

FINAL STUDY REPORT

Forest Law
Enforcement,
Governance, and
Trade (FLEGT)
implementation in
Europe and Indonesia,
and the implications of
timber legality and
deforestation policy
changes in the EU, UK,
USA and China

Authors

Laila Berning, Metodi Sotirov, Johanne Eckelmann: University of Freiburg, Germany (UFR)

Ahmad Maryudi, Andita Aulia Pratama, Dwi Laraswati: University of Gadjah Mada, Indonesia (UGM)

Submitted: 31st October 2022

Acknowledgements

The research and publication of this paper were made possible with the support of the Forest, Markets and Climate Governance (FGMC) programme of the UK Government Foreign, Commonwealth and Development Office (FCDO). This study was also co-funded by the Embassy of the Republic of Indonesia in Germany.

We thank Ms. Jade Saunders (UK Forest Trends) for supporting this study as a resource person. We also thank Ms. Jana Bentz, Ms. Sofia Konstantinova, Ms. Mattia van der Laan, and Mr. Daniel Alberto Cordova Pineda from the University of Freiburg, Germany, for their support as student assistants. We thank Mr. Clemens Hartebrodt and Mr. Felix Hoffmeister from the University of Freiburg for contributing to this study as part of their B.Sc. theses. We are very grateful to all interview partners and participants at the stakeholder workshops in Jakarta, Berlin, and London for sharing their knowledge.

Recommended citation

Berning, L., Sotirov, M., Eckelmann, J., Maryudi, A., Pratama, A., Laraswati, D. (2022). Forest Law Enforcement, Governance, and Trade (FLEGT) implementation in Europe and Indonesia, and the implications of timber legality and deforestation policy changes in the EU, UK, USA and China. Final study report. University of Freiburg, Germany, and Universitas Gadjah Mada, Yogyakarta, Indonesia



UNIVERSITAS GADJAH MADA



UKaid
from the British people

Table of Contents

EXECUTIVE SUMMARY	I
LIST OF ACRONYMS.....	VIII
1. INTRODUCTION	1
2. PROBLEM STATEMENT	3
3. MAIN RESEARCH OBJECTIVES AND QUESTIONS	5
4. RESEARCH METHODOLOGY.....	6
4.1 CONTENT ANALYSIS OF POLICY DOCUMENTS AND LITERATURE REVIEW	6
4.2 KEY INFORMANT INTERVIEWS AND STAKEHOLDER SURVEYS.....	6
5. SETTING THE STAGE: THE TRANSNATIONAL FLEGT POLICY FRAMEWORK.....	9
5.1. EU TIMBER LEGALITY POLICY.....	9
5.2. UK TIMBER LEGALITY POLICY	14
5.3. TIMBER LEGALITY POLICY OF THE US	14
5.4. TIMBER LEGALITY POLICY OF AUSTRALIA.....	15
5.5. TIMBER LEGALITY POLICY OF CHINA	15
6. IMPLEMENTATION OF THE TRANSNATIONAL FLEGT POLICY FRAMEWORK.....	17
6.1. IMPLEMENTATION OF THE EU TIMBER LEGALITY POLICY.....	17
6.2. IMPLEMENTATION OF TIMBER LEGALITY POLICIES IN THE UK, US, AUSTRALIA AND CHINA.....	31
7. IMPACTS OF THE TRANSNATIONAL FLEGT POLICY FRAMEWORK.....	34
7.1 POSITIVE POLICY AND MARKET IMPACTS ON THE DEMAND-SIDE.....	34
7.2 NEGATIVE IMPACTS ON THE DEMAND-SIDE.....	37
7.3 POLICY AND MARKET IMPACTS ON THE SUPPLY-SIDE IN INDONESIA	43
8. CHANGES IN DEMAND-SIDE REGULATORY MEASURES.....	53
8.1 REGULATORY POLICY CHANGES IN THE EU	53
8.2 REGULATORY POLICY CHANGES IN NON-EU CONSUMER REGIONS: THE UK AND THE US	69
9. IMPACTS OF THE EU'S AND NON-EU CONSUMER REGIONS' REGULATORY CHANGES.....	72
9.1. POTENTIAL IMPACTS OF EU DEFORESTATION REGULATORY CHANGES ON FLEGT	72
9.2. POTENTIAL IMPACTS OF REGULATORY CHANGES IN NON-EU CONSUMER MARKETS ON FLEGT	74
9.3 POTENTIAL POLICY AND MARKET IMPACTS FOR INDONESIA	75





9.4 POTENTIAL POLICY AND MARKET IMPACTS FOR OTHER PRODUCER COUNTRIES.....	90
10. SUMMARY CONCLUSIONS	97
BIBLIOGRAPHY.....	107
APPENDIX.....	128
ANNEX A: KEY INFORMANT AND EXPERT INTERVIEW OVERVIEW (UNIVERSITY OF FREIBURG, UFR).....	128
ANNEX B: STAKEHOLDER STATEMENTS ON THE EU DEFORESTATION REGULATION (DRAFT) (D1-D128).....	135
ANNEX C: COMPARATIVE OVERVIEW OF EXISTING AND EMERGING POLICIES REGULATING TIMBER LEGALITY AND/OR FOREST-RISK COMMODITIES SUSTAINABILITY/LEGALITY.....	136
<i>Table 1. Product scope.</i>	136
<i>Table 2. Definition of legality and ecological sustainability.</i>	138
<i>Table 3. Summary of key policy instruments.</i>	139
<i>Table 4. Import restrictions and prohibitions.</i>	143
<i>Table 5. Due diligence system.</i>	145
<i>Table 5. continued</i>	146
<i>Table 6. Country rating system.</i>	147





Executive Summary

Illegal and unsustainable land use has been touted as the key driver of global deforestation and forest degradation, particularly in the tropics. Among the first and most comprehensive transnational policy responses to tackle illegal logging and associated timber and timber product trade – as an important precursor to deforestation – was the European Union’s (EU’s) 2003 Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan with its supply-side EU-partner country FLEGT Voluntary Partnership Agreements (VPAs) and demand-side EU FLEGT Regulation and EU Timber Regulation (EUTR). Along with the EU FLEGT policy, the so-called transnational timber legality regime also includes the US Legal Timber Protection Act (LTPA), amending the US Lacey Act, and the Australian Illegal Logging Prohibition Act (ILPA). China has also recently amended its Forest Law to introduce demand-side legislative obligations for timber legality.

To address agricultural expansion – the most important driver of global deforestation – the EU, UK and US have recently started closing gaps in regulating forest-risk agricultural commodity supply chains. This new generation of regulatory changes in transnational trade policies points to important regulatory gaps and still largely unexplored processes of policy change and stability within and outside the continuously evolving transnational timber legality regime.


Against this background, the present report first examined the FLEGT policy’s functioning on the demand side in Europe (EU and UK) and non-European consumer regions (USA, Australia, and China) as well as on the supply side in Indonesia and other tropical countries. Second, newly emerging demand-side deforestation policy changes in Europe (EU, UK) and the US have been analysed. Third, the implications of the deforestation regulatory changes on reforms in Indonesia and other tropical countries have been assessed. Results are based on a comprehensive document analysis, surveys, and key informant interviews. Last but not least, the results of this study were presented, discussed, and validated during three expert workshops involving demand and supply-side state and non-state actors, held in September 2022 in Jakarta (Indonesia), Berlin (Germany) and London (UK). The main findings of these stakeholder workshops are presented in a policy brief (Sotirov et al., 2022) directly related to this final report. The main findings of this study are presented along a set of three main research questions, as summarised below.

1. How is the **current FLEGT policy** functioning in Europe (EU, UK) and Indonesia?

Implementation and impacts of FLEGT policy in Europe (EU and UK)

We found that the realisation of the full EU FLEGT Action Plan theory of change is negatively impacted by the low supply of FLEGT timber from tropical countries where Indonesia remains the only partner country that is successfully implementing a **FLEGT VPA** with the EU. Additionally, EU Member States (incl. the UK before the EU withdrawal) have






implemented the **EU FLEGT Regulation/EU Timber Regulation** in an inconsistent way across countries and enforced the regulations insufficiently. Despite a formal ‘green lane’ for FLEGT timber that is exempted from due diligence obligations under the applicable EU law, the lack of harmonised implementation and strict enforcement of the EU FLEGT Regulation/EUTR on the demand-side in EU countries has weakened the policy support and compromised the market advantages of FLEGT-licensing for supply-side partner countries, particularly Indonesia as the only country reaching the FLEGT-licensing stage. Another barrier to effective EU FLEGT policy implementation is the insufficient knowledge and lack of positive awareness about FLEGT timber among state authorities and economic operators in the EU27 and the UK.

At the same time, competent authorities in the EU Member States have transferred the EUTR into national legislation and worked collectively to improve the EUTR’s implementation and enforcement within and across countries. While EU institutions and Member State authorities have made progress in implementing the EU FLEGT Regulation / EUTR, the complex regulatory design, different political priorities and the insufficient capacities of implementing authorities have constrained effective and coherent implementation and enforcement of the EU timber legality rules. As a result, while the ‘green lane’ for FLEGT-licensed timber under the EUTR has initially increased EU traders’ demand for Indonesian timber imports on the EU market, the interest has lowered and only bears fruit when tropical timber is traded in conjunction with additional sustainability proofs, especially **FSC and/or PEFC forest certification**.

At the same time, among the **economic operators and traders**, mainly large companies and industries (e.g., traders, retailers), and some traditional forest sector small and medium-sized enterprises (SMEs), have been more aware and successful in implementing the EU FLEGT Regulation/EUTR through due diligence and legal sourcing along their supply chains. SMEs, and larger businesses and industries outside the traditional forest sector, have remained insufficiently aware of their obligations and faced challenges in complying with the EUTR. Owing to the inconsistent and insufficient implementation and enforcement across EU Member States, coupled with economic operators’ knowledge gaps, wanton evasion of due diligence obligations, and partly continued sourcing of illegally harvested timber and timber products, illegal commodities continue to be traded on the EU market.

The EU agreed under Article 13 of the EU-Indonesia FLEGT VPA to provide policy support for, stimulate market demand for and encourage a positive perception of FLEGT-licensed timber from Indonesia. **Timber Procurement Policies (TPP)**, such as public timber procurement regulations and non-state market-driven certification, have been suggested as key mechanisms to increase the EU policy support and market demand for FLEGT-licensed timber. Formally, EU institutions and Member State authorities have implemented TPP actions, including EU Green Public Procurement (GPP) criteria and ‘green lane’ acceptance of FLEGT-licensed timber as legal timber not subject to due diligence obligations under the EUTR. Initially, EU institutions, Member States, and international organisations engaged in awareness raising and other supportive actions for FLEGT timber-supportive TPPs. Other early facilitating actions included training for competent authority staff, FLEGT facilities and governmental funding for FLEGT-



focused programmes and projects. With these actions, EU and Member State higher-level policy actions have formally fulfilled FLEGT VPA-related commitments. However, the national and practical implementation of TPPs have been facing a range of shortcomings compromising effective policy and market support for FLEGT timber. The main challenges in most EU Member States include the lack of knowledge about and lower prioritisation for FLEGT-licensed timber at the expense of third-party forest certification in national TPPs, unclear implementation guidelines, diffuse definitions and standards, as well as insufficient practical application. In most EU countries, even those heavily dependent on tropical timber imports, FLEGT-licensed timber is neither prioritised as award criteria nor accepted as proof of sustainability in national TPPs. At the same time, private sector companies, especially multinational trade and retail companies, have mainly used third-party sustainability certification of forest management and timber chains of custody as private timber procurement policies. While private sector companies have used certified timber under **the FSC and PEFC schemes** for gaining market access, reaping price premiums and exercising peer pressure on market competitors, they have developed little knowledge about using FLEGT-licensed timber in their private procurement policies. At the same time, due to reduced time and costs for due diligence under the EUTR, FLEGT-licensed timber plays an important role for timber trading companies in EU countries (Amsterdam group) that are heavily dependent on tropical timber products.

There are also still important **knowledge gaps and uncertainties among state authorities and economic operators** on the demand-side around the value and credibility of the Indonesian Timber Legality Assurance System (TLAS), called SVLK, as a FLEGT legal timber license and sustainable timber standard. Indonesia's SVLK – a standard that certifies both legal and sustainable timber – is not very known among national authorities and economic operators in the EU and non-EU consumer markets. While several supply-side interviewees highlighted SVLK's similarities to FSC and PEFC in terms of fulfilling sustainability criteria, market actors and state authorities in Europe (EU27+UK) and the US do not perceive SVLK as fulfilling sustainability criteria, when compared to third-party schemes (FSC, PEFC). Several Indonesian interviewees highlighted SVLK as already fulfilling the majority of sustainability criteria and perceived that few additional actions were required for SVLK to fulfil EU sustainability standards. The complete acceptance of SVLK could be economically achieved when more EU countries import larger numbers of FLEGT-licensed timber and when the cost and criteria fulfilment meet with the best price-performance ratio. Politically, the acceptance can be enhanced by a supportive and coherent implementation of FLEGT-supportive policies designed and implemented by state authorities in EU and non-EU consumer regions.

Implementation and impacts of FLEGT policy in Indonesia

The EU-Indonesia FLEGT VPA implementation has supported an **inclusive and participatory multi-stakeholder process** in developing a fully operational TLAS through the SVLK. The SVLK comprises two sets of standards, namely a legality (VLK) standard for different types of processing industries and a sustainability (PHPL) standard for forest operations. The SVLK's implementation has fostered **legality compliance** in timber value chains, facilitated





more coherent and harmonised policies, and provided an option for solving problems related to illegal logging and the trade of illegal timber products. The SVLK implementation has also strengthened national forest institutional designs and provided enabling conditions for legal and more sustainable forest practices. Legality verification is enforced for all exports, not only to the EU, aimed at curtailing potential leakages or circumvention of non-legally verified product exports to non-EU markets. SVLK's adoption increased in both upstream and downstream operations, driven by the expectation of market incentives. The government facilitated SVLK adoption with the view of capturing promised market incentives.


Overall, **FLEGT exports of Indonesian timber products** have fluctuated over time. While FLEGT exports to the EU market tended to increase slightly following the full-fledged FLEGT licensing after 2016-2018, timber exports to the EU market have lately stagnated. In this regard, there is limited evidence showing direct positive links between the fully operational SVLK under the 2014 EU-Indonesia FLEGT VPA and the marketing of Indonesian timber products on the EU market. This has led to growing dissatisfaction among governmental and business actors in Indonesia towards the EU and its Member States regarding their limited concrete and effective actions to comply with commitments to promote FLEGT-licensed products through policy and market actions.

2. What are the new **demand-side deforestation policy** measures emerging in the EU, the UK, the US and China?

Deforestation policy changes in the EU

In the EU, the EUTR would be repealed by the newly emerging EUDR. This new **EU zero-deforestation policy** focuses not only on timber but mainly on forest-risk agricultural commodities (palm oil, soy, beef/cattle, cacao, coffee) to close regulatory gaps in addressing agricultural expansion as the most important driver of global deforestation. The EUDR would demand both legality and sustainability standards for timber and forest-risk agricultural commodities being placed on the EU market. FLEGT-licensed timber would fulfil the EUDR's legality obligation. However, FLEGT licenses would not be accepted as proof of complying with the EUDR's sustainability standard (i.e., zero deforestation and zero forest degradation). Unlike the EUTR, the EUDR would thus not provide a full green lane to the EU market for FLEGT-licensed timber and timber products. The EUDR would put higher legislative requirements and result in higher administrative and economic burdens for tropical producer countries such as Indonesia and European importers.

The EUDR has received overwhelming **support** from environmental and social NGOs expecting biodiversity conservation and social right protection. Like-minded EU institutions, such as the European Commission and the European Parliament, supported the EUDR based on shared beliefs and interests in regulating consumption, international trade and deforestation and forest degradation-linked supply chains. There is also wide support for the EUDR from import-dependent EU countries, EU and transnational businesses and industry organisations, mainly larger retailers and traders. They are interested in fulfilling regulatory policy



preferences and reaping economic benefits, including reputational gains, a levelled playing field or market protectionism.

Opposition has mainly come from specific FRC-import-dependent EU and transnational businesses and industry associations, particularly in the beef and palm oil sectors. They are concerned with economic disadvantages, including supply shortages, legal and administrative burdens, economic costs, complicated international trade, limited market access and increased competition. Governmental authorities, as well as businesses and industry associations in tropical producer countries, have also opposed the EUDR due to similar economic concerns, including competitive disadvantages, discriminatory trade restrictions, restrictions in clearing land for economic and social development, impacts on small-holders and domestic businesses, increased costs, legal, and administrative burdens.

Deforestation policy changes in the UK


Similar to the EU, the UK started regulating transnational agricultural commodity supply chains to address consumption-driven deforestation. With the proposed UK Environment Act, the UK is planning to introduce a due diligence system to discourage illegal forest-risk agricultural commodities from entering the UK market. The main difference compared to the EU is that the UK maintains its focus on requesting legality standards only: for timber and timber products under the UKTR and for deforestation-related agricultural commodities under the UK Environment Act. Unlike the EU, the UK **deforestation regulatory changes** will not include sustainability standards such as zero deforestation and zero forest degradation. As in the EU, there has been a strong public (NGOs) and political (governmental) momentum in favour of new due diligence provisions in the UK.

Deforestation policy changes in the USA

Similar to the UK, the US is in the process of adopting the FOREST Act – introduced in the Senate in 2021 – to request the legality of forest-risk agricultural commodities entering the US market. Like the UK, the legality of timber and timber products will continue to be regulated and requested under separate legislation, the 2008 US Lacey Act Amendment. Unlike the EUDR, the US **deforestation policy** would focus on commodity legality and not cover sustainability standards such as zero deforestation and zero forest degradation. Similar to the EU, the US is planning to introduce a deforestation risk-rating system to benchmark producer countries in addition to adopting new import declaration requirements. Unlike in the EU and the UK, there has been a weak political momentum for the proposed FOREST ACT of 2021 due to the divided party politics in the country.

Timber legality policy changes in China

China has amended its Forest Law to introduce demand-side legislative obligations for **timber legality**. However, the particular details and regulatory scope of the Forest Law Amendment are less ambitious when compared to the EU and non-EU market regulations. Unlike the EU, UK and US, China has not decided to introduce regulatory changes to govern



deforestation and forest degradation driven by transnational trade in forest-risk agricultural commodities and timber products. Neither sustainability has been regulated so far. The political context in China and restrictions on environmental and social NGOs and foreign actors operating in the country may hinder the adoption of legislation more similar to that existing in the EU, UK or US.

3. What are the **implications for Indonesia and other tropical producer countries** in the context of existing and newly evolving international policies and legal frameworks?

Implications from the EU deforestation policy changes

The EU's deforestation-free policy is widely regarded by stakeholders in Indonesia as another form of barrier to trade and is thought to negatively impact Indonesia's main export commodities, specifically oil palm. There are mismatches of definitions of forest and deforestation used by the EU and the Indonesian land-use regulatory frameworks that are defined beyond biophysical features. The EU's policy is thought to adversely impact commodities produced from forested landscapes outside Forest Zones and legal deforestation. It is also considered that the EUDR would further increase the burden of smallholder practices which heavily characterise the production of several commodities. FLEGT-VPAs are not seen as fit-for-purpose under the EUDR and are regarded as unsuitable to meet deforestation-free requirements, placing potential additional trade requirements for Indonesian timber products. Despite progress made in both mandatory and voluntary certification, Indonesia will likely face more challenges in exporting major commodities, such as oil palm.

Implications from deforestation and timber legality policies in non-EU regions

Amidst uncertainties around the EU's zero deforestation policy, stakeholders in Indonesia saw the importance of consolidating exports to Asian countries, the core export destinations of several commodities, including timber and oil palm. Timber legality policies in **China** and the **Republic of Korea** (ROK) share some similarities with the EUTR (including mandatory bans, due diligence obligations and the controlling and sanctioning of non-compliance). **China** has begun to establish cooperation, both business-to-business and government-to-government cooperation, with several producing countries. Indonesia could see this as an opportunity to establish similar cooperation focusing on the formal recognition of SVLK. **The US** expands its import regulations and enforcement, not only to timber with the Lacey Act Amendment but also to other forest-related agricultural products under the US FOREST Act. Indonesian SVLK might still be compatible through adaptation necessary to cover legality in deforestation issues. US regulations do not specify a formal mechanism for recognising timber legality systems, instead placing responsibilities on importers. Business-to-business cooperation on SVLK recognition is thus more feasible. Timber legality policies in **Japan** and **ROK** remain focused on voluntary actions to promote legal and/or sustainable timber. This could bring both market advantages and disadvantages to FLEGT timber from Indonesia and other tropical countries. Hundreds of Japanese timber businesses and trade organisations have established networks for supplying



legal/sustainable wood. Hence, Indonesia and other tropical countries could explore the business-to-business approach more.



List of Acronyms

UFR	The University of Freiburg
APHI	Asosiasi Pengusaha Hutan Indonesia
APL	Area Penggunaan Lain
ASMINDO	Asosiasi Industri Permebelan dan Kerajinan Indonesia/Indonesia Furniture Industry & Handicraft Association
ATIBT	International Tropical Timber Association
CAOBISCO	Association Communautaire des Industries de la Chocolaterie, Biscuiterie industries of Europe
CBD	Convention on Biological Diversity
CPET	Central Point of Expertise on Timber
CEU	Council of the European Union
CIFOR	Center for International Forestry Research
CITES	Convention on International Trade in Endangered Species
COCERAL	European Association of Trade in Cereals, Rice, Feedstuffs, Oilseeds, Olive Oil, Oils and Fats and Agrosupply
COM AGRI	Committee on Agriculture and Rural Development
COM DEVE	Committee on Development
COM ENVI	Committee on the Environment, Public Health and Food Safety
COM IMCO	Committee on Internal Market and Consumer Protection
COM INTA	Committee on International Trade
COM ITRE	Committee on Research and Energy
CSO	Civil Society Organization
CTLVS	China's Timber Legality Verification System
CZ	Czech Republic
DE	Deutschland
DG AGRI	Directorate General for Agriculture and Rural Development
DG DEVCO	Directorate-General for International Co-operation and Development
DG ENV	Directorate-General for the Environment
DG GROW	Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs
DG INTPA	Directorate-General for International Partnerships
DG NEAR	Directorate-General for Neighbourhood and Enlargement Negotiations
DG RTD	Directorate-General for Research and Innovation
DG SANTA	Directorate-General for Health and Food Safety
DG TAXUD	Directorate-General Taxation and Customs
DG TRADE	Directorate-General for Trade
DKP	Deklarasi Kesesuaian Pemasok
EC	European Commission
EEA	European Economic Area
EFI	European Forest Institute
EIA	Environmental Investigation Agency
ENGO	Environmental Non-Government Organization
EP	European Parliament
EPOA	European Palm Oil Alliance
ePURE	European Renewable Ethanol Industry
ETTF	European Timber Trade Association
EU	European Union
EUDR	EU Deforestation Regulation
EUTR	EU Timber Regulation



EUWTR	European Wildlife Trade Regulation
FAO	Food and Agriculture Organization
FEDIOL	EU Vegetable Oil and Proteinmeal Industry Association
FEFAC	European Feed Manufacturers' Federation
FFIF	Finnish Forest Industries Federation
FGMC	Forest Governance, Markets and Climate Programme
FLEG	Forest Law Enforcement and Governance
FLEGT	Forest Law Enforcement, Governance and Trade
FRC	Forest-risk commodity
FSC	Forest Stewardship Council
FTE	Full-Time Equivalent
GB	Great Britain
GDP	Gross Domestic Product
GIZ	Die Deutsche Gesellschaft für Internationale Zusammenarbeit
GPP	Green Public Procurement
HIMKI	Himpunan Industri Mebel dan Kerajinan Indonesia
HuMa	Association for Community and Ecology-Based Law Reform (Original: Perkumpulan untuk Pembaharuan Hukum Berbasis Masyarakat dan Ekologis)
IM	Independent Monitoring
IMCO	Internal Market and Consumer Protection
IMCO	Committee on Internal Market and Consumer Protection
IMM	Independent Market Monitoring
IPB	Institut Pertanian Bogor
IPOA	Indonesian Palm Oil Association
IPP	Integrated Product Policy
ISO	International Organization for Standardization
ISPO	Indonesia Sustainable Palm Oil
ITTO	International Tropical Timber Organization
KAN	Komite Akreditasi Nasional
LEI	Lembaga Ekolabel Indonesia
LMI	Lower Middle Income
LULUCF	Land Use, Land-Use Change and Forestry
MEP	Member of the European Parliament
MFP4	Multistakeholder Forestry Programme Phase 4
MNC	Multinational Companies
MoEF	Ministry of Environment and Forestry
MoT	Ministry of Trade
MPOC	Malaysian Palm Oil Council
MS	Member State (EU country)
NAP	National Action Plan
NDC	Nationally Determined Contributions
NGO	Non-governmental organisation
NI	Northern Ireland
OPSS	Office for Product Safety and Standards
PEFC	Programme for the Endorsement of Forest Certification Schemes
PHPL	Pengelolaan Hutan Produksi Lestari
REDD	Reducing Emissions from Deforestation and Forest Degradation
ROK	Republic of Korea
RPBBI	Rencana Pemenuhan Bahan Baku Industri Primer Hasil Hutan Kayu
RSPO	Roundtable on Sustainable Palm Oil
RTRS	Roundtable on Responsible Soy





SIGIF	Forest Information Management System
SIPUHH	Sistem Informasi Penatausahaan Hasil Hutan
SME	Small and Medium-sized enterprises
SVLK	Sistem Verifikasi Legalitas Kayu
TLAS	Timber Legality Assurance System
TPP	Timber Procurement Policies
UGM	University of Gadjah Mada
UK	United Kingdom
UKTR	UK Timber Regulation
UNECE	United Nations Economic Commission for Europe
UNEP- WCMC	United Nations Environment Programme World Conservation Monitoring Centre
UNFCCC	United Nations Framework Convention on Climate Change
US	United States of America
VLK	Verifikasi Legalitas Kayu
VPA	Voluntary Partnership Agreements
WTO	World Trade Organization
WWF	World Wide Fund for Nature

List of tables

<i>Table 1. Summary of demand- and supply-side interviewees.....</i>	<i>8</i>
<i>Table 2. FLEGT VPA implementation: an overview.</i>	<i>18</i>
<i>Table 3. Overview of EU policies with relevance to timber procurement.</i>	<i>25</i>
<i>Table 4. Overview of TPP of top-9 tropical timber importing European countries.</i>	<i>28</i>
<i>Table 5. Key Indonesian regulations of mandatory legality licensing for timber exports.</i>	<i>46</i>
<i>Table 6. Role of FLEGT under existing EU and non-EU regulatory policies.</i>	<i>75</i>
<i>Table 7. Potential applicability of the EU's deforestation definition on Indonesia's land sector.</i>	<i>79</i>
<i>Table 8. Key aspects of the due diligence system.</i>	<i>81</i>
<i>Table 9. Uptakes of voluntary certification of different commodities in Indonesia (per August 2022).....</i>	<i>83</i>





List of figures

Figure 1. Trends of timber legality (VLK) and forest sustainability (PHPL) SLVK certification.....	44
Figure 2. Proportion of sustainability (PHPL) certification based on grades.	45
Figure 3. Government support for SMEs to access legality verification in Indonesia.	47
Figure 4. Reasons for engaging in VLK-certification (Note: multiple responses possible as survey participants may have provided more than one response).	48
Figure 5. Exports of timber products from Indonesia (quantity and values, 2017-2021).....	49
Figure 6. Benefits of VLK indicated by processing industries in Indonesia	50
Figure 7. Overview of key positions on the EUDR of the AGRIFISH and ENV Council of the EU (Member States), European Commission, and European Parliament (own figure).....	64
Figure 8. Share of forest risk commodity exports from Indonesia's total exports (Directorate General of Plantations (2020) for palm oil, coffee, and cocoa; Directorate General of Sustainable Forest Management (2020) for timber).....	76
Figure 9. Proportion of smallholders in the production of key commodities.	84

List of boxes

Box 1. EU's commitments under the EU-Indonesia FLEGT VPA (EU and Indonesia 2014).....	11
Box 2. Overview of the UK FLEGT policy after the EU-UK withdrawal.	14



1. Introduction

Illegal logging and associated trade in illegal timber and forest products are recognized as a global problem (Kleinschmit et al., 2016). In many tropical countries, the scales of illegal logging have been reported to be very high, ranging between 30-80% of total timber use and trade, in some cases more than that of legal sources (see Tacconi et al., 2004; Cheng and Le Clue, 2010; Humphreys, 2006; Acheampong and Maryudi, 2020). Legal and illegal logging and associated trade are also touted as the most important driver of forest degradation (Hosonuma et al., 2012) and an important precursor to deforestation (Vancutsem et al., 2021), contributing to climate change, biodiversity loss, social rights concerns and undermining human life support systems (Dooley and Ozinga, 2011; Arcilla et al., 2015; Tacconi et al., 2019). Furthermore, illegal logging creates socio-economic problems, as in reduced countries' and legal firms' revenues, distorted global and local markets, undermined livelihoods of local communities, and land conflicts (Kleinschmit et al., 2016; Leipold et al., 2016).

One of the earliest and most significant policy packages tackling illegal logging and trade of illegal timber is the Forest Law Enforcement Governance and Trade (FLEGT) Action Plan of the European Union (EU), launched in 2003 (EC, 2003). The FLEGT Action Plan's main theory of change is to reduce illegal timber on the EU – and eventually global – market by (i.) decreasing the supply of illegal timber from tropical countries and (ii.) increasing demand for legal timber on the EU – and eventually global – market. The EU FLEGT policy framework works with three instruments to achieve these aims (Cashore and Stone, 2012; Sotirov et al., 2020).

First, the EU FLEGT Action Plan entails bilateral trade deals between the EU and tropical countries in the form of FLEGT Voluntary Partnership Agreements (VPAs). VPAs contain legally binding commitments between the EU and a tropical partner country that voluntarily decided to negotiate and implement this bilateral trade agreement (Rutt et al., 2018). VPAs entail thoroughly reviewing all laws related to forests in the exporting country and establishing a timber legality definition. Once agreed, the VPAs include the development of a licensing scheme, including a national partner country timber legality assurance system (TLAS) and a system for issuing FLEGT licences for timber exported to the EU. On the demand-side, the EU FLEGT Regulation governs the obligations and rights of EU Member States' authorities to verify and approve FLEGT licenses, control FLEGT-licensed timber shipments, and sanction non-compliant behaviour.

Second, the EU FLEGT Action Plan sets demand-side commitments for the EU to apply legal public procurement through EU and national public timber procurement policies. It also encourages non-state market-driven governance schemes such as forest sustainability certification of the Forest Stewardship Council (FSC) or the Programme for the Endorsement of Forest Certification (PEFC), or business codes of conduct by requesting legal timber from tropical partner countries (EC, 2003).

Third, the EU FLEGT Action Plan sets the stage for trade regulation through demand-side legal instruments. For this, the Council of the EU and the European Parliament adopted the EU Timber Regulation (EUTR) in 2010, with effective enforcement from 2013 onwards. The EUTR prohibits placing illegal timber products on the EU market and requires



economic operators that put timber products on the EU market for the first time (e.g. timber importers) to exercise due diligence by collecting information, assessing, and mitigating risks of illegally sourced timber entering their supply chains. Likewise, the EUTR provides EU member state authorities with rights and duties to control economic operators in fulfilling their due diligence obligations and sanction non-compliant behaviour. Under the EUTR, FLEGT-licensed timber products (and Convention on International Trade in Endangered Species (CITES)-licensed timber) are granted a 'green lane'. Operators are exempt from conducting due diligence on FLEGT-licensed timber based on the official recognition as low-risk commodities that can be directly traded on EU markets (Dieguez and Sotirov, 2021; Sotirov et al., 2017).



2. Problem statement

Indonesia is among the first partner countries to sign a FLEGT VPA with the EU. More importantly, Indonesia is the first country to successfully implement a FLEGT VPA through its TLAS system called *Sistem Verifikasi Legalitas & Kelestarian* (SVLK) and started issuing FLEGT Licences on 15 November 2016. FLEGT Licences are issued by Licensing Authorities which are independent organisations. In Indonesia, they are registered within the sphere of the Ministry of Environment and Forestry's (MoEF) authority.

While Indonesia has made significant progress on the supply-side by successfully establishing a timber licensing regime (Overdevest and Zeitlin, 2018), demand-side implementation of the 2014 EU-Indonesia FLEGT VPA Agreement in the EU and its Member States remains largely unknown in the scientific literature. In particular, the EU-Indonesia VPA includes a contractually agreed EU commitment to stimulate EU demand for FLEGT-licensed timber and improve the policy, market, and societal perception of FLEGT-licensed tropical timber in the EU (EU and Indonesia, 2014). However, it remains unclear how Indonesian timber is perceived by policy and economic actors on the EU market in the context of possible negative long-lasting effects of prior 'naming and shaming' campaigns of leading environmental non-governmental organisations (NGOs) and image-related response strategies by traders in changing tropical timber suppliers and sourcing destinations (McDermott and Sotirov, 2018; Sotirov et al., 2017).

Additionally, the global forest policy attention recently started shifting to the crucial role of agricultural expansion as the most important driver of global deforestation (FAO, 2021), particularly in the tropics (Pendrill et al., 2019). Agricultural expansion, in particular for pasture expansion and the production of commodities such as oil palm and soy, drives between 90-99% of tropical deforestation (Pendrill et al., 2022). Major consuming markets, such as the EU, have launched new policy efforts to regulate timber and agricultural forest-risk commodity (FRC) supply chains to address their role in driving forest loss and degradation (EC, 2021a). Other important consumer countries like the UK and US have also started adapting their policy and legal frameworks to regulate agricultural FRC supply chains (Government UK, 2022; 117th Congress, 2021). China amended its Forest Law, criminalizing purchasing, processing, and transporting wood when aware of its illegal origins (MEE, 2019). The main EU-led rationale for these policy shifts is to step up EU and transnational regulatory efforts to ensure deforestation-free FRC supply chains through legality or sustainability regulations.

This new generation of regulatory changes in EU trade policies points to important regulatory gaps and still largely unexplored processes of policy change and stability within the continuously evolving transnational timber commodity trade regime (Zeitlin and Overdevest, 2021). However, little is known about the design and implementation of these new deforestation policies and their factual or expected impacts on policy and firm-level changes in demand and supply-side countries, as well as on existing commitments and negotiations between the EU and Indonesia and other FLEGT VPA partner



countries. Likewise, little is known about the factual or expected impacts of the changing regulatory context on existing public and private timber procurement policies, public policy and legal instruments such as the EUTR, EU FLEGT Regulation and the US Lacey Act.





3. Main research objectives and questions

Given the aforementioned policy context and knowledge gaps, this policy support study aims to provide a greater understanding of the global policy context concerning the trade in tropical timber, forest products and agricultural FRCs from the perspective of producer and consumer countries. On the supply-side, this particularly includes – but is not limited to – Indonesia. On the demand-side, this particularly includes – but is not limited to – the EU.

In order to achieve this goal, the study undertakes an international comparative policy analysis, focusing on the experience of implementing the EU-Indonesia FLEGT VPA and the prognosis for VPA countries under future international arrangements governing the global trade of forest-related products. The study will also explore the implications of current and emerging policy changes in key consuming countries/regions – including the EU, UK, US and China – for Indonesia and other producer countries. In particular, the study addresses three main research questions:

4. How is the **current FLEGT policy** functioning in the EU, the UK and Indonesia?
5. What are the new **demand-side deforestation policy** measures emerging in the EU, the UK, the US and China?
6. What are the **implications for Indonesia and other tropical producer countries** in the context of existing and newly evolving international policies and legal frameworks?

4. Research methodology

The policy study is implemented in two interconnected data collection and data analysis methodological steps. The research design is as follows.

4.1 Content analysis of policy documents and literature review

First, a policy review of key policies and laws was conducted. This included the review of policy documents on the EU FLEGT Action Plan, the EUTR, EU-Indonesia FLEGT VPA, the UK Timber Regulation and UK-FLEGT VPAs. Additionally, Indonesian FLEGT VPA documents, Regulations issued by the Ministry of Environment and Forestry in relation to the Indonesian TLAS, as well as policy documents from the Ministry of Trade concerning timber trade (export and import mechanisms, etc.) and the Ministry of Industry concerning timber product circulation have been analysed. Furthermore, policy documents on newly emerging regulations and policies in the EU (EU Deforestation Regulation, EUDR), UK (UK due diligence provision in the Environment Act), and the US (FOREST Act) targeting timber and mainly agricultural FRC-driven deforestation have been analysed. In that context, the revision of the Chinese Forest Law has also been analysed.

In parallel, a review of peer-reviewed academic and non-academic ('grey') literature has been conducted. This includes reports from organisations such as Fern, ClientEarth, Center for International Forestry Research (CIFOR), Forest Trends, Environmental Investigation Agency (EIA), FLEGT Independent Market Monitor (FLEGT IMM), Chatham House, FGMC Policy Evaluation Learning Team, The Multistakeholder Forestry Programme - Phase 4 (MFP4), Ministry of Environment and Forestry (MoEF Indonesia), Ministry of Trade (MoT Indonesia), Ministry of Industry (MoI Indonesia), Global Trade Forum, Food and Agriculture Organization (FAO)-FLEGT (Impact Assessment Report), European Forest Institute (EFI), United Nations Economic Commission for Europe (UNECE).

4.2 Key informant interviews and stakeholder surveys

4.2.1. EU and non-EU consumer regions and countries (UK, US, global)

On the demand-side, the UFR's research team conducted 56 key informant interviews (Annex A). These organisations were largely based in the EU27+UK, US and Indonesia. Key informant interviews were complemented with an analysis of 128



written statements on the review of the EU FLEGT/EU Timber Regulation and the proposed EU Deforestation Regulation, mainly submitted during the European Commission's Open Public consultation on stepping up EU action in 2019 and reducing the impact of products placed on the EU market in 2020 (EC, 2019a; EC, 2021b). This particularly includes statements from transnational environmental and social NGOs, civil society organisations (CSOs), tropical producer countries, transnational business companies and industry associations, as well as private and public certification bodies (Annex B).

4.2.2. Indonesia and other tropical countries (Brazil, Cameroon, Ghana, Guyana, Viet Nam)

On the supply-side, the UGM research team conducted an online survey and received 88 responses from different types and scales of timber industries and manufacturers (downstream) to mainly assess the impacts of SVLK on their operations. 40 interviews (mostly online) with key informants were also carried out to close gaps in the academic and non-academic literature to complement and cross-check the policy review results. To understand the potential implications of the new EU and non-EU regulatory policy initiatives on sustainability and deforestation, the UGM team additionally interviewed key informants from several tropical countries, including Brazil, Cameroon, Ghana, Guyana, and Viet Nam (Table 1).



Table 1. Summary of demand- and supply-side interviewees.

	Demand-side: EU, UK, US (global)	Supply-side: Indonesia (Brazil, Cameroon, Ghana, Guyana, Viet Nam)
Governmental authorities	<p>EU institutions: European Commission Directorate-General (DG) for the Environment (ENV) and DG for Agriculture and Rural Development (AGRI)</p> <p>EU Member States (Belgium, Czech Republic, France, Finland, Germany, Italy, the Netherlands, Sweden, Portugal), as well as the UK</p>	<p>Ministry of Environment and Forestry, Ministry of Trade, Ministry of Industry, Ministry of Foreign Affairs, Ministry Coordinating for Maritime and Infestations, Committee of Indonesian Sustainable Palm Oil</p>
Businesses and industries	<p>European Timber Trade Federation, German Trade Association, UK-based multinational timber trade company, Belgium-based multinational timber trade and retailer companies</p>	<p>Indonesian Forestry Community Communication Forum, Indonesian Forest Concessionaires Association, Indonesian Pulp and Paper Association, Indonesian Wood Panel Association, Indonesian Sawmill and Woodworking Association, Indonesian Lightwood Association, Indonesian Furniture and Handicraft Industries Associations (ASMINDO and HIMKI)</p> <p>Indonesian Palm Oil Association (IPOA), Oil Palm Farmers Union, Indonesian Cacao Industry Association, Indonesian Coffee Exporter and Industry Association</p>
Environmental and social NGOs	<p>EIA, UK Forest Trends</p>	<p>Kaoem Telapak, Greenpeace, Ecosoc Rights, Forestry Independent Monitoring Network, Forest Watch Indonesia, Alliance of Volunteers to Save Nature, Indonesian Forum for the Environment, HuMa, Independent Market Monitoring, Sawit Watch, KEHATI Foundation, Auriga Nusantara, Indonesian Centre on Environmental Law and Indigenous Peoples' Alliance of the Archipelago</p>
International organizations, research institutes and think tanks	<p>International Tropical Timber Organisation (ITTO), UNEP-WCMC, Chatham House, European Forest Institute (EFI)</p>	<p>European Forest Institute (EFI), Centre for International Forestry Research, Centre for Transdisciplinary and Sustainability Sciences and academics</p>
Certification bodies	<p>FSC, PEFC</p>	<p>Indonesian Ecolabel Agency, TRANSTRA Permada, and Roundtable on Sustainable Palm Oil (RSPO) Indonesia</p>



5. Setting the Stage: the Transnational FLEGT Policy Framework

The **transnational FLEGT policy framework** consists of a range of supply and demand-side instruments that seek to assure timber legality along global supply chains. It is part of the so-called transnational timber legality regime (Overdevest and Zeitlin, 2018). In Europe, this regime includes the EU FLEGT Action Plan with its FLEGT VPAs, the EU FLEGT Regulation, the EU Timber Regulation, and Timber Procurement Policies (TPPs), as well as the UK Timber Regulation and UK FLEGT Regulation (after the EU-UK withdrawal). The transnational timber legality regime also includes the US Legal Timber Protection Act (LTPA), amending the US Lacey Act, and the Australian Illegal Logging Prohibition Act (ILPA) (Sotirov et al., 2020). China's recent timber legality policy must also be considered, given China's significant role as an important importer and exporter of timber and timber products.

