

DESIGNING DUE DILIGENCE

HOW POLICYMAKERS AND BUSINESSES CAN EFFECTIVELY TURN LEGISLATION INTO ACTION ON DEFORESTATION AND CONVERSION

Report commissioned by WWF-UK and prepared by 3Keel LLP.

Written by

Caitlin McCormack, Jeffrey Williamson and Will Schreiber (3Keel) with additional research provided by Rob Kilgour, Sian Allen and Garrett Stoll (3Keel)

Edited by

Mollie Gupta, Josephine Cutfield, Dr Jessica Fonseca da Silva and Sabrina Gonçalves Krebsbach (WWF-UK).

Thanks to all those who provided valuable feedback and support, including Jade Saunders (Forest Trends), Jake White, Robin McGhee, Debbie Tripley, Sarah Wakefield (WWF-UK); Jean François Timmers (WWF-Brazil); Anke Schulmeister (WWF-EU) and Steven Ripley (Tesco).

Design and infographics

Richard Scott and Robbie Dawson (3Keel).

Published in March 2022 by WWF-UK. Any reproduction in full or in part of this publication must mention the title and credit WWF-UK as the copyright owner. Text © WWF-UK, 2022. All rights reserved. Disclaimer: The material and the geographical designations in this report do not imply the expression of any opinion whatever on the part of WWF concerning the legal status of any country, territory or area, or concerning the delimitation of its frontiers or boundaries. No photographs in this publication may be reproduced without prior authorisation.

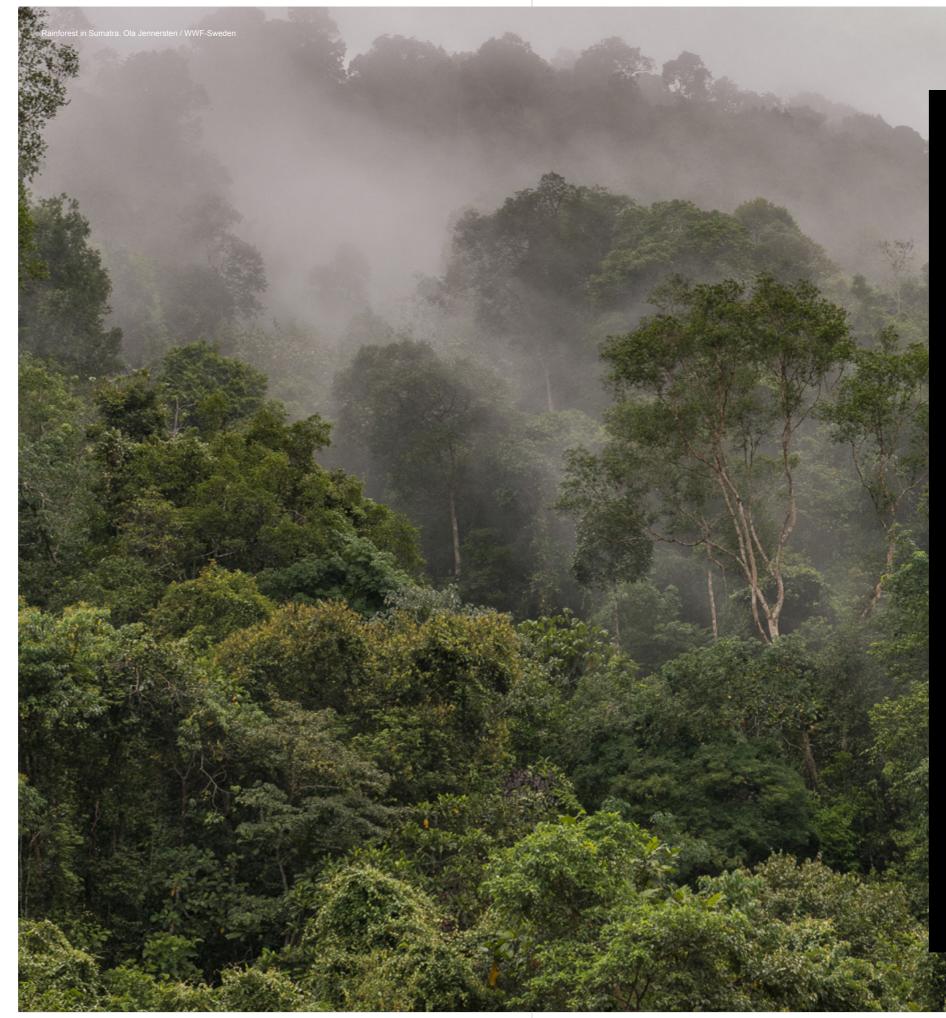
KEY TERMS

Conversion: Change of a natural ecosystem to another land use or profound change in a natural ecosystem's species composition, structure, or function.

Deforestation: Loss of natural forest as a result of: i) conversion to agriculture or other non-forest land use; ii) conversion to a tree plantation; or iii) severe and sustained degradation.

Due diligence: A risk management process implemented by a company to identify, prevent, mitigate, and account for how it addresses environmental and social risks and impacts in its operations, supply chains, and investments.

Forest-risk commodities: Agricultural and forest commodities whose production is associated with deforestation and the conversion of other natural ecosystems.



CONTENTS

EXECUTIVE SUMMARY	4
INTRODUCTION	6
METHODOLOGY	8
SECTION 1: DESIGNING EFFECTIVE DUE DILIGENCE LEGISLATION	10
THE SCOPE AND REQUIREMENTS OF The UK legislation for companies	11
COMMODITIES IN SCOPE	16
ENFORCING DUE DILIGENCE: Key principles and considerations	24
SECTION 1 CONCLUSIONS	27
SECTION 2: CONSIDERATIONS AND BEST PRACTICES For Businesses in Implementing due diligence	28
PRINCIPLES FOR ROBUST DUE DILIGENCE	30
STEP-BY-STEP GUIDE FOR IMPLEMENTING DUE DILIGENCE	32
SPECIFIC CONSIDERATIONS FOR DUE DILIGENCE Under Schedule 17 of the environment Act	34
BENEFITS OF GOOD DUE DILIGENCE	38
COSTS OF DUE DILIGENCE	40
BUSINESS INSIGHTS	42
SECTION 2 CONCLUSIONS	44
SECTION 3: RECOMMENDATIONS FOR ROBUST DUE DILIGENCE	46
APPENDIX 1: EXAMPLES OF POTENTIAL Range of Harmonised Systems (HS) codes	48
APPENDIX 2: TOOLS FOR DUE DILIGENCE	49

Cover photography: Day's Edge Productions / WWF-US

EXECUTIVE SUMMARY

Demand for agricultural commodities in the UK and abroad are a major driver of deforestation and habitat conversion in some of the world's most critical ecosystems. Between 2016 and 2018, the UK required 21.3 million hectares (Mha) globally per year to supply it with seven key commodities.1 The link between agricultural commodities and habitat destruction has facilitated an increase in voluntary commitments to eliminate deforestation and conversion in their supply chains. Despite this progress, these commitments-and the market as a whole-have been unable to demonstrate an ability to effectively overcome this urgent issue in the absence of legislation.

In response, governments have been designing and legislating due diligence requirements for forest-risk commodities. In the UK, Schedule 17 of the UK's Environment Act - which received royal assent in November 2021 - introduces mandatory due diligence obligations for companies that use forest-risk commodities in their UK commercial activities. The secondary legislation - which, at the time of writing, is under public consultation - will determine how the legislation is implemented and. therefore, its effectiveness in halting overseas illegal deforestation and conversion in UK supply chains. This report evaluates components of the due diligence legislation that will influence its effectiveness, including the companies and commodities in scope, as well as the necessary elements for effective enforcement. To support businesses to better understand and comply with the upcoming requirements, this report also provides high-level analysis of the principles, benefits, costs and best practice of due diligence. The key findings summarised below are based on secondary research and interviews with stakeholders, which informed the report's assessment of how the UK's due diligence obligations can be most effectively designed and implemented.

SECTION 1. KEY FINDINGS: DESIGNING EFFECTIVE DUE DILIGENCE LEGISLATION

The thresholds used to determine companies in scope of the legislation will critically determine its effectiveness. A threshold based on turnover will need to be set low in order to capture the majority of actors handling forest-risk commodities. A volume threshold for inclusion would help capture additional actors and is a stronger indicator of risk, A relatively high UK-based turnover threshold (i.e., over £100 million) by itself creates risks that actors with low turnover that handle high-volumes of lowmargin forest-risk commodities will be excluded. A volume threshold for inclusion could ensure that such actors are brought into scope. Thresholds need to be set at a level that brings the broadest range of actors handling forest-risk commodities in scope of the legislation requirements.

To comprehensively address the key drivers of deforestation and conversion, the legislation will need to ultimately include all forest-risk commodities,

including but not limited to; beef & leather, cocoa, coffee, rubber, maize, palm oil and soy, as well as all products derived from them or in which they are embedded. Including only a limited number of commodities in scope of the regulations risks leaving the majority of the UK's overseas conversion and deforestation footprint unaddressed by the legislation. If a phased approach to introducing commodities - as suggested by the government - is justified, as wide a list as possible of commodities with the greatest deforestation and conversion risk footprints should be prioritised for inclusion from the outset, with a clear plan and timeframe set out for bringing others into scope as soon as possible. This includes, at a minimum, palm oil, soy, beef & leather, and cocoa.

THE SECONDARY **LEGISLATION WILL DETERMINE HOW** THE LEGISLATION IS IMPLEMENTED AND, THEREFORE, ITS EFFECTIVENESS

A specialised, independent and sufficiently resourced competent authority should be responsible for enforcing the legislation. Its effectiveness will be higher if it has the power to proactively investigate non-compliance and to levy dissuasive fines and sanctions that disrupt trade. Enforcement should be by an authority with specialist expertise in the processes and supply chains it is regulating. It needs to be sufficiently resourced and have broad powers including the ability to proactively gather proof of infringement. Fines are most effective if combined with disruptive sanctions such as injunctions on further sale and/or processing. If fines are used, they need to be large enough to act as a deterrent. For example, set as a proportion of company turnover or profit to ensure fines are proportional to business size.

SECTION 2. KEY FINDINGS: CONSIDERATIONS AND BEST PRACTICES FOR BUSINESSES IMPLEMENTING DUE DILIGENCE

The design and implementation of due diligence systems will vary among companies, but all due diligence processes should follow a set of principles as outlined by industry initiatives and best practices. A company's size, position in the supply chain and relative existing due diligence systems will influence how it responds to the upcoming due diligence obligations. Regardless of these factors, robust due diligence systems: are ambitious, involve the actor accepting responsibility for its impacts, ensure the company 'does no harm' at a minimum and progresses towards a positive impact, are responsive, collaborative, entail engagement with stakeholders, and are transparent. They should also involve continuous monitoring and review to verify their impact and be adaptive to respond to changes in risks.

Businesses will need to consider specific aspects of the UK's due diligence obligations, including the emphasis on illegal deforestation and conversion, and the fact that all companies in scope that handle forest-risk commodities will have to conduct due diligence. Schedule 17 focuses specifically on illegal deforestation and conversion, which means that companies will have to ensure the forest-risk commodities used in their operations are produced in accordance with local laws in a producer country. Proving compliance with a legality-based model requires actors to understand laws and regulations at the national and subnational levels, which can be challenging when information is often opaque. Businesses should strive to go beyond illegal deforestation and conversion and address all deforestation and conversion, which can be more straightforward to implement and is often aligned with existing voluntary business commitments.

Although the ability to report on due diligence will be influenced by a company's access to information and on information sharing within the supply chain, all actors should publicly report on due diligence processes, volume of commodities used and origin. Public reporting is a vital component of successful due diligence. Companies and the government must work together to overcome current challenges associated with limited information sharing between supply chain actors to ensure that all companies can effectively report on the necessary information. Any reporting should be publicly transparent, providing both responsible stakeholders and regulators with relevant, useful and verifiable information.

Due diligence inevitably requires additional costs to a business; however, there are significant benefits for companies that design and implement robust due diligence processes. Although the costs of due diligence are difficult to quantify, estimates suggest that they are relatively insignificant for companies that are of sufficient size to be in scope of the requirements. These costs include the upfront costs required to improve data systems and ongoing costs of implementing and monitoring due diligence. Other costs could include premiums associated with certified volumes and third-party verification. Nonetheless, robust due diligence provides various operational, reputational and financial benefits to businesses.



THE UK'S DEMAND FOR AGRICULTURAL COMMODITIES IS DRIVING DEFORESTATION AND HABITAT CONVERSION OVERSEAS

Field of soy bean crops, Cerrado. Peter Caton / WWF-UK

The UK's demand for agricultural commodities produced overseas is contributing to deforestation and habitat conversion, as well as the destruction of wildlife and communities. An average land footprint of 21.3 Mha globally per year was required between 2016 and 2018 to supply the UK with just seven key commodities; palm oil, soy, cocoa, rubber, beef & leather, pulp & paper and timber. Much of this footprint was located in countries with a high risk of deforestation and conversion, and poor records of labour rights and rule of law². Globally, 69% of tropical forest conversion for commercial agriculture between 2013 and 2019 was in violation of national laws and regulations³. Growing recognition of this link between agricultural commodities and habitat destruction has led to many food industry actors introducing voluntary commitments to eliminate deforestation and conversion in their supply chains. To date, however, these voluntary measures have proved insufficient for effectively assessing and mitigating the impacts of UK supply chains^{4,5,6}. In order to remedy this, mandatory 'due diligence' regulations - which will require businesses using forest-risk commodities to assess and mitigate risk of deforestation or conversion in their supply chains - are currently being developed in the UK, as well as in Europe and the United States (Box 1).

In the UK, Schedule 17 of the Environment Act - passed in November 2021 introduced mandatory due diligence obligations on forest-risk commodities for companies. This legislation presents the opportunity to significantly reduce the UK's overseas deforestation and conversion footprint, with focus on illegal conversion. It follows similar developments of due diligence for forest-risk commodities in the EU, and early discussions of due diligence regulations in the US. Many businesses operating in the UK will therefore be required to comply with multiple due diligence laws, each of which vary in scope, and have the opportunity to demonstrate leadership by implementing robust due diligence to support the achievement of voluntary commitments on zero deforestation. Businesses could make a significant contribution to reducing the impact of impact of UK supply chains if due diligence is implemented robustly. Actions outlined in WWF's blueprint for action7 and elaborated in this study can support businesses to do this.

BOX 1:

Deforestation due diligence regulations are also being proposed in the EU and in the US. The commodities proposed for inclusion in the EU legislation are soy, beef, palm oil, wood, cocoa and coffee, and derived products, such as leather, chocolate and furniture⁸. The EU's law will require operators (actors that first import a commodity) and traders (actors using commodities in their commercial activities) that are not small and medium enterprises (SMEs)9 to collect the geographic coordinates of the land where these commodities were produced and ensure that their production did not involve deforestation - either illegal or legal. SME traders will have lighter obligations, being required to provide evidence that their suppliers meet due diligence obligations. The legislation being developed in the US - the FOREST Act - is intended to cover palm oil, soy, cocoa, cattle, rubber and wood will require evidence that commodity production has not entailed illegal deforestation^{10,11}.

INTRODUCTION

DUE DILIGENCE LEGISLATION IN EUROPE AND THE US

Details of how the UK's due diligence legislation will be formulated and implemented will be defined in 'secondary legislation'. For the legislation to be effective, it must be well-designed and strongly enforced. The due diligence systems put in place by businesses to meet their obligations must also be robust. Businesses should not only assess risks but also implement actions to mitigate risks as soon as possible, and monitor future outcomes of their actions. This report provides an analysis of the upcoming UK legislation, identifying elements that will determine its implementation and impact, and providing an overview of principles and features of robust corporate due diligence systems. The report is therefore intended to support businesses to scope out what will be required going forward for due diligence to be properly implemented once the regulation comes into effect.

In Section 1, the report evaluates features of the upcoming secondary legislation on due diligence in the UK, providing insight into how the companies and commodities in scope, as well as the enforcement mechanisms, will impact the effectiveness of the legislation. Section 2 then identifies key principles and steps for robust due diligence, and outlines some specific considerations for due diligence under the UK legislation. It also includes insights from businesses, and discussions on the benefits and cost implications of conducting robust due diligence. Using the insights from Sections 1 and 2, Section 3 summarises the key recommendations for effective implementation and compliance with the regulation, both for policymakers and for businesses.

METHODOLOGY

This report is based on research using a combination of primary and secondary information sources. Literature research included analysis of Schedule 17 of the Environment Act, UK government materials relating to upcoming secondary legislation and a consultation around this legislation (which was open for responses at the time of writing this report), and academic and grey literature including reviews and evidence relating to the design and implementation of other due diligence legislation. Stakeholder interviews were then conducted with representatives from anticipated regulated companies to gather first-hand perspectives of due diligence practices.¹² These semi-structured interviews were conducted with individuals responsible for supply chains and due diligence for forest-risk commodities in businesses throughout the supply chain, including importers, manufacturers and retailers. Members of civil society organisations and sector experts also provided insights into both parts of the research.

