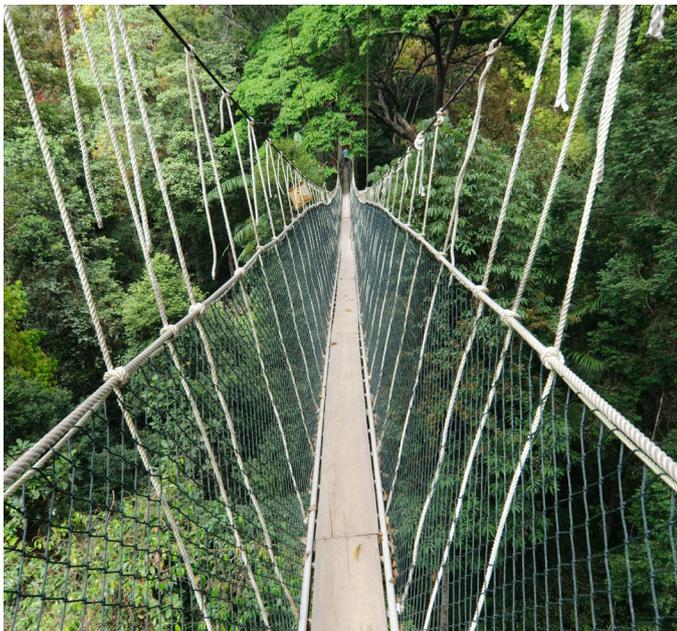
The Prepare phase prepares a company to identify which results to report to the market and how best to report them. Four guiding questions are presented:

P1: Strategy and resource allocation – What strategy and resource allocation decisions should be made as a result of this analysis?

P2: Performance management – How will we set targets and define and measure progress?

P3: Reporting – What will we disclose in line with the TNFD disclosure recommendations?

P4: Presentation – Where and how do we present our nature-related disclosures?



What CDP asks

There are three modules within the CDP forests questionnaire that are relevant to the Prepare phase: Governance, Business Strategy and Implementation.

- ▼ Firstly, within Governance, companies report whether board-level oversight of forest-related issues exists and are then asked specifically about the individual (with designation) or team that hold responsibility for these issues, their level of responsibility (assessing risks and opportunities, managing them or both) and the frequency with which they report these issues to the board.
- ▼ In the Business Strategy module, companies are to disclose if and how forest-related issues are integrated into their long-term strategic business plan; this covers long-term business objectives and financial planning and the long-term time horizon in years.
- ▼ In Implementation, questions on timebound and quantifiable targets are addressed: the CDP questionnaire included a list of target types: traceability, third-party certification, engagement with direct/indirect suppliers, ecosystem restoration, etc. There are also options provided for linked commitments, traceability points and third-party certification schemes: for commitments, CDP lists zero net/gross deforestation, no conversion of natural ecosystems, social commitments and traceability points include country, jurisdiction or plantation. Additionally numerical fields request from companies include the start and target years, the target as a percentage, and the percentage of target achieved in the reporting year.

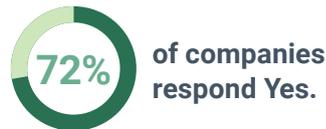
Table 4. CDP questions relevant to the Prepare phase of the TNFD LEAP framework

Question	Questionnaire Module	Full Question	Stage of LEAP process
F4.1	Governance	Is there board-level oversight of forests-related issues within your organization?	P1: Strategy and resource allocation
F4.2	Governance	Provide the highest management-level position(s) or committee(s) with responsibility for forests-related issues (do not include the names of individuals).	P1: Strategy and resource allocation
F5.1	Business Strategy	Are forests-related issues integrated into any aspects of your long-term strategic business plan, and if so how?	P1: Strategy and resource allocation
F6.1	Implementation	Did you have any timebound and quantifiable targets for increasing sustainable production and/or consumption of your disclosed commodity(ies) that were active during the reporting year?	P2: Performance management
F6.1a	Implementation	Provide details of your timebound and quantifiable target(s) for increasing sustainable production and/or consumption of the disclosed commodity(ies), and progress made.	P2: Performance management
F6.1b	Implementation	Why do you not have target(s) for increasing sustainable production and/or consumption of your disclosed commodity(ies) and what are your plans to develop these in the future?	P2: Performance management

How companies respond through CDP

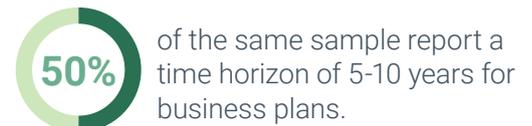
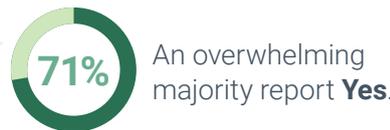
What proportion of companies have board-level oversight of forest-related issues?

