Service contract on EU policy on forest products and deforestation

Fitness Check of the EU Timber Regulation and the FLEGT Regulation

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Trinomics

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Economic analysis of environmental policies and analytical support in the context of Better Regulation

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Introduction

The section will assess the impact upon the VPA process and the implementation of the EUTR upon illegal logging levels in a number of countries. Focus will primarily be on those countries currently engaged in the VPA, although the impact of the EUTR upon other key timber exporters will also be included. The central assessment will be on the impact on illegal logging levels, but background information will also be provided in an overview of the countries analysed, on elements such as national action taken to reduce illegal logging, factors influencing illegal logging rates and market relationship with the EU.

The analysis will focus primarily on countries which are currently engaged in the VPA process, and the impact that the process has had on their national forestry sector, such as establishing TLAS and improved forest governance and the subsequent impact on illegal logging levels. The typically lengthy duration of the VPA process will result in likely significant divergence in impact between different countries at different stages of the process. Indonesia for instance has begun issuing licenses, whilst Ghana has been almost ready for a number of years, but Vietnam has only recently entered the process, and therefore the impact on illegal logging levels is expected to be significantly different.

In addition, three non-VPA countries - Russia, Ukraine and Myanmar – will also be assessed. The primary aim of these reviews will be to ascertain the impact of the EUTR upon illegal logging levels within these countries. The countries were chosen due to their importance in the global timber sector, due to their large forest areas, and the high level of EU timber imports. There is consistent evidence within the literature to suggest that the prevalence of illegal logging remains high in each country, showcasing the importance of understanding the current state of play in their forest sectors.

Methodology

To assess the impact of the VPA process and the EUTR a broad range of literature has been analysed. To determine the impact upon illegal logging levels it is preferable to analyse quantitative data over a time period covering both pre and post the implementation of the EUTR and the initiation of VPA negotiations. However, a review of the literature revealed an absence of a single dataset for any specific country, which has led to challenges in determining the impact of either Regulation over time. The analysis has therefore focussed on a number of different datasets, authored by sources such as Chatham House, World Bank, Environmental Investigation Agency, UN-FAO, Interpol and various national government departments. Due to the divergence in methodologies applied in different sources, it is difficult to reliably compare results from different datasets. A list of a few of the methodologies used in a number of the key datasets referred to is included below. To account for this, where comparisons have been made the methodologies used to calculate the results has been stated clearly alongside an acknowledgement that exact comparisons are not possible. It should be noted that the availability of useful quantitative data on illegal logging rates (particularly over time) is scarce within the data, and therefore whilst the application of this data to highlight changes to illegal logging levels has not always been possible, it has been applied where possible.

In addition, the analysis of illegal logging rates has also relied upon qualitative assessments of the prevalence of the illegal activity in each country, utilising a mixture of anecdotal and case study evidence typically put forward by NGO's and research groups. This has where possible been used to support the quantitative data results, but in some instances has provided the core evidence of a particular impact.

Table A-1 Methodology of key datasets

Source	Methodology
Seneca Creek Associates & Wood Resources International (Illegal logging and global wood markets, 2004)	Use of economic simulation using the Global Forest Products Model (GFPM) to determine the changes in wood production, consumption and trade flows that might result from constraining "illegal" volume. Analytical assumptions regarding illegal logging have been applied to the model based upon literature and field research.
World Bank (Strengthening Forest Law Enforecment and Governance, 2006)	The data taken from the World Bank has been collated through different sources, such as the FAO, although the exact methodology used to determine the final logging levels is difficult to determine the FAO prioritises the use of diagnostic surveys, the use of NGO's as information sources and industrial wood input-output estimates.
Chatham House (Tackling Illegal Logging and the related trade, 2015)	Calculates illegal logging as a % of total timber production, which utilises a different approach for each country being assessed. Common approaches used include the use of expert perception surveys, illegal logging estimates from other reports and wood-balance analysis previously undertaken by Chatham House. An estimate using the data collected through these different approaches has then be used to calculate the final level of illegal logging in each country
Global Forest Watch (2019)	Use of satellite data and developed algorithms. Tree loss data (referred to in the report) uses one algorithm covering 2001-2010 and another covering 2011-2018.
Preferred by Nature (2020)	A local expert develops the first draft of the assessment which is then reviewed by Preferred by Nature experts. A series of steps are followed to raft the risk assessment, including, identifying relevant legal authorities and required documentation and describing the risk of illegality.
Forest Trends (ILAT Risk, 2020)	Forest Trends has used independent indices to understand whether countries are consistently ranked relative to one another in terms of corruption. The ILAT Risk Data Tool also draws on three main and inter-related "risk" categories: (a) political governance risk; (b) risk of product association with armed conflict; and (c) risk of export in violation of export bans.
Chatham House (Forest Governance and Legality, 2020)	Forest Policy: An assessment was undertaken of each country's forest policy framework to evaluate the government's response to illegal logging. A standard list of questions was used in the policy assessment and answers were scored against three criteria: if the policy exists (0-2), how well designed it is (0-5) and how well implemented it is (0-5). For each of the countries, an in-country a partner undertook the assessment, each following the same set of guidelines. The scores were then reviewed by Chatham House researchers and peer reviewers and amended where necessary.
UN-FAO (2020)	Dataset collected by Landsat Satellite network. The data provides the estimated number of hectors of forest area between the years of 1990 – 2020. Further to this, a quality assurance process as defined by the Intergovernmental Panel on Climate Change (IPCC) guidance on land assessment was used.

Table A-1 above highlights the divergence in reporting methods used across sources to record illegal logging levels. It is therefore important to keep in mind the limitations to accurately comparing data between one source and another throughout the country analysis.

Overview of Illegal Logging in VPA Countries

There have been several attempts to estimate illegal logging and related timber trade. Most of these estimates have focused on illegal production (the definition of which varies across countries) and international trade of timber for commercial use. Illegal logging, timber production and timber export estimates in VPAs countries from different sources are presented in Table A-2. Although the sources are limited by the lack of data for recent years and therefore the impact of the VPA, they are useful to ascertain the prominence of illegal logging prior to the VPA process.

Table A-2 % of Illegal logging, % of Timber production and % of Timber exports

VPA Country	Source			
	(Seneca Creek Associates & Wood Resources International, 2004) % of illegal logging	**(World Bank, 2006)** illegal logging % of total timber production	**(Chatham House, 2015)**% of total timber production - 2013	**(Chatham House, 2015) % of timber exports - 2014**
Cameroon	50%	50%	65%	27%
Central African Republic	-	-	-	-
Congo	-	-	70%	66%
Ghana	34%-60%	-	70%	28%
Indonesia	70%-80%	70%-80%	60%	63%
Liberia	80%	-	-	-
Vietnam	20%-40%	20%-40%	-	14%

Prior to comparing the levels of illegal logging across different sources, it is important to outline the different methods used to calculate the rates. Seneca Creek Associate & Wood Resources International have calculated illegal logging rates through the use of an economic simulation using the Global Forest Products Model (GFPM) to determine the changes in wood production, consumption and trade flows that might result from constraining "illegal" volume. Analytical assumptions regarding illegal logging have been applied to the model based upon literature and field research. Chatham House have used a different methodology in calculating illegal logging as a % of total timber production, which utilises a different approach for each country being assessed. Common approaches used include the use of expert perception surveys, illegal logging estimates from other reports and wood-balance analysis previously undertaken by Chatham House. An estimate using the data collected through these different approaches has then be used to calculate the final level of illegal logging in each country. A similar methodology has been used for the data underpinning the % of timber trade exports. The data taken from the World Bank has been collated through different sources, such as the FAO, although the exact methodology used to determine the final logging levels is difficult to determine the FAO prioritises the use of diagnostic surveys, the use of NGO's as information sources and industrial wood input-output estimates.

Bearing in mind the different approaches used for most of the VPA countries, and where data is available, Table A-2 shows a relative stability in the estimated amount of illegal logging, but it is

difficult to make accurate comparisons due to different methodologies, which will be further detailed below. However, it can be observed that for most of these countries, exports tend to rely on legally harvested timber to a greater extent than local production (Chatham House Report, 2015). This fact might not be necessarily a result impact of the EUTR or FLEGT Regulation implementation but may be related to the structure of the internal market of these countries or follow more general global trade trends. If the internal market is unable to supply the level of timber required for domestic needs, countries will be forced to import the required timber, and similarly overproduction within the internal market will lead countries to look outward towards export markets. The extent to which the state of internal market has influenced the impact of the EUTR or VPA process can be investigated when consulting timber market experts from these countries during the stakeholder consultation activities.

Risk profiles of VPA countries

Table A-3 presents the risk profile of a number of countries engaged in the VPA process. The timber risk score is outlined in the second and third columns. The fourth column provides detail on illegal logging as a % of total production, with the fifth column providing contextual data on timber imports to the EU. VPA countries are, according to the Preferred by Nature scoring system (Preferred by Nature, 2020), mostly ranked as high-risk countries for illegal logging.

Table A-3 Risk profile scoring of VPA countries

VPA countries (date of entry into force)	Timber illegality risk (Preferred by Nature, 2020)	ILAT Risk Score & Category (Forest Trends, n.d.)	Quantitative assessment of illegal logging (Range based on Table A-2	EUTR annex product imports to EU (2018) in tonnes
Cameroon (2011)	22/100 – high risk	80.8 (Higher Risk)	50%-65% of total production (27% of total exports)	311,105
Central African Republic (2012)	22/100 – high risk	84.1 (Higher Risk)	n/a	22,219
Congo (2013)	No Preferred by Nature indicator – high risk according to the US EIA	86.6 (Higher Risk & Conflict State1)	70% of total production (66% of total exports)	9,146 4
Ghana (2009)	35/100 – relatively high risk	55.9 (Higher Risk)	70%% of total production (28% of total exports)	24,687
Indonesia (2014) – FLEGT Regulation licensing (2016)	No score – denoted as FLEGT country	51.5 (Higher Risk)	60%-80% of total production (63% of total exports)	586,520
Liberia (2013)	22/100 – high risk	76.5 (Higher Risk & Conflict State)	80% of total production	5,822
Vietnam (2019)	31/100 – relatively high risk	64.5 (Higher Risk)	20-40% of total production (14% of total exports)	229,010

Note: ILAT (Illegal Logging and Associated Trade)

The brief overview of the prevalence of illegal logging within VPA countries has identified the challenge in assessing the impact of the EUTR or VPA process upon illegal logging levels over a period of time due to the lack of a single source analysing the changing impact. The Chatham House report (Chatham House, 2015) does attempt to provide an overview of the impact of illegal logging across VPA countries through an analysis of the share of illegal imports from VPA countries into the EU, which shows a steady decrease between 2004 – 2014. However, the data is limited, as shown in the methodology report (Chatham House, 2014), by the lack of data for 2014 onwards and because of the limited scope of

1 Based on the World Bank Harmonized List of Fragile Situations (2019)

countries included. The report does not assess trade from all VPA partner countries, and exports to the EU are only considered for the U.K, France and Netherlands. The use of a number of sources has therefore been used, but there are difficulties in comparing illegal logging levels across datasets due to the inconsistent methodologies used. It is however clear from the overall assessment conducted that there remains a high risk if illegal logging within VPA counties, with high – moderately high levels of illegal logging generally reported across sources and high risk scores attributed to almost all countries. The lowest levels of risk have however been attributed to Indonesia, which is the only state assessed not to be deemed at least relatively high risk by Preferred by Nature. Considering that Indonesia is the only country to have begun issuing licensing this could indicate a possible reduction in risk due to this approach, but it is difficult to confirm the exact level of impact the licensing has had.

In addition to Table A-3, further indicators relating to illegal logging for VPA partner countries is provided below (Chatham House, 2019). The rating system used by Chatham House allows for an understanding on how forest governance has changed since 2009, through an assessment of the institutional and policy frameworks for the relevant national sectors. The scale used below to rank each section includes the categories failing, weak, fair, good and very good.

Table A-4 Forest Governance Indicators

VPA Country	Legal and Institutional Framework			Tenure & Resource Allocation			Regulating Demand			Transparency			Rule of Law		
Year	2008	2013	2018	2008	2013	2018	2008	2013	2018	2008	2013	2018	2008	2013	2018
Cameroon	Weak	Weak	Weak	Good	Good	Good	Weak	Weak	Failing	Fair	Good	Good	Fair	Fair	Good
Ghana	Fair	Good	Fair	Good	Good	Good	Weak	Fair	Weak	Good	Good	Good	Fair	Good	Good
Democratic Republic of Congo	-	Weak	Weak	-	Fair	Fair	-	Failing	Failing	-	Weak	Weak	-	Fair	Weak
Republic of Congo	-	Weak	Weak	-	Fair	Fair	-	Weak	Failing	-	Weak	Fair	-	Fair	Fair
Indonesia	Weak	Fair	Good	Weak	Fair	Fair	Weak	Weak	Fair	Weak	Good	Fair	Weak	Good	Good
Vietnam	Failing	Failing	Fair	-	-	-	Failing	Weak	Weak	-	-	-	Failing	Fair	Fair

The table shows that there has been a clear general trend towards improved forest governance for all countries since 2008. Although no clear link between this improving trend and the VPA process (or EUTR) has been reported, it appears that the regulations are having an impact. It is important to note however that Vietnam has also shown signs of improved forest governance between 2008 – 2018, despite not engaging in the VPA process until 2019. This suggests that there are also other factors influencing the evident improvements.

One note is that the ranking of 'good' for rule of law in Cameroon appears to be unjustified considering the Legal and Institutional Framework is categorized as 'Weak'. To provide additional context and clarification, the rule of law ranking has been based upon three sub-categories which in accordance with the Chatham House methodology (Chatham House, 2019) assigned the following scores – 'Checks and balances: Good; 'Timber Tracking and chain of custody: Fair' and 'Law enforcement: Good'. It was as a result of these scores that the final grade for Rule of Law was considered to be 'Good'.

Analysis of trends (FLEGT Dashboard, 2021) from the Corruption Perception Index has however indicated that there does not appear to be any significant correlation between average Corruption Perception Index score and VPA status, although there is a slightly higher average CPI in pre-VPA countries than those in the process of negotiating or implementing a VPA. Although this suggests that involvement in the VPA process may help to reduce perceived corruption, the CPI of FLEGT licensing countries (Indonesia) is also higher than those negotiating or implementing a VPA, suggesting that this impact may be limited.

The next section will provide a more detailed overview of the illegal logging levels in a number of VPA partner countries, assessing the specific challenges and action taken in each country.

Overview of VPA Countries

Indonesia

The VPA entered into force in May 2014. Indonesia has also started issuing FLEGT Regulation licensing for shipments as of November 2016 and became the first country to do so. The country is issuing legality certificates (V-legal document) for timber harvested legally for timber exported globally.

The ILAT 2020 Risk Score is 51.5 which still falls under the category for a higher risk (50-100) timber importing country, falling just above the lower value of 50.

Since the entry into force of the VPA, production has remained stable (<1% change) (2014 to 2018), while exports have somewhat increased over the same period (13% increase from 2014 to 2018). Over the same period, tropical wood exports (HS44) to the EU have dropped by approx. 50% since the VPA entered into force.

The Indonesian Independent Forest Monitoring Network (JPIK) reported on the positive impact of Indonesia's timber legality assurance system (SVLK), for example through improving good forest governance (FLEGT.org, 2018), which has typically been a beneficiary of the VPA process also. The report highlighted some continuing challenges and further improvements that are necessary to ensure credibility and accountability in the timber legality system, including the continuation of independent monitoring. It has noted that a series of seizures had taken place in Indonesia between December 2018 and February 2019, totalling 422 containers of illegally harvested timber originating from Papua and Maluku (UNEP-WCMC, 2019). The seized timber included valuable species such as merbau and Moluccan ironwood. A representative of the Indonesian Ministry of Environment and Forestry confirmed that all of the confiscated shipments lacked valid documentation. The Indonesian NGO Forest Watch Indonesia voiced concerns that the recent seizures signalled an increase in illegal logging from the relatively pristine eastern regions of Papua and Maluku. In addition, Mongabay (UNEP-WCMC, 2019) reported that some of the seized timber had been traced back to SVLK-certified companies and noted that the SVLK system contained chain-of-custody loopholes that enabled laundering of uncertified timber through certified sawmills. The report further noted that the Environment Ministry's Department of Sustainable Forest Products had found evidence of three companies having exploited this loophole. Other illegalities highlighted in the report included use of farmers' groups as fronts for harvesting in non-forest areas that would otherwise be off-limits to commercial logging, and the exploitation of abandoned concessions (UNEP-WCMC, 2019).

The levels of illegal logging in Indonesia prior to the ratification and implementation of the VPA was high. The Indonesian Ministry of Forestry estimated that the country lost between 1.6 million and 2.8 million hectares of forest annually (between 3 and 5 hectares/ minute) to illegal logging and land conversion in the years preceding 2010 (UN, 2010). This is supported by data showing that in 2013 the estimated level of illegal logging in Indonesia was 60%. (Chatham House, 2015). One report in favour of (Centre for International Forestry Research, 2020) assessed the impact on illegal logging in Indonesia through the use of a survey of expert participants within the country, analysis the change in illegal logging in Indonesia from pre-VPA involvement to present day and the issuing of licenses. There was broad agreement from Indonesian participants that levels of illegal logging had decreased, and this was particularly the case in forests which had been mandated to adopt sustainable forest management. The results of the survey indicated not only a reduction in illegal logging, but an increase in legally felled timber, as participants felt that the share of national timber production exploited with a legally obtained permit has also gone up. It is important to note however that the report was limited by its reliability on data collected through surveys, and the relative absence of quantitative data to support the views put forward. The report does acknowledge that there remains a need to better quantify illegal logging rates and ensure the use consistent methodologies (across VPA countries) which would help to provide more robust data.

Although illegal logging remains a concern in Indonesia, there is some evidence of progress. In 2015, following the issuing of FLEGT licenses, it was estimated that 30% of timber felled was illegal, a significant reduction from approximately 80% in 2006 (TEREA, 2016). Further to this, evidence has suggested that deforestation is in decline, signalling a probably (although not confirmed) decrease in illegal logging. Data from Global Forest Watch has however shown that primary forest lost within Indonesia has decreased significantly since 2016, from 929kha in 2016 to under 400ha in each year between 2017-2019, following a decreasing trend (Global Forest Watch, 2019). Although this data does not specify levels of illegal logging, the sharp fall in forest loss since the emergence of FLEGT Regulation licenses suggests the Regulation has had an impact. Further analysis has shown that post the implementation of the VPA annual deforestation rates have steadily decreased from 1.1 million hectares in 2014-15, to 630 000 hectares in 2015-16, and 480 000 hectares in 2016-17 (EU FLEGT Facility, 2017). Although this data similarly doesn't account specifically for illegal logging, analysis of the data can infer the same conclusion It is important to note the challenges in assessing levels of both deforestation and illegal logging. Although the sources noted above (Global Forest Watch & EU FLEGT Regulation Facility) have both described a declining trend in deforestation in recent years, the opposite trend has been observed through UN-FAO data (UN-FAO, 2020) which shows that the deforestation rate has begun to increase in the years 2010 – 2020.

However, as the data has also shown that the decline in illegal logging began as early as 2000, suggesting that progress has not been entirely related to the EUTR or FLEGT Regulations. This decline can be attributed to a number of activities which were taking place prior to Indonesian involvement in the VPA process. In 2001, Indonesia hosted a regional conference which helped to highlight globally the challenge of illegal logging, culminating in the Bali Declaration on Forest Law Enforcement and Governance. Following on from this, as early as 2003 development of an operator-based timber control system for timber exports (SVLK) had begun, which would later form the basis of the timber legality assurance system of the VPA. This effort to define timber legality within Indonesia in 2003 highlighted the ambition of the Indonesian government to tackle illegal logging in the years preceding their

engagement with the VPA process. The adoption (2009) and revision (2010) of the SVLK Regulation both also occurred before the VPA process has been concluded (EU FLEGT Facility, 2019)

Ghana

Ghana was the first country to sign a VPA in December 2009. Although there has been a decade of history since implementing the VPA, Ghana is still perceived as a relatively high-risk country (Table A-3) for illegal timber exports. The total timber production in Ghana is estimated at 10.2 million m^3 of timber products with 1.7 million m^3 of that destined for exports mostly going to African countries, China, and India. The proportion of trade to these countries is increasing, while trade to 'environmentally sensitive' markets such as the EU and USA is decreasing.

In terms of illegal logging, a 2014 survey of experts' perceptions estimated illegal logging at 49% of total log production and the total timber harvest is considered to be significantly larger than the allowable volumes (Chatham House, 2014). In support of the perception of high levels of illegal logging, the chainsaw logging that supplies over 70% of the domestic market was considered in 2015 to be largely illegal (EU FLEGT Facility, 2015).

A recent investigation (UNEP-WCMC, 2019) reported violation of the rosewood (*Pterocarus erinaceus*) trade ban in Ghana in July 2019, although allegations were disputed by the Ghanaian government. It was estimated that in recent years over 540,000 tons of rosewood were illegal harvested and imported to China whilst harvest and trade bans have been in effect, following the uncovering of a large, institutionalized timber trafficking scheme. In response to EIA's estimate of six million rosewood trees (over 540,000 tonnes of rosewood) exported from Ghana to China since 2012, the Forestry Commission stated that exports over the period March 2012 to May 2019 instead represented approximately 257,230 trees. The Ghanaian government has established a Committee (EIA, 2019) to investigate allegations of corruption in rosewood trade in Ghana, announced in August 2019.

Further, a study conducted by BVRio Institute (BVRio, 2017) identified a number of fraudulent practices in timber production in Ghana, relating to inter alia: granting/use of illegal permits; logging without a permit, in excess of approved yields or outside permitted areas; non-payment/reduced payment of royalties and harvesting fees; and non-fulfilment of Social Responsibility Agreements (SRA) between logging companies and local communities or landowners.

The evidence of the impact upon initiating VPA negotiations and the effect of the EUTR upon illegal logging in Ghana is mixed. Through the VPA process Ghana has established a timber legality system consisting of five key components – defining legality; supply chain control; verification of compliance; FLEGT licensing and independent monitoring. One of the resulting successes is considered to be a commitment from Ghana to tackle the drivers of illegal logging through legal and policy reforms. Further to this, legal reform ensured that there was a clearer definition of illegal timber in Ghana, a key step in ensuring it can then be reduced. However, a recent pivot away from the EU and towards China and India has begun to reduce the political will to implement further reform. This evidence used to assess the impact of legal reform was however primarily from secondary sources, compliment with interviews and focus groups. Although the report (Tropenbos International , 2018) presents a balanced argument on the impact of the VPA process, the absence of statistics to show the impact on illegal logging has limited the usefulness.

Although Ghana is yet to begin issuing licenses, there is a view that the success of VPA's is related not solely to the issuing of licenses, but also through additional developments, such as the impact upon governance of forests (EU REDD Facility, 2017). In the past decade the prevalence of illegal logging is said to be in decline (according to one BVRio official) as a result of initiatives such as the Ghana Timber Transparency Portal which was developed as part of reforms agreed under the VPA (Civic Response, 2020).Additional measures to combat illegal logging have been gradually introduced, such as the introduction of small scale timber permits (EU FLEGT Facility, 2018) which have been implemented through new Regulation, but it is unclear whether this was a direct result of VPA negotiations.
An estimated increase in logging taxes collected by the Ghanaian government of up to 640% (Civic Response Ghana, 2017) has been attributed to the VPA process, and indicates a probable shift towards legal practices. Further successes have also been linked to the VPA process, such as the establishment of a high quality traceability system and improved traceability and access to information for Ghanaian stakeholders (Tropenbos International, 2018). This is supported by an argument put forward (Centre for International Forestry Research, 2020) that Ghana has already begun to accrue benefits in the form of decreased illegal logging despite not having begun to issue licenses. One limitation of the report however is the reliance upon survey analysis of potentially subjective responses in the place of more quantitative hard data. Whilst the survey analysis points to a decrease in illegal logging activity, the report does not explain the theory of change or test the causal links between the ongoing VPA negotiations and the impact on illegal logging, which is a limiting factor to the evidence.

However, despite some apparent success, an increase of approximately 60 – 70% in deforestation of primary forests between 2017 – 2018 was reported (based on Global Forest Watch data), much of which occurred in protected areas and forest reserves (Mongabay, 2019). This estimate however focused on primary forest area only, which UN-FAO data suggesting that overall deforestation has declined in Ghana in recent years (UN-FAO, 2020), which has been referenced elsewhere within the deforestation analysis of the report. This figure (and the methodology used) was disputed by the Ghanaian government which believed the figure to be closer to 31%. A recent, more specific investigation into illegally harvested Rosewood, highlighted the consequences of illegal harvesting and the failure at government measures to prevent this (Dogbevi, 2020). Both the Mongabay (2019) and Dogbevi (2020) investigations have highlighted the continued prevalence of illegal logging, and the only partial effectiveness of government measures.

The analysis has revealed a lack of clear quantitative data concerning precisely how illegal logging levels have been impacted by the EUTR or the ongoing VPA process. The evidence available within the literature more typically provides broader approximations of illegal logging at a particular point in time. The absence of a source detailing a consistent overview of changes to illegal logging over time has made it challenging to identify the impact of initiating VPA negotiations. In addition, there is currently no source available within the literature which has systematically tried to assess the impact of either the EUTR or FLEGT Regulation. The conclusion which can be made from the analysis is that illegal activity has continued to persist, although it does not appear the risk is as high as in some other VPA countries.

Cameroon

Whilst the VPA entered into force in December 2011, the VPA is failing to make significant progress to date, including in the development of TLAS (UNEP-WCMC, 2020). Cameroon is still perceived as a high risk country for timber imports, as shown in Table A-3.

Cameroon produced 21.8 million m^3 of timber products in 2019, a significant increase compared to the 11.6 million m^3 produced in 2011 (an 87% increase). Over the same period overall exports increased from 4.9 to 6.7 million m^3 (a 37% increase)[2] despite tropical wood exports (HS44) to the EU dropping by 35% according to Eurostat data.

It has been estimated previously that 33% of overall log production (2013) and 65% of timber production (2015) were the result of illegal logging (UNEP-WCMC, 2020). More recently, there are a number of examples within the literature of illegal logging activities taking place within Cameroon. A few key examples can be found within reports by (UNEP-WCMC, 2020); (Environmental Investigation Agency (EIA), 2020) and (CIDT, 2018). In addition, BVRio Institute (BVRio, 2018) have outlined a number of fraudulent practices such as logging without a permit, concerns with the allocation of timber rights and operational illegalities.

The qualitative evidence of fraudulent practices in place in the Cameroonian forest sector has shown that illegal logging remains in existence. This is supported by conclusions from a Chatham House study which stated that the existence of illegal logging remained widespread within Cameroon (Hoare, 2015a). It is important to note that the data in the Chatham House study was based around perceptions presented in a survey from experts rather than through primary data collection, and is was not based upon robust, scientific analysis. A separate Chatham House study (Hoare, 2015b) estimated illegal logging to have represented 65% of total timber production in Cameroon in 2013, which was noted as representing a worsening situation within Cameroon (although no further statistics provided as to the extent of this).