BOX 2. THE UK ENVIRONMENT ACT: AN OVERVIEW

Schedule 17 of the UK Environment Act, which received royal assent on 9th of November 2021, introduces a mandatory due diligence obligation for companies to ensure that forestrisk commodities used in their UK commercial activities have not been produced in violation of local land laws in producer countries¹³. Companies in scope of the UK legislation are required to develop and implement a management system to obtain information about the forest-risk commodities in their supply chains, assess the risk that local land laws to protect forests and other natural ecosystems were not complied with, and mitigate that risk14.

The list of forest-risk commodities covered by the legislation are to be defined by the Secretary of State and will be those for which the 'Secretary of State considers that forest is being, or could be, converted to agricultural use for the purposes of producing the commodity¹⁵, an assessment which should be based on the latest scientific evidence. During a period of consultation from December 2021 to March 2022, the government clarified that once a commodity is defined as a forest-risk commodity, the requirements of the legislation will apply to that commodity regardless of whether it was produced 'in forest areas or other ecosystems (for example, savannahs)', if those areas are protected by local laws¹⁶. This inclusion of non-forest ecosystems is essential as savannahs like the Cerrado, grasslands like the Great Plains, and areas of peatland and mangrove are being converted to commodity production at rates comparable to, or higher than, those of deforestation happening in forest ecosystems such as the Amazon¹⁷.



SECTION 1: DESIGNING EFFECTIVE DUE DILIGENCE LEGISLATION

The Environment Act comprises 'primary legislation' which provides a broad outline of the upcoming UK due diligence obligations under Schedule 17. The exact measures and requirements that businesses will be required to comply with will be defined through 'secondary legislation'. The government has indicated there will be multiple pieces and modifications of secondary legislation. The focus here is on the first iteration of secondary legislation, the specifics of which are yet to be defined at the time of writing. This section evaluates three key features of the proposed legislation: (1) the businesses in scope and their obligations; (2) the scope of commodities; and (3) criteria for effective enforcement. A final dimension - company reporting requirements - is explored in further detail in Section 2.

THE SCOPE AND REQUIREMENTS **OF THE UK LEGISLATION FOR COMPANIES**

Schedule 17 indicates that companies in scope of the legislation will need to undertake due diligence before a product can be placed on the UK market, a model known as product-based due diligence. This model, which also underpins the existing EU Timber Regulation (EUTR) (now the UK Timber Regulations -UKTR - in the UK), and EU Conflict Minerals Regulation, often applies to the first importers, who first bring the product into a market in the jurisdiction to which the regulation applies. In contrast, the UK due diligence law uses 'commercial activity' to define businesses in scope. The definition of commercial activities is broad and includes distributing, supplying, processing and purchasing of forest-risk commodities¹⁸. The actors in scope are therefore expansive, including importers, processors and manufacturers, food service actors and retailers.

Setting a threshold for inclusion

The broad definition of 'commercial activity' creates the scope for almost all companies using forest-risk commodities to be included under the legislation. However, despite the primary legislation not explicitly requiring the due diligence obligations to apply only to large businesses, the government indicated its intention to do so in various documents accompanying the public consultation on the secondary legislation^{19,20,21}. The government has stated that it will use a turnover threshold to target larger businesses, which will, according to the government, allow them to focus their efforts on actors likely to handle larger volumes of forestrisk commodities. In so doing, the government has stated that the requirements will be focused on actors likely to be linked to larger deforestation or conversion risk - and which also exert considerable influence over the food value chains they function within²².

The reach and impact of the legislation will critically depend on the level at which any turnover threshold is set. The highest of the government's proposed threshold for inclusion, £200 million²³, would bring only a limited number of the largest importers, food manufacturers, retailers and processors with operations in the UK into scope of the legislation (see Figure 1). For example, key large companies who handle forest-risk commodities but whose turnover for 'commercial activities' within the UK fall below £200 million include Cadbury UK²⁴ and Sime Darby Oils Liverpool Refinery Ltd²⁵. Therefore, these would be out of the scope of the regulations if such a high turnover for inclusion is adopted.

The lowest turnover threshold proposed by the UK government in consultation materials is £50 million²⁶. This will capture several of the largest actors handling forest-risk commodities in the UK, but would still exclude a significant proportion of the UK economy. For example, small and medium enterprises (SMEs) with a turnover of under £50 million account for 52% of UK turnover in the private sector, with wholesale and retail trade being the sector with the highest share of SME turnover²⁷. Moreover, analysis of soy suppliers in the UK shows that 26 companies deliver 80% of UK retail soy use. Three of these companies - that together deliver 55,000 tonnes, or 5%, of UK retail soy use - would be excluded by a turnover threshold of £50m²⁸. As such, even if the government went with its lowest proposed turnover of £50 million turnover, there are still several risks:

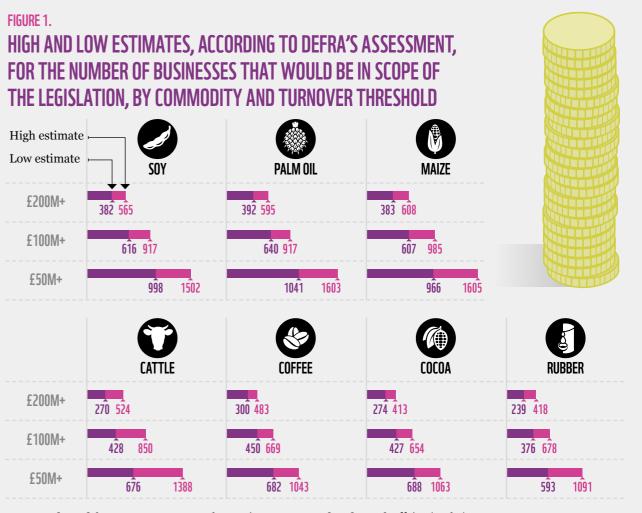
• Small- and medium-sized companies would be able to continue to import and trade commodities even if the commodity has been produced illegally, including as a result of illegal deforestation and habitat conversion²⁹. This is notable for UK commodity supply chains since some low-margin commodities, including rubber, are often imported in larger quantities by relatively small companies³⁰.

• Large global companies whose subsidiaries or UK business operations may not fall within the UK's threshold - for example aquaculture feed supplier EWOS Limited, which is a subsidiary of Cargill³¹ - may be excluded unless a specific global threshold is also included for international companies.

• It creates a potential loophole in which companies may set up shell companies to avoid the threshold, similar to the examples seen under the EUTR³².

To avoid these risks, which would limit the scope and effectiveness of the UK's due diligence regulation, the definition of small companies in the Companies Act - a £10.2 million turnover - could be considered as the threshold for inclusion³³. A £10.2 million turnover threshold will include a broad range of companies that potentially use forest-risk commodities, while reducing the risk of shell companies who would otherwise fall below the £50 million threshold. Furthermore, a £10.2 million threshold would limit the administrative burden of assessing and reporting compliance on the UK's smallest businesses.

74% **OF COMPANIES SUPPLYING UK RETAILERS HANDLED LESS THAN** 1.000 TONNES OF SOY EACH IN 2020



Source: adapted from UK Department for Environment, Food and Rural Affairs (Defra) impact assessment on due diligence obligations³⁴

The need for a volume threshold for inclusion

Only using a turnover threshold, however, could still leave critical companies out of scope. Industry groups have identified that small companies in the UK often import larger quantities of low-value commodities, including rubber, when compared to imports from large companies35. As such, a volume threshold for inclusion in addition to or in lieu of a turnover threshold - would greatly strengthen the coverage of the legislation. The government is already considering a de minimis volume threshold that would make companies that handle commodity volumes below a certain threshold exempt from the legislation³⁶. The intention is to reduce the burden of compliance for businesses that only handle small amounts of forestrisk commodities and focus the efforts of the legislation on larger volumes, which will have a large associated deforestation and conversion risk. Extending this logic means that adding a volume threshold to capture small companies that handle large volumes would strengthen the reach and impact of the legislation. This volume threshold will need to be set at a level that captures a broad scope of companies. Analysis of UK soy suppliers found that 74% of companies supplying UK retailers handled less than 1,000 tonnes of soy each in 2020; however, in combination, this amounted to more than 40,000 tonnes of soy that year³⁷. If it is not legally feasible for the Secretary of State to introduce a volume-based threshold in the secondary legislation, then the use of a volume-based threshold should be a priority when the regulations are reviewed in two years.

Obligations for companies in scope

In order to prove compliance with the UK due diligence legislation, a company will have to verify that the commodities in their supply chains have not been sourced from land which has been illegally converted into agriculture. To prove this, a company will be required to trace the commodity back to a point in the supply chain where compliance with producer country legislation can be ascertained. This will likely require traceability for in scope commodities to the farm or plantation. Companies will have to follow specific steps to understand the provenance of their forest-risk commodities, assess the risk that they have been produced illegally, take actions to mitigate that risk, and report publicly on the findings of their due diligence system³⁸.

The broad definition of 'commercial activity' in the UK primary legislation means that obligations will apply to actors regardless of their position in the supply chain, unless they are exempt according to any turnover or volume thresholds. This ensures that responsibility for due diligence is shared and avoids the risks associated with limiting obligations to first importers, as found under the EUTR/UKTR, such as actors establishing shell companies to act as the first placers to avoid the requirements³⁹.

Sharing responsibility for due diligence across the supply chain has its own potential implementation challenges, however. The ability of companies to trace commodities to origin fundamentally depends on the sharing of information among all supply chain actors. Upstream actors, including but not limited to first importers of products, are closer in the supply chain to commodity producers and therefore more likely to possess the evidence of traceability to farm or plot⁴⁰. Downstream actors, such as retailers, are reliant on upstream actors to provide them with data on the source of the commodities. As one retailer consulted in this study noted, 'we would have to go to the first importer for the information,' as they are unable to independently collect it without the data sharing from this supply chain actor⁴¹. However, importers consulted for this study stated that evidencing traceability to the farm entails costs for them and is most often conducted for certified volumes for which they can share some of the costs with other supply chain actors through price premiums. Downstream actors have the opportunity to improve traceability of their volumes if they pay to purchase such certified volumes if they are segregated or identity preserved; however certification cannot be the sole tool for demonstrating compliance with due diligence. This study found that there is a disconnect between nodes in the supply chain on ideas related to information sharing and access to data, and concerns over how responsibility and cost of traceability is currently shared between supply chain actors.

The UK due diligence legislation has the potential to level the playing field by placing obligations on all supply chain actors to conduct due diligence, which cannot be achieved without traceability and the assessment of risk to the source of production. The legislation could be particularly effective if the obligations include a requirement for actors to share sufficient data and information to allow other actors in their supply chain to conduct comprehensive due diligence. Supply chain actors consulted in this study see the legislation as a key opportunity for the government to introduce such a framework which makes information sharing mandatory and which specifies standardised formats and guidance on what information is needed and how it should be shared⁴².

In addition to the current low levels of information exchange between supply chain actors, the complexity of tracing commodities through multiple companies in non-segregated supply chains is a critical challenge to due diligence⁴³. Interviewees in this study noted that downstream actors - such as retailers - often only have visibility of their direct Tier 1 suppliers, which makes it difficult to trace the origin of the volumes they handle⁴⁴. For example, only 42% of the soymeal used by retailers

58% OF THE SOYMEAL USED BY RETAILERS IN THE UK WAS NOT TRACEABLE TO AN IMPORTER

in the UK was traceable to an importer and only 12% was traceable to sub-national region in the country in which it was produced⁴⁵. The difficulty of traceability for downstream actors should not, however, exclude them from obligations under the due diligence legislation. Rather, the legislation should promote and drive better traceability and transparency across the supply chain. Having a broad range of supply chain actors in scope, all with the imperative to gather evidence of origin and legality of commodities, could therefore strengthen its implementation. Only by achieving that, the legislation will meet its purpose to reduce the UK's contribution to global deforestation and habitat conversion.

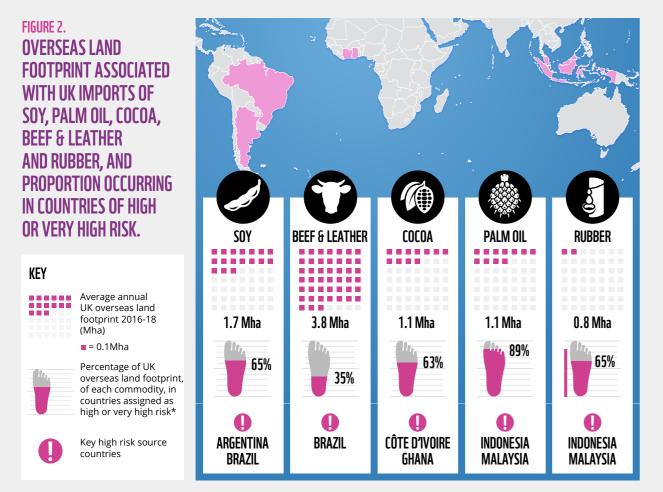
The government will need to develop secondary legislation that ensures that implementation of obligations by all supply chain actors - in addition to the verification of compliance and non-compliance - is practicable and enforceable. One option could be for due diligence obligations to be introduced based on an actor's position relative to other regulated actors in the supply chain. For example, the first regulated actor - the first, most upstream company in the supply chain who falls in scope of the due diligence obligations - could be required to evidence traceability of the commodity to origin and legality of production. Regulated actors further downstream would still be required to fully map their supplier base and collect information from their suppliers to identify where their volumes are coming from and to assess the risk that they are linked with illegal deforestation. However, where their volumes have previously passed through a first regulated actor upstream, they could evidence this and would not need to trace volumes further or conduct a full risk assessment for those volumes. Where volumes have not previously passed through a regulated actor, the downstream actor would then become the first regulated actor in the supply chain and be responsible for tracing volumes back to source and providing evidence that they were not produced in violation of any local laws. This approach would avoid multiple regulated actors duplicating due diligence processes and separately collecting the same information within the same supply chain. This approach would work best where most, if not all, companies handling forest-risk commodities - in particular, first importers - are in scope of the legislation and required to collect and share data on the origin of commodity volumes. This could be done by setting a turnover threshold at £10.2m or less in combination with a minimum volume turnover for inclusion.



COMMODITIES IN SCOPE

The scope of forest-risk commodities covered by the due diligence legislation will crucially determine its impact in reducing deforestation and conversion. Commodities currently considered by the government for inclusion in the UK legislation are; soy, palm oil, cocoa, maize, beef & leather, rubber and coffee⁴⁶. Evidence shows that all of these commodities are major drivers of deforestation and conversion through land clearance for their production⁴⁷ and that UK imports of these commodities have considerable deforestation and conversion embedded within them^{48,49}. In order to fulfil the UK's commitments to addressing its deforestation and conversion footprint - including the Glasgow Leaders' Declaration on Forests and Land Use, which commits signatories to, among other things, facilitating trade policies that do not drive deforestation and land degradation⁵⁰ - it is critical that all relevant commodities are included in the scope of this legislation and other similar measures.

The government is proposing a phased approach for bringing commodities into the scope of the legislation, suggesting that a shortlist will be included in the initial implementation phase, with others being brought into scope at a later date⁵¹. The justification for this is that each additional commodity in scope will necessitate additional time for developing commodity-specific measures in the legislation and putting in place a comprehensive enforcement regime equipped to handle multiple different commodity supply chains⁵². Given the unabated pace of loss of forests and other natural habitats,⁵³ it is critical that the scope of commodities is as inclusive as



Source: adapted from WWF-UK and RSPB's (2020) Riskier Business: the UK's overseas land footprint68.

*A risk score was assigned to each source country, based on its deforestation/conversion rates, labour rights and rule of law indices. Scores varied from 0 to 12, being \geq 11 very high risk, 9-10 high risk.

possible from the outset and that there is a strong rationale for *excluding* any of the commodities considered from the first round of implementation of the legislation, rather than for including all of them.

If a phased inclusion of the commodities is justified, then there will need to be a prioritisation of commodities for inclusion and a clear timeframe for future inclusion. One way to prioritise commodities could include examining the size of their associated deforestation and conversion risk, considering both the impact of global commodity sourcing, and the UK's role in driving that impact. The state of existing sustainable sourcing efforts in respective supply chains could also be considered. These two factors provide an indication of which commodities are associated with the greatest deforestation and conversion risks and where there are frameworks that provide a starting point for implementing additional due diligence requirements. It is, however, important to note that including commodities for which such frameworks are currently lacking in the scope of the legislation could drive traceability and risk assessment efforts in those supply chains that may not occur at the pace required if they are left out of scope. If a sequenced approach is justified, providing a timeframe for inclusion of different forest-risk commodities in secondary legislation could provide the regulatory signal needed to drive investment in lagging sectors.

Size of the deforestation/conversion risk footprint

All of the commodities considered for inclusion in the UK legislation are well documented to be major drivers of deforestation and conversion. The overseas land footprint associated with UK imports of soy, palm oil, cocoa, beef & leather and rubber constitute a combined land footprint of more than 7.9 Mha per year, with a significant proportion sourced from countries with very high or high risk of deforestation and conversion, as well as social risks (Figure 2). In addition, the area of maize production has expanded rapidly in the last 10 years and it is inextricably linked with deforestation and conversion for soy in Brazil, where the crops are often both grown on the same plot in the same year⁵⁴. Coffee production area is also expanding and the key producer countries are high risk for illegal deforestation and conversion⁵⁵.