When asked if there is board-level oversight of forest-related issues within the organisation,



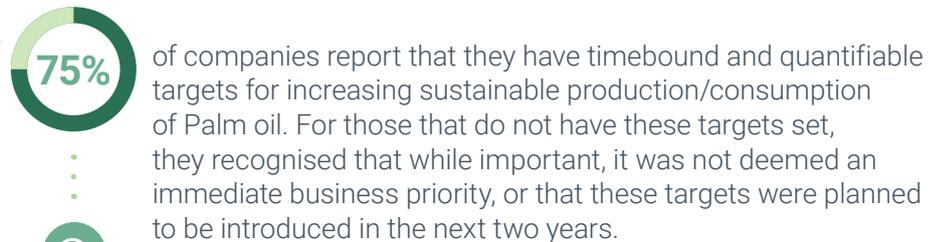
or sometimes more than quarterly (**17%**), or as important issues arise (**16%**).

What proportion of companies have integrated forest-related issues into their long-term strategy?



This question is not asking simply about your organization's response to forests-related issues.

How many companies report having set targets for forests?



A total of

306
targets

were reported in the 2021 Forests questionnaire. Forty-eight percent of these were to be certified by a third party (e.g. RSPO). Other common targets were focused on traceability, supplier and smallholder engagement, assessing compliance and replacing/phasing out Palm oil.



In addition to these targets, companies also had linked commitments, the most common of which was **zero net/gross deforestation (52%)**



followed by no conversion of natural ecosystems and other environmental commitments. When asked about **traceability**, the majority of companies were unable to provide a response (**73%**)



but **Mill, Plantation and Refinery** were reported, together making up **25%** of responses.



Furthermore, when asked to provide details of third-party certification schemes they use, the majority (**64%**) disclosed a type of **RSPO (Roundtable on sustainable palm oil) certification**, highlighting as significant for the commodity and sector.



In order to gather numerical data on the targets being set by companies, CDP asks companies to report the start and target years they have set, alongside the % of target achieved by the reporting year. For the latter, **93%** were able to provide a numerical value, showing that a large proportion of organisations are monitoring their performance against their targets.



150/306 Targets were reported to be achieved at **80%** or more.



105 of these were reported as **100%** achieved.

Who holds responsibility for delivering targets?

Many report having a senior member of staff (e.g Chief Sustainability Officer, Director of Financial Control) or a group (e.g. Sustainability Steering Committee) taking lead of the issues; this includes spearheading reports and assessments before raising them with the Board of Directors or departmental heads.

CDP-TNFD alignment

P1 (Strategy and resource allocation) in the Prepare step of the LEAP process is largely covered by the Governance and Business Strategy module – decision-making and oversight of forest-related issues are addressed in the former, while the latter covers the company's long-term strategic business plan.

P2 (Performance measurement) is covered by F6.1, 6.1a and b, where companies are asked to describe their timebound and quantifiable targets through details such as third-party certification schemes and traceability points. Progress of meeting targets is measured by companies reporting the target year and the % of target achieved in the reporting year.



**Company
Case Studies**



Alignment of 2021 disclosure to the LEAP Process:

Mars and Unilever Plc Case Studies

Mars and Unilever Plc demonstrated a high level of reporting in CDP's 2021 cycle, receiving an A score for their Palm Oil disclosure. The companies have successfully provided responses for questions aligned to each stage of the LEAP process – excluding questions like F6.1b, which ask companies why they do not have any targets, since these address companies that have not disclosed targets in preceding questions. Overall, their reporting aligns with the questions being asked by CDP, but do not report nature-related information beyond this.

Locate:

Mars

Mars disclosed information on their plantations and mills and mentioned countries of operations alongside providing production and consumption data. Through their Palm Positive Plan, the company achieved full traceability down to plantation level, and has included these details in their disclosure **(L1) (L4)**. Mars has disclosed countries and regions of operation, but as the CDP questionnaire does not ask for details of biomes and ecosystems, the company has not provided this detail. It does however, mention interventions to prevent conversion of natural ecosystems in general **(L2)**.

Unilever Plc

disclosed part of its consumption data, providing a numerical figure in metric tons of palm oil volume **(L1) (L4)**. They are also able to provide country of origin and regional details but like Mars, biomes and ecosystems are not listed. Like Mars, it also mentions protection of natural ecosystems as an objective, in Indonesia and Malaysia in particular **(L2)**.