Overall, although the literature is consistent that illegal logging remains in existence despite the initiation of the VPA process, the exact levels of this logging remain unclear, and there is a lack of quantitative data to assess how illegal logging has changed over time. One argument put forward is that this could be linked to the relative early stage that Cameroon remains in within the VPA process (Centre for International Forestry Research, 2020). The report uses surveys in thee VPA countries (Indonesia, Cameroon and Ghana) to assess the impact of VPAs upon illegal logging on countries in different stages of the process. Participants to the survey noted that the reduction in illegal logging was least prevalent in Cameroon comparative to the other partner countries. The results of the differing impacts have been attributed in part to the early stage of the process Cameroon is currently in. One further interesting aspect of the available literature is that reports of illegal logging have been signalled by the government, a possible consequence of improved transparency as a result of the VPA process, which encourages improved transparency as it does participation of civil society. Government action has also been reported through the literature to tackle illegal logging, although it is not possible to ascertain whether this is due to the VPA process. There is some evidence, however, that the VPA process has helped to facilitate collaboration between MINOF (a leading Cameroonian forest agency) and local NGO's (CIFOR, 2016). Increased cooperation between these stakeholder groups is expected to help reduce corruption and help support the necessary forest governance to tackle potential illegal logging.

2 ITTO data – Primary wood products

Central African Republic (CAR)

Although the VPA entered into force in July 2012, the progress made since has been limited, with a lack of financial resources and weak government presence in a number of forest amongst the reasons cited for the lack of progress (Logging Off, 2020). In addition, the timber illegality risk score published by Preferred by Nature (Preferred by Nature, 2020) has stayed at 22 out of 100 in 2017 and the ILAT 2020 Risk Score is 84.1 (Higher Risk), which is perceived as a high-risk country for illegal timber imports, highlighting the lack of progress.

The country is considered to have major governance problems which have prevented CAR from effectively eliminating illegal conduct (Forest Legality Initiative, 2013). Since the entry into force of the VPA, timber production has decreased from 2.4 in 2012 to 1.96 in 2018 million m^3 (18% decrease) while exports went from 0.6 in 2012 to 1.3 in 2018 million m^3 (129% increase). However, tropical wood exports (HS44) to the EU have decreased by roughly 11% (18 thousand tonnes in 2012 to 16 thousand tonnes in 2018). Timber products are mainly exported to Europe, China and North America and within Africa to Cameroon and Chad.

Earthsight research finds that, six years after EUTR was introduced to curb illegal timber imports, the trade in suspect wood from Africa continues as indicated by their investigation of French imports (Earthsight, African timber from firms linked to bribery, conflict and illegal logging floods into France, 2019). During a visit in May 2019 to the port on the outskirts of La Rochelle, Earthsight found logs originating from Central African Republic (CAR), Democratic Republic of Congo (DRC), Liberia and elsewhere linked to firms implicated in illegal deforestation, bribing governments and environmental abuses. The report named a number of French importers implicated in trade with African companies alleged to be involved in illegal activities.

To combat illegal timber practices the country has engaged with the Central African Forests Initiative, which aims to protect forests in Central Africa. As one of six partner countries the program helps combat illegal logging through the administration of grants to support good forest governance. Despite this, the practice of illegal logging has persisted (Earthsight, 2019). In recent years the largest logging operator (SEFCA) was accused of breaching cultivation limits (Earthsight, 2019) and of bribery for instance to pass roadblocks or protect their logging sites (Global Witness, 2015). This has been supported by evidence suggesting that the prevalence of illegal logging has led to a loss to the national or local government of millions of dollars of income per year (Junior et al, 2016).

Despite clear anecdotal evidence of the occurrence of illegal logging, analysis of the literature has not provided quantitative support for the evident practices occurring, and the true incidence of illegal logging, and the impact of the EUTR and the VPA process is hard to determine. Similarly, to other nations engaged in the VPA process, it is difficult to assess the impact of the process due to a lack of quantitative evidence of changing illegal logging levels since its implementation. There has however been comparatively limited evidence of progress made by the CAR government to curtail illegal logging contained within the reports assessed through the literature. The lack of tangible action reported to combat illegal logging has suggested limited impact from the VPA process.

Congo (DRC)

Although the VPA entered into force 2013, seven years later Congo is yet to begin issuing licenses. Congo is perceived as a high-risk country for illegal timber imports as per the ILAT 2020 Risk Score of 86.6 (Higher Risk).

It is considered as a conflict state based on the World Bank Harmonized List of Fragile Situations (2019), and the investigations of US Environmental Investigation Agency (US EIA). This is relevant because the weak institutional capacity and unstable governance within conflict countries can help increase the opportunities for the illegal exploitation of forest resources (Forest Trends, 2020).

US EIA has investigated the logging sector in the Congo and Gabon, countries that together account for approximately 60 percent of the total area under forest management in the Congo Basin. The findings from this investigation were significant in highlighting the ongoing challenges of illegal logging in Congo, as well as the actions which need to be taken, such as an anti-corruption and tax evasion crackdown, strengthening of regulatory frameworks and measures to improve transparency (EIA, Toxic Trade: Forest Crime in Gabon and the Repbublic of Congo and Contamination of the US Market, 2019).

Chatham House (Chatham House, 2015) estimates that 70% of timber production is illegal, of which illegal practices in concessions account for 50% and illegal chainsaw logging for 20%.

The EIA's findings (EIA, Toxic Trade: Forest Crime in Gabon and the Repbublic of Congo and Contamination of the US Market, 2019) indicated large-scale, high-level corruption on the part of Dejia Group companies (controlling nearly 1.5 million hectares of forest concessions in Gabon and the Republic of Congo). EIA found that illegally sourced timber from Dejia is contaminating European and US markets, despite their laws prohibiting the import of illegal timber. The report further claimed that there is a non-level European playing field benefitting traffickers as important differences exist in practice in terms of enforcement among Member States (MS) (a "soft" enforcement approach is attributed to Competent Authorities (CAs) in Belgium, France, Greece, Italy, and Spain). This has a bearing on how effectively the EUTR can protect European markets from illegal timber.

Since the entry into force of the VPA, timber production has decreased slightly from 8.0 to 7.8 million m^3 (2% decrease from 2012 to 2018). In the same period (2012 to 2018), exports increased from 2.5 to 3.4 million m^3 (37% increase) even as tropical wood exports (HS44) to the EU have decreased by about 60% in the same period.

Although the Chatham House report (Chatham House, 2015) has indicated the high level of illegal timber production within the Republic of Congo, the statistics provided have not been further supported through quantitative analysis elsewhere in the literature. This is likely due to a lack of verifiable sources within the literature which have detailed illegal timber logging through quantitative analysis, although it is evident through qualitative assessments that illegal logging has existed. The country has however recently adopted law 33 of the forest code which will introduce a range of new measures such as a production sharing regime (obliging companies to deliver physical quantities of logs to the state) and the obligation for companies to certify the legality of their exploited and processed products. (ATIBT, 2020). It is too early to analyse the impact the new measures will have on illegal logging rates.

Liberia

Liberia began to enforce the VPA process in 2013, and although the nation is yet to begin issuing licenses some progress has continued to be made. The Joint Implementation Committee (JIC) has for instance praised the Liberian legal framework for benefit sharing from logging (FLEGT Independent Market Monitor, 2020) and the 2018 Land Rights Act has supported local control of forest resources (SDI, 2019). However, there is still a way to go, evidenced by the fact Liberia is still perceived as a high-risk country for illegal timber imports as per the timber illegality risk score (22 out of 100 in 2017) published by Preferred by Nature (Preferred by Nature, 2020) and the ILAT 2020 Risk Score of 76.6 (Higher Risk). It is considered to be a conflict state based on the World Bank Harmonized List of Fragile Situations (2019), which as noted within the Congo overview this can increase the opportunity for illegal logging (Forest Trends, 2020).

Most timber produced in Liberia (approx. 2 million m^3) is used domestically with only 0.33 million m^3 diverted to exports (16%) in 2019. Of the timber that is exported, most goes to China and small proportions go to other Asian countries and to Europe. Since the entry into force of the VPA, production has remained relatively steady (6% increase) while exports have increased more significantly (35% increase).

The level of deforestation in Liberia has remained high, as over the last 25 years it is estimated that the forested area of the country has decreased by approx. 0.7% per year (Preferred by Nature, 2020). This does however not necessitate that illegal logging level has been responsible, with the data not stating the levels of deforestation attributed to either legal or illegal logging.

The NGO Volunteers to Support International Efforts in Developing Africa (VOSIEDA) released the findings of an Independent Forest Monitoring (IFM) investigation into the activities of a US company in Numopoh Community Forest, Liberia. VOSIEDA reported that the US company violated its community forest management agreement with Numopoh Community, including logging in areas beyond allocated boundaries and failure to pay land rental and cubic metre fees owed to the community (VOSIEDA, 2018). The report also suggested that Liberia's Forestry Development Authority (FDA) lacks capacity to effectively monitor forest contracts.

A study conducted by the BVRio Institute (BVRio, 2017) identified the following types of fraudulent practices used by operators in Liberia:

- Contracts/permits with overlapping tenure periods and borders:
  - Issuing permits/contracts with tenure periods beyond the legally allowed timeframe. Forest Management Contracts (FMCs) are issued for a period of 25 years but can be extended based on the contract holder's justification. The extension periods are generally in multiples of 5 years. Timber Sales Contracts (TSCs) are given for a maximum 3 years and Private Use Permits (PUPs) allocated for 5 years;
  - Issuing permit/contract with borders (coordinates) conflicting with nearby areas and sometimes overlapping with other contracts/permits.
- Side-stepping legal process and requirement:
  - Connivance with forest authorities to issue contracts, especially FMC and TSC, through non-competitive processes;
  - Avoiding the requirements of a FMC by operating though several PUPs, which have less strict requirements;

    - Violation of legal requirements for issuing permits especially PUPs. A common example is issuing PUPs without an environmental impact assessment;
    - Forest authorities issuing annual harvesting certificates without fully complying with legal requirements.
- Timber theft:
    - Logging without a permit;
    - Harvesting of protected species or in protected areas; and
    - Harvesting volumes exceeding the approved yield.
- Third-party rights:
    - Logging without Social Agreements and/or with Social Agreement not fully implemented;
    - Working with Social Agreements not approved by affected communities;
    - Social agreements are agreed on false pretences. Individuals from the community may wrongfully claim to be members of the Community Forestry Development Committees (CFDC); and
    - Not Paying or paying unjust compensation for the land.

Although Liberia has not completed the VPA process, progress has been made through the current negotiations to address illegal logging activity, for example, strengthening the capacity of the Liberian Forestry Development Authority and promoting regulation such as the Liberia Code of Harvesting Practices (EU FLEGT Facility, 2017).

Although action has been taken to combat illegal logging levels through the VPA process, literature reviewed has provided a lack of quantitative evidence to support whether or not the process has had an effect since 2013. Despite the lack of available statistics, some qualitative evidence has suggested that reforms in Liberia's forest sector have not been successful, and that illegal logging remains commonplace (Global Witness, 2017). However, it is difficult to conclusively determine the impact of either the EUTR or ongoing VPA negotiations on actual illegal logging levels.

Vietnam

The VPA agreement with Vietnam entered into force on 1 June 2019. The country is a major timber importer, importing large volumes of timber products from about 80 countries. These are used to produce secondary timber products that are then exported to the EU and other developed markets (EU FLEGT FAcility, 2020). Since the VPA's entry into force is quite recent, there are no data available to establish the development of timber production and trade volumes since.

In 2019, Vietnam produced 136.7 million m^3 of timber while it exported about 6.7 million m^3 (approx. 5%). Tropical timber exports (HS44) to the EU in 2018 were about 20 thousand tonnes.[3]

Illegal logging and trade in illegal timber is a serious problem in Vietnam. Between 30 and 50 thousand violations are reported per year, and the volume of high-risk imports in 2013 was estimated to be 2.3 million m^3 (about 18% of the year's timber imports) and about 14% of exports are estimated to be illegal (Chatham House, 2015).

[3] ITTO data

Early studies conducted by Seneca Creek Associates and Wood Sources International (in 2004) and the World Bank (in 2006) estimated that 20-40% of the country's timber came from illegal sources (Seneca Creek Associates & Wood Resources International, 2004) (World Bank, 2006).

Although the VPA agreement with Vietnam only recently entered into force, there have been early signs of tentative progress. The joint implementation framework (European Commission, 2017) outlined that the VPA will involve the operationalisation of a Vietnam Timber Legality System, which was then implemented in October 2020. However, although a sign of initial progress, the system has attracted criticism that its remit is too narrow and environmental protections have not been adequately included (FERN, 2020). Further to this, the independence of the legality system has been questioned, with Vietnamese NGO's seemingly excluded from the evaluation process.

Evidence of persisting issues is shown through the analysis of timber imports into Vietnam from Cambodia 2017/18, the majority of which were illegal (EIA, 2020). Estimates (by the EIA) indicate that, at full capacity, illegal logging operations in Cambodia could lead to illegal harvest of up to 1.15 million m^3 of illegal timber to Vietnam over the 2017-2018 dry season. The EIA cautioned that an inability to demonstrate that illegal timber is no longer entering the Vietnamese economy will affect the ability of Vietnam to issue FLEGT licences. This is likely die to the inability to subsequently verify the legality of the timber within the Vietnamese, which will hinder the ability to issue licenses.

Further, Global Witness (Global Witness, 2019) assessed imports of tropical timber from the Democratic Republic of the Congo (DRC) by both Vietnam and China in 2018, the DRC's two largest timber export markets. The analysis found that roundwood exports from the DRC to Vietnam increased by almost 66 per cent between 2017 (~40 000 tonnes) and 2018 (~90 000 tonnes). Global Witness described the increase as "a worrying trend", as Vietnam and China currently lack systems for ensuring legality of imports and stated that many of the DRC's timber exports have been considered illegal or high risk in recent years. Global Witness expressed concern that the controls required by the EU-Vietnam VPA may not be sufficiently rigorous to ensure legality of imports (Global Witness, 2019).

In terms of illegal logging, there remain a number of challenges in Vietnam. Over the past five decades the country has lost approximately half of its primary forests, although this can be partly attributed to the Vietnam War (Hays, 2014). recent quantitative data examining changing levels of illegal logging within the country is not readily available within the literature. The illegal trade data above, and the evidence provided (Chatham House, 2015) highlighted that issues remain around illegal logging at an estimated cost of $170m per year (Nguyen & Cao, 2020).

There is some suggestion that the trend of illegal logging may be in decline. Between 2015 – 2016 Vietnamese authorities detected 9% fewer violations of forest protection laws and regulations (Nguyen & Cao, 2020). It is important to acknowledge however that although overall the number of detected violations have been shown to have decreased, the occurrence of more serious cases involving larger volumes of timber has actually increased, offsetting the benefits from the apparent reduction in illegal logging. Further to this, there is a danger that a perceived reduction in illegal logging violations, not only in Vietnam but internationally, is actually the result of increasingly sophisticated tactics, as cartels become better organise and able to avoid detection (Nellemann, 2012).

Considering VPA entered into the VPA agreement as recently as 2019, it is too early to conclude the impact the agreement has had. Although the EUTR has been in place for longer (2013), the lack of clear quantitative data related to illegal logging in Vietnam remains a limitation of assessing the of the EUTR also. It is particularly difficult to assess the impact of the EUTR on Vietnam given it's comparatively small export market to the EU.A review of the literature has therefore not provided conclusive evidence to suggest illegal logging has been impacted by either Regulation, and the arguments have primarily been focussed on qualitative data and case study examples. Despite this, the analysis of Vietnam presents an interesting case study to highlight a number of the issues experienced by VPA countries as well as those as a result of the EUTR. For example, the analysis of illegal timber trade with Cambodia has helped to outline the complexities of operators trying to conduct DD on processed materials, in particular when they stretch across multiple countries.

Overview of Non-VPA Countries

The next section will provide overviews on three non-VPA counties – Russia, Ukraine and Myanmar. Although these countries have not been involved in the VPA process, overviews have been provided due to their importance in the global timber sector, particularly with respect to EU timber imports. Each country has a large forest area, and there is consistent evidence within the literature to suggest that the prevalence of illegal logging remains high in each, showcasing the importance of understanding the current state of play in their forest sectors.

Russia

To date Russia has not been involved in negotiations to implement a VPA and therefore the analysis will be concerned with the impact of the EUTR only. Russia remains a key consideration in discussions to reduce illegal logging, owing both to its size (815m hectares of forest area entirely owned by the state) and it's propensity for deforestation (over 5m hectares were lost in 2017) (UNEP-WCMC, 2018). Evidence of high levels of deforestation is further supported by data showing that tree coverage has decreased by 8.4% since 2001 (Global Forest Watch, 2019). The primary regions responsible for a reduction in tree cover were Sakha (eastern), Krasnoyarsk (western) and Irkutsk (central), indicating a wide geographical spread of deforestation across Russia. Additionally, Russia is also considered a high high-risk country for illegal timber imports as per the timber illegality risk score (6 out of 100 in 2017) (NepCon, 2017), increasing the importance to regulate the high logging levels in operation.

It is due to its large geographical size, that the known risks associated with the deforestation practices in Russia are of such interest, and there are a number of concerns. It has been estimated that close to $240m worth of illegally sourced timber was exported from Russia to the EU in 2014, which has been calculated as being worth 20% of all expected illegal timber imports into the EU (Gan, 2016). The known prevalence of bribery within the country (World Bank, 2017) and the evident mis-use of permits leading to over-harvesting, are two such examples of practices within Russia which have supported the continued existence of illegal logging despite legislative efforts to prevent this. This is evidenced by Russia's position on the Corruption Perception Index (Transparency International, 2019), scoring a lowly 28/100, indicating a high level of expected corruption. A clear link between corruption and deforestation has been made by Interpol, which showed that level of deforestation and corruption were positively correlated (Interpol, 2016), which highlights the importance of considering corruption when assessing illegal logging.

The prevalence of illegal logging in Russia is clear, although a range of different statistics have been provided across the literature. It is estimated that as much as 20% of logging nationwide involves the

illegal harvesting of timber (Gan, J. et al, 2016), a figure which increases to up to 80% for the far eastern region of the country (Environment Investigation Agency, 2013). Issues of illegal logging within Eastern Russia are further supported within the literature through the acknowledgement that, along with Siberia, the Russian Far East is one of the most critical areas of illegal harvesting (Fedorov et al, 2017). There are a number of other projections for the prevalence of illegal logging which have been provided below (Fedorov et al, 2017). The large range (from between 10% - 60% of share of timber harvest) highlights the difficulty in estimating the levels of illegal logging within the country, with challenges such as establishing a clear definition of 'illegal logging' and differences in methodologies used (such as the use of satellite data).

Table A-5 Proportion of total harvested volume estimated to be illegal

Source	Volume per year	Share of Timber Harvest	Date
Rosleshoz Prime Minister's Office	1.1-19 million m^3	<1-10%	2010-2013
WWF Russia	-	10% - 20%	2010
WWF	3.69 million hectares		2019
World Bank	35 million m^3	20%	2010
Greenpeace Russia	50 million m^3	25%	-
Prosecutor General's Office	-	50%	2013
Environmental Investigation Agency	59-117 million m^3	30% - 60%	2013
Russian Federal Forestry Agency	1.3 million m^3		2014
Russian Federal Forestry Agency	1.7 mission m^3		2017
Russian Federal Forestry Agency	1.1 million m^3		2018

Note: Source (Fedorov et al, 2017) *with additions*

It is however evident that exact estimates as to the extent of illegal logging are hard to quantity, as is the case with most countries, with a range of different levels specified across the literature (UNEP-WCMC, 2018). The data available on illegal logging also tends to have a time lag, with most of the statistics available within the literature focussed on illegal logging rates for several years previous. A further key point is that the statistics from Russian government agencies have presented a significantly lower level of illegal logging than the research from NGO groups has identified. The analysis has been limited by the lack of more recent statistics on illegal logging levels, with the majority of NGO reports focused on logging levels in the first half of the 2010s.

One specific aspect of logging within Russia which has been under investigation recently is the legality of sanitary logging. A recent WWF report stated that within Russia sanitary logging is often used as a mechanism to bypass logging restrictions, including in protected areas (WWF, 2020). Further to this, its use has been questioned by Nikolay Shmatkov, Director of FSC Russia, who believes that it is likely to not always be proper sanitary logging in terms of fighting pests, and that the official paperwork supporting it may not always be entirely valid (NEPCON, 2020).

Legislation enacted thus far to combat illegal logging include the Russian Forest Code (2006) with includes aims relating to the control and management of forest resources. However, an evaluation of the code (Hitchcock, 2010) noted that in fact many commentators argued that the code had actually made the prevalence of illegal logging worse. This is due in part because the provisions to prevent illegal logging have largely been removed from the new code, and that the new code has been rushed

and the existence of weaknesses and loopholes will allow forest users to almost always prove legality of their actions (Karpachevskii, 2007).

Although it is difficult to clearly identity the impact of the EUTR upon illegal logging within Russia, the literature has highlighted the importance of Russia as a key player within the forestry sector, and a key exporter to the EU. Recent findings (Earthsight, 2020) have suggested that the prevalence of illegally logged timber into the EU from Russia has remained high, with analysis based upon a case study of BM Group. This has indicated a failure of the EUTR and of EU MSs to conduct effective due diligence to ensure the legality of the timber. Further to this, stakeholder engagement has indicated that certification from the FSC should not be sufficient to assume legality of timber imports into the EU.

This is of greater importance given the high risk of illegality within the Russian forestry sector. The literature reviewed has not identified any clear reduction in this risk in recent years following the implementation of the EUTR, suggesting that the Regulation has not had a significant impact upon this, although the lack of quantitative data has made this difficult to conclusively assess.

Ukraine

Ukraine is a close neighbour of the EU, bordering a number of EU MSs, and is a key player in the global timber industry with close to 10m hectares of forest area (UNEP-WCMC, 2018). However, despite this, Ukraine and the EU have not entered in negotiations to implement a VPA. As is the case with Russia, interest in Ukrainian logging is linked to the high volume of forest area within the country and the evidence of illegal logging and other activities. In the case of Ukraine this is particularly relevant given the high volume of exported to the EU (4.76b kg of EUTR-regulated products) (UNEP-WCMC, 2018).

One of the key concerns linked to logging within Ukraine is the apparent prevalence of corruption. A 2018 investigation from Earthsight concluded that the industry was 'steeped in illegality' citing numerous breaches of regulations concerning the harvesting of timber (Earthsight, Complicit in Corruption, 2018). The investigation showed that the primary destination for illegally sourced Ukrainian wood was the EU, with a number of case studies provided to support this. One particular study uncovered the large-scale illegal importation of sawn timber from Lviv. One key aspect of this example is that the importers were found to have been unaware of the illegal origins of the wood and that one such company (JAF Group) stated that their MS CA had confirmed their EUTR due diligence system. A recent 2020 example stems from another Earthsight investigation which concluded that IKEA had been selling products produced from illegally sourced timber from the Ukrainian Carpathians (Earthsight, 2020). IKEA had been relying upon the Forest Stewardship Council to ensure the legality of its timber imports, but the system had failed in this case to accurately detect the illegal origins of the imports.

Quantitative data on the prevalence of illegal logging has estimated that illegal logging to have affected an average volume of up to 1.25 million m^3 annually (UNEP-WCMC, 2019) although this estimate is from approximately a decade ago. More recently illegal logging has been estimated in the Carpathians region to equate to 1 million m^3, with the Forest Guard project detecting 4.7 thousand m^3 of illegally harvested wood in this area (UNEP-WCMC, 2019). A comparison of these figures suggest there has not been any significant change in illegal logging levels since 2010, although it is important to keep in mind the disparities between different estimates. The State Forestry Agency, for instance, estimated average annual volume of illegal logging to be just 20,000 m^3 (UNEP-WCMC, 2019) – significantly lower than the other sources have reported.

In recent years Ukraine has introduced more stringent regulation to protect its forest area and reduced the incidence of illegal logging. The government introduced new legislation in 2017 aimed at protecting old growth forests, which will include additional protection for the forests in the Carpathian Mountains – considered to be among the most valuable forests globally (WWF, Protection for Ukrainian old growth forests signed into law, 2017). There are also a number of previous legislative attempts from the government to protect their forest areas, such as the Ukrainian Land Code (2001) and the State Specific Programme for the Forests of Ukraine (2010 – 2015).

Similarly to the analysis of illegal logging within Russia, it has been difficult to determine the impact of the EUTR upon illegal logging levels with the Ukraine, with a lack of quantitative data available to assess how the levels have changed since the implementation of the Regulation. The literature has however shown that there remains a high risk of illegal activity within the Ukrainian forestry sector, and by extension of imports to the EU, to which the Ukraine is a key exporter.

Myanmar

Although VPA negotiations have not formally began, efforts are being made to prepare for Myanmar to begin the process, with support from the Myanmar Forest Certification Committee (MFCC) (MFCC, 2018). The forest area in Myanmar (29m hectares) is almost entirely state owned.

In recent years, Myanmar has experienced a number of challenges relating to illegal logging, including a high incidence of bribery (World Bank, 2017), an inadequate legal and policy framework (described as outdated with overlaps and conflicts between laws) (NepCon, Myanmar forest sector legality Analysis, 2013) and high levels of corruption (29/100) (Transparency International, 2019), as noted within the UNEP-WCMC Myanmar country profile. The EIA has stated that the risk of illegal harvesting is 'extraordinarily high' within the country, and further to this, with respect to complying with the EUTR it has been noted that information provided to the EUTR to demonstrate a right to harvest has typically been either unavailable or unverifiable (Environmental Investigation Agency, 2016). The view that it has been challenging in recent years to verify the legality of timber in Myanmar was supported through stakeholder engagement. It was evident through this process that the issue of timber transparency was also expected to be further worsened following the new role of the military in Myanmar forests and an emphasis on a more revenue focussed approach.

Examples of illegal logging can be found throughout Myanmar. One example occurred in the Kayah State where the regional government permitted 10,000 tons of timber to be sold after it was found to have been illegally harvested from the bank of a state river (Myanmar Executive Industries Transparency Initiative, 2020). Illegal timber seizures within Myanmar have been relatively commonplace, with a further breakdown of illegal timber seized (by authority) within Myanmar is shown below:

Although the data shows a very slight decrease in illegal timber seizures between 2017 – 2018, a look back at the preceding years does not show a consistent downward trend, with lower levels of seizures reported in both 2014 and 2016 than in 2018. This data does therefore not provide conclusive evidence of changes in illegal logging activity in recent years (and indeed could also reflect an example of perhaps fluctuating levels of enforcement). It is therefore hard to establish a clear impact of the EUTR from the data set.

Table A-6 Illegal Timber Seizures in Myanmar

Authority	2016/17	%	2017/18	%
Forestry Department	43,347	87%	37,812	78%
Forest Police Force	3,034	6%	0	0%
Defence	2,842	6%	10,377	21%
Myanmar Police Force	802	2%	477	1%
Mobile Team	0	0%	0	0%
MCD	0	0%	15	0%
Total	50,027	100%	48,681	100%

Note: Data from the Myanmar Executive Industries Transparency Initiative

To combat illegal logging, and the issues described, the national government has introduced a number of initiatives prior to opening VPA negotiations with the EU. The Myanmar Timber Legality Assurance System works to ensure the legality of timber exports, in turn disincentivising the practice of illegal logging. Myanmar has also committed to working with the Financial Action Task Force (FATF) to help tackle illegal logging through financial mechanisms such as stronger action on money laundering and applying improved financial intelligence in investigations (Myanmar Executive Industries Transparency Initiative, 2020).