5.1. EU Timber Legality Policy

5.1.1. EU FLEGT Action Plan

In 2003, the EU adopted the **EU FLEGT Action Plan** (EC, 2003). The European Commission proposed this Action Plan to combat the pervasive international problem of illegal logging and associated trade. The Action Plan proposed an innovative approach, envisaging a collaborative and coordinated response involving all those affected, including consumer and producer countries, the private sector and all other stakeholders.

The Action Plan has been structured around three main pillars: (1) supply-side support in producer countries to reduce the supply of illegal timber (through governance reforms and the development of a licensing system), (2) demand-side measures in consumer countries to reduce the end-use of illegal timber and increase the demand for legal timber, and (3) trade measures (VPAs and additional legislation) – supported by dialogue and international collaboration – to link demand- and supply-side measures and incentivise both.

The overall objectives of the Action Plan are best expressed in the 2003 Council Conclusions, endorsing it by stressing that “[F]orest law enforcement, governance and trade needs to be addressed in terms of sustainable development, sustainable forest management and poverty reduction, as well as social equity and national sovereignty” (CEU, 2003, p.2). The Action Plan proposed a coordinated EU response drawing on the different strengths and capacities of EU Member States and the European Commission. Member States were invited to provide funding and mainstream forest governance reforms in their development cooperation



programmes.


The EU FLEGT Action Plan proposed a range of policy measures structured in seven areas:

- 1) Support to timber-producing countries, including actions to (i.) promote equitable and just solutions to the illegal logging problem, (ii.) verification systems, (iii.) transparency measures, (iv.) capacity building and (v.) policy reform.
- 2) Activities to promote trade in (legal) timber, including actions to (i.) develop a multilateral framework and pursue multilateral cooperation, (ii.) develop voluntary licensing of exports through bilateral or regional **FLEGT Partnership Agreements** between the EU and timber exporting countries and (iii.) review and develop additional **legislative options**.
- 3) Promotion of **public procurement policies**, including actions that guide contracting authorities on dealing with legality when specifying timber in procurement procedures.
- 4) Support for private sector initiatives, including action to encourage private sector initiatives for good practice in the forest sector, including the use of voluntary codes of conduct for private companies to source legal timber.
- 5) Safeguards for financing and investment, including actions to encourage banks and financial institutions investing in the forest sector to improve due diligence practices when making investments.
- 6) Support the Action Plan with existing legislative instruments, including (i.) anti-money laundering legislation, (ii.) the CITES Convention and (iii.) other legislative instruments, such as the OECD Convention on Bribery and Corruption.
- 7) Support work undertaken to address the problem of conflict timber.

5.1.2. FLEGT Voluntary Partnership Agreements (VPAs)

The **FLEGT VPAs** quickly emerged as a key component of the FLEGT Action Plan implementation efforts. VPAs are bilateral trade agreements between the EU and third countries, aiming to ensure that only legal timber and timber products from timber-producing exporting countries reach the EU market. In addition to promoting legal trade, VPAs seek to address the causes of illegality by improving forest governance and law enforcement. A major strength of VPAs is that they look beyond trade by considering environmental issues, local development, and local populations.

While parties enter a VPA voluntarily, the agreement becomes legally binding upon ratification by both parties. VPAs include agreed commitments and action items from both parties, namely tropical partner countries on the supply-side and the EU and its Member States on the demand-side.



On the supply-side, effective VPA implementation requires tropical partner countries to agree on a national, multi-stakeholder definition of timber legality that is agreed upon by the government, private sector, and civil society. Legal timber products are those that comply with the laws of the country of origin. Importantly, a fully operational TLAS must be set up and effectively implemented to verify that timber and timber products comply with the applicable national laws. Competent bodies in the exporting country must also be capable of issuing valid and credible FLEGT licenses for timber products destined for the EU market once the verification process is completed. A TLAS is robust and credible when fully operational, as it includes effective supply chain controls and mechanisms for verifying compliance, subject to independent audits. Before issuing FLEGT licenses, a VPA partner country must also implement legal reforms and other measures specified in the VPA (Cashore et al., 2016; Sotirov et al., 2020; Overdevest and Zeitlin, 2018).

In return, the EU – also negotiating on behalf of the EU Member States – commits to support VPA countries with capacity building and technical assistance to implement a TLAS system. The EU also commits to accept timber and timber products from VPA countries as legal if they have a FLEGT license. Additionally, EU institutions and Member States commit to increasing EU market demand for legal timber and timber products (FLEGT-licensed tropical timber) by encouraging both private and public sector procurement policies that give preference to legally harvested timber and timber products. They also commit to investigating and supporting the positive perception of FLEGT-licensed tropical timber (Cashore et al., 2016; Sotirov et al., 2020). A particular example of the EU’s main contractual obligations and commitments under the fully operational VPA with Indonesia is provided in Box 1.

Box 1. EU’s commitments under the EU-Indonesia FLEGT VPA (EU and Indonesia 2014).

“Article 13

Market Incentives


Considering its international obligations, the Union shall promote a favourable position in the Union market for the timber products covered by this Agreement. Such efforts will include in particular measures to support:

- (a) public and private procurement policies that recognize a supply of and ensure a market for legally harvested timber products; and
- (b) a more favourable perception of FLEGT-licensed products on the Union market.”

5.1.3. EU FLEGT Regulation

Since the VPAs are international agreements, the EU had to adopt internal legislation to give them effect in its internal legal order and empower EU Member





States to accept FLEGT-licensed timber and processing FLEGT licenses. In 2005, the EU adopted the **EU FLEGT Regulation (Council Regulation (EC) No 2173/2005)** (CEU, 2005).

The EU FLEGT Regulation is the necessary EU legal instrument providing the legal framework for implementing VPAs within the EU by establishing a “set of rules for the import of certain timber products for the purposes of implementing the FLEGT licensing scheme”. It lays down the procedure for accepting and verifying FLEGT licenses by Member States’ competent authorities and provides for developing an electronic system to record and exchange data contained in the FLEGT licenses between them and the European Commission.

The EU FLEGT Regulation requires *inter alia* Member States:


- 1) To verify FLEGT licenses for each shipment covered by the FLEGT licensing scheme and keep a record (electronic or paper format) of the original FLEGT license together with the corresponding customs declaration (Article 5).
- 2) To set and enforce effective, proportionate and dissuasive penalties in cases of violation of the Regulation (Article 5).
- 3) To take action in case of violations and notify the European Commission of any information on circumvention of the Regulation (Article 6).
- 4) To appoint a Competent Authority. The customs can be a Competent Authority, be part of the Competent Authority or none of both (Article 7). Even if customs are not part of the Competent Authority, the EU countries may delegate tasks, such as shipment controls, to the customs (Article 12). All enforcement measures, including data exchange, shall be carried out in cooperation between customs and Competent Authority (Article 13)
- 5) To submit to the Commission, by 30 April every year, a report on the application of this Regulation, including information on quantities of timber products and the number of FLEGT licenses received per HS code and VPA country and cases of violation of the Regulation, including the number of rejected shipments (Article 8).

As with all EU laws, the primary responsibility for implementing the FLEGT Regulation rests with the EU Member States. To aid Member States’ customs authorities in processing FLEGT licenses once licensed timber starts to enter the EU market, the Commission adopted the "Customs and FLEGT Implementation Guidelines" (EC, 2014), which have been elaborated in close cooperation with the Member States.

5.1.4. EU Timber Regulation

In 2010, the EU adopted its other key instrument – the **EUTR (Regulation (EU) No 995/2010)** – to implement the EU FLEGT Action Plan and strengthen demand-side measures for eradicating the trade in illegally harvested timber and timber






products while promoting the demand for legal timber (EP and CEU, 2010). It became directly applicable and legally binding in all EU Member States on 3rd March 2013. The EUTR's interim period between its adoption and entry into force was necessary for EU Member States to prepare their industry and administration for its application and enforcement. The Commission also needed time to adopt additional legislative measures providing more detailed requirements for its application.

Through its main provisions, the EUTR:

- 1) Defines illegal timber by reference to the legislation of the country of harvest (e.g. tropical countries). Timber harvested in compliance with the legislation applicable in that country is considered to be legal.
- 2) Prohibits the placing on the market of illegal timber and products derived from such timber (defined in its Annex using the product codes of the EU Combined Nomenclature and additional descriptions where necessary). The prohibition applies both to domestically produced and imported timber.
- 3) Obliges operators first placing timber and timber products on the EU market to exercise due diligence to minimise the risk of illegal timber in their supply chains. A due diligence system (DDS) includes obligations to (i.) collect and provide access to information on timber products placed on the EU market, (ii.) assess risks of illegal timber products entering the EU market through global supply chains, and (iii.) mitigate risks to prevent illegally sourced timber products from entering the EU market unless the risk has been identified to be negligible during the risk assessment procedure.
- 4) Requires traders who make already placed timber and timber products available further down the supply chain on the EU market to keep records to facilitate traceability.
- 5) Provides for monitoring organisations (MOs) to be recognised by the European Commission. Operators can use the DDS of these MOs instead of developing their own.
- 6) Encourages exporting countries to provide publicly available information about their forest management system, which operators could use as an assurance of compliance with the applicable legislation in their risk analysis process.
- 7) Provides a green lane for FLEGT timber in that timber and timber products covered by a FLEGT license (and CITES permits) are considered legal, automatically complying with the EUTR and exempted from DDS obligations.
- 8) Allows for third-party sustainability certification (e.g. FSC, PEFC) to be applied by economic operators by means of illegal timber risk assessment and mitigation but does not provide a formal green lane for forest certification to be recognised as a DDS.

As is the case with the FLEGT Regulation, EU Member States are responsible for enforcing the EUTR. Member States had to designate national government bodies as competent authorities responsible for the EUTR's application and enforcement. Member States must also lay down 'effective, proportionate and dissuasive' penalties for infringement of the EUTR obligations. Member States competent authorities must check



operators and monitoring organisations to verify if they comply with the EUTR's requirements. Checks are conducted in accordance with periodically reviewed plans following a risk-based approach and when competent authorities are in possession of relevant information, including substantiated concerns provided by third parties.

5.2. UK Timber Legality Policy

The UK designed and implemented the EU FLEGT policy until the EU-UK withdrawal. After the UK's exit from the EU, the UK adopted its own FLEGT policy, which largely mirrors the EU FLEGT policy (see Box 2).

Box 2. Overview of the UK FLEGT policy after the EU-UK withdrawal.

UK Timber Regulation:

- Requirements remain the same as under EUTR.

Trading with the EU, EEA countries and Northern Ireland (NI):

- There will be no new due diligence checks on timber flowing from NI to GB.
- Due diligence checks **will** take place on timber flowing from GB to NI.
- Due diligence checks **will** take place on timber entering NI directly from non-EU countries. They **will not** take place if entering directly from an EU or EEA country.
- Timber coming from the EU into GB will have due diligence checked.
- Green lane for timber and timber products covered by FLEGT and CITES.
- Partial recognition of third-party certification as a "risk mitigation tool".

(Government UK, 2022)

UK FLEGT Regulation:


- First bilateral VPA on FLEGT held by Indonesia.
- UK-Indonesia FLEGT VPA was ratified by the UK government at the end of the transition period of the UK's exit from the EU but is not yet ratified by the Indonesian government.
- EU and UK FLEGT VPA alignment poses challenges (e.g. the risk of demanding different standards).

(UK and Indonesia, 2019; UK Government, 2022)

5.3. Timber Legality Policy of the US

Unlike the EU and the UK, the US has thus far not adopted or developed supply-side or bilateral trade instruments such as FLEGT VPAs. Concerned about reciprocity and domestic interest issues, the US openly opposed the UK's and EU's initial ideas of bilateral trade





agreements or multilateral approaches initiated on the demand-side as “this could have environmental and economic implications in large [domestic] timber producer countries such as the USA” (Leipold et al., 2016, p. 296).

Instead, the US government amended its 1900 Lacey Act in 2008 by adopting the US Legal Timber Protection Act (LTPA). The US Lacey Act Amendment includes a prohibition on trade in plants and plant products, such as raw logs, sawn timber, plywood, composite materials, furniture, pulp, paper, and musical instruments, harvested in violation of foreign and US law. Similar to the EUTR, the US Lacey Act/LTPA requests economic actors to exercise due care along supply chains. Unlike the EUTR, the due care requirement is not further specified, but it applies to all economic operators selling, buying, transporting, possessing or trading with timber and timber products.

Unlike the EUTR, and similar to CITES (Convention on International Trade in Endangered Species), the US law requests timber importers to file a Lacey Declaration at the point of entry (borders/customs). Law enforcement is an obligation of competent authorities to exercise compliance checks on targeted operators (Leipold et al., 2016). Importantly, unlike the EUTR and the Australian ILPA, the US Lacey Act Amendment does not formally recognize FLEGT-licensed timber (e.g. from Indonesia/SLVK) as proof of legality and does not grant FLEGT timber a green lane for due care obligations.

5.4. Timber Legality Policy of Australia

In 2012, the Australian government adopted the ILPA to also ban the entry of illegal timber from its market and to request risk-based due diligence from timber importers and domestic timber processors. Timber importers must file an import declaration whether they exercise due diligence (Leipold et al., 2016).

The Australian ILPA informally recognizes FLEGT-licensed timber under an EU FLEGT VPA (e.g. from Indonesia/SLVK) as proof of legality and grants FLEGT-licensed an informal green lane for due diligence obligations (Leipold et al., 2016).

5.5. Timber Legality Policy of China

Mounting international public concern associated with China’s expanding international legal and illegal timber footprint has led to increasing international pressure calling for a more stable and institutionalised regulatory response, preferably through mandatory laws. In this context, Chinese policymakers recently proposed and codified Article 65 in the revised Forest Law, which came into force on July 1, 2020 (MEE, 2019). The article stipulates that ‘any timber



operating or processing enterprise shall keep a standing book for entry and exit of raw materials and products of woods. No organisation or individual may purchase, process, and transport woods in full awareness of their illegal origins such as illegal felling or wanton deforestation.’ Importantly, the Chinese Forest law does not entirely prohibit illegally sourced timber along supply chains but rather the import and export of woods if companies are aware of illegality issues.

The revision of the Forest Law introduces a certain shift in the Chinese forestry administration, equally considering ecological, conservation and industrial interests. More specifically, it seeks to (i.) protect, restore and cultivate China’s forest resources, (ii.) promote the sustainable utilisation of forest resources, (iii.) raise the population’s ecological awareness and (iv.) prohibit the purchase, processing, and transport of illegally harvested woods.

In contrast to the legislative developments in the EU, UK, and US, the Chinese law does not address agricultural FRCs. It also does not formally recognize FLEGT-licensed timber as legal timber.



6. Implementation of the Transnational FLEGT Policy Framework

6.1. Implementation of the EU Timber Legality Policy

6.1.1. Implementation of FLEGT VPA

Since the formal implementation of the EU FLEGT Action Plan commenced in 2003 and 2004, 17 tropical timber-producing and exporting countries have entered into VPA agreements with the EU. So far, only Indonesia has achieved full implementation of its VPA. Indonesia was among the first partner countries to sign a FLEGT VPA with the EU. More importantly, Indonesia is the first country in the world to successfully implemented a FLEGT VPA through its SVLK-TLAS system (see below) and started issuing FLEGT licenses on 15 November 2016. FLEGT licenses are issued by Licensing Authorities, independent organizations registered with the provider country's Ministry of Environment and Forestry (MoEF). As of 2016, Indonesia has started shipping the first FLEGT-licensed timber products to the EU market (Cashore et al., 2016; EU FLEGT Facility, 2017).

All other interested tropical countries are still in different stages of negotiating or preparing the implementation (Table 2). Important large timber-producing and exporting tropical or non-tropical countries, such as Brazil, China, Russia, and Papua New Guinea, have never signalled an interest in negotiating a VPA with the EU.


Table 2. FLEGT VPA implementation: an overview.

Stage	Scope	Countries
Full implementation	VPA agreement signed and ratified, TLAS set up and operating, FLEGT licensing	Indonesia
Partial Implementation	VPA agreement signed and ratified, process of developing TLAS	Cameroon, Central African Republic, Guyana, Ghana, Guyana, Honduras, Liberia, Congo Republic, Viet Nam
Negotiation	Bilateral negotiation formally embarked	Ivory Coast, Democratic Republic of the Congo, Gabon, Laos, Malaysia (put on hold), Thailand

6.1.2. Implementation of the FLEGT VPA in Indonesia

Indonesia began to design its national timber legality verification system, the SVLK, back in 2002. Later, the SLVK became Indonesia's officially recognized TLAS under the EU FLEGT policy framework. The SLVK was developed in response to commitments expressed at the 2001 Bali Ministerial Conference on Forest Law Enforcement and Governance (FLEG). Following calls from various forest stakeholders, timber legality verification became a government initiative, which was intensified when Indonesia formally embarked on formal negotiations for a FLEGT VPA with the EU (Maryudi, 2016). The development of SVLK was compatible with FLEGT as it was directly connected to main issues such as ineffective forest law enforcement actions to curb illegal logging and the slow progress of forest certification as a market-based instrument to promote sustainable uses of forest resources (Maryudi, 2016).

A growing body of scientific literature and reports document vibrant policy processes in developing the legality system. Many of them point out the SVLK's inclusive and participatory multi-stakeholder processes, characterized by a strong involvement of civil societies and interest groups (e.g. Duffield and Richards, 2013; Hernawan, 2011; Luttrell et al., 2011; Mulyani and Jepson, 2016). At the same time, studies found that the participation of several NGOs dwindled over time (McDermott et al., 2020). Our interviews with different stakeholders confirmed the participatory nature of the SVLK's policy development, which was a stark difference compared to policy processes during the previous decades. This reflects the more open and democratic society during the SVLK development. A source from an independent monitoring body mentioned that it is the SVLK policy process in which views from civil societies



were highly-valued, adding that civil society groups were invited and directly involved in policy-making processes, including the promulgation of SVLK regulations. Another interviewee lauded SVLK as the only forest-related initiative in Indonesia that directly involves the broad public.


SVLK is a government-run system, but its functioning is based on an external third-party certification approach. This involves the assessment of the operations of timber producers, traders, processors, and exporters by independent verification bodies accredited by the National Accreditation Body (*Komite Akreditasi Nasional*, KAN). The use of third-party audits is designed to improve the system's credibility and legitimacy (Giessen et al., 2016; Erbaugh et al., 2017). An NGO representative highlighted that third-party audits are commonly used by forest-related certification to create a credible and robust system:

“From the outset, the stakeholders agreed to design a legality verification system with audits by a third-party institution not by the government. That is a common logic of a credible certification and verification system”.

Additionally, independent monitoring (IM) by broader civil societies was designed as an innovation to oversee the credibility and transparency of the accreditation, audits, or licensing processes. IM is recognized in the legality system as a formal monitoring watchdog agent (Overdevest and Zeitlin, 2014). The IM mechanism is said to be one of the strengths of SVLK that have already produced some positive impacts (Duffield and Richards, 2013), although sustainable financing continues to become an area for attention for it to function properly (Hasyim et al., 2020). The currently applicable law (Ministerial Regulation No. 8/2021) prohibits using governmental budgets for IM activities. Greater involvement and participation of the wider public was also considered crucial for the IM functioning due to the limited human resources of the formal monitoring networks. Recently, an IM network involved local and customary communities in monitoring activities. It also provided training for the communities to understand SVLK and IM functioning as well as their rights in the context of forest operation (Ichwan et al., 2019).

SVLK comprises two sets of standards: a legality standard (VLK) for different types of processing industries and a sustainability standard (PHPL) for forest operations by private concessions and state companies (Maryudi et al., 2017; Savilaakso et al., 2017; Susilawati and Kanowski, 2020). In fact, the SVLK was recently renamed as *Sistem Verifikasi Legalitas and Kelestarian* (previously *Sistem Verifikasi Legalitas Kayu*) to explicitly underline that it is designed to also foster forest sustainability. SVLK regulations initially obliged all forest production operations (upstream) and processing industries (downstream) to demonstrate that their operations are conducted legally and sustainably.

This obligation was revised with several safeguard mechanisms for small operations. For instance, small-scale tree growers were later exempted from the legality obligations and instead are required to file a declaration of legality conformity (*Deklarasi*



Kesesuaian Pemasok, DKP) when selling their timber (Susilawati et al., 2019). Two reasons drove this exemption policy. First, it was to improve the accessibility of the legality by different types of industries and scales of operation, principally by small operations. Secondly, smallholder tree growing in Indonesia was considered to be low risk in terms of both illegality and environmental harm (Nurrochmat et al., 2016; Flanagan et al., 2019, Lewin et al., 2020). Small manufacturers, artisans and wood depots are also provided with a group certification option. Furthermore, the standards and verification mechanisms for them are streamlined with longer duration of certification validity and surveillance periods.


Indonesia began to sanction legality licensing (V-Legal) for exports of processed and finished timber products, including rattan, following the issuance of Regulation No. 64 of the Ministry of Trade (MoT) in 2012. However, exports of non-legally verified products were still allowed, with inspections conducted prior to shipments. Legality licensing of exports of furniture and handicrafts by small- and medium-sized enterprises (SMEs) and artisans was delayed until January 2015. The legality licensing was further relaxed in October 2015 when the Ministry of Trade (MoT) issued Regulation No 89, no longer requiring SMEs to submit V-Legal for exports on several products (notably furniture and handicrafts). This Regulation was adopted to allow revisions on the SVLK regulations in terms of additional standards to better engage small operations.

Legality licensing was reinforced for all exports, including furniture and handicrafts, in 2016 following the issuance of Regulation of MoT No. 25. The mandatory legality licensing for all exports was further sanctioned in Regulation 84 in December 2016 following the first shipment of FLEGT-licensed Indonesian timber products to the EU market. The reinforcement was encouraged by hopes in the so-called “green lane” access to EU markets under the EUTR.

6.1.3. Implementation of the EU FLEGT Regulation

Since Indonesia is the only FLEGT partner country that has started exporting FLEGT-licensed timber since 2016, the EU FLEGT Regulation has yet to be widely implemented in practice. Since 2016, EU countries have received notifications of 121.529 FLEGT licenses for FLEGT timber aimed to enter the EU market. 90% of those licenses were received in 7 out of the 28 EU countries, including Belgium, France, Germany, Italy, the Netherlands, Spain and the United Kingdom (UK) (before the EU-UK withdrawal). These tropical timber trade-dependent EU countries are also working together under the so-called ‘Amsterdam Group’ with the official aim to fight illegal logging and associated trade (Hartebrodt, 2022).

From 2017-2020, EU Member States carried out a total of 3.969 (3.04% of the total received licenses) additional controls of received FLEGT licenses and 1.055 (0.87%) additional controls of FLEGT timber shipments. Practical implementation of the EU FLEGT Regulation is more robust and effective when more criteria for additional controls are considered, resulting in more precise FLEGT shipment controls. Physical shipment controls are also a very good indicator of effective enforcement as they are connected to higher financial and administrative efforts than license controls since more employees are needed to execute controls. Overall, EU Member States’ competent authorities rejected 0.25% of FLEGT




licenses out of all received notifications and rejected 9% or 95 out of 1055 additional physical shipment controls for not matching the licenses (Hartebrodt 2022).

However, the EU FLEGT Regulation's practical enforcement has been uneven across EU Member States. Belgium, for instance, has executed almost 60% of all shipment controls, while Spain executed 22% of all license controls only in the year 2018. Similar to the EUTR (see below), EU Member States have implemented the EU FLEGT Regulation in a very different and hence incoherent way. Austria, Belgium and Latvia are found to have implemented the Regulation sufficiently as they had a high level of penalties, considered more criteria for additional controls and executed many additional FLEGT controls. Another group of EU countries, such as Bulgaria, Estonia, and Malta, had poor formal rules on the EU FLEGT implementation but still performed well in practical enforcement through controlling and detecting (few) false FLEGT licenses and shipments that they received. The third group of EU Member States, including Finland, Germany, Slovakia, Spain, and Sweden, implemented the FLEGT Regulation formally in a good way with higher sanctions but in an insufficient way through practical checks. However, a fourth group of the remaining EU countries (e.g. the Czech Republic, France, Italy, Ireland, Hungary, the Netherlands, Poland, and the UK before the EU-UK withdrawal) has not sufficiently implemented the EU FLEGT Regulation neither in formal nor practical terms (Hartebrodt, 2022).

6.1.4. Implementation of the EU Timber Regulation

EU Member States have established institutional and legislative frameworks for the EUTR's domestic implementation (EC, 2018). Furthermore, the implementation by competent authorities and compliance by economic operators have progressed. Nevertheless, practical enforcement challenges remain (Hoffmeister, 2022). For example, research findings reveal that the EUTR's implementation was subject to incoherent implementation and inconsistent enforcement, resulting in different clusters of EU Member State enforcement depending on various factors, such as differences in administrative capacities, economic wealth, risky timber import dependence and environmental NGO pressure (McDermott and Sotirov, 2018; cf. Radosavljević et al., 2021).

In its EU FLEGT/EU Timber Regulation Fitness Check, the European Commission confirms significant differences in human and financial resources available to competent authorities across Member States: 'it seems that some countries devote very limited resources to the implementation and enforcement of the EUTR considering the number of operators and volume of import' (EC, 2021c, p.13). In particular, in most EU Member States, including major timber-importing EU countries, less than 10 Full-Time Equivalent (FTE) staff are responsible for the EUTR's implementation and enforcement. For instance, Belgium, Denmark, Finland, Ireland, Malta and the Netherlands only have two to three FTE staff each. Importantly, the European Commission finds that neither the Member State's size nor trade volume determined the allocated FTE staff. The incoherent and inconsistent implementation across EU Member States is also reflected in differences in the number of checks and levels of penalties (EC, 2021c; I40). According to our interviews, low sanctions and penalties limit economic operators' positive




behavioural changes, explaining that neither the EU Member States nor the UK and US wanted to ‘annoy industry’, which would be needed to address the problem (e.g. I35, I36).

In 2020, 16 EUTR Member States issued 130 notices of remedial action, two temporary seizures, two temporary suspensions of the authority to trade/injunctions, 194 administrative financial penalties, six permanent seizures, 11 suspensions of the authority to trade as a penalty and 42 other penalties for domestic timber and timber products. In terms of imported timber and timber products, 24 EUTR Member States issued 404 notices of remedial action, two temporary seizures, 11 temporary suspensions of the authority to trade/injunctions, one lifting of the suspensive effect of a complaint/appeal, 15 other interim measures, 244 administrative and one criminal financial penalties, three permanent seizures, six suspensions of the authority to trade as a penalty and ten other penalties. Six EU Member States (Greece, Hungary, Italy, Lithuania, Slovenia, and Slovakia) reported court cases for EUTR breaches concerning *domestically harvested* timber and timber products. Additionally, six EU Member States (Austria, Denmark, Italy, the Netherlands, Portugal, and Sweden) reported court cases for EUTR breaches concerning *imported* timber and timber products (EC, 2021d). However, overall there were only a few successful court cases to draw on, and unsuccessful court cases resulted in a reluctance of public authorities to bring potential non-compliance issues to court (I40).

Interview partners particularly stressed that limited regulatory concreteness resulted in inefficient prosecution (e.g. I1; I12; I14). For instance, the definition of what operators needed to do was insufficient, clarity was absent on Member State competent authorities’ obligations concerning enforcement actions, and controlling authorities had limited possibilities to sanction (I1; I12). Furthermore, due to the lack of effective powers of seizure, incentives to quickly process commodities into products that are difficult to seize (e.g. a yacht made of illegal timber) were too high (I35).

Moreover, the due diligence concept was perceived and enforced differently by EU Member States and operators (I4). Notably, the understanding of ‘negligible risk’ differed and was translated differently into EU Member States’ own legislation, resulting in difficulties in proving corporate misconduct in court (I40). The European Commission evaluated in its 2021 EUTR-FLEGT Fitness Check that the term ‘negligible’ risk and ambiguous rules on how to prove compliance frequently caused difficulties in proving economic operators’ non-compliance and infringements in court: ‘operators [...] have not always been facing legal consequences for contravening the EUTR’ (EC, 2021c, p. 29). Interviewees also reported significant challenges for competent authorities to identify the validity of documents, highlighting that sufficient effort and resources need to be allocated to enforcement (I39; I35; I36).

Additionally, breaches of the EUTR’s ‘prohibition’ clause, which the European Parliament added to the EUTR’s final draft (Sotirov et al., 2017) after NGO pressure during the parliamentary committee process (I36), have not reached European courts in the EU27+UK so far. This is because the evidential threshold has been impossible for enforcement authorities and third parties (NGOs) to reach (Norman and Saunders, 2021). The multiple decision-making powers and incoherent enforcement in the EU multi-level governance system without a clear hierarchy and procedures resulted in enforcement difficulties due to uncertainties about



whether due diligence or prohibition cases of non-compliance should be pursued (I36).

Additionally, implementing demand-side law based on legality defined by producer countries brings about difficulties for competent authorities in EU Member States to obtain necessary enforcement-related evidence (I37). European courts would have had to discuss and determine if laws have been broken in producer countries by making extra-territorial jurisdiction judgments beyond their capacities. This implies challenges in collecting evidence, actively cooperating with producer countries' governments and rightly interpreting non-European legal frameworks (Norman and Saunders, 2021).

According to several interview partners (e.g. I14; I37), enforcement challenges remain in terms of proving whether activities were illegal and, consequently, tracing said illegal timber from its place of harvesting in tropical countries (e.g. logs harvested in a national park) to the final consumer in the EU (e.g. sawn wood from the log taken from the national park that is sold in the warehouse in Germany, the Netherlands or UK). Moreover, practices of changing producer countries' laws to legalise deforestation and hence make deforested timber legal under EU law are particularly reported in the case of Brazil (I40). This includes legalising illegal timber and timber product shipments in the process of being shipped to the EU (I40). Furthermore, different understandings of illegality and enforcement priorities (e.g. illegal harvesting vs illegally changed HS codes) caused substantial EUTR enforcement difficulties (I14). Consequently, it is easier for enforcement officials and environmental prosecutors to focus more on enforcing compliance with due diligence obligations under the EUTR (Norman and Saunders, 2021). As a result, many EUTR court cases relate to failures of due diligence procedures rather than proving that illegal wood enters the EU market (I37).

Interviewees from Environmental Non-Government Organizations (ENGOS) highlighted that lessons need to be learnt from observed difficulties in controlling the EU market, as in the EU's and Member States' inability to shut borders for illegally sourced timber imports. Unlike FLEGT VPA-licensed timber that is controlled by state authorities at EU customs and borders, the EUTR does not have a border measure that would deny timber imports if timber products are found to be illegal already at EU borders. Instead, the EUTR works with a legal deterrence of controlling and penalizing non-compliant companies only after the timber is put on the EU market (e.g. I35; I36).

According to interview partners, important improvements in the EUTR implementation across EU Member States can be seen, too. For instance, after initially conducting random checks, EU Member States developed lists and criteria to focus enforcement activities on the most relevant companies (e.g. those trading in high-risk products). Competent authorities have improved their national legislation and cooperated with customs and the OLAF - the European Anti-fraud office on illegal trade-related issues. During frequent FLEGT/EUTR expert group meetings, Member States' competent authorities and European Commission policy officers have openly shared information, knowledge and expertise on the EUTR's enforcement (I40). The EU level and cross-country networks among officials have proved particularly effective in helping Member States enforce the EUTR more effectively within their jurisdiction (I39).

6.1.5. Implementation of EU Timber Procurement Policies

As described above, the EU FLEGT Action Plan and Article 13 of the EU-Indonesia FLEGT VPA aim to create a positive perception of and market demand for FLEGT-licensed timber. TPP are one important instrument to achieve this goal in that public and private timber procurement is meant to increase demand for FLEGT-licensed timber.

Public Timber Procurement Policies at the EU level


Under the umbrella of the 2019 European Green Deal – the EU policy to become the first climate-neutral continent by 2050, resulting in a cleaner environment, more affordable energy, smarter transport, new jobs and overall better quality of life – the European Commission and EU Member States have developed Green Public Procurement (GPP) criteria. GPP criteria exist for 14 areas. Four of these also include legality and sustainability criteria for timber products (Brack and Fripp, 2018). A forerunner to the GPP is the EU's 2003 Integrated Product Policy (IPP) strategy which encouraged EU Member States to produce a National Action Plan (NAP). To date, 22 EU Member States have developed a NAP, whereas Estonia, Hungary, Luxembourg, and Romania have not.

The EU GPP criteria were last revised in 2018. The timber-relevant GPP criteria cover copying and graphic paper, wall panels, office building design, construction and management and furniture (Brack and Fripp, 2018). Acceptable forms of proof for copying and graphic paper and for wall panels have a very broad range but also explicitly mention FLEGT licenses. Furniture, office building design and construction and management criteria accept not only FLEGT licenses but also timber legality in line with the EUTR definitions.

Table 3 provides an overview of further EU policies with relevance to timber procurement. The 'criteria focus' column refers to what the policies list as requirements with regard to TPP: timber legality and/or timber sustainability and if TPP requires verification of these standards or not. The 'product specification' column gives an overview of what the policies are referring to and what timber products are covered. The column 'forms of proof acceptable' indicates if FLEGT licences are specifically mentioned in TPP as acceptable proofs and what other forms of proof (e.g. FSC or PEFC-certified wood) are deemed to be acceptable.

Table 3. Overview of EU policies with relevance to timber procurement.

EU policies		Criteria focus	Product specification	Forms of proof acceptable	
				FLEGT	Other
RED II	Renewable Energy Directive (Directive (EU) 2018/2001) <i>Use of energy from renewable resources (e.g. fuelwood, palm oil, etc.)</i>	Legality: as defined by country of extraction. Sustainability: reduce land use change	Focus on primary timber products	Not specified	
EUWTR	European Wildlife Trade Regulation 338/97 <i>Trade in species</i>	Legality: as defined in national law implementing CITES	Type of timber species	No	Export documentation, import permits
Public procurement policies	Directive 2014/24/EU, Directive 2014/25/EU <i>General procurement guidelines; permits states to restrict the use of cost as a sole criterion</i>	Legal and sustainable - as set by GPP	Timber and timber products used in contracts	Left to Member States to decide	Left to Member States to decide
EUTR	EU Timber Regulation (Regulation No 995/2010) <i>Illegal logging and associated trade</i>	Legality	Timber and wood products	Yes, FLEGT timber = legal timber	CITES licences = legal timber, documentation
EU Deforestation Regulation (draft)	2021/0366 (COD) <i>Deforestation-free forest risk-commodities</i>	Legality + Sustainability	Oil palm, soya, cocoa, cattle, wood, coffee	FLEGT = legal timber but not sustainable timber	To be determined



The European Commission referred to public procurement policies as a strategic instrument for achieving policy goals (EC, 2017). However, the opinion of several interviewees was that the impact of TPP has been minimal so far for several reasons. The main challenges are that governments of EU countries buy and/or contract out little (I6; I31), prefer cheaper products compared to the more costly sustainable offers (I51; I56), and at times replace timber products by choosing to buy and use unsustainable materials like concrete. The observed financial barrier is also backed by the European Commission's observation that the lowest price has been the preferred award criterion (EC, 2017).

Furthermore, EU Member States reported the lack of legal obligation as a barrier to implementing GPP (EC, 2017). The voluntary nature of GPP as an inhibitor of TPP implementation, especially at the regional level in EU Member States, was also confirmed by interviewees (I56; I43). This is also supported by recent research on the topic (Sapir et al., 2022; Andhov et al., 2020).

Concerning GPP's proof of criteria, and especially with regard to procurement, it is against EU law (illegal) to reference 'a specific make or source, or a particular process, or to trade marks, patents, types or a specific origin or production with the effect of favouring or eliminating certain undertakings or certain products' (see Article 23 of Directive 2004/18/EC) (EP and CEU, 2004). This Directive was repealed by Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement. No substantial changes to TPPs were noticeable by this. This means that for formal rules, referencing FLEGT-licensed timber as GPP criteria could be assessed as illegal or possibly disputable under EU procurement law. Thus far, no court cases are known regarding referencing FLEGT-licensed timber or specific certification schemes (FSC or PEFC) in timber procurement.

Public Timber Procurement Policies at the EU Member State level

As of 2018, 22 out of the 28 EU Member States had developed some form of public timber procurement policy (Brack and Fripp, 2018). The decision taken by these EU countries on the legality-vs-sustainability priority in timber procurement allows different country clusters to be identified. The procurement policy position a country takes on the sustainability vs legality priority allows to uncover the differential EU and national policy support or lack thereof for legal timber and to identify the positive or negative impacts of TPPs on the perception and market demand of FLEGT-licensed timber on the EU market. The following country clusters can be identified: (i.) countries that accept both sustainability (FSC/PEFC certification) and legality (FLEGT licenses) as procurement criteria (Austria, Finland, France, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Sweden, UK); (ii.) countries that accept only sustainability as procurement criteria (Belgium, Denmark, Germany, Spain), (iii.) countries that do not define whether they accept sustainability or legality as procurement criteria (Greece, Hungary, Poland, Portugal, Romania) (Brack and Fripp, 2018; Department of Energy and Climate Change, 2014; White, 2019; White, 2021).

A closer look at the TPPs of the EU countries that are the main importers of FLEGT-licensed timber is provided in Table 4 below. Except for Greece and Poland, all of these EU countries are



also the top tropical timber importers.

The 'product coverage' column refers to both primary and secondary categories. Primary products include sawn wood, veneer, plywood and logs. Secondary products are those primary sources that have undergone value-adding procedures and include mouldings, doors, joinery and windows. Concerning total imports, Indonesia might not dominate the EU27+UK market, but with a market share of 44%, Indonesia is the largest supplier of secondary tropical timber products. Tropical timber is hardly used for paper production, which is why paper is listed, where applicable, separately (Teeuwen et al., 2021). The 'priority given to FLEGT' column indicates how FLEGT-licensed timber is treated in the policies (with priority or not) and whether or not an EU country's timber procurement policy accepts FLEGT as fulfilling sustainability criteria and under what circumstances.

The overview of the results presented in Table 4 indicates that except for the UK, the top FLEGT/tropical timber importing EU countries either do not accept and/or do not prioritise FLEGT timber in their public TPPs. The situation looks similar across all European countries, where only Luxembourg and the UK prioritise FLEGT timber in public TPPs. This creates little policy support and market demand in the EU market for FLEGT timber, mostly at the expense of certified timber and timber products.


Table 4. Overview of TPP of top-9 tropical timber importing European countries.

<i>EU countries with detailed definitions in national procurement policies for legal and sustainable</i>					
		Accepted forms of proof:		Priority given to FLEGT	Date of enactment/latest revision
Country	Product coverage	Other	FLEGT		
France	Primary, secondary and paper	Any product of chain-of-custody certificate Evidence of management plan Ecolabels Self-declaration of compliance Customs documents qualifying sustainable products when entering the EU	Yes	No position taken	Introduced: 2004 Reviewed: 2011
France National Strategy to combat imported deforestation (SNDI)		Any product of chain-of-custody certificate Evidence of management plan Self-declaration of compliance Customs documents qualifying sustainable products when entering the EU	Yes	No position taken	Introduced: 2022
Italy	Secondary and paper	- FSC & PEFC - Ecolabels - Verifiable self-declarations - Third-party legal verification - Export permits	Yes	FLEGT-licensed timber is legal but not sustainable, thus not covering the mandated criteria of sustainability.	Introduced: 2008 Revised: 2013
Netherlands	Primary, secondary and paper	- FSC & PEFC - Committee assess schemes against criteria	Yes	FLEGT-licensed timber is legal but not sustainable. Sustainable is	Introduced: 2004 Revised 2014

Table 4 continued

<i>EU countries with detailed definitions in national procurement policies for legal and sustainable</i>					
				encouraged but not, unlike legality, mandatory.	
UK <i>UK Public Procurement Policy on Timber</i>	Primary, secondary and paper	- FSC & PEFC	Yes	Accept FLEGT-licensed timber as being equal to sustainably produced timber.	Introduced: 2017 Revised: 2013
UK <i>UK Timber Standard for Heat and Electricity</i>	Primary	- FSC & PEFC	Yes	Accept FLEGT as standard for legality but still require proof of sustainability.	Introduced: 2014
<i>EU countries that accept only certified products- i.e. only refer to sustainable</i>					
Belgium	Primary, secondary and paper	- Supply chain & PEFC or equivalents	No	None existent as sustainable is the main procurement criteria, and FLEGT is not accepted as being sustainable.	Introduced: 2006 Revised: 2014
Germany	Primary, secondary and paper	- FSC or PEFC	No	None existent as sustainable is the main procurement criteria.	Introduced: 2007 Revised: 2017
Spain	Secondary and paper	- FSC & PEFC - Ecolabels	No	None existent as sustainable is the main procurement criteria.	Introduced 2008
<i>EU countries that do not mention nor define the terms of legal or sustainable</i>					
Greece	No criteria concerning public procurement				
Poland	No criteria concerning public procurement				

(Department of Energy and Climate Change, 2014; Storck and Oliver, 2021; White, 2019; White, 2021)



Private Timber Procurement Policies in the EU

Private TPPs such as third-party forest certification schemes (FSC and PEFC), timber purchase strategies and codes of responsible conduct are mainly developed and implemented by multinational companies (MNCs), large retailers, timber trade companies and forest industry firms. Private timber purchase policies are voluntary and hence mainly driven by market access and supply security interest, reputational concerns and civil society pressure (Dieguez and Sotirov, 2021).


Two-panel surveys in 2018 and 2021 analysed timber purchase policies of 20 private companies in European countries that were selected based on their (large) market significance in sectors heavily involved with timber trade (e.g. furniture, retailer). These studies found that 19 companies had a timber procurement policy and that 7 out of the 18 accessible policies specifically referred to FLEGT licensing (White, 2019; White, 2021).