Although timber commodities and pulp & paper contribute the most to the UK's overseas land footprint, **palm oil** and **soy** have the largest percentage of their footprints located in countries with high risk or very high risk of deforestation and habitat conversion⁵⁶ (Figure 2). These commodities may therefore be considered particular priorities for inclusion in the due diligence legislation. However, limiting the scope of the legislation to just these two commodities would exclude the majority of the land footprint of UK commodity imports, comprising over 5 Mha per year associated with cocoa, beef & leather, and rubber, as well as the considerable land footprints of coffee⁵⁷ and maize⁵⁸ production.

In particular, UK imports of **cocoa** account for 1.1 Mha of land used on average per year, similar to the footprint of palm oil, and 63% of this cocoa land footprint occurs in countries with very high or high risk of deforestation and conversion. Cattle products - **beef & leather** - have by far the largest overseas land footprint associated with UK imports (other than timber and pulp & paper⁵⁹, which the government has defined as explicitly out of scope of the proposed legislation), at almost 4 Mha per year, with more than a third occuring in countries of high or very high risk for deforestation and conversion (Figure 2). Cattle ranching is one of the leading causes of deforestation and land conversion globally, causing an estimated 3 Mha of deforestation per year between 2001-2015⁶⁰. Although a significant proportion of UK beef & leather imports come from countries with relatively low deforestation or conversion risk (e.g. Ireland and Germany), an average of 8% of the UK's imports of beef between 2016-18 came from Brazil⁶¹, where the scale of land clearance for cattle ranching makes it the source of one-fifth of all emissions from commodity-driven deforestation across the entire tropics⁶². Production

7.9Mha OF LAND IS NEEDED FOR THE UK'S IMPORTS OF JUST 5 COMMODITIES

of **rubber** has also been linked to severe deforestation and habitat conversion including the clearance of 3 Mha of forests in the Mekong region since 2000⁶³. Meanwhile maize is inextricably linked with soy production in Brazil, where soy and maize are often both grown on the same plot in the same year, due to multi-season harvests⁶⁴. Therefore, maize is also associated with deforestation and conversion. The area of maize production in Brazil expanded 4% each year between 2010-20 with a significant proportion occurring in the Mato Grosso state,⁶⁵ which has undergone extensive deforestation and conversion. Coffee production area is also expanding, particularly in Central and South America and in Africa. For example, coffee production area in Peru increased 24% between 2010 and 2018 and there was a 53% increase in production area in Ethiopia over the same period⁶⁶. Many key coffee producer countries - including Ethiopia, Guatemala and Honduras - are considered high risk for illegal deforestation and conversion associated with coffee production⁶⁷.

Furthermore, a significant proportion of forest-risk commodities are imported to the UK in derived products or embedded forms. These are also included in the scope of the legislation (Box 3).

BOX 3. DERIVATIVES AND EMBEDDED COMMODITIES IN THE SCOPE OF THE LEGISLATION.

The scope of Schedule 17 includes commodities 'in whole or in part,' or 'products derived from that specific commodity'. Significant volumes of forest-risk commodities are imported to the UK in derived and embedded forms: 73% of leather imports, 70% of cocoa imports and 90% of rubber imports are imported in processed products rather than raw forms⁶⁹. The scope of derivatives and embedded commodities - including gelatine for cattle, soy in animal feed, and palm oil in soap - covered by the legislation must therefore be comprehensive in order to capture a meaningful proportion of the volumes imported into the UK.

Harmonised systems (HS) codes, a globally standardised system of classifying goods for trade, offer a possible system for capturing derivatives or commodities embedded in the manufacture of a product as it is passed from actor to actor down the supply chain. This is the system used in the UKTR, for a relatively short list of timber products. The number

70%

and diversity of relevant HS codes for commodities in scope of the Schedule 17 legislation, however, will have to be far greater. A snapshot of the range of HS codes relevant for palm oil, which is an ingredient in around half of all products commonly on supermarket shelves, is shown in Appendix 1.

Standardised methodologies will need to be used for calculating the embedded or derived volumes of a commodity within a product. For certain commodities, industry or UK-standard conversion factors exist, for example, the Agricultural Industries Confederation statistics or Roundtable on Responsible Soy (RTRS) conversion factors for determining soy content in animal feed. However, these are not available for all commodities and comprehensive and standardised systems will need to be developed to ensure that differing commodity content in different products is accounted for in a consistent and robust way by all companies in scope.



73%

of leather imports to the UK are in derived forms including car seats, footwear and bags and cases



of cocoa imports to the UK are of rubber imports are in derived forms, particularly including in derived or embedded forms including cocoa powder, cocoa vehicle tyres and vulcanised rubber paste, and chocolate products





Another tool in palm oil sourcing is the global database of locations for palm oil mills published by World Resources Institute⁷⁵. Some large importers also publicly publish lists of sourcing mills⁷⁶, which provides traceability of volumes to mill, although this is not the same as traceability to plantation, where the deforestation or conversion would have occurred. A stakeholder consulted in this research stated that traceability to farm is 'not easy to get to' as it involves the mapping of thousands of smallholders, which may vary year-on-year77. An additional challenge is that traceability beyond approximate region is not possible for palm oil volumes bought through third parties or the spot market, which accounted for around 30% of volumes bought by one stakeholder consulted in this research78.



STATE OF EXISTING SUSTAINABLE SOURCING EFFORTS

Frameworks for traceability, chain of custody and risk assessment provide a starting point for due diligence in commodity supply chains; however, the degree to which these have developed varies between commodities. In commodity supply chains with more advanced frameworks, actors may be more quickly able to comply with the legislative due diligence requirements. Nonetheless, bringing commodities for which efforts are lagging into scope of the obligations could accelerate improvements in due diligence in these supply chains. An overview of current frameworks in the supply chains of the different commodities is presented below. Note that voluntary sustainability standards (VSS) and certification schemes are amongst the most widely used tools in existing supply chain sustainability efforts, but they are not sufficient for proving compliance with due diligence obligations (see Box 4)70.

PALM OIL

Palm oil has been the focus of considerable sustainable sourcing and chain of custody efforts. The biggest of these is the Roundtable on Sustainable Palm Oil (RSPO), which administers a certification scheme for palm oil. RSPO segregated certified volumes are relatively widely available for crude and refined palm oil. These volumes are verified to come from RSPO certified plantations and mills, but cannot be traced back to a specific producer71. Volumes of Identity Preserved palm oil - which does allow traceability to specific growers - exist but are negligible. More than a third of palm oil volumes reported by UK companies are certified as Mass Balance, which does not allow traceability of volumes and contains palm oil from a mix of sources, including some which are not RSPO certified72. Segregated or Identity Preserved certification for palm kernel oil, palm kernel expeller and derivatives is also limited because of limited market demand for certified volumes of these types of palm oil and difficulty tracing their volumes through highly complex supply chains⁷³. Despite the fact that many stakeholders use certification schemes to evidence that their products are deforestation and conversion-free, it does not guarantee that this is the case. RSPO certified palm oil concessions in Indonesia and Malaysia, for example, have been found on sites recently cleared of forest⁷⁴.





SOY

Soy has received focus in sustainable sourcing efforts, for example in industry initiatives like the Roundtable on Responsible Soy Association (RTRS) and commitments like the UK Soy Manifesto⁷⁹ and French Soy Manifesto⁸⁰, due to links with deforestation in the Brazilian Amazon and conversion of habitats including the Cerrado and Gran Chaco. Traceability is considered high in some regions and supply chains, although it tends to stop at exporter/importer level. For example, the Brazilian Rural Environmental Registry (CAR as per acronym in Portuguese), which geo-locates rural properties, allows traders including ADM, Bunge and Cargill to trace 92% of directly-sourced soy to farm in certain municipalities in Brazil⁸¹. However, traceability of indirectly sourced volumes and those coming from other municipalities or countries is far more limited. Although certification can provide a starting point for traceability and chain-of-custody, only a small proportion of soy is certified; less than 2% of production area and volumes were certified under a voluntary standards scheme (VSS) in 201882. Most of this is certified under 'Book-and-Claim' or Mass Balance schemes; the availability of Segregated or Identity Preserved soy is minimal. Certification also does not guarantee volumes are free from deforestation and conversion (see palm oil, above). An advantage for estimating soy volumes used along supply chains is that industry conversion factors are available from the RTRS' in which allow calculation of volumes of embedded soy83.



ed soy beans. Ana Paula Rabelo / WWF-UK







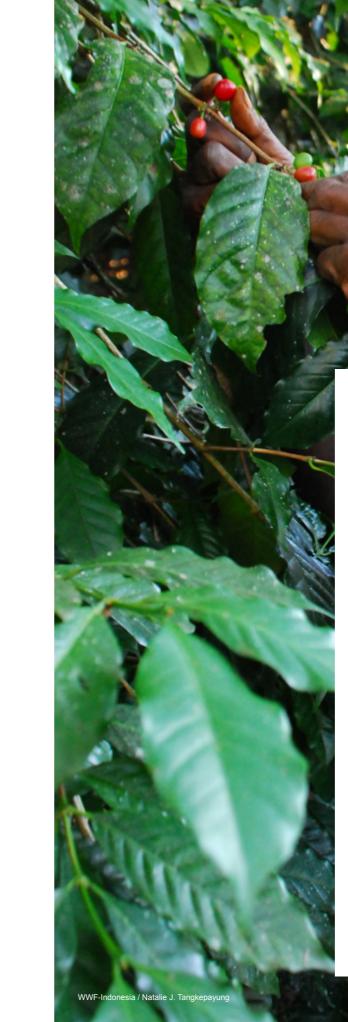
COCOA

Cocoa is the focus of some efforts around sustainable sourcing, mostly linked to ensuring human rights in its production. Sector initiatives include the World Cocoa Foundation, a body whose membership comprises 80% of the cocoa sector and which has goals including ending deforestation in the cocoa supply chain⁸⁴. Up to 27% of cocoa production area was certified under a VSS in 2018, although many producers are covered by more than one scheme and double-counted⁸⁵. Where a certification body publishes cooperative locations (e.g. Rainforest Alliance and Fairtrade), certification can facilitate traceability; however, this only covers a fraction of the estimated 5-6 million smallholder cocoa producers⁸⁶. Only 44% of cocoa beans from Côte d'Ivoire can be traced back to the cooperative using publicly available information; the rest is sourced indirectly by traders through local middlemen or is exported by traders who provide no information about their sourcing⁸⁷. Accurate data on the location of cocoa farms - For example, in Côte d'Ivoire and Ghana, which produced 70% of global cocoa in 2018/19⁸⁸ - is very limited⁸⁹. The Conseil Café Cacao in Côte d'Ivoire facilitates some traceability to local trader or cooperative, and Cocobod in Ghana allows some traceability to district or company⁹⁰, but there is no traceability to grower. Certification does not necessarily guarantee no deforestation or conversion⁹¹; certified cocoa cooperatives in Côte d'Ivoire have been linked to deforestation in protected areas92 and some estimates suggest that 30% of cocoa production in Côte d'Ivoire occurs in classified forests93. While Fairtrade cannot guarantee that farms are 100% deforestation- or conversion-free (or child labour- free), it does have strict standards in place that clearly prohibit deforestation and conversion (except in very strictly defined circumstances such as replanting existing crop trees) in the smallholder (SPO) standard clauses⁹⁴, which apply to both cocoa and coffee.









Rubber has only recently received attention for links to deforestation and conversion, despite evidence of a rapidly growing footprint over the past several decades. Around 90% of rubber imports to the UK are in derived forms¹¹³, which adds complexity to traceability. Rubber is thus far excluded from the EU due diligence regulations¹¹⁴. The Global Platform for Sustainable Natural Rubber, launched in 2018, is developing standards for companies (members include Michelin, Continental and Pirelli) to report on policy commitments including zero deforestation¹¹⁵. Finally, maize has received limited attention in relation to deforestation and conversion to date, but an analysis by UK Government Joint Nature Conservation Committee (JNCC) suggests that of agricultural crop products contributing to conversion of tropical and sub-tropical forest, it is the third largest contributor to the UK's deforestation risk after palm oil and soy $^{\mbox{\tiny 116}}.$ It is linked with land clearance for soy production in Brazil as both crops are commonly grown on the same plot within the same year. A retailer consulted for this project stated that the UK consultation document was the first time they had seen mention of a link between maize and deforestation¹¹⁷.



OTHER COMMODITIES

Compared to palm oil, soy, cocoa and cattle, the other commodities considered for inclusion in the UK legislation have received less attention to date in their links to deforestation and habitat conversion. Many key coffee producer countries present a high risk for deforestation and habitat conversion¹⁰⁷. There is some precedence for coffee traceability through VSSs and approximately one fifth of production was covered by a scheme in 2017¹⁰⁸. The Rainforest Alliance certification scheme prohibits deforestation and the destruction of natural ecosystems¹⁰⁹. Fairtrade also includes strict requirements prohibiting deforestation and conversion in its smallholder standards¹¹⁰. Meanwhile, the 4C (The Common Code for the Coffee Community) prohibits clearance of forest, but only relates to primary, protected or high carbon stock forests¹¹¹. Around 70% of coffee is produced by smallholders, which adds complexity to tracing to farm, and issues of governance in the main coffee producer countries mean they are considered high risk for fraud in relation to traceability¹¹².

ENFORCING DUE DILIGENCE: Key principles and considerations

The effectiveness of due diligence legislation will rely on effective enforcement. The upcoming secondary legislation in the UK will define the enforcement mechanisms underpinning the requirements of Schedule 17. These may include provisions to allow enforcement authorities power of entry, inspection, examination, and search and seizure, ability to impose civil sanctions, issue stop notices, and/or levy monetary fines¹¹⁸. Experience from previous legislation - particularly the EUTR /UKTR - points to key principles for effective enforcement of due diligence legislation, described below.

Clarity of requirements and definitions

Enforcement of legislation is likely to be most effective when requirements are clear and unambiguous¹¹⁹. Experience from the EUTR is that the ambiguity of terms like 'negligible risk' has resulted in regulators being unable to identify and penalise inadequate risk assessments or mitigation120 and being hesitant to file lawsuits against actors apparently breaching the regulations¹²¹. The current wording of the UK due diligence legislation on forest-risk commodities offers even greater ambiguity. For example, the government proposes to require businesses to 'eliminate risk or reduce risk to as low as reasonably practicable'122. This could mean different things for different companies, commodities and geographies. In order for this to be enforceable, what is deemed 'reasonably practical' will need to be strictly defined and made more onerous over time as best practice improves. Similarly, the proposed exemption "where ... an enforcement authority is satisfied that the regulated person took all reasonable steps to implement a due diligence system..." means 'reasonable steps' must be strictly defined¹²³. Supply chain actors consulted in this research strongly stated that they need absolute clarity on the definitions and thresholds used in the legislation in order to be able to understand whether they fall within scope and what their specific obligations are¹²⁴. Adopting the wording 'negligible risk' where companies cannot eliminate risk of illegal deforestation and conversion would provide a less subjective requirement than what is deemed 'reasonably practicable', but would still require a clear definition to be enforceable.

The need for clear and unambiguous definition also applies to the standards and data that are acceptable as proof of compliance with the legislation. EUTR/UKTR enforcement officials report that one common reason for weak enforcement of the regulation is a lack of clarity and agreement about the standards and data available to assess compliance¹²⁵. Companies and courts have been found to interpret due diligence as a reporting exercise, which allows those in breach of regulations to avoid liability by simply showing documents to prove the existence of a due diligence system¹²⁶. There is a need for this due diligence legislation to clearly define what is required to prove that a company is actively assessing and mitigating risks¹²⁷. Stakeholders consulted in this research stated that this would be particularly critical for proving legality. For instance, one stakeholder stated; "What is really important in this regulation is that there is a *clear understanding of which tools each actor needs to use in order to declare a product as qualifying* [with the legality requirement]; I don't think there is anything available off the shelf today that would cover all countries"¹²⁸.

The core due diligence requirements for businesses will need to be detailed in the secondary legislation itself to ensure they are understood as mandatory. In addition, companies will need clear, pragmatic and practical guidance and supporting materials to ensure they meet due diligence requirements. Independent expert bodies, for example, could be created to provide further guidance and advice to businesses on compliance with the legislation, similar to the role Central Point of Expertise on Timber (CPET) had for implementation of the EUTR in the UK¹²⁹.

COMPANIES NEED CLARITY ON THE DEFINITIONS AND THRESHOLDS IN THE LEGISLATION TO UNDERSTAND WHETHER THEY FALL IN SCOPE AND WHAT THEIR SPECIFIC OBLIGATIONS ARE.