Evaluate:

Mars

Mars successfully provided details of risk assessment conduction and detrimental impacts that the company has been exposed to in the past, and has also been able to provide a numerical figure for the total financial impact experienced **(E2) (E3)**. Consumption data is reported down to plantation level, as CDP requests **(E1)**. However, the link between impacts and each priority location where they occur are not requested by CDP and thus not highlighted by companies.

Unilever Plc

Unilever Plc also provides details of risk assessment and frequency of conduction **(E1)**, but reports that the company has not experienced any detrimental impacts in the past.

Assess:

Mars

Mars provides details of one risk and opportunity faced by the company for palm oil consumption, providing a corresponding response to this risk **(A1) (A2)**: the company flags changes to national legislation as a risk to their global supply chain, increasing the likelihood of greater compliance costs. The opportunity to this is reflected in the Palm Positive Plan – increased supply chain transparency and security of supply is set to minimise this risk. It should be noted however, that this was the only risk and opportunity disclosed to CDP; no other nature-related risks or opportunities were identified by the company.

Unilever Plc

Like Mars, Unilever Plc also disclosed one risk: negative media coverage, flagging brand damage as the potential impact, driven from campaigns linking deforestation and palm oil cultivation to Unilever Plc. As a response to this, the company increased the use of sustainably sourced material from certified independent mills and increased the suspension of non-compliant suppliers **(A1) (A2)**. Again, this is not a nature-related risk. However, Unilever Plc does identify a nature-related opportunity for the company - opportunities to increase their brand value, by being positively associated with our sustainable, deforestation-free palm & smallholder & landscape protection/regeneration programs has been disclosed in response to this question **(A5)**.

Process:

Mars

Decisions related to forest-related issues in Mars sit with the CEO, who is the head of the company's leadership team. Implementation is then cascaded down to leaders of each business segment. The Board also sees to all issues to guide long-term business strategy and measure progress **(P1)**. With respect to targets, the Palm Positive Plan aimed to deliver deforestation-free Palm Oil and simplify Mars' supply by reducing the number of mills and increase traceability. The company reported successfully meeting this target in 2020. They also have a company-wide target to reduce Greenhouse Gas emissions by 67% by 2050, with a 2015 start year **(P2)**.

Unilever Plc

Unilever Plc discloses that climate and nature issues and commitments are the responsibility of the CEO, with the company board taking accountability for overall company action **(P1)**. Similar to Mars' target of reducing the number of mills, Unilever's Sustainable Living Plan is a public commitment to reducing the number of mills from 1600 globally to 500 located largely in Indonesia and Malaysia by 2023. The plan's overarching goal is to achieve conversion- and deforestation-free material. The company also in 2020 achieved its target of sustainable sourcing, by procuring 100% of its palm from RSPO-certified sources **(P2)**.

Summary and conclusions

3

Summary and conclusions

The data mapping and analysis conducted in this report provides a detailed breakdown of disclosure for palm oil in the 2021 CDP forests questionnaire. By observing the TNFD's LEAP process and sub-components alongside the modules of the questionnaire, one can identify the correlations as well as the limitations between the questions CDP currently asks and what information TNFD asks for as part of the beta framework.

While standalone questions or a dedicated module for nature-related issues does not exist, nature-related issues are included as dropdowns for several questions alongside other elements like regulatory or market-based concerns⁴.



4. Open text field questions also exist in the CDP Forests questionnaire but have not been included as part of the analysis in this report beyond F3.1a (whether companies measure risks their organisation is exposed to) in the Assess step of the LEAP process. To view the full list of questions in the CDP Forests questionnaire follow: [Guidance for companies - CDP](#)

The heat map shows the approximate level of alignment of the 2021 CDP forests questionnaire with the LEAP framework.

Not currently aligned	Some alignment	Largely aligned
-----------------------	----------------	-----------------

L1 Business footprint	L2 Nature interface	L3 Priority location identification	L4 Sector identification
Where are our direct assets and operations and our related value chain (upstream and downstream) activities?	Which biomes and ecosystems do these activities interface with? What is the current integrity and importance of the ecosystems at each location?	At which locations is our organisation interfacing with ecosystems assessed as being low integrity or of biodiversity importance?	What sectors, business units, value chains or asset classes are interfacing with nature in these priority locations?