The data available within the literature has highlighted that illegal logging activity remains commonplace within Myanmar, as evidenced by the high level of illegal timber seizures, which have not been shown to have decreased since the EUTR was implemented. Although there has been some noticeable action from the national government to combat illegal logging, it has not been possible to assess the effectiveness of these measures through the available literature due to the absence of any source specifically assessing the impact of the EUTR, as well as the lack of quantitative data on illegal logging levels over recent years.

Conclusions

The analysis of VPA partner countries has provided mixed evidence of the impact of VPA's upon illegal logging. Although there has been some evidence of progress, most notably in Ghana and Indonesia, reliably assessing the impact of the agreements has been limited by the lack of quantifiable and definitive data. This is particularly true for the absence of a single dataset to determine illegal logging levels across countries. Although some evidence has suggested reduced illegal logging due to VPA's (across partner countries) through analysis of metrics such as illegal trade, this assessment has been limited by both the number of countries and the time period assessed (Chatham House, 2014).

Overall, the evidence suggests that beginning the VPA process will support the aim to reduce illegal logging, with benefits increasing as the process advances. This reflects that it is not only the issuing of FLEGT licenses but other aspects of the process, leading for instance, to improved forest governance and transparency which have also been effective in reducing illegal logging levels. However, it is evident that despite the implementation of VPA's, the risk of illegal logging has remained, albeit slightly diminished in some cases. This is consistent across partner countries, indicating that the agreements have not provided a fully effective solution. It is also important to note the difficulty of accurately understanding the impact of VPA's through the current data available, which in some instances is subjective and anecdotal. That only one country – Indonesia – has reached licensing stage has further challenged the ability to reliably judge the impact the VPA's could potentially have.

Annex B – Analysis of deforestation data

Introduction and methodology

In the absence of a robust and temporally complete data set on levels of illegal logging, forest cover (FOA, 2010) data (and associated afforestation or deforestation trends) can be used as a proxy for the state of forest resources over time. This in turn may provide insights into the possible effects of any changes in forest policy (Arevaop & Ladie, 2020).

It is important to note that there are limitations to this proxy method: Changes in forest cover may be due to both legal and legal logging, or due to other factors like clearance of land for agriculture or urban development, fires, and may be temporary or permanent.

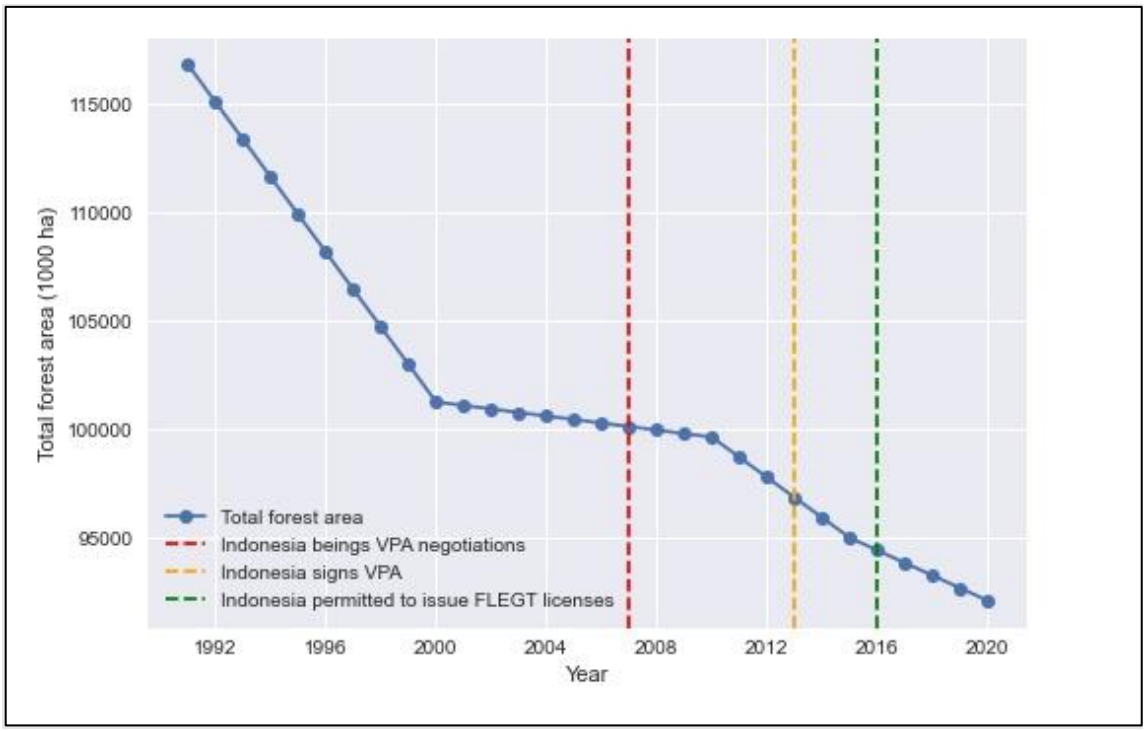
Data from the Forest and Agriculture Organization (FAO, 2020) was used to provide an understanding of the changes in forest size. This dataset is compiled by the FAO's national correspondent for each country who identifies the most reliable and complete estimates (with the Landsat Satellite network found to be commonly used), the data collection and analysis follows a quality assurance process as defined by the Intergovernmental Panel on Climate Change (IPCC) guidance on land assessment was used (IPPC, 2020). Detailed information of how the FAO dataset is collated is available on the FAO website (FAO , 2020). A limitation of the FAO dataset is that data has been historically reported once a decade before the review frequency was increased to a 5-year period from the year 2000, this meant that values for most years consisted of a linear estimation between reported years. Further, technical advancements in forest measurements techniques mean that there is a potential for previous higher margins of error in measurement to cause a step change in reported forest size. Other data sources were also considered, but many link back to the database compiled by the FAO (including models by the University of Maryland (University of Maryland, 2020) whose work feeds into the information displayed on the Global Forest Watch website (GFW, 2020)) and did not offer additional insights.

Forest cover data was collated over a period from 1991 – 2020 for selected case study countries. This time period was selected to consider trends before and after adoption of the FLEGT Regulation and EUTR. A literature review using the google search engine and science direct library was undertaken to link evidence of key events with changes seen in the dataset.

Forest size trends in VPA countries

Case study: Indonesia

Figure B-1 Annual forest cover in Indonesia between 1991 and 2020



After opening discussions in 2007, the Indonesian government signed a VPA with the EU in 2013. Since November 2016, Indonesia is issuing FLEGT Regulation licenses. Figure B-1 Annual forest cover in Indonesia between 1991 and 2020

shows that total forest area reduced at a significant rate over the 1990s. The rate of reduction of forest cover slowed over the 2000's, but then accelerated again post 2010. Indonesia has three official categories of forest: conservation, protection and production. Over this period, production forests were the biggest areas of deforestation (CIFOR, 2015). Evidence from the literature attributes this rapid deforestation trend predominantly to the growth in the number palm oil plantations (Purnomo, Ramdani, Agustiyara, Tomoro, & Samidjo, 2019) (Between 1990 and 2010, the total area used for the cultivation of palm oil grew from 1.1 million to 7.8 million hectors (Tacconi, Rodrigues, & Maryudi, 2019), but also to policy reforms which granted regional authorities more autonomy to install local regulation (Indonesia, 1999), in turn leading to a reduction in the ability of the Indonesian central Government to manage forest areas. Recognizing that regional authorities were failing to appropriately regulate timber harvesting, the central government passed new rules (2002) which blocked regional authorities' ability to issue logging and forest permits in state-controlled forests (Bar, Resosudarmo, Dermawan, & McCarthy, 2006).

It is possible that the VPA may have had some impact in the 2000s. However there were a number of wider policy changes at national level which could have also contributed, in particular efforts of the Indonesian government to unilaterally introduce a licensing scheme from early 2000s (FLEGT licence, 2020). Indeed given the rate of forest loss began to decline before commencement of the VPA negotiations, attribution of effects to the VPA is problematic. What is clearer is that despite the VPA negotiations (and latterly licensing), forest loss accelerated and maintained a high rate of loss in the 2010s. Hence any potential impact of VPAs was clearly overwhelmed by other influencing factors.

Of course, what the deforestation data does not provide insight to is legality. It may be the case that even if expansion of palm oil plantations and/or local rights have driven higher rates of deforestation, these activities may have been legal. The fact that it is reduction in forest cover in the '*production*' sector lends further weight that part of this activity may be legal. In conclusion it is evident deforestation continues at a significant pace. It is difficult to deduce from this data whether VPA has had an impact or not on legality, but clearly there are other, stronger drivers that highlight the wider issue that VPA (and EUTR) are limited in targeting legality as a driver of deforestation, rather than sustainability more broadly.

Case Study: Ghana

Figure B-2 Annual forest cover in Ghana between 1991 and 2020

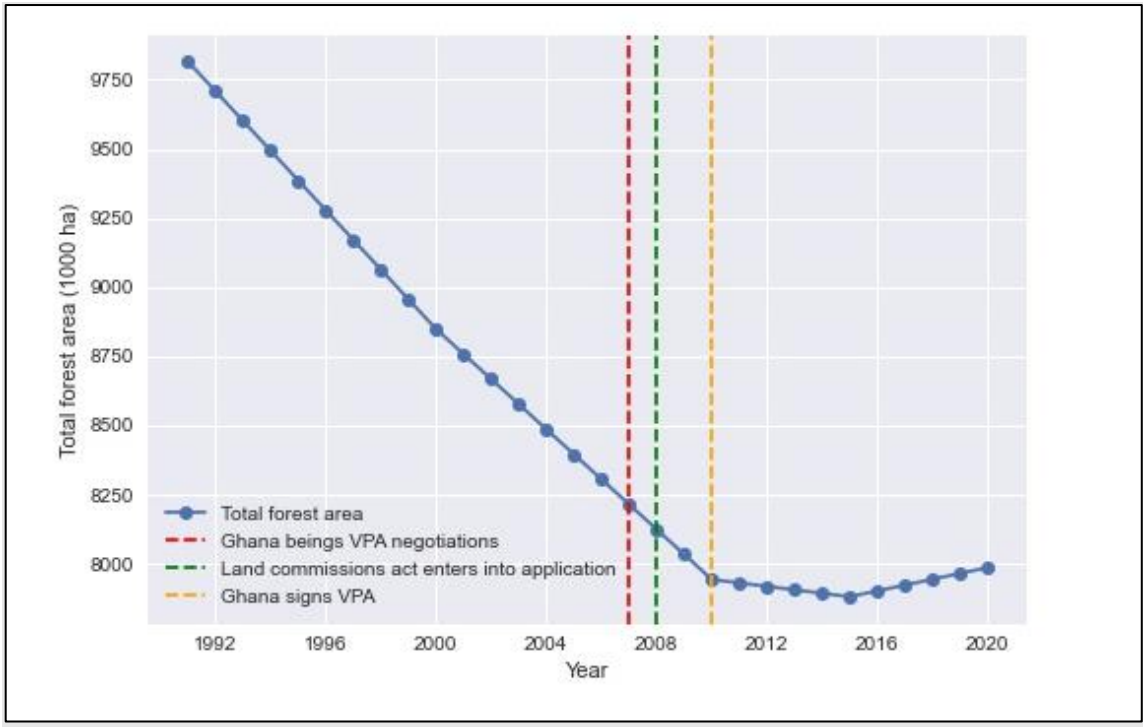


Figure B-2 shows that there was a large reduction in total forest size between 1992 – 2010. However, the rate of deforestation slowed significantly after 2010, and from 2015 was followed by a period of net afforestation to 2020. From the figure, we are not able to rule out the possibility that the VPA signed with the EU in 2010 may have had an impact on the rate of deforestation in Ghana, however with review of other legislations around this period, it is clear that several other policies and initiatives have been introduced which may also have influenced levels of forest cover.

National policies such as, the *land commissions act* (Ghana, 2008), the '*Forestry Development Master Plan 2016 – 2036*' (Republic of Ghana, 2015), the '*Ghana REDD+ Strategy (2016-35)*' (Republic of Ghana, 2016) and the '*National Climate-Smart Agriculture and Food Security Action Plan of Ghana (2016-2020)*' (Republic of Ghana, 2016) highlight that land (forest) conservation was a priority in the decade following the beginning of VPA negotiations with the EU. It has not been possible to identify, categorically, whether VPA negotiations were a key driver in the development of these policies. Our analysis, provided in Annex C, shows a fairly linear decreasing trend in the EU spending on EUTR regulated wood-based products from Ghana, with a relative drop of 76% in 2018 compared to 2007 export values, an absolute change of EUR 91 million. However, since the introduction of the

aforementioned policies, the decreasing trend in EU imports from Ghana has halted although this does not break with broader trade partners regarding EU imports.

Further exploration of the literature has identified evidence that undermines the potential impact of the VPA. A study on the impacts on the timber industry by the VPA found that some timber producers stated that they have now stopped exporting their product to Europe and sell either to the internal or the Asian market (Acheampong & Maryudi, 2020). The same study highlights that there are several reasons for the decision by producers to change their target market with the increased level of bureaucracy and cost being a key theme in some of the reasons provided. Further, the study found that some timber processing firms and exporters went out of business or left the industry, this is cited to be partly due to limited timber resources available in addition to the additional costs associated with the VPA.

In summary, deforestation rates slowed significantly once the VPA was signed, perhaps suggesting a positive effect. However other initiatives may have also influenced levels of illegal logging. What can be concluded is that the VPA process does not seem to have instigated a stronger drive for deforestation prior to licencing commencing. More broadly the literature again questions the ability of the VPA to impact deforestation in Ghana given the agreement does not address other sources of demand for forest resources and space, namely agriculture (Tuffour-Mills, Antwi-Agyei, & Addo-Fordjour, 2020), population growth and global demand for cocoa (Higonnet, Hurowitz, Cole, Armstrong, & James, 2020).

Forest size trends in non-VPA countries (EUTR impacts) – non-EU

Case study: Ukraine

Figure B-3 Annual forest cover in the Ukraine between 1993 and 2020

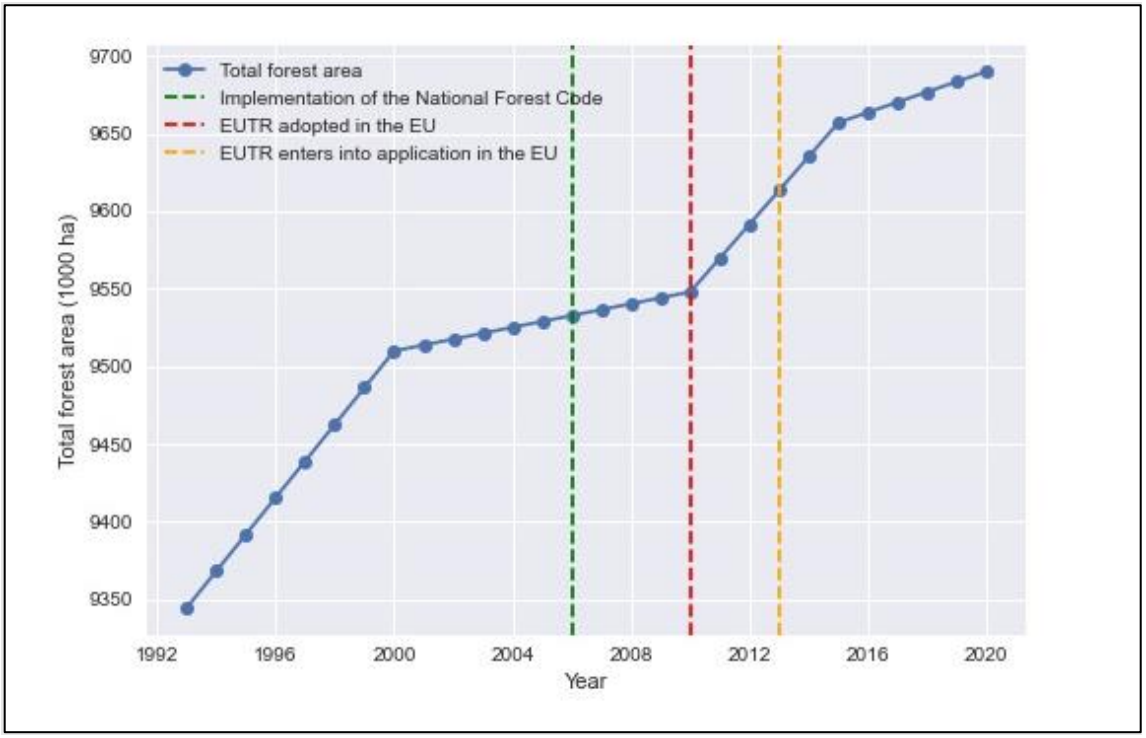


Figure B-3 shows that total forest area in the Ukraine has been increasing annually every year since 1993. This afforestation trend appears to accelerate from 2010, in line with the adoption of the EUTR (before the rate of growth slows again post 2016). Although this simple trend analysis suggests EUTR may have had a positive effect, analysis of the wider policy context in the Ukraine suggests there were other key policies and initiatives that are likely also to have had significant effects, limiting the ability to attribute these trends to EUTR.

The introduction of the national forest code (Lopatin, Marttila, Sikanen, & Eklund, 2011) and forest management programs (Ukraine Government, 2012) are the key legal instruments introduced by the Ukrainian government that led to changes in forest management and timber practices. The forest code defines citizens' legal rights to access of forest resources and the use of '*sales purchase contracts*' which place a requirement on commercial timber traders to submit clear scope of activities (including plans for forest regeneration) in logging permit applications. The code also includes a new framework that grants regional authorities more responsibilities for forest management and places the economic potential of the forest secondary to that of its recreational functions (World Bank, 2020). Environmental NGO '*Preferred by Nature*' report (Preferred by Nature, 2019) that alongside the legislative changes has been a demand by timber operators for their products to be certified through FSC accredited bodies, resulting in approximately half of Ukraine's forest to be FSC certified in 2019; this reportedly driven by the introduction of the EUTR and the requirement to assure timber legality combined with the important position of the EU as a trade partner to Ukraine. However, there are limitations within the paper-based tracking system, which enables operators to falsify information and undermine efforts to improve forest management practices (as discussed in Annex A).

Further, the Ukraine's timber trade was also found to be influenced by other factors outside of the Ukrainian government's direct control: as the EU placing a restriction on goods from the Crimea and Sevastopol after the annexation of the region (European Council, 2014). Evidence has also found that large European firms operating in the Ukrainian timber trade had responded to the EUTR by halting '*production*' operations in the country whilst restructuring themselves as an '*operator*' in EU countries where local suppliers could provide certification of produce (EIA, 2015). The Ukraine government have moved to reform practices in the timber trade in recent years. This is evidenced by the introduction of an electronic timber tracking scheme, increased penalties for illegal trade and the piloting of a public electronic register for harvesting and trade (UN, 2020) but none of these initiatives are linked in the literature to the EUTR. Stakeholders interviewed suggested that there is a political will to increase efforts to understand impacts on forest size in the future, exemplifying a recent decision to conduct the first national forest inventory since 1996; unfortunately financial constraints are likely to delay the completion to between 3 – 5 years.

It is therefore reasonable to conclude that the introduction of the EUTR has played a role in the afforestation seen in Figure B-3, particularly when considering that half of the Ukraine's forest is stated to be certified by the FSC. As seen in trade analysis of Figure C-18, Ukraine has seen a significant increase in the volume of its trade with the EU since the entry in force of the EUTR something potentially linked to the improved levels of timber legality certification and other forest management policies leading to a reduction in deforestation rates.

Case study: Russia

Figure B-4 Annual forest cover in Russia between 1993 and 2020

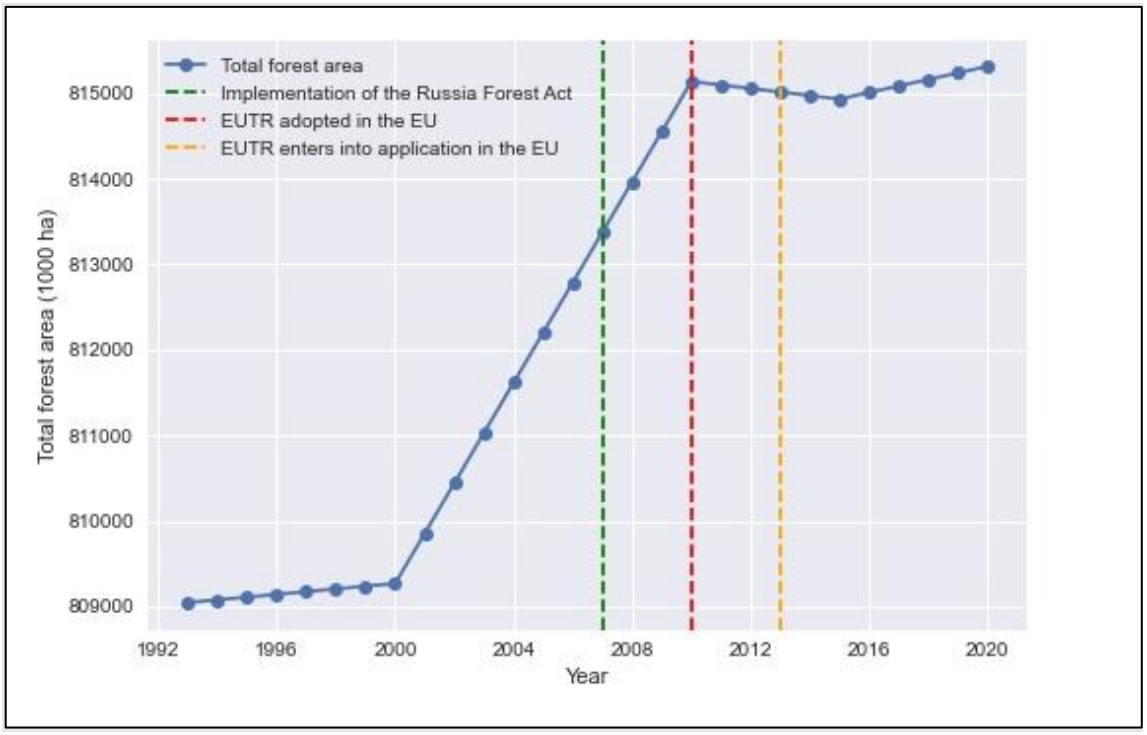


Figure B-4 shows that the total forest area increased during the observable period, which covered 40% of Russia's total land space (EIA, 2013). However, from 2010, the total forest size has remained broadly constant to 2020. Hence, from this data it is difficult to conclude that the implementation of the EUTR has had an impact on Russia's total forest size. Again, several other factors are at play outside the EUTR which influence forest cover. Since the early 2000's, International NGO's have had a presence in the Russian forestry sector, including a growing area of forest being FSC certified to help certify products sold internationally (Tsysiachniouk & Henry, 2015).

Research undertaken by the Petrozavodsk State University (Lukashevich, Shegelman, Vasilyev, & Lukashevich, 2016) found a growing use of voluntary forest certification tools by timber merchants during the decade up to 2016. The paper highlights that Russia ranks second in the terms of area of forest certified by the FSC who issue approximately 40% of the total number of certificates through 16 of the 27 accredited FSC certification bodies (Accounting for approximately 40 million hectors of forest managed by 160 companies). The study suggests the EUTR is "*likely*" to be the key the key driver in the increased demand for certification services and therefore could be a possible explanation for the afforestation seen in Figure B-4.

The research partly supports the Forest and Agriculture Organization's (FAO) assessment that NGO's should be credited for pushing for changes (FAO, 2020) to forest management policies in Russia, such as their role in highlight the limitations in the '*The Russia Forest Act*' (FAO, 2007) which the FSC looked to address through a new FSC certification standard for Russian timber (FSC-STD-RUS-V6-1-2012). Despite the influence of NGO's and other local stakeholders, the FAO suggest that the decrease in funding provided to regional authorities for forest management purposes has weakened their ability to conduct effect forest management.

Counter to the influence of the EUTR, the EIA (EIA, 2013) highlights that a high proportion of timber sourced in Russia is exported into China; and therefore that the EUTR does little to improve forest management practices by companies which service the demand from China. Evidence shows that this is especially true for SME's operating in eastern Russia who have little incentive to serve the European timber market due to their limited finance or technical capacity to adapt to the EUTR (Holopainen, Toppinen, & Perttula, 2015).

In conclusion, it appears that a combination of the EUTR and support for Russian timber merchants from an increasing NGO network has helped to conserve and grow forest areas in Russia, however, due to its proximity to China and other Asian markets, timber merchants continue to have the option to sell to markets outside of the EU trading block, avoiding the needed to follow desired forest management practices targeted in the EUTR.