In our interviews, private companies and business associations from European countries (I47; I49; I51; I52) said they were very proactive and careful with their timber procurement. In particular, they undertook yearly reviews of procurement policies and sent monitoring employees to check supply chains on the ground in tropical timber-producing countries. Companies also said that they engaged in both legality verification and sustainability certification. They saw the necessity for double third-party audits to meet their market interests: they found FLEGT licenses helpful to import tropical timber on the EU market but needed to certify the same timber under the FSC or PEFC schemes to make it marketable to the end consumer. According to a competent authority in an EU country, it is, however, generally not assessed how much wood is both licensed and certified (I14).

According to our interviews (I9; I13; I49; I50; I52), the advantage of procuring and trading in certified wood is that FSC or PEFC certification schemes enjoy high acceptability and recognition throughout the whole supply chain, especially on the EU market. This market-supportive role of certified wood is especially noteworthy for companies and end-consumers. The FSC and PEFC certification schemes are also positively perceived by (larger) private companies for being able to provide third-party assessment and verification of both timber sustainability and legality. FLEGT-licensed timber, in contrast, is hardly known or not known at all on the EU market.

FSC and PEFC certification schemes are often seen as private procurement policies that help implement the EU FLEGT policy. They are especially preferable for traders and retailers who believe that certification schemes ‘automatically cover all criteria, including legality’ (I21). However, certified timber is not provided a formal green lane as automatic proof of timber legality under the EUTR, but some EU countries (e.g. Germany) treat it as proof of legality in the practical enforcement (Dieguez and Sotirov, 2021). As such, FLEGT-licensed timber was not perceived as competitive enough compared to FSC or PEFC-certified timber (I21; I52; I53).

Nonetheless, since the EUTR/FLEGT Fitness Check (see above) and the development of the EU Deforestation Regulation (see below), third-party sustainability certification schemes, namely FSC and PEFC, have become increasingly under critique mainly by think tanks,



environmental NGOs, EU institutions and some EU countries (I54). Several interview partners confirmed an increasingly negative perception of third-party sustainability schemes for 'having failed' (I52; I53; I54). A critical assessment and evaluation of certification schemes and their (in-)effectiveness were also elaborated in a recent EU study carried out by Preferred by Nature (NEPCon, 2020).


6.2. Implementation of Timber Legality Policies in the UK, US, Australia and China

6.2.1. The UK (pre and post-EU-UK withdrawal)

In the UK, enforcement by the competent authority has ramped up efforts since 2013 and uses scientific testing tools to assess companies' compliance with the EUTR. However, sanctions for non-compliance remain weak, and the number and value of fines and penalties are reported to be insufficient to deter non-compliance (Norman and Saunders, 2021). Furthermore, resources dedicated to the EUTR's enforcement declined compared to the early stage of implementation (McDermott and Sotirov, 2018) despite significant increases in high-risk timber imports, for instance, from Brazil and Russia (Norman and Saunders, 2021).

Following the UK's exit from the EU, the EUTR has been replaced in the UK by the UK Timber Regulation (UKTR), which applies from 1 January 2021 (Government UK, 2022). The UKTR's regulatory scope is identical to the EUTR and requests the same due diligence requirements from operators that place timber and timber products on the UK market for the first time and information requirements from traders on their suppliers and customers (Government UK, 2022) (Box 2). Just as under the EUTR, FLEGT-licensed and CITES-covered timber and timber products fulfil the UKTR's legality requirements, representing a green lane to the UK market (Storck and Oliver, 2021). The most important change after the EU-UK withdrawal was the great increase of businesses required to carry out due diligence as they are now considered to be operators (I30).

Key challenges to proper UKTR enforcement are limited resources within the UK government due to – among others – Covid-19-related economic developments (I35). Relatedly, UK enforcement agencies depend on knowledge hubs, including the ability to draw on environmental NGOs' knowledge and in-country independent monitors to effectively enforce the regulations. Identifying issues with illegalities proves difficult for countries not prioritised by NGOs due to important information gaps for the respective countries (I30). A key reported learning from implementing the EUTR and UKTR is that proactive checks on companies triggered better compliance, as many companies only allocated compliance staff and budget after having been checked. ENGOs particularly criticised that the EU and the UK took a 'soft approach' working with industry and low penalties, limiting the EUTR's and UKTR's potential impact (I35, I36). As a result, injunction-stop notices proved to be more powerful than court



cases due to low sanctions and penalties as well as prosecutors' inexperience in prosecuting environmental crimes (I35).

To replace EU FLEGT VPAs with new UK FLEGT VPAs, the UK is currently also negotiating Indonesia's first bilateral VPA on FLEGT. Operators conducting business in the UK must obtain FLEGT licences for timber imported from VPA partner countries with the UK – to date, only Indonesia – and submit them to the UK's Office for Product Safety and Standards (OPSS) (Government UK, 2022). Importantly, alignment challenges of EU and UK VPAs, as in implementation measures and reporting, represent high transaction costs and include risks of deviation by demanding different standards from operators (I32). Additionally, the UK's recent political prioritisation to regulate agricultural commodity supply chains in addition to timber and timber products could result in a reduced focus on regulating timber and timber products.

6.2.2 United States of America


Initially, US competent authorities took a threatening approach to companies during the enforcement of the US Lacey Act Amendment/LTPA. Given their scarce administrative resources, the US implementing agencies used prosecutions and penalties of a low number but high-profile non-compliant companies to create a deterrence effect. To compensate for their weaker capacities, US state authorities used information and evidence on illegal timber trade provided by investigations of environmental NGOs. This quickly turned US Lacey Act/LTPA enforcement into a political process, as state authorities were often called to justify their case-by-case prosecution action in Congress (Leipold et al., 2016).

More recently, there have been signals of more systematic and stronger enforcement of the US Lacey Act Amendment/LTPA. For example, the US Department of Justice has recently used a customs-based early warning system and imposed steeper penalties for non-compliance (EIA, 2020; Storck and Oliver, 2021). The US Department of Commerce is also reported to determine whether certain plywood products assembled or completed in Viet Nam are covered under the antidumping and countervailing duty orders on certain hardwood plywood products made in China (Storck and Oliver, 2021). Several timber products from Viet Nam are reported at risk of being investigated by the US for trade defence measures or fraud and illegal conveyance. Cases of imprisonment for violating the US Lacey Act are also available (Department of Justice, 2022). There is, however, little evidence that the enforcement of the US Lacey Act Amendment/LTPA, which has a border dimension (declaration), has significantly shifted illegal timber-importing behaviour.

6.2.3 Australia

In Australia, the implementation of the ILPA's due diligence requirement provided a useful basis for companies to develop and improve legality verification systems. Initially, the Australian competent authorities took a soft enforcement approach through educational and supportive measures in implementing the ILPA. They mostly provided information and facilitation instead of controlling and sanctioning companies. This was done due to limited administrative capacities and out of fear of seeing the ILPA





withdrawn by superior political authorities if enforced to the economic disadvantage of industries (Leipold et al., 2016).

6.2.4 China

China has also signalled its commitment to addressing the growing problem of illegal timber imports from tropical forest-rich countries in Africa and Oceania. For this, China's Timber Legality Verification System (CTLVS) has been under development since 2009, but it is not yet fully operational. Judicial interpretation and implementing regulations of timber legality provisions of China's new Forest Law are now under development.

A US-based ENGO representative criticised increasing difficulties for foreign NGOs to operate within China, particularly after adopting a new Chinese law restricting foreign NGOs from operating in China. Independent timber supply chain tracing and investigations are no longer possible to the extent this was possible 5-10 years ago. The interview partner reported sensitivity to sovereignty issues and a broader move towards stronger controls on foreign actors within China. In that context, the interview partner reported difficulties in lobbying China to enact similar types of legislation compared to the US and EU legislation. At the same time, China has a key role as a major importer, exporter and manufacturer (I37).

An EU Member State government official stressed that from a strategic point of view, it is generally useful to refer to legislative developments outside the EU (e.g. US, Australia, Korea, China) in communications and argumentations with economic operators to be able to show how legislative standards are also evolving outside the EU (I14). However, the fact that different countries take slightly different approaches presents challenges, as in creating confusion for the industry sector to understand different market requirements (I39).



7. Impacts of the Transnational FLEGT Policy Framework

7.1 Positive policy and market impacts on the demand-side


EU FLEGT VPAs / EU FLEGT Regulation

In the 2021 EUTR/FLEGT Fitness Check, a policy evaluation by the European Commission, key achievements were identified in the development and implementation of FLEGT VPAs. Particular improvements were seen in the participation of tropical countries' stakeholders and civil society in the decision-making process, strengthened governance structures, capacity building, and raised awareness about illegal logging (EC, 2021c). The ITTO also reports significant progress with other VPA partner countries – particularly Ghana and the Republic of Congo – in reforming forest laws and implementing VPA-aligned commitments (Storck and Oliver, 2021).

Our document analysis and interviewees also confirmed several positive policy developments related to the EU FLEGT VPAs. First, the process-oriented systemic approach of negotiating FLEGT VPAs with the EU and implementing them nationally in the tropical partner countries was highlighted as a key achievement (I37; I38). While the 'VPA legacy' is not measurable (I40), representatives from international organisations, consultancies and think tanks (e.g. I39, I40; I41; I42), as well as several environmental and social NGOs (e.g. I38; Brainforest et al., 2021), highlighted important FLEGT induced forest governance improvements in VPA partner countries, particularly in Indonesia.

Frequently highlighted are improvements in Indonesia, such as enhanced transparency, setting up multi-stakeholder processes, forest policy development, governance and legal reforms, and reduced illegal logging (e.g. I1; I3; I5; I35; I36). An EU official referred to Indonesia as a 'best case' example (I1), and a representative from an Indonesia-based ENGO gave credit to the Indonesian Government for keeping their commitments (I38). A key reason for Indonesia's success was seen in the development of the legality framework already before the EU-Indonesia FLEGT VPA negotiations due to the civil society-driven and governmental prioritisation to tackle illegal logging (I38). The following quotation illustrates this: 'The big fights happen[ed] before we talk[ed] about VPA. So, when we engage[d] with the EU to negotiate [a] VPA, the issues in the country, the big ones, [...] the big differences have already been resolved. [So] we only debated about technicalities' (I38).

While forest governance changes have consumed a lot of time and effort, they are reported to have led to systemic, countrywide and sustainable reforms that are still ongoing 15 years after initiating FLEGT VPAs (e.g. I38; I41; I42). Furthermore,



Indonesia's suggestion to rely on a VPA-like approach to ensure deforestation-free timber and agricultural supply chains under the newly emerging EU Deforestation Regulation highlights producer countries' overarching support for bilateral trade instruments like VPAs (I13; I38; I45).


Further benefits were seen in policy spillover effects in that other VPA tropical countries and China approached Indonesian stakeholders to learn from their experience with the SVLK system (I45). Reflecting upon the long and complicated process of negotiating VPAs with the EU, some VPA countries are now developing their own SVLK-like national TLAS (I45).

The ITTO also revealed beneficial market impacts in the overall positive perception of administrative processes related to importing FLEGT-licensed timber during the FLEGT Independent Market Monitoring's (IMM) survey period from 2017 to 2020. For instance, survey respondents from key EU27+UK country markets for VPA timber products increasingly found the administrative aspects of FLEGT-licensing processes easily understandable and manageable. They believed that FLEGT licenses eased importing of Indonesian timber into the EU market. A majority of respondents favoured 'a regulatory approach involving increased supply of FLEGT-licensed tropical timber linked to consistent and effective enforcement of EUTR to remove illegal wood' (Storck and Oliver, 2021, p. 8). Similarly, a German competent authority member highlighted the operational practicality of the FLEGT licensing regime and reported good communication between Germany and Indonesia in the context of FLEGT licenses. Particular policy and market benefits were seen in the green lane for FLEGT timber, offering cost savings and reduced administrative burdens for market participants that do not have to fulfil the more costly and laborious EUTR's due diligence obligations (I14). Further supportive measures for FLEGT-licensed timber include their mention in the EU GPP criteria (I9).

Even though FLEGT licensing did not yield significant EU (and global) market benefits in terms of an increased share of FLEGT-licensed timber products across product sectors (e.g. wood furniture, plywood, mouldings/decking, wood doors, laminated wood products, wood flooring, paper products), the EU27+UK's country import value from Indonesia was rising before the pandemic immediately after achieving FLEGT licensing between 2017 and 2019. Furthermore, Indonesia's share in some highly competitive markets was at least maintained, suggesting an overall stabilisation of Indonesia's market share after a long period of decline owing to FLEGT-licensing-related reputational gains and regulatory advantages. Furthermore, new market opportunities for FLEGT-licensed products due to increasing green growth measures in Covid-19 recovery plans are expected (Storck and Oliver, 2021).

EU Timber Regulation

One major policy and market support mechanism was seen by many interview partners in the green lane for FLEGT-licensed timber under the EUTR (I30; I31; I49; I53). This is recognized by trade actors, with 66% of trade consultation participants confirming that they would wholly or partially, given the opportunity, choose FLEGT-licensed timber (Storck and Oliver, 2021). The preference for FLEGT stems from it reducing costs of due diligence and administrative



procedures and reducing the risk of law infringement to zero (Storck and Oliver, 2021).

The green lane for FLEGT timber under the EUTR and the listing of FLEGT timber in EU GPPs created an initial positive perception of FLEGT-licensed timber. The latter was also supported by positive news articles around the first arrival of FLEGT-licensed timber from Indonesia on the EU market (I47; I49) and EU countries' ministries sending awareness-raising letters to federations and stakeholders (I13). In the past, more awareness-raising activities were taking place, with monitoring organisations receiving regular training and workshops on TPP and their role (I43) and government-funded multi-stakeholder organisations advising market actors in their sourcing policies and practices (I41). Further supportive tools implemented included a FLEGT-dedicated website and a variety of documents and reports on the FLEGT Action Plan, EUTR and VPAs, as well as the creation of the (now closed) EU FLEGT Facility of the European Forest Institute.


According to the Fitness Check of the EUTR/EU FLEGT Regulation, operators placing timber on the European market improved their supply chain transparency and implementation of due diligence requirements under the EUTR regardless of the company's size and economic activities (EC, 2021c). At the EU27+UK level, some of our interviewees also reported positive policy and market developments. They stated that large operators that control most of the timber trade cleaned up their supply chains and imported less illegally sourced wood (I1; I40).

The compliance and behavioural shifts in terms of changed trade activities in the case of high-risk timber largely depended on the awareness of importing companies and their knowledge about the EUTR. For example, larger operators in Germany that cover the majority of total import value and those importing from risky countries were most compliant with the EUTR. On the other hand, small and non-forest sector operators trading with and retailing timber products were unaware of the due diligence obligations and less compliant with the EUTR (Köthke, 2020).

A recent ITTO study also reported that several economic operators in Europe, particularly those that had implemented TPP and due diligence procedures before the enforcement of the EU timber legality framework, perceived positive market and regulatory effects of the EUTR in levelling the playing field across countries (Storck and Oliver, 2021).

Despite existing implementation and enforcement weaknesses in EU Member States and issues with behavioural changes of corporate actors, the EU continues to expect reduced deforestation rates through the EUTR's global applicability and joint efforts with producer countries to address trade leakage (EC, 2021c). The EUTR, by design, also served as an inspiration for similar demand-side laws in consumer countries (EC, 2021c), such as Australia (ILPA) (Leipold et al., 2016), South Korea (ROK) (Act on Sustainable Use of Timbers) (Ministry of Government Legislation, 2020), Japan (the Clean Wood Act) (EU FLEGT Facility, 2018), and Switzerland (Timber Trade Ordinance) (Schweizerische Eidgenossenschaft, 2021). The US extended its Lacey Act to cover EUTR-like situations (EC, 2021c).

A recent ITTO Independent Market Monitoring Report also highlighted the considerable reach and potential influence of EU FLEGT policy measures in eliminating illegal production and



trade of timber and timber products (Storck and Oliver, 2021). Key recommendations include the establishment of a harmonised EU wide-standard for EUTR enforcement and enhancing competent authorities' funding, staffing and training. Furthermore, strengthening the EU's commitment to supporting public and private procurement policies of FLEGT-licensed timber and enhancing their perception on the EU market was recommended (Storck and Oliver, 2021).

Non-EU consumer country regulations

While Ghana was expected to be the next country after Indonesia to reach a FLEGT licensing stage for several years (e.g. I1; I13; I14), Viet Nam is now considered to be next in line (I1). A pivotal role was played by an agreement between the US and Viet Nam governments from October 2021 on illegal logging and timber trade requesting that Vietnamese 'timber and wood products are subject to controls that are no less strict than those required to obtain a FLEGT license' (Government of the United States of America and Government of the Socialist Republic of Viet Nam, 2021, p. 6).


Viet Nam's exports of wood or wood products – particularly furniture – to the United States represented almost 59% of their total exports for January - June 2022 (Ministry of Finance of Viet Nam General Department of Customs, 2022; ITTO TTM, 2022). Given the importance of the US as an important market for Vietnamese timber exports, the US government could make demands and impact long-held positions within the Vietnamese government faster and more effectively than the FLEGT VPA process with the EU (I36). An interview partner also reported that Viet Nam's policy interests are government-driven and mainly shaped by the communist political system of the country, which could also have fast-tracked the EU-Viet Nam VPA negotiations (I45).

Overall, the ITTO reported an increase in the balance of tropical primary wood export value in 2020 to regulated markets, primarily due to trade shifts from China and India to the US. Consequently, the ITTO concluded that Indonesia's SVLK is becoming increasingly important given the growing number and expanding market dominance of regulated markets (Storck and Oliver, 2021).

7.2 Negative impacts on the demand-side

EU FLEGT VPAs / EU FLEGT Regulation

The FLEGT licensing regime also faces a range of shortcomings and constraints. Overall, the complex, long and resource-intensive negotiation process between the EU and VPA countries was criticised (e.g. I1; I4; I37; I45). In particular, establishing national timber licensing systems in VPA partner countries that are robust enough for the EU was a difficult task (I1). This required political commitment over a long period of time (I34) which was more difficult to achieve by other VPA countries than Indonesia (I4). Key reported reasons include limited governance capacities in VPA partner countries (I1), still persisting



corruption issues (e.g. I4; I13; I37), conflicts and wars (e.g. I13) as well as changes in governments with changing political priorities (e.g. I4; I13).


Interview partners also said that the reduced impact of FLEGT VPAs due to the protracted implementation (e.g. I13; I21; I31; I47; I49; I52) caused the EU FLEGT Action Plan to be affected by a policy discourse change shifting the policy arguments from legality only to legality and sustainability (I52). These discourse changes were said to be closely linked to the political agenda of ministries of EU countries (I13; I31; I47; I49; I56), with ‘the whole public procurement [being] a political thing’ (I31). The long FLEGT implementation time further confirmed the perceptions of the less ambitious FLEGT Action Plan (I8; I52; I56).

An EU official also evaluated the lack of FLEGT progress in some African countries to stem from limited civil society involvement in the VPA process. The process was perceived to have been mainly driven by short-term external consultant involvement and not rooted in domestic developments (I1). Even Viet Nam, a VPA country with overall very good progress, was criticised for lacking collaboration with non-state actors such as NGOs, which is critical to achieving a widely accepted TLAS system.

The lengthy VPA negotiations with interested producer countries but limited trade volumes of FLEGT-licensed timber to the EU were explained by a lack of interest from major sourcing countries such as Brazil and Russia (e.g. I3; I4; I45). Globally, VPA partner countries account for around one-fifth of all timber product exports from Lower Middle Income (LMI) countries¹ (Storck and Oliver, 2021). In the EU, however, only 9% of total wood-based product import value stems from VPA countries, with EU imports from Indonesia accounting for 3% (EC, 2021c). Over time, the European Commission’s interest in continuing the VPA approach, namely a trade-based approach coupled with EU development support, to tackle global deforestation and forest degradation diminished (e.g. I1; I3). The European Commission particularly criticised the slow progress in reaching the FLEGT licensing stage with additional VPA partners and highlighted issues with trade leakages to less regulated markets such as China while continuously providing economic support to partner countries during VPA negotiations: ‘while the export of timber from the VPA countries has shifted from the EU to China the EU continues to finance domestic stakeholder activities as long as the VPA process is still ongoing’ (EC, 2021c, p. 26).

Indonesia remains the only country with a functioning FLEGT licensing system in place. This significantly impacted the expected market advantage for Indonesian FLEGT-licensed timber and timber products on the EU market. An interview partner stated that the market would be completely different if more countries had reached the FLEGT licensing stage (I13). Operators, for instance, would have had a bigger incentive to trade FLEGT-licensed commodities if more countries issued FLEGT licenses (I4). The ITTO also reported that private sector buyers in the EU expected available FLEGT licenses from a broader range of countries before formally

¹ Following the World Bank’s definition of county groups with low and middle income. This includes Indonesia’s most direct competitors, other EU27+UK VPA partner countries and other global markets.



accepting FLEGT licensing in their timber procurement policies. The IMM's trade consultation also concluded that FLEGT licensing could positively impact purchasing decisions, as in giving preference to FLEGT-licensed timber from Indonesia over unlicensed timber from competing sources. However, commercial considerations about the product's competitiveness in terms of price, reliable delivery and quality remain the most important decision-making factor (Storck and Oliver, 2021).

From 2017 to 2020, Belgium, France, Germany, Italy, the Netherlands, Spain and the UK were the main importers of FLEGT-licensed timber. While the EU27+UK's total country import value from LMI countries continuously increased until 2020, VPA partner countries' share remained broadly flat. Moreover, several non-VPA LMI countries – notably the Russian Federation, Ukraine, Turkey, Belarus and Serbia – registered larger gains in EU27+UK country import shares, signalling a market competition between FLEGT tropical timber and non-FLEGT non-tropical timber (Storck and Oliver, 2021). All these signals showed that 'VPA countries have not fared better than their non-VPA competitors' (White, 2019, p. 7).

Overall, the ITTO registered a long-term trend of declining market share for tropical wood in EU27+UK countries. This decreasing trend resulted from – among other reasons – substituting non-tropical wood and non-wood materials, environmental prejudices and challenges to demonstrate EUTR compliance for products not covered by FLEGT licenses. Slowing economic activity in 2019 and Covid-19 disruptions further reduced the market share of tropical primary product imports. Alongside other South-East Asian countries, Indonesia registered a disproportionate loss of market share in 2020. The ITTO reported a 14% decrease to USD 1.19 billion in Indonesian FLEGT-licensed product imports to the EU27+UK in 2020 (Storck and Oliver, 2021).

Key reasons include increased freight rates, lack of containers destined for Europe, other pandemic-related supply-side problems and logistical problems, disproportionately impacting timber product imports from VPA partners into the EU27+UK compared to neighbouring European countries. As a result, EU27+UK countries increasingly purchased timber from neighbouring European countries not participating in EU FLEGT VPAs, but with risky timber production. Furthermore, pre- and post-pandemic weakening of currencies – particularly the Russian rouble and Brazilian real – resulted in a competitive disadvantage for Indonesian FLEGT-licensed products due to price drops. The most important market competitors were China (plywood, mouldings/decking, wood flooring, paper products), India (hand-made wood furniture), Malaysia (laminated wood products), Brazil (mouldings/decking) and Eastern European countries (modified temperate wood furniture, wood doors), notably Ukraine, Bosnia, Russia, Belarus and Turkey. Ukraine is an increasing competitor for wood flooring, and Russia is a key competitor for plywood and laminated wood products (Storck and Oliver, 2021). These trade patterns will likely shift again in light of Russia's 2022 invasion of Ukraine and the need for substitutes from other producer countries such as Indonesia (142).

The ITTO also reported insufficient positive communication and endorsement from governments and public administrations in the EU27+UK about the still fundamentally new FLEGT VPA process and Indonesia's achievements in being the only country so far in reaching




the FLEGT licensing stage (Storck and Oliver, 2021). The majority of our interview participants also stated that they do not believe that a positive perception was created around FLEGT-licensed timber (I9; I21; I41; I50; I51; I53; I56) and that state-led awareness-raising activities were rare. The majority of impactful activities seem to have been organized by trade federations, businesses and the Indonesian embassy themselves (I8; I47; I51).

ITTO's survey respondents highlighted that the insufficient communication did not help create the necessary trust in the new system, which negatively impacted potential market developments for FLEGT-licensed products. Furthermore, confusion about the value of FLEGT licensing is reported to have led to inconsistent messaging and a lack of endorsement in public procurement policies in the EU and its Member States (Storck and Oliver, 2021). The ITTO reported important uncertainties on where to position FLEGT-licensed products from Indonesia in terms of legality and sustainability. The ability of the SLVK to prove products' sustainability in addition to their legality was seen to become increasingly important in environmentally sensitive markets (Storck and Oliver, 2021).

Policy and institutional challenges regarding EU countries' TPP implementation also limited the market access for FLEGT timber. This includes the lack of timber procurement policy harmonisation across EU Member States (I56). The UK, for instance, sought to go beyond the legal minimum with their public procurement policy by striving to grant FLEGT timber recognition for sustainability (I36). On the contrary, Germany did not formally mandate the use of FLEGT-licensed timber in its TPPs due to concerns about not meeting the same standards as FSC and PEFC sustainably certified timber and timber products (I13). In parallel, giving preferential treatment to FLEGT-licensed wood was not necessarily in the interest of many EU Member States due to concerns about giving preferred market access to products not produced by their respective domestic forest producers (I35). As a result, the FLEGT licensing regime is characterised by an overall lack of state and non-state actors' awareness in the EU27+UK (e.g. I13; I42).

Further challenges included the overwhelming density of regulations on procurement (I9; I40), the lack of government funds to sub-ordinated government units or other institutions that could assist in implementation (I8; I41; I47) and vague definitions and instructions on due diligence given (I9; I43; I50; I56). All of the challenges were further exacerbated by the lack of communication between the national and EU policymakers and stakeholders (I41; I47; I53), the success of communication, depending on the existence of a personal relationship, made more difficult in the face of personnel turnover (I9).

The EU FLEGT Action Plan's impact on reduced illegal logging and associated trade is difficult to assess due to data gaps for illegal activities (e.g. I13; I40). However, the European Commission concluded in its most recent evaluation that 'the FLEGT Regulation cannot be deemed efficient' (EC, 2021c, p.43) and only reported a moderate success of the EUTR and EU FLEGT Regulation in tackling the issues of illegal logging and illegal timber entering the EU market (EC, 2021c). A range of supply- and demand-side policy constraints and shortcomings limited the realisation of the FLEGT Action Plan's theory of change. This limited impact is evidenced by continuously alarming global deforestation and forest degradation rates (FAO and



UNEP, 2020).

EU Timber Regulation


Even after almost ten years of EUTR implementation, European economic operators still face difficulties understanding the EUTR's main propositions, namely the concept of due diligence and fully validating the trustworthiness of collected information as sufficient proof (EC, 2021c).

The academic and non-academic literature finds a range of negative policy and market impacts of the EUTR's incoherent implementation materializing in the import of high-risk timber via specific EU Member States with less stringent requirements, resulting in market distortions and leakage effects (EC, 2021c; Köthke, 2020; McDermott and Sotirov, 2018). Several interviewees also confirmed that the practical implementation of the EUTR allowed for loopholes in circumventing due diligence obligations, as in deliberately shifting companies' liability by formally shifting their position in the supply chain by becoming a trader instead of an operator (I36) or outsourcing reputational risks to small shell companies (I1). Legal enforcement and impacts have been evaded when operators chose to register in a third country in Europe, outside Europe, or an EU Member State that is not enforcing the EUTR fully.

As a result, some operators perceived negative effects on levelling the playing field due to price undercutting by less diligent operators in EU Member States with weak EUTR enforcement and less environmentally sensitive markets (Storck and Oliver, 2021). Concerned operators hoped to see more robust responses from enforcement authorities (I36). Timber trade flows were particularly redirected via east and southeast Europe (Storck and Oliver, 2021). For instance, an EIA investigation revealed the trafficking of timber from Myanmar through Italy to other EU Member States such as Slovenia, Belgium, Germany, the Netherlands, Czech Republic, France, Poland, Denmark and Spain (EIA, 2021). Eventually, companies managed to import their products to the EU despite strict EUTR rules and additional regulatory measures, including high sanctions and a common EU enforcement position banning the import of Myanmar teak on the EU market (I36). NGO-led research also highlighted increased EU27 imports of Myanmar teak throughout 2020, despite a general downward trend in tropical timber imports due to Covid-19-related restrictions (Saunders and Norman, 2020). Furthermore, the Commission reported increased timber and timber product imports from countries at high risk of illegal logging (EC, 2021e).

The above-outlined inconsistencies in EU domestic enforcement of the EUTR further reduced the potential 'green lane' advantage for FLEGT-licensed products from Indonesia under the EUTR (Storck and Oliver, 2021). As a result of the lack of an effective market shutdown for illegal timber and timber products entering the EU market, the theoretical incentive for VPAs did not hold as illegal wood, and the total profit was still entering the EU market (I35).

While the opportunity to use the green lane for FLEGT timber under the EUTR was welcomed by many interview partners (I21; I47; I49; I51; I53), they highlighted many barriers to unfolding positive effects. Private firms and industry federations said that while they were already struggling against the bad image of tropical timber, FLEGT



licenses were also considered ‘too much of a hot potato’ (I49). Whilst using FLEGT licenses reduced time, costs and risks in importing tropical timber (I49; I51), it did not sufficiently address the reputational risk. This is because FLEGT timber was neither well known nor trusted by end consumers (I13; I49; I50; I52) nor considered leakage-free or trustworthy (I49; I52). The view of FLEGT-licensed timber from government interviewees was more diffuse as, more often than not, the FLEGT-licensed timber was not present or playing a significant role.

A further possible explanation for the reservations against FLEGT license acceptance was the different and incoherent implementation of the EUTR by the EU countries that were mentioned by many interviewees (I31; I49; I51; I52; I53). The view of a ‘lethargic EUTR implementation’ based on ‘box-ticking’ and a resulting ‘paper-trail witch-hunt’ was not very favourable to economic operators on the supply and demand-side (I8; I43; I49). An additional factor affecting the demand for FLEGT-licensed timber was seen in the fact that FLEGT timber was not welcomed by all timber actors on the EU and non-EU consumer markets. The reason was that tropical timber was seen as a competition to regionally produced timber and timber products on the demand-side (Storck and Oliver, 2021) and may ‘upset the timber industry’ (I43) there.

Reasons for the reduced market impact of TPP in relation to EUTR and FLEGT licenses were also found in the FLEGT Action Plan, specifically in the EUTR, not taking market dynamics sufficiently into account. Markets are under pressure to supply timber (I56) which led to the commercial rotation of species (I51), based, among others, on species availability and price (I49), not being considered and reflected on sufficiently. One solution might have been increasing the amount of FLEGT-licensed timber on the market, but this was impeded by a lack of additional FLEGT-licensing VPA countries, with Indonesia alone being unable to cover market demand on its own (I49; I53). In some cases, interviewees also stated that governments could not have an opinion or make guarantees on the market as using FLEGT-licensed timber is a commercial decision (I13; I21; I49; I51).

Non-EU consumer country regulations

Effectively controlling EU market access is critical as this underpins the FLEGT Action Plan’s theory of change (I35). At the same time, EU legislation on its own is not enough and bears the risk of being perceived as a ‘silver bullet’ (I39). Interview partners particularly highlighted the issue of trade leakages to less regulated markets and bifurcated markets, for instance, in China, where clean timber and timber products are exported to the US and Europe while questionable commodities and products are consumed on domestic markets (e.g. I4; I13; I37).

Consequently, many interview partners stressed the importance of aligning all consumer countries’ timber legality intervention measures and working closely with producer countries to find ways to support the latter in strengthening their forest and land use sector’s governance (e.g. I37; I38; I39; I41; I42). As such, the FLEGT Action Plan’s principle of combining a ‘carrot and stick’ approach where the EU establishes a standard and then negotiates with countries not meeting the requirements was positively perceived and evaluated by several interview partners

(e.g. I37; I39).

7.3 Policy and market impacts on the supply-side in Indonesia

7.3.1 Policy impacts

In Indonesia, the national TLAS, called SVLK, is implemented with the official aim of improving the governance of forest and timber industries and bolstering wise and sustainable use of forest resources (Cashore and Stone, 2012; Overdevest and Zeitlin, 2018). SVLK was reported to have fostered legality compliance in timber value chains (Susilawati and Kanowski, 2021). It was also said to have facilitated more coherent and harmonised national policies related to forestry (Neupane et al., 2019). However, several interviewees in this study flagged the overlapping regulatory frameworks between land and forest administration. As mentioned by a source from the Indonesian Forest Concessionaires Association (*Asosiasi Pengusaha Hutan Indonesia*, APHI), administrative procedures facing concessions are made simpler. In addition, several local (Regency) governments provided regulatory frameworks on timber manufacturing operations to fit SVLK requirements (Maryudi et al., 2014).

Studies also highlight that SVLK provided enabling conditions for wise and sustainable forestry (see Wibowo et al., 2019) and strengthened the national forest policy and institutional framework through stakeholder involvement, increased participation, and enhanced transparency (Savilaakso et al., 2017; Miniarti et al., 2018; Neupane et al., 2019). Several CSOs interviewed in this study highlighted the government's strong political will to implement SVLK. They believed that progress was clear to see over the past ten years how the legality system contributes to enforcing laws and regulations as well as reducing the rates of deforestation. Another CSO working on human rights issues said that the forest sector of Indonesia underwent a substantive reform regarding the rights and access of local communities and customary groups, despite the slow progress in the implementation. The interviewee added that the issues might need to be formally elaborated on in SVLK-related regulations.

Key governance themes became an area of public attention in the early implementation of SVLK. For instance, the theme of public access to data and information emerged in the scientific and grey literature (Hasyim et al., 2020; Ichwan et al., 2021). For instance, key data and information related to timber production and supply (*Rencana Pemenuhan Bahan Baku Industri Primer Hasil Hutan Kayu*, RPBB), which is important for monitoring illegal practices, was hardly accessible in the early stages of the SVLK's development. Nonetheless, recent developments showed a significant improvement in the context of transparency. Several monitoring CSOs suggested that credible CSOs were now granted access to obtain such data for monitoring purposes.

7.3.2 Market impacts

The number of companies and industries both legally verified and sustainably certified with SVLK standards has grown steadily over time (Figure 1). According to data obtained from the MoEF, 352 forest concessions (natural forest, tree plantations, ecosystem restoration and timber utilisation) were certified according to sustainability standards (PHPL). This figure accounts for ca. two-thirds of the total forest concessions in the country. Importantly, 65% of the PHP-certified concessions scored the highest certification grade (Figure 2).

In terms of downstream practices, more than four thousand legality (VLK) certificates were issued for different types and scales of processing industries. Scientific reports (e.g. Setyowati and McDermott, 2017; Maryudi and Myers, 2018) and interviews with several stakeholders suggested that the uptake of SVLK is more apparent in larger operations due to higher resource-availability compared to the smaller ones such as home industries and artisans.

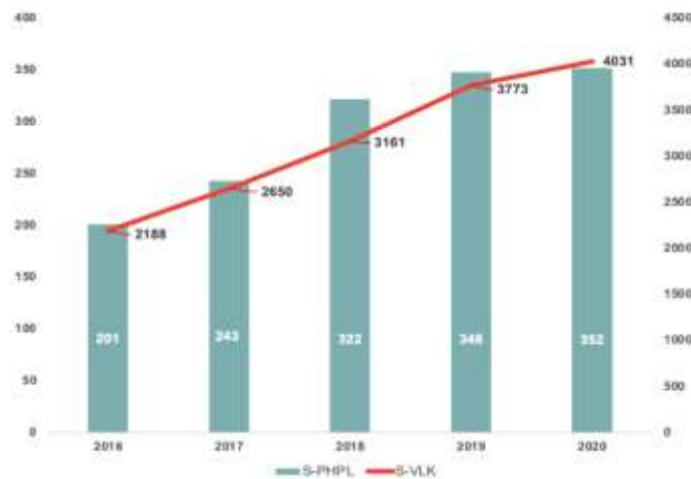


Figure 1. Trends of timber legality (VLK) and forest sustainability (PHPL) SVLK certification.

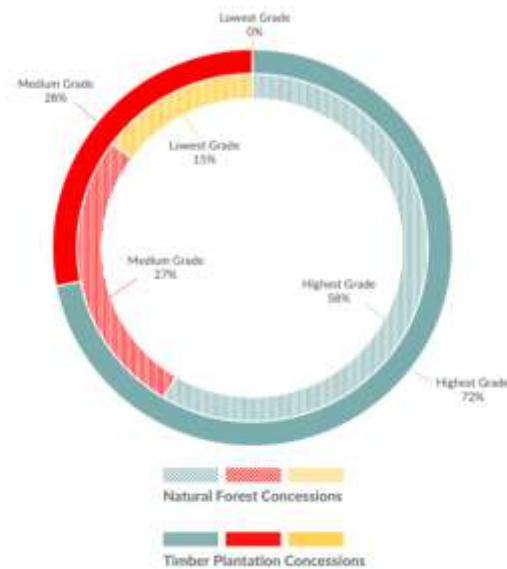


Figure 2. Proportion of sustainability (PHPL) certification based on grades.

Concerning the overall implementation of SVLK, a source from EFI reflected that, despite some areas for improvement, SVLK is an achievement for Indonesia, specifically in the context of legality. In its VPA with the EU, Indonesia is committed to verifying the legality of timber exported to not only the EU but also to non-EU markets (Article 10 of the EU-Indonesia FLEGT VPA). This provision is aimed at curtailing potential market leakages or circumvention of exports of non-legally verified products to non-EU markets (see Pujiastuti, 2015).

However, SVLK regulations allowed gradual transitions for the eventual full-fledged legality licensing for exports in late 2016. For instance, its enforcement for small manufacturers was delayed several times to provide time for them to get ready. Legality licensing for exports has become a topic of national debates centred around the issue of accessibility of the legality systems by different types of forest operations and the implications for their operations, markets, and trades (Maryudi et al., 2021).

Regulatory frameworks governing timber exports were regularly changed to revisit issues of scope, types of products covered, operations, and timeline to enforce compulsory requirements (Table 5).

Table 5. Key Indonesian regulations of mandatory legality licensing for timber exports.

Trade regulation	Date	Key features	Mandatory degree
64/ 2012	October 22, 2012	Mandatory legality licensing for exports of processed and finished products (e.g. furniture) & rattan, but inspection still allowed for primary products (non-furniture).	Partial
81/ 2013	December 27, 2013	Phased implementation schedules of mandatory legality licensing, furniture products starting a year after regulation issuance.	Partial
97/ 2014	December 24, 2014	Legality Self Declaration replacing legality licensing for exports of furniture and crafts (by small and medium registered exporters).	Partial
89/ 2015	October 19, 2015	Exports of several products (mostly furniture) are not required to use a legality licence, only a statement of raw materials from legally verified suppliers.	Partial
25/ 2016	April 15, 2016	Mandatory legality licensing for all exports, including for furniture and handicrafts.	Full mandatory
84/ 2016	December 27, 2016	Mandatory legality licensing for all exports, legality verification of small industries subsidised.	Full mandatory
15/ 2020	February 18, 2020	No references towards MoEF Regulation on legality. All exports only require technical inspection.	Non-mandatory
45/ 2020	May 11, 2020	Revocation of P. 15/ 2020, mandatory legality licensing for all exports, including for furniture and handicrafts.	Full mandatory

Source: Maryudi et al., 2021.

Numerous sources interviewed in this research, ranging from government administrations to associations of timber industries and manufacturers, confirmed the initial enthusiasm around 2016, when Indonesia reached the FLEGT licensing stage. Hopes included improved EU market access and potentially better prices for Indonesian products. A source from the MoEF had further hoped that the EU would push EU Member States to implement the EUTR, including the FLEGT green lane and encourage them to implement public



procurement policies for the benefit of Indonesian FLEGT-licensed timber products. The government also facilitated SMEs to engage in legality licensing with the expectation of quickly capturing the potential incentives in EU markets. Between 2015 and 2020, approximately 700 SMEs were heavily subsidised to engage in SVLK (Figure 3). They represented approximately 20% of the total number of VLK-certified processing industries.

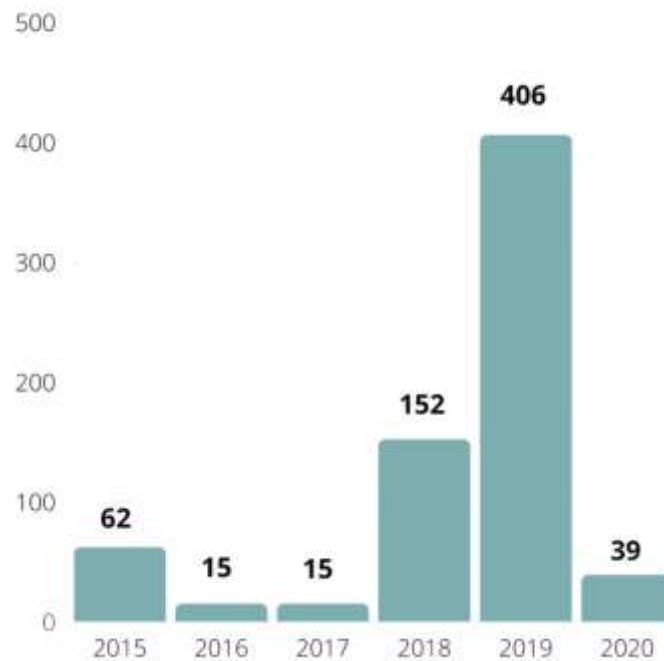


Figure 3. Government support for SMEs to access legality verification in Indonesia.