Fines

For legislation to be effective, the penalties for breaching requirements need to be genuinely dissuasive to businesses. The UK legislation mentions monetary fines as one component of the suggested penalties for non-compliance. Evidence from previous legislation demonstrates that for fines to be effective, they must be large enough to pose a genuine economic risk to a business. Fines issued under the EUTR/UKTR, for example, have been found to be too small to deter illegal activity^{130,131}. The UK government proposes that the maximum monetary penalty under the due diligence legislation will be set at £250,000¹³². This equates to only 0.5% of the lower proposed turnover threshold of £50 million for businesses in scope, and 0.125% for a company with a turnover of £200 million. The £250,000 figure is the maximum size of a monetary fine, however, and experience from implementation of the EUTR/UKTR is that, despite there being no cap for the maximum size of a fine, fines have continued to be laid at around £5,000, which is negligible when compared to the turnover of companies in scope of the requirements¹³³.

Fixed fines also disproportionately impact businesses with smaller turnovers. An alternative is calculating fines as a percentage of profit or turnover. This places a proportionate economic cost on large actors and avoids disproportionately penalising smaller actors¹³⁴. There is evidence from the EUTR/UKTR that linking the size of fines to the volume of commodity in question can also lead to good practice¹³⁵.

BOX 4. LIMITATIONS OF CERTIFICATION FOR DEMONSTRATING DUE DILIGENCE

Certification may provide a component of demonstrating compliance with due diligence obligations but cannot be the sole measure used. A number of existing mainstream certification schemes do not currently incorporate deforestation or habitat conversion. Even those that do address deforestation cannot necessarily be relied on as a guarantee that (illegal) deforestation or conversion has not occurred (see the section on certification and traceability for palm oil, above), and compliance with the standard may not be systematically verified by a third party. Furthermore, Book-and-Claim or Mass Balance models of certification are not sufficient to underpin claims that a product is free from (illegal) deforestation or conversion, as they can contain volumes that are not certified or not of known legal origin¹³⁶. Only Identity Preserved or Segregated certification models can provide guarantees on all of the physical volumes used and greater degrees of traceability.

The credibility and reliability of a certification scheme as an indicator of (illegal) deforestation- and conversion-free production will need to be assured before it is used as a component of due diligence compliance. The consultation document from the UK government states that certification schemes

should be assessed using defined minimum quality criteria, but suggests that this assessment could be done by the regulated businesses themselves¹³⁷. This could create the perverse incentive for businesses to approve certifications with criteria that are relatively easy to meet, rather than those that provide a strong guarantee that commodity volumes are free of illegal deforestation and conversion. This risk could be avoided by certification schemes being subject to periodic assessment against strict criteria by an independent multi-stakeholder expert board. This used to be done until 2016, for example, by the CPET for UK timber procurement^{138,139}. These assessments were solely desk-based, however, and similar assessments for the UK legislation would benefit from on-the-ground verification.

Therefore, while all the above issues are not addressed, certification may provide complementary information to demonstrate compliance, but cannot be the only measure used to prove compliance with due diligence, and must not absolve businesses of their due diligence obligations. Relying on certification would risk making due diligence a 'tick box' exercise for regulated companies that shifts the onus for enforcement and verification that production is free from illegal deforestation and conversion onto certification bodies. As Section 2 discusses, due diligence must instead involve companies undertaking detailed assessment and mitigation of risks in their supply chains¹⁴⁰. The proposed EU Due Diligence Regulation will involve fines of up to at least 4% of actor's annual turnover, in addition to powers to confiscate relevant products and revenue, and to exclude actors from public procurement processes¹⁴¹. The upcoming Dutch Child Labor Due Diligence Act will also apply fines of at least 10% of a company's revenue if the maximum fine (of €870,000) is not deemed an appropriate penalty¹⁴².

Penalties other than fines

Schedule 17 creates scope for other penalties to be used in addition to fines, including civil sanctions. Evidence from the enforcement of previous legislation, such as the US Tariffs Act, suggests that the disruptive impact of measures such as suspension of authorisation to trade, seizure of prohibited goods and imprisonment of company directors can be more dissuasive than a fine^{143,144}. For example, these powers were used in 2020 to ban imports to the US of palm oil from Sime Darby Plantation due to allegations of forced labour¹⁴⁵. Seizure of goods prevents illegal materials continuing to enter the market despite fines having been levied¹⁴⁶. A 'stop notice' or injunction on customs clearance subjects an actor to economic costs and reputational damage from being unable to fulfil contracts and the cost of storing or disposing of unsold stock147. The proposed Dutch Child Labor Due Diligence Act will supplement fines with making company directors liable for two years imprisonment if their company gets two fines within five years¹⁴⁸. Civil sanctions like this can be a powerful tool, especially since they require lower evidence threshold than criminal sanctions; evidence from enforcing the EUTR/UKTR is that the difficulty in proving non-compliance 'beyond reasonable doubt' for a criminal conviction has inhibited enforcement agencies from being able to issue penalties¹⁴⁹. In the UK, the competent authority responsible for implementing the UKTR has previously stated that a regime of civil sanctions would comprise a more flexible, proportionate, and ultimately effective approach to dealing with non-compliances¹⁵⁰.

Mandate and resourcing of a competent enforcement authority

Due diligence legislation will need to be enforced by a competent authority. Lessons from previous legislation show that a competent authority is more effective when it has access to specialist expertise on the processes and supply chains it is regulating¹⁵¹. The EUTR competent authority in the Netherlands, which is considered a leader in terms of quality of cases and sanctions for non-compliant actors, has access to specialist environmental courts, for example¹⁵². There is evidence that due diligence cases are also more effectively brought to trial when competent authorities have the power to take cases directly to court - as is the case for the competent authorities for the EUTR in the UK, Sweden and the Netherlands - rather than having to find prosecutors willing to take cases¹⁵³. Provisions that allow authorities to proactively gather proof of infringements, rather than relying on actors like civil society organisations to bring claims to their attention, also improves the effectiveness of due diligence enforcement¹⁵⁴.

Besides having the necessary expertise, the competent authority will also need to be adequately resourced with both personnel and budget. Previous enforcement of the EUTR by the UK competent authority is judged to have been inadequate due to issues including insufficient personnel resourcing and budget¹⁵⁵. Between 2015 and 2017, the authority reported a total annual budget of £750,000 for EUTR enforcement, including checks, remedial actions, and issuance of penalties. This was reduced to £620,000 per annum between 2017 and 2019¹⁵⁶. Resourcing of the competent authority for enforcement of the upcoming due diligence legislation will need to be significantly greater than this as it will be dealing with several commodities, compared to just timber and pulp & paper. BESIDES HAVING THE NECESSARY EXPERTISE, THE COMPETENT AUTHORITY WILL ALSO NEED TO BE ADEQUATELY RESOURCED WITH BOTH PERSONNEL AND BUDGET.

SECTION 1 CONCLUSIONS

As this section has shown, there are various aspects of the upcoming secondary legislation that will determine the effectiveness of the UK's due diligence obligations. For Schedule 17 to build on the impact of existing voluntary commitments, questions around the scope of companies and commodities included from the outset, as well as how due diligence will be enforced, need to be carefully thought out. For example, if a turnover threshold is used to define businesses in scope, and is set at a level that only captures the largest actors, a significant proportion of businesses handling forest-risk commodities in the UK will not be subject to requirements. Thus, a lower turnover threshold - if any - combined with (or entirely replaced by) a volume threshold to include smaller companies that handle large volumes of forest-risk commodities, will bring a more comprehensive range of businesses into scope. In so doing, the legislation could incentivise better collaboration and information sharing across the supply chain, which is currently a major barrier to sustainable sourcing efforts. Similarly, if only a small number of commodities are included in the initial requirements, a substantial part of the UK's overseas land footprint will be out of scope. Although commodity supply chains with mature existing due diligence frameworks may be able to comply more readily with the legislation requirements, the inclusion in scope of commodities that lag behind in this regard could create the imperative for the development of robust due diligence systems in these sectors. Finally, the specific mechanisms through which Schedule 17 is enforced and the powers delegated to the enforcement body will be vital. These mechanisms will need to be dissuasive enough to deter companies from absorbing penalties as just another 'cost of doing business'. Similarly, both the mechanisms and the powers delegated to the enforcement body need to be laid out clearly in secondary legislation to ensure effective compliance and enforcement.

The UK government is not the only stakeholder who has a role to play in deciding the effectiveness of these specific components under Schedule 17 and in securing its enforcement. Businesses and civil society also have the opportunity to respond and shape policy through the current consultation and their role in advocating for policies that allow implementation of best practices. Moreover, once the secondary legislation comes into effect, businesses will have the responsibility to comply with the obligations, while civil society will have the responsibility to hold these businesses and the government to account. All three stakeholders will together be the deciding factor on whether or not Schedule 17 will meet its aspirational aims.



SECTION 2: BEST PRACTICES FOR BUSINESSES IN IMPLEMENTING DUE DILIGENCE

Schedule 17 makes due diligence for forest-risk commodities a legally binding obligation for businesses in scope. Some companies already have voluntary commitments to address deforestation and conversion in their supply chains, and systems and practices to measure progress with these commitments. This will provide a starting point for meeting the obligations of the legislation, which is restricted to excluding *illegal* deforestation and conversion from supply chains, rather than all deforestation and conversion. However, the requirements will necessitate additional efforts compared to most voluntary measures, namely the need to provide evidence that production did not violate relevant local laws in producer countries. The obligations will also likely introduce a much higher degree of public reporting than currently observed by companies. Companies that are in scope but do not have existing commitments will need to establish entirely new systems and processes for performing due diligence and reporting on outcomes and mitigating actions.

There are well-established industry principles and guidelines for robust supply chain due diligence. This section draws on these to outline key principles of 'best practice' due diligence and provides a high-level guide on the steps necessary for developing and implementing due diligence. Some of the tools available to support businesses in developing and implementing due diligence are identified (See Appendix 2). The section then goes on to evaluate what specific demands the UK Due Diligence legislation is likely to make on business due diligence efforts. Finally, some high-level benefits and cost considerations of due diligence are outlined.

PRINCIPLES OF GOOD DUE DILIGENCE

The design and implementation of due diligence will vary between companies, depending on their size, position in the supply chain, the forest-risk commodities they handle, and any existing due diligence systems they have in place. For all businesses, however, there are broad general principles of 'good' due diligence.

AMBITION -

Businesses should engage in supply chain due diligence with ambition and strive to go beyond standard industry practice. This would ideally go beyond only illegal deforestation and conversion to assess risks of all deforestation and conversion, in alignment with existing industry initiatives such as the Consumer Goods Forum's' Forest Positive Coalition. The aim should be to match or exceed expectations of what due diligence should deliver, which is now well-defined in principles, guidelines and requirements (for example in the Accountability Framework initiative¹⁵⁷), as well as demands from downstream civil society and consumers¹⁵⁸.

RESPONSIBILITY -----

It is crucial that businesses do not shift responsibility for due diligence onto other businesses, farmers (particularly smallholders) or organisations (for instance, certification bodies). Effective due diligence will rely on the combined effort of all actors in a supply chain¹⁵⁹. Businesses will need to take responsibility for all risks linked with their activities including those occurring through their supplier relationships160.

RESPONSIVE & EVALUATIVE

Where due diligence does not successfully prevent harms from occurring, it must also involve active mitigation and remediation of the issues. However, remediation should be viewed as a last resort measure. Due diligence processes and systems should also be continuously evaluated and improved to remain agile to changing risk in the business's supply chain¹⁶¹. Ultimately, businesses' due diligence systems and outcome actions should evolve to provide a positive impact on the environment and society of regions where their supply chains operate.

ROBUST & RIGOROUS

Businesses should seek to conduct their due diligence to the highest possible standards and quality. Due diligence carried out by businesses should be verifiable by third parties as far as possible.

STAKEHOLDER ENGAGEMENT

PREVENTATIVE

The purpose of due diligence is first and foremost to prevent adverse impacts on people, the environment and society¹⁶⁴. Due diligence systems and practices must seek to avoid negative impacts through businesses' activities and supply chain, then to mitigate those risks that cannot be avoided completely.

Meaningful engagement of stakeholders should be undertaken at all stages of the due diligence process and across the supply chain. This should involve two-way communication with stakeholders, and timely and open sharing of

information about actions taken by the business as part of its due diligence process. This must critically include obtaining free, prior and informed consent (FPIC) of indigenous peoples and local communities where actions will have impacts on or near their lands¹⁶⁸, and provide simple mechanisms for receiving and assessing grievances.

COMMUNICATION & COLLABORATION

Successful supply chain due diligence relies on effective internal and external communication that enables collaboration¹⁶². Businesses must promote understanding of their expectations and cascade information about policies, commitments, implementation requirements and reporting to other actors in their supply chain¹⁶³.

> **THESE PRINCIPLES SHOULD NOT REMAIN IN THE BOARDROOM, BUT WILL NEED TO BE IMPLEMENTED THROUGHOUT THE COMPANY** AND ACROSS ITS SUPPLY CHAIN

TRANSPARENT & TRUSTWORTHY

Transparent reporting remains weak across the industry. According to Forest 500, most companies to date do not publicly report on their progress towards their commitments¹⁶⁵. Businesses must disclose the results of their due diligence publicly and engage with other stakeholders to demonstrate compliance¹⁶⁶. Effective and transparent communication works to build trust with stakeholders and allows for effective enforcement of due diligence obligations. Further, disclosing results in a transparent manner with full detail signals to the wider stakeholder community that the business is committed to meeting its responsibilities and any goals it has set¹⁶⁷.

STEP-BY-STEP GUIDE For implementing due diligence

This step-by-step guide provides a high-level outline of how principles of good due diligence can be turned into the steps required to conduct due diligence.



These steps represent a synthesis of recommendations provided by various bodies, including the Accountability Framework Initiative, Organisation for Economic Co-operation and Development (OECD), and Preferred by Nature. Other guidelines available to businesses include the Retail Soy Group principles for achieving deforestation- and conversion-free value chains for soy¹⁶⁹, the Consumer Goods Forum's roadmaps for transforming soy, beef and palm oil supply chains¹⁷⁰, WWF's principles for deforestation and conversion-free supply chains¹⁷¹, and the WWF Basket Blueprint for Action¹⁷².

The step-by-step guide below is not exhaustive and is intended to provide a starting point for businesses seeking to better understand what is necessary to align with due diligence best practices. Furthermore, due diligence requirements will differ across companies, as these are commensurate with the size of the business, its supply chain and the probability and severity of risk.¹⁷³ Specific considerations for compliance with the likely obligations of the upcoming UK legislation are outlined after the best practice steps.

SEE APPENDIX 2 For tools to Help with Implementing Due diligence

1. DEFINE SCOPE OF ACTION

• Identify the specific legal obligations your company must comply with and any industry-wide standards for action.

• Establish your company's level of ambition and the objectives to be achieved with due diligence (i.e. Does your company intend to go beyond the legal requirements of due diligence?).

• Develop verifiable targets and key performance indicators, based on your company's ambition and/or legal requirements, to ensure your company is on track to meet any legal due diligence requirements and achieve your company's intended objectives.

🔁 2. DEVELOP A DUE DILIGENCE POLICY

The due diligence policy should include:

- The commitments, targets, and applicable timeframes for due diligence.
- A detailed plan, including actions and mechanisms, for implementing these due diligence procedures within the business.

• Any relevant responsibilities in the company and the competencies required to fulfil them, including a senior management position with accountability for implementation of due diligence.

• A framework for reporting, as well as monitoring and evaluation, that provides insight into how the company will continuously improve its due diligence process.

• A mechanism that allows for the company to update its policy to align with insights gained from implementing due diligence, including supply chain mapping and risk identification.

9 3. MAP THE SUPPLY CHAIN

• Detailed information should be collected from suppliers on their transactions, policies, commitments, traceability, transparency, and their relationship with their own suppliers. Companies should work with first-tier suppliers to compile information on tier 2 and 3 suppliers. Gaps in traceability should be mapped and addressed.

• Businesses will need to conduct an analysis of the information received from suppliers to assess the quality of documents provided. Companies should enter all information into a supply chain mapping tool/system.

📕 4. IDENTIFY AND ASSESS RISK

• Identify key indicators of risk and use these with the supply chain mapping to identify which materials may be non-compliant with legal obligations and/or company policy.

• Undertake verification at supplier sites where risk level is identified to be high or cannot be determined. Third-party actors may be able to support this.

• Use credible certification, remote sensing and/or landscape/jurisdictional approaches as tools to continuously monitor risk.

• Continue to monitor and verify supplier performance to ensure continued compliance with the legislation and/or company policy.

5. MITIGATE AND REMEDIATE RISKS

• If non-compliance has occurred, assess the degree of noncompliance based on intensity, scale, and persistence. A company may then choose to:

- **Avoid risk** by suspending all activity or replacing the supplier or the supply chain.
- **Control risk** by changing procurement procedures and/or engaging with suppliers.

• Where non-compliance occurs, consult with stakeholders on risk remediation. Possible remediation strategies are:

- Statutory mechanism run by state authorities/ ombudsman.
- Litigation in relevant legal system or arbitration/dispute resolution.
- Local community led arbitration processes.

• Evaluate effectiveness of risk mitigation actions using monitoring and verification techniques, (i.e. audits) and adaptive management.

😫 6. REPORT ON DUE DILIGENCE

Reporting should:

• Fulfil the reporting requirements stipulated by law, allowing enforcement agencies to ensure your company is in compliance with the relevant legislation.