Case study: Myanmar

Figure B-5 Annual forest cover in Myanmar between 1991 and 2020

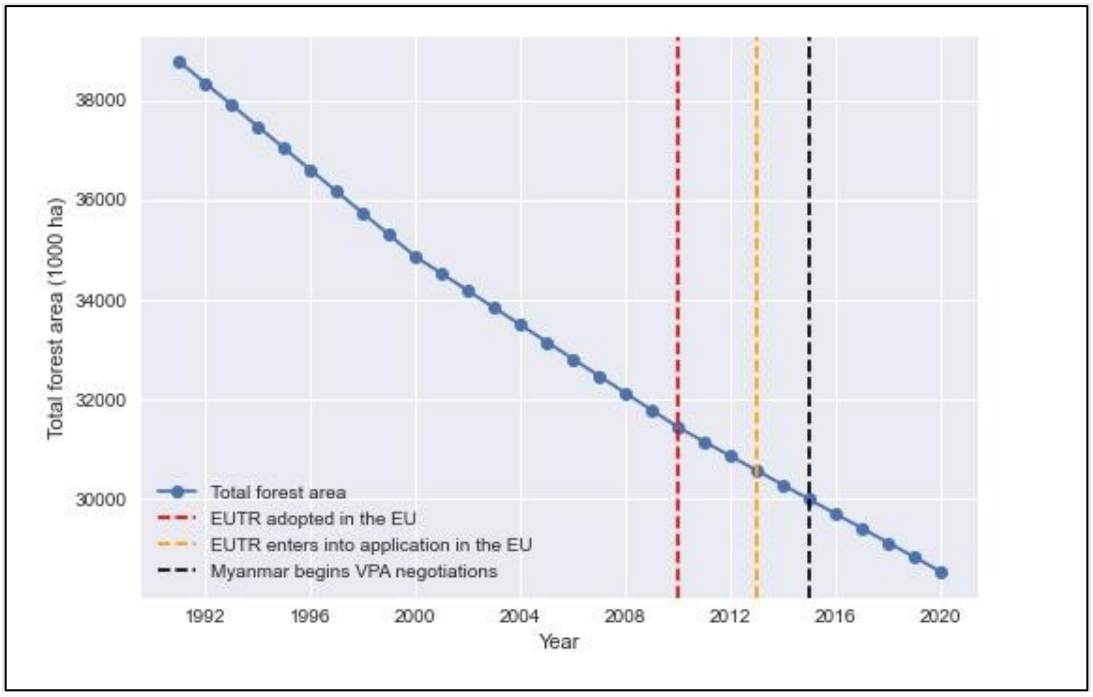
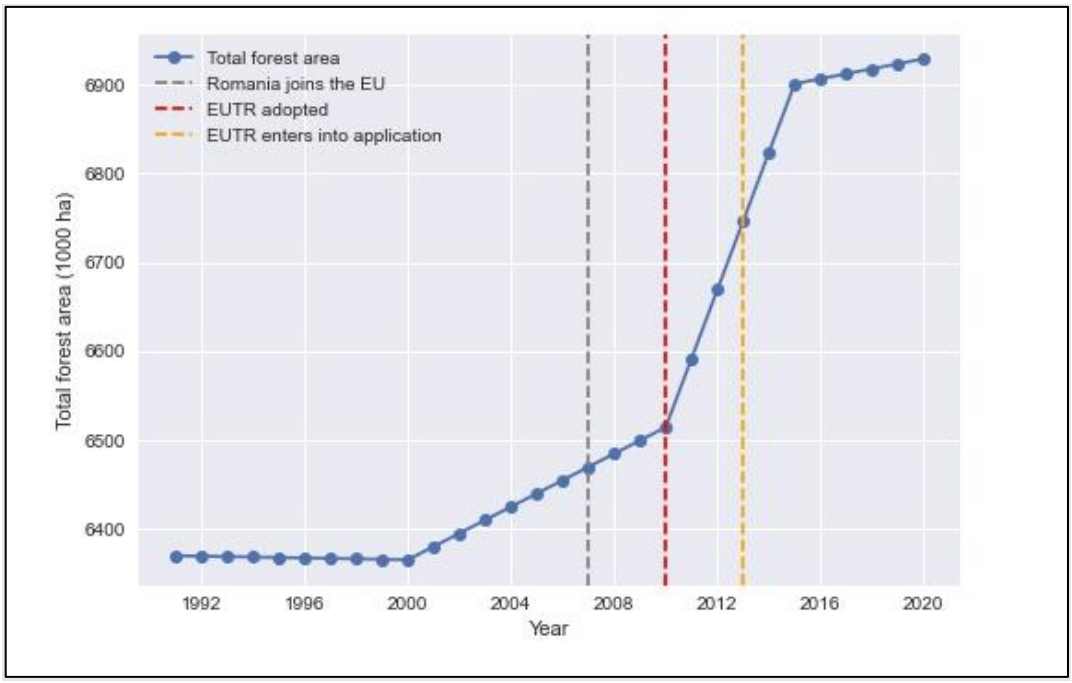


Figure B-5 shows that total forest area in Myanmar fell between 1992 and 2020, and the rate of deforestation was consistent over this period. On this basis it is difficult to conclude that the EUTR has had an impact in Myanmar (nor indeed the VPA process: Myanmar started to engage in the VPA process since 2015) (FLEGT , 2020). Myanmar has been working towards improving forest management practices since the EUTR was adopted, for example bringing forward: The *Environmental Conservation Rules* (Republic of Myanmar , 2014), the *National Land Use Policy* (2016), *Myanmar Sustainable Development Plan* (2018 – 2030) (2018) and *Forest Rules* (Republic of Myanmar, 2019). Prior to this there was a perceived lack of political appetite for new regulation partly due to close ties between the national government during this period and the economic interests of countries oligarchs who controlled the timber industry (Springate-Baginski, Thein, Neil, Thu, & Doherty, 2014). The influence of the country's oligarchs began to wane following the establishments of a new government in 2011 that pushed for widespread reform (Mark & Belton, 2020).

Forest size trends in non-VPA countries (EUTR impacts) – EU

Case study – Romania

Figure B-6 Annual forest cover in Romania between 1991 and 2020



Widespread issues in the Romanian timber industry are well documented: The Environmental Investigation Agency (EIA) undertook a two-year study to report on practices in the country (EIA, 2015). The study highlighted historic issues with land ownership opened up areas of forest for exploitation and suggested that up to 49% of timber cut between 2008 and 2014 was illegally harvested. It noted businesses have developed practices to exploit loopholes in certification practices undertaken in Romania allowing a number of large Industry leaders have moved key business units to Romania to take advantage of the vast logging reserves (despite foreign businesses note being legally permitted to buy forest land).

Figure B-6 shows that after a period of fairly constant forest size from 1991 to 2000, total forest size started to grow post 2000. This rate of growth drastically accelerated from 2010 to 2015, before slowing to a reduced, but still positive growth from 2015. This perhaps suggests that the EUTR may have had some impact on levels of forest loss.

The EIA report concluded that the EUTR has had an impact on illegal logging practices in Romania as large timber companies had made clear efforts to restructure their operations so that they can be seen to comply with the new legislation. However, rather than fully complying with the spirit of the EUTR, the EIA report has shown that companies are in some cases doing the bare minimum so that they can, at the very least, make claim to be compliant. The report claims that, in effect, large timber companies have adapted their business so that they can take advantage of loopholes in the regulation to avoid having to undertake extensive due diligence. This involves buying timber from smaller local '*operators*' and acting themselves as '*traders*', and in turn reporting that measures have been undertaken to ensure that the timber is at minimal risk of being in violation of the regulation. Firms are then able to sell their product in the EU market with the claim that it has been certified to meet trade requirements when actually the certification requirements in Romania are not aligned to those stipulated in EU

regulation. Indeed reports of illegal practices continue (The Guardian, 2020). Hence although forest area is seen to increase, it is difficult to attribute this to EUTR in the face of continued reports of illegality.

Case Study – Bulgaria

Figure B-7 Annual forest cover in Bulgaria between 1991 and 2020

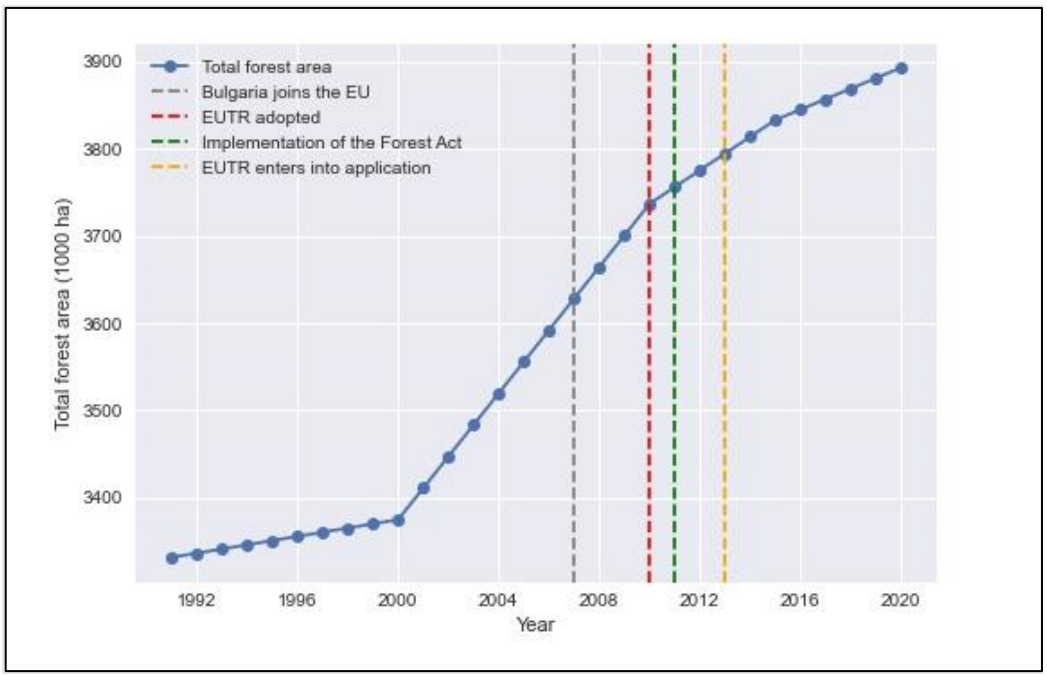


Figure B-7 shows that the total forest area in Bulgaria grew by approximately 18% between 1991 and 2020. The figure does not provide a clear indication of the EUTR having a dramatic impact on forest management practices within the country although a continued increase in forest cover should be noted. Any attribution of effects is again made problematic by wider changes in the governance of forest resources in Bulgaria. Revisions to the Forestry Act (2011) was a controversial moment in Bulgarian environmental law, which is best represented by the fact that its passing led to spontaneous protests in the country's capital city, Sofia (EURACTIV, 2012). Multiple reasons were given for protests. Like Romania, the Bulgarian government decided to embark on a process of redistributing land nationalized during the countries communist period back to the families of the original owners, leaving approximately 23% of forest land under state ownership in 2011 (European Forest Institute , 2015). Critics of the new law, raised concerns that it enabled the reclassification of forest and conservation land, allowing timber businesses access to raw materials without the need of state approval. Further, the act enabled protected land to be used for ski resorts, and eased restrictions for developments to be built in forestry areas (EURACTIV, 2012). The figures shows that forest growth slowed around the period of the implementation of the Forestry Act suggesting that it may have influenced forest growth. In recent years, Bulgaria has published several policies relating to the forest management (FAO, 2014), coupled with the implementation of a national FSC accredited standard (FAO, 2016).

Annex C – Trade analysis

Aggregate data analysis

Intra-EU trade of EUTR-regulated products

Intra-EU trade of EUTR regulated products represents a value of approximately €106 billion in 2018, only slightly down from the high of € 116 billion pre the 2008 financial crisis. As seen in Table C-1, after a sharp decrease in the 2007-2009 period and a relative stabilisation of trade volumes in the following years leading to 2013, intra-EU trade has gradually picked up since.

Within the range of EUTR-regulated products, Chapter 48 products[4] represent more than half of the trade volumes with Chapter 44 products[5] coming in as the second most important trade category within the group.

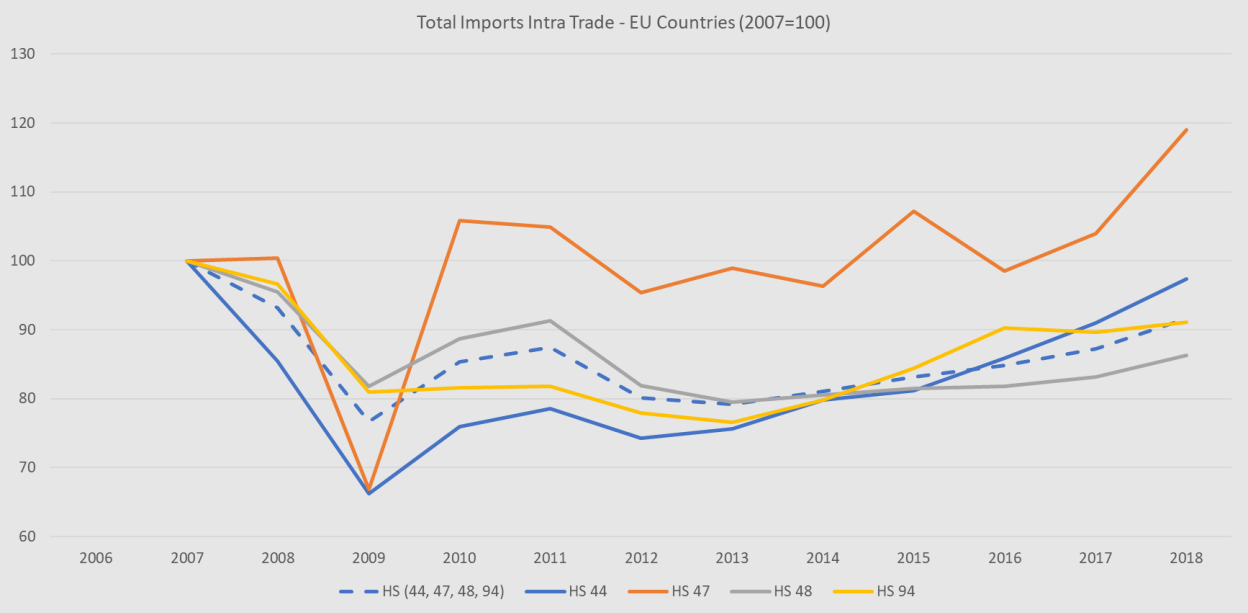
Table C-1 Value of EU intra-EU trade of EUTR-regulated products (in million Euro) (source: Eurostat ext_go_detail)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Chapter 44	31,594	7,010	20,917	23,990	24,820	23,465	23,900	25,215	25,636	27,144	28,750	30,760
Chapter 47	6,470	6,493	4,324	6,850	6,788	6,173	6,402	6,235	6,938	6,373	6,724	7,699
Chapter 48	64,586	61,652	52,830	57,250	58,990	52,879	51,338	51,990	52,654	52,837	53,709	55,719
Chapter 94	13,896	13,427	11,248	11,333	11,359	10,835	10,644	11,095	11,725	12,544	12,458	12,653
All EUTR	**116,546**	**108,583**	**89,320**	**99,424**	**101,957**	**93,352**	**92,284**	**94,534**	**96,954**	**98,898**	**101,641**	**106,832**

Figure C-1 presents how trade of the specific product categories has evolved over time. All product presented a significant drop in trade volumes in the 2007-2009 period resulting in 2009 presenting only 77% of the 2007 trade volumes, with the drop being sharper for Chapter 47[6] and Chapter 44 products. The trade of these products lost nearly a third of its value in this period. In the following years, EUTR-regulated trade recovered to reach 92% of the pre-2008 activity while Chapter 44 and 47 products also presented a sharper trade volume recovery outpacing the rest of the EUTR-regulated category in reaching their pre-2008 trade volumes. This trend is already apparent by 2013 and in the years post the EUTR adoption (in 2013) we can see its continuation. This leads to the conclusion that the EUTR has not led to an overall shift in intra-EU trading of some product categories to a larger extent than for other.

[4] Chapter - 48 Paper and Paperboard Articles of Paper Pulp and of Paper or of Paperboard
[5] Chapter - 44 Wood and Articles of Wood and Wood Charcoal
[6] Chapter – 47 Pulp of wood or of other fibrous cellulosic material

Figure C-1 Development of the value of intra-EU28 imports of EUTR-regulated products (2017=100)(source: Eurostat ext_go_detail)



Intra-EU export volumes of EUTR-regulated products for specific EU Member States are presented in Table C-2. Germany is by far the largest exporter of these products with exports amounting to around €21 billion in 2018. This is less than the 2007 high in export volumes (€24.5 billion) but still higher than the 2013 low of €18.3 billion. Other large exporters include Sweden (€9.8 billion), Poland (€9.2 billion), Finland (€8.0 billion), Austria (€7.7 billion), Italy (€7.1 billion) and France (€6,5 billion). It is worth also mentioning the relatively high export volumes of the Netherlands (€5.5 billion) and Belgium (€5.2 billion) which could be potentially justified by their functioning as trade entry points to the EU.

The general pattern of a decrease in exports in the 2007-2009 period followed by a relative stabilisation in the 2010-2013 and then steady increase leading to 2018 is broadly observed for most Member States. That said, significant differences in the sharpness of the drops and increases in trade volumes can be observed, with a number of Member States presenting a less intense drop in the early period followed by a steeper increase in exports post 2013.

Table C-3 presents in turn the intra-EU imports of EUTR-regulated products by specific Member States. Similar to before Germany is by far the largest importer of these products with imports exceeding €20 billion in 2018. This is around the same level as the 2007 high in import volumes (€20.5 billion) and significantly higher than the 2013 low value of €18.3 billion. Other large importers include France (€12.4 billion), the United Kingdom (€9.0 billion), Italy (€8.6 billion), the Netherlands (€8.4 billion), Belgium (€6.3 billion) and Poland (€6.0 billion).

Table C-2 Value of EU28 intra-EU exports of EUTR-regulated products per Member State (in million Euro) (source: Eurostat ext_go_detail)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Austria	7,508	6,997	5,769	6,705	6,914	6,493	6,488	6,544	6,744	7,025	7,194	7,729
Belgium	6,702	6,359	5,226	5,545	5,774	4,876	4,605	4,700	4,907	5,198	5,064	5,216
Bulgaria	209	211	130	181	204	219	241	264	280	304	313	335
Croatia	-	-	-	-	-	-	200	472	505	573	610	654
Cyprus	44	72	48	55	59	39	39	31	22	13	14	18
Czech Republic	2,790	2,820	2,463	2,845	3,034	2,682	2,714	2,783	2,886	3,039	3,101	3,305
Denmark	2,207	2,002	1,651	1,625	1,596	1,417	1,424	1,446	1,435	1,410	1,354	1,408
Estonia	1,002	861	624	863	980	957	1,027	1,121	1,214	1,272	1,259	1,383
Finland	10,712	9,465	6,725	7,641	7,630	7,246	7,068	7,540	7,736	7,671	7,632	7,961
France	8,857	8,163	6,495	6,648	6,859	6,255	6,055	6,084	6,178	6,245	6,293	6,521
Germany	24,595	23,173	19,448	21,195	21,604	19,085	18,307	18,600	18,907	19,821	20,454	21,084
Greece	189	177	154	154	165	130	128	134	149	159	159	178
Hungary	1,349	1,262	1,193	1,393	1,465	1,212	1,195	1,200	1,294	1,300	1,338	1,402
Ireland	643	562	482	596	531	523	527	480	511	488	541	569
Italy	8,361	7,882	6,531	6,953	6,897	6,461	6,445	6,587	6,702	6,690	6,881	7,069
Latvia	1,385	1,094	823	1,226	1,361	1,311	1,337	1,418	1,483	1,537	1,629	1,953
Lithuania	924	815	655	845	986	986	1,017	1,111	1,122	1,208	1,295	1,420
Luxembourg	679	599	608	593	571	518	500	496	518	568	579	560
Malta	6	5	3	2	3	2	1	3	3	4	4	9
Netherlands	6,023	5,602	4,599	5,384	5,343	4,791	4,697	4,803	4,885	4,856	5,312	5,517
Poland	5,250	5,264	4,791	5,597	6,094	5,778	6,309	6,809	7,365	7,904	8,507	9,221
Portugal	2,431	2,296	1,825	2,210	2,385	2,308	2,347	2,292	2,332	2,290	2,389	2,518
Romania	978	775	673	875	917	885	1,029	1,078	1,125	1,241	1,355	1,374
Slovakia	1,874	1,868	1,739	1,786	1,646	1,519	1,540	1,605	1,723	1,721	1,755	1,857
Slovenia	987	895	761	833	891	829	833	879	913	1,003	1,002	1,053
Spain	4,348	4,456	3,626	4,172	4,225	3,804	3,717	3,676	3,638	3,682	3,837	4,000
Sweden	13,007	11,827	9,758	10,870	11,181	10,444	9,918	9,828	9,781	9,187	9,276	9,778
United Kingdom	3,388	3,022	2,490	2,568	2,592	2,519	2,389	2,522	2,491	2,417	2,426	2,506
All EUTR	116,450	108,527	89,290	99,361	101,904	93,288	92,098	94,506	96,850	98,824	101,572	106,599

Table C-3 Value of EU28 intra-EU imports of EUTR-regulated products per Member State (in million Euro) (source: Eurostat ext_go_detail)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Austria	5,522	5,258	4,668	5,133	5,485	5,352	5,341	5,198	5,232	5,477	5,679	5,734
Belgium	7,347	7,099	5,945	6,423	6,647	6,167	5,908	6,120	5,782	5,954	6,084	6,310
Bulgaria	509	538	384	396	416	402	404	408	442	455	460	492
Croatia	780	764	617	592	587	485	469	537	612	613	672	751
Cyprus	273	260	202	204	182	136	111	111	112	123	129	146
Czech Republic	2,643	2,847	2,424	2,675	2,754	2,550	2,574	2,619	2,827	2,858	3,004	3,150
Denmark	3,713	3,383	2,642	2,726	2,890	2,701	2,632	2,750	2,751	2,713	2,815	3,006
Estonia	421	399	286	360	374	393	429	437	438	447	496	526
Finland	1,724	1,771	1,175	1,477	1,585	1,428	1,309	1,194	1,186	1,133	1,131	1,307
France	14,883	14,300	12,357	13,248	13,309	11,907	11,569	11,538	11,585	11,668	12,103	12,400
Germany	20,480	18,958	16,004	18,554	19,523	18,311	18,287	19,138	19,638	19,554	19,494	20,190
Greece	1,928	1,837	1,404	1,339	1,124	881	883	899	895	908	900	963
Hungary	1,661	1,695	1,356	1,444	1,492	1,316	1,358	1,438	1,522	1,597	1,676	1,767
Ireland	1,867	1,564	1,101	1,107	1,138	1,112	1,058	1,158	1,315	1,250	1,276	1,346
Italy	9,340	8,233	6,745	8,294	8,380	7,281	7,303	7,607	7,715	7,728	8,091	8,642
Latvia	468	382	247	326	367	404	467	513	493	514	554	588
Lithuania	651	642	464	576	667	704	725	810	767	755	787	827
Luxembourg	751	711	680	700	715	691	659	638	649	666	668	676
Malta	125	126	115	111	109	109	103	105	111	101	91	113
Netherlands	7,658	7,407	5,833	6,123	6,389	5,647	5,343	5,416	5,702	7,553	7,925	8,435
Poland	4,469	4,675	3,739	4,489	4,855	4,510	4,586	4,916	5,094	5,150	5,634	6,025
Portugal	2,021	1,989	1,735	1,846	1,798	1,472	1,499	1,592	1,605	1,622	1,737	1,809
Romania	1,400	1,392	1,103	1,151	1,194	1,050	1,070	1,122	1,228	1,336	1,428	1,627
Slovakia	1,342	1,455	1,233	1,311	1,334	1,288	1,353	1,258	1,299	1,337	1,365	1,436
Slovenia	852	808	714	785	757	744	801	869	935	1,059	1,092	1,238
Spain	7,150	6,127	4,776	5,124	5,057	4,377	4,317	4,429	4,649	4,690	4,761	5,152
Sweden	3,220	2,882	2,317	2,832	3,076	2,793	2,689	2,708	2,672	2,825	2,898	3,135
United Kingdom	13,347	11,080	9,054	10,080	9,752	9,142	9,037	9,009	9,697	8,810	8,693	9,042
All EUTR	116,546	108,583	89,320	99,424	101,957	93,352	92,284	94,534	96,954	98,898	101,641	106,832

Imports of EUTR-regulated products from non-EU countries

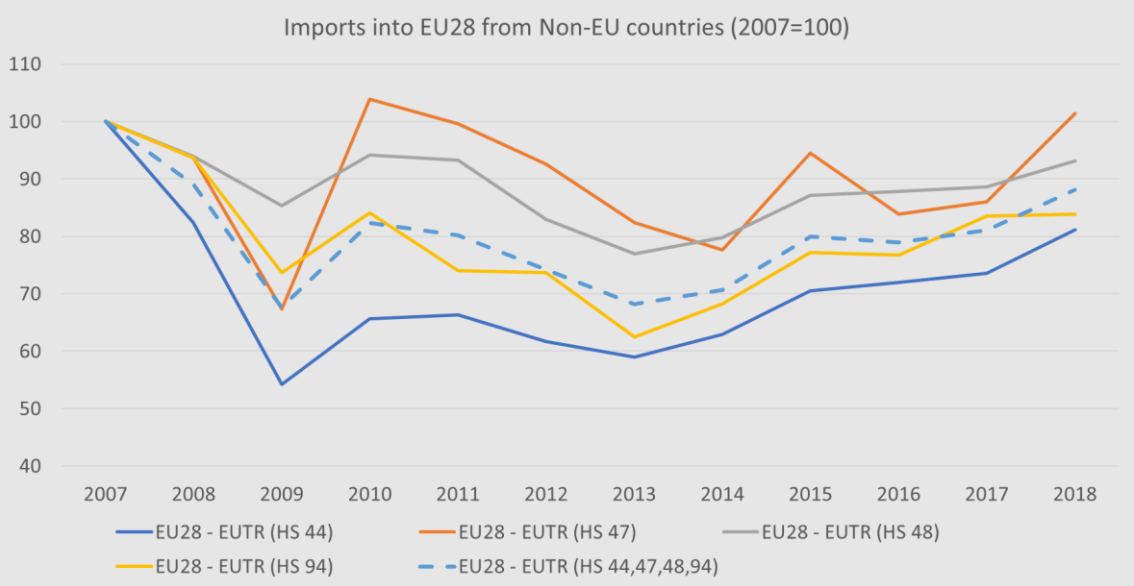
The value of EU imports of the products regulated by EUTR have fluctuated over recent years as can be seen in the table below. In this table, product import values are presented for all EUTR-regulated products and individually for each chapter of product codes (HS-codes) as defined in the Eurostat ComExt database. The composition of EUTR-regulated imports appears relatively stable with Chapter 44 products[7] being the largest category of regulated products throughout the 2007-2018 period, followed by Chapter 48[8] representing the second largest category.

Table C-4 Value of EU imports of EUTR-regulated products from non-EU countries (in million Euro) (source: Eurostat ext_go_detail)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Chapter 44	13,961	11,509	7,567	9,168	9,259	8,610	8,236	8,789	9,846	10,050	10,271	11,323
Chapter 47	5,426	5,085	3,654	5,639	5,405	5,025	4,471	4,212	5,128	4,550	4,668	5,505
Chapter 48	9,030	8,482	7,704	8,503	8,421	7,491	6,948	7,206	7,875	7,933	8,000	8,414
Chapter 94	4,921	4,609	3,625	4,141	3,644	3,629	3,073	3,359	3,796	3,778	4,111	4,126
All EUTR	**33,338**	**29,684**	**22,549**	**27,451**	**26,729**	**24,754**	**22,727**	**23,565**	**26,646**	**26,311**	**27,050**	**29,368**
Index 2007=100	100	89	68	82	80	74	68	71	80	79	81	88

The relative development of the trade of these products since the entry into force of EUTR in 2013 can be seen in Error! Reference source not found.. A gradual increase in imports of EUTR regulated products can be observed as imports in 2013 represented only 68% of their pre-crises value while by 2018 this has risen to 88%. All product types follow a similar trajectory with pulp products (HS Chapter 47) presenting the stronger increase and being the only product category to reach pre-crisis levels (101% of their 2007 value), while timber (HS chapter 44) presenting the slowest recovery (reaching only 81% of their 2007 value).

Figure C-2 Development of the value of EU28 imports of EUTR-regulated products from non-EU countries (2007=100) (source: Eurostat ext_go_detail)



[7] Chapter - 44 Wood and Articles of Wood and Wood Charcoal
[8] Chapter - 48 Paper and Paperboard Articles of Paper Pulp and of Paper or of Paperboard

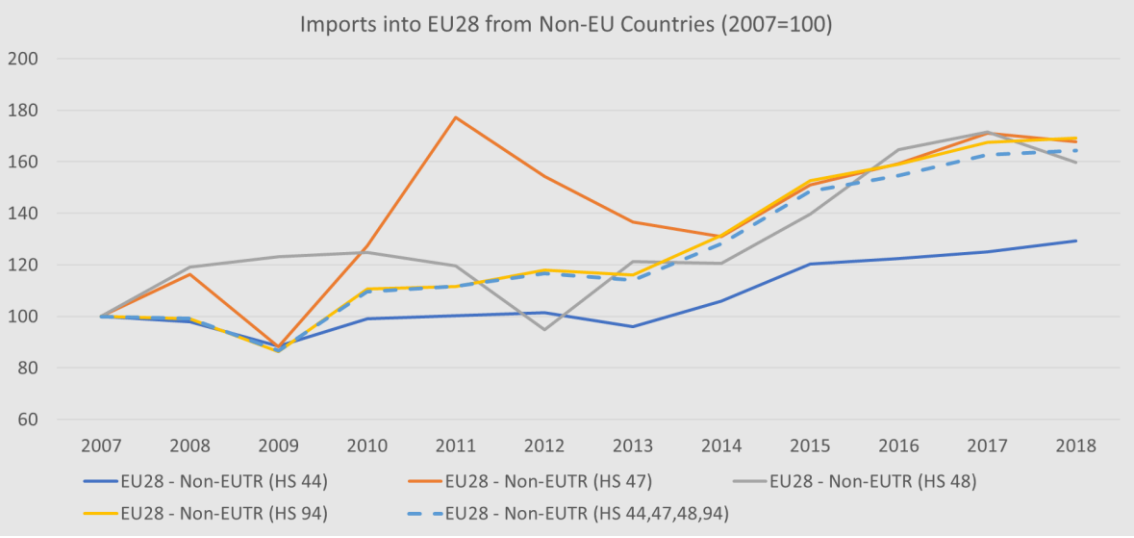
In comparison to the trade of EUTR-regulated products, Table C- presents the development of the import value of all the remaining products in the respective Chapters that are not regulated by the EUTR. This includes products classified under Chapters 44, 47 and 48 that are exempt from the EUTR. These represent relatively small volumes compared to the EUTR-regulated products of the same chapters. In the same table, imports of non-wood-based furniture product values are also presented (Chapter 94) as they may potentially provide for substitutes for wood-based furniture.