However, as stipulated in Regulation 15/2020, the legality license was removed from the requirements for exports of timber products. Regulation 15/2020 aimed to simplify procedures on timber-based products' exports and foster investments in the national timber-based industries and exports. This regulation was specifically to navigate Covid-19-pandemic impacts. Nonetheless, exports of timber products still required verification and technical checks. A quick survey conducted by MFP Phase-4 in 2020 (Pratama et al., 2020) showed that approximately two-thirds of the respondents (in total 151 from different industries) remained hopeful of the positive impacts of SVLK to increase their sales and to better penetrate the EU markets.

Our survey on downstream processing industries also confirmed those expectations while engaging in VLK certification (Figure 4). Regulation 15/2020 was briefly in place; mandatory legality licensing for all exports was reinstated in May 2020 in the belief that SVLK could still produce a good impact. As of the writing of this report, legality licensing is made mandatory for

all timber exports.

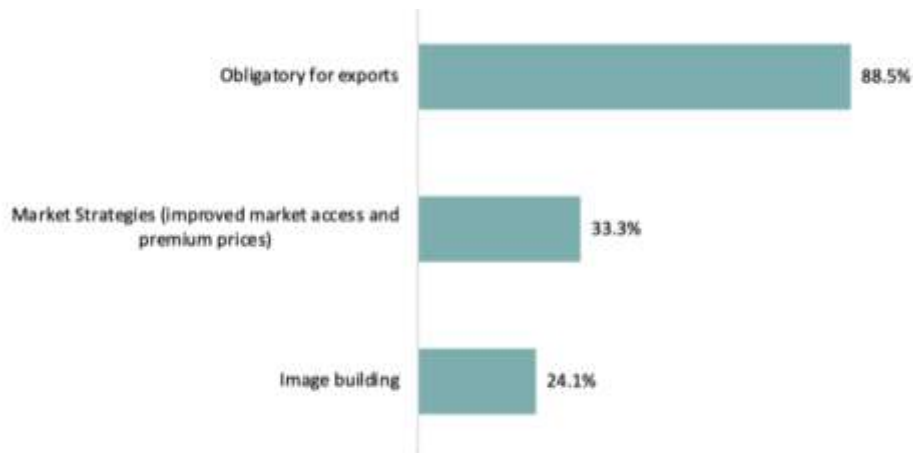


Figure 4. Reasons for engaging in VLK-certification (Note: multiple responses possible as survey participants may have provided more than one response).

Several observations on the impacts of the EU-Indonesia FLEGT VPA on Indonesian forest industries, including timber exports, can be made. First, SLVK covered diverse types of forests, products, and scales of forest operations and scales of operations from vertically integrated industries (see Maryudi, 2015; Setyawati, 2017; Salim and Munadi, 2017; Melati and Shantiko, 2013; Purnomo et al., 2014). Second, many factors influenced the trade of timber products, including market situations, competition, consumer preferences, and designs of products (Maryudi et al., 2021). Official statistics showed that exports of timber products fluctuated and tended to increase (in terms of values) following the fully-fledged FLEGT licensing (Figure 5). Nonetheless, the increase in exports to the EU remained not clearly observable despite other indications in several trade reports (for instance, ITTO TTM, 2020). The proportion of Indonesian timber exports to the EU continued to be under 10% of the total timber export values.

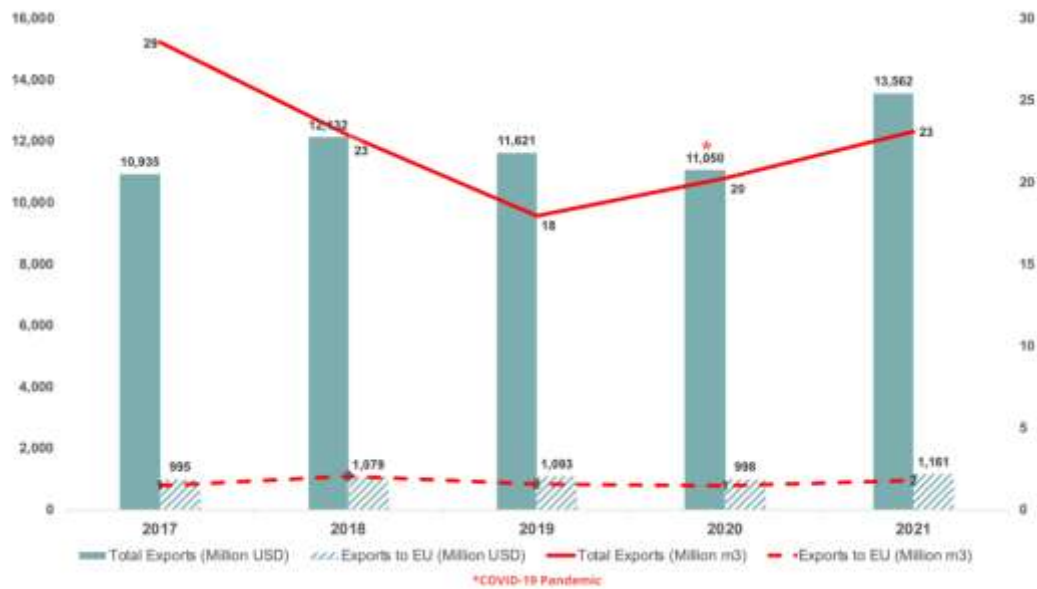


Figure 5. Exports of timber products from Indonesia (quantity and values, 2017-2021).

In this regard, scholars (e.g. Astana et al., 2020; Nurkomariyah et al., 2019) remain unconvinced about the direct positive links between SVLK and the marketing of timber products, especially to the EU. 80% of survey respondents (88 industries with different types and scales of production) also mentioned there were no significant changes concerning the export destinations. This stands in contrast to the initial belief on the anticipated increased exports to the EU market after FLEGT licensing through the SLVK.

Our survey with different types of processing industries also indicated the benefits of VLK-uptake. Figure 6 shows that less than 20% of the respondents indicated better market access, and only ca. 3,0 % mentioned premium prices. Our probe further indicated that better market access and price premiums could be achieved only in Asian markets.

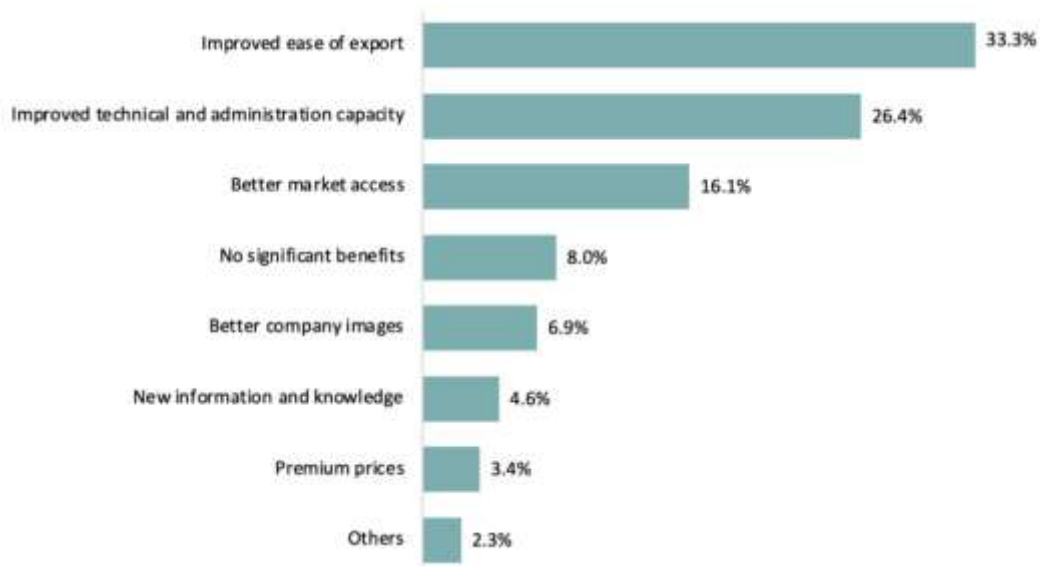


Figure 6. Benefits of VLK indicated by processing industries in Indonesia

Interviews with different stakeholders also confirmed the results of our market survey. More specifically, the business sector did not see positive impacts of the EU-Indonesia FLEGT VPA. Many of them lamented the limited efforts by the EU to promote FLEGT-licensed timber products, as laid down in Article 13 of the EU-Indonesia FLEGT VPA (see above). Several CSOs also shared their views. One of the CSOs pointed out that during a meeting, even a high-ranked official was unaware of SVLK and FLEGT-licensed timber products. In general, the dissatisfaction with the limited effort of the EU to produce the promises was best summarised by a source from a forest business association:

'We had been working extremely hard to meet what they [the EU] have required from us. It is increasingly apparent that they [the EU] do not keep their promises. It seems that they [the EU] say "we have granted you the green lane for your products. It is up to you now to capitalise it". There are no concrete efforts to internalise or promote FLEGT-licensed products to the end users'.

7.3.3 Forest management impacts

An assessment of PHPL audits of seventy-eight concessions covering a forest area of 18 million hectares showed that concessions usually performed better at the economic (timber production) than social (e.g. local communities' rights, recreation) and ecological (e.g. biodiversity, water) aspects (Maryudi et al., 2017). Further analysis of the changes over time underlined that those forest concessions were generally able to maintain and/or improve their overall grades, although social and ecological aspects remained the most challenging issues (Maryudi et al., 2017). A source from a CSO was convinced that before the PHPL audit, the concessions must have improved their forest practices to meet the requirements.

Several interviewees from CSOs and private sectors believed that progress was made following the implementation of SVLK, especially concerning the traceability of forest and timber products. They specifically referred to the Ministry's online integrated platform of *Sistem Informasi Penatausahaan Hasil Hutan* (SIPUHH-online), which provided a more efficient timber tracking system. An APHI source also mentioned the careful implementation of reduced impact logging for reducing carbon emissions by PHPL-certified concessions with the highest grade. As previously mentioned, approximately two-thirds of the certified concessions fell under this category. It was also said that other certified concessions should be encouraged to continuously improve their forest practices to obtain the highest certification grade in re-certification to harness the positive impacts SVLK has currently produced.

However, several old studies and reports also pointed out areas for further improvement. For instance, the quality of SVLK audits, both VLK and PHPL, was said to vary between verification bodies (see Luttrell et al., 2011; Fishman and Obidzindki, 2015). SVLK certification was also considered to be quite simple, emphasising document-based audits (Pratiwi et al., 2015). This issue was also highlighted by several interviewees in this study, particularly when reflecting on SVLK implementation in the early phases. A caveat needs to be made on the relatively dated references, some of which were published at the early implementation of SVLK (before the signing of the EU-Indonesia FLEGT VPA). Analysis and a reflection on the current situation were thus needed. In fact, procedures on accreditation and monitoring of the verification bodies by the KAN were improved, indicated by the revocation of some verification bodies that were found to have conducted improper practices.

Our interviews with verification bodies indicated the extent of improvement. For instance, they mentioned internal procedures that ensured the qualification of their auditors. In addition, they also pointed out several 'learning' and 'probation phases' that must have been taken before an auditor is assigned to conduct field audits. The survey conducted in this study further indicated the value of VLK certification. Approximately a fifth of the survey participants mentioned that besides VLK, they also possess other certifications such as FSC, PEFC, and the International Organization for Standardization (ISO). Approximately 75% of them felt that there is no significant distinction between the different certification schemes in terms of the standards and audit procedures.

A key question regarding the impact of SVLK is the extent to which it contributed to



tackling illegal logging and other illegal forest-related activities. Some remaining cases of illegality were reported. A recent study by IPB University presented in Global Forum on Forest Governance of the Chatham House in July 2022 also showed the occurrence of illegal logging, specifically in state forests (Chatham House, 2022).

Nonetheless, current media coverage of illegal logging is not as intense as in the past. This may provide an (indirect) indication of the decline in illegality cases. Our interviews with various stakeholders, i.e., environmental NGOs, an association of timber manufacturers, and governments, did not provide a strong conclusion on the current situation. Some strongly believed that cases of illegal logging declined, although they were unsure if it could be attributed solely to SVLK implementation. They also mentioned that illegal logging may have evolved into more disguised forms, such as the use of timber utilisation by the cooperatives of local communities and timber harvests outside the assigned zones. An NGO extensively working on legality-related issues argued that the detection of illegal logging cases indicated the effective functioning of the SVLK instead. Responding to this, most CSOs underlined the importance of stronger law enforcement to enhance SVLK impacts.



8. Changes in demand-side regulatory measures

8.1 Regulatory policy changes in the EU

8.1.1 The EU Deforestation Regulation (legal draft) at a glance

In June 2022, the Council of the European Union representing the EU Member States adopted its negotiated position (general approach) on the European Commission's proposal for a new EUDR, published in November 2021. The EUDR would formally replace the existing forest-specific EU legislation (EUTR, FLEGT Regulation) by reducing the role of FLEGT VPAs and repealing the EUTR while continuing and expanding its regulatory approach. The EUDR advances the EUTR's regulatory scope by keeping but going beyond the previous focus on timber legality standards to mainly include FRCs and new environmental sustainability standards (i.e., zero-deforestation and forest degradation) (EC, 2021a; CEU, 2022a).

The new regulatory policy developments were based on the European Commission's conclusion, stating: '[While] Both Regulations [EUTR and FLEGT] [...] had a positive impact on forest governance, the objectives of the two Regulations – namely to curb illegal logging and related trade, and to reduce the consumption of illegally harvested timber in the EU – have not been met and [...] focusing solely on legality of timber was not sufficient' (EC, 2021a, pp. 26–27).

The proposed EUDR builds on experiences with and lessons learnt from designing and implementing other EU supply chain and environmental regulations in the forest, renewable energy, fishing, mining and financial sectors. This particularly includes the FLEGT Action Plan (FLEGT VPAs, EUTR) (Sotirov et al., 2017; Zeitlin and Overdevest, 2020), the Renewable Energy Directive, the Illegal, Unreported and Unregulated Fishing Regulation, the Conflict Minerals Regulation and the Non-Financial Reporting Directive (Burkhardt, 2020; Partzsch, 2021; Partzsch and Vlaskamp, 2016).

8.1.2 The EU Deforestation Regulation policymaking process

The agenda-setting started with the EU commissioning the study on '[t]he impact of EU consumption on deforestation' in 2011 (EC, 2013; 2019b), shortly after the adoption of the EUTR in 2010 (EP and CEU, 2010). In 2019, the European Commission, European Parliament and Council of the European Union politically prioritised the development of new regulatory and non-regulatory measures to regulate zero-deforestation agricultural FRC supply chains in key policy outputs. The key policy documents included a European Commission Communication, Council of the European Union conclusion, two European Parliament reports and two European Parliament resolutions (CEU, 2019; EC, 2019b; OEIL, 2019; OEIL, 2020; OEIL,



2022).

The European Commission believed that 'legally binding options [...] would be more effective than voluntary measures' (EC, 2021a, pp. 5–6). Its legislative proposal was published after a series of impact assessments, studies, public consultations, expert group meetings and stakeholder conferences (e.g. EC, 2021c; f; g). The objective was to pass a new regulation that would close the regulatory gap in existing EU trade policy and governance mechanisms of not directly addressing deforestation and excluding deforestation caused by agricultural FRC production, trade and consumption. This was explained by the European Commission as follows: 'The existing EU legislative framework [EUTR and FLEGT Regulation] focuses on tackling illegal logging and associated trade and does not address deforestation directly' (EC, 2021a, p. 26). The EU thereby sought to minimise its contribution to global deforestation and forest degradation by reducing its contribution to greenhouse gas emissions and global biodiversity loss (CEU, 2022a).

The negotiation and adoption of the European Commission's draft regulation are currently subject to an ongoing ordinary (ex-co-decision) legislative procedure between the European Parliament and the Council of the European Union representing Member State's agricultural, forestry and environmental ministers (OEIL, 2022; Wojciechowski, 2022). In 2022, the Council of the European Union held a policy debate on 21 February in its Agriculture and Fisheries Council configuration and on 17 March in its Environment Council configuration (CEU, 2022a-d). The Environment Council's compromised negotiated position was adopted during the French Presidency, shortly before the Czech Republic's Presidency (CEU, 2022a). Member States stressed the need to develop a compromised text that 'strikes the right balance [...] between ambition and realism' (CEU, 2022a, p.3).

In the European Parliament, the procedure is led by the responsible Committee on the Environment, Public Health and Food Safety (COM ENVI) and involves the Committees for opinion: International Trade (INTA), Development (DEVE) and Agriculture and Rural Development (AGRI) and Internal Market and Consumer Protection (IMCO) (OEIL, 2022). Following the ordinary legislative procedure, the European Parliament and Council of the EU (representing the EU Member States) consulted with the European Economic and Social Committee (EESC), an EU government entity representing organised civil society with a consultative role in the EU's decision-making procedure (European Communities, 2012; EESC, 2022). The EESC adopted its opinion on 23 February 2022, welcoming the Commission's proposal while recommending broadening the regulatory scope – for instance, in terms of expanding the product scope (Puech d'Alissac and Florian, 2022). The European Parliament adopted its position in September 2022 by highlighting, among others, the need for the EU to continue negotiating and implementing FLEGT VPAs (EP, 2022). By the time this report is submitted, the European Parliament, the Council of the EU and the Commission will start trilateral political negotiations, called trilogues, to finalise and adopt the EUDR's text. The final legislative text on the EUDR is expected to be adopted in spring 2023, whereas its entry into force is scheduled for 2025 (14).

8.1.3 The regulatory design of the EU Deforestation Regulation (tentative)

Overall, representatives from key EU institutions, EU Member State governmental officials, international organisations and ENGOs positively evaluated the EUDR's development, particularly comparing the EUDR's regulatory design with the EUTR (e.g. I1; I12; I14; I37; I40). With reservations due to ongoing changes to the regulatory elements during the negotiations between EU decision-makers and EU institutions, they believed that the EUDR would successfully address key shortcomings of the EUTR through a denser and clearer regulatory design. At the same time, some interview partners raised concerns about the EUDR's closed decision-making process (e.g. I42), its unilateral nature (e.g. I38) and the overall lack of expert-based adjustments in EU policy agendas and goals (e.g. I41).

Following the EUTR's approach, the EU would seek to comply with World Trade Organization (WTO) law by equally applying the EUDR's scope to commodities and products produced within the EU (EC, 2021a).

Product scope

Many interview partners supported the EUDR's overarching and expanded product scope covering not only timber but also soy, oil palm, beef, cacao and coffee (e.g. I1; I40). Others were in favour of the inclusion of additional products such as rubber and maize (e.g. I1; I13, I39). The influential EU NGO ClientEarth criticised the narrow scope of derived products listed in Annex 1, considerably lowering the EUDR's de-facto regulatory scope despite its broad language suggesting a wide product coverage (ClientEarth, 2021). An EU Member State governmental official also expressed disappointment that timber products like charcoal and chairs were not included in the European Commission's draft despite previous long discussions about amending the EUTR's product scope (I16).

The final product scope is still subject to negotiations between EU institutions. The Council of the EU's negotiated position, for instance, includes additions of products derived from the Commission-proposed six commodities (coffee, cocoa, palm oil, soya, beef and wood) (CEU, 2022a) (Annex C, Table 1). At the same time, several interview partners stressed difficulties with covering wood and agricultural commodities in one regulation. They stated that timber cannot be deforestation-free (I36) and that the timber industry should be treated separately from industries that did not have to develop due diligence and due care procedures (I41; I42). Including timber in the EUDR also includes risks, as in shifting attention away from the timber sector, which could weaken enforcement (I39). Relatedly, the European Commission decided to exclude financial institutions from the EUDR despite their role in driving global deforestation and forest degradation (I1). They are addressed in separate legislation such as the EU Taxonomy Register and the proposal for a Directive on corporate due diligence and accountability due to concerns about trade-offs, as in enforcement difficulties and losing regulatory clarity (e.g. I36; I40). However, requirements under these initiatives are not as strict as they would have been under the EUDR in terms of prohibiting the offering of financial products as a bank or investment fund that verifiably led to deforestation (I13).

Prohibition clause

The EUDR includes an EUTR-based prohibition clause and mandatory due diligence obligations. Unlike under the EUTR, the prohibition clause expands to operators and traders. Relevant products can only 'be placed or made available on the Union market, or exported from the Union market' if they fulfil three conditions. Relevant products must be 1) deforestation-free, 2) relevant commodities must have been produced complying with the producer country's legislation, and 3) they must be covered by a due diligence statement (CEU, 2022a). According to the EUDR, the proposed due diligence aims to ensure compliance with the first two dispositions.

Due diligence obligations


Several EU-based interview partners stated that the proposed due diligence obligations in the EUDR draft are more clearly defined compared to the EUTR (e.g. I12; I37) and that the due diligence statement will help prove cases in court as more detailed information will be requested from economic operators to prove their obligations (I1). The proposed legal provisions in the EUDR specify the checks on operators and on traders that competent authorities can do to effectively determine non-compliance with the prohibition clause, due diligence and information requirements (CEU, 2022a).

The details of the due diligence obligations for operators and traders are subject to ongoing negotiations.

Under the European Commission's draft, due diligence requirements expand to traders that are not SMEs to close loopholes for sidestepping due diligence requirements. Traders that are SMEs would be subject to information requirements (EC, 2021a). Several interview partners positively commented on the European Commission's proposal to expand due diligence obligations to traders while stating that the definition of traders that are not SMEs is still high and leaves out many significant traders (e.g. those with a larger turnover but small staff) (e.g. I1; I36; I39). Other interview partners stressed considerable administrative burdens for competent authorities, suggesting lifting obligations for small traders, both in terms of limited additional impacts and operational feasibility (e.g. I14). Interview partners also raised concerns about smallholders' feasibility of complying with the EUDR (e.g. I38; I34).

Under the Council of the EU's compromised text, due diligence obligations would only expand to operators. All traders must follow information requirements. Traders that are not SMEs must ensure that operators comply with specified due diligence requirements. Furthermore, they must provide the reference number of existing due diligence statements. These proposed amendments seek to remove duplicated obligations and maintain the chain of responsibility while reducing administrative and financial burdens for operators and Member States (CEU, 2022a).

The due diligence system introduced new geolocation requirements for operators to provide information on the geographical location of relevant plots of land (EC, 2021a; CEU, 2022a). Having the plot of land information enables measuring deforestation without visiting



the country of production through satellite imagery. However, challenges will remain, as in knowing the validity of geolocation information (I37). The Council of the EU proposed that in the case of cattle, geolocation requirements only apply to the location where the cattle were raised, excluding mandatory information requirements for the feed itself (CEU, 2022a).

The newly introduced 'Register' Information System, which must contain due diligence statements and their reference number, is expected to enhance the EUDR's implementation and enforcement. The European Commission must establish and maintain this 'Register' (CEU, 2022a).

Deforestation-free definition

The EUDR's risk-based due diligence requirements rely on a FAO-based definition of 'deforestation-free'. Under the European Commission's draft, this means that the relevant commodities and products cannot be associated with deforestation or forest degradation after December 31, 2020 (EC 2021a, p. 35). Deforestation is defined as 'the conversion of forest to agricultural use, whether human-induced or not', whereas forest degradation refers to 'harvesting operations that are not sustainable and cause a reduction or loss of the biological or economic productivity and complexity of forest ecosystems, resulting in the long-term reduction of the overall supply of benefits from forest [...]' (EC, 2021a, pp. 34-35).

Under the Council of the EU's compromised text, the cut-off date is December 31, 2021. The compromised forest degradation definition narrowly focuses on structural forest cover changes 'taking the form of the conversion of primary forests into plantation forests or into other wooded land' (CEU, 2022a, p.34).

The deforestation-free definition was evaluated controversially by interview partners. While some stress the foundation on internationally-based definitions (e.g. I1) and that focusing on legality would not be sufficient in minimising global deforestation and forest degradation (e.g. I37; I40), interview partners also highlighted issues with the definition's enforceability (e.g. I14), legitimacy and fairness (e.g. I37).

Country benchmarking system

Along with the aforementioned legal definitions, a country benchmarking system categorising EU Member States and third countries as 'low risk', 'standard risk', or 'high risk' are among the most important policy innovations compared to the EUTR (EC, 2021a; CEU, 2022a). While all countries are initially assigned a standard level of risk, the European Commission must identify countries or subnational jurisdictions with low or high deforestation and forest degradation risks based on criteria assessing land use change, production trends as well as the existence, implementation and enforcement of national and international policy and governance mechanisms and laws. Furthermore, the European Commission launched the EU Observatory, which will assist the EUDR's implementation by providing scientific evidence on global deforestation and forest degradation and related trade. The European Commission must also engage with high-risk countries to help them reduce their level of risk (CEU, 2022a). In that context, the European Commission proposed a new development-



cooperation-based instrument called Forest Partnerships (EC, 2021a, p.7).

The EUDR's prospective simplified due diligence requirements for low-risk countries and jurisdictions to reduce Member State competent authorities' administrative burdens are seen controversially. An interview partner noted that risk assessment is the first step in a good due diligence system. Consequently, by its nature, the following step of risk mitigation would not be needed after having identified a low risk (I39). In that context, several interview partners also stressed difficulties in assigning a risk level to an entire country for different products and different types of producers (e.g. I38; I39). (E)NGOs like Fern and ClientEarth particularly criticised this Commission-induced loophole (ClientEarth, 2021; Fern, 2022a).


EU and producer country cooperation

Notably, under the EUDR, cooperation between the EU and producer countries is mandatory. Article 28 mandates that the European Commission and interested EU Member States engage with producer countries to jointly address deforestation and forest degradation. Such agreements and their effective implementation will be considered in the EUDR's benchmarking. The European Commission and interested EU Member States are also required to engage with other major consuming countries to promote adopting similar requirements to minimise their contribution to deforestation and forest degradation and ensure a global level playing field. The Council of the EU's proposed amendments seek to enhance countries' risk classification in terms of legitimacy and compatibility with WTO rules (e.g. enhanced fairness, transparency, objectivity) compared to the Commission's proposal (CEU, 2022a).

Role of FLEGT timber and third-party certification in the EU Deforestation Regulation

Lessons learned from 'limited evidence that the VPAs overall have contributed to reducing illegal logging' (EC, 2021a, p. 7) are a key reason for the Commission's strong advocacy for new trade rules and suggestion to repeal the FLEGT Regulation: 'if the FLEGT Regulation were to be repealed, it would free considerable resources [...]. Those could be used in [a] new approach that addresses the issue more effectively and more efficiently' (EC, 2021c, p. 46). As a result, FLEGT-licensed wood would only fulfil the EUDR's timber legality obligation but not the two sustainability standards (i.e. zero-deforestation and forest degradation) (CEU, 2022a; EC, 2021a).

Third-party certification schemes are not given a direct role under the EUDR. This decision reflects core policy-oriented learning of pro-change actors from experience with the recent EUTR/FLEGT evaluation and Impact Assessment accompanying the EUDR proposal. This evidence concludes that third-party certification (of timber and agricultural FRCs) should not be recognized as a 'green lane' to fulfil due diligence and legality assurance obligations under the EUDR due to third-party's eroding legitimacy and ineffectiveness as non-state market regulation (EC, 2021c; f; g; Dieguez and Sotirov, 2021). The limited effectiveness of voluntary private regulation and industry self-regulation (certification and corporate zero-deforestation pledges) is repeatedly highlighted: 'Some issues have been identified between the Regulations and certification schemes (e.g. FSC/PEFC), including the misuse of certification and questions



around transparency and chain of custody' (EC, 2021c, p. 44). Consequently, the European Commission ruled out soft measures such as voluntary labelling, due diligence and certification in its 2021 impact assessment on minimising the EU's embedded deforestation and forest degradation: 'these measures and related commitments have already been implemented for years by some companies, with little success in terms of preventing deforestation and fostering deforestation-free supply chains' (EC, 2021f, p. 46).

Enforcement

Learning from the EUTR's inconsistent implementation across EU Member States (see Chapter 6.1), the EUDR now also provides more details on checks, cooperation and information exchange, reporting, interim measures, corrective action and penalties. The EUDR also mandates EU Member States to conduct quantified minimum annual checks on operators and traders (CEU, 2022a). The European Commission's draft Regulation proposed higher minimum control obligations for competent authorities in terms of checking operators, traders, commodities and products (Annex C, Table 3).

Social right standards

Finally, the Council of the EU's text has been strengthened compared to the European Commission's proposal by including several references to the United Nations Declaration on the Rights of Indigenous Peoples (CEU, 2022a). The European Parliament's Environment Committee further strengthened the protection of Indigenous People's rights and added amendments to enhance access to justice and remedies for harmed people (Fern, 2022a). The Council of the EU removed the Commission's proposed article on access to justice (CEU, 2022a). The EUDR includes EUTR-based obligations for Member State's competent authorities to carry out checks if they possess substantiated concerns, namely third parties' well-founded claims concerning non-compliance. Unlike the EUTR, the EUDR also specifies requirements for operators and traders to inform competent authorities about newly acquired information, including substantiated concerns (CEU, 2022a).

Tables in Annex C summarise the EUDR's key regulatory elements and compare them with the existing regulations of the timber legality regime and the emerging forest risk commodity rules.

8.1.4 Key supporters and opponents of the EU regulatory policy changes

Overall, three clusters of EU institutions and EU countries could be identified in our study: (i) a very supportive and ambitious cluster of EU institutions and EU countries, (ii) a generally supportive cluster of EU countries, and (iii) a sceptical cluster of EU countries (Figure 7).



Supportive EU institutions

The European Commission, in particular the DG ENV, has been a driving force in the EUDR's development. It engaged in identifying problems, commissioning studies, developing impact assessments, consulting with the public, stakeholders and Member States and proposing a legal draft to solve the identified problems (e.g. I4; I35). EU officials reported that targeting forest-risk agricultural commodities became a top priority over the last decade following the commissioned study on the EU's consumption impact on deforestation (I4; I5). Developing the first legislative draft was mainly led by the DG ENV. The closest associated EU Commission branch was the Directorate-General for International Partnerships (DG INTPA) due to the direct impact on the FLEGT Action Plan's implementation (I1). The DG AGRI, representing EU forest owners and the agricultural sector, participated in the background by contributing to studies, impact assessments and drafting the proposal (I1; I5). The EUDR legal draft developed into an inter-service Commission initiative also involving the Directorate-General for Trade (DG TRADE) because of trade implications, the Directorate-General for Health and Food Safety (DG SANTA) because of the link to food safety, the Directorate-General for Taxation and Customs (DG TAXUD) because of the link to customs and customs control, the Directorate-General for Research and Innovation (DG RTD) concerning monitoring and the role of the EU Commission's Joint Research Centre (JRC) therein. The External Action Service, the Directorate-General for Neighbourhood and Enlargement Negotiations (DG NEAR) and DG INTPA were involved in the context of international relations and impacts on third countries. Substantive input on the EUDR's draft came from DG TAXUD, DG TRADE, DG INTPA and the External Action Service (I1).

The European Parliament was found to be a very strong supporter of the EUDR, advocating for a strengthened and more ambitious regulatory design (I1). MEPs are developing their position based on the Commission's proposal with back and forth between COM IMCO, ENVI and AGRI, likely resulting in reaching a middle ground similar to the Council's position. Overall, the fundamental need for a new Regulation is not contested in EU institutions (I13).

European Parliament report: 'Notes that such an EU legal framework should also be extended to high-carbon stock and biodiversity-rich ecosystems other than forests [...]. Believes that these obligations should apply to all operators placing forest and ecosystem-risk commodities (FERC) on the Union market [...]' (Burkhardt, 2020, p. 14).

Supportive and sceptical EU Member States

The Council of Agriculture and Fisheries Ministers of the EU Member States (AGRIFISH) were in charge of the EUDR's further development, followed by the Environment Council configuration (ENV) (CEU, 2022a). While agriculture, forestry and environmental ministers of the 27 EU Member States expressed broad support for the EUDR's objectives and due diligence rules at their Council meetings in February, March and June 2022, they held different opinions on the EUDR's details (CEU, 2022b-d).





FRC import-dependent EU Member States, such as Belgium, Denmark, France, Germany, Italy, the Netherlands, Spain, and other European countries, supported the EUDR's development. They are among the nine signatories of the Amsterdam Declarations Partnership on sustainable forest and agricultural supply chains (Amsterdam Declarations Partnership, 2021). An EU Member State official reported that these seven EU Member States plus Luxembourg worked closely together and supported the EUDR's development with strong ambition (I13). Among the Amsterdam Declarations Partnership signatories, particularly the Netherlands, France, and Germany, lobbied the Council to pursue ambitious EU-level actions to achieve deforestation-free agricultural imports at several AGRIFISH Council meetings (e.g. CEU, 2017; CEU, 2019).

Overall, these ambitious and generally supportive EU Member States supported an increased regulatory scope to varying degrees (Figure 7). Many ambitious EU Member States – particularly France, Germany, Denmark, and Luxembourg – advocated for an expanded regulatory scope. Key demands included an expanded product scope (e.g. rubber, maize), the inclusion of other ecosystems to avoid leakage (e.g. wetlands), keeping or strengthening the forest degradation definition, strengthening human rights concerns and/or introducing minimum inspection levels (CEU, 2022b-d; I14; I16; I17; I23). At the same time, there is variation in the level of ambition. Germany, for instance, pleaded for the inclusion of financial institutions and investments (I16), but Denmark supported the European Commission's argument 'that it would be too complex to have it in one Regulation' (I17). Germany was initially described as a critical companion of the EUDR. Under the new German government and the French Council presidency, Germany shifted towards being a very strong supporter and pulling actor, requesting a more ambitious regulation (e.g. in terms of equal control requirements for all risk categories, an expanded product scope, the inclusion of more ecosystems and an expanded forest degradation definition) (I12; I13). This political prioritisation was also part of Germany's new governing coalition contract between the social democrats, greens, and the liberals (I13). France tried to advance the EUDR during the French presidency and pressed heavily to achieve a general negotiated Council position before handing over the presidency to the Czech Republic (I12; I40). Notably, France and Germany have already passed similar national laws on transnational supply chain legality and sustainability (e.g. French Duty of Vigilance law, German Supply Chain Due Diligence Act) (Gustafsson et al., 2022; Weihrauch et al., 2022). The French agriculture minister's statement illustrates the normative justification for the EUDR: 'Europe must impose its standards on others and not have others' standards imposed on it' (ITTO TTM, 2022a, p. 22).

Luxembourg and Denmark requested more ambition in the European Commission's proposed definitions, as in including additional ecosystems and strengthening the forest degradation definition (CEU, 2022b-d). The Netherlands strived for an ambitious Regulation that expands to other ecosystems but also highlighted the need to reduce administrative burdens for companies and the importance of a level playing field (CEU, 2022b-d). Belgium also strived for an ambitious Regulation that expands to other ecosystems (e.g. wetlands, dry zones) and economic activities such as mining while raising concerns about costs and excessive burdens for small producers, farmers and SMEs (CEU, 2022b-d).



Generally supportive EU Member States joined these ambitious EU Member States. They are largely content with the European Commission's draft and particularly the Council's negotiated position while also proposing further improvements that would alleviate administrative burdens (e.g. for competent authorities or market actors) (CEU, 2022b-d). This cluster includes the Amsterdam Declaration Partnership signatories Italy and Spain. Italy, while being flexible in assessing more ecosystems and raw materials, stressed that the EUDR needs to be proportionate and particularly highlighted the need for harmonised implementation, improved enforceability and measures to avoid trade distortions (CEU, 2022b-d). Spain also prioritised the protection of other ecosystems but was concerned about administrative burdens and compliance with international trade rules and particularly supported the Council of the EU's compromised text (I17; CEU, 2022b-d). An interview partner explained that several Member States in this cluster, including Spain, Portugal and Italy, would like to be more ambitious but are also concerned about 'administrative infrastructure that they do not have' (I17). Portugal, for instance, generally agreed with the scope of the Council's negotiated position and supported the adjusted forest degradation definition but also highlighted concerns about the definition's enforceability, price increases, and trade balances (CEU, 2022b-d).

Other EU countries like Malta accepted the forest degradation definition and appreciated the alignment with the Green Deal. At the same time, Malta stressed the need for non-discriminatory producer assessments, raised concerns about impacts on international trade and requested implementation support for EU Member States. Cyprus supported including additional ecosystems such as peatlands and stressed the need to support partner countries. Cyprus also requested improvements to the implementation provisions. Croatia supported the due diligence system, particularly in combination with the country benchmarking system, in the context of simplified due diligence obligations for low-risk countries and reduced obligations for SMEs. Lithuania welcomed the Council of the EU's revised forest degradation definition and supported an extended byproduct list. While welcoming reduced administrative burdens for competent authorities and SMEs, Lithuania still believes that financial and administrative burdens, particularly for small traders and operators, are too high and requested financial and technical support. Romania particularly stressed that compromised due diligence obligations and definitions must be kept, supporting the risk-based due diligence approach for low-risk countries. Slovakia supported the product scope and particularly the benchmarking as a tool to simplify the due diligence system. Latvia raised unresolved questions about financial resources for the EUDR's implementation and requested improvements in the implementation provisions. Ireland supported the legislative pace, approved the compromised forest degradation definition and supported risk-based checks with reservations about the Commission's proposed 5% threshold perceived as very ambitious (CEU, 2022b-d).

Next to these ambitious and broadly supportive countries are the more sceptical EU Member States, including Austria, Finland, Sweden, Greece, Czech Republic, Poland, Hungary, Slovenia, Bulgaria and Estonia (Figure 7). They broadly shared the ambition of not going beyond what is in the Council's first position (CEU, 2022b-d). Several of these countries, in particular the forest-rich Nordic countries Sweden and Finland, were especially concerned about the forest degradation definition and the controversial proposal to ban



commodities derived from legally and illegally deforested land (CEU, 2022b-d; ITTO TTMa, 2022). Several Baltic states (e.g. Estonia) and South-Western/Balkan countries (e.g. Slovenia, Greece) also raised concerns about the forest degradation definition (I13; CEU, 2022b-d). Finland stressed the importance of sustainable forest use and highlighted administrative burdens under the proposed inspection levels (CEU, 2022b-d). Sweden also criticised disproportionate administrative burdens and costs, the need to ensure WTO compatibility and requested redrafting the forest degradation definition (CEU, 2022b-d). Many smallholders in Nordic countries that do not consider themselves operators would have been affected by the EUDR, just like cocoa smallholders. Consequently, there was a lot of opposition from forest-rich Nordic countries with many smallholders (I40). Notably, the forest degradation definition was significantly changed in the Council of the EU's negotiated position to find a 'clear and appropriate definition' in the absence of an internationally agreed definition (CEU, 2022a, p. 4). The definition now refers to the conversion of primary forests, which would mostly apply to tropical producer countries due to the few remaining primary forests in the EU. Old-growth or primary forests only account for up to 3% of the EU's total forested area and 1.2 % of the EU land (EC, 2021h).

A governmental official from the Czech Republic stressed that the EU has no direct competence on forestry, voicing concerns that the European Commission will start to regulate Member States' forests through the EUDR even in the absence of clear decision-making authority at the EU level (I11). Furthermore, governmental officials from the Czech Republic and Finland raised concerns about proposed delegated acts under the European Commission's proposal, as in being too vague and unclear about powers that would be given to the European Commission, for instance, in terms of the benchmarking system (I10; I11; I18). Notably, the Council of the EU's negotiated position no longer includes the article on 'exercise of the delegation' (CEU, 2022a, p. 77). Also, other articles providing the possibility for the European Commission to adopt various delegated acts were removed, for instance, in terms of amending the list of relevant products (CEU, 2022a; EC, 2021a).

Furthermore, several sceptical EU Member States (e.g. Austria, Bulgaria, Czech Republic, Greece, Hungary, and Poland) raised strong concerns about the financial and administrative

burdens of the inspection system (I11; I19). For instance, export-dependent Austria was very concerned about very high and quasi-obligatory controls (I5). Similarly, the Czech Republic deemed the European Commission's proposed control targets to be unrealistic. Several EU Member States, including Bulgaria, requested technical and financial support for the EUDR's implementation. Greece demanded further simplification and digitalization of the due diligence system. Hungary emphasised food security as a priority and highlighted competitive disadvantages for the European livestock sector (CEU, 2022b-d). Estonia highlighted that 'lessons needed to be learned from EUTR, which in practice had failed to effectively remove illegally harvested wood from EU trade' (ITTO TTM, 2022a, p. 23). Lastly, the group of more sceptical Member States stressed concerns about expected changes in trade flows, supply shortages and leakages: 'But I am personally a little bit worried about the possible shift in export, import, in the European Union, and the possible rise of prices and maybe some

shortages of raw materials' (I10).