E1 Identification of relevant environmental assets and ecosystem services by priority location	E2 Identification of dependencies and impacts by priority location	E3 and E4: Dependency and impact analysis
What is the nature of our business processes and activities at each priority location? What environmental assets and ecosystem services do we have a dependency or impact on at each priority location?	What are our nature-related dependencies and impacts across our business at each priority location?	What is the size and scale of our dependencies on nature in each priority location? What is the size and scale of our impacts on nature in each priority location?

A1 Risk Identification	A2 Acknowledgement of current nature-related risk management efforts	A3 Identification of additional risk management steps that could be taken	A4 Assessing materiality	A5 Opportunity identification and assessment
What are the corresponding risks for our organisation?	What existing risk mitigation and management approaches are we already applying?	What additional risk mitigation and management actions should we consider?	Which risks are material and should be disclosed in line with the TNFD disclosure recommendations?	What nature-related opportunities does this assessment identify for our business?

P1 Strategy and resource allocations	P2 Target setting & performance management	P3 Reporting	P4 Presentation
What strategy and resource allocation decisions should be made as a result of this analysis?	How will we set targets and define and measure progress?	What will we disclose in line with the TNFD disclosure recommendations?	Where and how do we present our nature-related risk disclosures?

These results show there is significant alignment between what CDP have been asking companies for over a decade and what the LEAP process is advising companies to do in future. Much of the data disclosed through the CDP forests questionnaire could also be used in a LEAP assessment. However, robust nature-related risk and opportunity assessments, as set out in the voluntary LEAP process, may require greater depth and granularity than CDP demands and it requires data in areas not currently covered by CDP,

particularly on assessing the state of the environment on and assessing robust company impacts and dependencies. Completing a LEAP assessment could require significantly more effort than completing the CDP forests questionnaire. Companies already complain about the burden of reporting to CDP; the TNFD will need to carefully manage the balance between gathering sufficient information to understand and manage environmental data with the burden of reporting to the market.



The CDP data also suggest that palm oil companies have a way to go before they recognise the levels of risks and opportunities being recognised by others, particularly with regard to the importance of physical and systemic risks to the business, rather than the more commonly understood transitional risks.



Whilst there is significant overlap, the CDP forests questionnaire and the LEAP process provide very different views of a company. The CDP questionnaire provides specific information on company progress towards the eradication of deforestation from its supply chains. The LEAP process should provide a far more comprehensive overview of all the ways a company interacts with its environment, the degree to which these relationships are being managed and how to report these data to the market. In the future, CDP expects to expand its disclosure platform to better capture a wider range of nature-related risks and opportunities in a more integrate way and expects to use the TNFD LEAP approach as a structure for this.

Whilst CDP disclosure demonstrates companies are increasingly willing and able to report across many areas of the LEAP framework, the quality of data reported demonstrate that companies still have a way to go if they are going to be able to comprehensively understand and report on environmental relationships to the level LEAP requires. Disclosures on palm oil are actually some of the most advanced compared to other forest-risk commodities, but even here the same patterns are being exhibited as were summarised across sectors in [CDP's annual forest disclosure report](#): action is happening in all areas required, but only a minority of companies are able to show they are taking sufficient action across the board.

The CDP data also suggest that palm oil companies may have a way to go before they recognise wide range of nature-related risks and opportunities to which they may be exposed, particularly with regard to physical and systemic risks to the business, rather than the more commonly understood transitional risks. The TNFD approach should help companies achieve this, but the lack of perceived concern may also be a barrier to implementing it in the first place.

Finally, the TNFD is likely going to have to provide particular support to areas not covered by the CDP questionnaire. These include the assessment of environmental status and the assessment of the impacts and dependencies of the company on its environment.

Annex

Data limitations

The primary limitation of the CDP data is that the forests questionnaire was designed to assess company progress against 15 KPIs to measure progress against the eradication of deforestation from supply chains. Whilst these questions overlap strongly with the TNFD process, they are much more restricted in scope (focusing specifically on deforestation rather than the wider range of nature-related impacts covered by TNFD) and were designed to answer slightly different questions.

In addition to this, data disclosed to CDP are submitted voluntarily by the companies, therefore they are always subject to inherent limitations. These limitations are managed as far as possible by built-in cross-cutting questions within the questionnaires, allowing for consistency checks, and because the data are provided in response to formal requests by investors and purchasers, which brings with it a level of legal liability and obligation.

Finally, the specific data analysed for this report were also limited in the sense that they were restricted to a single year and a single commodity and therefore represented a fairly small sample from a much larger database of information. Over 1100 disclosures were received in 2021 across all commodities, and forests data have been collected for over a decade.