In examining the trend line for the imports of these products post-2013, they are seen to follow a similar overall pattern of steady trade volumes increase as that identified for EUTR-regulated products. However, this product selection presents a considerably stronger performance in the post-2008 crisis trade recovery (reaching 168% of their 2007 value by 2018). Especially when looking into the development of trade volumes after 2013, the increase in trade volumes is stronger than that of the EUTR-regulated imports.

Table C-5 Value of EU imports of non-EUTR-regulated products (in million Euro) (source: Eurostat ext_go_detail)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Chapter 44	1,541	1,509	1,364	1,526	1,544	1,564	1,481	1,634	1,853	1,889	1,926	1,992
Chapter 47	255	296	225	324	452	393	348	333	384	406	436	427
Chapter 48	16	19	20	20	19	15	20	19	23	27	28	26
Chapter 94	11,033	10,918	9,528	12,214	12,321	13,024	12,807	14,490	16,835	17,539	18,498	18,661
Total	12,846	12,742	11,136	14,084	14,336	14,996	14,656	16,477	19,095	19,860	20,887	21,106
Index 2007=100	100	99	87	110	112	117	114	128	149	155	163	164

Figure C-3 Development of the value of EU28 imports of non-EUTR-regulated wood-based products and furniture from non-EU countries (20-7=100) (source: Eurostat ext_go_detail)



With one of the EUTR objectives being to ensure that only legally harvested timber and timber products are placed on the EU market, it is worth examining the development of trade volumes with countries assessed as being of low risk of illegal logging. For this, a selection is made of 21 countries, which are classified into the low risk category for illegal logging (as per the ILAT risk score). Excluding from this

selection the countries with negligible trade with the EU, [9] this selection includes some of the most important EU timber-product trade partners (such as the United States, Norway, Switzerland and Canada). Overall, imports from these countries represent roughly one third of all EU imports of EUTR-regulated products. As seen in table C-3, the trade volume development for the group of low-risk countries follows a path of steady trade volumes increase since 2013 very similar to that of the overall trade volumes of the same product selection as presented in Table C-1 indicating that no preferential trade with these countries is observed, especially after the entry into force of EUTR in 2013. On the contrary, presenting a sub-average performance, it could be argued that middle and high risk countries have increased their significance as EU timber trade partners and no shift to trading with low risk countries can be observed as a result of EUTR. Looking closer to the trade with specific countries since 2013, the most significant part of the increase in trade with the EU comes from only two partner countries, the United States of America and Uruguay while the rest of the group presents roughly similar trade volumes.

Table C-6 Value of EU imports of EUTR-regulated wood-based products from low-risk countries (in million Euro) (source: Eurostat ext_go_detail)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Australia	68	44	40	66	74	59	69	60	44	53	72	51
Canada	2,051	1,550	1,118	1,242	1,106	949	907	763	816	834	794	883
Hong Kong	150	152	105	109	97	93	85	89	99	90	107	88
Japan	181	167	155	197	186	174	128	149	150	170	163	138
New Zealand	23	22	19	35	26	19	17	33	35	41	56	51
Norway	1,851	1,620	1,289	1,485	1,471	1,226	1,108	1,079	1,107	1,139	1,199	1,261
Korea (Republic of)	111	96	80	76	120	110	102	126	140	143	100	104
Singapore	75	80	76	60	53	50	40	48	57	32	39	34
South Africa	379	289	264	275	249	225	182	200	213	201	199	196
Switzerland	2,480	2,337	1,960	2,078	1,972	1,610	1,439	1,422	1,389	1,339	1,316	1,265
Taiwan	117	122	93	104	85	84	80	68	70	75	78	73
Uruguay	157	344	266	554	527	395	392	361	673	676	739	993
United States of America	4,042	3,636	2,959	3,655	3,557	3,498	3,335	3,535	4,146	4,013	4,110	4,250
Total	**11,698**	**10,472**	**8,434**	**9,946**	**9,534**	**8,504**	**7,892**	**7,942**	**8,949**	**8,813**	**8,981**	**9,397**
Index 2007=100	100	90	72	85	81	73	67	68	76	75	77	80

Further, when looking into the imports from higher-risk countries, the opposite trend can be observed. For this, a selection is made of 106 countries, which are classified into the higher-risk category for illegal logging (as per the ILAT risk score).[10] This selection also includes some of the most important EU timber-product trade partners (such as Brazil, Russia and Ukraine). Overall, imports from these countries represent more than a third of all EU imports of EUTR-regulated products. As seen in table C-7, the trade volume development for the group of higher-risk countries follows a path of steady trade volumes increase since 2013 that is significantly stronger than the overall trade volumes of the same product selection as presented in Table C-1. This shows that trade volumes with higher-risk countries have not suffered any disproportionate impact from the entry into force of EUTR in 2013.

[9] American Samoa, Anguilla, Greenland, Lichtenstein, Iceland, Mauritius, San Marino and the Virgin Islands
[10] https://www.forest-trends.org/fptf-ilat-home/ (last accessed 22 February 2021)

Table C-7 Value of EU imports of EUTR-regulated wood-based products from higher-risk countries (in million Euro) (source: Eurostat ext_go_detail)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total (106 countries)	13,311	11,392	8,039	9,772	9,620	8,916	8,289	8,752	10,061	10,133	10,337	11,898
Index 2007=100	100	86	60	73	72	67	62	66	76	76	78	89

Country	Risk score	Country	Risk score	Country	Risk score	Country	Risk score
Afghanistan	90.98	Egypt	76.54	Libya	96.56	Solomon Isds	70.15
Algeria	76.84	El Salvador	50.55	Madagascar	76.54	Somalia	99.19
Angola	86.45	Equatorial Guinea	90.30	Malawi	66.57	South Sudan	98.55
Argentina	63.30	Eritrea	94.56	Maldives	64.32	Sri Lanka	54.71
Azerbaijan	56.88	Ethiopia	81.85	Mali	73.36	Sudan	93.85
Bangladesh	79.37	FS Micronesia	57.06	Marshall Isds	51.81	Suriname	60.76
Belize	65.45	Gabon	84.95	Mauritania	76.18	Syria	96.56
Benin	60.62	Gambia	69.32	Mexico	68.35	Tajikistan	80.69
Bermuda	54.32	Ghana	56.11	Moldova	56.45	Tanzania	65.31
Bolivia	76.72	Guatemala	73.49	Morocco	55.69	Thailand	59.67
Bosnia Herzegovina	54.72	Guinea	80.95	Mozambique	80.13	Timor-Leste	75.92
Brazil	57.49	Guinea-Bissau	88.80	Myanmar	91.62	Togo	71.96
Burkina Faso	60.87	Guyana	59.39	Nauru	56.41	Trinidad and Tobago	51.45
Burundi	91.48	Haiti	86.58	Nepal	66.55	Tunisia	52.68
Cambodia	81.16	Honduras	84.40	Nicaragua	72.53	Turkey	56.31
Cameroon	81.13	India	65.31	Niger	72.81	Turkmenistan	88.23
Central African Rep.	84.61	Indonesia	51.51	Nigeria	81.10	Tuvalu	51.71
Chad	93.22	Iran	80.29	Pakistan	82.56	Uganda	69.66
Colombia	64.31	Iraq	90.87	Palau	51.50	Ukraine	69.05
Comoros	79.04	Kazakhstan	53.41	Papua New Guinea	82.59	Uzbekistan	79.18
Cote d'Ivoire	77.92	Kenya	69.98	Paraguay	55.76	Venezuela	95.91
Cuba	66.63	Kiribati	64.88	Peru	65.58	Vietnam	64.14
Dem. People's Rep. of Korea	95.10	Kyrgyzstan	65.92	Philippines	60.88	Yemen	96.99
Dem. Rep. of the Congo	94.69	Lao PDR	88.72	Rep. of Congo	87.66	Zambia	64.01
Djibouti	78.17	Lebanon	77.08	Russia	79.68	Zimbabwe	92.31
Dominican Rep.	58.06	Lesotho	61.96	Sao Tome and Principe	61.60		
Ecuador	80.69	Liberia	77.94	Sierra Leone	75.82		

Development of import patterns of specific EU countries

Examining the Eurostat dataset (Table C-8) regarding the import volumes of the specific EU Member States, here again the considerable differences in import trends between EU countries can be observed. The larger importing countries are the United Kingdom (€6.1 billion), Germany (€4.3 billion), Italy (€3.3 billion), the Netherlands (€3.0 billion), France (€2.1 billion), Belgium (€1.7 billion) and Poland (€1.2 billion). Whereas the general trend of recovering trade volumes post-2013 can be identified in most countries, neither the recovery trend nor its intensity is uniformly true. While on average EU imports of EUTR-regulated products do not reach the pre-crisis levels, for some countries, imports end up in 2018 being higher than in 2007. Since the introduction of EUTR in 2013, the countries presenting the stronger increase in imports are some of the new EU Member States as well as some of the countries harshest hit by the economic crisis[11] (so expected to present a stronger rebound effect). To filter out the impact of the crisis, the comparison is made to 2007 levels. With the exception of Poland, none of them ranks amongst the largest EU importers of timber. Specifically, the sharpest increases in imports where measured in Romania (+85%), Poland (+83%), Lithuania (+62%), Slovakia (+51%), Czech Republic (+30%), Malta (+18%) and Bulgaria (+15%).

[11] Strongest increase in extra-EU imports since 2013 is presented in Lithuania (+220%), Latvia (+155%), Poland (+90%), Greece (+83%), Romania (+82%), Portugal (+76%), Bulgaria (+57%) and Estonia (+55%).

Table C-8 Value of EU imports of EUTR-regulated products per Member State (in million Euro) (source: Eurostat ext_go_detail)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Austria	469	469	434	519	561	484	473	490	503	495	465	499
Belgium	2,381	2,011	1,685	1,813	1,801	1,793	1,578	1,589	1,748	1,754	1,723	1,681
Bulgaria	186	217	141	136	147	145	136	146	148	168	183	214
Croatia	203	195	162	135	136	132	127	127	125	145	159	176
Cyprus	97	97	68	75	64	47	37	42	41	42	46	52
Czech Republic	207	223	186	226	230	203	192	187	213	237	245	269
Denmark	699	600	433	523	506	439	413	436	462	452	505	602
Estonia	328	157	102	141	156	162	168	183	186	196	217	260
Finland	1,003	1,141	457	606	581	530	550	516	482	487	507	633
France	2,907	2,662	2,083	2,463	2,327	2,188	1,895	1,840	1,991	1,976	1,876	2,050
Germany	5,064	4,566	3,874	4,779	4,618	4,227	3,797	3,846	4,134	4,076	4,187	4,331
Greece	630	582	457	398	326	257	235	259	278	365	342	429
Hungary	239	178	138	156	168	156	139	140	165	184	212	208
Ireland	554	378	223	233	199	197	192	220	265	266	275	276
Italy	4,158	3,728	2,717	3,499	3,413	2,850	2,736	2,668	3,007	2,747	2,840	3,278
Latvia	331	164	72	98	117	111	99	143	178	195	222	316
Lithuania	231	172	92	115	144	138	147	192	223	276	300	375
Luxembourg	12	11	7	4	4	5	5	5	7	7	7	8
Malta	20	22	18	25	27	22	18	20	20	19	25	24
Netherlands	2,851	2,747	2,129	2,952	2,865	2,644	2,208	2,173	2,560	2,394	2,536	2,964
Poland	679	707	540	695	746	685	655	793	909	988	1,101	1,245
Portugal	331	278	195	291	262	160	175	189	237	275	265	308
Romania	276	340	236	254	267	263	280	321	395	472	472	509
Slovakia	69	76	54	63	77	70	75	76	87	104	92	104
Slovenia	245	228	194	247	276	228	180	143	159	179	193	227
Spain	2,049	1,663	1,041	1,248	1,220	964	855	895	1,067	1,004	1,045	1,138
Sweden	1,314	1,249	921	1,130	1,101	1,018	959	1,012	1,062	996	1,062	1,102
United Kingdom	5,807	4,820	3,892	4,624	4,390	4,636	4,404	4,912	5,992	5,810	5,948	6,089
All EUTR	33,338	29,684	22,549	7,451	26,729	24,754	22,727	23,565	26,646	26,311	27,050	29,368

We looked into the increase in extra-EU imports of specific countries to develop an understanding of how far the increase in their trade external trade can be attributed to the implementation of EUTR potentially resulting in a shift in imports through specific countries . Specifically, Table C-9 compares extra-EU imports, intra-EU imports and the exports of the selection of the seven EU Member States that presented the strongest increase in extra-EU imports since 2007. This exercise aims to identify whether extra-EU imports of these countries present a significantly different pattern compared to their intra-EU imports. Moreover, in comparing them with the development of their intra-EU exports, it is possible to deduct whether specific countries have developed to be "convenience" entry points for timber importers aiming to circumvent stricter EUTR-related checks.

Table C-9 Change in trade value of EUTR-regulated products for selected EU Member States (source: Eurostat ext_go_detail)

	Trade value (in € million)			Share EU total			Trade value (in € million)
	2013	2018	Difference	2013	2018	Difference	Corresponding to share increase
Extra-EU imports	1,503	2,740	1,237	6.6%	9.3%	2.7%	798
Intra-EU imports	10,816	13,670	2,855	11.7%	12.8%	1.1%	1,150
Intra-EU exports	12,851	17,523	4,672	14.0%	16.4%	2.4%	2,648
The values represent the totals for the EU Member States presenting the largest extra-EU import increase in the 2007-2018 period (Bulgaria, Czech Republic, Lithuania, Malta, Poland, Romania and Slovakia)							

In between the seven countries presenting the strongest increase in imports of EUTR regulated products since 2007, the value of imports accounted to 6.6% of the EU total in 2013 (€1.5 billion) and 9.3% by 2018 (€2.7 billion). The 2.7% increase in import share of these countries since the beginning of the implementation of EUTR in 2013 represents a value of approximately €800 million additional imports. Even if this shift stood for an effort to avoid stricter EUTR checks, this would represent a relatively small part (2.7%) of the total EU imports.

At the same time, these countries present a similar pattern of increasing the overall value of their intra-EU total imports. These increased in the 2013-2018 period from €10.8 billion (11.7% share of EU total) to €13.7 billion (12.8% share). The corresponding increase in EU share amounts to €1,150 million, indicating that the specific selection of Member States presents a similarly strong increase in intra-EU imports compared to extra-EU imports.

Moreover, the same countries present also a significantly increase in exports to other EU countries leading to a trade increase corresponding to €2,648 million. This trade value increase is significantly higher than their additional extra-EU imports highlighting that their exports to other EU countries do not seem to be driven by the additional imports.

With the above in mind, it is difficult to demonstrate that a significant part of EUTR-regulated imports has shifted to more "convenient" entry points.

Development of imports from VPA countries

In Table C-10 an overview of the current imports of EUTR-regulated products[12] from VPA-implementing and VPA-negotiating countries is presented. This overview shows the portion of the trade in EU timber-products covered by countries engaged in VPA discussions with the EU (9.1% of total import value). This portion is even smaller when considering that only 6.2% is covered by countries implementing a VPA agreement, and that only 3% of all imports comes from countries (i.e. Indonesia) who are issuing FLEGT licences.

Table C-10 VPA countries and VPA negotiating countries and EU28 timber imports from these countries in 2018 (source Eurostat[13])

Country	VPA status	Year of VPA coming into force	FLEGT licencing	EUTR annex timber and timber products imports value to EU (Million Euro)	% of total EU imports	EUTR products imports (tonnes)	% of total imports	Tropical timber imports (Million Euro)	% of total imports value
Cameroon	Implementing	2011	-	252.11	0.9%	311,105	0.5%	217.7	5%
Central African Republic	Implementing	2012	-	11.37	0.0%	22,219	0.0%	8.4	0%
Republic of Congo	Implementing	2013	-	78.63	0.3%	91,464	0.1%	65.5	2%
Ghana	Implementing	2009	-	28.92	0.1%	24,687	0.0%	16.3	0%
Indonesia	Implementing	2014	Since 2016	878.33	3.0%	586,520	0.9%	147.6	4%
Liberia	Implementing	2013	-	2.30	0.0%	5,822	0.0%	-	-
Vietnam	Implementing	2019	-	570.71	1.9%	22,9010	0.4%	5.3	0%
Total VPA				1822.37	6.2%	1,270,828	2.0%	460.7	11%
Côte d'Ivoire	In negotiation	n/a	-	63.3	0.2%	63,112-	0.1%	54.508	1%
Democratic Republic of the Congo	In negotiation	n/a	-	25.45	0.1%	37,581.7	0.1%	18.39	0%
Gabon	In negotiation	n/a	-	163.47	0.6%	188,744.02	0.3%	137.67	3%
Guyana	Agreed, pending signature	n/a	-	3.38	0.0%	4,840.29	0.0%	0.0592	0%
Honduras	Agreed, pending signature	n/a	-	1.45	0.0%	1,393.51	0.0%	0.0935	0%
Laos	In negotiation	n/a	-	0.07	0.0%	11.72	0.0%	-	-
Malaysia	In negotiation	n/a	-	477.32	1.6%	319,642.77	0.5%	153.93	4%
Thailand	In negotiation	n/a	-	102.12	0.3%	73,925.48	0.1%	0.982	0%
Total VPA-negotiating				773.26	2.9%	626,139.49	1.1%	365.63	9%
Total imports (All countries)				29290.00	9.1%	62,320,000	3.1%	4210	20%

Table C-11 presents the value of EUTR-regulated product imports from VPA countries providing also a comparison with their coverage of total high-risk country imports to the EU. Figure C-4 presents the development of the relevant trade volumes with this selection of countries. It can be seen that all categories of countries engaged in VPA implementation or negotiations have performed relatively worse

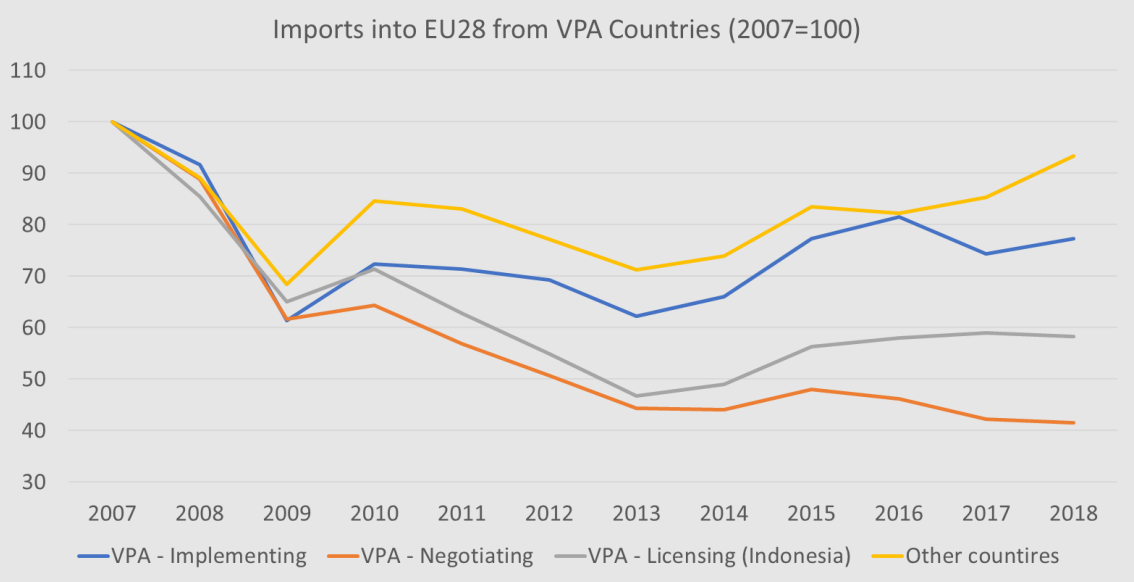
[12] Each VPA includes a specific product scope bilaterally agreed between the EU and the partner country, however in order to simplify the analysis of this section, a common EUTR-scope has been selected.
[13] Eurostat database: The ComExt database was used to derive the value of all EUTR-regulated timber products; Tropical wood imports representing a sub-set of the Chapter 44 of the Harmonised System overall product codes to which EUTR is applicable are derived from the For_trop dataset.

than the average timber exporter to the EU over the course of the implementation of FLEGT Regulation. In principle, an improvement of forest governance and timber legality would be expected over the course of the VPA negotiations eventually leading to the establishment of the TLAS. The functioning of the latter could potentially facilitate trade with the EU as is in fact exhibited by the relatively better performance of Indonesia since the entry into force of the TLAS system in 2016 (even more so, if we account also for a couple of years of systematic improvement taking place prior to that).

Table C-11 Value of EU imports of EUTR-regulated wood-based products from VPA countries (in million Euro) (source: Eurostat ext_go_detail)

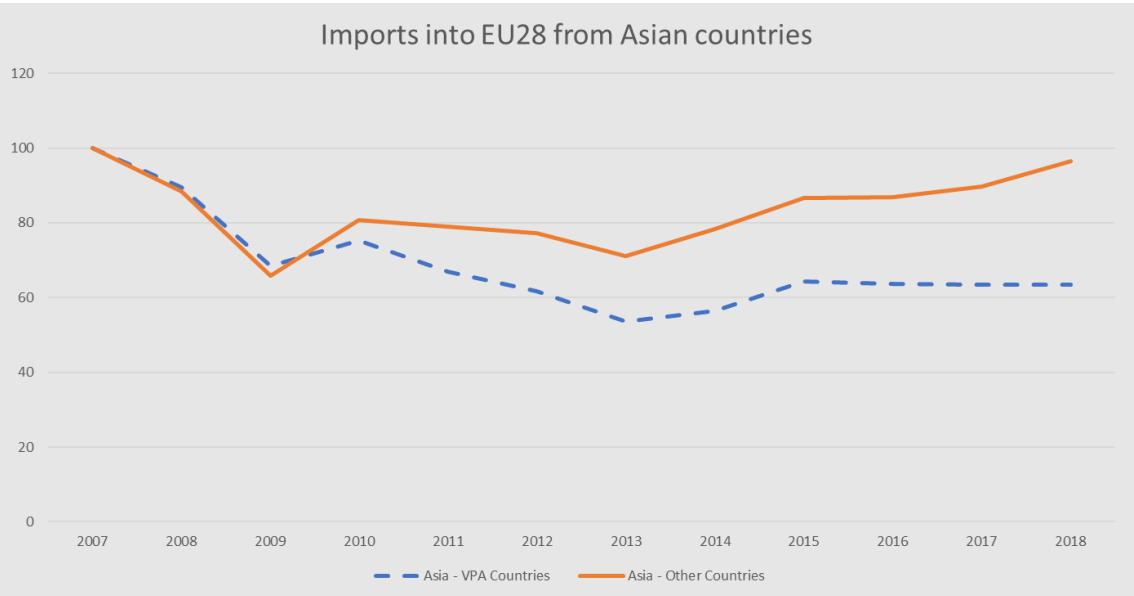
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Cameroon	524	430	257	298	324	293	239	237	268	306	240	252
Central African Republic	29	24	13	11	12	10	7	6	12	14	7	11
Congo	107	108	59	89	66	57	67	67	73	84	72	79
Ghana	120	99	53	54	53	44	36	35	31	30	27	29
Liberia	0	0	4	3	18	12	5	2	3	3	2	2
Vietnam	442	459	364	430	399	432	406	460	558	559	560	571
Indonesia	1,509	1,289	981	1,077	947	829	706	739	849	876	890	879
Congo (Democratic Republic of)	146	126	66	64	61	45	44	33	44	45	27	25
Gabon	340	303	202	187	176	149	152	147	165	197	172	163
Guyana	11	8	6	8	4	3	2	2	5	2	3	3
Honduras	6	3	3	3	2	4	3	4	2	2	1	1
Ivory Coast	264	238	122	132	110	105	87	97	95	83	66	63
Laos (People's Democratic Republic)	0	1	0	0	0	0	0	0	0	0	0	0
Malaysia	971	862	649	717	624	566	462	475	521	478	479	480
Thailand	283	256	197	189	173	154	144	133	136	125	104	103
Total	**4,751**	**4,205**	**2,976**	**3,262**	**2,969**	**2,701**	**2,363**	**2,437**	**2,762**	**2,805**	**2,650**	**2,663**
Index 2007=100	100	89	63	69	62	57	50	51	58	59	56	56
VPA Coverage of high-risk country imports in the EU	**36%**	**37%**	**37%**	**33%**	**31%**	**30%**	**29%**	**28%**	**27%**	**28%**	**26%**	**22%**

Figure C-4 Development of the value of EU28 imports of EUTR-regulated wood-based products from non-EU countries (2007=100) (source: Eurostat ext_go_detail)



A more detailed comparison of the trade performance of countries engaged in VPAs (negotiation and implementation) vis-à-vis their regional competitors is presented in Figure C-5 for Asian countries, Figure C-6 for African countries and Figure C-7 for South and Central American countries. In each of them, it can be seen that non-VPA countries have been consistently performing better than their VPA neighbours showing no sign of better than average performance of the VPA countries.[14]

Figure C-5 Development of the value of EU28 imports of EUTR-regulated wood-based products from Asian countries (2007=100) (source: Eurostat ext_go_detail)



[14] Noting that the agreements with the VPA countries where implemented at some point along the timeline so in assessing the relevant trendline we should account for the dates of entry in negotiation and signing of each VPA

Figure C-6 Development of the value of EU28 imports of EUTR-regulated wood-based products from African countries (2007=100) (source: Eurostat ext_go_detail)