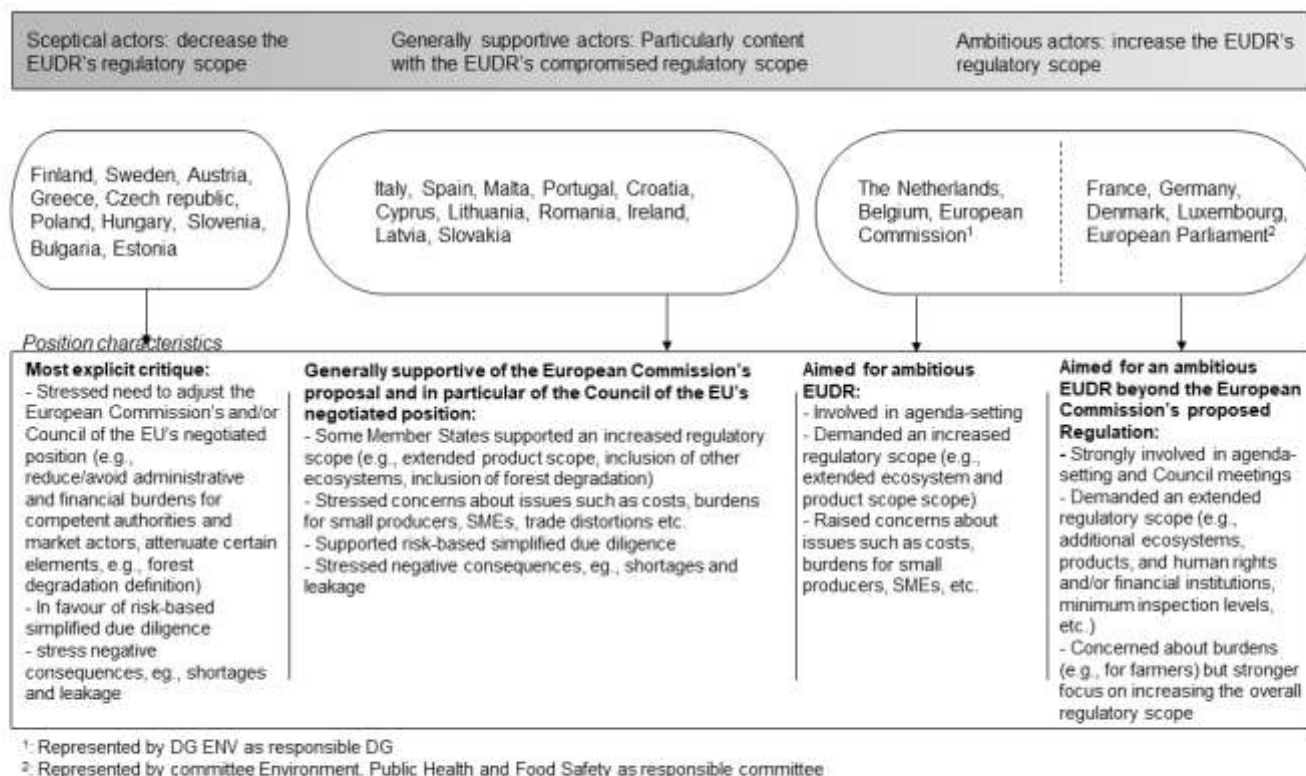



Figure 7. Overview of key positions on the EUDR of the AGRIFISH and ENV Council of the EU (Member States), European Commission, and European Parliament (own figure).

Supportive non-state actors: environmental and social NGOs and certification bodies

Demands from several non-state actors also shaped the new EU zero-deforestation policy developments. Within the European Commission's Open Public Consultation, for instance, an 'overwhelming majority of stakeholders — businesses associations and NGOs – supported a mandatory due diligence regime' (EC, 2021a, p. 7). In particular, a coalition of more than 100 mostly EU-based environmental NGOs, including Greenpeace, World Wide Fund for Nature (WWF), ClientEarth, Fern, and their (supra-)national networks, contributed to an unprecedented reach with over one million submissions making the EUDR's 2020 consultation the EU's largest stakeholder involvement on environmental issues (WWF, 2020). This had a significant impact in terms of the initial consultation (I40). Several interview partners stressed




civil societies' and NGOs' active, progressive and pulling role in demanding an ambitious regulation (e.g. I5; I12; I40). They organised workshops on the first draft and published reports and statements on the different legislative initiatives in the EU, UK and US (I14; I40). These (E)NGOs and CSOs strongly favoured the EUDR in terms of introducing new mandatory due diligence requirements for agricultural FRC supply chains.

At the same time, several environmental and social NGOs stressed the need to strengthen the FLEGT Action Plan and support VPA countries (e.g. Fern, 2021a; b; Brainforest et al., 2021). In particular, Fern is a strong advocate for a coherent application of both FLEGT VPAs and the new EUDR: 'The first way [...] is by strengthening forest and land governance [...] drawing lessons from the FLEGT-VPAs [...]. The second way [...] is by passing a new regulation [which] must require companies to conduct due diligence' (Fern, 2020).

Various Indonesian NGOs also expressed their support for the EUDR, demanding clear demand-side sustainability and human rights due diligence standards while highlighting the need for a common understanding and agreement on key concepts (Indonesian Civil Society Communications Forum, 2020; I38). They also highlighted the necessity to ensure the Regulation's proper enforcement and provide technical and non-technical support to producer countries to support them in meeting the EUDR's standards. Indonesian NGOs also held webinars to inform civil society in Indonesia about the upcoming regulatory changes, particularly working with smallholders in the palm oil sector. Kaoem Telapak held a consultation meeting for VPA stakeholders in Indonesia for the private sector and government ministries, talking about possible positive outcomes and challenges, reaching the common position that they will have to find a way to comply if they desire to continue trading with the EU (I33; I34; I38). They believe that the EU will go ahead with the EUDR regardless of whether the Indonesian government, civil society and private sector agree or disagree (I38).

Environmental and social NGOs, supported by the European Parliament, strongly advocated for an increased regulatory scope to hold all market actors, including all operators, traders, SMEs, and financial institutions, accountable for negative socio-environmental externalities associated with FRC commodity trade (Burkhardt, 2020; WWF, 2020). Additional key demands were the inclusion of non-forest ecosystems, a wider product scope (e.g. all forest and ecosystem risk commodities) and a liability clause (Burkhardt, 2020; I3).

Forest and food certification bodies like Rainforest Alliance and FSC also expressed their support for new EU due diligence rules regulating timber and agricultural FRC supply chains (D1-D128). They believe that a 'smart mix' of mandatory and voluntary policy instruments would level the playing field for responsible actors and effectively tackle global deforestation: 'In the framework of deforestation, FSC recommends combining: i) improved due diligence with, ii) [voluntary sustainability standards] as tools to assess and minimise deforestation risks and include sustainability considerations' (FSC, 2021). While hoping to be recognized as the sole entity doing controls and issuing certificates, forest certifiers like FSC know that they would be strengthened under the EUDR as they exclude land use change from being certified (I12).



Supportive non-state actors: firms, businesses, and industry associations

A magnitude of transnational and EU domestic business companies and industry associations also expressed their support for the EUDR. This includes transnational timber and food retailers and multinational cosmetic companies (e.g. Mondelez International, Nestlé, Procter & Gamble, IKEA, Lidl, L'Oréal), firms and industry associations from the EU's agricultural and food sectors (e.g. CAOBISCO, EPOA, Copa & Cogeca, ICMSA) as well as from the EU's domestic exporting forest and forest product sector, biofuel sector, investment, and asset management companies (e.g. Swedish Forest Industries Federation, ePURE, ACTIAM). These pro-change business actors communicated their support to varying degrees through their own or joint industry statements, partly during the EU public consultation and partly in strategic alliances with environmental actors. These business actors supported the EUDR driven by economically-oriented interests, as in secured market access, removed or reduced disadvantages from (cheaper) competitors on the market, a level playing field, secured legal certainty and reputational benefits (D1-D128). Some EU producers that do not depend on agricultural FRC imports, for instance, supported the EUDR as they believe they would have a competitive advantage through expected increased prices for deforestation-free soy (I12). An EU official reported that large parts of the industry supported the EUDR's development in principle while having reservations about regulatory details (I1). Many forest-related business actors have been less involved in the EUDR's discussion and accepted the EUDR, believing that they would not be affected much (I12).


Mondelez International public consultation statement : 'Mondelez International supports the adoption of harmonized due diligence legislation in the European Union. Such legislation would level the playing field and drive mainstream adoption of sustainable practices' (Mondelez International, 2021).

The aforementioned EUDR supportive actors are pitted against status quo-oriented state and business actors in the EU and tropical countries.

Opposing state actors: EU institutions and tropical countries

COM INTA and ITRE in the European Parliament favoured private-sector regulation and market incentives (Burkhardt, 2020). Furthermore, tropical producer countries (e.g. Colombia, Indonesia, Malaysia, Republic of Congo, Brazil) voiced opposition to new EU trade rules due to the EUDR's perceived discriminatory design (e.g. I33; I34; I45; I46). Instead, they suggested maintaining the status quo, relying on development cooperation or free-trade agreements such as FLEGT VPAs.

Many interview partners from Indonesia criticised that FLEGT-licensed timber and timber products would only comply with the EUDR's due diligence



requirements in terms of fulfilling the legality requirement (e.g. I45; I34). Some interview partners from the Indonesian forestry sector highlighted the burden for producer countries like Indonesia (e.g. additional costs) and suggested directing the due diligence requirements to non-VPA or non-FLEGT-licensed countries (e.g. I45). Indonesian governmental, NGO/CSO and forest industry business representatives further criticised the historical lack of a clear incentive for Indonesia as a strategic partner of the EU in the context of FLEGT VPAs and raised concerns about reduced and missing incentives under the EUDR (e.g. I38; I34; I45).


Government of Colombia: ‘Obligatory due diligence is a technical barrier to trade and would negatively affect developing countries. Less trade restrictive measures must be analysed’ (Government of Colombia, 2019).

Republic of Congo: ‘We must build on Congo’s ground-breaking timber trade deal with the EU, not undermine it [...] Any move to get rid of FLEGT licenses, raises concerns for our government’ (FLEGT IMM, 2021).

Government of Brazil: ‘The possible adoption of a sustainability parameter [...] would imply the possible application of inadequate standards for the achievement of the alleged environmental objectives [...] in specific countries, in view of the different national circumstances with regard to the subject of deforestation, thus transforming these standards into disguised restrictions to trade’ (Government of Brazil, 2020).

Opposing non-state actors: firms, businesses, industry associations, and certification bodies

Several non-state actors from the forest, agricultural, non-food agricultural product processing, meat and dairy sectors (e.g. Citrus BR, Fedepalma, IPOA, FFIF, ECA, EDA, UECEBV) were sceptical about the EUDR’s development or openly opposed its development (D90-D120). They shared concerns about increased administrative and legal burdens, complicated international trade, or highlighted the legitimacy of FRC production and trade. Key economic actors include COCERAL, FEDIOL, and FEFAC – representing the EU grain and oilseed trade and animal feed industry – and the European Timber Trade Association (ETTF) and German Timber Trade Association (GD Holz), representing the timber importing industry (ITTO TTM, 2022a). COCERAL, FEDIOL, and FEFAC rejected the EUDR believing it would lead to economic disadvantages such as supply shortages in the EU, high prices, and reduced EU food and feed chain competitiveness due to the ‘exclusion of the majority of smallholders and certain mills



supplied by smallholders from supply chains' (ITTO TTM, 2022a, p. 24). Like many sceptical EU Member States, ETTF and GD Holz also raised concerns about the definition of deforestation and forest degradation (ITTO TTM, 202a2).

Forest and agricultural FRC import-dependent companies have been particularly interested in the EUDR's development since the Regulation would affect their business and sourcing practices (e.g. I5; I12). An EU official and EU Member State governmental representative particularly highlighted the beef sector as a source of initial opposition until a pragmatic middle ground was identified (I5; I13).

Overall, the status-quo-oriented business actors emphasised their preference for existing regulatory measures (e.g. EUTR, FLEGT VPAs), third-party certification schemes (e.g. FSC/PEFC, RSPO, Roundtable on Responsible Soy (RTRS)) and free trade or voluntary bilateral partnership agreements (e.g. VPAs, EU-Mercosur agreement, development cooperation).

Likewise, public (e.g. the Malaysian Palm Oil Council (MPOC) and private (e.g. RSPO, RTRS) soy and palm oil certification bodies disliked the EUDR. Instead, they favoured incentive and trade-based approaches, promoting existing third-party standards and certification schemes: 'RSPO recommends making sustainable palm oil the norm by promoting stricter certification standards' (D125). Agricultural FRC certifiers would have to carry the main burden and would be subject to controls by an entity above them, which resulted in a reluctance to support the EUDR (I12).

Finnish Forest Industries Federation public consultation statement: 'existing regulatory and market-based voluntary tools must be acknowledged when analysing different options for measures such as risk-based approaches to be taken when promoting deforestation free value chains. Instead of proposing any new regulation, better implementation of existing regulation and voluntary tools should be executed to meet the objectives' (Finnish Forest Industries, 2021).

IPOA: 'There should be no imposition on Indonesia's sovereign right to regulate its domestic palm oil industry, including the future development and evolution of ISPO' (Indonesian Palm Oil Association, 2021).



8.2 Regulatory policy changes in non-EU consumer regions: the UK and the US

8.2.1 Regulatory policy changes in the UK

In addition to the EU regulatory policy changes, partly similar, partly different policy and legislative developments are taking place in other important consumer regions and countries such as the UK and US (Government UK, 2022; 117th Congress, 2021). While the EU is replacing and enhancing its existing legislative framework in the forest sector (i.e., EUTR) with an integrative new regulation that will regulate both timber products and agricultural commodities (i.e., EUDR), the UK is developing a separate legislative initiative to regulate agricultural FRC supply chains.


The UK Environment Act currently discusses due diligence provisions that would introduce additional due diligence requirements for larger businesses that operate in the UK and use specified agricultural FRCs (Defra, 2021). These new UK trade rules seek to implement new due diligence provisions to help tackle illegal deforestation in UK supply chains (Defra, 2021). Similar to the EU, there was overwhelming support, particularly from environmental NGOs and civil society, for introducing new FRC-related legislation in the UK (Defra, 2020; E-Mail correspondence with UK official). Especially WWF urged the UK government to act through the Environment Bill in a campaign providing pre-filled answers to the consultation (Defra, 2020).

A UK governmental official stated that they believe this approach of recognizing ‘the primacy of national and sub-national governments’ decisions in determining the management of their natural resources [...] provides the best path to long-term sustainability’ (E-Mail correspondence with UK official).

8.2.2 Regulatory policy changes in the US

Similarly, the US government is developing a new regulatory policy through The Fostering Overseas Rule of Law and Environmentally Sound Trade, in short, the FOREST Act of 2021. Similar to the UK law, the US FOREST Act seeks to regulate the import of agricultural FRCs that have been produced on illegally deforested land, which includes amendments to the Tariff Act of 1930 and the US Code (117th Congress, 2021). Under the bill, importers of palm oil, soybeans, cocoa, cattle, rubber and wood pulp, or the products made wholly or partly from them, would have to improve their tracking of supply chains for the specified commodities and products (Annex C, Table 3, 4). Furthermore, like the US Lacey Act Amendment, the FOREST Act’s import declarations would require importers to exercise reasonable care to assess and mitigate deforestation-related risks and require them to file import declaration statements to prove the legality of FRCs. Imports falling short of specified standards would be blocked, and importers would face US legal action and penalties (Schatz, 2021).

A US-based environmental NGO representative reported that a zero-deforestation standard – as proposed by the EU – would not get very far politically in the



US. Instead – drawing on experience with the US Lacey Act – the representative believed there was a reasonable chance to unite people again behind the argument that illegal deforestation should not happen (I37). Furthermore, there are equity questions involved in developing a deforestation-free standard. For the US, as a large emitter, it would be difficult to demand from small producers to no longer legally clear their land for subsistence farming (I37).

Unlike in the EU and UK, it is not clear yet whether the US FOREST Act will receive the necessary political and public momentum to pass due to the divided political situation caused by the political gridlock between the Republican and Democratic parties (e.g. I36; I37). Consequently, tropical producer countries have not yet been informed about potential US legislative changes (I37; I45).

8.3.3. Regulatory policy changes in the EU, the UK, and the US: a comparison

Product scope


The product scope is the first key difference between the EUDR's draft, the UK Environmental Bill and the US FOREST Act. While the EUDR's product scope includes both timber and agricultural FRCs, timber and timber products are mostly excluded from the US and UK legislative proposals (Annex C, Table 1). While wood pulp products are listed under the US FOREST Act, other timber and timber products continue to be covered in the US Lacey Act. In the UK, timber and timber products continue to be covered under the UKTR (FLEGT IMM, 2022).

Another key difference between the UK and EU laws is the UK's inclusion of rubber (Annex C, Table 1) and the UK's decision to use a turnover instead of an employee number threshold to define businesses in scope (Defra, 2020).

Regulatory scope: legality vs sustainability

The EUDR's regulatory expansion specifying new legally binding ecological sustainability standards (i.e. zero deforestation and zero forest degradation) together with legality obligations is the second key difference compared with the UK Environmental Act and the US FOREST Act. Like the US Lacey Act and the UKTR, and unlike the EUDR's draft, the new UK and US legislative initiatives continue to focus on commodity legality and do not cover sustainability standards such as zero deforestation and/or zero forest degradation (Annex C, Table 2).

In that context, a representative from an international organisation referred to environmental NGO reports criticising that large UK companies are already implementing what is proposed under the new due diligence requirements in the UK Environmental Bill. The representative concluded that the UK law would not sufficiently increase the existing legality standard (I40).



Country benchmarking system

A key difference between the proposed trade laws in the EU and the US compared to the UK legislative initiative is the prospective introduction of a deforestation risk rating system in addition to new due diligence requirements. While both the EUDR and the US FOREST Act propose country rating systems for deforestation risks (e.g. 'low risk', 'standard risk', or 'high risk'), the UK law primarily relies on introducing new due diligence requirements (Annex C, Table 5, 6).

Forest definition

Unlike in the EUDR, the forest definition in the UK Environment Act is sufficiently broad to include additional ecosystems, including forested savannahs and mangroves (E-Mail correspondence with UK official). Furthermore, the UK legislation will apply wherever an agricultural FRC is produced to avoid ecosystem leakage incentives: 'if a regulated forest risk commodity is produced on an area of land that isn't a forest, businesses would need to ensure that these commodities were produced in line with relevant local laws' (E-Mail correspondence with UK official). Similarly, the US FOREST Act's definition of forest seeks to be as expansive as possible. It builds on the FAO definition of forests and other wooded land, thus covering additional ecosystems such as the Cerrado and Chaco (I37; Schatz, 2021).

Tables in Annex C provide a detailed overview of the key similarities and differences between the existing timber legality instruments and the new regulatory changes in the EU and non-EU consumer regions. This comparative overview includes the EU-Indonesia FLEGT VPA (EU and Indonesia, 2014), the EUTR (EP and CEU, 2010), the EUDR (draft) (EC, 2021a; CEU, 2022a), the UK's due diligence provisions in the Environment Act (Defra 2021), the US FOREST Act of 2021 (Schatz, 2021; 117th Congress, 2021) and the amended Chinese Forest Law (MEE, 2019).



9. Impacts of the EU's and non-EU consumer regions' regulatory changes


9.1. Potential impacts of EU deforestation regulatory changes on FLEGT

Impacts on EU timber legality policy from a policy-oriented learning perspective

In its Fitness Check, the European Commission particularly criticised the existing EU legislative framework's (EUTR, FLEGT) narrow focus on timber legality instead of sustainability (i.e. zero-deforestation, zero forest degradation) and the exclusion of agricultural forest risk commodities (EC, 2021c). Legal and illegal timber extraction and logging are the most important driver of global forest degradation and an important precursor to deforestation (Hosonuma et al., 2021; Vancutsem et al., 2021). However, around 90% of global deforestation is caused by agricultural expansion (FAO, 2021). It was said that this was well known at EU institutions and in the EU Member States at the time of the FLEGT Action Plan's development in the early 2000s. At this time, however, it was politically more salient and more feasible to focus regulatory interventions on illegal logging and timber trade (e.g. I1; I41; I4, I5; I13). A governmental official reported that discussions about NGO-driven tropical timber boycotts at that time went up to the highest level and that expert opinions about the forest sector's comparatively small role in driving global deforestation were neglected (I13). Now, the focus of civil-society pressure shifted high-level EU discussions towards regulating agricultural commodities, now acknowledged as the main driver of global deforestation (I13; I4; I5).

According to the European Commission, one of the most important impacts of the EUTR's and FLEGT Regulation's implementation evaluation in the EU (EC, 2021c) is the recognition that new demand-side legislation is required to address key shortcomings of the transnational FLEGT regime and the EU's timber legality policy (EC, 2021a). This includes going beyond the previous focus on timber legality to regulate not only the legality but also the sustainability of forest and mainly agricultural forest-risk commodity (soy, palm oil, beef, cacao, coffee) supply chains. The EUDR draft now recognises agricultural expansion as the main driver of global deforestation (I1; EC, 2021a).

Learning from the FLEGT Action Plan's strengths and weaknesses, many interview partners were generally in favour of developing a new legislative approach that builds on the EUTR and FLEGT to address the issue of global deforestation and forest degradation more efficiently. Interviewees particularly supported the EUDR believing that it would successfully address some of the EUTR's/FLEGT Regulation's shortcomings, such as the lack of minimum




inspection levels (I1; I14; I13; I39). Several key informants stressed that the new Regulation needs to build on the FLEGT Action Plan's overarching theory of change, namely developing EU regulatory standards and supporting tropical partner countries in reaching these specified standards (I38; I39; I41, I42).

Impacts on the future role of FLEGT

Expert and stakeholder opinions about the future role of FLEGT VPAs deviated strongly. EU officials particularly emphasised the slow and resource-intensive process of negotiating and implementing VPAs, stating that the European Commission will honour commitments made but not actively pursue new FLEGT VPAs (e.g. I1). This is also reflected in the EUDR's proposed regulatory design. Under the European Commission's EUDR draft, FLEGT-licensed timber would only fulfil the legality but not the two other key sustainability requirements (i.e. zero deforestation and zero forest degradation). This would reduce the green lane advantage of direct recognition and EU market advantage for FLEGT-licensed timber, currently provided under the EUTR/FLEGT Regulation and the EU-Indonesia FLEGT VPA (White, 2021).

This planned policy change suggests that the EU will not formally accept Indonesia's SVLK as a sufficient sustainability standard for the European market under the EUDR due to the perceived narrow focus on timber legality, excluding sustainability criteria such as zero-deforestation and forest degradation. However, several interview partners stressed similarities of Indonesia's SVLK system with third-party sustainability certification, namely FSC and PEFC, particularly in terms of fulfilling sustainability criteria (e.g. I41; I45). Interview partners from Indonesia highlighted that – at the time of negotiating the EU-Indonesia FLEGT VPA – the focus was on legality but that the SVLK system is now ready and adaptable to also include additional sustainability criteria (I34; I38; I45). Research by Susilawati and Kanowski (2021) suggests that while SVLK fostered legality compliance in domestic and export value chains, it has less stringent requirements than FSC certification. This facilitated compliance but also allowed for loopholes. Third-party forest certification schemes (e.g. FSC, PEFC) are hardly mentioned in the EUDR legal draft, pointing to the general mistrust as shown above (EC, 2021a).

With its EUDR legal proposal, and unlike the commitments under the EU-Indonesia FLEGT VPA, the EU seeks to reduce FLEGT's role instead of promoting its positive perception on the Union market and increasing public and private demand and procurement of FLEGT-licensed products (White, 2021). At the same time, the European Commission also proposed developing a new development cooperation instead of a trade-based instrument called Forest Partnerships (EC, 2021a; I1). Many interview partners were broadly in favour of this new instrument due to the perceived importance to continue building on the FLEGT Action Plan's overarching partnership approach to effectively halt global deforestation and forest degradation (e.g. I39; I40). At the same time, there is still a lot of confusion around this new instrument. Several interview partners criticised it as too broad and not targeted enough (e.g. I38; I39). The European Commission's DG INTPA is developing the first Forest Partnerships set. Member State discussions should take place in October 2022, and more information on the Forest Partnerships was expected to be available in the first week of November 2022 (I6).



Several interview partners particularly stressed the necessity for a partnership approach in the context of supporting land use governance reforms in producer countries and avoiding trade leakage to less regulated markets (e.g. I39; I40). Otherwise, a risk was seen in that the EU would only clean up its supply chains without instituting systemic land use changes in producer countries, which would limit the potential impact in terms of achieving the overarching policy goal of minimising global deforestation and forest degradation (e.g. I38; I40).

While some interview partners stressed the importance of having FLEGT-VPA-like market incentives (e.g. I38; I42), other interview partners highlighted that the market incentive under FLEGT was very weak and hence not necessarily an essential component to engaging with partner countries (e.g. I1; I39).

9.2. Potential impacts of regulatory changes in non-EU consumer markets on FLEGT

Impacts in the UK, US, China, Australia, Republic of Korea, and Japan on the future of FLEGT

As shown above, and unlike the EU, the forest-related regulatory policies in the UK (i.e. UKTR, UK FLEGT VPAs, new due diligence provisions in the UK Environmental Act, UK timber procurement policies) and in the US (Lacey Act Amendment, US FOREST Act) continue to focus on the legality of timber and agricultural FRC supply chains. Unlike the EU and US, FLEGT-licensed timber and national TLAS, such as Indonesia's SLVK, would continue to fulfil the UK's import requirements without reducing FLEGT's green lane recognition and market advantage.

Unlike in the UK, the existing and emerging US policy framework does not recognise FLEGT timber and national TLAS, such as SLVK, as proof of legality under the Lacey Act Amendment. Similarly, the US FOREST Act would not provide for formal recognition of legal timber, such as FLEGT-licensed timber, under a national TLAS like the SLVK, as this draft law does not regulate timber products, except wood pulp.

Unlike in the EU, sustainability standards are generally not requested in the UK and US regulations. Instead, timber and agricultural FRCs only need to fulfil legality requirements. This would also mean that timber and agricultural FRCs from areas subject to deforestation and forest degradation may still be traded on the UK and US markets if the production of these commodities was allowed by the applicable laws of the sourcing (tropical) countries.

Table 6 provides a comparative overview of the role of FLEGT-licensed and national TLAS under the existing regulatory policies in the EU and non-EU consumer markets. It is evident that thus far, only the EU and the UK directly, and Australia indirectly, provide for formal policy and market support for FLEGT timber and national TLAS.

Table 6. Role of FLEGT under existing EU and non-EU regulatory policies.

Regulatory policy	Role of FLEGT-licensed timber and national TLAS
US: 2008 Lacey Act Amendment	No formal mechanism for FLEGT-timber and recognition of national timber legality systems like SLVK.
EU: 2010/2013 EU Timber Regulation	Direct green lane for FLEGT-licensed timber and timber products, as well as for national TLAS (EU-partner country FLEGT VPAs).
Australia: 2012 Illegal Logging Prohibition Act	Indirect green lane for FLEGT timber, as it wholly or partially recognises state, territory or third countries' laws, certification or industry accreditation as compliance with due diligence requirements.
Japan: 2016 Clean Wood Act	No direct reference to FLEGT. The Guideline for Verification of the Legality and Sustainability of Wood and Wood Products recognizes third-party certification schemes and voluntary private-sector verification methods.
China: 2019 Forest Law Amendment	No direct reference to FLEGT. China is interested in learning more about SVLK as a TLAS.
ROK: 2020 Act on Sustainable Use of Timbers	No direct reference to FLEGT. Importers must file import declarations before importing timber and timber products. Any documents verifying timber and timber products can be provided upon inspection.
UK: 2021 UK Timber Regulation	Direct green lane for FLEGT-licensed timber and timber products, as well as for national TLAS (UK-partner country FLEGT VPAs).
Switzerland: 2021 Swiss Timber Trade Regulation	No direct reference to FLEGT. Certification or regulations verified by third parties can be used for risk assessments under the due diligence obligations.

9.3 Potential policy and market impacts for Indonesia

9.3.1 Impacts of the draft EU Deforestation Regulation

Negative regulatory product scope-related trade impacts

As shown above, the proposed EUDR would continue the timber legality obligations under the current EUTR/FLEGT Regulation but expand them with the far-reaching sustainability requirements to ban marketing timber and FRCs associated with (legal and illegal) deforestation and forest degradation on the EU market. The EUDR introduces a three-tier risk country benchmarking system based on issues such as deforestation rates and national legal frameworks in producer countries. It lists specific FRCs such as timber, palm oil, soy, beef, cacao, and coffee.

Since some of these FRCs are Indonesia's main export products to the EU, the EUDR will most likely affect the EU-Indonesian trade. For example, the value of Indonesia's palm oil exports is now the largest compared to Indonesia's exports of other

non-oil and gas sectors. In 2020, Indonesia’s oil palm industry generated a foreign exchange of nearly 19 billion USD, making up more than 10% of the country’s total export value. FRC commodity exports, including palm oil, timber, coffee and cacao, make up approximately 20% of the total export values (Figure 8).

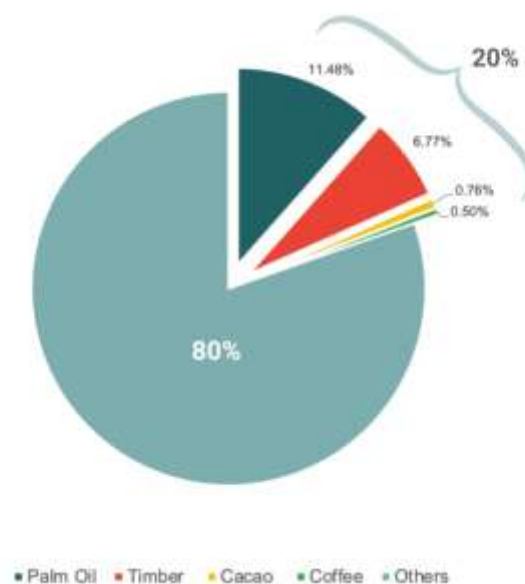



Figure 8. Share of forest risk commodity exports from Indonesia’s total exports (Directorate General of Plantations (2020) for palm oil, coffee, and cocoa; Directorate General of Sustainable Forest Management (2020) for timber).

Although Asian countries continue to be the main export market destinations of some of the FRCs specified in the EUDR, the EU market cannot be discounted. The share of Indonesian exports of timber products to the EU market continues to account for roughly 10-15%. EU markets are particularly important for furniture products. A similar figure is also shown for oil palm (Rifin et al., 2020). The EU is also one of the main export destinations of Indonesia’s coffee and cacao (Inayah et al., 2022).

Some interviewees were not fully surprised by the EU’s new zero deforestation policy and expected that further regulatory policies in other consumer markets would continue to evolve to add new requirements to trade which would put pressure on producer countries such as Indonesia. The Ambassador of the Republic of Indonesia to the EU (as interviewed by CNBC Indonesia on 25 February 2022) pinpointed oil palm, timber, cacao, and coffee as the four main Indonesian products that would most likely be negatively impacted by the EUDR. Likewise, some interviewees named oil palm, and to some degree timber products, as the main Indonesian commodities that would be negatively affected by the EUDR.

Some key stakeholders, including but not limited to government officials and business actors, were very concerned about potential adverse impacts of the EUDR on Indonesia’s



exports to the EU. Initially, senior officials of Indonesia's government expressed concerns about the potential twist of 'zero deforestation' as market protectionism and discriminatory measures (see Jong, 2020; Ellis-Petersen, 2021). These concerns were echoed by many interviewees from various ministries within the government administration, industries and their associations, as well as academics and research institutes. The citation below summarises these strong negative opinions:

'It [the EUDR] creates a non-tariff barrier to trade and will adversely affect the access to global supply chains. It [the EUDR] represents a unilateral action to discredit the rights of other nations to develop'.

Positive trade, governance and social right impacts

However, various stakeholders remained optimistic that not all products from Indonesia will be severely affected. For example, several interviewees were relatively confident that Indonesia's FLEGT-licensed (legal and sustainable) timber products would still be better placed regardless of potential additional legal requirements under the EUDR. Regarding other FRCs, a source from the Association of Indonesia's Cacao Industries argued that Indonesian cacao might not be impacted as adversely as cacao from Africa.

One interviewee suggested that the EUDR would be a game-changing policy to which exporting producer countries may need to adapt. Although opinions varied, several environmental NGOs positively assessed the EUDR for its likely impacts on improving forest governance in Indonesia. More specifically, NGO interviewees mentioned that the EUDR would address the existing forest-related challenges that are yet to be solved by the current policy instruments, such as issues related to indigenous people's rights. This positive view was shared and complemented by an interviewee from an international research institute who saw the new EU zero deforestation policy as a solution to the changing challenges from illegal logging to deforestation and climate change.

Mismatches on (legal) definitions of forest and deforestation

Most interviewees identified the necessity for the Indonesian government to actively engage in negotiations with the EU to clarify the EUDR's operationalization, including on such contentious issues as how deforestation should be defined. In their opinion, the definition of deforestation (inherently including forests) is vague and could be problematic in operationalization. For example, Pirard et al. (2015) identified four different definitions of deforestation: (i.) zero deforestation (which is also known as deforestation-free or no-deforestation), (ii.) zero net deforestation, (iii.) zero gross deforestation, and (iv.) zero illegal deforestation.



Several interviewees hoped that the EU would depart from the existing definition adopted in international forest-related fora instead of creating a ‘new field’. Even if such a definition is used, it would not necessarily fit Indonesia’s complex forest-related terminologies that are specified beyond biophysical features. Forest in Indonesia cannot be separated from the broader land governance shaped by various regulatory and institutional frameworks. According to the Basic Agrarian Law No. 5/ 1960, land in Indonesia is generally classified according to the dual ownership system, i.e., state and private. Following the so-called Consensus-Based Forest Land Use Planning (*Tata Guna Hutan Kesepakatan*, TGHK), state land is further classified into two broad allocations, i.e., forest zones and non-forest zones/other use areas (*Areal Penggunaan Lain*, APL). The current forest regulatory framework (e.g. Ministerial Regulation P.14/2004) adopts a minimum threshold of 30% tree cover on a minimum area of 0.25 hectares to define a forest. This Indonesian definition differs from that of the FAO, which the EU DR would adopt, in that the FAO forest definition uses a threshold of 10% tree cover on a minimum area of 0.5 hectares.

Nonetheless, the legal categorization and definitions do not necessarily correspond with the biophysical conditions (Table 7). For instance, some state forest zones are not covered with adequate tree vegetation to constitute a forest ecosystem. According to Indonesia’s state of forests report 2020 (MoEF, 2020), 25% of the total 107 million hectares of terrestrial forest zones are not forested. In contrast, many parts of non-forest zones (APL) across the country are forested and are characterised by high biodiversity levels (Ekawati et al., 2014). It is estimated that forested APL zones in total amount to as much as 7.2 million hectares (MoEF, 2020). Similarly, rural people have long practised tree planting on private land, which is not formally categorised as forest in Indonesia. In fact, ‘trees outside forests’ have become a main source of raw materials for Indonesia’s timber industries (Maryudi et al., 2015).

Table 7. Potential applicability of the EU's deforestation definition on Indonesia's land sector.

Biophysical conditions	State land		Private land
	Forest Zone	Non-forest zone (Area for other uses)	
1. Forested			
- Natural forest & tree plantations	Applicable	Applicable	
- Composed with other commodities	Applicable	Applicable	Applicable
2. Not forested	Applicable	Not applicable	Not applicable

As previously mentioned, the FAO's definition of forests and deforestation is likely to be used by the EU. According to the FAO, deforestation is defined as the conversion of forested areas to non-forest land use or the long-term reduction of tree canopy cover below the 10% threshold. The FAO (2000) adds that forests are determined by both the presence of trees and the absence of other predominant land uses. This operationalization of forest and deforestation could be problematic for Indonesia in many respects. The obvious complication relates to forested landscapes outside the state forest zones (both state land for other uses and private land). On the one hand, they fall under the FAO's definition of forests. On the other hand, they cannot fully be regulated with Indonesia's existing forest legal systems, which are mostly dedicated to state forest zones. A source from the MoEF reflected on the difficulties in controlling deforestation in non-forest zones by rhetorically asking if cutting trees at home gardens is considered deforestation.

Concern was particularly raised regarding tree planting practices on private land that, in many cases, are driven by the growing market channels for tree products. Several studies (e.g. Maryudi et al., 2015) showed challenges that tree farmers faced in the context of complex regulatory frameworks related to legality and sustainability-related policies. The studies concluded that excessive regulatory frameworks might work counterproductive. Instead of promoting sustainability, they may dampen the enthusiasm of smallholder farmers to plant trees to improve the environmental quality.

Even for the state forest zones, several interviewees mentioned some legal, technical, and practical issues highlighting the differences in the definition of deforestation between Indonesia and the EU. For instance, the legal frameworks in Indonesia still allow legal forest conversion (legal deforestation) to facilitate economic development (Nurrochmat et al., 2020), despite the sharp decline in the country's rate of deforestation to less than 500 thousand hectares/year, as shown in official reports and studies (MoEF, 2020; Global Forest Watch, 2018). The annual rate



of deforestation in this decade was projected to reach 820.000 hectares, although the government aimed to lower it to 350.000 hectares to meet the country's National Determined Contribution under the Paris Agreement (MoEF, 2020). One interviewee said that zero deforestation is unlikely to be achieved in the short term due to several land-based policy priorities, such as providing land for food production. The interviewee shared insights on the importance of granting Indonesia a transitional phase under the EUDR's future implementation, citing good examples from the policy initiative of FOLU NetSink by 2030.

Deforestation-free in the EU's legal proposal will likely cover legal compliance and mandatory sustainability standards to avoid deforestation and forest degradation. This includes timber plantations from conversions, which are considered forests in Indonesia's legal contexts. Over-harvesting forests is considered to constitute deforestation. As of May 2020, land allocated for industrial timber plantations extended to more than 11 million hectares, although approximately a third is not in management operations (MoEF, 2020).

Although timber plantations fall under the EU's deforestation definition, they might not necessarily be affected by the EUDR, at least theoretically, due to the cut-off date, which is set after 31 December 2020. In practical terms, this means a 'temporal segregation', i.e., the conversion of forest that has taken place before this date is not considered to be involved in deforestation (Karsenty, 2022). In this regard, a source from the MoEF was also confident that Indonesia would remain well-placed by citing the moratorium on the conversion of natural forests that was enforced for some time. The cut-off date itself looked reasonable and might not much affect the operations on the forest land that were released beforehand. In fact, much of the deforestation in Indonesia occurred before the specified cut-off date. Hence, some environmental and social NGOs considered a much earlier cut-off date for more impactful.

Clarity on the EU's definition of deforestation is also needed for commodities that are already grown on land that, according to the Indonesian legal frameworks, is still gazetted as forestland. In fact, several commodities, such as coffee, cacao, and oil palm, are planted in forest zones in the form of agroforestry practices. A recent report (Bakhtiar et al., 2019), for instance, points out that approximately 20% of the current oil palm plantations in Indonesia were long grown in forest zones. According to the FAO, as previously mentioned, forests are also determined by the absence of other predominant land uses. Thus, the commodity can be considered as a product that leads to deforestation. Over the past few years, the government of Indonesia has been working intensively to resolve issues concerning the existence of non-forest commodities within forest zones and implemented several strategies to restore the landscape close to forest ecosystems by adopting agroforestry strategies. Theoretically, commodities produced from the area can still be regarded as (agro)-forestry products. In addition, the fact that they have been grown before the EU's specified cut-off date would not make them fall under the EU's deforestation definition. Nonetheless, it remains unclear how the EU would regulate these issues through more specific rules.


Administrative and financial burdens of due diligence

Like the EUTR, the implementation of the EUDR will require economic operators to use a DDS. The key elements of a DDS are summarised in Table 8. Before placing relevant timber and/or FRCs on the EU market, economic operators must ensure they have exercised due diligence, ensuring that their products were associated with no or only negligible risk of (legal and illegal) deforestation and forest degradation. Extrapolating from the experience with the EUTR, implementing the due diligence under the EUDR would place substantial operational burdens (e.g. staff, time, expertise) on economic operators. It will also result in costs for operators to cover, for instance, onsite visits to check supply chains, prepare and assess evaluation reports, supplier audits and other specific services (NEPCon, 2020). This will also require investing in further capacity development of producers, exporters and traders in sourcing countries.

Table 8. Key aspects of the due diligence system.

Element	Definition	Action
Information collection	The operator must have access to information describing the products, country of harvest, species, quantity, details of the supplier and information on compliance with national legislation.	
Risk assessment	Identification and specification of the risk of illegal timber in the supply chain, based on the information identified above and taking into account criteria set out in the regulation.	Operators assess: - Assurance of compliance with applicable legislation, including certification schemes and third-party verification - Prevalence of deforestation in the country of harvest
Risk mitigation	When the assessment shows that there is a risk of deforestation, risks should be mitigated either by changing supplies and/or requiring additional information and verification from the supplier.	Operators obtain additional sourcing data and third-party verification to back supplier claims.

Learning from experiences with the EUTR, the DDS for every product must be assessed at least every 12 months. Traders are required to maintain basic information on their supplier and buyer to enable the traceability of traded products and the provision of such data to competent



authorities upon request. The exporters may be required by their importing partners to develop their own product tracking system. Recent publications (Köthke, 2020; Setiahadhi et al., 2020) pointed out that small economic operators faced challenges in establishing due diligence systems that, in turn, can affect their interests in importing products from high-risk countries.

Country benchmarking issues

Potential activities for determining the risk category of a country may include assessments of deforestation rates over time, as well as corruption and governance indices. Some interviewees raised concerns about complex administrative procedures and heavy financial burdens for due diligence if Indonesia was to be categorised between ‘standard risk’ and ‘high risk’. Another interviewee suggested that the EU should not use the same risk ranking for all commodities produced in a specific country. In the case of Indonesia, for instance, timber products might be categorised as a ‘low-risk’ commodity, while oil palm could be considered a ‘high-risk’ commodity.

The disputed role of third-party sustainability certification

The EUDR is rather negative about using private certification for companies to conduct a risk assessment. Third-party certification may not be automatically used as a decision support mechanism, let alone as a substitute for undertaking due diligence (EC, 2021a). At the same time, private certification initiatives for FRCs, such as timber (FSC, PEFC, Lembaga Ekolabel Indonesia, LEI), palm oil (RSPO), and coffee (Fair Trade) gained traction in Indonesia (Maryudi, 2015; Pirard et al., 2015; Wahyudi et al., 2020). Table 9 provides an overview of the uptake of different third-party certification schemes in Indonesia.

While not being recognised as proof of due diligence under the EUDR, the potential use of private certification is also subject to the regulatory frameworks to be implemented in Indonesia. The experience with the implementation of the EU-Indonesia FLEGT VPA for timber products also showed that private certification was not automatically deemed as a substitute for the mandatory legality verification under the SLVK in Indonesia.