• Use metrics that are quantifiable in absolute terms (i.e. tonnage of commodities used) and relative to total operations (i.e. percentage of supply chain volume at risk).

• Make information available publicly so that other companies in the supply chains, financial institutions, civil society, consumers, and other important external stakeholders can make informed investment, advocacy and purchasing decisions. Data should be fully transparent and interpretable and therefore verifiable.

👐 7. EVALUATE AND ADAPT

• Recognise that deforestation and conversion risks in your supply chains are fluid, and the specific commodities and areas recognised to be at a higher risk of deforestation and conversion may change over time.

• Conduct continuous monitoring and evaluation of the due diligence system, processes and policies to ensure they continue to fulfil the requirements of the law and voluntary standards, and respond to changing conditions in your supply chain.

SPECIFIC CONSIDERATIONS FOR DUE DILIGENCE UNDER SCHEDULE 17 OF THE ENVIRONMENT ACT

The step-by-step guide outlines the general steps of robust supply chain due diligence. Although the exact details of the UK legislation are (at the time of writing) to be defined in secondary legislation, there are already some particular considerations around meeting its obligations. Two major ones are considered briefly here, based on currently available information: the requirements to comply with local laws, and the applicability of obligations to a broad range of supply chain actors under the broad definition of 'commercial activity'.

The need to prove compliance with local laws

The UK due diligence obligations specifically focus on addressing illegal deforestation and habitat conversion, and require evidence that local laws on land ownership and land use were complied with in the production of commodities. In practice, this will require collection and reporting of data that delivers; 1) traceability of commodities to the plot where they were produced, 2) assessment of whether their production was linked with deforestation or habitat conversion, and, 3) evidence that all relevant local laws relating to the ownership and use of that plot of land were complied with. It is important to highlight that this framing of the legislation around the illegality of deforestation and conversion has significant drawbacks, which are briefly explored in Box 5. However, the legality approach is not included under the current consultation. Therefore, it would have to be reviewed in the coming years, when the legislation goes through its first review process.

Some actors handling forest-risk commodities already have existing commitments to achieve zero deforestation and/or conversion in their supply chains, regardless of whether it was legal or illegal, and therefore already have systems in place to assess risks. There are a number of ways to assess whether deforestation or conversion has happened in the place of production, including satellite imagery and databases like Global Forest Watch, which provide near-real time information that allows identification of whether deforestation or habitat clearance has occurred (see Appendix 2 for additional tools)¹⁷⁴. This still relies, however, on actors being able to trace their products back to origin to know where to look for possible conversion of native vegetation, which remains a challenge for the majority of commodity volumes (see previous section). To various degrees of precision, emerging techniques - including metabolomic analysis¹⁷⁵, blockchain systems¹⁷⁶ and stable isotope ratio analysis¹⁷⁷ - have the potential to assist the tracing of specific commodity volumes to a sourcing region or supplier. These are expected to become more common in the coming years.

The obligation to prove compliance with local land laws adds an additional and complex requirement, and is likely to be more costly to businesses than evidencing zero deforestation or conversion. For example, if a company uses geospatial data to assess whether deforestation or habitat conversion has occurred on land where a given commodity was produced, it will still need to verify whether this conversion was in violation of local laws. This is particularly challenging in cases when a percentage of land is permitted to be legally cleared, as in the case under the Forest Code in Brazil. This means that the company in scope will have to know the full parameters of the owned land from which that percentage is measured. As yet, it is unclear how this will be enforced, but the relevant laws will be specific to the producer country, and will likely also include laws applying at district and local levels. Verification of the specific laws relating to each production plot thus represents a significant task and is likely to require coordination with producer country authorities and/or third parties in the producer country, including indigenous peoples and local communities, to collect the relevant information.

Past due diligence legislation has shown that this is made difficult by the complexity of legal structures in producing countries, the variation in what is defined as legal between countries, and the lack of comprehensive, publicly available data on legality^{178,179}. Some programmes working on linking supply chain actors to producers and verifying the legal status of land exist. For example, Meridia maps smallholder farmers and facilitates documentation and land titling, working with organisations including Unilever and Mondelez¹⁸⁰. However, these programmes are so far relatively limited in scope. Regardless, it will be important that the Secretary of State provides clear indication in the secondary legislation of the key categories of land use and ownership laws that need to be complied with, as well as what types standards and data will be accepted as evidence of compliance. Moreover, guidance should detail the key specific laws relevant in high risk regions that should be taken into consideration when performing due diligence.

ROX 5

SHORTCOMINGS AND CHALLENGES OF DUE DILIGENCE BASED ON ILLEGALITY OF DEFORESTATION AND CONVERSION

Although mandatory due diligence legislation is a positive step in the UK addressing its overseas land use footprint, the focus on illegal deforestation and habitat conversion has significant shortcomings. These include:

• A significant part of the UK's overseas footprint is excluded. In Brazil, for example, legislation limited to illegal deforestation and conversion could fail to capture between 29 and 42,000 hectares of forests in UK supply chains by 2030¹⁸¹ in addition to significant areas of non-forest habitat that are not legally protected.

• A legality-based approach provides perverse incentives for producer countries to deregulate, removing or modifying laws that provide legal protection to areas of forest and other critical natural ecosystems¹⁸².

It also presents particular challenges to implementation and enforcement:

- Past experience with the EUTR/UKTR has shown that it is difficult to prove the illegal origin of a product to the degree required for conviction or punishment¹⁸³. In addition, the ability to enforce different components of legality has varied; whilst 88% of surveyed EUTR enforcement officials had sanctioned a company for violating laws on rights to harvest timber, only 12.5% had sanctioned based on legal rights relating to land tenure¹⁸⁴.
- Companies will have to navigate and understand the specific legal regimes of producer countries, including down to the subnational level. Under past due diligence obligations, including the EUTR/ UKTR, this has proven challenging; enforcement

officials report that companies often do not know the exact legal requirements in their source countries and information about the legality of land conversion is difficult to access and interpret, with standards and data available to assess compliance being highly contested¹⁸⁵.

• The number and complexity of relevant local laws presents a considerable challenge. In Indonesia, for example, there are a substantial number of laws that govern forest conversion, as well as customary (adat) legal systems; in Sumatra alone, there are at least 22 laws that could fall in scope of 'relevant local laws'¹⁸⁶. Stakeholders interviewed for this study noted that verifying legality will add a significant additional task on top of their current due diligence processes which commonly address *all* deforestation and therefore do not require verification of legality¹⁸⁷.

• Companies may have to operate in an otherwise opaque environment. Confirming whether or not a clearance was legal requires verifying information which is rarely wholly in the public domain, and in some cases, land ownership will not be through written documentation¹⁸⁸. Stakeholders consulted for this research noted that guidance and tools do not yet exist to help them navigate proving legality for all producer countries¹⁸⁹.

• Enforcement bodies and courts involved in implementing the Lacey Act in the US and the EUTR/UKTR report limited effectiveness with judging legality based on other countries' laws, particularly where it depends on evidence of harms being collected in source countries, and evidence of traceability all the way to source¹⁹⁰.

Evidencing compliance with local laws may be partially supported through approved certification schemes. For palm oil, RSPO certification includes a principle of 'Compliance with applicable laws and regulations'¹⁹¹ and could therefore be used by companies as partial evidence of their compliance with local laws for Segregated or Identity Preserved volumes, as long as the laws included within the scheme encompass all local laws that are relevant to the due diligence legislation. However, RSPO has said that its standards "do not extend to enforcing or confirming the legal standing of a company's use of land (which is a mandate only held by the national authority)".229 Thus, the RSPO certification can only be used as a tool to assess compliance, but not to verify it or absolve a company of responsibility to show legality. Other additional evidence will also need to be provided and compliance must be verified by a competent authority. Market-based initiatives (e.g. the Amazon Soy Moratorium) and pre-competitive initiatives (e.g. Soy Transparency Coalition and Palm Oil Transparency Coalition) that take legality into account and share supply chain data could also be used as partial evidence of compliance.

Obligations and reporting for all types of actors across commodity supply chains

The scope of the UK legislation will place due diligence obligations on actors at all points of the supply chain. The primary legislation and materials accompanying the government consultation on secondary legislation leave scope for all actors to be required to evidence that forest-risk commodities were not produced in violation of relevant local laws applying to the plot of land on which they were produced, which necessitates tracing volumes back to source. As well as comprehensive supply chain mapping, this will require a significant increase in data collection and, critically, data sharing by all actors along the supply chain.

Schedule 17 makes it a legal requirement for companies to report information under three broad headings: identifying and obtaining information on the commodity, assessing the risk that relevant local laws were not complied with, and steps taken by the company to mitigate the risk. This information will need to be made available to other supply chain actors to allow them to trace commodity volumes and risks along their supply chains, as well as to the enforcement authority to allow them to assess risks, conduct audits and verify compliance. A portion of this information will also be made publicly available to enable scrutiny by civil society and the finance sector. The Global Resource Initiative Taskforce have indicated in their forthcoming report [unpublished] that the finance sector could use this due diligence information to exclude illegally produced forest-risk commodities from their lending and investment portfolios*.

The secondary legislation will set out the specific reporting requirements, and the extent to which reported information must also be made publicly available. Table 1 provides an overview of the most relevant and useful information that actors should report on, both publicly and to the competent authority. One option for a pragmatic implementation of the legislation could be for obligations to be tailored based on where the regulated actor sits relative to other regulated actors (see Section 1: Obligations for companies in scope); Table 1 therefore outlines slightly different reporting requirements for 'first regulated actors' in a supply chain and for other regulated actors. If this approach is not used, all businesses may need to collect and report all information specified below.

*The GRI Task Force's forthcoming Finance Report is currently only available (in draft final form) to the Task Force and members after consultation, but provides recommendations to address deforestation and conversion through the financial sector.

TABLE 1.

RELEVANT INFORMATION FOR COMPANIES TO DISCLOSE AS PART OF THEIR DUE DILIGENCE OBLIGATIONS, ¹⁹²

DUE DILIGENCE REQUIREMENT

IDENTIFYING AND OBTAINING INFORMATION ON COMMODITY IN SCOPE

Information to report on for 'first regulated actor'

derived and embedded products imported

on for regulated actors and embedded products used further downstream

Information to report on for all regulated actors

DUE DILIGENCE REOUIREMENT ASSESSING THE RISK THAT RELEVANT LOCAL LAWS WERE NOT COMPLIED WITH

Information to report on for 'first regulated actor'

be free of deforestation and conversion free of illegal deforestation and conversion



on for regulated actors which compliance with local laws is known further downstream

Information to report on for all regulated actors

- covered by these
- DUE DILIGENCE REQUIREMENT MITIGATING RISKS



Information to report on for all regulated actors

- in percentage of commodities traceable to source year on year)
- of engagement and mitigation actions
- Processes in place if engagement with non-compliant supplier fails

**Although public reporting of geographic locations of farms and of certain points in the supply chain (i.e. mill lists) is already practiced by some businesses, there can be serious privacy and data safety concerns over publishing geographic locations of smallholder farms that should be taken into consideration by both government and businesses.

- Volume of commodity imported, including volume of • Specific locations of commodity production, for example as GPS points**
- Information to report Volume of commodity used, including volume of derived
 - List of direct and indirect suppliers including importers - sourced from and volumes sourced from each
 - National and/or sub-national origin of imports • Percentage of commodities and derived/embedded commodities traceable to i) the country of origin, ii) to subnational region, iii) to the farm and/or to any other relevant intermediary points (e.g. mill for palm oil, crusher for soy)
 - Percentage of commodities third-party verified to
 - Percentage of commodities third-party verified to be
 - Percentage of commodities covered under approved
 - certification or landscape-based initiatives
- Information to report Proportion of supply chain volume and/or suppliers for
 - Definition of risk and alignment to industry initiatives
 - Management systems on deforestation and conversion, including
 - 'red flags' for commodities in specific source countries
 - Metrics and methodology for risk assessments
 - Tools, databases used to ascertain risk
 - Tools and actions used to mitigate risk and the proportion of the supply base
 - Procurement policies and transparency requirements for suppliers
 - Public register of grievances and actions that includes:
 - Engagement with non-compliant suppliers and number of suppliers
 - suspended or excluded from contracts based on non-compliance
 - Concrete steps taken to address the risk of no compliance (i.e. changes
 - Metrics and processes in place to measure effectiveness

BENEFITS OF GOOD DUE DILIGENCE FOR BUSINESS

A robust due diligence process will not only ensure a company is in compliance with the upcoming legal requirements, but will also provide other benefits, including reduced exposure to operational and supply chain risks, reduced costs from litigation, and improved reputation¹⁹⁶. Additionally, due diligence can improve a company's reputation and relationship with key stakeholders, including consumers and suppliers, as well as build its social licence to operate in certain regions¹⁹⁷. Furthermore, research has shown that there is a positive correlation between the extent to which a company implements environmental and social policies and economic performance in terms of profitability¹⁹⁸. The high-level benefits to businesses of a robust due diligence system are operational, reputational and financial. Below we describe further details and provide examples of each.

Operational benefits

Implementing a robust due diligence system can improve a business's operational performance. According to OECD and Columbia University's School of International and Public Affairs (SIPA), the most commonly cited benefit of due diligence in the intermediate term is improvement in a company's knowledge of its operations and supply chain¹⁹⁹. The deeper knowledge gained from due diligence allows companies to reduce their operational and strategic risks that may arise from the environmental, social and economic conditions present across its wider supply chain, which in turn lowers its exposure to resulting reputational and financial setbacks²⁰⁰. For companies operating in an environment where good due diligence is yet to become the standard, it is often found that robust due diligence can provide competitive advantage over peers by avoiding material risks to operations²⁰¹. Due diligence also increases the resilience of a company's supply chain by allowing companies to build relationships with high-quality suppliers²⁰². Research by WWF-UK has shown that some retailers have used responsible sourcing and due diligence to address supply shortages and ensure long-term access to commodities like timber at prices they are willing or able to pay²⁰³.



and SIPA noted that in their research, the greatest opportunity cost associated with conflict was the lost value in future projects, expansion plans and sales²⁰⁵. Conflict can also escalate, forming the basis of advocacy campaigns and lawsuits that may damage the company's reputation with consumers²⁰⁶. On the other hand, an enhanced reputation for sound environmental and social practices has been shown to improve brand value and customer loyalty, both which improve a company's competitive position and pricing power²⁰⁷.

Besides an enhanced external reputation, responsible supply chain management can increase internal reputation as well. A WWF-UK survey of retailers found that sustainable sourcing had a positive impact on employee morale and work satisfaction²⁰⁸. Beyond retailers, other studies have found evidence that responsible businesses are more attractive employers, with purpose-driven companies reporting that their employees miss fewer days of work and have lower turnover rates209.

Financial benefits

Improved operations and reputation can lead to businesses achieving increased financial performance, through both cost avoidance and cost reduction. For cost avoidance, a strong due diligence process will ensure that companies are not exposed to penalties for non-compliance or litigation^{210,211}. Where consumer expectations are high, due diligence and responsible sourcing practices can also act as a 'market defence strategy' against competitors²¹². Robust due diligence also provides opportunities to reduce cost. For example, research by OECD and SIPA has shown that responsible businesses have increased access to, and lower cost of, capital while also having lower borrowing costs²¹³.

Reputational benefits

Due diligence gives companies a better understanding of their supply chain and leads them to reduce their exposure to risks. Increased visibility of where a company sources from provides an opportunity to form better relationships with

BOX 6.

SOCIETAL AND ENVIRONMENTAL BENEFITS OF ROBUST DUE DILIGENCE

As well as the operational, reputational and financial benefits for businesses, effective and robust due diligence has benefits for the environment and for people, particularly in producer countries. Robust due diligence, which entails comprehensive assessment of supply chain risks and strong action to mitigate or remediate these risks, will more effectively identify and, if acted upon, help eliminate deforestation and conversion, and human rights abuses associated with commodity supply chains. Forests, as well as other non-forest ecosystems¹⁹³, provide critical biodiversity

habitat, act as vital carbon sinks¹⁹⁴ and support livelihoods for local and indigenous populations. Understanding, securing and respecting local land ownership laws, including those guaranteeing the rights of indigenous peoples and local communities, has been shown to not only benefit livelihoods of people who live in forests, but also enhance forest protection¹⁹⁵. Furthermore, by achieving a balance between commodity production, nature conservation and fair development, companies help achieve the United Nations' Sustainable Development Goals.

local communities, avoiding conflict and securing their licence to operate²⁰⁴. OECD

COSTS OF DUE DILIGENCE

Due diligence requires investment and human resources to develop and implement necessary systems and practices in a business. These include initial, one-off set-up costs including developing due diligence policy and practices, installing or upgrading IT systems, and training of staff and supply chain partners, and ongoing costs of maintaining systems and collecting, aggregating and analysing data²¹⁸. Costs will vary depending on the size of the company and will be lower for businesses that already have processes in place that can be adapted and scaled to meet the requirements of the legislation (see Table 2)²¹⁹. Although there are likely to be additional costs for each additional forest-risk commodity a company handles, there may be some economies of scale, for example from already having a system in place for collecting information from suppliers²²⁰.