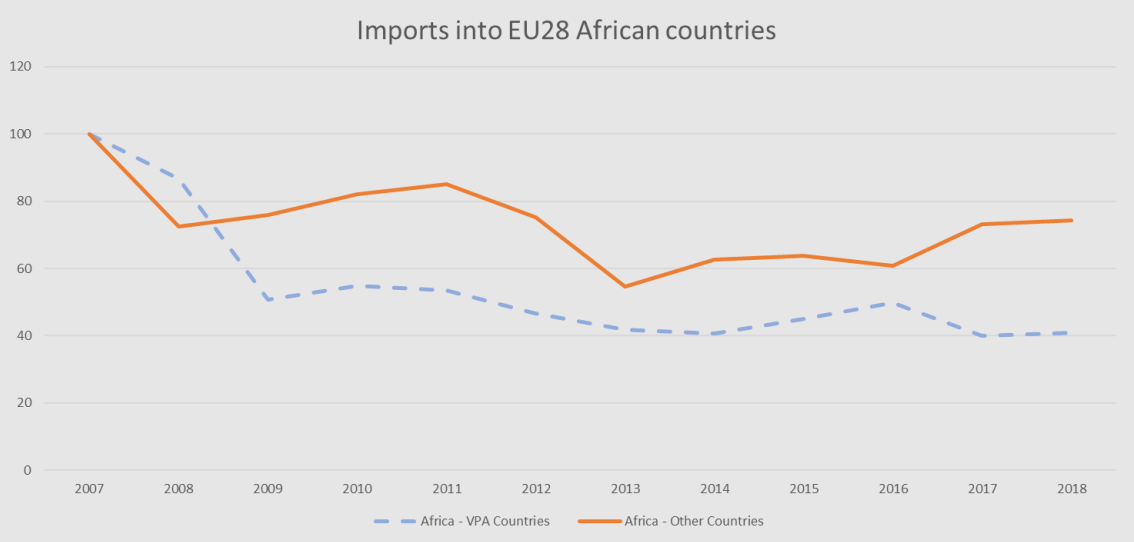
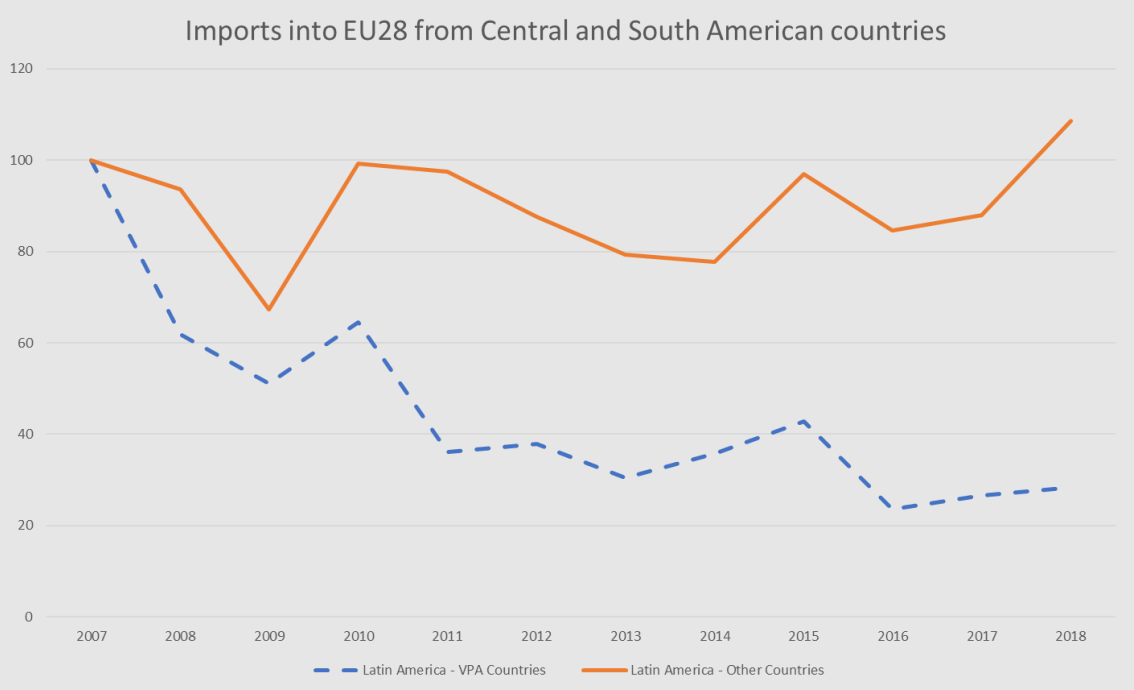


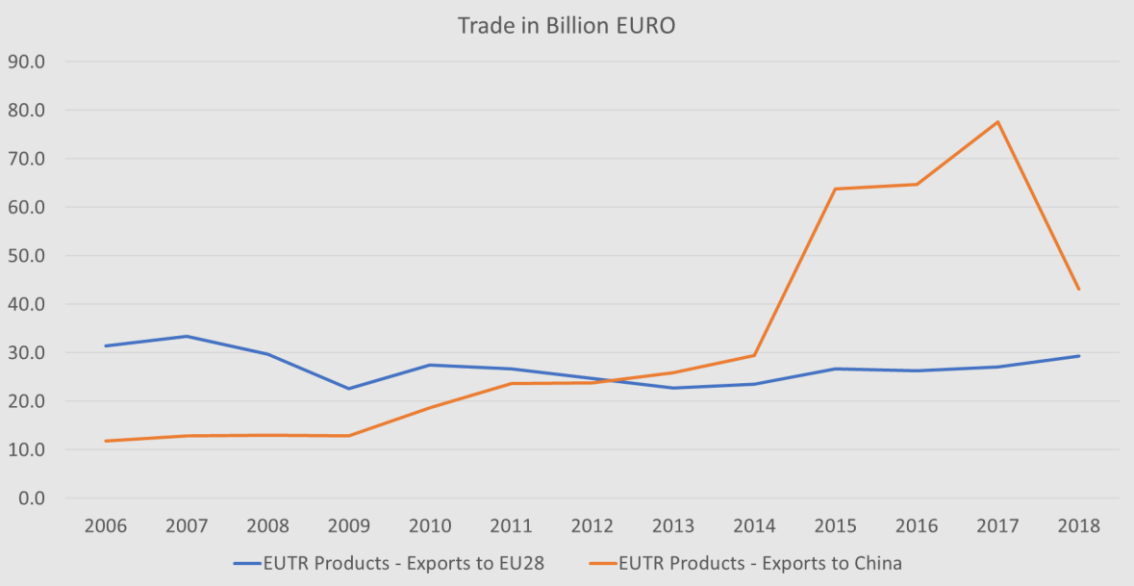
Figure C-7 Development of the value of EU28 imports of EUTR-regulated wood-based products from Central and South American countries (2007=100) (source: Eurostat ext_go_detail)



Development in the significance of the EU as a trade partner to VPA countries

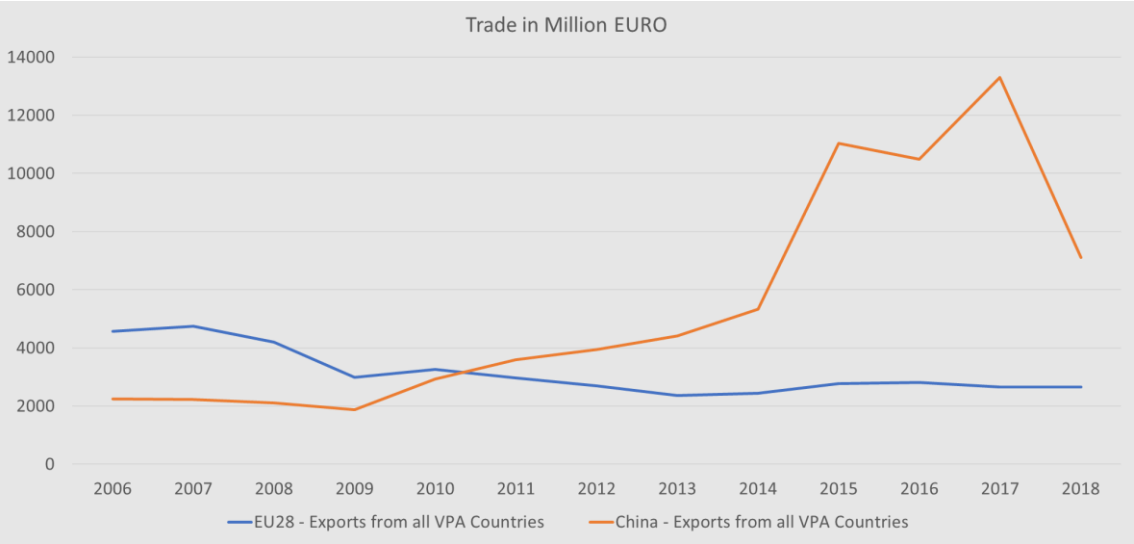
Figure C-8 presents the total import of EUTR-regulated products for the EU and China. The significance of China as an importer of these products globally has changed significantly since 2009: in 2017 China imported more than double the value of EUTR products imported by the EU, compared to presenting less than half of the EU imports a decade earlier. This increased trade activity comes at the expense of the EU's gravity as a trade partner. It can be expected to result in the EU having less influence in production methods of timber-product exporting countries since a rapidly growing alternative market is available to absorb their exports.

Figure C-8 Value of imports of EUTR-regulated wood-based products for the EU 28 and China (in million Euro) (source: Eurostat ext_go_detail, UN Comtrade data)



A similar pattern is observed for trade from VPA countries specifically, where China has also replaced the EU as the most important trade partner of VPA countries as seen in Figure C-9. The increase in importance of China as a trade partners is in this case even more pronounced. In 2018, the total value of exports from VPA countries to China stood at more than double the level of exports of the same countries to the EU. This is a reversal of the 2007 situation when the EU absorbed more than double the amount of exports from these countries compared to China.

Figure C-9 Value of imports of EUTR-regulated wood-based products from VPA countries for the EU28 and China (in million Euro) (source: Eurostat ext_go_detail, UN Comtrade data)



A similar reversal of importance as a trade partner can be seen when examining imports from the most important EU VPA trade partners. In the case of Indonesia, the functioning of the TLAS has not led to a reversal of this trend as seen in Figure C-10. The same is true for Vietnam (Figure C-11) where despite the progress made in developing a functioning TLAS (although a fully functioning TLAS is not yet in place) and the relative increase in imports for the EU28, China still handily surpasses it as a trade partner.

Figure C-10 Value of imports of EUTR-regulated wood-based products from Indonesia for the EU28 and China (in million Euro) (source: Eurostat ext_go_detail, UN Comtrade data)

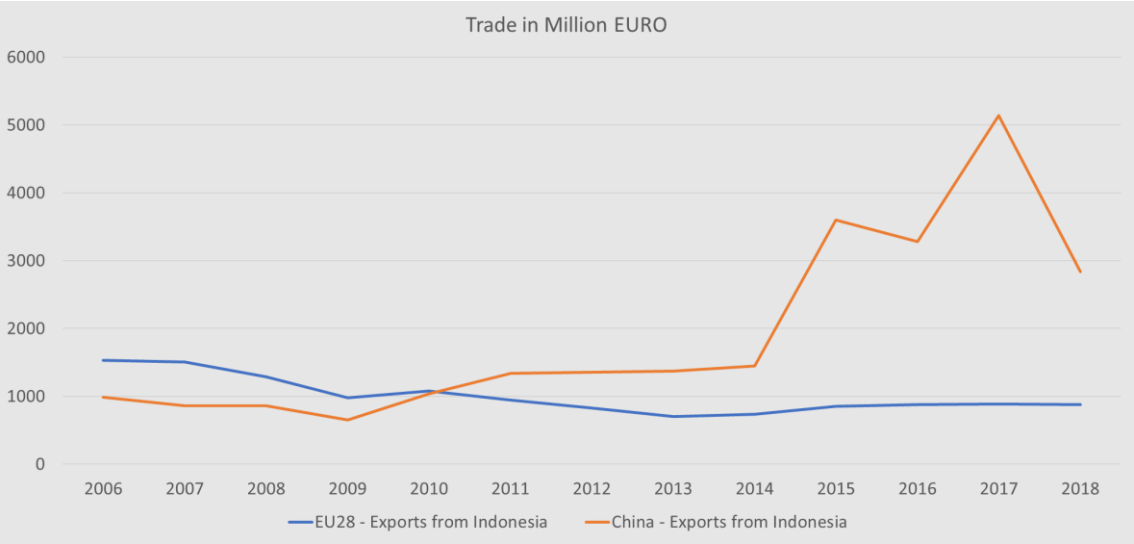
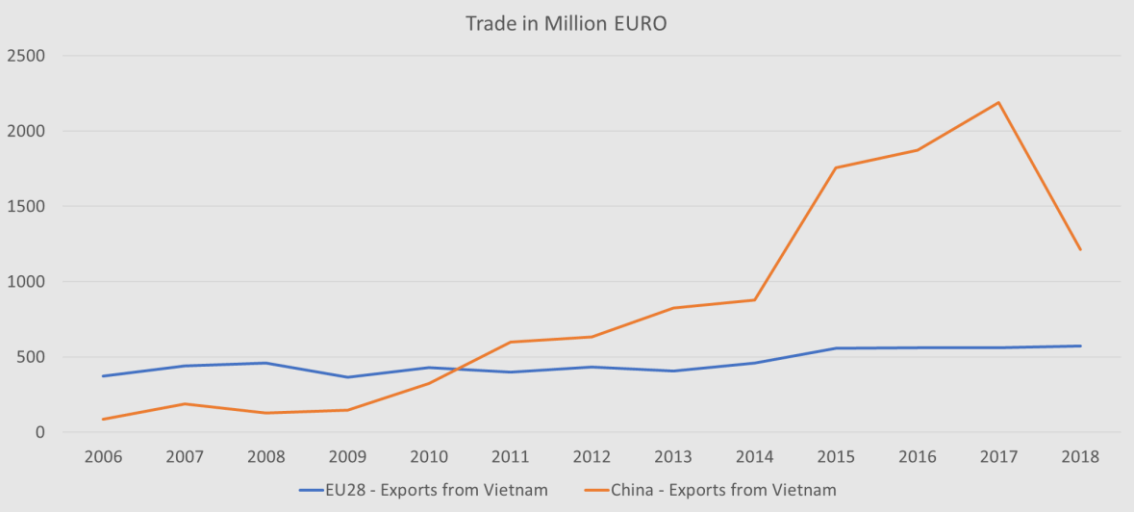


Figure C-11 Value of imports of EUTR-regulated wood-based products from Vietnam for the EU28 and China (in million Euro) (source: Eurostat ext_go_detail, UN Comtrade data)



For other relatively large exporters to the EU such as Malaysia (Figure C-12) and Cameroon (Figure C-13) which also present a higher risk profile as origins of illegal timber than the previous[15], despite starting from a significantly better position, EU imports have also decreased. When combined with the increase in imports of China, the two stand in near parity as trade partners for these countries.

[15] Based on ILAT country risk profiles

Figure C-12 Value of imports of EUTR-regulated wood-based products from Malaysia for the EU28 and China (in million Euro) (source: Eurostat ext_go_detail, UN Comtrade data)

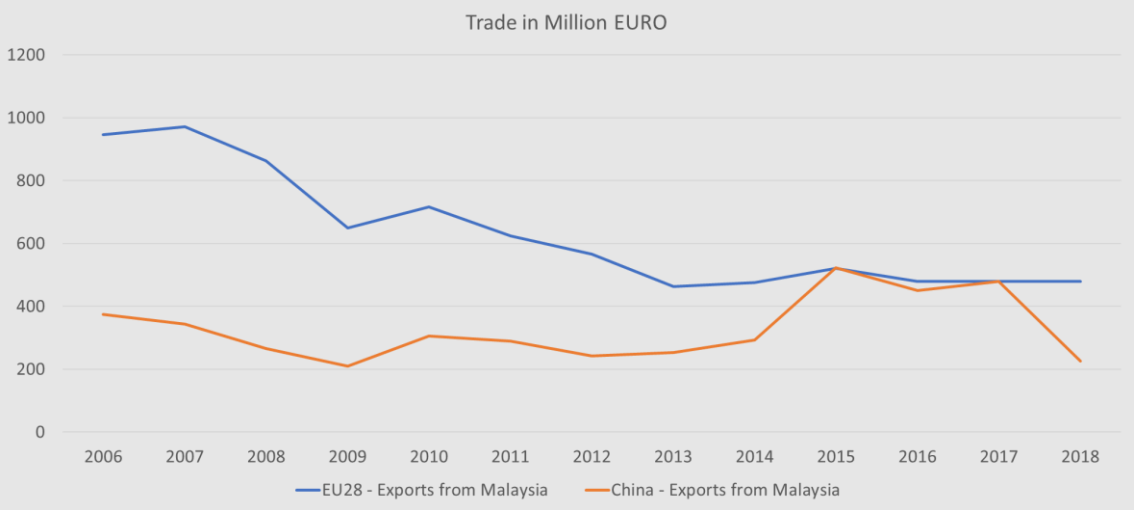
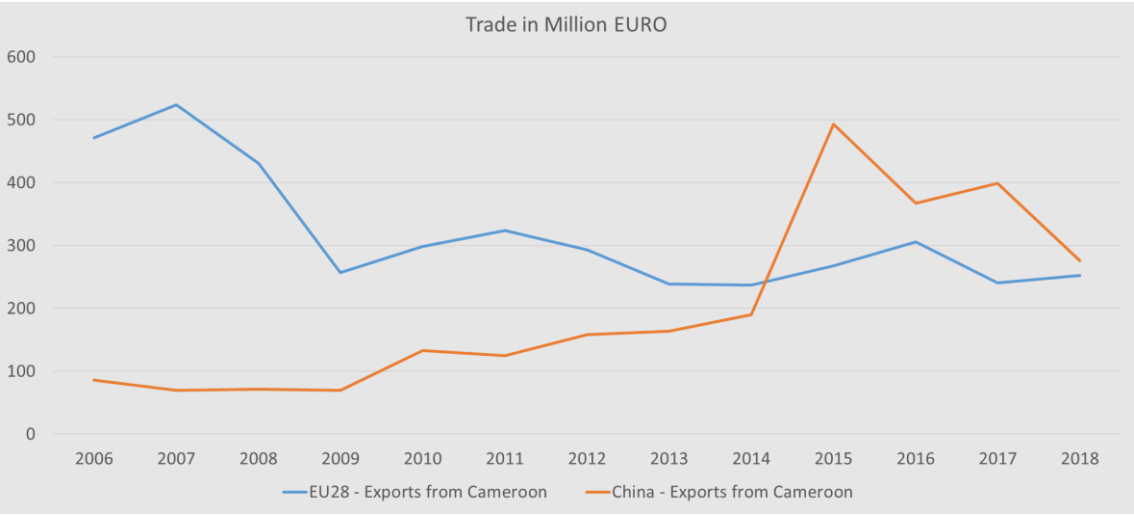


Figure C-13 Value of imports of EUTR-regulated wood-based products from Cameroon for the EU28 and China (in million Euro) (source: Eurostat ext_go_detail, UN Comtrade data)

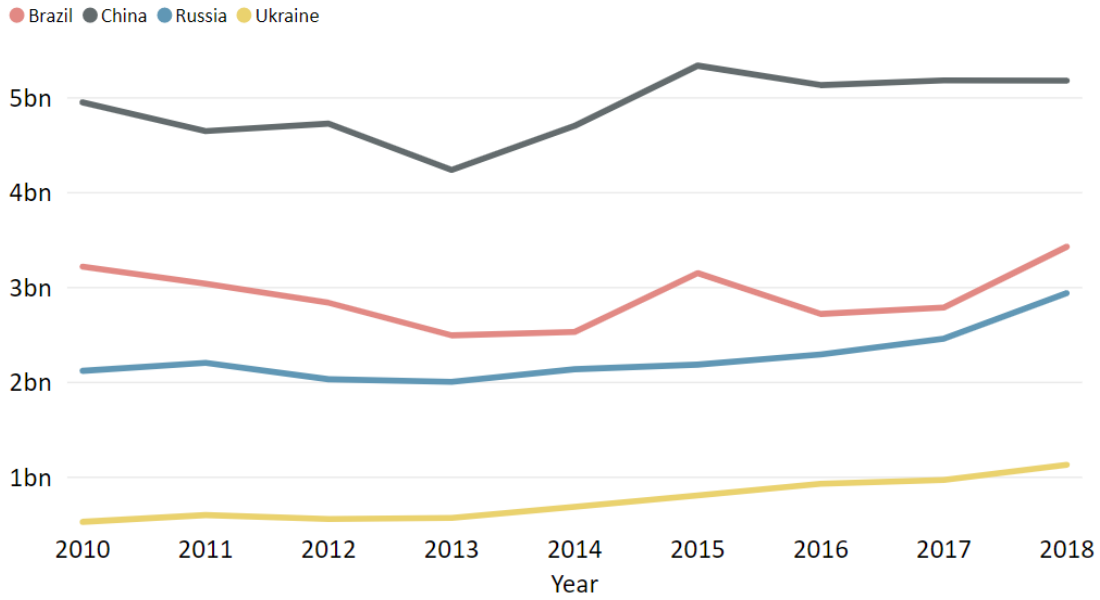


Country specific trends

The inability of the EUTR to reduce illegal logging globally becomes more prominent as an increased trend observed in the value of imports from key timber exporting countries such as Russia, Brazil, Ukraine and China which are still considered non-negligible risk countries regarding their illegal logging activities[16] as presented in the Figure C-14.

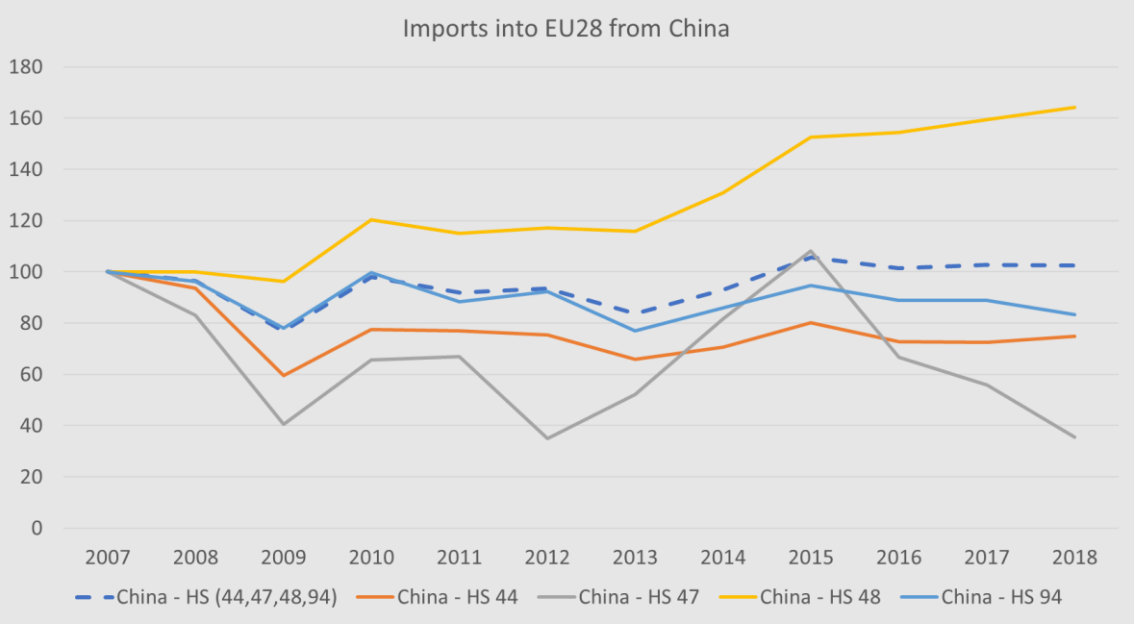
[16] NEPCon timber risk scores: Brazil (42/100), China (73/100), Russia (6/100), Ukraine (10/100) – least scored country is perceived as high-risk exporting country.

Figure C-14 Value EUTR-regulated timber product imports[17] into EU from Brazil, China, Russia, Ukraine - in Euro (Source: FLEGT Regulation Dashboard)



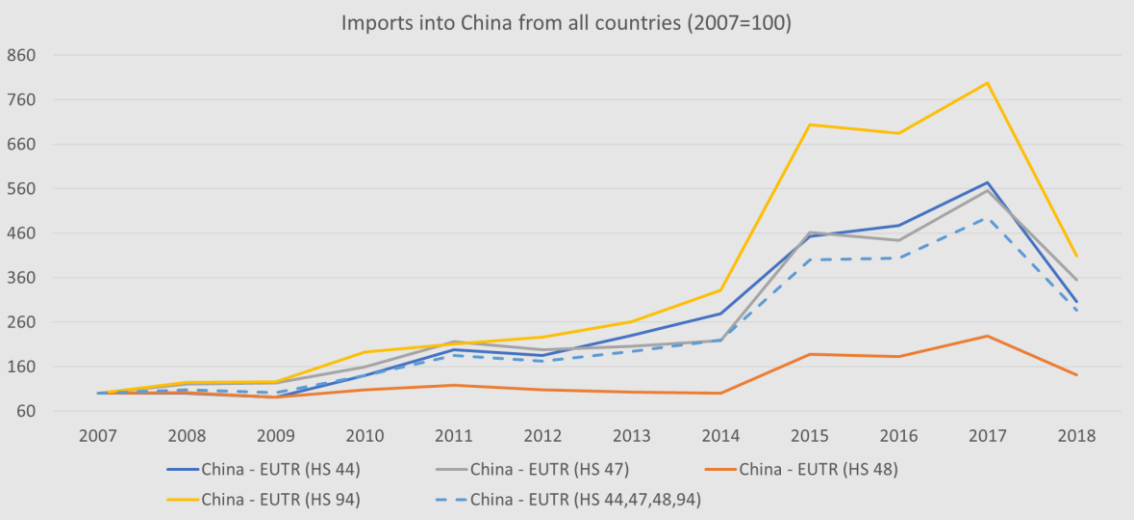
A more detailed breakdown of the main HS codes used for imports from these countries is presented in the figures below indicating the different specialisation in their exports to the EU28. EUTR-regulated imports from China (Figure C-15) appear to stagnate over this period. However, since total EU imports have decreased, this amounts for a relative increase in the share of imports coming from China. The exception to this is the import of furniture products (HS Chapter 94) which is the only product category exhibiting an increase, it is also showing a sharp increase post 2013. At the same period, Chinese imports of furniture have increased also sharply after the introduction of EUTR in 2013 (Figure C-16). This could potentially show a shift of furniture imports from higher risk countries to the EU via China, a view that needs to be confirmed with market operators.

Figure C-15 Development of the value of EU28 imports of EUTR-regulated products from China (index 2007=100) (source: Eurostat ext_go_detail)



[17] EUTR annexure products (Data accessed from EU timber trade interactive dashboard – Source Eurostat)

Figure C-16 Development of the value of imports of EUTR-regulated products to China (index 2007=100) (source: Eurostat ext_go_detail)



In Figure C-17 and Figure C-18, EUTR imports to the EU28 from another two major trade partners, Russia and Ukraine are shown. While imports from Russia appear considerably reduced over the last decade, imports from Ukraine are on a steady upwards trajectory. This trend might be potentially supported by the measures brought in the country to increase the legality of timber harvest seen in Annex B.