Table 9. Uptakes of voluntary certification of different commodities in Indonesia (per August 2022)

Commodities	Certification schemes	Uptakes in Indonesia		
		CoC (unit)	FMU (Unit)	Coverage (million hectares)
Timber	FSC	368	37	3.14
	PEFC	47	76	4.05
	LEI	10	20	2.24
Oil palm	RSPO	128	271	2.16
	ISPO	*	763	3.64
Coffee	UTZ	71	10	#
	Rainforest Alliance	#	7	0.005
Cacao	UTZ	71	10	#
	Rainforest Alliance	#	4	0.020

* This certification does not include CoC

Data is unavailable for each commodity

Disputable smallholder practices

Smallholder practices – not only related to tree planting but also growing other commodities such as coffee, cacao, and oil palm – are likely to become an area of intense policy discussion and processes in the context of the new EU zero deforestation policy. Experience from the EU’s FLEGT policy implementation and Indonesia’s timber legality system (SVLK), as well as other market-based policy instruments such as voluntary certification of commodities, clearly provided a lesson on how smallholder tree planting needs specific policy attention. An array of stakeholders interviewed in this study clearly raised concerns about the livelihoods of smallholder farmers when discussing the EUDR’s potential impacts.

Some Indonesian commodities are grown by smallholder farmers. Smallholder tree planting has increasingly become an important source of timber industries in Indonesia. The roles of smallholder practices are even more apparent regarding

other commodities (Figure 9). For instance, approximately half of the Indonesian oil palm was produced by smallholders. A source from the Indonesian Association of Coffee Exporters and Industries mentioned that small-scale farmers produced nearly all Indonesian coffee. A similar case was also mentioned for cacao production.

Concerns about the ability of smallholder farmers to engage in global and EU markets strongly resurfaced while conducting this study. In most cases, interviewees mentioned that the due diligence procedures would clearly lead to additional costs for smallholders, disadvantaging them compared to larger businesses and integrated operations. While referring to smallholders, several informants highlighted issues around fairness and justice and hoped that the EUDR would not further disadvantage them. One interviewee further pointed out technical challenges related to validating deforestation for small-scale operations without using expensive, super-high-resolution images and GIS techniques.

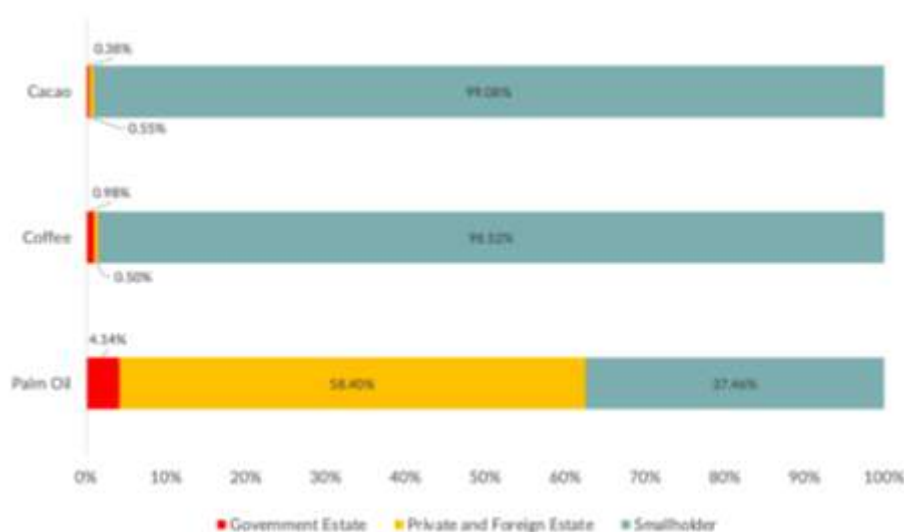



Figure 9. Proportion of smallholders in the production of key commodities.

9.3.2 Impacts of the EU-Indonesia FLEGT VPA

In implementing its proposed deforestation-free policy in the forest sector, the EU and EU Member States will likely draw on it while also moving away from the existing EU-Indonesia FLEGT VPA. Leaked versions of the European Commission’s legal proposal for a EUDR indicated that the FLEGT approach would be discontinued (ClientEarth, 2021). As shown above, FLEGT VPAs have been evaluated as not fit-for-purpose and unsuitable to be adapted to the deforestation-free requirement (EC, 2021a). Additionally, the full green lane market advantage for FLEGT timber under the EUTR would diminish when/if the EUDR repealed the EUTR. Instead, the EU might open new bilateral negotiations and



partnerships with tropical countries or a group of countries (Henn, 2021). In fact, the so-called Forest Partnerships proposed by the European Commission and the legal compliance as the core of FLEGT VPA would be used as a minimum baseline to meet some (legality), but not all (sustainability) obligations under the proposed EUDR (van den Hombergh, 2020).

On the positive side, several interviewees hoped that the EU would respect the bilateral commitments under the EU-Indonesia FLEGT VPA regarding timber products when implementing the EUDR. They also recommended the EU to preserve the timber legality progress achieved with Indonesia so far while exercising further options to meet also the sustainability requirements of the proposed EUDR. Some experts argued that the successful EU-Indonesia FLEGT VPA could place Indonesia as a ‘low-risk’ country regarding due-diligence processes for timber products under the EUDR. This could place Indonesian timber products in a better market position compared to other Indonesian FRCs exported to the EU. This depends, however, on the EUDR’s operationalization and whether multiple bilateral partnerships for different commodities or a single holistic model for the listed commodities will be designed. One interviewee suggested that the Forest Partnerships might cover all the listed commodities and be expanded to other sectors, such as bio-energy.

As previously discussed, the government of Indonesia has continuously improved the SLVK as its national TLAS, for example, by explicitly addressing sustainability issues that may suit the EU’s new sustainability requirements under the EUDR. The experience with the EU-Indonesia FLEGT-VPA, centred around using a national mandatory certification system such as the SLVK, might also serve as a model to negotiate similar partnerships for other commodities, including palm oil (Klaver et al., 2015). Currently, Indonesia has a mandatory certification in place for palm oil, i.e., the Indonesian Sustainable Palm Oil (ISPO) certification scheme, which may provide a basis for formal bilateral negotiations with the EU if it meets the EUDR’s requirements.

9.3.3 Impacts of regulatory changes in non-EU countries

SVLK recognition by other consumer markets

Several stakeholders, including representatives from government administrations, private sectors, associations, and research institutes, stressed the importance of consolidating or expanding exports from Indonesia to other (regional) markets in Asia. East Asian countries, notably China, Japan, and the Republic of Korea, but also non-Asian and non-EU consumer markets, such as the US, are the major export destinations for Indonesian timber products. As previously mentioned, those countries have also begun implementing a legality and sustainability-related regulatory framework.

China

The new development in the forest policy and legal framework in China is particularly interesting to investigate for several reasons. China is Indonesia’s largest trading partner in timber products. Over the past decade, China has become one of the biggest players in global



timber trade, both as an exporting and importing country. It is a main exporter of paper, furniture, particle boards, and plywood (FAO, 2017). Growing investment in China's furniture industry and the rapid development of its paper and plywood industries have boosted furniture, paper products and plywood exports from China (UNECE, 2018). The gap between domestic supply and demand continues to grow, reaching approximately 200 million m³ roundwood equivalent/year (Ke et al., 2019). As a result, timber product imports will continue to rise (Indufor, 2016; FAO, 2019). Consequently, various tropical timber products are mostly traded with China (ITTO TTM, 2020). In general, the main timber products imported by China are in unprocessed and semi-processed forms for further processing (Chen et al., 2015).

Timber products entering China come from both low-risk and high-risk countries in terms of illegality. Industrial softwood logs and sawn timber are imported from mostly low-risk countries but also from Russia, which often draws illegality concerns. In contrast, a large proportion of China's imports of tropical timber have come from countries that are often considered high-risk with weak forest governance and legality concerns, such as Papua New Guinea, Solomon Islands, Equatorial Guinea, Cameroon, and Congo (Global Witness, 2019). Nonetheless, Chinese imports of illegal timber, mainly from tropical countries and Russia, were reported to decrease steadily over the past decade (Indufor, 2016). Forest Trends (2017) reported that the percentage of imports from high-risk countries declined substantially, from 90% in 2006 to 30% in 2016.

As shown above, China has increasingly and explicitly endorsed the fight against trade in illegal timber products. This policy turn has been driven by increasing pressure from importing consumer countries (e.g. the EU, UK, US and Australia) that are concerned about legality and sustainability issues of Chinese timber products. Domestic policies were promulgated to prohibit the trade of timber products, and a timber legality verification system has been developed to influence company behaviour (Zeitlin and Overdeest, 2021). As mentioned above, the amendment of the Chinese Forest Law signals China's increased intent on promoting trade of legal and sustainable timber products due to its high dependence on timber product exports to regulated markets in consumer markets. However, the prohibition of illegal timber products is not yet in force (Fernandez et al., 2021). Additionally, doubts were raised if China can fully implement (with legally binding force) its own rules, including the prohibition to trade timber products originating from illegal sources and unsustainable practices (see Ren and Zhang, 2021).

As previously discussed, the recent timber legality and sustainability policy in China is focused on raising the awareness of its industries about illegality issues in sourcing timber products without specific obligatory risk mitigation measures. For this, China has established several bilateral cooperation agreements, both government-to-government and business-to-business, with tropical producer countries in the Congo Basin (Ren and Zhang, 2021). During an informal discussion involving researchers and timber industries from China and Indonesia in early 2022, presenters from China underlined the country's strong intent to eliminate illegal products from its trade. They also mentioned China's concerns about the negative market impacts of the emerging EUDR. At the same time, Chinese delegates were eager to learn about



the compatibility of SVLK to meet EU timber legality (and sustainability) obligations.


Interviewees further indicated that China might consider cooperation with other trade partners in legal and/or sustainable timber. Indonesia's main product imported by China is pulp which is further processed into paper products and eventually marketed to eco-sensitive regulated markets, such as the EU, UK, and US. This consumer market pressure, coupled with evolving timber and sustainability regulatory changes, should encourage Indonesia's government to actively engage in dialogues with China over the potential recognition of its SVLK. Considering the EU-Indonesia FLEGT VPA experience, Indonesia, with its SVLK, possesses a comparative edge over other China's current trading partners, including the countries that have established similar bilateral cooperation. Thus, there is potential for a mutual partnership between Indonesia and China to promote trade of legal and sustainable timber centred around a formal recognition of SVLK and shared economic interest to continue trading with regulated EU and non-EU consumer markets. The options for cooperation may include a government-to-government model similar to the EU-Indonesia FLEGT VPA and business-to-business models of industry self-regulation.

The US

The US is endowed with rich forest resources and thus produces a vast amount of roundwood and secondary timber products. The main challenge facing the US is the high consumption of timber products. The per capita consumption of timber products is more than triple than the world's average (Wang and Wang, 2012) put this into perspective, the per capita consumption in the US is nearly tenfold that of China (Wang and Wang, 2012). The high consumption in the US is primarily driven by the high timber product demand for house construction and refurbishment. In 2018, new house construction in the country reached 1.25 million units, the highest since 2009 (White, 2019). In 2018, imports of tropical timber products on the US market reached USD 10.4 billion, an increase of 11% from the previous year. The increase in imports from tropical countries was partly driven by trade disputes between the US and China, which encouraged the US to import more from tropical countries, such as Viet Nam (furniture) and Indonesia (furniture and plywood).

As shown above, unlike the EUTR and EU-Indonesia FLEGT VPA, the US Lacey Act Amendment does not formally recognise timber legality systems like the SLVK. Nonetheless, it does not necessarily mean that FLEGT licensing is incompatible with the core due care obligation under the Amendment. The Act gives importers and traders relatively more freedom to determine methods used to ensure compliance and allows them to adapt the depth of their due care efforts to their specific situation (Fernandez et al., 2021).

This may include using FLEGT VPA-like models of timber legality verification and assurance. Stork (2019) argued that there is a potential for a TLAS under the EU FLEGT VPA to help importing operators to also comply with the due care obligation of the US Lacey Act. In fact, in 2018, the lion's share of tropical timber products (87%) was imported from FLEGT VPA partner countries. Stork (2019) further argued that there was a prospect of trade collaboration between the US and EU FLEGT partner countries. The government of Indonesia may hence seek



ways to promote its timber legality system SLVK as proof of verification, including establishing formal bilateral negotiations with the US government over the potential recognition of the legality system.


Japan

Over the past few decades, house construction and timber markets in Japan have grown rapidly for two reasons: (i.) the tradition of house renovation every 20-30 years, and (ii.) the recent rapid development of rented houses, known as 'built for rent' (Forestry Agency, 2015). Approximately half of the domestic timber consumption was for house construction (Forestry Agency, 2015). Since the 1960s, due to the increasing costs of domestic timber exploitation and labour shortage, growing gaps in timber supply have been filled with cheaper timber imports from North America and Southeast Asia, including Indonesia (Forest Agency, 2015). Imports include round wood, sawn wood and wood panels, wood chips and particles, as well as paper and paperboard. Malaysia is by far the main supplier of tropical timber products, covering round wood, sawn wood and plywood to Japan (FAO, 2019). Indonesia is another main supplier of tropical timber to Japan, exporting mainly plywood, sawn timber, and wood chips and particles (FAO, 2019).

In the past two decades, Japan has promoted the transformation of its forest sector into a leading industry with growing concerns about using timber from responsible sources. In 2000, the government issued the Green Purchasing Law (Law No. 100) regulating the procurement of eco-friendly products. In 2005, it also started the promotion of 'Kizukai' as a national campaign for promoting the use of sustainable timber (Forest Agency, 2015). In the following year, the government also issued guidelines on legal verification and sustainable timber, known as 'Goho-wood'. Japan later adopted the 'Act for the promotion of wood use in Public Buildings', which promoted 'green purchasing' by government institutions and private sectors (Ministry of Environment Japan, 2016).

With the Clean Wood Act, the Forest Department of Japan issued methods for verifying legal and sustainable timber. They include (i.) forest certification (such as FSC, PEFC), (ii.) verification by timber associations by developing voluntary ethics, and (iii.) verification by individual companies in compliance with the national guidelines. Unlike the timber legality and sustainability laws in the EU, UK, US and China, the Japanese Clean Wood Act regulations promote the trade of legal timber with the help of non-state market-driven sustainability certification and voluntary industry measures and without using legal bans and enforcing penalties for importing illegal timber.

The government of Indonesia may hence seek ways to promote its SLVK timber legality system as an additional or even superior proof of verification of timber legality in Japan. It may establish formal bilateral negotiations with the Japanese government over the potential recognition of the timber legality system. The Japanese government appears to be open to bilateral dialogues and partnerships on legal and sustainable timber (Japan Federation of Wood Industry Associations, 2009). The government of Indonesia may also seek business-to-business partnership models to which the Japanese government showed a friendly openness (Forestry



Agency, 2015). As of 2016, there were approximately 130 forest and timber business and trade organisations in Japan that have networks with around 7000 companies to supply Goho-wood under the Clean Wood Act (Forestry Agency, 2015).

ROK

Demands of domestic industries for timber and timber consumption in ROK have tended to increase with the impressive economic growth and development of this country's growing population. Due to the limited domestic timber production, imports have mainly fulfilled timber demands (NEPCon, 2018). Although the forest growing stock continues to increase, domestic timber harvests can only be expected in the next two decades (Saunders and Norman, 2019). In particular, the proportion of imports accounted for about 80% of domestic consumption (Lawson, 2014). Imported timber products included pulp and paper, paperboard, round wood, and plywood (FAOStat, 2019). Paper was the main timber product imported into ROK (FAOStat, 2019). In 2016, the country was listed as one of the countries whose paper consumption was more than double that of the global average (Martin and Haggith, 2018). Pulp became one of the main products imported and originated mainly from Chile, Canada, the US, Brazil, and Indonesia (FAOStat, 2019). In addition, paper and paper board imports were mostly made from China, Japan, the US, Finland, and Indonesia (FAOStat, 2019).

Major timber products imported into ROK were sourced from 'high-risk' countries and regions with poor forest governance, poor law enforcement and a high degree of illegal harvests. For instance, round wood entering the country was traditionally sourced from Russia, Papua New Guinea, and Malaysia (Serawak) (Lawson, 2014). A report by Saunders and Norman (2019) also indicated the high proportion of products from high-risk countries, mainly plywood, fibreboard, and particle boards. Considering this, ROK can be considered a less sensitive market for legal timber products. Nonetheless, the domestic policies related to forest and timber industries have shown signals toward more responsible uses. Since 2004, the country has developed criteria and indicators of sustainability within the ITTO framework. It has also targeted a certification of 300.000 hectares of the country's forests under the FSC scheme. ROK also revised the Act on the Sustainable Use of Timbers to promote the trade of legal products with the national implementing standards in 2018.

The Korean Forest Service (2018) highlighted several verification measures. They included (i.) internationally recognised third-party certification, such as FSC, PEFC, and ISO 17065, and (ii.) bilateral agreement with a country that has established a verification system, including documents used in the EU FLEGT VPA initiatives. Nonetheless, legality and sustainability policies may not be enforced in ROK in the near future. Instead, the government of ROK used to emphasise voluntary actions by importers.

This does not necessarily mean formal cooperation with ROK on timber legality is less worthwhile. But the strategies to promote timber legality systems, such as SVLK and FLEGT timber, can be directed more to import operators. The country (ROK) also remains open for private sustainability certification schemes that flourish in Indonesia, although they are not fully tailored in the national legality system SLVK.



9.4 Potential policy and market impacts for other producer countries

Deforestation and tropical timber trade


Tropical forests account for 45% of the world's forests (FAO, 2020). Tropical forests have been experiencing significant deforestation, especially since the 1980s (Ritchie and Roser, 2021). The tropics lost 12 million ha of tree cover in 2018 alone, representing the fourth-highest annual loss since record-keeping began in 2001 (Weisse and Goldman, 2019). It was reported that 95% of recent global deforestation occurred in tropical regions, with Latin America and Southeast Asia contributing 59% and 28%, respectively (Ritchie and Roser, 2021). Agricultural expansion, both large-scale commercial agriculture and subsistence agriculture, continues to be the main driver of deforestation, whereas unsustainable (illegal) forest management and illegal forest use contribute to forest degradation.

Trade in tropical timber products represents roughly 20% of global trade in timber products (Pepke et al., 2018). More specifically, trade in tropical timber products is primarily coordinated between producer and consumer countries under the ITTO. The ITTO is the key intergovernmental organisation promoting the sustainable management and conservation of tropical forests and the expansion and diversification of international trade in tropical timber from sustainably managed and legally harvested forests. ITTO countries' membership represents about 90% of the global tropical timber trade and more than 80% of the world's tropical forests (ITTO TTM, 2022a). The market for tropical timber has grown but remains significantly lower than its peak during the early 2000s (Ingram et al., 2020). Round wood initially dominated the volumes of timber traded, but its share declined sharply since several tropical countries either started capturing value-added benefits or legislating log export bans (Pepke et al., 2018).

Traditionally, the EU, the US and Japan were the major importers of tropical wood products (Gan et al., 2016). However, several producer countries shifted their exports towards growing domestic and regional markets and new markets in Asia (Teeuwen et al., 2019). China, India, and Viet Nam have become the principal importers of tropical logs. For instance, in 2019, China's imports accounted for 66% of ITTO tropical log imports, followed by India and Viet Nam, with shares of 18% and 6%, respectively (ITTO TTM, 2020). Furthermore, the bulk of the imports of tropical sawn-wood (86%) lay within the Asia-Pacific region, with those three countries as the major importers (ITTO TTM, 2020).

Impacts of EU FLEGT

As shown above, some key producing countries have engaged in negotiating and implementing FLEGT VPAs with the EU (Table 2). In addition to the aforementioned results about Indonesia, several interview partners from other VPA countries, such as Guyana, Cameroon, Ghana, and Viet Nam, provided useful information and



assessments for this study. While many dynamics and differences in the scales of the impacts among these VPA countries were mentioned, interview partners generally agreed that FLEGT VPAs had produced positive impacts. Like in Indonesia, it was mentioned that FLEGT most significantly improved domestic forest governance. The interviewees from Cameroon, Ghana, Guyana and Viet Nam highlighted that FLEGT VPA processes had led to the democratisation of the forest sector by opening spaces for multi-stakeholders engagement.

In terms of forest law enforcement, interviewees from Cameroon claimed that the country's TLAS, Forest Information Management System (SIGIF), has helped improve documentation of the forest industries and reduced the costs of paperwork for the production and trade of timber. Although the SIGIF was considered a robust and credible system with the potential to be recognised as a national TLAS and FLEGT-licensing system by the EU, Cameroon continues improving the system (now SIGIF2) as it was considered necessary for regulating the national forest industries, too.

An interviewee from Ghana offered a different insight. Ghana's process of obtaining recognition by the EU for issuing FLEGT licenses through their national TLAS was complicated by the country's forest tenure system. The government's attempts to fit the local forest tenure system into the national system were assessed to be very challenging. The lack of benefits for local communities was further indicated as a key issue Ghana is now facing in implementing a FLEGT VPA with the EU.

Impacts of the EU Deforestation Regulation

Key producing countries might react differently to the new policy changes in the EU promoting zero-deforestation and forest degradation next to legal forestry, as well as the legality of timber and forest-risk agricultural commodities in the UK and the US. The zero-deforestation obligations under the EUDR were expected to discourage EU importers from sourcing from Cameroon, Cambodia or the Democratic Republic of Congo, given the limited efforts in these countries in the fight against deforestation (Karsenty, 2022). It was also assessed that tropical countries with relatively poor forest practices and often considered as high-risk in terms of legality, such as Papua New Guinea, Solomon Islands, Myanmar, and Nigeria (see Lin et al., 2021), would not be meeting the EUDR's obligations and more likely to maintain their focus on Asian markets, including new emerging markets in India.

An interviewee from Brazil mentioned that the government might be cautious with the EUDR as the country is a key exporter of beef products to the EU and soy to China. So far, the country's exports have not been heavily affected by the trade policies regarding timber legality in the EU (EUTR) or China (new Forest Law Amendment). Hence, the interviewee expected that Brazil would be looking to source its products on markets with similar laxer regulations (legality but not sustainability) regardless of the new EU deforestation policy. As explained, Brazil is now on good terms with its trade partners, especially China, with its lower standards, preferring cheap and good quality products without requesting 'sustainability'. The interviewee said Brazil would strengthen its trade with less-sensitive markets and seek new markets with no or fewer trade barriers when/if the EU adopts and fully implements the more demanding



EUDR.

Interview partners from Cameroon and Guyana mentioned that there were no concrete policy discussions and decision-making processes in these countries responding to the emerging EUDR. However, they expected more intense policy responses upon the EUDR's adoption and implementation. Still, one interviewee voiced concern over the potential adverse impacts of this EU zero deforestation policy on Guyana since 'there was no talk about sustainability and no deforestation'. Representatives from Guyana also felt that the EU should consider the fact that this tropical country had the lowest deforestation rate in the world. Interviewees for Cameroon also said that their government might not be interested in engaging in the implementation of the EU zero deforestation policy. Instead, the Cameroon government was expected to be placing the consequences of implementing the EUDR on the private sector when trading timber and FRCs with the EU. They also underlined that the policy and market response of Cameroon to the EUDR would be mainly driven by the fact that the country also exports their timber and FRCs to other consumer markets in Asia, especially in China, Viet Nam, and India that place little legality and sustainability standards as requirements for trade.


Some interviewees from tropical countries questioned the EU approach in not actively consulting the new EUDR with them as partner countries negotiating and implementing a FLEGT VPA with the EU. This is illustrated by a quote from a representative from Guyana: '[...] out of the blue, the EU dropped this bombshell on us [...] No deforestation and sustainability and other things'. In general, interviewees stressed that VPA countries hoped the EU would still respect bilateral FLEGT VPAs in that the EU would consider and not discount the progress made in VPA amidst the new EUDR. One interviewee from Guyana stressed that 'VPA goes beyond just the origin of timber, and it had to have that social environmental components' that should underline the VPA between the EU and the tropical countries.

Potential policy and market responses of producer countries

While it is challenging to foresee the near future, this study suggests an analytical approach (following Maini, 2003; Cashore et al., 2004; McDermott and Sotirov, 2018, Maryudi et al., 2021) to explore policy responses of different producer and exporting countries to the EUDR. This analytical framework is based on the interplay of internal and external factors of the respective countries and includes the following drivers and barriers of policy and firm-level behavioural responses:

Importance of FRCs to the national economy and their position in global trade

In general, FRCs, such as timber, palm oil, soy, beef, cacao, and coffee, play a key role in the national economy of many tropical countries. Timber products have been the main foreign exchange earners for Brazil, Indonesia, Malaysia, Guyana, and most Congo Basin countries for decades. The timber industry has also become an important sector in Viet Nam. In addition to the national economy, the timber industry also plays a key role in the livelihood of local people and smallholders in some countries such as Cameroon and Ghana. While timber products remain important, several tropical countries have now shifted to other forest-risk agricultural




commodities. This includes soybeans for Brazil, palm oil for Indonesia and Malaysia, and cacao for Ghana, Viet Nam and Indonesia. The export of these FRCs has increased at pace over the past few years. According to an interviewee, Brazil aims to increase the production of cattle/beef products and soy that will consequently need more agricultural land, which would result in forest clearings and deforestation. Brazil is a powerhouse in the global trade of cattle/beef and soy commodities (Avileis and Mallory, 2022; Rahman, 2020; Cadby and Araki, 2021). Another interviewee also suggested that cacao is now the backbone of Ghana's economy since the country is now the worldwide second-biggest producer of cacao.

Safeguarding the national economy, in particular through maintaining the economic contribution of land-based FRCs, is likely to be the most defining factor in encouraging those countries to actively respond to the recent policy change processes, domestically and internationally, triggered by the EU, UK and US policies governing legality or legality and sustainability of timber and agricultural FRCs. Brazil and Indonesia have already confirmed their readiness to respond actively to emerging policy changes (Marzano, 2021; Jong, 2020; Ellis-Petersen, 2021). Other interviewees suggested that Cameroon, Ghana, and Viet Nam are also eager to learn more about and shape the operationalization of the emerging EU zero deforestation policy. Several sources from China expressed a similar notion during an online meeting with Indonesian partners. In combination with other economic factors, such as market dependence and the high proportion of exports to the EU and US, safeguarding the national economy is likely to facilitate more intense domestic policy responses. The policy dilemma would be to decide (i.) whether and how to adapt the national policy and legal framework to meet both the existing and newly emerging obligations on EU and non-EU consumer markets to fight illegal logging and associated trade as well as to avoid deforestation and forest degradation, or (ii.) to switch to other trade strategies, especially to redirect exports to less sensitive and less demanding international consumer markets, for example in Asia (China, India, Viet Nam), or to regional and local markets.

Current trade patterns of FRCs with the EU and US and alternative markets

Many tropical timber producers have reduced their trade with Europe (EU-27, UK) which used to be their main export market (Teeuwen et al., 2019). At the same time, the EU's imports of both primary and secondary tropical timber products have also declined in recent years (Teeuwen et al., 2019). Instead, the six Congo Basin countries have turned to China as a trade partner, which is now the largest market for their timber products (Ren and Zhang, 2021). While outside of the scope of this study, current trade patterns of other FRCs are also an important factor. For instance, with its relatively low export values to the EU and US compared to China (Adjemian et al., 2021), Brazil might not necessarily push for drastic domestic policy changes that would otherwise compromise its production and exports of soybeans. An interviewee said that Brazil generally focuses on national economic development, which pushes their FRC industry development system in beef and soy production sectors. Currently, Brazil's main trade partner is China which has surpassed the US. Hence, it can be expected that Brazil would not make any drastic policy and trade changes to meet ever-



increasing standard requirements in the EU, the UK, and the US unless this would be very strategic for the national economy.

On the other hand, high dependence on EU and other sensitive non-EU consumer markets can be a key factor for persuading a country to engage in policy and market changes in response to the new deforestation policies. One interviewee said that the share of cacao exports from Ghana to the EU is significant, and as such, it can be regarded as a supporting factor for the country's active engagement with EU policies. Similarly, the high share of timber exports, principally plywood and furniture, to EU, UK and US markets should encourage Viet Nam to actively seek measures to respond to the legality and sustainability-gear policy and legal changes in the EU, the UK, the US, and China to a lesser degree. An interviewee revealed that Viet Nam has currently taken a strong position as a dominant timber-producing, consuming and exporting country. Viet Nam is encouraged to join the FLEGT VPA process with the EU to build a better image of their timber products and foster economic development of their national timber industries even though the EU is a relatively small trade partner compared to the US, their main trade partner.

Enforcement of deforestation policies

As shown above, the experience with FLEGT policy implementation showed different enforcement levels of the EUTR/EU FLEGT Regulation and other FLEGT VPA commitments across EU countries. Challenges in implementing timber legality policies were also reported for other non-EU consumer countries, like the US, Australia, and China. On the supply-side, several VPA countries such as Cameroon, Guyana and Viet Nam voiced their concern over technical difficulties in setting up national TLAS due to issues with their database and information systems despite progress in implementing FLEGT VPAs with the EU. Similarly, Ghana has faced difficulties on more substantial issues, such as local forest tenure arrangements to fit the EU FLEGT VPA requirements. However, many tropical countries have also lagged behind in implementing the FLEGT commitments for various political, economic and social reasons.

The challenges in implementing existing commitments on both the demand and supply-side, such as the transnational FLEGT policy, would define the future policy responses of tropical countries to newly emerging deforestation policies in the EU, UK, and US. In particular, tropical countries may not consider the emerging EU zero-deforestation policy as a strong push for drastic policy changes if and as long as EU Member States do not enforce their own EU policies and laws coherently and effectively, and other non-EU consumer regions have not adopted more demanding zero-deforestation obligations similar to the EUDR. For example, the aforementioned results show that the emerging UK and US deforestation policies and laws are mostly relevant to the legality of agricultural FRCs, whereas tropical timber products will remain subject to legal obligations under the existing timber legality rules (UKTR, US Lacey Act).

Commitments to international policies to tackle deforestation

Commitments to international policies to tackle deforestation are also predicted to play an important factor in influencing the response of tropical countries. This includes commitments



made by the countries to the existing forest-related international regimes such as CBD/Aichi Targets/Post 2020 Global Biodiversity Policy Framework, UNFCCC/REDD, and regional cooperation on the trade of legal/ sustainable FRCs. Progress and commitments of tropical countries' FLEGT VPAs with the EU could also determine their policy responses. As previously argued, there is a degree of probability that the EU would use its experience of implementing its FLEGT policy as the basis for the proposed EU zero deforestation policy. Seven countries have signed a VPA with the EU and are currently developing a licencing scheme, and nine more are in negotiations with the EU (Maryudi et al., 2020). Countries whose VPA negotiations with the EU are at the initial stages, such as Côte d'Ivoire, the Democratic Republic of the Congo, Gabon, and Laos, might reorient their policy and potentially abandon their respective negotiations if and as long as their future national TLAS and FLEGT licensing systems are not playing a key role in ensuring zero deforestation commitments in the timber trade sector under the EUDR, and the UK and US deforestation policies. On the other hand, countries with advanced VPA implementation, such as Cameroon, Ghana, the Republic of the Congo, and Viet Nam, might keep their options open on how to respond to the EU's proposed zero deforestation policy changes. Particularly, because their respective national TLAS are nearly in completion, Ghana and Viet Nam would be interested in getting recognition of their timber legality systems and better market uptake of their (potential) FLEGT-licensed timber from EU policy and market.

Current domestic deforestation policies and practices

Deforestation continues to occur in tropical countries at different scales. In terms of absolute deforestation, Brazil, the Democratic Republic of Congo, Indonesia, and Angola are at the top of the global deforestation chart between 2010 and 2020 (FAO, 2020). In contrast, in terms of net annual change (%), Côte d'Ivoire leads deforestation among tropical countries (FAO, 2020). The extent to which tropical countries are making progress in halting deforestation, including the existing forest and land-use regulations and depending on whether they already fit with the proposed legality and sustainability norms in the EU, UK and US, positive engagement of tropical countries with the consumer markets' deforestation obligations and commitments could be expected.

However, several tropical countries have different interpretations of forests and deforestation. For instance, Indonesia distinguishes between legal and illegal deforestation. Similarly, Brazil's Forest Code still allows 20% of land to be legally deforested for other purposes. The legal conversions of forests for agricultural cropping could prove critical. When implemented and strongly enforced, the proposed policy changes in the EU, UK and US might require significant forest governance reforms in tropical countries if they wish to maintain their respective trade with these importing EU and non-EU consumer regions.

The likely policy scenario is that tropical countries would be adversely impacted by the proposed policy changes in Europe (EU, UK) and the US. The consequence would be vibrant domestic and international policy discussions and technical engagements. In general, the recent deforestation policy changes in Europe and the US will likely result in policy and market leakage characterised by Asian countries (China, India, Viet Nam) becoming even more relevant and bigger markets for tropical timber. As previously discussed, despite



the increased policy commitments on the trade of legal and sustainable timber products, China is unlikely to take drastic actions to fully introduce strict legality and sustainability measures in the short term.

10. Summary conclusions

The present policy support study aimed at providing a greater understanding of the global policy context with regard to the global trade in tropical timber, forest products and agricultural forest risk commodities from the perspective of producer countries, in particular, but not limited to, Indonesia, and consumer countries, including but not limited to the EU.

To this end, data from a content analysis of documents, interviews, and stakeholder surveys were collected to address the following three separate but interrelated research questions: (1.) How is the current FLEGT policy functioning in the EU, the UK and Indonesia? (2.) What are the new demand-side deforestation policy measures emerging in the EU, the UK, the US and China? (3.) What are the implications for Indonesia and other tropical producer countries in the context of existing and newly evolving international policies and legal frameworks?

In the following, we provide answers to these questions by summarising the main evidence presented in this report and relating the main study findings to a set of related main topics and subquestions.

1. Functioning of FLEGT policy in Europe (EU and UK)

1.1. Implementation of EU FLEGT VPAs, EU FLEGT Regulation, and EUTR

Sub-question 1: *What is the status of implementing the EU FLEGT Action Plan (FLEGT VPAs, FLEGT Regulation, EUTR) in the EU-27 and the UK (before the EU-UK withdrawal)?*

- Realising the full FLEGT VPA's theory of change is negatively impacted by the fact that Indonesia remains the only tropical country that successfully and fully implements a FLEGT VPA with the EU.
- Since law adoption, EU Member States (incl. UK before EU withdrawal) have implemented the FLEGT Regulation/EUTR in an inconsistent way across countries and enforced the regulations insufficiently.
- The lack of harmonised implementation and strict enforcement of the EU FLEGT Regulation/EUTR on the demand-side in the EU countries has weakened the policy support and the 'green lane' market advantages of FLEGT-licensing for supply-side partner countries (Indonesia).
- There is still a lack of sufficient knowledge and positive awareness about FLEGT timber

among governmental authorities and economic operators in the EU27 and the UK.

Sub-question 2: *How have EU FLEGT policies changed in the UK after the EU withdrawal?*

- The UK transferred the EUTR into the UKTR and the EU FLEGT Regulation into the UK FLEGT Regulation after the EU withdrawal.
- The provisions of the EUTR and UKTR are essentially the same except for which consumer market (EU vs UK) timber and timber products are placed.
- The UK ratified a UK-Indonesia FLEGT VPA (not yet in force, to be ratified by Indonesia) following the EU-FLEGT VPA design.

Sub-question 3: *How has implementing state authorities' and firms' behaviour changed during the EU FLEGT/EUTR implementation?*

- Competent authorities in the EU Member States have transferred the EUTR into national legislation and worked collectively to improve the EUTR's implementation and enforcement within and across countries.
- While EU institutions and Member State authorities have made progress in implementing the EU FLEGT Regulation / EUTR, the complex regulatory design, different political priorities and the insufficient capacities of implementing authorities have constrained effective and coherent implementation and enforcement of the EU timber legality rules.
- While the 'green lane' for FLEGT-licensed timber under the EUTR has initially increased EU traders' demand for Indonesian timber imports on the EU market, the interest has lowered and only bears fruit when tropical timber is traded in conjunction with additional sustainability proofs (e.g. FSC and/or PEFC forest certification).
- Among the economic operators and traders, mainly large companies and industries (e.g. traders, retailers) and some traditional forest sector SMEs have been more aware and successful in implementing the EU FLEGT Regulation/EUTR through due diligence and legal sourcing along their supply chains.
- At the same time, SMEs, and larger businesses and industries outside the traditional forest sector, have remained insufficiently aware of their obligations and faced challenges in complying with the EU timber legality laws.
- Illegal timber and timber products continue to be traded on the EU market.

1.2. Implementation of EU Timber Procurement Policies

Sub-question 4: *What is the status of implementing public and private TPP in the EU-27 and the UK?*

- The EU agreed under Article 13 of the EU-Indonesia FLEGT VPA to provide policy support for, stimulate market demand for and encourage a positive perception of FLEGT-licensed timber from Indonesia.
- TPP, such as public timber procurement regulations and non-state market-driven certification, have been suggested as key mechanisms to increase the EU policy support and market demand for FLEGT-licensed timber.
- Formally, EU institutions and Member State authorities have implemented TPP policy actions, including EU GPP criteria and 'green lane' acceptance of FLEGT-licensed timber as legal timber not subject to due diligence obligations under the EUTR.
- In the beginning, EU institutions, Member States, and international organisations engaged in awareness raising and other supportive actions for FLEGT timber-supportive TPPs.
- Other facilitating actions at the initial phase included training for competent authority staff, FLEGT facilities and governmental funding for FLEGT-focused programmes and projects.
- EU and Member State higher level policy actions have seemingly fulfilled FLEGT VPA-related commitments formally. However, the national and practical implementation of TPPs have faced a range of shortcomings compromising effective policy and market support for FLEGT timber.
- The main challenges in most EU Member States include the lack of knowledge about and lower prioritisation for FLEGT-licensed timber at the expense of third-party forest certification in national TPPs, unclear implementation guidelines, diffuse definitions and standards, as well as insufficient practical application.
- In most EU countries, even those heavily dependent on tropical timber imports, FLEGT-licensed timber is neither prioritised as award criteria nor accepted as proof of sustainability in national TPPs.
- Private sector companies, especially multinational trade and retail companies, have mainly used third-party sustainability certification of forest management and timber chains of custody as private timber procurement policies.
- While private sector companies have used certified timber under the FSC and PEFC schemes for gaining market access, reaping price premiums and exercising peer pressure on market competitors, they have developed little knowledge about using FLEGT-licensed timber in their private procurement policies.
- At the same time, due to reduced time and costs for due diligence under the EUTR, FLEGT-licensed timber plays an important role for timber trading companies in EU countries

(Amsterdam group) that are heavily dependent on tropical timber products.

Sub-question 5: *To what degree is Indonesia's SVLK perceived by the EU and non-EU markets as providing licenses for legal timber and as a standard that also takes into account sustainability criteria (i.e., deforestation-free)?*

- The SVLK, a standard that certifies both legal and sustainable timber, is not very known among national authorities and economic operators in the EU and non-EU consumer markets.
- There are still important knowledge gaps and uncertainties among state authorities and economic operators on the demand-side around the value and credibility of the SVLK as a FLEGT legal timber license and sustainable timber standard.
- While several supply-side interviewees highlighted SVLK's similarities to FSC and PEFC in terms of fulfilling sustainability criteria, market actors and state authorities in Europe (EU27+UK) and the US do not perceive SVLK as fulfilling sustainability criteria, when compared to third-party schemes (FSC, PEFC).
- Several Indonesian interviewees highlighted SVLK as already fulfilling the majority of sustainability criteria and perceived that few additional actions were required for SVLK to fully fulfil EU sustainability standards.
- The complete acceptance of SVLK could be economically achieved when more EU countries import larger numbers of FLEGT-licensed timber and when the cost and criteria fulfilment meet with the best price-performance ratio. Politically, the acceptance can be enhanced by a supportive and coherent implementation of FLEGT-supportive policies designed and implemented by state authorities in EU and non-EU consumer regions.

2. Functioning of FLEGT policy in Indonesia

2.1. Impacts of EU FLEGT policy on forest policy and governance in Indonesia

Sub-question 6: *What evidence exists regarding the impacts of the FLEGT VPA process with regard to forest policy, governance and the rule of law in Indonesia?*

- The EU-Indonesia FLEGT VPA implementation has supported an inclusive and participatory multi-stakeholder process in developing a fully operational TLAS through the SVLK.
- The SVLK comprises two sets of standards, i.e., legality (VLK) for different types of processing industries and sustainability (PHPL) of forest operations.
- The implementation of the SVLK has fostered legality compliance in timber value chains, facilitated more coherent and harmonised policies, and provided an option for solving problems related to illegal logging and the trade of illegal timber products.
- The SVLK implementation has also strengthened national forest institutional designs and provided enabling conditions for legal and more sustainable forest practices.

2.2. Impacts of EU FLEGT policy on forest businesses and industries in Indonesia

Sub-question 7: *How did FLEGT reforms under the VPA and EUTR shift the thinking and behaviour of Indonesian businesses in the forest sector?*

- Legality verification is enforced for all exports, not only to the EU, aimed at curtailing potential leakages or circumvention of non-legally verified product exports to non-EU markets.
- The adoption of SVLK increased in both upstream and downstream operations, driven by the expectation of market incentives.
- The government facilitated SVLK adoption with the view of capturing promised market incentives.

Sub-question 8: *To what degree have the economic benefits to Indonesia materialised, as set out in the EU-Indonesia FLEGT VPA?*

- FLEGT exports of Indonesian timber products have fluctuated in general.
- While FLEGT exports to the EU market tended to increase slightly following the full-fledged FLEGT licensing after 2016-2018, timber exports to the EU market have lately stagnated.
- There is limited evidence showing direct positive links between fully operational SVLK as TLAS under the EU-Indonesia FLEGT VPA and the marketing of Indonesian timber

products on the EU market.

- Despite formal commitments, there is growing dissatisfaction among governmental and business actors in Indonesia towards the EU and its Member States regarding their limited concrete and effective actions to promote FLEGT-licensed products through policy and market actions.