Annex

Additional data points and information of interest for the TNFD

While the CDP Forests questionnaire covers a wide breadth of company activity, when compared to the TNFD beta framework, one finds that there are areas for which additional data could be provided beyond the questions mapped to in this report.

CDP questions successfully cover the 'what' 'where' and 'when' of information requested in its modules, but the thought process and reasoning of companies for taking certain approaches or applying a specific tool is not

necessarily covered – this is the 'how' and 'why', limiting the granularity that the TNFD may require through the components of the LEAP process. Below are examples of where this applies:

- ▼ Along the value chain, CDP breaks down reporting by direct operations or along the supply chain. Granularity beyond this to define up- mid- and downstream activity is not currently included. Nature-related responses integrated as part of dropdowns alongside other fields in questions- standalone question on nature do not exist. This is similar for information included in the Locate phase of the LEAP process, where information on ecosystems and biome interaction is included, but not asked for specifically in the CDP questionnaire.
- ▼ When reporting on their risk assessment procedures, companies are asked to disclose tools and methods being used to conduct a risk assessment. While they are requested, details of what these tools and methods entail is not asked for; for example, if a company discloses that they make use of internal methods to assess risk, further breakdown of what precisely these methods are not provided.
- ▼ Within the risks and opportunities module of the CDP forests questionnaire, companies are asked to disclose various facets of their risks and opportunities alongside the risks and opportunities themselves – these include likelihood of occurrence, magnitude, and timeframe. While they are stated and relevant dropdowns are provided as potential responses to select from, how these elements are determined is not requested for disclosure by CDP.
- ▼ Third-party certification schemes are requested by CDP, in relation to percentage of land that is certified and targets the company has set that have certification schemes involved. Disclosure of these schemes is recorded in high percentage in the CDP questionnaire, with over two thirds of companies being able to provide details of which schemes they apply. Further information however, on the application/auditing process or success of these schemes is not requested in the questionnaire.

Annex

Changes being introduced in CDP's 2022 Questionnaire

The following questions have been introduced in the 2022 CDP Forests questionnaire, and align to the Locate and Evaluate stages of the LEAP process.

Question	Question	Module	Topic	Alignment to LEAP
F1.7	Indicate whether you have assessed the deforestation or conversion footprint for your disclosed commodities over the past 5 years, or since a specified cutoff date, and provide details.	Current State	Land conversion	Evaluate
F2.2	For each of your disclosed commodity(ies), has your organization mapped its value chains?	Procedures	Value chain mapping	Locate
F2.2a	Provide details of your organization's value chain mapping for its disclosed commodity(ies).	Procedures	Value chain mapping	Locate

F1.7 covers the topic of land conversion. Disclosure of the extent to which the company monitors its deforestation or conversion footprint within the supply chain provides investors and other data users with an understanding of the scale of forest-related impacts. Organizations are able to demonstrate transparency and awareness of the relationship between forests and their business activities. The question covers whether or not companies have monitored or estimated their deforestation/conversion footprint, the known footprint in hectares and the level of coverage. This is relevant to the Evaluate stage of LEAP.

F2.2 and F2.2a asked for data on value chain mapping. Knowledge of the actors in a value chain is crucial for

understanding risk exposure and opportunities related to deforestation and land conversion. Mapping the value chain is an important first step in determining and engaging on any potential environmental impacts resulting from commodity production. Additionally, transparency of forests risk commodity suppliers and where they operate is good practice. This type of data is increasingly being requested by investors, civil society, and other stakeholders in the assessment and verification of the environmental impacts of commodity production. This facilitates accountability for, and strengthens credibility of, the organization's sustainability commitments. These two questions are both relevant for Locate, which addresses parts of the value chain that have an interface with nature.

Annex

Additional information on the company case studies – Mars

Mars delivered

100%

deforestation-free palm oil by the end of 2020 and has advanced its work for human rights across its suppliers' extended supply chains.



A business model that focuses exclusively on financial performance is not sustainable or desirable.



In 2021, Mars disclosed on five commodities through CDP: Wood, cattle products, cocoa, palm oil, soy and timber products. It received an A score for its Palm oil disclosure.

Policy: Mars has both a publicly available general policy and palm oil specific companywide no-deforestation policy: the Palm oil Positive Plan. Through its Palm Positive Plan, Mars delivered 100% deforestation-free palm oil by the end of 2020 and has advanced its work for human rights across its suppliers' extended supply chains.