Some indicative cost considerations of supply chain due diligence can be understood from reviews and impact assessments of other due diligence legislation, including the EU Conflict Minerals Regulations and the UK's Modern Slavery Act²²¹. The European Commission has also conducted an impact assessment of proposed disclosure reporting and a comprehensive review of due diligence through the supply chain, including likely costs (see Table 2)²²². Other cost estimates are provided by the OECD²²³. The data in Table 2 shows some estimated costs of supply chain mapping and risk assessment, which are relatively well known based on the assessments of sources mentioned above.

TABLE 2 ESTIMATED COSTS OF RISK ASSESSMENT FOR COMPLIANCE WITH DUE DILIGENCE LEGISLATION.

Legislation	Reported or estimated costs of risk assessment		
EU Conflict Minerals Regulations	Set-up costs (first year)	€13,500 (0.014% of average turnover) per company ²¹⁵	
	Ongoing annual costs	€2,700 (0.011% of average turnover) per company ²¹⁶	
Modern Slavery Act	Costs assumed to be negligible since reporting requirements already exist under Companies Act 2006		
EU Non-Financial Reporting Directive	Set-up and training costs	€5,000 per company	
	Ongoing annual costs	€33,000-€604,000 per comapny depending on size and complexity	
European Commission Due Diligence proposal	Annual labour cost, including expenditure on mitigation activities but excluding overhead	€36,990 for company with turnover of €50 million (0.074%) €0.5 million for a company with turnover of €10 billion (0.005%) ²¹⁷	

Source: adapted from WWF-UK's work on environment and human rights due diligence²¹⁴

Costs associated with mitigation of identified risks are harder to estimate, and will depend on the action a business chooses to take, which could vary from creating an internal or industry standard, to investing in actions to mitigate the risk at the origin, to divesting or banning a non-compliant supplier²²⁴.

The estimates in Table 2 vary considerably. This may be due to businesses having very different starting points, with costs being lower for those with some due diligence frameworks already in place. It also depends on the exact requirements of the different pieces of legislation evaluated. In practice, estimating costs of due diligence is challenging for businesses. The dynamic nature of supply chains - which often entail regularly shifting suppliers, volumes, and sourcing locations - make anticipating exactly what due diligence will entail in practice difficult. Furthermore, there may be hidden or intangible opportunity costs; for example, if a company decides to use certified volumes as one method to show compliance, these come at a price premium as well as 'locking in' the company to a sub-group of suppliers that offer certified volumes. The resulting reduction in sourcing options, one stakeholder noted, is thus an additional cost to calculate. Nevertheless, due diligence costs are generally estimated to be a small proportion of business turnover.

Defra has published estimates of potential costs for performing due diligence for the upcoming due diligence legislation (Table 3). These demonstrate that, on an economy-wide scale, costs of due diligence are a fraction of the current social and environmental costs of illegal deforestation and conversion. Defra also estimate that costs will be lower for businesses that already conduct some level of due diligence, and that costs are likely to increase as the number of forest-risk commodities does, but with some economies of scale²²⁵.

TABLE 3.

ESTIMATED COSTS OF PERFORMING DUE DILIGENCE, COMPARED TO THE SOCIAL COST OF CONTINUED ILLEGAL DEFORESTATION

Option for UK due diligence legislation on forest-risk commodities	Net cost to UK businesses of due diligence per year (£m)	Estimated social costs of current illegal deforestation (£m)*
Two priority commodities regulated in the fastest achievable timeline (18-24 months)	20 to 77.6	-172.1 to -667.7
Three to four commodities regulated in 3-4 years	31 to 145.4	-266.6 to -1251.9
Five to seven commodities regulated in 4-5 years	56.9 to 222.2	-489.4 to -1912.5

Cost of options given in 2019 prices. *Costs of the current business-as-usual situation where commodity sourcing is associated with illegal deforestation

Source: adapted from Defra's impact assessment on due diligence obligations²²⁸

BUSINESS INSIGHTS

Below is a summary of some key insights from interviews with individuals responsible for supply chains and due diligence for forestrisk commodities in anticipated regulated companies from throughout the supply chain, including importers, manufacturers and retailers. These provide a snapshot of current issues and opportunities seen by the industry, and expectations regarding the upcoming legislation. We also provide some reflections and highlight opportunities for further progress on sustainability, offered by both the legislation and currently available guidelines and tools.

USE OF CERTIFICATION

Most respondents indicated that certification is currently the main assurance system for commitments within forest-risk supply chains. Several respondents suggested that they would be hoping to use certification as a major component of proving compliance; 'being able to use an existing, credible certification scheme would make compliance much easier'. Even for palm oil, which was seen to have the most advanced due diligence systems, one retailer stated that 'if certification is not a means to prove compliance, that would mean you have to have full traceability of the supply chain for all volumes and no-one can do that [currently]'. However, respondents also acknowledged the limitations of certification, with one stating that certification would have to be 'well-designed' to ensure it could be used as proof of no deforestation. One respondent described that their company was moving away from certification to direct sourcing due to ongoing issues associated with using certification as assurance.

WWF REFLECTIONS

Certification is one of the most widely used mechanisms for ensuring supply chain best practices, including deforestation-free standards. However, although it may provide a component of demonstrating compliance with the new due diligence obligations, it cannot be the sole measure used nor should it shift businesses' responsibility for demonstrating compliance to certification bodies (see Box 4). The secondary legislation, and accompanying support and guidance, should help businesses develop robust due diligence practices across their entire supply chains. This will critically rely on requirements for information-sharing between supply chain actors.

WWF REFLECTIONS

Many companies are already conducting some form of due diligence to meet their voluntary deforestation or conversion-free commitments. Many guidelines and tools exist to support businesses in: developing robust due diligence policies and practices, mapping their supply chains, delivering traceability of commodities, and assessing and mitigating supply chain risks (see Appendix 2). The legislation will need to be accompanied by clear expectations for compliance and guidelines on appropriate tools and best practice for verifying legal compliance and systems for standardised information sharing between supply chain actors.

MEASURES AND TOOLS

Respondents described existing measures and tools used for traceability and risk assessment. These were often via thirdparty services, including on-the-ground in sourcing countries. Measures included:

• G bou • B • I nec

• E 'da

• On-the-ground efforts to find and engage with suppliers and indirect suppliers

All respondents mentioned that they had their own deforestation policies, including 'zero deforestation' and 'deforestation free' commitments, and No Deforestation, Peatland or Exploitation (NDPE) policies. Actors sourcing palm also had policies to achieve a certain percentage of traceability to mill and plantation.

WWF REFLECTIONS

The upcoming legislation represents a key lever to drive further traceability and sustainable sourcing efforts across all forest-risk commodity supply chains, and particularly in sectors that currently lag behind in this regard. Actors in commodity supply chains with well-developed sustainable sourcing frameworks should be relatively well-placed to comply with the legislation, although may still have to update their policies and practices to implement robust due diligence that meets the legislative requirements.

EXISTING DUE DILIGENCE EFFORTS IN DIFFERENT Commodity supply chains

Respondents reported that sustainable sourcing efforts are most advanced for **palm oil** supply chains, including certification, systems for traceability and risk management. **Soy** was seen as the next most advanced in terms of sustainable sourcing efforts, particularly due to sector initiatives like the UK Soy Manifesto. **Cocoa** was described as having some existing certification efforts, and a couple of respondents stated it was next on their company's sustainable sourcing agenda, although it is seen as less developed in terms of transparency and traceability. **Cattle** was a focal commodity for one of the retailers interviewed which had a policy of excluding beef coming from high-risk geographies but noted that ingredient beef was a key challenge for traceability. **Coffee** was not mentioned by most respondents, and more than one respondent described that **rubber** and **maize** supply chains 'haven't been thinking or talking about this' and 'just don't have the level of focus on [sustainable sourcing] that soy and palm oil have had for decades'.

TRACEABILITY AND DATA SHARING

Respondents from across the supply chain agreed that access to data to allow traceability to farm varies between actors in different positions of the supply chain. In general, first importers are better placed to trace commodities back to origin; one importer stated that this is 'a fair assumption' in most cases. Retailers described that they are currently able to engage with their Tier 1 suppliers, but being 'at the end of the supply chain, it is challenging to bridge the gap...to the farmer'. One retailer described that to evidence traceability to origin, downstream actors would; 'have to get that information from first importers anyway'. Respondents stated that a current lack of data sharing between supply chain actors is a major barrier to due diligence; 'the basis for data sharing is just not there'. Respondents rarely had leverage to ask their suppliers to provide information or to cascade requirements to secondary suppliers and onwards. Several respondents saw the legislation as a key opportunity for government to make it a requirement for information to be collected and shared along the supply chain, and that it 'has to be standardised'. Without this, one respondent said '[we have to] be realistic on the systems we can develop with limited visibility of information'. Traders described that collecting traceability data incurred costs which needed to be shared with other actors in the supply chain for them to access this data.

- Geo-spatial mapping for deforestation and for concession boundaries
- Bi-weekly update on deforestation alerts within concessions
- Desk-based review of evidence for certification and other necessary documentation
- Desk-based deforestation risk assessments presented in 'dash boards'

WWF REFLECTIONS

Robust due diligence critically depends on improved traceability, transparency and information sharing between supply chain actors. The legislation is an opportunity to create mandatory and standardised frameworks to facilitate this. Upstream actors (e.g. first importers) have a particularly critical role to play in tracing commodities to their source, given their greater access to data from the source.

SECTION 2 CONCLUSIONS

As Schedule 17 comes into effect, businesses of varying sizes and with various roles in the supply chain will have to either improve their existing due diligence practices or develop the processes and systems from scratch. Although both situations require additional resource and investment, there are existing resources that companies can leverage to ensure their due diligence systems are robust, including guidance from the Accountability Framework Initiative²²⁷. As this section has suggested, these resources should be used across all steps outlined in the step-by-step guide. This section has also provided a starting point to think about how a company can implement a due diligence system within the context of Schedule 17, including taking into account factors such as proving legal compliance.

It is important to note that due diligence systems should be routinely monitored and evaluated to ensure that they deliver on a company's obligations under the due diligence legislation, as well as against any voluntary commitments and industry standards. Despite the upfront costs associated with due diligence, there are also substantial benefits, such as increased visibility of the supply chain, improved reputation and the potential to avoid costs associated with litigation, among others, as well as invaluable benefits to nature and society. A company should therefore strive to continuously improve its due diligence processes to best capitalise on these benefits and to meaningfully contribute to addressing deforestation and conversion.



A COMPANY SHOULD STRIVE TO CONTINUOUSLY IMPROVE ITS DUE DILIGENCE PROCESSES TO MEANINGFULLY CONTRIBUTE TO ADDRESSING DEFORESTATION AND CONVERSION.

SECTION 3: RECOMMENDATIONS FOR ROBUST DUE DILIGENCE

Based on the findings of this research - which has evaluated aspects of the design of due diligence legislation as well as the practical steps involved for businesses implementing due diligence - we provide below key recommendations aimed at policymakers and businesses.

RECOMMENDATIONS FOR BUSINESSES

• Be involved and vocal in pushing the government for secondary legislation that delivers robust and comprehensive due diligence to 'lift the baseline', including by responding to the government consultation that closes on 11 March 2022 and any ongoing engagement with Defra

• Develop or update existing commodity supply chain policies so that they are robust and go beyond minimum legal requirements. Ensure your policies clearly set out time-bound commitments, targets and implementation plans - including through due diligence - in alignment with the AFi, the OECD and the UN guiding principles on business and human rights

• Incorporate the Principles of Good Due Diligence in this report (see page 30) into your company's due diligence policies and procedures

• Ensure supplier contract terms align with your policies and legal requirements and ensure sufficient commercial penalties are in place when non-conformances occur • Work with suppliers to map the full extent of your supply chain and provide access to information to ensure transparency and traceability throughout the entire supply chain

• Report publicly on your progress towards your commitments and legal requirements, including mandatory due diligence, in an accessible and interpretable manner which can be verified by responsible stakeholders, including consumers and members of civil society

• Conduct a continuous cycle of monitoring, verification, evaluation, and adaptation to ensure your due diligence policies and procedures are fit for purpose and provide the adequate impact for business, nature and society

RECOMMENDATIONS FOR POLICYMAKERS

• All supply chain actors operating in the UK should have obligations under the due diligence legislation to enable efficient implementation and cooperation. However, it may be more effective to tailor the requirements based on an actor's position in the supply chain

• If a turnover threshold is used, it must be set as low as possible to bring into scope the largest possible range of companies that handle forest-risk commodities, without overly burdening smaller companies

• A volume-based threshold for determining companies in scope - in addition to or in lieu of a turnover threshold - should be adopted, as a better proxy for deforestation and conversion risk and to strengthen the reach and impact of the legislation

• The legislation should apply to all commodities that drive deforestation and conversion, including future drivers. If there is strong justification for a phased introduction of forest-risk commodities, those with the highest deforestation and conversion footprint should be prioritised, however a timescale for inclusion of all forest-risk commodities should be defined in secondary legislation

• To enable effective implementation and enforcement, secondary legislation should contain clearly defined due diligence obligations and include a requirement to share data across the supply chain. This can be supported by clear, pragmatic guidance on how to comply with the secondary legislation, including acceptable tools for supply chain mapping and risk assessment, and a list of key legislative instruments to be complied with • Penalties should be legitimately dissuasive and use a mixture of monetary penalties as well as civil and criminal sanctions, including seizures or injunctions. Any monetary penalties should be proportional to a company's turnover to ensure they are dissuasive for large companies whilst avoiding disproportionately penalising smaller actors

• Establish a competent authority to enforce the legislation that is independent and adequately resourced, including specialist expertise and broad powers (e.g. ability to proactively gather evidence of infringements and to bring cases to court)

• During the first review of the legislation, expand the scope of the legislation to all deforestation and conversion whether illegal or legal. Due diligence on all deforestation and conversion will alleviate many of the legal and technical difficulties associated with providing compliance to a legality-based model, as well as aligning with many existing voluntary zero-deforestation and conversion commitments

• Due diligence requirements and scope of the legislation should be aligned with existing or proposed due diligence requirements in other jurisdictions to ensure that products will meet requirements across a variety of markets without further additional costs to businesses

APPENDIX 1. EXAMPLE OF THE POTENTIAL RANGE OF HARMONISED SYSTEMS (HS) CODES THAT WILL NEED TO BE IN SCOPE TO CAPTURE DERIVED AND EMBEDDED FORMS OF PALM OIL.

A sample of HS codes that would need to be in scope for capturing derived and embedded forms of palm oil. This list is not exhaustive.

	HYTONE
Margarine	1517
Chocolate and food preparations containing cocoa	1806
Ice cream and other edible ice	2105
Soap in bars, cakes, moulded pieces, shapes, liquid or cream	3401
Biodiesel and mixtures thereof	3826
Oil seeds; palm nuts and kernels, whether or not broken	120710
Vegetable oils; palm oil and its fractions, crude, not chemically modified	151110
Vegetable oils; palm oil and its fractions, other than crude, whether or not refined, but not chemically modified	151190
Vegetable oils; palm kernel or babassu oil and their fractions, crude, not chemically modified	151321
Vegetable oils; palm kernel or babassu oil and their fractions, other than crude, whether or not refined, but not chemically modified	151329
Crispbread, whether or not containing cocoa	190510
Gingerbread and the like, whether or not containing cocoa	190520
Sweet biscuits, whether or not containing cocoa	190531
Waffles and wafers, whether or not containing cocoa	190532
Rusks, toasted bread and similar toasted products, whether or not containing cocoa	190540
Other bakers' wares	190590
Oil-cake and other solid residues; whether or not ground or in the form of pellets, resulting from the extraction of palm nuts or kernels oils	230660
Acids; palmitic acid, stearic acid, their salts and esters	291570

APPENDIX 2. TOOLS

STEPS 1 & 2 - DEFINE SCOPE OF ACTION AND DEVELOP A POLICY

- Accountability Framework Initiative's Self-Assessment Tool
- OECD's Due Diligence Guidance For Responsible Business Conduct (2018)
- Preferred by Nature's Due Diligence Guidelines Version 3.0 (2017)
- Preferred by Nature's Due Diligence Procedure Template
- WWF's The Business Case for Responsible Sourcing (2017)
- WWF's Deforestation and Conversion Free Supply Chains (2021)

STEP 3 - MAP THE SUPPLY CHAIN

- European Commission provides list of IT solution providers for due diligence
- Preferred by Nature Supply Chain Mapping Tool
- WWF Australia and BGC Digital Ventures' OpenSC

STEP 4 & 5 - IDENTIFY, ASSESS, MITIGATE AND REMEDIATE RISKS

• Accountability Framework Initiative's Operational Guidance on Supply Chain Management provides an outline for assessing environmental and human rights risk

- based risk assessments
- Preferred by Nature's Sourcing Hub contains regional risk profiles
- GeoRSPO has data on RSPO concessions and certified mills
- and changes in land cover over specific time frames
- Isotope analysis is an emerging scientific technique for commodity batch verification
- Preferred by Nature's Supplier Audit Report Template)
- standards
- existing jurisdictional approaches companies can use to mitigate risk