3. Emerging demand-side regulatory policy changes in Europe (EU, UK), the US, and China

3.1. Regulatory policy changes in the EU

Sub-question 9: *What is the new demand-side deforestation policy emerging in the EU?*

- The EUTR would be repealed by the newly emerging EUDR. This new EU zero-deforestation policy focuses not only on timber but also on forest-risk agricultural commodities (palm oil, soy, beef/cattle, cacao, coffee).
- The EUDR would demand both legality and sustainability standards for timber and forest-risk agricultural commodities being placed on the EU market.
- Like under the EUTR, FLEGT-licensed timber would fulfil the EUDR's legality obligation. However, the EUDR would not grant a full green lane to the EU market for FLEGT-licensed timber and timber products. FLEGT licenses would not be accepted as proof of complying with the EUDR's sustainability standard (i.e., zero deforestation and zero forest degradation).
- The EUDR would put higher legislative requirements and result in higher administrative and economic burdens for tropical producer countries such as Indonesia and European importers.

Sub-question 10: *Who are the supporters and opponents of the EU zero deforestation policy?*

- The EUDR has received overwhelming support from environmental and social NGOs expecting biodiversity conservation and social right protection. Like-minded EU institutions, such as the European Commission and the European Parliament, supported the EUDR based on interests in regulating consumption, international trade and deforestation and forest degradation-linked supply chains.
- There is also wide support for the new EUDR from import-dependent EU countries, EU and transnational businesses and industry organisations, mainly larger retailers and traders.

They are interested in fulfilling regulatory policy preferences and reaping economic benefits, including reputational gains, a levelled playing field or market protectionism.

- Opposition has mainly come from specific FRC-import-dependent EU and transnational businesses and industry associations, particularly in the beef and palm oil sectors. They are concerned with economic disadvantages, including supply shortages, legal and administrative burdens, economic costs, complicated international trade, limited market access and increased competition.
- Governmental authorities, as well as businesses and industry associations in tropical producer countries, have also opposed the EUDR due to similar economic concerns, including competitive disadvantages, discriminatory trade restrictions, restrictions in clearing land for economic and social development, impacts on small-holders and domestic businesses, increased costs, legal, and administrative burdens.

3.2. Regulatory policy changes in the UK

Sub-question 11: *What is the new demand-side deforestation policy emerging in the UK, and who are the supporters and opponents?*

- Similar to the EU, the UK started regulating transnational agricultural commodity supply chains to address consumption-driven deforestation.
- With the proposed UK Environment Act, the UK is planning to introduce a due diligence system to discourage illegal forest-risk agricultural commodities from entering the UK market.
- The main difference compared to the EU is that the UK will continue to request only legality: for timber and timber products under the UKTR and for deforestation-related agricultural commodities under the UK Environment Act.
- Unlike the EU, the UK regulatory changes will continue to focus on commodity legality and do not include sustainability standards such as zero deforestation and zero forest degradation.
- As in the EU, there has been a strong public (NGOs) and political (governmental) momentum in favour of new due diligence provisions in the UK.

3.3. Regulatory policy changes in the US

Sub-question 12: *What is the new demand-side deforestation policy emerging in the US, and who are the supporters and opponents?*

- Similar to the UK, the US is in the process of adopting the FOREST Act – introduced in the Senate in 2021 – to request the legality of forest-risk agricultural commodities entering the US market.

- Like in the UK, the legality of timber and timber products will continue to be regulated and requested under separate legislation, the US Lacey Act Amendment from 2008.
- Unlike the EUDR, the US FOREST Act would continue to focus on commodity legality and not cover sustainability standards such as zero deforestation and zero forest degradation.
- Similar to the EU, the US is planning to introduce a deforestation risk-rating system to benchmark producer countries in addition to adopting new import declaration requirements.
- Unlike in the EU and the UK, there has been a weak political momentum for the proposed FOREST Act of 2021 due to the divided party politics in the country.

3.4. Regulatory changes in China

Sub-question 13: *What is the new demand-side deforestation policy in China, and who are the supporters and opponents?*

- China has amended its Forest Law to introduce demand-side legislative obligations for timber legality.
- However, the particular details and regulatory scope of the Forest Law Amendment are less ambitious when compared to the EU and non-EU market regulations.
- Unlike the EU, UK and US, China has not decided to introduce regulatory changes to govern deforestation and forest degradation driven by transnational trade in forest-risk agricultural commodities and timber products. Neither sustainability has been regulated so far.
- The political context in China and restrictions on environmental and social NGOs and foreign actors operating in the country may hinder the adoption of legislation more similar to that existing in the EU, UK or US.

4. Implications of the regulatory changes on reforms in Indonesia and other tropical countries

4.1. Impacts of the EU zero deforestation policy on Indonesia

Sub-question 14: *What are the perceived impacts of the EU regulatory policy changes in Indonesia?*

- The EU's deforestation-free policy is widely regarded by stakeholders in Indonesia as another form of barrier to trade and is thought to negatively impact Indonesia's main export commodities, specifically oil palm.
- There are mismatches of definitions of forest and deforestation used by the EU and the Indonesian land-use regulatory frameworks that are defined beyond biophysical features.
- The EU's policy is thought to adversely impact commodities produced from forested landscapes outside Forest Zones and legal deforestation.
- It is also considered that the EUDR would further increase the burden of smallholder practices which heavily characterise the production of several commodities.
- FLEGT-VPAs are not seen as fit-for-purpose under the EUDR and are regarded as unsuitable to meet deforestation-free requirements, placing potential additional trade requirements for Indonesian timber products.
- Despite progress made in both mandatory and voluntary certification, Indonesia will likely face more challenges in exporting major commodities, such as oil palm.

4.2. Impacts of non-EU consumer market regulations on Indonesia

Sub-question 15: *To what degree is FLEGT licensing under TLAS, such as SLVK, recognised or has the potential to be recognised by other consumer markets in Asia (such as China, Japan, ROK) and further afield (US) as a credible legality standard that meets domestic import requirements?*

- Amidst uncertainties around the EU's zero deforestation policy, stakeholders in Indonesia saw the importance of consolidating exports to Asian countries, the core export destinations of several commodities, including timber and oil palm.
- Timber legality policies in China and ROK share some similarities with the EUTR (including mandatory bans, due diligence obligations and the controlling and sanctioning of non-compliance).
- China has begun to establish cooperation, both business-to-business and government-to-government cooperation, with several producing countries; Indonesia could see this as an



opportunity to establish similar cooperation focusing on the formal recognition of SVLK.

- The US expands its import regulations and enforcement, not only to timber with the Lacey Act Amendment but also to other forest-related agricultural products under the US FOREST Act. Indonesian SVLK might still be compatible through adaptation necessary to cover legality in deforestation issues.
- US regulations do not specify a formal mechanism for recognising timber legality systems, instead placing responsibilities on importers. Business-to-business cooperation on SVLK recognition is thus more feasible.
- Timber legality policies in Japan and ROK remain focused on voluntary actions to promote legal and/or sustainable timber. This could bring both market advantages and disadvantages to FLEGT timber from Indonesia and other tropical countries.
- Hundreds of Japanese timber businesses and trade organisations have established networks for supplying legal/sustainable wood. Hence, Indonesia and other tropical countries could explore the business-to-business approach more.

Bibliography

117th Congress, 2021. Fostering Overseas Rule of Law and Environmentally Sound Trade Act of 2021. URL <https://www.govinfo.gov/app/details/BILLS-117hr5508ih> (accessed 11 November 2022).

Acheampong, E., Maryudi, A., 2020. Avoiding legality: Timber producers' strategies and motivations under FLEGT in Ghana and Indonesia. *Forest Policy and Economics* 111, 1-8. <http://dx.doi.org/10.1016/j.forpol.2019.102047>.

Adjemian, M.K., Smith, A., He, W., 2021. Estimating the market effect of a trade war: The case of soybean tariffs. *Food Policy* 105, 102152. <https://doi.org/10.1016/j.foodpol.2021.102152>.

Amsterdam Declarations Partnership, 2021. Amsterdam Declarations Partnership - About. URL <https://ad-partnership.org/about/> (accessed 20 April 2022).

Andhov, M., Caranta, R., Stoffel, T. et al., 2020. Sustainability through public procurement: The way forward – reform proposals. *SSRN Journal*. <https://doi.org/10.2139/ssrn.3559393>.

Arcilla, N., Holbech, L. H., O'Donnell, S., 2015. Severe declines of understory birds follow illegal logging in upper Guinea forests of Ghana, West Africa. *Biological Conservation* 188, 41-49. <https://doi.org/10.1016/j.biocon.2015.02.010>.

Astana, S., Riva, W.F., Hardiyanto, G., Komarudin, H., Sukanda, A., 2020. Towards improved forestry performance: Evaluating the added value of the timber legality assurance system in Indonesia. *International Forest Review* 22, 19-32. <https://doi.org/10.1505/146554820828671517>.

Avileis, F.G., Mallory, M.L., 2022. The impact of Brazil on global grain dynamics: A study on cross-market volatility spillovers. *Agricultural Economics* 53, 231-245. <https://doi.org/10.1111/agec.12693>.

Bager, S.L., Persson, U.M., dos Reis, T.N.P., 2021. Eighty-six EU policy options for reducing imported deforestation. *One Earth* 4, 289–306. <https://doi.org/10.1016/j.oneear.2021.01.011>.

Bakhtiar, I., Suradiredja, D., Santoso, H., Saputra, W., 2019. Hutan kita bersawit- Gagasan penyelesaian untuk perkebunan kelapa sawit dalam kawasan hutan. Yayasan KEHATI, Jakarta

Bartley, T., 2014. Transnational governance and the re-centered state: Sustainability or legality?. *Regulation & Governance* 8, 93-109. <https://doi.org/10.1111/rego.12051>.





Brack, D., 2014. Promoting legal and sustainable timber: Using public procurement policy. Chatham House, the Royal Institute of International Affairs, London.

Brack, D., Fripp, E., 2018. Draft proposal: GPP/Ecolabel criteria for timber and timber products-final report. Publications Office of the European Union, Luxembourg.

Burkhardt, D., 2020. Report with recommendations to the Commission on an EU legal framework to halt and reverse EU-driven global deforestation (2020/2006(INL)). A9-0179/2020. European Parliament.

Cadby, J., Araki, T., 2021. Towards ethical chocolate: Multicriterial identifiers, pricing structures, and the role of the specialty cacao industry in sustainable development. *SN Business & Economics* 1, 11-36. <https://doi.org/10.1007/s43546-021-00051-y>.

Cashore, B.W., Auld, G., Newsom, D., 2004. Governing through markets: Forest certification and the emergence of non-state authority. Yale University Press.

Cashore, B., Leipold, S., Cerutti, P.O., et al., 2016. Global governance approaches to addressing illegal logging: Uptake and lessons learned. In: Kleinschmit, D., Mansourian, S., Wildburger, C., Purrel, A. (Eds.), *Illegal logging and related timber trade - Dimensions, drivers, impacts and responses. A global scientific rapid response assessment report. Interconnecting Forests, Science and People (IUFRO)*, Vienna.

Cashore, B., Stone, M.W., 2012. Can legality verification rescue global forest governance?: Analyzing the potential of public and private policy intersection to ameliorate forest challenges in Southeast Asia. *Forest Policy and Economics* 18, 13–22. <https://doi.org/10.1016/j.forpol.2011.12.005>.


Council of the European Union (CEU), 2003. Council conclusions - Forest Law Enforcement, Governance and Trade (FLEGT). 2003/C 268/01. Official Journal of the European Union.

CEU, 2005. Council 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. OJ L 347. Council of the European Union.

CEU, 2017. Outcome of the Council meeting - 3562nd Council meeting - Agriculture and Fisheries. Council of the European Union. Luxembourg.

CEU, 2019. Outcome of proceedings: Conclusions of the Council and of the governments of the Member States sitting in the Council on the communication on stepping up EU action to protect and restore the world's forests. 15151/19. Council of the European Union, Brussels.

CEU, 2022a. Draft 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 – General approach. 10284/22. Council of the European Union, Brussels.

CEU, 2022b. Agriculture and Fisheries Council. Public session 21 February 2022. Commodities associated with deforestation and forest degradation. URL <https://video.consilium.europa.eu/event/en/25485> (accessed 17 August 2022).

CEU, 2022c. Environment Council. Public session 17 March 2022. Regulation on deforestation-free products. URL <https://video.consilium.europa.eu/event/en/25610> (accessed 17 August 2022).

CEU, 2022d. Environment Council. Public session 28 June 2022. Deforestation and forest degradation. URL <https://video.consilium.europa.eu/event/en/25958> (accessed 17 August 2022).

Chatham House, 2022. Global forum on Forest Governance 2022. URL <https://chathamhouse.cplus.live/event/forestgovernance>

Chen, W., Xu, D. and Liu, J., 2015. The forest resources input-output model: An application in China. *Ecological Indicators* 51, 87–97. <https://doi.org/10.1016/j.ecolind.2014.09.007>.

Cheng, B., Le Clue, S., 2010. Forestry in Asia-Issues for responsible investors. Responsible Research. URL <https://www.admcf.org/wp-content/uploads/2019/11/3-Resource-Forestry-in-Asia-September-2010.pdf>.


ClientEarth, 2021. The proposed EU law on deforestation-free products. https://www.clientearth.org/media/sbjhtw3c/eu-deforestation-proposal_main-elements-and-omissions_dec21.pdf (accessed 15 August 2022).

Defra, 2020. Consultation on the introduction of due diligence on forest risk commodities: Summary of responses and the government's response. URL https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/933985/due-diligence-forest-risk-commodities-government-response.pdf (accessed 13 November 2022).

Defra, 2021. Impact assessment - due diligence on forest risk commodities. Department for Environment, Food and Rural Affairs.

Department of Energy and Climate Change, 2014. Timber standard for heat & electricity: Woodfuel used under the renewable heat incentive and renewables obligation. London.

Department of Justice, 2022. Jackson county man sentenced for violation of Lacey Act. U.S. Attorney's Office. Eastern District of Kentucky, URL <https://www.justice.gov/usao-edky/pr/jackson-county-man-sentenced-violation-lacey-act>



Dieguez, L., Sotirov, M., 2021. FSC sustainability certification as green-lane for legality verification under the EUTR? Changes and policy learning at the interplay of private governance and public policy. *Forest Policy and Economics* 131, 102568. <https://doi.org/10.1016/j.forpol.2021.102568>.

Dooley, K., Ozinga, S., 2011. Building on forest governance reforms through FLEGT: The best way of controlling forests' contribution to climate change?. *Review of European Community & International Environmental Law* 20, 76-86. <https://doi.org/10.1111/j.1467-9388.2011.00717.x>

Duffield, L., Richards, M., 2013. Lessons learned from civil society efforts to promote community (forest) resource rights and other rights in Voluntary Partnership Agreements. *Forest Trends*, Washington, DC.

European Commission (EC), 2003. Communication from the Commission to the Council and the European Parliament. Forest Law Enforcement, Governance and Trade (FLEGT). Proposal for an EU Action Plan. COM (2003) 251 final. European Commission, Brussels.

EC, 2013. The impact of EU consumption on deforestation: Comprehensive analysis of the impact of EU consumption on deforestation. Study funded by the European Commission, DG ENV, and undertaken by VITO, IIASA, HIVA and IUCN NL. No. 2013- 063. European Union, Luxembourg.

EC, 2014. Commission Notice. Customs and FLEGT implementation guidelines. Public Summary. 2014/C 389/02. European Union, Luxembourg.

EC, 2017. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Making Public Procurement work in and for Europe. COM(2017) 572 final. European Commission, Strasbourg.

EC, 2018. Report from the Commission to the European Parliament and the Council Regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market (the EU Timber Regulation). Biennial report for the period March 2015 - February 2017. COM(2018) 668 final. European Commission, Brussels

EC, 2019a. Feedback received on: Deforestation and forest degradation – stepping up EU action - feedback (202). URL https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/2027-Deforestation-and-forest-degradation-stepping-up-EU-action_en (accessed 18 August 2022).

EC, 2019b. Commission staff working document accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions stepping up EU action to protect and



restore the world's forests. SWD(2019) 307 final. European Commission, Brussels.

EC, 2019c. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - stepping up EU action to protect and restore the world's forests. COM(2019) 352 final. European Commission, Brussels.

EC, 2021a. Proposal for a Regulation of the European Parliament and of the Council of the European Union 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. COM(2021) 706 final. European Commission, Brussels.

EC, 2021b. Deforestation and forest degradation – reducing the impact of products placed on the EU market - have your say. URL https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12137-Deforestation-and-forest-degradation-reducing-the-impact-of-products-placed-on-the-EU-market_en (accessed 18 August 2022).

EC, 2021c. Commission staff working document fitness check on Regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market (the EU Timber Regulation) 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). SWD(2021) 328 final. European Commission, Brussels.


EC, 2021d. EUTR: Union-wide overview for the year 2020. Overview based on the analysis of information on the application of the EU Timber Regulation (Regulation EU No. 995/2010), submitted by EUTR Member States. URL https://ec.europa.eu/environment/forests/pdf/EUTR%20Overview%202020_alternative.pdf (accessed 13 November 2022).

EC, 2021e. Summary record sixth meeting of the “multi-stakeholder platform on protecting and restoring the world's forests” with a focus on deforestation and forest degradation virtual - Zoom conference 23 November 2021 first session. European Commission.

EC, 2021f. Commission staff working document impact assessment minimising the risk of deforestation and forest degradation associated with products placed on the EU market. SWD(2021) 326 final Part 1/2. European Commission, Brussels.

EC, 2021g. Commission staff working document impact assessment report minimising the risk of deforestation and forest degradation associated with products placed on the EU market. SWD(2021) 326 final Part 2/2. European Commission, Brussels.

EC, 2021h. Earth Day: New report shows there are still pristine forests in Europe and calls for their mapping and strict protection. URL <https://environment.ec.europa.eu/news/earth-day->



new-report-shows-there-are-still-pristine-forests-europe-and-calls-their-mapping-and-2021-04-22_en (accessed 16 August 2022).

European Communities, 2012. Consolidated version of the treaty on the functioning of the European Union. OJ 2012 C 326/47. European Union, Luxembourg.

Environmental Investigation Agency (EIA), 2021. The Italian job. How Myanmar timber is trafficked through Italy to the rest of Europe despite EU laws. London, Washington DC.

EIA, 2020. Landmark legislation with global impacts for forest conservation. URL <https://us.eia.org/blog/lacey-act-landmark-legislation-with-global-impacts-for-forest-conservation/>

Ekawati, S., Rumboko, L., Rochmayanto, Y., Kushartati, Salaka, F., Muttaqin, Z., 2014. Kebijakan land swap: Mungkinkah dilakukan. Policy Brief, 8. URL http://simlit.puspijak.org/files/other/3_eka.pdf

Ellis-Petersen, H., 2021. Indonesia says COP26 zero-deforestation pledge it signed 'unfair.' URL <https://www.theguardian.com/world/2021/nov/05/indonesia-says-cop26-zero-deforestation-pledge-it-signed-unfair> (accessed 17.6.22).

EP, 2022. Deforestation Regulation ***I Amendments adopted by the European Parliament on 13 September 2022 on the proposal for a regulation of the European Parliament and of the Council on 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 (COM(2021)0706 – C9-0430/2021 – 2021/0366(COD))1 (Ordinary legislative procedure: first reading). P9_TA(2022)0311. European Parliament, Strasbourg.


EP, CEU, 2004. Directive 2004/18/EC of the European Parliament and of the Council of 31 March 2004 on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts. Official Journal of the European Union, Strasbourg.

EP, CEU, 2010. Regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market (Text with EEA relevance). No 995/2010. Open Journal of European Union.

Erbaugh, J. T., Nurrochmat, D. R., Purnomo, H., 2017. Regulation, formalization, and smallholder timber production in northern Central Java, Indonesia. *Agroforestry Systems* 91, 867-880. <https://doi.org/10.1007/s10457-016-0037-6>.

EU FLEGT Facility, 2017. Indonesia shipped verified legal timber worth more than 1 billion





Euros to EU in first year of FLEGT licensing. URL euflegt.efi.int/indonesia-news/-/asset_publisher/FWJBFN3Zu1f6/content/indonesia-shipped-verified-legal-timber-worth-more-than-1-billion-euros-to-eu-in-first-year-of-flegt-licensing (accessed 19 April 2022).

EU FLEGT Facility, 2018. Briefing - a comparison of the Japanese Clean Wood Act and the EU Timber Regulation. URL euflegt.efi.int/publications/a-comparison-of-the-japanese-clean-wood-act-and-the-eu-timber-regulation#_ftn1 (accessed 10 June 2022).

EU, Indonesia, 2014. Voluntary Partnership Agreement between the European Union and the Republic of Indonesia on Forest Law Enforcement, Governance and Trade in timber products into the European Union. European Union, Brussels.

European Court of Auditors, 2018. Putting EU law into practice: The European Commission's oversight responsibilities under Article 17(1) of the treaty on European Union. Publications Office of the European Union, Luxembourg.

European Economic and Social Committee (EESC), 2022. Rules of procedure and code of conduct for Members of the European Economic and Social Committee. Publications Office of the European Union, Luxembourg.

Falkner, R., 2007. The political economy of 'normative power' Europe: EU environmental leadership in international biotechnology regulation. *Journal of European Public Policy* 14, 507–526. <https://doi.org/10.1080/13501760701314326>.

Food and Agriculture Organization (FAO), 2000. On definitions of forest and forest change, Forest resources assessment programme working paper 33. Rome. URL <https://www.fao.org/3/ad665e/ad665e00.html>


FAO, 2017. Global forest product facts and figures 2016. Rome. URL <https://www.fao.org/3/I7034EN/i7034en.pdf>

FAO, 2019. Global forest product facts and figures 2018. Rome. URL <https://www.fao.org/3/ca7415en/ca7415en.pdf>

FAO, 2019. Forestry trade flows. URL <http://www.fao.org/FAOStat/en/#data> (accessed 22 July 2022).

FAO, 2020. The state of the world's forests 2020. Forests, biodiversity and people. Rome. URL <https://wedocs.unep.org/20.500.11822/32472>

FAO, 2021. FAO remote sensing survey reveals tropical rainforests under pressure as agricultural expansion drives global deforestation. Rome. URL <https://www.fao.org/documents/card/ar/c/cb7449en/>



Fern, 2020. Feedback from: Fern. URL https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12137-Deforestation-and-forest-degradation-reducing-the-impact-of-products-placed-on-the-EU-market_en (accessed 25 June 2022)

Fern, 2021a. FLEGT and EUTR Fitness Checks: Continued lack of transparency about EU plans. URL <https://www.fern.org/publications-insight/flegt-and-eutr-fitness-checks-continued-lack-of-transparency-about-eu-plans-2383/> (accessed 15 August 2022).

Fern, 2021b. Raising the bar - strengthening EU biodiversity and climate leadership through FLEGT and Forest Partnerships. URL <https://www.fern.org/publications-insight/raising-the-bar-strengthening-eu-biodiversity-and-climate-leadership-through-flegt-and-forest-partnerships-2336/> (accessed 14 November 2022)

Fern, 2022a. The European Parliament's Environment Committee heeds Indigenous Peoples' voices. URL <https://www.fern.org/publications-insight/the-european-parliaments-environment-committee-heeds-indigenous-peoples-voices-2541/> (accessed 15 August 2022).

Fern, 2022b. EU Regulation on deforestation-free products: What's in the new proposal and what does it mean. URL https://www.fern.org/fileadmin/uploads/fern/Documents/2021/Fern_Deforestation-Regulation-briefing_01.pdf (accessed 28 October 2022).

Fernández, G.R., Long, T.T., Yanxia, L., 2021. A review of international bamboo and timber trade regulations. International Bamboo and Rattan Organisation 70. China. URL https://www.inbar.int/resources/inbar_publications/a-review-of-international-bamboo-and-timber-trade-regulations-a-multijurisdictional-study/

Finnish Forest Industries, 2021. Feedback from: Finnish Forest Industries Federation. URL https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12137-Deforestation-and-forest-degradation-reducing-the-impact-of-products-placed-on-the-EU-market_en (accessed 25 June 2022)

Fishman, A., Obidzinski, K., 2015. Verified legal? Ramifications of the EU Timber Regulation and Indonesia's Voluntary Partnership Agreement for the legality of Indonesian timber. International Forestry Review 17, 10-19. <https://doi.org/10.1505/146554815814725095>

Flanagan, A.C., Midgley, S.J., Stevens, P.R., McWhirter, L., 2019. Smallholder tree-farmers and forest certification in Southeast Asia: Productivity, risks and policies. Australian Forestry 82, 18-28. <https://doi.org/10.1080/00049158.2018.1560569>

FLEGT IMM, 2021. Minister Matondo speaks out for FLEGT – FLEGT IMM. URL <https://flegtimm.eu/news/minister-matondo-speaks-out-for-flegt/> (accessed 14 November 2022)





FLEGT IMM, 2022. Different takes on Deforestation Regulation. URL flegtimm.eu/news/different-takes-on-deforestation-regulation/ (accessed 21 March 2022).

Forest Agency, 2015. Annual report on forest and forestry in Japan (Fiscal Year 2015). Japan Forestry Agency, 2015, 35. URL <http://www.rinya.maff.go.jp/j/kikaku/hakusyo/26hakusyo/pdf/>

Forest Trends, 2017. China's forest product imports and exports 2006-2016: Trade charts and brief analysis. Washington DC. URL https://www.forest-trends.org/wp-content/uploads/2017/08/doc_5627.pdf (accessed 15 November 2022)

FSC, 2021. FSC's five recommendations to the EU Commission for an effective deforestation-free supply chain. URL <https://fsc.org/en/newscentre/fscs-five-recommendations-to-the-eu-commission-for-an-effective-deforestation-free> (accessed 14 November 2022)

Gan, J., Cerutti, P.O., Masiero, M., Pettenella, D., Andrighetto, N., Dawson, T., 2016. Quantifying illegal logging and related timber trade. IUFRO World Series 35, 37-59. URL https://www.cifor.org/publications/pdf_files/Books/BIUFRO1603.pdf

Giessen, L., Burns, S., Sahide, M.A.K., Wibowo, A., 2016. From governance to government: The strengthened role of state bureaucracies in forest and agricultural certification. Policy and Society 35, 71-89. <https://doi.org/10.1016/j.polsoc.2016.02.001>

Global Forest Watch, 2018. Data on Indonesia's tropical forest deforestation. URL <https://gfw.global/3f4CwdQ> (accessed 7 July 2022).

Global Witness, 2019. Lessons from China's global forest footprint: How China can rise to a global governance challenge. URL <https://www.globalwitness.org/en/campaigns/forests/lessons-from-chinas-global-forest-footprint/> (accessed 14 November 2022)

Government of the United States of America, Government of the Socialist Republic of Viet Nam, 2021. Agreement between the Government of the Socialist Republic of Viet Nam and the Government of the United States of America on illegal logging and timber trade.

Government of Brazil, 2020. Comments submitted by the Brazilian government on the European Commission's public consultation "Deforestation and forest products impact assessment".

Government of Colombia, 2019. Feedback from: Government of Colombia. URL https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/2027-Deforestation-and-forest-degradation-stepping-up-EU-action_en (accessed 25 July 2022)

Government UK, 2022. Regulations: Timber and FLEGT licences. URL <https://www.gov.uk/guidance/regulations-timber-and-flegt-licences> (accessed 14 November 2022)



2022).

Gustafsson, M.T., Schilling-Vacaflor, A., Lenschow, A, 2022. Foreign corporate accountability: The contested institutionalization of mandatory due diligence in France and Germany. *Regulation & Governance*. 10.1111/rego.12498.

Hartebrodt, C., 2022. Forest Law Enforcement, Governance and Trade: A policy analysis of the FLEGT Regulation implementation in the EU-27 and the UK. Bachelor Thesis. University of Freiburg.

Hasyim, Z., Laraswati, D., Purwanto, R.H., Pratama, A.A., & Maryudi, A., 2020. Challenges facing independent monitoring networks in the Indonesian timber legality assurance system. *Forest Policy and Economics* 111,102025. <https://doi.org/10.1016/j.forpol.2019.102025>.

Henn, E.V., 2021. Protecting forests or saving trees? The EU's regulatory approach to global deforestation. *RECIEL* 30, 336–348. <https://doi.org/10.1111/reel.12413>.

Hernawan, D., 2011. Stakeholder opinion on FLEGT/VPA process: A survey on issues of timber legality in Indonesia. Wageningen University, Wageningen.

Hoffmeister, F., 2022. Differences in the implementation of the EU Timber Regulation across member states - a political economy approach. Bachelor Thesis. University of Freiburg.

Hosonuma, N., Herold, M., De Sy, et al., 2012. An assessment of deforestation and forest degradation drivers in developing countries. *Environmental Research Letters* 7, 044009. <https://doi.org/10.1088/1748-9326/7/4/044009>.

Humphreys, D., 2006. Logjam: Deforestation and the crisis of global governance, The Earthscan forestry library. Earthscan, London.

Ichwan, M., Purwanto, A.B., Pramudiana, D., Rohman, Z., Rodaim, M., 2021. PEOPLE MONITOR: The Dynamics of SVLK Monitoring by Indigenous People/Local Communities in Indonesia. PPLH Mangkubumi, Tulungagung.

Inayah, A., Aprilia, H.D., 2022. Commercial diplomacy to increase exports of Lampung cocoa commodities in the European Union market: Presented at the Universitas Lampung International Conference on Social Sciences (ULICoSS 2021). Bandar Lampung, Indonesia. 65-73. Atlantis Press. <https://doi.org/10.2991/assehr.k.220102.009>.

Indufor, 2016. China as a timber consumer and processing country: An analysis of China's import and export statistics with in-depth focus on trade with the EU, Final Report. URL <https://www.wwf.org.uk/indufor-china> (accessed 15 November 2022)

Indonesian Palm Oil Association, 2021. Indonesian Palm Oil Association (IPOA) Gabungan





Pengusaha Kelapa Sawit Indonesia (GAPKI).

Ingram, V.J., Behagel, J.H., Mammadova, A., Verschuur, X., 2020. The outcomes of deforestation-free commodity value chain approaches: Background report. Wageningen University & Research. URL <https://edepot.wur.nl/565091>

ITTO TTM, 2020. Tropical Timber Market Report (No. 9), 24. ITTO Market Information Service.

ITTO TTM, 2022a. Tropical timber market report (No. 4), 26. ITTO Market Information Service.

ITTO TTM, 2022b. Tropical timber market report (No. 2), 26. ITTO Market Information Service.

Indonesian Civil Society Communications Forum, 2020. Indonesian NGOs Joint Statement EU Communication (2019) on stepping up EU's action to protect and restore the world's forest. URL kaoemtelapak.org/?publication=indonesian-ngos-joint-statementeu-communication-2019-on-stepping-up-eus-action-to-protect-and-restore-theworlds-forest (accessed 15 August 2022).

Japan Federation of Wood Industry Associations, 2009. Report: The 2009 symposium on the promotion of wood and wood products with verified legality (goho-wood). URL <http://goho-wood.jp/jigyuu/h21/doc/h21report1-2.pdf> (accessed 15 November 2022).

Jong, H.N., 2020. Indonesia risks timber trade with the EU after scrapping license rules. URL <https://news.mongabay.com/2020/03/indonesia-eu-timber-wood-legality-svlk-license-logging/> (accessed 11 November 2022).


Karsenty, A., 2019. Certification of tropical forests: A private instrument of public interest? A focus on the Congo, Basin. *Forest Policy Economics* 106, 101974. <https://doi.org/10.1016/j.forpol.2019.101974>

Karsenty, A., 2022. Is a European proposal on imported deforestation too punitive? (commentary). *Mongabay Environmental News*. URL <https://news.mongabay.com/2022/02/is-a-european-proposal-on-imported-deforestation-too-punitive-commentary/> (accessed 28 October 2022).

Ke, S., Qiao, D., Zhang, X., Feng, Q., 2019. Changes of China's forestry and forest products industry over the past 40 years and challenges lying ahead. *Forest Policy and Economics* 106, 101949. <https://doi.org/10.1016/j.forpol.2019.101949>.

Klaver, D., Saragih, B., Choy, E.A., et al., 2015. Future roles of the state in governing the global palm oil industry; Expert meeting Grand Mercure Singapore Roxy Hotel, Singapore; 26-27 August 2015. Report CDI-16-003. Netherlands, Indonesia, Malaysia. URL <https://edepot.wur.nl/377932>

Kleinschmit, D., Mansourian, S., Wildburger, C., Purrett, A., 2016. Illegal logging and related timber trade-dimensions, drivers, impacts and responses. A global



scientific rapid response assessment report (Vol. 35). International Union of Forestry Research Organizations (IUFRO) Secretariat.

Korea Forest Service. 2018. Korea's regulation to promote legal timber trade. URL <http://english.forest.go.kr/images/content/data/down/Leaflet.pdf>

Köthke, M., 2020. Implementation of the European Timber Regulation by German importing operators: An empirical investigation. *Forest Policy and Economics* 111, 102028. <https://doi.org/10.1016/j.forpol.2019.102028>

Lawson, S., 2014. Illegal logging in the Democratic Republic of the Congo. *Energy, Environment and Resources EER*, 2014.

Lawson, S. 2014. Illegal wood import and re-export: The scale of the problem and the response in Thailand, South Korea and India. *Energy, Environment and Resources EER*, 2014. URL https://www.chathamhouse.org/sites/default/files/home/chatham/public_html/sites/default/files/20140400IllegalWoodThailandSKIndiaLawson.pdf

Leipold, S., Sotirov, M., Frei, T., & Winkel, G., 2016. Protecting “first world” markets and “third world” nature: The politics of illegal logging in Australia, the European Union and the United States. *Global Environmental Change* 39, 294–304. <https://doi.org/10.1016/j.gloenvcha.2016.06.005>.

Lesniewska, F., McDermott, C.L., 2014. FLEGT VPAs: Laying a pathway to sustainability via legality lessons from Ghana and Indonesia. *Forest Policy and Economics* 48, 16-23. <https://doi.org/10.1016/j.forpol.2014.01.005>

Lewin, A., Mo, K., Scheyvens, H., Gabai, S., 2019. Forest certification: More than a market-based tool, experiences from the Asia Pacific region. *Sustainability* 11, 2600. <https://doi.org/10.3390/su11092600>

Li, J., Chen, S., 2015. Empirical analysis on the practical feasibility of timber legality verification work in China. *Open Journal of Political Science* 5, 167. [10.4236/ojps.2015.53018](https://doi.org/10.4236/ojps.2015.53018)

Lin J.C., Lee J.Y., Liu W.Y., 2021. Risk analysis of regions with suspicious illegal logging and their trade flows. *Sustainability* 13, 3549. <https://doi.org/10.3390/su13063549>

Luttrell, C., Obidzinski, K., Brockhaus, M. et al., 2011. Lessons for REDD+ from measures to control illegal logging in Indonesia. Center of International Forestry Research.

Maini, J.S., 2003. International dialogue on forests: Impact on national policies and practices. Forest policy for private forestry—global and regional challenges. CAB International, Wallingford.

Martin, J., Haggith, M., 2018. The state of the global paper industry. Environmental Paper Network, pp. 1-89. URL https://environmentalpaper.org/wp-content/uploads/2018/04/StateOfTheGlobalPaperIndustry2018_FullReport-Final-1.pdf

Maryudi, A., Suprpto, E., Iswari, P., 2014. Menunggu godot? Sistem Verifikasi Legalitas Kayu (SVLK) untuk memperbaiki sistem pranata dan tata kelola kehutanan Indonesia (Kasus: Hutan hak dan industri di klaten, Jawa Tengah).

Maryudi, A., Nawir, A.A., Permadi, D.B. et al., 2015. Complex regulatory frameworks governing private smallholder tree plantations in Gunungkidul District, Indonesia. *Forest Policy and Economics* 59, 1-6. <https://doi.org/10.1016/j.forpol.2015.05.010>

Maryudi, A. 2016. Choosing timber legality verification as a policy instrument to combat illegal logging in Indonesia. *Forest Policy and Economics* 68, 99-104. <https://doi.org/10.1016/j.forpol.2015.10.010>

Maryudi, A., Kurniawan, H., Siswoko, B.D., Andayani, W., & Murdawa, B. 2017. What do forest audits say? The Indonesian mandatory forest certification. *International Forestry Review* 19, 170-179. <https://doi.org/10.1505/146554817821255150>

Maryudi, A., Myers, R., 2018. Renting legality: How FLEGT is reinforcing power relations in Indonesian furniture production networks. *Geoforum* 97, 46-53. <https://doi.org/10.1016/j.geoforum.2018.10.008>

Maryudi, A., Acheampong, E., Rutt, R.L., Myers, R., McDermott, C.L. 2020. "A level playing field"?- What an environmental justice lens can tell us about who gets leveled in the Forest Law Enforcement, Governance and Trade Action Plan. *Society & Natural Resources* 33, 859-875. <https://doi.org/10.1080/08941920.2020.1725201>

Maryudi, A., Laraswati, D., Sahide, M.A., Giessen, L., 2021. Mandatory legality licensing for exports of Indonesian timber products: Balancing the goals of forest governance and timber industries. *Forest Policy and Economics* 124, 102384. <https://doi.org/10.1016/j.forpol.2020.102384>

Marzano, K., 2021. Deforestation-free commodity chains: How an EU legislative proposal reverberates in Brazil. IASS Postdam. URL https://publications.iass-potsdam.de/pubman/item/item_6001490

McDermott, C.L., Hirons, M., Setyowati, A., 2020. The interplay of global governance with domestic and local access: Insights from the FLEGT VPAs in Ghana and Indonesia. *Society & Natural Resources* 33, 261-279. <https://doi.org/10.1080/08941920.2018.1544679>.

McDermott, C.L., Sotirov, M., 2018. A political economy of the European Union's Timber Regulation: Which member states would, should or could support and implement EU rules on



the import of illegal wood? *Forest Policy and Economics* 90, 180–190. <https://doi.org/10.1016/j.forpol.2017.12.015>.

MEE, 2019. *Forest Law of the People's Republic of China*. Ministry of Ecology and Environment, the People's Republic of China, China.

Melati, P., Shantiko, B., 2013. Making research work for small-scale furniture makers: Action research in the Jepara furniture industry, Indonesia. <https://doi.org/10.17528/cifor/004310>

Miniarti, Y., Wardhana, Y.M., Abdini, C., 2018. The success of SVLK in supporting the improvement of Forest Governance. *Jurnal Analisis Kebijakan Kehutanan* 15, 55-66. doi:10.20886/jakk.2018.15.1.55-66.

Ministry of Agriculture (MoA), 2021. *Statistical of national leading estate crops commodity 2020-2022*.

Ministry of the Environment Japan, 2016. *Basic Policy on Promoting Green Purchasing (provisional translation)*. (February). URL https://www.env.go.jp/en/laws/policy/green/2_2016feb.pdf

Ministry of Environment and Forestry (MoEF), 2020. *Data on timber export*. URL <https://phl.menlhk.go.id/infografis> (accessed 21 August 2022).

MoEF, 2020. *The State of Indonesia's Forests 2020*. Ministry of Environment and Forestry, Jakarta, Indonesia. URL https://indonesianembassy.de/wp-content/uploads/2020/12/Lowres2-SOFO-2020-B5_ENG-12.24.2_compressed.pdf


Ministry of Finance of Vietnam General Department of Customs, 2022. *Statistics of exports by country/territory - main exports*.

Ministry of Government Legislation, 2020. *Act on the sustainable use of timbers. Act No.17010, Partial Amendment*. Korean Law Information Center.

Mondelēz International , 2021. *Feedback from: Mondelēz International*. URL https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12137-Deforestation-and-forest-degradation-reducing-the-impact-of-products-placed-on-the-EU-market_en (accessed 25 June 2022)

Mulyani, S., Lisdiyono, E., 2020. *Legal protection model for forest preservation of processed timber businesses*. In *International Conference on Law, Economics and Health (ICLEH 2020)* (pp. 580-583). Atlantis Press.

Mulyani, M., Jepson, P., 2016. Does the 'one map initiative' represent a new path for forest mapping in Indonesia? *Assessing the contribution of the REDD+ initiative in effecting forest*



governance reform. *Forests* 8, 14. <https://doi.org/10.3390/f8010014>

NEPCon. 2018. Timber legality risk assessment Republic of Korea. URL <https://www.nepcon.org/sites/default/files/library/2018-12/NEPCon-TIMBER-RoK-Risk-Assessment-ENV1.2.pdf>

NEPCon, 2020. EUTR due diligence monitoring - Service information. URL <https://f.nordiskemedier.dk/282h7uqrj4u40v7a.pdf>.

Neupane, P.R., Wiati, C.B., Angi, E.M., Köhl, M., Butarbutar, T., Gauli, A., 2019. How REDD+ and FLEGT-VPA processes are contributing towards SFM in Indonesia—the specialists' viewpoint. *International Forestry Review* 21, 460-485.

Norman, M., Saunders, J., 2021. The United Kingdom Timber Regulation: Changing the market to protect forests? (Information brief). *Forest Trends*.

Nurkomariyah, S., Firdaus, M., Nurrochmat, D.R., Erbaugh, J.T., 2019. Questioning the competitiveness of Indonesian wooden furniture in the global market. In *IOP Conference Series: Earth and Environmental Science* 285, 012015. <https://doi.org/10.1088/1755-1315/285/1/012015>.

Nurrochmat, D.R., Dharmawan, A.H., Obidzinski, K., Dermawan, A., Erbaugh, J.T., 2016. Contesting national and international forest regimes: Case of timber legality certification for community forests in Central Java, Indonesia. *Forest Policy and Economics* 68, 54-64. <https://doi.org/10.1016/j.forpol.2014.09.008>.

Nurrochmat, D.R., Boer, R., Ardiansyah, M., Immanuel, G., Purwawangsa, H., 2020. Policy forum: Reconciling palm oil targets and reduced deforestation: Landswap and agrarian reform in Indonesia. *Forest Policy and Economics* 119, 102291. <https://doi.org/10.1016/j.forpol.2020.102291>.