On palm oil, Mars has a public no-deforestation commitment that covers 100% of its palm oil supply, includes a cut-off date of 2015 and a target date of 2020. It also has a Climate action target to cut GHG emissions across their value chain by 67% by 2050. Among other aspects, Mars expects its suppliers to:

- ▼ Ensure no deforestation or conversion of primary forest or natural ecosystems of high conservation value (HCV);
- ▼ Ensure no development in high carbon stock (HCS) areas;
- ▼ Support free prior and informed consent;
- ▼ Resolve land rights disputes through a balanced and transparent dispute resolution process;
- ▼ Respect farmers' and communities' land rights and the rights of indigenous and forest-dependent people;
- ▼ Support farmers and plantation owners to comply with Mars' deforestation-related requirements

Mars integrates forest issues into all parts of long-term strategic business plans including its long-term business objectives, strategy for long-term objectives and financial planning. Financial performance and positive societal impact guide Mars' decision-making because "a business model that focuses exclusively on financial performance is not sustainable or desirable". This approach ensures Mars' financial planning helps it achieve near-term results so it can remain a successful business for the next 100 years. It has also resulted in sustainability investments of nearly US\$1 billion since 2016.

Mars reports assessing forest-related risks across its palm oil supply chain, with risks beyond six years considered and includes: the availability of forest risk commodities, quality of forest risk commodities, impact of activity on the status of ecosystems and habitats, social impacts and local communities in the assessment. Forest-related risks are assessed more than once a year using external consultants, Global Forest Watch Pro, internal company methods and Starling. For example, to assess palm oil deforestation risks, Mars overlays its palm oil sources identified through supply chain mapping with areas at high risk of deforestation, using an internal geographic information system.

Through Mars' Palm Positive Plan, launched in September 2019, they have made sweeping transformations to their palm supply chain to deliver deforestation-free palm oil and advance respect for human rights. In October 2020, Mars announced that this plan had delivered a deforestation-free palm-oil supply chain based on rigorous mapping, management and monitoring. Through a radical simplification of Mars' supply chain, they have cut the number of mills in their supply chain from 1,500 to fewer than 100, and aim to halve that number again in 2022. The company engages in forward contracting with suppliers and they now report full traceability to plantation level.

Since 2013, Mars has purchased 100% of its palm oil from Roundtable on Sustainable Palm oil (RSPO)-certified sources through the mass balance program. In 2019, Mars began sourcing RSPO-segregated palm oil for its European and Australian businesses, meaning certified palm oil that is kept separate throughout the entire supply chain.

Using geospatial monitoring tools and second-party verification, Mars has a system to control, monitor, and verify compliance with its no deforestation policies and commitments in its palm oil supply chain. Mars is working with an external consultant to conduct monthly satellite monitoring of its total palm oil supply chain at a supplier group level for deforestation or development on peat. Any findings are verified and followed up with Tier-1 suppliers to take appropriate action.

Mars engages in longer-term contracts with suppliers who commit to and deliver supply chains that meet its expectations. If reported supplier non-compliance is validated, Mars will remove the supplier from its supply chain and work with them to develop a corrective action plan. Corrective actions are reviewed to ensure they meet re-entry before re-engaging the supplier.



Legal compliance

Mars conducts a general assessment of legal compliance with forest regulations and/or mandatory standards within its palm oil supply chain. Legal compliance is included in its Supplier Code of Conduct and Mars assesses the sustainability performance, social and legal compliance audit results of prioritized suppliers using an external supplier evaluation tool.

Smallholders

2000 palm oil smallholders have been engaged by Mars through the Areal Prioritas Transformasi (APT) program. Mars is working with smallholders to support good agricultural practices and reduce deforestation and/or conversion of natural ecosystems through capacity building, supply chain mapping, investing in pilot projects and prioritizing support for smallholders in high deforestation risk regions. For example, Mars reports that it has engaged more than 2,000 palm oil smallholders through the Areal Prioritas Transformasi (APT) program that addresses the challenges of deforestation caused by poverty, preventing deforestation inside concessions, forming community-based conservation plans and providing alternative livelihood options for these farmers.

Integrated landscape approaches are a critical complement to supply chain management to achieve a deforestation-free transformation, especially in the most critically threatened or highest conservation value landscapes.

To support and improve its suppliers' capacity to comply with forest-related policies, commitments and other requirements, Mars reports that it has engaged 100% of its direct suppliers through capacity building, supply chain mapping and financial and commercial incentives. It develops or distributes supply chain mapping tools, invests in pilot projects, has long-term contracts linked to forest related commitments, offers on-site training and technical assistance, and uses supplier questionnaires on environmental and social indicators.