STEP 6 - EVALUATE AND ADAPT

- The Global Reporting Initiative (GRI)
- The CDP Forests
- Climate Disclosure Standards Board (CDSB)
- UN Guiding Principles Reporting Framework
- Sustainable Development Goals

Tools companies can use include:

- GRI 102: General Disclosures
- Proforest's NDPE Implementation Reporting Framework

• Accountability Framework Initiative's How to Write a Strong Ethical Supply Chain policy • OECD and FAO's Guidance for Responsible Agricultural Supply Chains (2016)

• Accountability Framework Initiative's Operational Guidance on Remediation & Access to Remedy

• OECD's Due Diligence Guidance for Responsible Business Conduct provides a list of sources for desk-

• Trase Supply Chains provides tool to assess risk levels of specific suppliers and countries; EU will have a centralised digital system ('the Register') for relevant information on commodities placed on EU markets

· Global Forest Watch, NASA Worldview and MapBiomass provide geospatial data to monitor deforestation

• Companies might also choose to use audits and chain of custody systems, such as certification (See

• Accountability Framework Initiative's Certification and Roundtables provides a list of credible certification

· Conservation International's Exploring the reality of the Jurisdictional Approach provides insight into

Globally recognised initiatives and standards that companies should consider are:

· Accountability Framework Initiative's Operational Guidance on Reporting, Disclosure, and Claims

REFERENCES

1 WWF-UK and RSPB. 2020. Riskier Business: The UK's Overseas Land Footprint, p.4. https://www.wwf.org.uk/riskybusiness

2 Ibid.

3 Cassie Dummett and Arthur Blundell. 2021. Illicit Harvest, Complicit Goods: The State of Illegal Deforestation for Agriculture, 2. https://www. forest-trends.org/wp-content/uploads/2021/05/Illicit-Harvest-Complicit-Goods_rev.pdf

4 Bager, S., Persson, U.M., and Reis, T. 2021. Eighty-six EU policy options for reducing imported deforestation. https://doi.org/10.1016/j. oneear.2021.01.011

5 IDH. 2020. The urgency of action to tackle tropical deforestation. https:// www.idhsustainabletrade.com/publication/the-urgency-of-action-to-tackletropical-deforestation/

6 WWF, n.d. Deforestation & conversion free supply chains: a guide for action. https://deforestation-free.panda.org/

7 See WWF-UK. 2021. WWF Basket Blueprint for Action. https://www.wwf. org.uk/sites/default/files/2021-11/WWF-Basket-Blueprint-for-Action.pdf

8 European Commission. 2021. Questions and Answers on new rules for deforestation-free products. https://ec.europa.eu/commission/presscorner/ detail/en/qanda_21_5919

9 European Commission. 2021. Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the making available on the Union market as well as export from the Union of certain commodities and products associated with deforestation and forest degradation and repealing Regulation (EU) No 995/2010. p. 12. https://ec.europa.eu/ environment/system/files/2021-11/COM_2021_706_1_EN_ACT_part1_v6. pdf

10 Schatz, B. 2021. Schatz, Blumenauer Unveil New Bipartisan Legislation To Help Stop Illegal Deforestation Around The World, Fight Climate Change. https://www.schatz.senate.gov/news/press-releases/schatz-blumenauerunveil-new-bipartisan-legislation-to-help-stop-illegal-deforestation-aroundthe-world-fight-climate-change

11 Radwin, M. 2021. FOREST Act bill would hold global suppliers accountable for illegal deforestation. Mongabay. https://news.mongabay. com/2021/10/forest-act-bill-would-hold-global-suppliers-accountable-forillegal-deforestation/

12 Interviews were conducted under Chatham House rules and will be cited hereafter as 'Stakeholder interview'

13 HM government. 2021. Environment Act 2021, Schedule 17. https://www.legislation.gov.uk/ukpga/2021/30/schedule/17/part/1/enacted

14 Ibid., paragraph 3.2.

15 HM government. 2021. Environment Act 2021, Schedule 17. Part 1. 1(3).

16 Department for Environment, Food and Rural Affairs (Defra). 2021. Implementing due diligence on forest risk commodities: Consultation document. https://consult.defra.gov.uk/international-biodiversity-andclimate/implementing-due-diligence-forest-risk-commodities/supporting_ documents/implementingduediligenceconsultationdocument.pdf

17 WWF- France. 2022. Beyond Forests: Reducing the EU's footprint on all natural ecosystems. https://wwfeu.awsassets.panda.org/downloads/ beyond_forests_en.pdf

18 HM government. 2021. Op. cit.

19 Defra. 2021. Due diligence on forest risk commodities: consultation impact assessment, p.10. https://consult.defra.gov.uk/internationalbiodiversity-and-climate/implementing-due-diligence-forest-riskcommodities/supporting_documents/ duediligenceconsultationimpactassessment.pdf

20 Defra. 2021. Consultation document, p.13. Op. cit.

21 HM government. 2021. Op cit.

22 Defra. 2021. Consultation document, p.13. Op. cit.

23 Ibid.

24 See: https://app.duedil.com/company/gb/00155256/cadbury-uk-limited

25 See: https://pomanda.com/company/06627939/sime-darby-oilsliverpool-refinery-limited 26 Defra. 2021. Consultation document. Op. cit.

27 Department for Business, Energy and Industrial Strategy (BEIS). 2021. Business population estimates for the UK and regions 2021: statistical release. https://www.gov.uk/government/statistics/business-population-

 $estimates\-2021/business\-population\-estimates\-for\-the\-uk\-and\-regions\-2021\-statistical\-release\-html$

28 Anonymised data compiled by 3Keel, which also underpins analysis in: 3Keel. 2019. Moving to deforestation free animal feed: 2018 retail soy initiative. https://www.3keel.com/wp-content/uploads/2019/10/3keel_soy_report_2019.pdf

29 Earthsight. 2020. Eight reasons proposed UK law won't stop consumption driving global deforestation. https://www.earthsight.org.uk/news/analysiseight-reasons-uk-due-diligence-law-wont-stop-consumption-driving-globaldeforestation

30 Retail Soy Group. 2020. Letter to Secretary of State: Role of due diligence requirements in addressing global deforestation. https://www.retailsoygroup. org/wp-content/uploads/2020/10/Letter-on-due-diligence-consultation_final. pdf

31 See Dun and Bradstreet. EWOS Limited. https://www.dnb.com/ business-directory/company-profiles.ewos_ limited.99be4ec3db67bf7f5bcdf9153481e5f7.html

32 Although Defra has stated that the inclusion of 'subsidiaries' under the Act will mitigate this risk, shell companies can still fall outside of legal subsidiaries of a company; Brack, D. and Ozinga, S. 2020. Enforcing due diligence legislation 'plus', p.26. FERN. https://www.fern.org/fileadmin/ uploads/fern/Documents/2020/Enforcing_due_diligence_legislation_ plus_16102020.pdf

33 HM government. 2006. Companies Act, 2006. https://www.legislation.gov.uk/ukpga/2006/46/contents

34 Taken from Defra. 2021. Consultation impact assessment, p.13. Op. cit. Defra notes that there may be overlap between companies for beef & leather, which means that the cattle figures could be overestimates.

35 Retail Soy Group. 2020. Op. cit.

36 Defra. 2020. Consultation on the introduction of due diligence on forest risk commodities: Summary of responses and the government's response. https://assets.publishing.service.gov.uk/government/uploads/system/ uploads/attachment_data/file/933985/due-diligence-forest-riskcommodities-government-response.pdf

37 Anonymised data compiled by 3Keel, which also underpins analysis in: 3Keel. 2019. Op cit.

- 38 HM Government. 2021. Op. cit.
- 39 Brack and Ozinga. 2020. Op. cit, p.14.
- 40 Stakeholder interviews conducted by authors.
- 41 Ibid.

42 Ibid.

43 Heron et al. 2018. Global Value Chains and the Governance of 'Embedded' Food Commodities: The Case of Soy. https://doi.org/10.1111/1758-5899.12611

44 Stakeholder interviews conducted by authors.

45 3Keel. 2021. Moving to deforestation free animal feed in Europe, p. 20. https://www.3keel.com/wp-content/uploads/2021/10/Soy-Report-2021.pdf

46 Defra. 2021. Consultation document. Op. cit.

47 Goldman, E., et al. 2020. Estimating the Role of Seven Commodities in Agriculture-linked Deforestation: Oil Palm, Soy, Cattle, Wood Fiber, Cocoa, Coffee, and Rubber. World Resource Institute. https://files.wri.org/d8/ s3fs-public/estimating-role-seven-commodities-agriculture-linkeddeforestation.pdf

48 West et al. 2021. Towards indicators of the global environmental impacts of UK consumption: Embedded Deforestation. JNCC. https://data.jncc.gov.uk/ data/709e0304-0460-4f83-9dcd-3fb490f5e676/JNCC-Report-681-FINAL-WEB.pdf

49 WWF-UK and RSPB. 2020. Op. cit.

50 UK Government and UN Climate Change. 2021. Glasgow leaders' declaration on forests and land use. https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/

51 Defra. 2021. Consultation document. Op. cit., p.12.

52 Defra. 2022. Webinar on consultation on due diligence secondary legislation. 18th January 2022.

53 See Figure 1 in WWF-France. 2022. Op. cit.

54 Galford et al. 2013. Prospects for land-use sustainability on the agricultural frontier of the Brazilian Amazon. https://doi.org/10.1098/rstb.2012.0171

55 Treanor, N. and Saunders, J. 2021. Tackling (Illegal) Deforestation In Coffee Supply Chains: What Impact Can Demand-Side Regulations Have? Forest Trends. https://www.forest-trends.org/wp-content/ uploads/2021/02/10-things-to-know-about-coffee-production.pdf

56 WWF-UK and RSPB. 2020. Op. cit. NB: timber, pulp & paper have a larger footprint overseas, but the Environment Act primary legislation explicitly states that timber products will not be in scope. They are covered by the UKTR.

- 57 Treanor and Saunders. 2021. Op. cit.
- 58 West et al. 2021. Op. cit.
- 59 WWF-UK and RSPB. 2020. Op. cit.
- 60 Goldman, E., et al. 2020. Op. cit., p.9.
- 61 WWF-UK and RSPB. 2020. Op. cit.

62 Ermgassen, E. et al. 2020. The origin, supply chain, and deforestation risk of Brazil's beef exports. https://doi.org/10.1073/pnas.2003270117

63 Gisbergen, I. 2018. EU Consumption of Rubber and Deforestation. FERN.: https://www.fern.org/publications-insight/eu-consumption-ofrubber-and-deforestation-31/

64 Galford et al. 2013. Op. cit.

65 Ibid.

 $66\quad$ Analysis of FAOSTAT crop production data. See: https://www.fao.org/ faostat/en/#data

67 Treanor and Saunders. 2021. Op. cit.

- 68 WWF-UK and RSPB. 2020. Op. cit.
- 69 WWF-UK and RSPB. 2020. Op. cit. pp. 66, 73, 79.

70 One stakeholder noted that the various shortcomings of certification standards in ensuring no deforestation or other malpractice has pushed them towards a direct sourcing model.

71 Roundtable on Sustainable Palm Oil (RSPO). 2009. RSPO Supply Chain Certification Systems. http://www.rspo.org/sites/default/files/RSPO-Supply%20Chain%20CertificationSystems%20-5Nov2009_0.pdf

72 WWF-UK and RSPB. 2020. Op. cit. p.60.

73 CPET. 2015. Sustainable Palm Derivatives in Cleaning and Personal Care Products. https://assets.publishing.service.gov.uk/government/uploads/ system/uploads/attachment_data/file/444001/CPET_Palm_Oil_Derivatives_ in_Cleaning_and_Personal_Care_Products_08_07_15_External_FINAL.pdf

74 Jong, HN. 2020. 'Meaningless certification': Study makes the case against 'sustainable' palm oil. Mongabay. https://news.mongabay.com/2020/08/ palm-oil-certification-sustainable-rspo-deforestation-habitat-study/

75 Sargent, S. et al. 2022. Universal Mill List: A Standardized Methodology for Creating a Global Database of Palm Oil Mills. World Resources Institute. https://files.wri.org/d8/s3fs-public/universal-mill-list-standardizedmethodology-creating-global-database-palm-oil-mills.pdf

76 For example, see Unilever's Palm Oil Mill list from Unilever Suppliers 2019. https://assets.unilever.com/files/92ui5egz/production/ f99f25f95150e910e5c7602b945a3a38d1c7ad17.pdf/palm-oil-mill-list-fromunilever-suppliers.pdf

- 77 Stakeholder interview
- 78 Stakeholder interview
- 79 See: https://www.uksoymanifesto.uk/

80 French Ministry for an Ecological Transition. 2021. Nouvel outil d'évaluation des risques de déforestation liée aux importations de soja. https:// www.deforestationimportee.fr/fr/actualites/nouvel-outil-devaluation-desrisques-de-deforestation-liee-aux-importations-de-soja-59

81 World Business Council for Sustainable Development (WBCSD). 2020. Soft Commodities Forum progress report: Building transparent and traceable soy supply chains. https://docs.wbcsd.org/2020/06/WBCSD-Soft-Commodities-Forum-progress-report.pdf

82 International Trade Center. 2020. The state of sustainable markets 2020: statistics and emerging trends, pp. 3, 5. https://www.intracen.org/ uploadedFiles/intracenorg/Content/Publications/SustainableMarkets2020layout_20201012_web.pdf 83 Roundtable on Responsible Soy (RTRS). 2020. Soy footprint calculator. https://responsiblesoy.org/rtrs-soy-footprint-calculator?lang=en

84 See: https://www.worldcocoafoundation.org/

85 International Trade Center. 2020. Op cit.

86 Kroeger et al. 2017. Eliminating deforestation from the cocoa supply chain. World Bank. https://documents1.worldbank.org/curated/ en/876071495118818649/pdf/115144-REVISED-20170530-Cocoa-finalupdated.pdf

87 Ermgassen, E. 2021. Chocolate companies face deforestation risks from unknown cocoa suppliers. Trase Insights. https://insights.trase.earth/insights/ chocolate-companies-face-deforestation-risks-from-unknown-cocoasupplies/?utm_source=Trase&utm_campaign=1fffodd70a-EMAIL_ CAMPAIGN_2022_01_10_04_19&utm_medium=email&utm_ term=0_45ddd61bbd-1fffodd70a-41144475

88 See Statista. 2020. Global cocoa bean production from 2018/2019 to 2020/21, by country. https://www.statista.com/statistics/263855/cocoa-bean-production-worldwide-by-region/

89 Nitidae and EFI. 2021. Traceability and transparency of cocoa supply chains in Côte d'Ivoire and Ghana. EU REDD Facility. https://www.euredd.efi. int/documents/15552/431687/

 $\label{eq:constraint} Traceability+and+transparency+of+cocoa+supply+chains+in+C%C3\%B4te+d\%E2\%80\%99 \ Ivoire+and+Ghana/f291580b-oc30-ea52-939e-5000b025a932 \ Same equation (Same equatio$

90 Stoop, P. et al. 2021. Technical Brief on Cocoa Traceability in West and Central Africa: Overview and recommendations for enhanced cocoa traceability in Côte d'Ivoire, Ghana and Cameroon. p.17. https://www.idhsustainabletrade. com/uploaded/2021/04/Cocoa-Traceability-Study_Highres.pdf

91 van der Ven et al. 2018. Do eco-labels prevent deforestation? Lessons from non-state market driven governance in the soy, palm oil, and cocoa sectors. https://doi.org/10.1016/j.gloenvcha.2018.07.002

92 Mighty Earth. 2020. Rapid Response: Deforestation risks of certified cocoa cooperatives in Côte d'Ivoire. Mighty Earth. http://www.mightyearth. org/wp-content/uploads/Final_RR-Special-Report-on-Cocoa_English-Version_January-2020.pdf

93 Nitidae and EFI. 2021. Op. cit.

94 See clauses 3.2.30, 3.2.31, 3.2.32 of SPO standard clauses. Fairtrade International. 2019. Fairtrade Standard for Small-scale Producer Organizations. https://files.fairtrade.net/standards/SPO_EN.pdf

95 Trase. 2020. Trase Yearbook 2020: The state of forest risk supply chains - Brazilian beef. Trase Insights. https://insights.trase.earth/yearbook/ contexts/brazil-beef/

96 MacFarquhar, C. et al. 2019. Hidden deforestation in the Brazil-China beef and leather trade. Global Canopy. https://globalcanopy.org/wp-content/ uploads/2020/12/Hidden-deforestation-in-the-Brazil-and-China-beef-andleather-trade.pdf; Pitcher, L. 2021. New study links major fashion brands to Amazon deforestation. The Guardian. https://www.theguardian.com/ us-news/2021/nov/29/fashion-industry-amazon-rainforest-deforestation

97 Cadastro Ambiental Rural, or, the Rural Environmental Registry

98 IPAM Amazônia. n.d. Brazil's Forest Code: Assessment https://ipam.org. br/wp-content/uploads/2017/01/relat%C3%B3rio_en_ocf_web.pdf