Figure C-17 Development of the value of EU28 imports of EUTR-regulated products from Russia (2007=100) (source: Eurostat ext_go_detail)

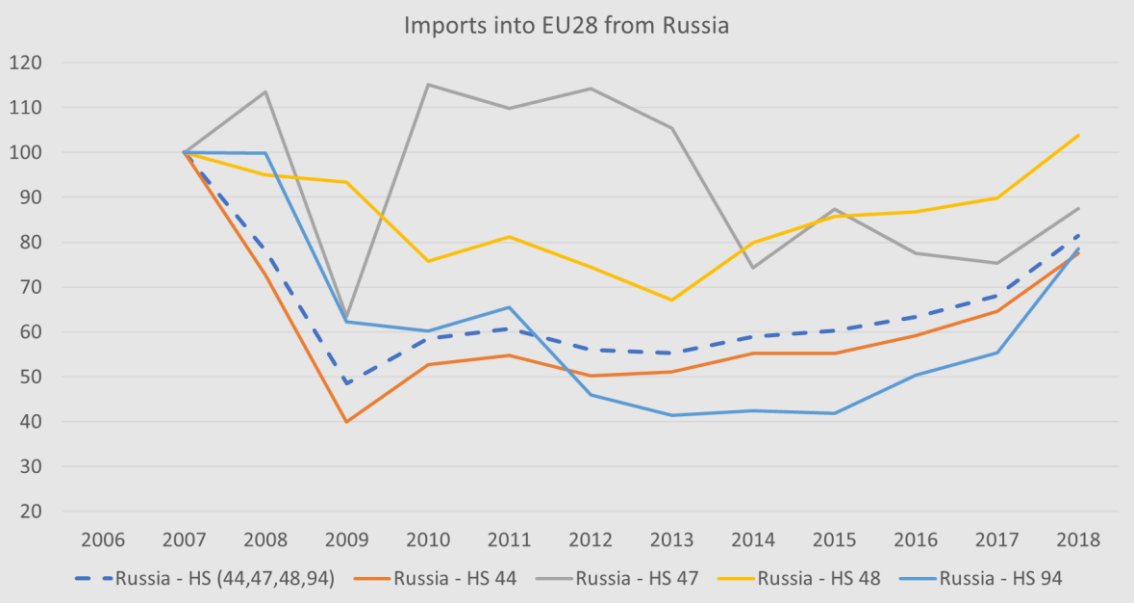
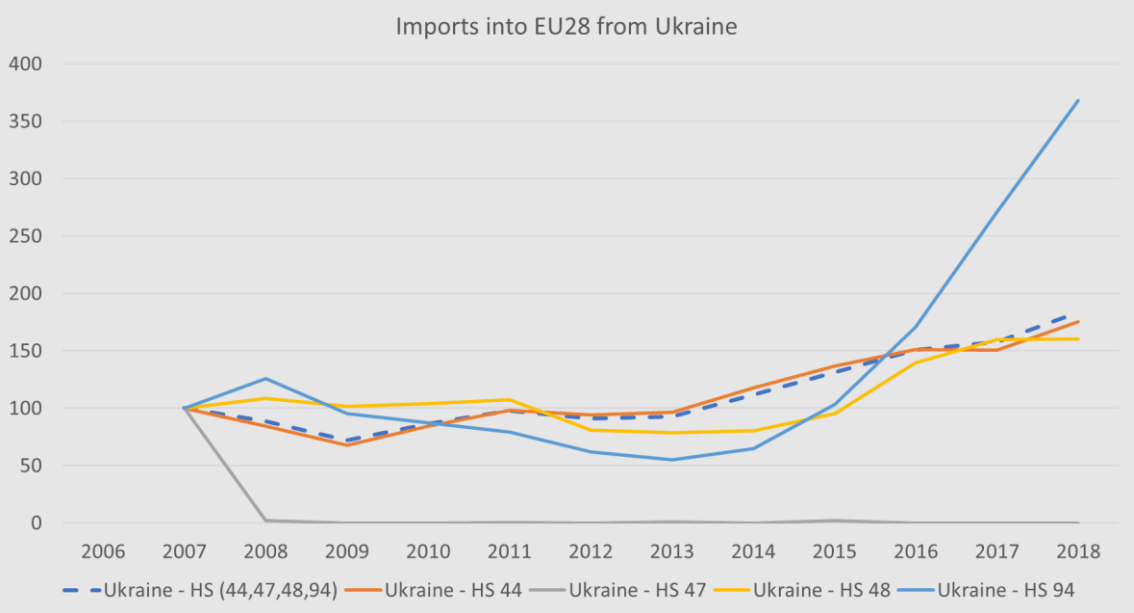
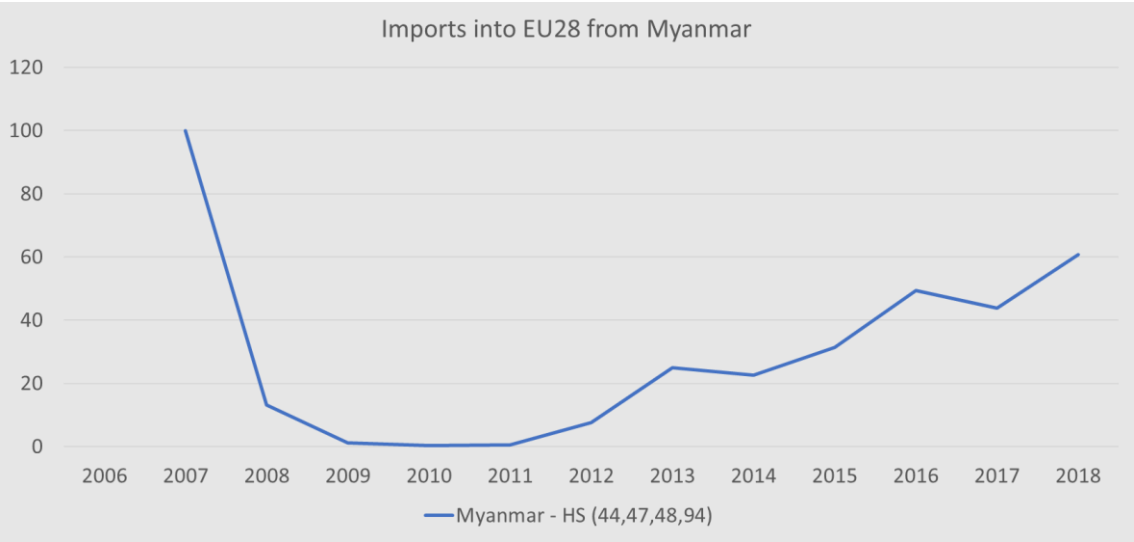


Figure C-18 Development of the value of EU28 imports of EUTR-regulated products from Ukraine (2007=100) (source: Eurostat ext_go_detail)



Furthermore, the example of Myanmar is interesting as it might indicate differences in enforcement approaches between EU MS since the entry into force of EUTR (Figure C-19) despite the country being considered to have concerning lack of transparency of timber product value chains, its exports to the EU have been gradually increasing after the lift of the EU trade embargo since 2012. However, this increase has been uneven across EU MS: for some, the value of trade has nearly reached pre-embargo levels (e.g. Italy, Belgium) or even increased in value (e.g. Greece, Croatia), while for others (e.g. Germany, the Netherlands, France etc.) trade has reduced significantly compared to the pre-embargo levels. Although trade with Myanmar represents a relatively low volume and might not thus attract the focus on enforcement authorities, this still shows that EUTR might not always function as expected for exporting countries with a high-risk profile and would rather depend on the enforcement approach of each MS.

Figure C-19 Development of the value of EU28 imports of EUTR-regulated products from Myanmar (2007=100) (source: Eurostat ext_go_detail)



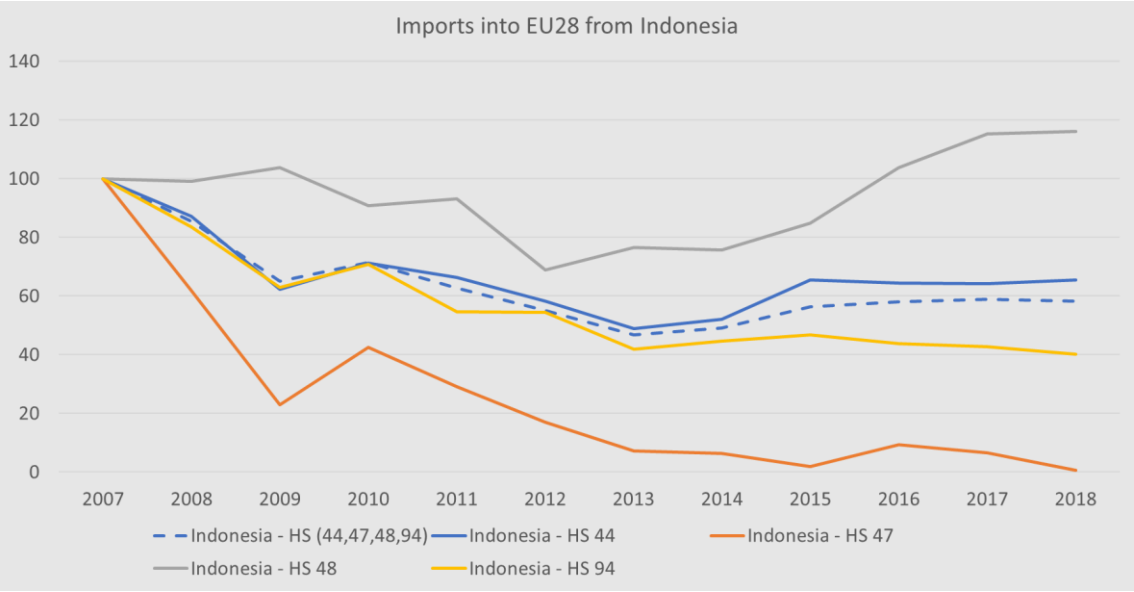
Imports to the EU from Indonesia:

Indonesia is one of the world's largest exporters of tropical timber products, which are produced from logging activities in natural forests, industrial plantations and household-managed small-scale plantings, as well as from imported timber. Indonesia exports a wide variety of timber products, ranging from plywood, pulp and paper to furniture and handicrafts. The main export markets are in Asia (China, Japan and South Korea). Indonesia is also by far the biggest FLEGT Regulation VPA-country trade partner of the EU, exporting EUTR-regulated products as in 2018 trade worth is EUR 0.878 billion.

That said, it needs to be acknowledged that the only VPA country currently issuing FLEGT licences to verify legal timber products, is Indonesia. Of timber product imports from all sources and specifically from tropical sources to the EU, only 3% and 4% by value (0.9% and 3% by weight) respectively originate from Indonesia. This, obviously, represents only a very small amount of the total timber imported to the EU28.

In November 2016, Indonesia became the first country to start FLEGT Regulation licensing, having signed its VPA with the EU in 2011 (this entered into force in 2014). Since November 2016 more than 50,000 FLEGT licences have been issued by Indonesia's 25 independent licensing authorities. The data from 2007 to 2018 on the imports of EUTR-regulated product to EU from Indonesia, based on Eurostat ComExt data, is presented in Figure C-20.

Figure C-20 Development of the value of EUTR-regulated timber products imports to the EU28 from Indonesia - (2007=100) (Eurostat: Eurostat ext_go_detail



A steep decline in imports from Indonesia is observed. A downward trend that started in 2007 was halted in 2013 and followed by a small recovery in 2014-2016. The 2018 exports of Indonesia are only about 58% of what they were about a decade earlier with only Paper products (HS chapter 48) showing a strong increase and trade of Wood products (HS Chapter 44) also increasing their value between 2013 and 2015, the time in which the timber legality assurance scheme (SVLK) was finalised as this might have increased the confidence of EU importers on the legality of Indonesian timber.

Difference-in-difference analysis

Introduction

Further analysis was undertaken to build on the initial analysis which sought to assess trends in the levels of imports of products covered by the EUTR into the EU from 'low' and 'high' risk countries and the shift from EUTR products to non EUTR products. The supplementary analysis sought to undertake the same analysis for representative 'control' groups against which the actual trends in trade can be compared, with the aim to draw out conclusions more clearly and robustly regarding the impact that the EUTR has had on the level of illegally logged timber entering the EU market.

The additional analysis uses two control groups: The first is a set of countries comparable with the EU with no timber legality control system in place; the second is based on EU imports of products outside the scope of the EUTR included in the same HS chapters covered by the EUTR. **We can tentatively conclude that the EUTR may have led to a reduction in imports of illegally harvested timber to the EU of between 12% and 29%.**

Analysis of the levels of illegal timber entering the EU is complex and problematic. Throughout this section we note key caveats and limitations at each stage of the approach, which should be considered when reviewing the final results.

Imports from high-risk and low-risk countries

Step 1: Selection of a representative group of trade partner countries

The analysis is performed using the UN's COMTRADE database[18]. The previous analysis for the EU using data from Eurostat's Comext database. However, this database only contains data on imports to the EU. The analysis considers the development of imports of EUTR-regulated products from the main low- and high-risk trade partner countries to the EU[19]. This categorization, in turn, is based on a country risk list elaborated by Forest Trends[20]. Due to the large number of high-risk countries, a prioritisation exercise was undertaken, shortlisting 10 high risk countries on the basis of their share of global timber exports. The countries chosen for this analysis as the main EU trade partners from the two categories are presented in the table below.

Table C-12 – Prioritisation of high and low risk EU trading partners

Assessment of risk of illegal logging	Countries	% of EU timber imports
High Risk	Bosnia and Herzegovina, Brazil, Cameroon, Gabon, Indonesia, Russian Federation, Thailand, Turkey, Ukraine, Vietnam,	45% of EU imports (2006-2019)
Low Risk	Australia, Canada, Hong Kong (China), Japan, New Zealand, Norway, Rep. of Korea, Singapore, South Africa, Switzerland, Uruguay, USA	35% of EU imports (2006-2019)

The import trends for both country groups are assessed for the period before and after the entry into force of the EUTR (2013). To avoid overreliance on the data for any single year, a comparison of the import volumes for both groups is developed for two 5-year periods (2007-2012 and 2013-2018).

[18] https://comtrade.un.org/data/
[19] The classification of trade partner countries to high- and low-risk is elaborated in Annex C of the Fitness Check report.
[20] https://www.forest-trends.org/wp-content/uploads/2020/02/ILAT-Risk-Project-Methodology.pdf

Caveat 1: ILAT risk scores are used as a proxy for the legality of timber imports from different countries. However, ILAT risk does not necessarily correspond to illegality. Furthermore, legality is determined by the specific operations and context of each individual source, hence within each country different levels of timber legality are the case for different, products, regions, exporters and timeframes etc.

Caveat 2: To render the trade dataset exercise manageable in workload, a sample of trade partner countries has been used selecting the most important EU trade partners. Over 100 countries have an ILAT score of >50. From this list, we have selected countries for the sample based on their significance as a global exporter of timber. The set of trade partners is kept constant for comparability purposes although they do not necessarily present an equally important trade partner for each individual member of the control group (CG) countries (see step 2). For CG countries the development of import trends might be different if accounting for the selection of their most important trade partners.

Step 2: Selection of a control group of countries to compare EU import trends

To identify how far the development in trade volumes has been influenced by the EUTR, we compare EU import trade data trends with those of a Control Group (CG) of selected countries. The selection of CG countries is done using the following criteria:

- Similar GDP per capita values, hence, implicitly assuming that these countries are similarly net importers of timber from the rest of the world, have similar tastes, and levels of demand
- Absence of regulations restricting the placement of illegal timber on the domestic market (this prohibited the inclusion of many ideal candidates for the control group given their 'similarities' to the EU: USA, Canada, and Australia).

By choosing CG countries as similar to the EU28 as possible, the intention is that the main variable left in play is the EUTR implementation. As such the analysis aims to exclude all other factors so as to isolate the impacts of the EUTR and conclude that any differences in trade trends observed between EU and CG are due only from a switch from illegal to legally harvested timber products as a result of the EUTR.

The countries presented in the table below have been selected as part of the CG. The share of imports from selected low/high risk countries has been estimated by comparing such imports between 2007 and 2018 to the total imports from all countries for the same period.

Caveat 3: The selection of the control group is critical to the isolation of the effects of the EUTR and the confidence that can be placed on any conclusions around the impacts on illegal logging. However, several factors have limited the selection of countries for the control group (i.e. comparability of markets, and introduction of regulation over the analysis period). Even then, there remain differences between the EU and other markets which may have an influence on the volume of imports from different countries. Hence there is no perfect control group for the comparison of EU import trends as there are no markets of similar size and GDP development stage while with an absence of timber legality regulation.

Caveat 4: the coverage of imports to Switzerland from the cohorts of low and high-risk countries is low. This is because the data shows that a high level of imports to Switzerland come from the EU. This potentially signals that a large volume of Swiss imports is routed through the EU, and as such, the database shows the trading partner rather than country of origin. In addition, the result is a small sample of the total imports to Switzerland being represented, which is then at risk of small sample bias. However, we have decided to retain Switzerland for the analysis as the resulting import/export trends do not visually appear to be misleading, and given Switzerland is likely the closest 'control' country in terms of representing the EU market.

Table C-13 – Control Group countries

Country	% of imports from trade partner countries	Comment
EU	80%	EUTR first year of entry into force in 2013
Israel	37-45%	No timber legality legislation
New Zealand	30-33%	No timber legality legislation yet in place.
Japan	50%	Comparison concerns the period prior to the introduction of timber legality regulations in 2017
Switzerland	2-3%[21]	No timber legality legislation. Added in the control group despite the relatively small share of imports due to its market being highly comparable with that of the EU.

Step 3: Development of the counterfactual imports scenario

To control for individual trends in the overall levels of imports to each CG country and the EU, the analysis is performed on the basis of the ratio of imports from high-risk to imports from low-risk countries, for each import destination.

For each of the selected countries, high-risk country imports have been compared to low-risk country imports for the 5 years prior to the entry in force of the EUTR (2007-2012). Then the same comparison is done for the 5 years after the introduction of the EUTR (2013-2018)[22].

The relative change in proportion between the first and second five-year periods is performed for each CG country and the EU. The results are presented in the following table.

The comparison of these trends between the EU and the CG countries indicates how the ratio of EU imports from high- and low-risk countries has developed compared to how they would have been expected to develop in the absence of the EUTR (counterfactual scenario). For example, where the increase in the ratio between the two periods is *higher* for the EU, then the level of increase of imports

[21] The low share of imports from the selected group can be attributed to Switzerland, due to its land-locked nature, import most of its timber via EU countries. Leaving only a small share being reported as of other origin.

[22] The 2013-2017 period was used for Japan due to the introduction of timber legislation.

from high-risk countries to the EU (relative to the increase/change in imports from low-risk countries to the EU), was higher than that of the CG country. I.e. imports from high-risk countries increased to a greater extent in the EU against the CG country (relative to the level of imports from low-risk countries), counter to the expected impacts of the EUTR.

Table C-14 - Relative change in high/low risk proportion of imports between five-year periods for EU and CG countries

Country/group	Proportion of high/low risk imports 2008-12	Proportion of high/low risk imports 2013-18	Change
EU	93%	111%	**20%**
Japan	60%	77%	**30%**
Switzerland	85%	138%	**63%**
Israel	20%	44%	**124%**
New Zealand	39%	49%	**28%**
CG average (volume weighted)			***36%***
CG average (Straight average across CG countries)			***61%***

The average development of imports for the CG countries is calculated on a straight and a weighted average. This is then used as the baseline to represent how imports to the EU could have developed in the absence of the EUTR. The different averages are used as a low and high bound for the effects. In this case, both are slightly above the trend observed for the EU – i.e. in the absence of the EUTR, one may have expected that the proportion of imports from high-risk countries (relative to imports from low-risk countries) to have been even higher.

These alternative trends are then applied to the EU Trade data to depict what levels of trade could have been. A comparison is then made between the 'baseline' and observed trade data to calculate the percentage change in imports from high-risk countries.

This suggests that in the absence of the EUTR, value of all imports from high-risk countries may have been between 12-25% higher (weighted and straight average respectively).

The straight average is perhaps more relevant than the weighted average as this does not bias the control group sample towards any given country which has the highest levels of trade. E.g. Japan has much more significant levels of trade than other control group members. Hence where the average include Japan, the changes are weighted much more towards the trends observed in Japan – i.e. implicitly stating that Japan is a more representative comparison to the EU than other countries in the control group.

Caveat 5: The comparison of high-risk country imports makes sense when viewed against both low-risk and medium-risk country imports. However, as high- and low-risk countries present a clearer differentiation in terms of timber legality, these two country groups have been chosen.

Imports of EUTR products and non-EUTR products

This analysis is performed using data from Eurostat's Comext database which covers the EU. The analysis considers shifts in the imports of products which are in scope of the EUTR and products which are not in scope of the EUTR

Caveat 1: In this analysis, the non-EUTR products become the 'control group' Hence again we implicitly assume that the only factor influencing any difference in trends in trade data is the EUTR. Hence any other factors which may influence trends in trade are common across both groups – i.e. they have similar market influences. Of course within these groups, there is a diverse range of products which are influenced by different factors – e.g. taste, heating / cooking demand, availability of alternatives. Hence the confidence we can draw in the results of this analysis are determined by the strength of non-EUTR as a comparable control group.

Step 1: Selection of products

For the purposes of this analysis, EUTR products are the ones specified in the Annex to the EUTR. Non-EUTR products are products which are included in the same HS Chapters mentioned in the EUTR but are not within the scope of the Regulation. A detailed mapping is presented in Annex B to this paper.

Step 2: Development of the counterfactual imports scenario

For each of the selected countries, high-risk country imports have been compared to low-risk country imports for the 5 years prior to the entry in force of the EUTR (2007-2012). Then the same comparison is done for the 5 years after the introduction of the EUTR (2013-2018)[23].

The change in proportion between the first and second five-year periods is performed for each HS code and total imports. The results are presented in the table below.

Table C-15 - Relative change in imports between five-year periods for different product categories

HS chapter	EUTR Change	Non-EUTR Change
HS44	27%	44%
HS47	15%	38%
HS48	14%	51%
HS94	13%	70%
All HS (HS 44,47,48,94)	19%	67%
HS 47 and 48	15%	39%

Caveat 2: It is noteworthy that the increase of imports of non-EUTR products may be impacted by a substitution of products covered in the EUTR with products not covered in the EUTR, in order to circumvent the regulation. It is impossible to separate this factor from other factors influencing the growth in imports. This in turn would have an impact of 'over-estimating' the potential adjustment to be made to EUTR imports.

A consistently higher increase in the import of non-EUTR products is observed compared to the import of EUTR products.

[23] The 2013-2017 period was used for Japan due to the introduction of timber legislation.

We assume that the trends observed for non-EUTR products would have been mirrored in EUTR products in the absence of a regulation.

The growth rates observed for non-EUTR imports between pre and post EUTR periods are applied to EUTR imports pre-EUTR, to produce an 'adjusted' level of import of EUTR products post 2013. The result in terms of the reduction of imports of those observed in practice, relative to the adjusted baseline, are presented in the table below.

Table C-16 - % reduction in observed EUTR imports relative to adjusted level (post 2013)

HS chapter	% reduction
HS44	12%
HS47	17%
HS48	24%
HS94	34%
All HS (HS 44,47,48,94)	29%
HS 47 and 48	17%

In this instance, actual EUTR product imports between 2013 and 2018 would have been on average 29% lower than the adjusted baseline.

Looking more closely at the product categories covered, some products are only partially relevant. Seeing in detail the excluded HS94 codes, these seem less relevant as a comparator for products covered by the EUTR than some of the other excluded codes (e.g. recovered paper and pulp). In that respect HS Chapters 47 and 48 seem the most relevant and reliable to use as a control group (CG). However, they are represented in rather low volumes which reduces somehow their CG reliability. In any case, the calculations have also been performed for a combined HS 47 and 48 category.

Another caveat to mention here is that due to is dominant position in non-EUTR products (88%), HS 94 drives the total calculation.

Conclusions

Applying the approaches above, we can tentatively conclude that the EUTR may have led to a **reduction in imports of illegally harvested timber logging imports to the EU of between 12% and 29%.**

As noted above, deducing the impact of EUTR on import of illegal timber is complex and difficult. There is no data which directly captures legality (due to its clandestine nature). Hence proxies have to be used, and even then, there are limitations to these proxies (e.g. data availability, availability of robust control group).

First, we place more weight on the comparison of high/low risk relative to EUTR/non-EUTR products as the former is considered to be a closer proxy of legality (which is more likely to be determined by country-specific factors than product specific factors).

A critical step of the methodology is the control group and its comparability to the EU market, to isolate the effects of the EUTR. The robustness of the conclusion and how confident we can be that the trends we are observing are due to the EUTR (and in response the reduction in import of illegal logging) hinges on how representative the control group is of an EU without the EUTR.

It is important to note that the true effect on illegal logging could be even higher. The approach taken here does not capture potential changes in suppliers within the same country as a result of the EUTR DDS. Nor does it capture any potential improvement in harvest legality of existing suppliers which could lead to benefits additional to what is calculated.

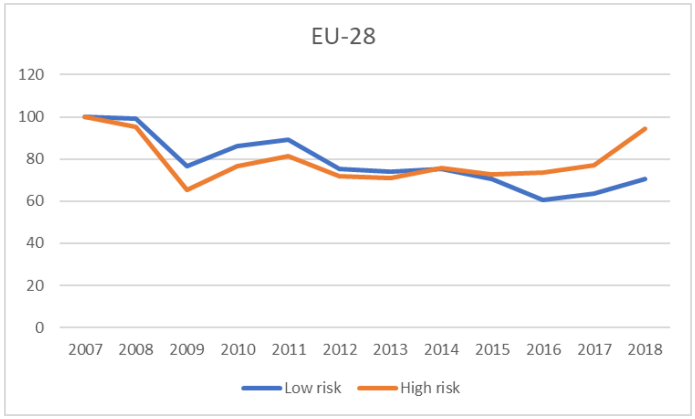
The additional analysis comparing EUTR v non-EUTR products lends additional weight to this conclusion. The ranges offered by both analyses broadly overlap. The average of the EUTR v non-EUTR analysis across all product categories (29%) sits outside the top end of the range of the high-low risk country analyses. However, given again these estimates cannot capture all effects, we therefore consider it not inaccurate to adopt this all-product average as the upper bound of our selected range of likely impacts.

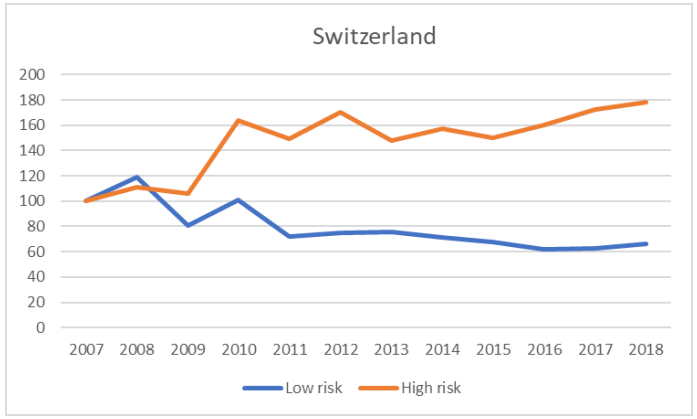
It is also worth considering this result in the context of the broader findings of the Fitness Check, namely:

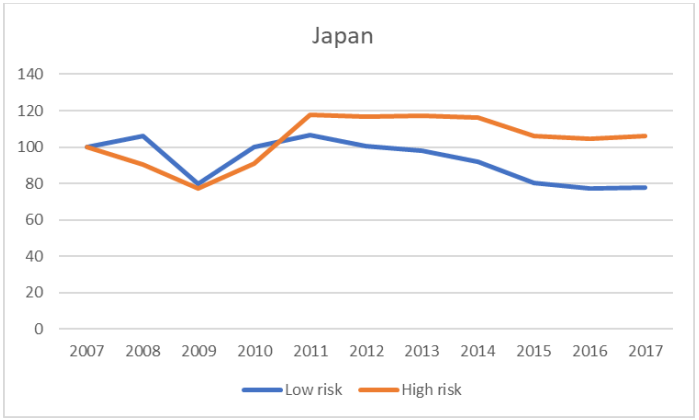
- The EUTR is broadly seen as an important step forward in tackling illegal logging and associated trade. There is a positive perception amongst stakeholders of DD as a delivery mechanism. DD as a mechanism is viewed positively by MS CAs, NGOs, industry and other stakeholders
- However, some important challenges have been identified in both the detailed design of the due diligence system, but also in the way EUTR has been implemented in some Member States. Some evidence of operators perceiving there is variation in the stringency with which the EUTR is enforced across MSs (e.g. number of checks, level of penalties), with attempts observed to import timber which has likely been illegally harvested via some MSs with perceived weaker implementation and enforcement.
- Although DD Systems cover the majority of timber placed on the EU market, they do not cover all imports.
- Awareness among operators is high, and transparency has significantly improved which in theory places pressure throughout the supply chain to ensure legality.
- However, it is a challenge for operators and CAs to verify the robustness of information collected under DD and the definition of negligible risk is deemed somewhat subjective.