To manage and mitigate deforestation risks Mars is working beyond first-tier suppliers through capacity building, developing or distributing supply chain mapping tools and investing in pilot projects.

Mars is participating in jurisdictional approaches to promote the implementation of forest-related policies and commitments because "Integrated landscape approaches are a critical complement to supply chain management to achieve a deforestation-free transformation, especially in the most critically threatened or highest conservation value landscapes." For palm oil, Mars has partnered with Conservation International and other organizations to develop the Coalition for Sustainable Livelihoods to support smallholders and sound natural resource management in Aceh and North Sumatra, Indonesia. It has also engaged with initiatives such as the Consumer Goods Forum and Tropical Forest Alliance to catalyse collective action in support of landscape approaches.

Annex

Additional information on the company case studies – Unilever

Unilever Plc's People & Nature Policy are leading to the selection and consolidation of the number of palm mills from

1600
globally to



500



The public commitment to 100% sustainable sourcing was a Unilever Sustainable Living Plan target (2010-2020) & remains an important target in the new Unilever Compass.



Unilever Plc disclosed for four commodities in CDP's 2021 Forest questionnaire: Palm oil, Timber products, Soy and Cocoa. Like Mars, it also received an A score for its Palm oil disclosure.

Unilever Plc's People & Nature (P&N) Policy (2020) is aligned with Accountability Framework Guidance & goes well beyond palm industry-standard NDPE Policies and regulatory requirements. As a result of the traceability/transparency and natural ecosystem protection principles inscribed in the Policy, they have implemented a strategy through 2020 that relies on traceability & assessment of the risk-of deforestation at sourcing origin, leading to the selection and consolidation of the number of palm mills from 1600 globally to 500, mainly in Indonesia and Malaysia.

Unilever declared its public commitments in its People & Nature (P&N) Policy (2020), which covers all purchased volumes of cocoa, palm, P&B, soy, tea with a 100% by 2023 target and through the Responsible Sourcing Policy (RSP) which applies to all Suppliers. Compliance with these Policies - and the independent verification thereof - is included in contractual agreements with Suppliers, to establish commercial obligation to comply with policy requirements. The P&N Policy requires suppliers, supplier groups & their third-party supply chains to commit to:

- ▼ Protect natural ecosystems from deforestation and conversion
- ▼ Respect & promote human rights, including FPIC, remediation
- ▼ Transparency and traceability, including transparent resolution of complaints
- ▼ Being a force for good for nature and people.

The public commitment to 100% sustainable sourcing was a Unilever Sustainable Living Plan target (2010-2020) & remains an important target in the new Unilever Compass. Other commitments by the company include:

Zero gross/no Deforestation:

Unilever report taking action to make ensure no deforestation exists along the palm supply chain, by shifting sourcing from 1,600 palm mills globally, to 500 mills located largely in Indonesia and Malaysia. This transformation is ongoing, beginning in 2020 and to be completed by 2023. In 2020, the company sourced 99.6% RSPO-certified palm materials- indicating its sourcing restrictions to credible certified sources. In addition, 158 palm oil suppliers were suspended in 2020 due to non-compliance against our Policy for both deforestation/conversion and human rights related breaches.

No conversion of natural ecosystems:

Unilever Plc has set up monitoring systems to manage palm-linked peatland conversion - an at-risk natural ecosystem in Indonesian & Malaysian palm. With external organisations such as Descartes Labs and NASA FIRMS & MODIS, they built geospatial data layers and an alerting system to verify and manage supplier non-compliance.

Restoration & compensation:

Unilever Plc has reported on taking action to address and restore past deforestation and/or conversion through investment in 5 jurisdictional projects across Indonesia & Malaysia, in collaboration with governments, NGOs, industry actors on forest protection and/or restoration work. In 2020, the company restored 34 hectares of forests around Tanjung Puting National Park, part of their Central Kalimantan-Inobu project.

Secure FPIC:

All of Unilever Plc's suppliers must commit to our RSP, which is anchored in standards like International Bill of Human Rights & ILO Declaration on Fundamental Principles & Rights at Work; and includes the company's commitment to respect & promote land rights of communities & indigenous people, through the application of the FPIC participatory process & a zero-tolerance stance on land grabbing. In 2020, Unilever Plc engaged The Forest Institute (TFI) to conduct a qualitative analysis of social & land conflicts relating to the palm oil industry in Indonesia to develop concrete recommendations on strategic interventions from Unilever and other private sector entities to help reduce or resolve land conflicts.