99 Brazilian Coalition on Climate, Forests and Agriculture. 2020. Beef chain traceability in Brazil: Challenges and Opportunities. http://www.coalizaobr. com.br/boletins/pdf/Beef-Chain-Traceability-in-Brazil-challenges-andopportunities_final-report-and-recommendations-v2.pdf

100 Barth, B. and Milhorance, F. 2021. Brazil's Amazon beef plan will 'legalize deforestation' says critics. Food & Environment Reporting Network. https:// thefern.org/2021/11/brazils-amazon-beef-plan-will-legalize-deforestation-say-critics/?utm_source=FERN+Newsletter+Service&utm_campaign=aff2a81f36-EMAIL_CAMPAIGN_2019_07_09_08_03_COPY_01&utm_medium=email&utm_term=0_c95f7f9b8b-aff2a81f36-120488509

101 Skidmore et al. 2021. Cattle ranchers and deforestation in the Brazilian Amazon: Production, location, and policies. https://doi.org/10.1016/j. gloenvcha.2021.102280

102 Consumer Goods Forum Forest Positive Coalition of Action. 2022. Beef Roadmap: Version 1.0. https://www.theconsumergoodsforum.com/ wp-content/uploads/2022/02/CGF-FPC-Beef-Roadmap-EN.pdf

103 Global Canopy. 2022. Forest500 2022 Annual Report: A climate wake up, but businesses failing to hear the alarm on deforestation. Global Canopy. https://forest500.org/sites/default/files/forest500_2022report_final.pdf

104 WWF-UK and RSPB. 2020. Op. cit.

106 Lambert, N. and Gillespie, A. 2020. Traceability in the Leather Production Supply Chain. TextileExchange. https://responsibleleather.org/ wp-content/uploads/2018/05/2020.03.31_Traceability_v3.pdf

107 Treanor and Saunders. 2021. Op. cit.

108 International Trade Center. 2019. The state of sustainable markets 2019: statistics and emerging trends. https://www.intracen.org/uploadedFiles/ intracenorg/Content/Publications/Sustainabile%20markets%202019%20web. pdf

109 Rainforest Alliance. 2020. What's in our 2020 certification program? Deforestation. Rainforest Alliance. https://www.rainforest-alliance.org/wp-content/uploads/2020/06/2020-program-deforestation.pdf

110 Fairtrade. 2019. Op. cit. p.32.

111 See International Trade Centre's Standards Map. https://www. standardsmap.org/en/identify

112 Treanor and Saunders. 2021. Op. cit.

113 WWF-UK and RSPB. 2020. Op. cit. p.73

114 Rankin, J. 2021. Reducing scope of EU anti-deforestation law misguided, say scientists. The Guardian. https://www.theguardian.com/ environment/2021/oct/26/reducing-scope-of-eu-anti-deforestation-lawmisguided-say-scientists

115 Mighty Earth. 2021. Industry Takes Another Step Towards Assuring Sustainable Natural Rubber. Mighty Earth. https://www.mightyearth. org/2021/12/15/industry-takes-another-step-towards-assuring-sustainablenatural-rubber/

116 West et al. 2021. Op. cit.

117 Stakeholder interview

118 HM government. 2021. Op cit

119 Saunders, J. 2020. Ten Steps Towards Enforceable Due Diligence Regulations that Protect Forests. Forest Trends. https://www.forest-trends. org/wp-content/uploads/2020/09/10_Steps_Due_Diligence.pdf; Brack and Ozinga. 2020. Op. cit.

120 Saunders. 2020. Op. cit.

121 European Commission. 2021. Commission Staff Working Document: Executive Summary of the Fitness Check on Regulation (EU) No 995/2010 of the European Parliament and of the Council fo 20 October 2010 laying down the obligations of operators who place timber and timber products on the market (the EU Timber Regulations) and on Regulation (EC) No 2173/2005 of 20 December 2005 on the establishment of a FLEGT licensing scheme for imports of timber into the European Community (FLEGT Regulation). https:// ec.europa.eu/environment/system/files/2021-11/SWD_2021_329_1_EN_ resume_bilan_qualite_part1_v2.pdf

122 Defra.2021. Consultation document. Op. cit. p.25.

123 HM Government. 2021. Op cit. paragraph 13.2.; Greener UK. 2021. Environment Bill Committee briefing: due diligence on forest risk commodities and global footprint. Greener UK. https://greeneruk.org/sites/default/files/ download/2021-07/Environment_Bill_Greener_UK_Link_briefing_Lords_ Committee_deforestation_and_global_footprint.pdf

124 Stakeholder interview

125 Saunders. 2020. Op. cit.

126 Ibid; Brack and Ozinga. 2020. Op. cit.

127 Saunders. 2020. Op. cit.128 Stakeholder interview

128 Stakeholder Interview

 $\label{eq:linear} 129 \ See: https://www.gov.uk/government/groups/central-point-of-expertise-on-timber$

130 Client Earth. 2018. National EUTR penalties: are they sufficiently effective, proportionate and dissuasive? Client Earth. https://www.clientearth. org/media/cuxibicg/national-eutr-penalties-are-they-sufficiently-effective-proportionate-and-dissuasive-ce-en.pdf

131 Brack and Ozinga. 2020. Op. cit.

132 Defra. 2021. Consultation document. Op. cit. p 32.

133 Norman, M. and Saunders, J. 2021. The United Kingdom timber regulation: changing the market to protect Forests? Forest Trends. https:// www.forest-trends.org/wp-content/uploads/2021/05/UKTR-Report.pdf

134 Earthsight. 2020. Op. cit.

135 WWF. 2019. WWF Enforcement Review of the EU Timber Regulation (EUTR). WWF. https://wwf.panda.org/wwf_news/?357123/WWF-Enforcement--Review-of-the-EU-Timber--Regulation-EUTR

136 Defra. 2015. UK statement on sustainable palm oil: 3 years on progress report. https://assets.publishing.service.gov.uk/government/uploads/system/ uploads/attachment_data/file/480165/sustainable-palm-oil-3years-progress. pdf

137 Defra. 2021. Consultation document. Op. cit.

138 BEIS. 2014. CPET resources for government procurers, suppliers and businesses. https://www.gov.uk/government/collections/cpet-resources-for-government-procurers-suppliers-and-businesses

139 Preferred by Nature. 2009. CPET reassessment endorses FSC and PEFC. Preferred by Nature. https://preferredbynature.org/newsroom/cpetreassessment-endorses-fsc-and-pefc

140 Brack and Ozinga. 2020. Op. cit.

141 European Commission. 2021. Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL. Op. cit. p.48

142 Sharma, D. 2021. Human Rights Due Diligence Legislation in Europe -- Implications for supply Chains to India and South Asia. DLA Piper. https:// www.dlapiper.com/en/middleeast/insights/publications/2021/03/humanrights-due-diligence-legislation-in-europe/

143 Brack and Ozinga. 2020. Op. cit.

144 Saunders. 2020. Op. cit.

145 Reuters Staff. 2020. U.S. blocks palm oil imports from Malaysia's Sime Darby over forced labour allegations. Reuters. https://www.reuters.com/ article/

us-malaysia-sime-darby-usa/u-s-blocks-palm-oil-imports-from-malaysias-sime-darby-over-forced-labour-allegations-idUSKBN2941FY?edition-redirect=uk

146 Brack and Ozinga. 2020. Op. cit.

147 Saunders, J. 2020. Meaningful supply chain legislation: Lessons from the US Tariffs Act for regulating the trade in forest risk commodities. Forest Trends. https://www.forest-trends.org/blog/meaningful-supply-chainlegislation-lessons-from-the-us-tariffs-act-for-demand-for-regulating-thetrade-in-forest-risk-commodities/

148 Sharma. 2021. Op. cit.

- 149 Brack and Ozinga. 2020. Op. cit.
- 150 Norman and Saunders. 2021. Op. cit.
- 151 Saunders. 2020. Ten Steps. Op. cit.

152 Ibid.

153 Ibid.

154 Ibid.

155 Hoare, A. 2015. Tackling Illegal Logging and the Related Trade: What Progress and Where Next? Chatham House. https://www.confor.org.uk/ media/79650/chatham-house-tackling-illegal-logging-report-july-2015.pdf

156 Norman and Saunders. 2021. Op. cit.

157 See Accountability Framework Initiative's Operational Guidance. https://accountability-framework.org/the-framework/contents/operational-guidance/

158 RMF. 2021. The ESG Due Diligence and Transparency Report on

Extractive Commodity Trading. RMF. https://www. responsibleminingfoundation.org/app/uploads/EN_RMF_DDAT_ TRADING_2021_WEB.pdf

159 WWF. 2021. Deforestation and conversion free supply chains: WWF vision, guiding principles and asks. https://wwfint.awsassets.panda.org/ downloads/dcf_supply_chains___vision_principles_asks.pdf

160 OECD. 2018. OECD Due Diligence Guidance For Responsible Business Conduct. https://globalnaps.org/wp-content/uploads/2018/06/oecd-duediligence-guidance-for-responsible-business-conduct.pdf

161 Preferred by Nature. 2017. Due Diligence Guidelines Version 3.0. https:// preferredbynature.org/library/due-diligence-tools/dd-01-preferred-naturedue-diligence-guidelines

162 Ibid; OECD. 2018. Op. cit.

- 163 OECD. 2018. Op. cit.
- 164 Ibid.

165 Global Canopy. n.d. Companies. https://forest500.globalcanopy.org/ companies/ 166 Accountability Framework. 2020. How to write a strong ethical supply chain policy. https://accountability-framework.org/how-to-use-it/resources-library/how-to-write-a-strong-ethical-supply-chain-policy/

167 OECD. 2018. Op. cit.

168 Ibid

169 Retail Soy Group. 2021. Achieving deforestation- and conversion-free soy value chains: Principles of successful strategies for downstream sellers of livestock products. Retail Soy Group. https://www.3keel.com/wp-content/uploads/2021/10/Deforestation-free-principles_.pdf

170 The Consumer Goods Forum. 2022. Commodity-specific roadmaps. The Consumer Goods Forum. https://www.theconsumergoodsforum.com/ environmental-sustainability/forest-positive/key-projects/commodity-specificroadmaps-and-reporting/

171 WWF. 2021.Op. cit.

172 WWF-UK. 2021. WWF Basket. Op. cit.

173 OECD. 2018. Op. cit.

174 International Atomic Energy Agency. 2011. Enhancing Food Safety and Quality Through Isotopic Techniques for Food Traceability. International Atomic Energy Agency. https://www.iaea.org/sites/default/files/gc/ gc55inf-5-att2_en.pdf

175 Cassago, A. et al. 2021. Metabolomics as a marketing tool for geographical indication products: a literature review. https://doi.org/10.1007/s00217-021-03782-2

176 For example, see OpenSC. https://opensc.org/

177 For example, see WorldForestID. https://worldforestid.org/a-new-global-standard-in-product-verification/

178 Saunders. 2020. Ten Steps. Op. cit.; Brack and Ozinga. 2020. Op. cit.

179 WWF-UK. 2021. Due Negligence: Will a Due Diligence Regulation on Illegal Deforestation Delink UK Supply Chains from Deforestation? WWF. https://www.wwf.org.uk/sites/default/files/2021-08/WWF-UK-Due-Negligence-Report.pdf

180 For example, see Meridia. https://www.meridia.land/services/land-titling

181 WWF-UK. 2021. Due Negligence. Op. cit.

182 Client Earth. 2021. Endorsing the End of the Amazon: Critical Weaknesses in the UK government's Proposed Forest Risk Commodities Framework and How to Fix Them. Client Earth. https://www.clientearth.org/ latest/documents/policy-briefing-brazilian-legal-reforms-and-implicationsfor-the-uk-s-proposed-law-on-forest-risk-commodities/

183 Brack and Ozinga. 2020. Op. cit.

184 Saunders. 2020. Ten Steps. Op. cit.

185 Ibid.

- 186 WWF-UK. 2021. Due Negligence. Op. cit.
- 187 Stakeholder interview
- 188 WWF-UK. 2021. Due Negligence. Op. cit.
- 189 Stakeholder interview
- 190 Saunders. 2020. Ten Steps. Op. cit. p.4

191 RSPO. 2007. RSPO Principles and Criteria for Sustainable Palm Oil Production. RSPO. https://www.rspo.org/file/RSPO%20Principles%20&%20 Criteria%20Document.pdf

192 The steps roughly reflect the wording of Schedule 17 in the primary legislation of the Environment Act (2021). Although the wording does not directly reflect the wording used in the step-by-step guide, they correspond to steps three, four and five. These recommendations are based on the Accountability Framework initiative, Retail Soy Group principles, and suggested disclosures under the Task force on Climate-Related Financial Disclosures (TCFD).

193 WWF-France. 2022. Op. cit.

194 Harris, N. and Gibbs, D. 2021. Forests Absorb Twice as Much Carbon as They Emit Each Year. World Resource Institute. https://www.wri.org/insights/ forests-absorb-twice-much-carbon-they-emit-each-year

195 WWF et al. 2021. The state of Indigenous Peoples' and Local Communities' lands and territories: A technical review of the state of Indigenous Peoples' and Local Communities' lands, their contributions to global diversity conservation and ecosystem services, the pressures they face, and recommendations for action. https://wwfint.awsassets.panda.org/ downloads/report_the_state_of_the_indigenous_peoples_and_local_ communities_lands_and_territor.pdf

196 Navarra, C. 2020. Corporate due diligence and corporate accountability European added value assessment. European Parliamentary Research Service (EPRS), European Parliament. https://www.europarl.europa.eu/RegData/ etudes/STUD/2020/654191/EPRS_STU(2020)654191_EN.pdf

197 WWF-UK. 2020. A Blueprint for Responsible Global Business: The Case for an Environmental & Human Rights Due Diligence Obligation for UK Businesses. WWF. https://www.wwf.org.uk/updates/blueprint-responsibleglobal-business

198 Navarra. 2020. Op. cit.

199 OECD and Columbia School of International and Public Affairs (SIPA).2016. Quantifying the Costs, Benefits and Risks of Due Diligence for Responsible Business Conduct: Framework and Assessment Tool for Companies, p.59. OECD.

200 Ibid.

201 OECD. 2017. Promoting Sustainable Global Supply Chains: International Standards, Due Diligence and Grievance Mechanisms. Paper presented at the 2nd Meeting of the G20 Employment Working Group. https://www.ilo.org/ wcmsp5/groups/public/---dgreports/---inst/documents/publication/ wcms_559146.pdf

202 Mo, K. 2017. Responsible sourcing of forest products: The business case for retailers, p.21. WWF. https://www.wwf.org.uk/sites/default/files/2017-05/ WWF%20Business%20Case%20responsible%20sourcing_0.pdf

203 Ibid

204 WWF-UK. 2020. Op. cit.

205 OECD and Sipa. 2016. Op. cit. p.59.

206 Ibid.

207 Ibid.

208 Mo. 2017. Op. cit. p.25.

209 OECD and Sipa. 2016. Op. cit. p.59.

210 Navarra. 2020. Op. cit.

211 Geipel, J. and Scheinert, J. 2019. A New Normal for Due Diligence in Global Supply Chains. AssentBlog. https://blog.assentcompliance.com/index. php/due-diligence-legal-landscape/

212 Mo. 2017. Op. cit. p.23.

213 OECD and Sipa. 2016. Op. cit. p.60.

214 WWF-UK. 2020. Op. cit. p.47.

215 For more information, see European Commission's Impact Assessment of Conflict Minerals Regulations: https://eur-lex.europa.eu/legal-content/EN/ TXT/?uri=CELEX:52014SC0053

216 Ibid.

217 Smit et al. 2020. Op. cit.

218 Navarra. 2020. Op. cit.

219 Ibid.

220 Defra. 2021. Consultation impact assessment. Op. cit..

221 For an in-depth review of the main studies assessing cost of due diligence for the conflict mineral sector, see pp. 44-46 of Navarra. 2020. Op. cit.

222 Smit, L. et al. 2020. Study on due diligence requirements through the supply chain: Final Report. European Commission. https://op.europa.eu/en/publication-detail/-/publication/8ba0a8fd-4c83-11ea-b8b7-01aa75ed71a1/language-en

223 OECD and Sipa. 2016. Op. cit. p.60; OECD. 2021. Costs and Value of Due Diligence in Mineral Supply Chains - OECD Position Paper. https://mneguidelines.oecd.org/costs-and-value-of-due-diligence-in-mineral-supply-chains.pdf

224 WWF-UK. 2020. Op. cit.

225 Defra. 2021. Consultation impact assessment. Op. cit. p.17.

226 WWF-UK. 2020. Op. cit. p.47.

227 See Accountability Framework Initiative's Operational Guidance. https:// accountability-framework.org/the-framework/contents/operational-guidance/

228 Defra. 2021. Consultation impact assessment. Op. cit. p.1

 $\label{eq:229} https://www.theguardian.com/environment/2021/oct/21/indonesia-palm-oil-sites-forests-greenpeace$





For a future where people and nature thrive | wwf.org.uk

 $^{\odot}$ 1986 panda symbol and $^{\odot}$ "WWF" Registered Trademark of WWF. WWF-UK registered charity (1081247) and in Scotland (SC039593). A company limited by guarantee (4016725)