Obidzinski, K., Kusters, K., 2015. Formalizing the logging sector in Indonesia: Historical dynamics and lessons for current policy initiatives. *Society & Natural Resources* 28, 530-542. <https://doi.org/10.1080/08941920.2015.1014605>

Obidzinski, K., Dermawan, A., Andrianto, A., Komarudin, H., Hernawan, D. 2014. The timber legality verification system and the Voluntary Partnership Agreement (VPA) in Indonesia: Challenges for the small-scale forestry sector. *Forest Policy and Economics* 48, 24-32. [10.1016/j.forpol.2014.06.009](https://doi.org/10.1016/j.forpol.2014.06.009)

Legislative Observatory European Parliament (OEIL), 2019/2156(INI) - The EU's role in protecting and restoring the world's forests. URL <https://oeil.secure.europarl.europa.eu/oeil/popups/ficheprocedure.do?reference=2019/2156>



INI)&l=bg (accessed 19 April 2022).

OEIL, 2020. 2020/2006 (INL) - An EU legal framework to halt and reverse EU-driven global deforestation. URL [https://oeil.secure.europarl.europa.eu/oeil/popups/ficheprocedure.do?lang=en&reference=2020/2006\(INL\)](https://oeil.secure.europarl.europa.eu/oeil/popups/ficheprocedure.do?lang=en&reference=2020/2006(INL)) (accessed 26 August 2022).

OEIL, 2022. 2021/0366(COD) - Deforestation Regulation. URL [oeil.secure.europarl.europa.eu/oeil/popups/ficheprocedure.do?reference=2021/0366\(COD\)&l=en](https://oeil.secure.europarl.europa.eu/oeil/popups/ficheprocedure.do?reference=2021/0366(COD)&l=en) (accessed 19 April 2022).

Overdeest, C., Zeitlin, J., 2014. Assembling an experimentalist regime: Transnational governance interactions in the forest sector. *Regulation & Governance* 8, 22–48. <https://doi.org/10.1111/j.1748-5991.2012.01133.x>.

Overdeest, C., Zeitlin, J., 2018. Experimentalism in transnational forest governance: Implementing European Union Forest Law Enforcement, Governance and Trade (FLEGT) Voluntary Partnership Agreements in Indonesia and Ghana. *Regulation & Governance* 12, 64–87. <https://doi.org/10.1111/rego.12180>

Partzsch, L., 2021. European Union's proxy accountability for tropical deforestation. *Environmental Politics* 30, 600–621. <https://doi.org/10.1080/09644016.2020.1793618>

Partzsch, L., Vlaskamp, M.C., 2016. Mandatory due diligence for 'conflict minerals' and illegally logged timber: Emergence and cascade of a new norm on foreign accountability. *The Extractive Industries and Society* 3, 978–986. <https://doi.org/10.1016/j.exis.2016.07.003>

Pendrill, F., Persson, U.M., Godar, J., Kastner, T., Moran, D., Schmidt, S., Wood, R., 2019. Agricultural and forestry trade drives large share of tropical deforestation emissions. *Global Environmental Change* 56, 1–10. <https://doi.org/10.1016/j.gloenvcha.2019.03.002>

Pendrill, F., Gardner, T., Meyfroidt P. et al., 2022. Disentangling the numbers behind agriculture-driven tropical deforestation. *Science* 377, eabm9267. <https://doi.org/10.1126/science.abm9267>

Pepke, E., Bowyer, J., Howe, J., 2018. Impact of market forces and government policies on the tropical timber trade. Dovetail Partners, Inc. URL https://dovetailinc.org/report_pdfs/2018/dovetailtroptimber0118.pdf

Pirard, R., Fishman, A., Gnych, S., Obidzinski, K., Pacheco, P., 2015. Deforestation-free commitments: The challenge of implementation. An application to Indonesia. Center for International Forestry Research (CIFOR). URL <https://doi.org/10.17528/cifor/005572>.

Pirard, R., Fishman, A., Gnych, S., Obidzinski, K., Pacheco, P., 2015. Deforestation-free

commitments: The challenge of implementation. An application to Indonesia. 181. CIFOR.

Pratama, A., Laraswati D., Maryudi A., 2020. The regulatory change of legality verification requirements for exports of wood products - A rapid impact assessment. Sebijak Institute Faculty of Forestry, Universitas Gadjah Mada, Yogyakarta.

Pratiwi, S., Wibowo, A., Giessen, L., 2015. Third-party certification of forest management In Indonesia: Analysing stakeholders' recognition and preferences. *Jurnal Manajemen Hutan Tropika* 21, 65–75. <https://doi.org/10.7226/jtfm.21.2.65>

Puech d'Alissac, A., Florian M., 2022. Opinion European Economic and Social Committee. Minimising the risk of deforestation and forest degradation associated with products placed on the EU market. NAT/832. European Economic and Social Committee.

Pujiastuti, L., 2015. Mahal dan Rumit, Sertifikat Kayu Diminta Dicoret dari Syarat Ekspor Mebel. *detikfinance*. URL <https://finance.detik.com/industri/d-3036048/mahal-dan-rumit-sertifikat-kayu-diminta-dicoret-dari-syarat-ekspor-mebel> (accessed 24 October 2022).

Purnomo, H., Achdiawan, R., Melati., 2014. Value-chain dynamics: Strengthening the institution of small-scale furniture producers to improve their value addition. *Forests, Trees and Livelihoods* 23, 87-101. <https://doi.org/10.1080/14728028.2013.875279>

Radosavljević, M., Masiero, M., Rogelja, T., Glavonjić, B., 2021. Adaptation to EUTR requirements: Insights from Slovenia, Croatia and Serbia. *Forests* 12, 1665. <https://doi.org/10.3390/f12121665>

Rahman, S. 2020. Malaysian independent oil palm smallholders and their struggle to survive 2020. *Perspective*. Yusof Ishak Institute. URL https://www.iseas.edu.sg/wp-content/uploads/2020/12/ISEAS_Perspective_2020_144.pdf

Ren, P., Zhang, J., 2021. Advancing sustainability in China's engagement in the Congo Basin: An assessment of China's role and potential collaboration opportunities in forest-related trade and development cooperation. URL <https://pfbc-cbfp.org/news-partner/China-CongoBasin.html>

Rifin, A., Feryanto, Herawati, Harianto., 2020. Assessing the impact of limiting Indonesian palm oil exports to the European Union. *Economic Structures* 9, 26. <https://doi.org/10.1186/s40008-020-00202-8>

Ritchie, H., Roser, M., 2021. Forests and deforestation. *Our world in data*. URL <https://ourworldindata.org/deforestation> (accessed 11 November 2022).

Rutt, R.L., Myers, R., Ramcilovic-Suominen, S., McDermott, C, 2018. FLEGT: Another 'forestry fad'?. *Environmental Science & Policy* 89, 266-272. <https://doi.org/10.1016/j.envsci.2018.08.012>



Salim, Z., Munadi, E. 2017. Info Komoditi Furnitur. Badan Pengkajian dan Pengembangan Perdagangan Kementerian Perdagangan Republik Indonesia. URL http://bppp.kemendag.go.id/media_content/2017/11/Isi_BRIK_Furnitur.pdf

Sapir, A., Schraepen, T., Tagliapietra, S., 2022. Green Public Procurement: A neglected tool in the European Green Deal Toolbox? *Intereconomics* 57, 175–178. <https://doi.org/10.1007/s10272-022-1044-7>

Saunders, J., Norman, M., 2019. Regulating the trade in Illegal timber: Republic of Korea Update, State of Play October 2018. *Forest Trends*. URL <https://www.forest-trends.org/publications/regulating-the-trade-in-illegal-timber-republic-of-korea-update/>

Saunders, J., Norman, M., 2020. Following the teak: Companies are using convoluted routes to bring EUTR non-compliant timber into the European Union. A September 2020 Update. *Forest Trends*. URL [forest-trends.org/blog/following-the-teak-convoluted-routes-to-bring-eutr-non-compliant-timber-into-eu-september-2020-update/](https://www.forest-trends.org/blog/following-the-teak-convoluted-routes-to-bring-eutr-non-compliant-timber-into-eu-september-2020-update/) (accessed 14 November 2022)

Savilaakso, S., Cerutti, P.O., Montoya Zumaeta, J.G., Ruslandi, Mendoula, E.E., Tsanga, R., 2017. Timber certification as a catalyst for change in forest governance in Cameroon, Indonesia, and Peru. *International Journal of Biodiversity Science, Ecosystem Services & Management* 13, 116-133. <https://doi.org/10.1080/21513732.2016.1269134>

Schatz, B., 2021. The Fostering Overseas Rule of Law and Environmentally Sound Trade (FOREEST) Act of 2021 section by section.

Schreiber, H., Tisch, A., Hofbauer, B., 2021. Study on the implementation of life cycle assessment and environmental footprint methods in the context of public procurement: Final report. Environment Directorate-General of the European Commission, Luxembourg.

Schweizerische Eidgenossenschaft, 2021. Verordnung über das Inverkehrbringen von Holz und Holzzeugnissen (Holzhandelsverordnung, HHV). Fedlex Die Publikationsplattform des Bundesrechts, Switzerland.

Setiahadi, R., Sari, S. R., Maryudi, A., Kalmirah, J., Baskorowati, L., 2020. Monitoring Implementation Impact of the EU-Indonesia's VPA on SME Livelihood. *International Journal of Forestry Research* 2020. <https://doi.org/10.1155/2020/4327802>

Setyowati, A., McDermott, C.L., 2017. Commodifying legality? Who and what counts as legal in the Indonesian wood trade. *Society & Natural Resources* 30, 750-764. <https://doi.org/10.1080/08941920.2016.1239295>

Setyawati, A., 2017. Pulp and paper industry Indonesia: Challenges and opportunities. *Indonesia Investments*. URL <https://www.indonesia-investments.com/id/news/todays-headlines/pulp-and-paper-industry-indonesia-challenges-and-opportunities/item7738> (accessed 28 October 2022)



2022).

Sotirov, M., Stelter, M., Winkel, G., 2017. The emergence of the European Union Timber Regulation: How Baptists, Bootleggers, devil shifting and moral legitimacy drive change in the environmental governance of global timber trade. *Forest Policy and Economics* 81, 69-81. <https://doi.org/10.1016/j.forpol.2017.05.001>

Sotirov, M., Pokorny, B., Kleinschmit, D., Kanowski, P., 2020. International forest governance and policy: Institutional architecture and pathways of influence in global sustainability. *Sustainability* 12, 7010. <https://doi.org/10.3390/su12177010>

Sotirov, M., Berning, L., Eckelmann, J., Maryudi A., Pratama, A., Laraswati, D., 2022. Forest Law Enforcement, Governance, and Trade (FLEGT) implementation in Europe and Indonesia, and the implications of timber legality and deforestation policy changes in the EU, UK, USA and China. A Policy Brief. Zenodo. <https://doi.org/10.5281/zenodo.7322940>

Storck, S., Oliver, R., 2021. FLEGT-licensed and VPA partner timber products trade 2020. ITTO, FLEGT IMM, Yokohama.

Susilawati, D., Kanowski, P., Setyowati, A.B., Resosudarmo, I.A.P., Race, D., 2019. Compliance of smallholder timber value chains in East Java with Indonesia's timber legality verification system. *Forest Policy and Economics* 102, 41-50. <https://doi.org/10.1016/j.forpol.2019.02.005>


Susilawati, D., Kanowski, P.J., 2020. Cleaner production in the Indonesian pulp and paper sector: Improving sustainability and legality compliance in the value chain. *Journal of Cleaner Production* 248, 119259. <https://doi.org/10.1016/j.jclepro.2019.119259>

Susilawati, D., Kanowski, P.J., 2021. Sustainability certification and legality verification in Indonesian natural forest-based wood products value chains. *International Forestry Review* 23, 365-391. <https://doi.org/10.1505/146554821833992839>

Tacconi, L., Obidzinski, K., Agung, F., 2004. Learning lessons to promote forest certification and control illegal logging in Indonesia. CIFOR.

Tacconi, L., Rodrigues, R. J., Maryudi, A., 2019. Law enforcement and deforestation: Lessons for Indonesia from Brazil. *Forest Policy and Economics* 108, 101943. <https://doi.org/10.1016/j.forpol.2019.05.029>

Teeuwen, S., van Benthem, M., Oldenburger, J., van Best, S., Beerkens, G., Butler, R., 2021. Europe's sourcing of verified tropical timber and its impact on forests: What Next? Exploring the EU27 & UK's share of verified legal and sustainable tropical timber product imports. IDH- the Sustainable Trade Initiative, Netherlands. URL <https://www.idhsustainabletrade.com/uploaded/2021/12/Timber-11.0.pdf>



United Nations Economic Commission for Europe (UNECE), 2018. Forest products annual market review 2016-2017. United Nations. URL <https://www.perlego.com/book/3275535/forest-products-annual-market-review-20162017-pd>.

UNEP-WCMC, 2020. EUTR Analysis 2019: Background analysis of the 2017-2019 national biennial reports on the implementation of the European Union's Timber Regulation (Regulation EU No 995/2010). UNEP-WCMC, Cambridge.

UK, Indonesia, 2019. Voluntary Partnership Agreement between the United Kingdom of Great Britain and Northern Ireland and the Republic of Indonesia on Forest Law Enforcement, Governance and Trade in Timber Products into the United Kingdom of Great Britain and Northern Ireland [The agreement is not in force]. Foreign and Commonwealth Office, London.

Valenza, A., Alessandrini, M., Negrila, P., Celotti, P., 2019. Assessing the implementation of the 2014 directives on public procurement: Challenges and opportunities at regional and local level. European Committee of the Regions, Luxembourg.

Vancutsem, C., Achard, F., Pekel, J.F et al., 2021: Long-term (1990–2019) monitoring of forest cover changes in the humid tropics. *Science Advances* 7, eabe1603. <https://doi.org/10.1126/sciadv.abe1603>

Van den Hombergh, H., 2020. Mandatory minimum criteria for agro commodities placed on the European market: A proposal for coherent company requirements on deforestation and sustainability across EU policy and legislation. IUCN NL, Amsterdam.


Van Heeswijk, L., Turnhout, E., 2013. The discursive structure of FLEGT (Forest Law Enforcement, Governance and Trade): The negotiation and interpretation of legality in the EU and Indonesia. *Forest Policy and Economics* 32, 6-13. <https://doi.org/10.1016/j.forpol.2012.10.009>

Wahyudi, A., Wulandari, S., Aunillah, A., & Alouw, J.C., 2020. Sustainability certification as a pillar to promote Indonesian coffee competitiveness. In IOP Conference Series: Earth and Environmental Science 418, 012009. 10.1088/1755-1315/418/1/012009

Wang, L., Wang, H. 2012. Comparison of timber consumption in U.S. and China. In: Okia, C.A (Ed.), *Global perspectives on sustainable forest management*. IntechOpen. <https://doi.org/10.5772/33536>

Weihrauch, D., Carodenuto, S., Leipold, S., 2022. From voluntary to mandatory corporate accountability: The politics of the German Supply Chain Due Diligence Act. *Regulation and Governance*. <https://doi.org/10.1111/rego.12501>

Weisse, M., Goldman, E.D. 2019. The world lost a Belgium-sized area of primary rainforests last



year. World Resources Institute, 25. URL <https://www.wri.org/insights/world-lost-belgium-sized-area-primary-rainforests-last-year>

Weiss, J., Shin, K., Monard, E., Tilling, S., Maniatis, B., 2020. Comparing recent deforestation measures of the United States, European Union, and United Kingdom. *Environmental Law* 32, 91–94.

White, G., 2019. A study of EU public timber procurement policies, related guidance and reference to FLEGT – An IMM Study – May 2019. ITTO, FLEGT IMM, Yokohama.

White, G., 2021. A study of EU public timber procurement policies, private sector policies and related guidance – An IMM Study – September 2021. ITTO, FLEGT IMM, Yokohama.

White, G., Benthem, M.V., Oldenburger, J., Teeuwen, S., 2019. Unlocking sustainable tropical timber market growth through data: Mapping Europe’s sustainable tropical timber footprint and growing its global impact. IDH- the Sustainable Trade Initiative, Netherlands. URL <https://www.idhsustainabletrade.com/uploaded/2019/11/Unlocking-sust-tropical-timber-market-growth-through-data.pdf>

Wibowo, A., Pratiwi, S., Giessen, L., 2019. Comparing management schemes for forest certification and timber-legality verification: Complementary or competitive in Indonesia? *Journal of Sustainable Forestry* 38, 68-84. <https://doi.org/10.1080/10549811.2018.1498359>

Wojciechowski, J., 2022. Agriculture and Fisheries Council, 21 February 2022 - French Presidency of the Council of the European Union 2022. URL <https://presidence-francaise.consilium.europa.eu/en/news/press-release-agriculture-and-fisheries-council-21-february-2022/> (accessed 21 March 2022).

Womack, L., Glaser, S., Sinovas, P., Malsch, K., 2019. The interplay between CITES and EUTR/FLEGT- A discussion document for the Joint EUTR/CITES Expert Group meeting. UNEP-WCMC, Cambridge.

World Bank, 2021. Green public procurement: An overview of green reforms in country procurement systems, Climate Governance Paper Series. World Bank, Washington D.C. <https://doi.org/10.1596/36508>.

WWF, 2020. Record submissions to public consultation urge EU to act on deforestation. URL wwf.eu/?uNewsID=1430691 (accessed 15 March 2021).

Zeitlin, J., Overdeest, C., 2021. Experimentalist interactions: Joining up the transnational timber legality regime. *Regulation & Governance* 15, 686–708. <https://doi.org/10.1111/rego.12350>

Appendix

Annex A: Key informant and expert interview overview (University of Freiburg, UFR).

Affiliation	Interview (I), Webinar/Conference statement (S)/ Personal communication (P)	Action level	Year	New, more anonymized acronym
EU Institutions				
European Commission DG ENV	I	EU	2022	I1
European Commission DG ENV	I	EU	2022	I2
European Commission DG ENV	I	EU	2022	I3
European Commission DG AGRI	I	EU	2022	I4
European Commission DG AGRI	I	EU	2022	I5
European Commission DG INTPA	P	EU	2022	I6
European Parliament COM ENVI	S	EU	2022	I7
EU Member State governmental authorities				

Annex A continued

Affiliation	Interview (I), Webinar/Conference statement (S)/ Personal communication (P)	Action level	Year	New, more anonymized acronym
Governmental authority- Belgium	I	EU-BE	2022	I8
Governmental authority - Belgium	I	EU-BE	2022	I9
Governmental authority - Czech Republic	I	EU-CZ	2022	I10
Governmental authority - Czech Republic	I	EU-CZ	2022	I11
Governmental authority - Germany	I	EU-DE	2022	I12
Governmental authority - Germany	I	EU-DE	2022	I13
Governmental authority: Competent Authority (Germany)	I	EU-DE	2022	I14
Governmental authority - Germany	I	EU-DE	2022	I16
Governmental authority - Denmark	I	EU-DK	2022	I17
Governmental authority - Finland	I	EU-FI	2022	I18
Governmental authority - Finland	I	EU-FI	2022	I19

Annex A continued

Affiliation	Interview (I), Webinar/Conference statement (S)/ Personal communication (P)	Action level	Year	New, more anonymized acronym
Governmental authority: Enforcement Authority (Italy)	I	EU-IT	2022	I20
Governmental authority - Netherlands	I	EU-NL	2022	I21
Governmental authority - Netherlands	I	EU-NL	2022	I22
Governmental authority - Netherlands	I	EU-NL	2022	I23
Governmental authority - Netherlands	I	EU-NL	2022	I24
Governmental authority - Poland	I	EU-PL	2022	I25
Governmental authority - Portugal	I	EU-PT	2022	I26
Governmental authority: Competent Authority (Portugal)	I	EU-PT	2022	I27
Governmental authority: Competent Authority (Portugal)	I	EU-PT	2022	I28
Governmental authority - Sweden	I	EU-SE	2022	I29

Annex A continued

Affiliation	Interview (I), Webinar/Conference statement (S)/ Personal communication (P)	Action level	Year	New, more anonymized acronym
Governmental authority: Competent Authority (Portugal)	I	EU-PT	2022	I28
Governmental authority - Sweden	I	EU-SE	2022	I29
UK governmental authority				
UK governmental authority	I	UK	2022	I30
UK governmental authority	I	UK	2022	I31
UK governmental authority	P	UK-Indonesia	2022	I32
Tropical producer country governmental authority				
Governmental authority Indonesia	I	ID	2022	I33
Governmental authority Indonesia	I	ID	2022	I34
Environmentally-oriented non-state actors				
Environmental NGO	I	UK, US, international	2022	I35

Annex A continued

Affiliation	Interview (I), Webinar/Conference statement (S)/ Personal communication (P)	Action level	Year	New, more anonymized acronym
Environmental NGO	I	UK, US, international	2022	I36
Environmental NGO	I	US, international	2022	I37
Environmental NGO	I	ID, international	2022	I38
International organisations, consultants and think tanks. research institutions				
International think tank	I	UK, international	2022	I39
International Organisation	I	UK, International	2022	I40
International Organisation	I	International	2022	I41
International Organisation	I	International	2022	I42
Research institution Germany	I	EU-DE	2022	I43
Ministerial Conference	I	International	2022	I44
Business and industry associations and federations				

Annex A continued

Affiliation	Interview (I), Webinar/Conference statement (S)/ Personal communication (P)	Action level	Year	New, more anonymized acronym
Business and industry associations and federations				
Indonesian Forestry Association	I	ID	2022	I45
Indonesian Forestry Association	I	ID	2022	I46
European Trade federation	I	DE	2022	I47
European timber association	I	FR	2022	I48
Business companies serving European consumer market				
Import-export	I	BE, transnational	2022	I49
Importer	I	UK	2022	I50
Import-export	I	BE, transnational	2022	I51
Certification Schemes				
Forest certification body	I	International	2022	I52
Forest certification body	I	International	2022	I53

Annex A continued

Affiliation	Interview (I), Webinar/Conference statement (S)/ Personal communication (P)	Action level	Year	New, more anonymized acronym
Forest certification body	I	International	2022	I54
Forest certification body	I	International	2022	I55
Forest certification body	I	International	2022	I56

Annex B: Stakeholder statements on the EU Deforestation Regulation (draft) (D1-D128).

Stakeholder category	Organisations	Data source
Transnational environmental and social NGOs, civil society organisations	E.g. Fern, Conservation International, Environmental Investigation Agency, Both ENDS, Forest Peoples Programme, Friends of the Earth Europe, Global Canopy, Global Witness, Greenpeace, Mighty Earth, ClientEarth, WWF, Solidaridad, World Resources Institute	European Commission open public consultation, additional statements published on respective websites
Transnational business companies and industry associations (e.g. timber/timber product traders, retailers)	E.g. Mondelez International, Nestlé, Ferrero, Unilever, Amfori, Cargill	European Commission open public consultation, joint statements published on respective websites
Tropical producer country domestic commodity producers and industry associations (e.g. agricultural commodity producers)	E.g. National Federation of Oil Palm Growers of Colombia (Fedepalma), Citrus BR, IPOA, Brazilian Association of Animal Protein (ABPA)	European Commission open public consultation
EU domestic commodity producers and industry associations (e.g. forest owners, farmers)	E.g. Swedish Forest Industries Federation (SFIF), Belgian Alliance for Sustainable Palm Oil (BASP), European Palm Oil Alliance (EPOA), CAOBISCO, Copa & Cogeca, European Cocoa Association (ECA), COCERAL, FEDIOL, FEFAC	European Commission open public consultation, additional statements published on respective websites
Private certification bodies	World Fair Trade Organization Europe (WFTO), Rainforest Alliance, Forest Stewardship Council (FSC), Round Table on Responsible Soy Association (RTRS), RSPO	European Commission open public consultation, additional statements published on respective websites
Public certification bodies	Malaysian Palm Oil Council (MPOC)	European Commission open public consultation
Producer countries and their public authorities (e.g. Indonesia and other tropical VPA countries)	E.g. Government of Colombia, Government of Brazil, The Republic of Indonesia	European Commission open public consultation
Intergovernmental organisation	International Cocoa Organisation (ICCO): ICCO Secretariat	European Commission open public consultation
Consumer countries and their public authorities	Ministry of Environment and Food of Denmark, US Government	European Commission open public consultation

Annex C: Comparative overview of existing and emerging policies regulating timber legality and/or forest-risk commodities sustainability/legality.

Table 1. Product scope.

Legislation	Product scope
EU-Indonesia FLEGT VPA	<ul style="list-style-type: none"> • Broad range of timber and timber products. • The Joint Implementation Committee – a joint mechanism made up of representatives from the parties, with the objective of handling issues related to VPA implementation – can amend the list of timber products
2010 EUTR	<ul style="list-style-type: none"> • Broad range of timber and timber products. • First review of product coverage by 3 December 2015 and every six years thereafter.
2021 EUDR (European Commission's draft)	<ul style="list-style-type: none"> • Relevant commodities: Cattle, cocoa, coffee, oil palm, soya and wood. • Relevant products: products that contain, have been fed with or have been made using relevant commodities. First review by the Commission no later than two years after the entry into force and regularly thereafter. • Commission can include additional relevant products that contain or have been made using relevant commodities by adopting a delegated act.
2022 EUDR (Council of the European Union's negotiated position)	<ul style="list-style-type: none"> • Retains focus on the scope proposed by the Commission in respect of the six commodities covered. • Proposal of a number of additions to the list of products derived from the six commodities. • Clarification of requirements for livestock feed placed on the EU market or imported into the EU. • The Commission must make legislative proposals to amend the list of relevant products when appropriate. •



Table 1 continued

Legislation	Product scope
2022 UK due diligence provisions in the Environment Act (in development)	<ul style="list-style-type: none"> • Key ‘forest risk’ commodities (agricultural commodities associated with wide-scale deforestation) that were produced on land illegally occupied or used. • Commodities listed under the consultation impact assessment: Broad range of products that fall under the categories 1) cattle (beef and leather), 2) cocoa, 3) coffee, 4) palm oil, 5) soy, 6) rubber and 7) maize.
US FOREST Act of 2021 (draft)	<ul style="list-style-type: none"> • Amends the Tariff Act of 1930, inserting section 527A, which establishes the prohibition to import products made wholly or in part of commodities produced on illegally deforested land: <ul style="list-style-type: none"> ○ Covered commodities (initial list): palm oil, soybeans, cocoa, cattle, rubber and wood pulp. ○ Covered products (initial list): palm oil or palm oil products, soybeans or soybean products, cocoa or cocoa products, and cattle or cattle products, wood pulp or wood pulp products. ○ Lists review by the Trade Representative: not less frequently than annually
2020 Forest Law of the People’s Republic of China	<ul style="list-style-type: none"> • Forest resources: raw materials and products of woods. • Forests: includes arbor forests, bamboo forests, and shrub forests specified by the State. • Woods: include trees and bamboo.

Table 2. Definition of legality and ecological sustainability.

Legislation	Legality and ecological sustainability
EU-Indonesia FLEGT VPA	<ul style="list-style-type: none"> • Legal = in accordance with Indonesia's national laws and regulations. • EU position: Legal but not sustainable.
2010 EUTR	<ul style="list-style-type: none"> • Legal = in accordance with national laws of the country of production (EU and producer countries). • Legal but not sustainable.
2021 EUDR (European Commission's draft)	<ul style="list-style-type: none"> • Legal = in accordance with national laws of the country of production (EU and producer countries). • Sustainable = deforestation-free (i.e., zero-deforestation and zero forest degradation).
2022 EUDR (Council of the European Union's negotiated position)	<ul style="list-style-type: none"> • Identical to the European Commission's proposal (but with changes to the deforestation-free definition).
2022 UK due diligence provisions in the Environment Act (in development)	<ul style="list-style-type: none"> • Legal = in accordance with national laws of the country of production (producer countries, not yet clear if this also applies to the UK). • Legal but not sustainable.
US FOREST Act of 2021 (draft)	<ul style="list-style-type: none"> • Legal = in accordance with national laws of the country of production (foreign countries). • Legal but not sustainable.
2020 Forest Law of the People's Republic of China	<ul style="list-style-type: none"> • No organisation or individual is allowed to purchase, process, and transport woods if they are aware of their illegal origins (e.g. illegal felling or wanton deforestation). • Illegal acts include felling without a licence, felling without fulfilling the obligations required by the licence, felling bamboo trees without complying with the technical protocols, or the destruction of forest resources. • Equation of legality and sustainable utilisation of forest resources with ecological sustainability. The law also includes chapters on forest rights (chapter II), forest protection (chapter IV), and afforestation and land greening (chapter V), with several articles that aim to protect China's forest resources, promote sustainable development, and raise the populations' ecological awareness.

Table 3. Summary of key policy instruments.

Legislation	Key policy instruments
EU-Indonesia FLEGT VPA	<ul style="list-style-type: none"> • Voluntary to enter into the bilateral trade agreement. Once entered into and ratified, it is legally binding for both parties. • Market incentive for legal timber and timber products. The EU has to promote a favourable position on the Union market for covered timber products. • The TLAS covers Indonesian timber products destined for domestic and international markets. • 'Green lane' for FLEGT-licensed timber and timber products under the EUTR.
2010 EUTR	<ul style="list-style-type: none"> • Prohibition clause for operators • Specified due diligence requirements for operators • Traceability requirements for traders • 'Green lane' for FLEGT licenced timber and timber products • EU Member States' competent authorities must pursue checks when 'substantiated concerns' are raised by third parties or when shortcomings in the implementation by operators of the due diligence system established by a monitoring organisation have been detected
2021 EUDR (European Commission's draft)	<ul style="list-style-type: none"> • Prohibition clause for operators and traders. • Specified due diligence requirements for operators and traders that are not SMEs. • Traders who are SMEs have to collect and keep specified supply chain information. • Country benchmarking system to categorise countries as low, standard or high risk in terms of deforestation and forest degradation. • Simplified due diligence requirements for low-risk countries. • Member States must ensure that competent authorities conduct minimum checks: <ul style="list-style-type: none"> ○ 5% of the operators placing, making available on or exporting from the Union market each of the relevant commodities on their market ○ 5% of the quantity of each of the relevant commodities placed or made available on or exported from their market

Table 3 continued

Legislation	Key policy instruments
2021 EUDR (European Commission's draft)	<ul style="list-style-type: none"> ○ Enhanced scrutiny for high-risk importers and imports: 15% of operators and 15% of commodity quantities • EU Member States competent authorities must pursue checks and hearings when 'substantiated concerns' are raised by third parties; operators and traders should provide information to competent authorities if they are made aware of relevant new information, including substantiated concerns. • Competent authorities can take immediate interim measures to prevent the placing or making available on the EU market - and export from the EU market - of relevant commodities and products under investigation. • Article 28: the European Commission must engage with producer countries to develop partnerships and cooperation to jointly address deforestation and forest degradation. • Development Cooperation through new Forest Partnerships (gradually replacing FLEGT VPAs). Includes an article on 'access to justice'.
2022 EUDR (Council of the European Union's negotiated position)	<ul style="list-style-type: none"> • Prohibition clause for operators and traders. • Specified due diligence requirements for operators. • All traders have to collect and keep specified supply chain information. • Traders who are not SMEs must ensure that operators comply with the EUDR's due diligence system and provide the reference number of existing due diligence statements. • Country benchmarking system to categorise countries as low, standard or high risk in terms of deforestation and forest degradation. • Simplified due diligence requirements for low-risk countries. • Member States must ensure that competent authorities conduct minimum checks: • Standard risk: 1% of the operators and traders that are not SMEs, established in that Member State, making available on or exporting from the Union market relevant products that contain or have been made using relevant commodities.

Table 3 continued

Legislation	Key policy instruments
2022 EUDR (Council of the European Union’s negotiated position)	<ul style="list-style-type: none"> • High risk: 5% of the operators and traders that are not SMEs. • EU Member States competent authorities must pursue checks and hearings when ‘substantiated concerns’ are raised by third parties; operators and traders should provide information to competent authorities if they are made aware of relevant new information, including substantiated concerns. • Competent authorities can take immediate interim measures for relevant commodities and products under investigation • Article 28: the European Commission and interested EU Member States must engage with producer countries to jointly address deforestation and forest degradation and the root causes leading to them. • Removed the article on ‘access to justice’.
2022 UK due diligence provisions in the Environment Act (in development)	<ul style="list-style-type: none"> • Due diligence requirements for large businesses operating in the UK
US FOREST Act of 2021 (draft)	<ul style="list-style-type: none"> • Amends the Tariff Act of 1930, inserting section 527A, which establishes the following: <ul style="list-style-type: none"> ○ Prohibition to import products made wholly or in part of commodities produced on illegally deforested land. ○ Importers must file an import declaration upon entry stating that the person has exercised reasonable care. ○ Importers must file an import declaration that specifies information on the supply chain and risk mitigation measures taken for imports from foreign countries with an Action Plan. ○ Development and publication of Action Plans for countries without adequate and effective protection against illegal deforestation with goals and benchmarks. • Specified measures to provide foreign assistance for countries committed to eliminating deforestation. • Amends the United States Code (Chapter 47 of title 41) by adding the Procurement preference for commodities not produced from land subject to deforestation.



Table 3 continued

Legislation	Key policy instruments
2020 Forest Law of the People's Republic of China	Several provisions outline a broad range of obligations on forest rights, development plans, forest protection, afforestation and land greening, management and administration, supervision and inspection. Legal liability includes prohibition clauses, specifies several violations, and when administrative penalties and criminal liability apply.

Table 4. Import restrictions and prohibitions.

Legislation	Import restrictions and prohibitions
EU-Indonesia FLEGT VPA	Imports into the EU of timber products exported from Indonesia are prohibited unless the shipment is covered by a FLEGT licence.
2010 EUTR	<p>Prohibition clause Prohibition of placing illegally harvested timber or timber products derived from such timber on the internal market.</p> <p>Due diligence obligations</p>
2021 EUDR (European Commission’s draft)	<p>Prohibition clause Relevant commodities and products can only be placed or made available on the Union market – or exported from the Union market – if all the following conditions are fulfilled:</p> <ol style="list-style-type: none"> 1. they are deforestation-free; 2. they have been produced in accordance with the relevant legislation of the country of production, and 3. they are covered by a due diligence statement. <p>Due diligence obligations</p>
2022 EUDR (Council of the European Union’s negotiated position)	<p>Prohibition clause Relevant products can only be placed or made available on the Union market – or exported from the Union market – if all the following conditions are fulfilled:</p> <ol style="list-style-type: none"> 1. they are deforestation-free; 2. the relevant commodities have been produced in accordance with the relevant legislation of the country of production, and 3. they are covered by a due diligence statement. <p>Due diligence obligations</p>
2022 UK due diligence provisions in the Environment Act (in development)	Expected prohibition of specified commodities that were produced illegally. A due diligence system must be established in relation to the use of a forest risk commodity. Secondary legislation is required to implement due diligence provisions. Businesses in scope that do not comply with these requirements may be subject to fines and civil sanctions.



Table 4 continued

Legislation	Import restrictions and prohibitions
US FOREST Act of 2021 (draft)	Amends the Tariff Act of 1930, inserting section 527A, which establishes import declarations: <ul style="list-style-type: none">• Import ban unless importers file a declaration stating that they have exercised reasonable care to assess and mitigate deforestation-related risks.• Import ban for products and commodities sourced in a high-risk country with an action plan unless importers file a declaration that includes sufficient information on their full supply chain and measures taken to assess and mitigate the risks that the point of origin was subject to illegal deforestation.
2020 Forest Law of the People's Republic of China	Article 65 specifies that 'No organization or individual may purchase, process, and transport woods in full awareness of their illegal origins such as illegal felling or wanton deforestation'.

Table 5. Due diligence system.

Legislation	Due diligence system
EU-Indonesia FLEGT VPA	NA
2010 EUTR	<p>Operators must exercise due diligence when placing timber or timber products on the market. This due diligence system must include:</p> <ul style="list-style-type: none"> ○ Access to information: Measures and procedures providing access to information on operator’s timber or timber product supply chain. ○ Risk assessment: procedures enabling the operator to analyse and evaluate the risk of illegally harvested timber or timber products derived from such timber being placed on the market. ○ Risk mitigation: unless the risk is negligible, risk mitigation procedures must be implemented (e.g. requiring additional information or documents and/or requiring third-party verification).
2021 EUDR (draft)	<p>Before placing relevant commodities and products on the market or before exporting them, operators and traders that are not SMEs must exercise due diligence with regard to all relevant commodities and product supply chains.</p> <p>The due diligence system must include:</p> <ul style="list-style-type: none"> ○ Collection of information and documents needed to fulfil information requirements (includes geolocation information requirements). ○ Risk assessment measures. ○ Risk mitigation measures: unless the risk is negligible, risk mitigation procedures must be implemented. <p>Simplified due diligence for low-risk countries (i.e., dispensed from carrying out the second and third steps of the due diligence process). only negligible risk was found.</p> <p>Traders who are not SMEs must make available to competent authorities the reference numbers of the existing due diligence statements of the associated products they intend to make available on the market.</p>

Table 5. continued

Legislation	Due diligence system
2022 EUDR (Council of the European Union's negotiated position)	<p>Similar to the European Commission's proposal but with some modifications to the details of the due diligence system:</p> <ul style="list-style-type: none"> • The implementation of a due diligence system is only required for operators and no longer for traders, whether or not they are SMEs. Prior to making relevant products available on the market, traders who are not SMEs must ensure that the operators have exercised due diligence according to the EUDR and that no or only negligible risk was found. • Traders who are not SMEs must make available to competent authorities the reference numbers of the existing due diligence statements of the associated products they intend to make available on the market.
2022 UK due diligence provisions in the Environment Act (in development)	Businesses in scope have to undertake a due diligence exercise on their supply chains and provide an annual report on this exercise. Businesses' due diligence exercises will be published.
US FOREST Act of 2021 (draft)	Amends the Tariff Act of 1930, inserting section 527A, which establishes the obligation for importers to exercise reasonable care to assess and mitigate the risks that any covered commodity used to make the covered product was produced from land subject to illegal deforestation and have to file import declarations.
2020 Forest Law of the People's Republic of China	Article 65 specifies that '[a]ny timber operating or processing enterprise shall keep a standing book for entry and exit of raw materials and products of woods'.

Table 6. Country rating system.

Legislation	Country rating system
EU-Indonesia FLEGT VPA	NA
2010 EUTR	NA (Informally practised for several years within the EU EUTR/FLEGT expert group)
2021 EUDR (European Commission's draft)	<ul style="list-style-type: none"> • The identification of low and high-risk countries or parts thereof will be based on information provided by the country concerned and include the assessment criteria 1) rate of deforestation and forest degradation, 2) rate of expansion of agricultural land for relevant commodities, 3) production trends of relevant commodities and products, 4) coverage of emissions and removals from agriculture, forestry and land use in nationally determined contributions (NDC) to the United Nations Framework Convention on Climate Change, 5) EU-tropical producer country agreements and other instruments addressing deforestation and forest degradation, 6) existence, implementation and enforcement of national or subnational laws tackling deforestation and forest degradation. (Article 27.2) • No obligation for the Commission to categorise any country. Categorisation will be done through an Implementing Act that involves the Council and Parliament. • The Commission must notify countries concerned about intended changes in assigned risk categories. • Countries are provided with adequate time to provide a response to changing risk status and are invited to provide information, including on measures taken by the country to remedy the situation. • The Commission will publish the results of the country benchmarking system. • Three categories of countries: low, standard and high risk Low-risk rating only if legality requirements are fulfilled, and international datasets show that deforestation is not continuing to take place, irrespective of political commitments.

Table 6 continued

Legislation	Import restrictions and prohibitions
	<ul style="list-style-type: none"> Operators can still import from high-risk countries if they are able to fulfil all due diligence obligations, EU will support them through Forest Partnerships. <p>The obligations for operators and Member States' authorities will vary according to the risk level, with simplified due diligence duties for low-risk and enhanced scrutiny for high-risk countries.</p>
2022 EUDR (Council of the European Union's negotiated position)	<p>Similar to the European Commission's proposal but with some modifications to the details:</p> <ul style="list-style-type: none"> The list of countries that present low or high risk must be published no later than 18 months from the entry into force of the EUDR. The Commission must engage in dialogue with countries categorised as high-risk in order to help them reduce it. The Commission not only must notify countries concerned about intended changes of assigned risk categories, but it also must engage in a dialogue with them in order to prevent any change to higher risk.
2022 UK due diligence provisions in the Environment Act (in development)	NA
US FOREST Act of 2021 (draft)	<p>Amends the Tariff Act of 1930, inserting section 527A, which establishes the identification of countries without adequate and effective protection against illegal deforestation, and the development of action plans:</p> <ul style="list-style-type: none"> Within 180 days of enactment, the US Trade Representative must identify countries without adequate and effective protection against commodity-driven illegal deforestation. The information related to the country's identification must be made publicly available. Not less frequently than every two years, the Trade Representative must assess whether additional foreign countries should be identified.



Table 6 continued

Legislation	Import restrictions and prohibitions
	<ul style="list-style-type: none">• Trade Representative must consider foreign countries' 1) trends of deforestation and illegal deforestation, 2) policies and practices that deny adequate and effective enforcement against illegal deforestation, 3) trends in the capacity and effectiveness of enforcement against illegal deforestation, 4) incidence of violence and human rights violations in connection with illegal deforestation.• Not later than three years after enactment, the US Trade Representative must develop an action plan for each identified country. The action plan identifies goals and benchmarks, such as implementing new laws and rules to ensure that illegal deforestation is no longer occurring in the country.• A foreign country to which an action plan applies may petition the Trade Representative to determine that the country has achieved all benchmarks in the action plan, terminating the action plan.
2020 Forest Law of the People's Republic of China	NA