Transparent resolution of complaints and conflicts:

On an ongoing basis, the company transparently manages complaints, conflicts and grievances via Unilever's public grievance process, which is open both to employees and to third parties & sets out procedures for addressing allegations of non-compliance with company policies. Unilever records, addresses and reports these via the public Grievance Tracker, so that others can see and act on these insights.

In 2020,

99.6%

of Unilever's palm core volumes were RSPO certified.



In 2020 as part of Compass, Unilever Plc launched their €1 billion Climate & Nature Fund, which their brands will use over the next 10 years to take meaningful action to improve the health of the planet.



Unilever Plc sources materials certified to sustainability standards, such as RSPO. In 2020, 99.6% of Unilever's palm core volumes were RSPO certified – 92.2% MB, 2.1% SG and 5.3% independent smallholder credits (RSPO IS-credits). This helps to restrict palm sourcing to suppliers who maintain compliance with the RSPO standard and can consistently supply certified volumes to Unilever. In 2020, Unilever was the largest buyer of RSPO independent smallholder (IS)-credits- these purchases benefitted over 8,000 independent smallholder farmers located across Indonesia and Thailand, representing 61% of the total number of RSPO-certified independent smallholder. Collectively these independent smallholder groups manage 83% of the total area of land that is RSPO certified under independent smallholders.

The company's Sustainable Agriculture Code & Regenerative Agriculture Principles provide guidance on soil, carbon capture & restorative & regenerative practices: these were initiated with selected suppliers in 2021. All materials purchased must comply with our Responsible Sourcing Policy. In 2020 as part of Compass, Unilever Plc launched their €1 billion Climate & Nature Fund, which their brands will use over the next 10 years to take meaningful action to improve the health of the planet. The company is investing up to \$25m over 2018-2022 in sustainable commodity projects e.g. running programs and sourcing sustainably from smallholders (SHFs) in Indonesia and Cote d'Ivoire.

Unilever Plc uses internal company methods to evaluate quality of its sourced commodities. In order to ensure quality of sourced ingredients and mitigate forest risks along the supply chain, the company purchases ingredients that are certified under schemes such as FSC, PEFC, RSPO, or RTRS. The impact of deforestation-risk is monitored using tools such as Global Forest Watch Pro & Trase.

Unilever Plc also uses jurisdictional/landscape assessment to identify priority areas to invest in smallholder (SH) impact programs that will increase supply of sustainable, quality commodities through extension services e.g. training palm smallholders in Good Agricultural Practices (GAP) & helping get quality palm seedlings. By shortening the supply chain & being closer to suppliers, they believe it is one way to better control the quality of inputs into products e.g. GAP training for palm oil smallholders in priority areas.

RSPO requirements are considered to be equivalent or exceeding those of ISPO and MSPO. Unilever buys RSPO certified volumes from Palm suppliers and by virtue of this, volumes in compliance with RSPO standards are produced by farmers and suppliers who have been assessed and found to be comply with forest regulations and any other mandatory standards in the relevant jurisdiction. The company conducts quarterly checks on suppliers' RSPO certification status, which is renewed annually, to ensure that they continue to be compliant with legal requirements set out in the RSPO framework.



CDP Authors

Thomas Maddox

Global Director, Forests and Land

Thomas.Maddox@cdp.net

Dua Zehra

Senior Environmental Analyst

dua.zehra@cdp.net

**For more information
please contact:**

CDP

Thomas Maddox

Global Director, Forests and Land

Thomas.Maddox@cdp.net

Global Canopy

Andrew Boulding

Research Associate

a.boulding@globalcanopy.org

Commissioned by:



Funded by:



CDP Worldwide

4th Floor

60 Great Tower Street

London EC3R 5AZ

Tel: +44 (0) 20 3818 3900

forests@cdp.net

www.cdp.net

About CDP

CDP is a global non-profit that runs the world's environmental disclosure system for companies, cities, states and regions. Founded in 2000 and working with over 590 investors with \$110 trillion in assets, CDP pioneered using capital markets and corporate procurement to motivate companies to disclose their environmental impacts, and to reduce greenhouse gas emissions, safeguard water resources and protect forests. Over 14,000 organizations around the world disclosed data through CDP in 2021, including more than 13,000 companies worth over 64% of global market capitalization, and over 1,100 cities, states and regions. Fully TCFD-aligned, CDP holds the largest environmental database in the world, and CDP scores are widely used to drive investment and procurement decisions towards a zero carbon, sustainable and resilient economy. CDP is a founding member of the Science Based Targets initiative, We Mean Business Coalition, The Investor Agenda and the Net Zero Asset Managers initiative.

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