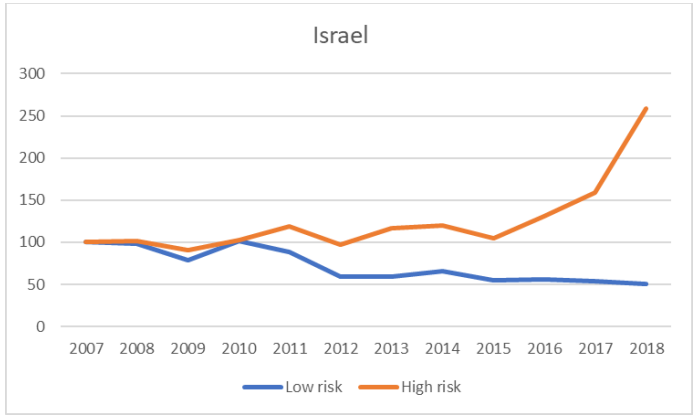
As explained in the main report, it is challenging to draw quantitative conclusions from these qualitative statements. However, some may provide some grounding as to why the impacts on the trade data are less than 100% (reduction in illegal logging). Namely the fact that coverage of DDS is not 100%.

Figure C-21 - Trends of imports from low/high risk countries to EU-28 and control group (Indexed to 2007=100)









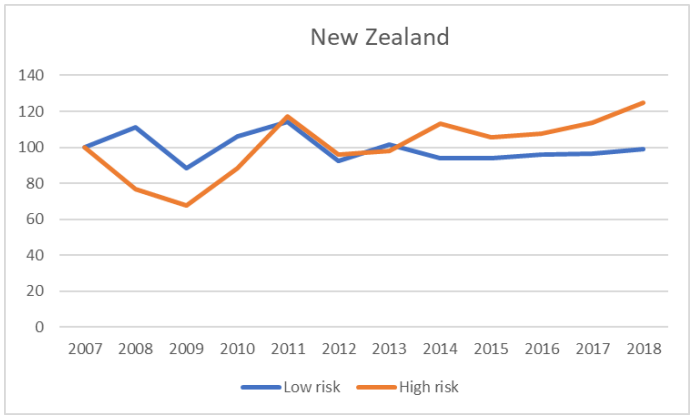
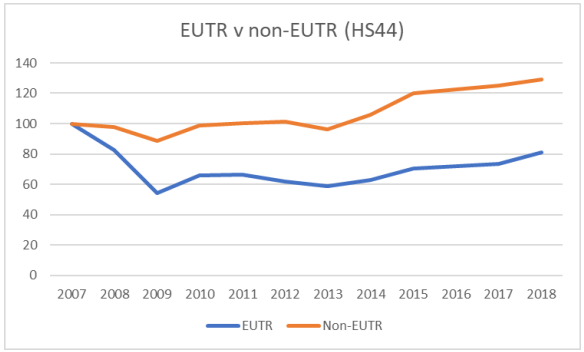
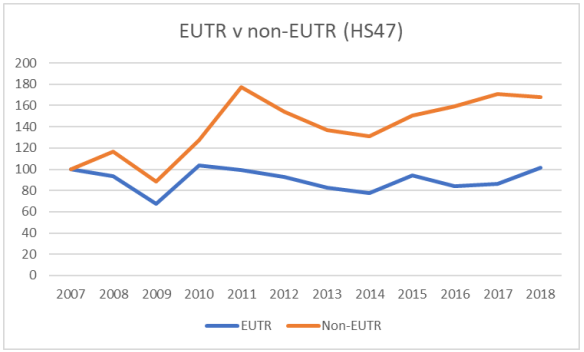
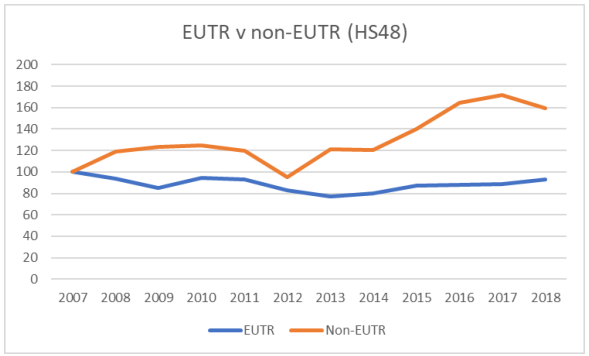
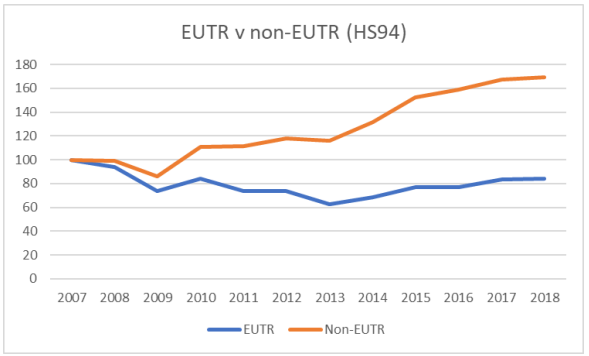

New Zealand
140
120
100
80
60
40
20
0
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
Low risk
High risk

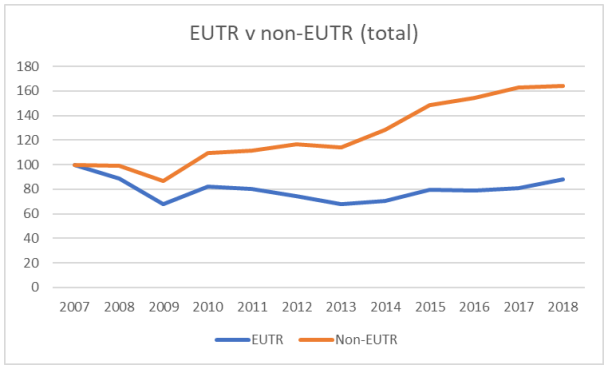
Figure C-22 – Trends of imports of EUTR and non-EUTR products(Indexed to 2007=100)











Annex D - Implementation of EUTR

Legal framework

In the initial two years after the EUTR came in force, not all MSs had transposed their obligations into national law and assigned CAs (European Commission, 2016) The Commission had to engage in bilateral dialogue with eight MSs, which rapidly brought half of them into compliance; legal actions were taken against the other four (European Commission, 2018). Since the uneven implementation created a non-level playing field for operators, the following actions were taken by the Commission:

- promoting cooperation among MSs and the Commission and sharing information in the FLEGT Regulation-EUTR Expert Group meetings[24];
- developing new guidance documents or updating existing ones;
- publishing bi-monthly briefing notes on EUTR issues.

Roles

In accordance with Article 7(1), countries are required to designate one or more CAs that are responsible in particular for carrying out checks at regular intervals on operators' compliance with the EUTR as per Article 4 (prohibition to place illegally harvested timber or timber products derived from such timber on the EU market and obligation to have a due diligence system (DDS) in place) and Article 6 (the elements that the DDS must contain). All MSs, as well as Norway and Iceland, have selected CAs to oversee the implementation and enforcement of the obligations arising under the EUTR. CAs were designated at the early stages of the regulation, with the mid-term evaluation finding that all countries met this requirement by 2015 (European Commission, 2018) For imported timber, the national CAs have the sole responsibility for checking operators in 21 countries; for domestic timber, this is the case in 19 countries. In the remaining countries, this responsibility has been partly or fully delegated to regional CAs (European Commission, 2018).

According to the "Background analysis of the 2017-2019 national biennial reports on the implementation of the European Union's Timber Regulation (Regulation EU No 995/2010)", in the 2019 reporting, the CAs were the authorities responsible for preparing the national report for all countries with the exception of Austria, Lithuania and Sweden, although Austria and Sweden confirmed that the CAs contributed to the reporting (UNEP-WCMC, 2020) .In Austria, Czech Republic, Germany, Italy, Lithuania, the Netherlands, Poland and Portugal, additional authorities have also provided input to the national report.

WWF notes that besides a few exceptions, there are no focal points in MSs in other parts of the enforcement chain apart from CAs such as from police or prosecutors' offices (WWF, 2019).

Number of checks and use of risk assessment criteria

The number of reported checks has increased from the start of the implementation 2013 to 2019. According to the initial evaluation of the EUTR covering the period between 2013 and 2015, 26 MSs (excluding Greece and Hungary) reported that their CAs had developed plans for checks on operators, as required by article 10(2) of the EUTR (European Commission, 2016). All CAs applied a risk-based approach for the preparation and review of their plans, indicating some level of consistency in the

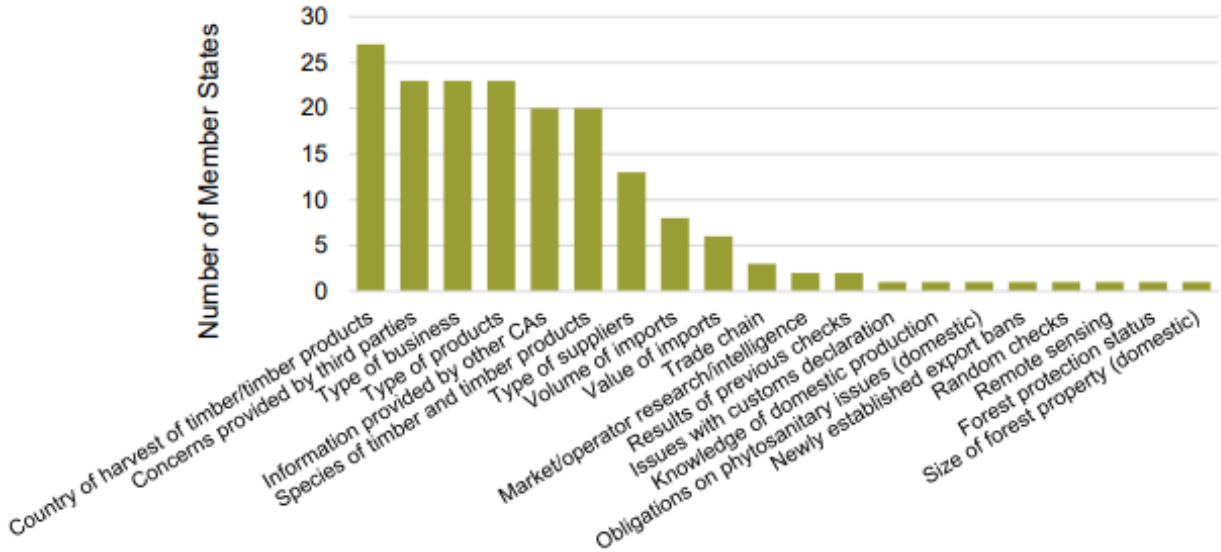
[24] https://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=3282

approaches taken (European Commission, 2016). Risk factors considered included the characteristics of suppliers and their products, the type of operators, as well as information received from third parties, as required by the EUTR (European Commission, 2016). In the first two years of the EUTR implementation, *not all MSs conducted checks* and some of them were delayed due to the general delay in the transposition of the EUTR in national law (European Commission, 2016)

In the 2015-2017 period, all MSs reported that plans for checks on operators were in place, although Bulgaria only reported on the plan for checks on operators for domestic timber (European Commission, 2018). The majority of countries did not provide sufficient details on the plans to allow understanding of their consistency (European Commission, 2018). Belgium reported that, due to resource constraints, priority was given to following up on complaints rather than planning checks (European Commission, 2018). Similarly to the previous reporting period, countries primarily used customs data and their own registers of operators to identify operators for checks.

Figure D-1 presents the risk-based criteria which MSs reported[25] to apply in their checks. The figure shows that the majority of MSs considered the country of origin of the timber (European Commission, 2018). However, this information is insufficient to conclude that imports from all high-risk countries are consistently checked. Besides this criterion, some countries reported conducting specific checks on round wood export from Ukraine (due to the export ban put in place by the Ukrainian authorities), domestic firewood (Hungary), imports from EU candidate countries and high-risk imports from Belarus, Brazil, Cameroon, Indonesia, Myanmar, Vietnam, China, Malaysia, Russian Federation, Ukraine and Taiwan, imports of particular products; and of particular species such as teak or oak. The answers indicate that the CAs focus on the most relevant high-risk supply chains relevant with regard to their national situation. The volume and value of imports was considered by a few MSs. This indicates that some MSs may not capture most operators linked to the highest proportion of imports in terms of volume and value.

Figure D-1 Number of MSs using specific risk criteria when performing checks



Source: European Commission

[25] The information was reported on voluntary basis and is not conclusive.

In accordance with Article 10(2), in addition to the checks conducted in accordance with risk-based plans, checks may be conducted when a CA is in possession of relevant information, including on the basis of substantiated concerns provided by third parties, concerning compliance by an operator with the EUTR. 14 countries reported having received substantiated concerns about operators, mainly from non-governmental organisations (NGOs) and customs. 86 % of the operators identified were checked and 50 % received penalties. Substantiated concerns were also received by seven countries in relation to traders, mainly from NGOs and members of the public (European Commission, 2018). Of the 64 traders identified, 63 (98 %) were checked and 16 (around 25 %) received penalties (European Commission, 2018) .In 2016, several MSs did not have a prescribed procedure on substantiated concerns. These included Austria, Belgium, Bulgaria, Denmark, Finland, Germany, the Netherlands, Romania and the UK (ClientEarth, 2018) In some countries such as Austria, NGOs did not have sufficient standing to legally challenge if CAs do not respond to substantiated concerns (ClientEarth, 2018)

Significantly more checks are performed on domestic timber in comparison to imported timber. In the 2015-2017 period, more than 17 700 checks were performed on operators placing domestic timber on the market and almost 2 800 checks on operators placing imported timber on the market (European Commission, 2018). There were variances between MSs in the number of checks on operators dealing with domestic timber, ranging from 3 965 (Hungary) to none[26] (Table D-1). The proportion of the checks compared to the total number of operators varied significantly, from less than 1% (Austria and Czechia) to 100% (Poland)[27]. However, the reporting showed that in some countries, EUTR checks were integrated as part of the checks carried out by the authorities responsible for forest management and in these cases the number of checks may not be reported even though sanctions may be applied (European Commission, 2018). The MSs which reported no checks on operators for domestic timber stated a number of reasons, including limited domestic production. It is noteworthy that the European Commission started legal proceedings against Belgium in 2017 for not conducting checks on timber placed on its market (ClientEarth, 2018)

In 12 MSs operators were reported to not be obliged to register so only estimates could be used by CAs to inform their checks which means that many operators may remain unchecked (WWF, 2019). Furthermore, the overall small number/proportion of checks in all MSs means that once an operator has been checked, they may remain unchecked for many years (WWF, 2019) .Finally, a consultation conducted by WWF found that out of 16 interviewed CAs, 10 always notified operators of upcoming checks – a practice which could seriously hamper the effectiveness of checks (WWF, 2019). Evidence to verify this will be sought in the consultation.

[26] Belgium, Croatia, Ireland, Malta, the Netherlands and the United Kingdom
[27] It is unclear if some operators were checked more than once in Poland which could lead to the impression of 100% compliance. It is also unclear whether Poland requires operators to register or deals with estimates of the number of operators on its market. The latter could lead to some operators remaining unchecked.

Table D-1 Estimated number of operators, planned checks (number and % of all operators) and performed checks (number and % of all operators) (2015-2017)

Country	Domestic operators	Domestic checks (planned)	Domestic checks (performed)	International operators	International operators checks (planned)	International operators checks (performed)
Austria	145 000	979 (0.6%)	863 (0.5%)	6 000	50 (0.8%)	28 (0.5%)
Belgium	unknown	0	19	unknown	unknown	725
Bulgaria	4 013	610 (15%)	725 (18%)	unknown	48	41
Croatia	50	0	0	5 000	5 (0.1%)	4646 (0.9%)
Cyprus	63	124 (196%)	130 (206%)	781	92 (11%)	106 (13.5%)
Czechia	300 000	113 (0.03%)	119 (0.04%)	2 500	70 (2.8%)	68 (2.7%)
Denmark	28 000	unknown	1 (0.03%)	3 800	24-40	58
Estonia	10 000	1 135 (11%)	794 (7.9%)	450	20 (4.4%)	15 (3.3%)
Finland	350 000	20 (0.005%)	20 (0.005%)	2 000	32 (1.6%)	32 (1.6%)
France	5 000	30 (6%)	30 (6%)	14 000	320 (2.2%)	320 (2.2%)
Germany	2 000 000	unknown	unknown	25 000	309 (1.2%)	309 (1.2%)
Greece	1 930	237 (12%)	209 (10.8%)	604	86 (14%)	73 (12%)
Hungary	46 700	2 010 (4.3%)	3 965 (8.4%)	2 674	60 (2.2%)	25 (0.9%)
Ireland	unknown	0	0	unknown	358	358
Italy	unknown	53	53	unknown	107	107
Latvia	140 000	unknown	unknown	290	24 (8.2%)	24 (8.2%)
Lithuania	25 940	60 (2%)	7 264 (28%)	800	155 (19%)	227 (28%)
Luxembourg	200	155 (77.5%)	227 (113.5%)	245	13 (5.3%)	12 (4.8%)
Malta	unknown	0	0	750	9 (1.2%)	9 (1.2%)
Netherlands	100	0	0	4 900	100 (2%)	74 (1.5%)
Norway	120 000	24 (0.02%)	30 (0.02%)	5 000	10 (0.2%)	23 (0.05%)
Poland	45	45 (100%)	45 (100%)	73 (100%)	73 (100%)	73 (100%)
Portugal	2 525*	unknown	152 (6%)	853*	77 (9%)	166 (19%)
Romania	4 372	3 759 (85%)	1 492 (34%)	162	126 (77%)	79 (48%)
Slovakia	9 700	1 200 (12%)	1 328 (13.6%)	unknown	unknown	unknown
Slovenia	460	400 (86%)	424 (92%)	1 423	26 (1.8%)	29 (2%)
Spain	1 000	75 (7.5%)	65 (6.5%)	11 000	425 (3.8%)	217 (1.9%)
Sweden	unknown	14	14	unknown	71	71
United Kingdom	unknown	0	0	unknown	184	184

Source: European Commission (2018)

In this period, the number of checks on traders with regard to traceability obligations ranged from one (Denmark, France, Luxembourg) to 747 (Cyprus) (European Commission, 2018)

In the 2017-2019 reporting period, checks were planned by all MSs for importing operators and by 19 MSs for domestic operators; however, for the latter, 20 countries actually reported having performed checks under the EUTR. For domestic operators, 55% of the reporting countries that had planned checks performed 90% or more of these planned checks. For importing operators, 72% of the reporting countries performed 90% or more of the planned checks. In total, countries performed 17 280 checks on domestic operators and 3 976 checks on importing operators. Six countries used scientific methods for timber origin identification. Following checks on operators, 590 domestic and 885 importing operators were found to not meet the obligations of Articles 4 and/or 6 of the EUTR. The majority of operator infringements concerned placing on the internal market of illegally harvested timber, with a smaller proportion relating to breaches of one or multiple DDS requirements, which include obligations such as establishing and maintaining a DDS. Of a total 2 468 enforcement actions taken, the majority (68%; 1 666) applied to domestic timber. 23 countries reported carrying out checks on traders, and 7 reported

taking enforcement action. A total of 2 333 checks on traders were performed, leading to 544 notices of remedial action or warning letters and 265 financial penalties. Three countries reported receiving a total of 214 substantiated concerns regarding 188 traders, all of which were checked. These checks led to 305 notices of remedial action and 188 penalties.

Finally, an assessment performed by WWF concluded that the majority of checks conducted on operators focus on the due diligence requirements, with fewer checks being focused on the prohibition and traceability obligations (WWF, 2019). WWF also noted that transparency of CAs could be improved, with more CAs proactively disseminating information on EUTR enforcement via their websites (WWF, 2019).

Penalties

The first evaluation of the EUTR found that, in the 2013-2015 period, 24 MSs reported that sanctions were set in their national legislation for infringements of the obligations of the Regulation (European Commission, 2016). Exceptions included Greece, Hungary, Romania and Spain, all of which however reported that they were in the process of elaborating adequate sanction provisions. The range of sanctions varied considerably across the MSs from notice of remedial actions, fines, seizure of timber, suspension of authorisation to trade to imprisonment in countries where breaches were considered to be a criminal offence. The highest penalties related to the violation of the provision of the prohibition of placing illegal timber on the EU market, followed by penalties for breaches of due diligence and traceability obligations. Factors considered by the MSs to determine the level of sanctions include the national economic conditions and levels of sanctions imposed for infringements of other comparable obligations, such as the EU Wildlife Trade Regulations and FLEGT Regulation. While the MSs have the power to set sanctions, too much variation in levels of sanctions meant that operators in the EU are not operating on a level playing field. The limited number of penalties (19 across all MSs) in the first two years of the implementation period meant that there was limited evidence to judge on whether they are "effective, proportionate and dissuasive".

In the 2015-2017 period, all MSs and Norway provided information on the range of penalties for potential infringements of the EUTR. The penalties could be both administrative and criminal in 13 countries, only administrative in 10 countries, and only criminal in two countries[28]. In 21 countries, notices of remedial action could be issued where shortcomings are detected in order to allow operators to adjust their DDS prior to being re-checked. These could be combined with interim measures such as seizures of timber or prohibition on placing it on the market. The seizure of timber or timber product(s) was reported as a potential penalty by 19 countries, while 10 countries can suspend the authorisation to trade. Breaches of the EUTR are punishable by imprisonment in 15 countries, with 10 years the longest (Greece) and 30 days the shortest (Luxembourg) potential maximum sentence.

Error! Reference source not found. presents an overview of the scale of penalties per country and type of infringement. The figure makes it clear that, as in the first two years of the implementation period, the largest penalties reported were those relating to prohibition. The smallest penalties related to the traceability obligation. Only five countries reported equal penalties for all types of infringement. The ranges of the penalties reported by MSs are as follows:

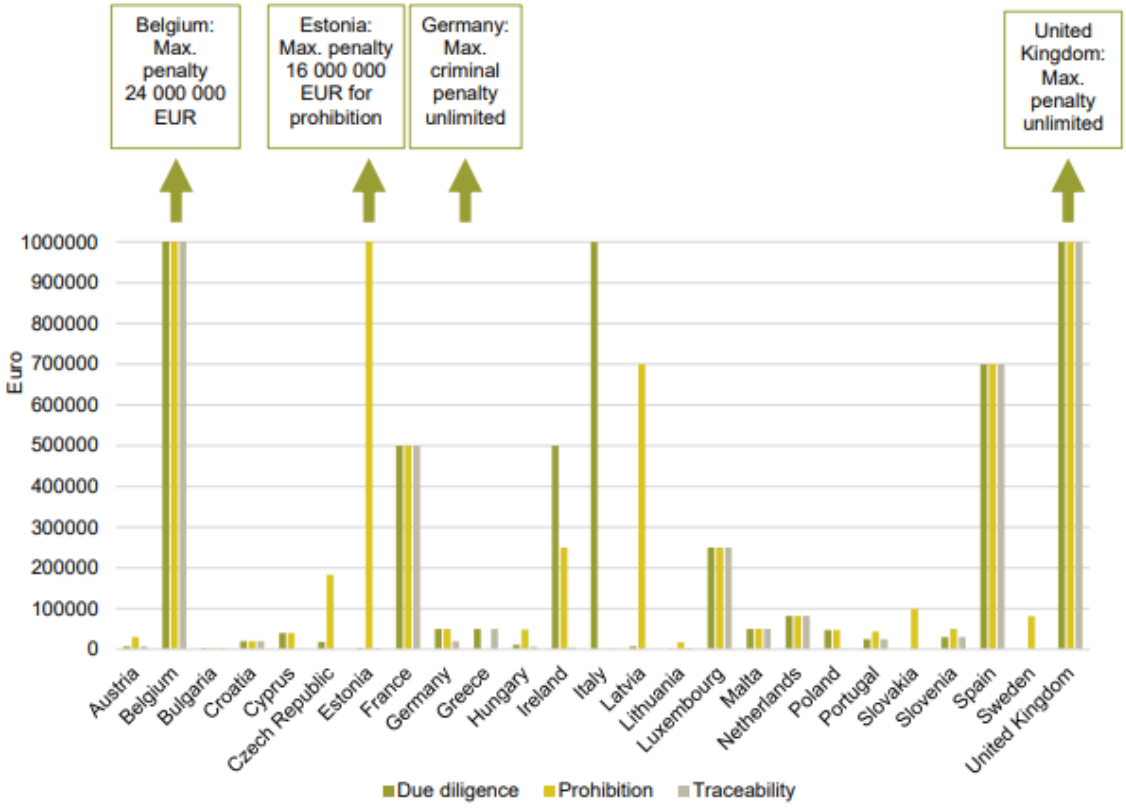
- Up to EUR 100 000: Austria, Bulgaria, Croatia, Cyprus, Germany (administrative penalties), Greece, Hungary, Lithuania, Malta, Netherlands, Poland, Portugal, Slovakia, Slovenia and Sweden;

[28] Four countries did not provide information on this matter.

- Up to EUR 1 000 000: Czech Republic, France, Ireland, Italy, Latvia, Luxembourg and Spain;
- Above EUR 1 000 000: Belgium, Estonia, Germany (criminal penalties) and United Kingdom.

Denmark did not set a limit whereas Finland and Sweden bases fines on the offenders' revenues. As in the first two years of implementation, the large differences in the type and scale of penalties across countries suggests that a level playing field has not been created for operators, with opportunities to relocate to countries with less severe penalties.

Figure D-2 Penalties for the breach of EUTR obligations across MS (2015-2017)



Source: European Commission (2018)

In the 2017-2019 period, information regarding penalties was provided by 13 MSs and Norway. The majority of the countries referenced other environmental legislation, including laws for the implementation of FLEGT Regulation and CITES. Table D-2 presents information on the penalties in the 2017-2019 period. Similarly to the previous periods, the table shows a large variability across countries and generally higher penalties for infringement of the prohibition provision

In a Forest Trends Timber Regulation Enforcement Exchange (TREE) survey29 of enforcement officials responsible for EUTR and other regulations designed to tackle the trade in illegally harvested timber, over 58% of survey respondents responsible for enforcing the EUTR believed that penalties are not currently proportionate or dissuasive, and 54% believed that penalties should be set as a percentage of profit or turnover. This practice was only reported by Finland and Sweden in the 2015-2017 period.

29 The TREE process began in 2012 and facilitates a series of information-sharing workshops that bring together key stakeholders and enforcement officials for the US Lacey Act, the EU Timber Regulation, and the Australian ILPA. In August 2020, Forest Trends surveyed government agencies responsible for the enforcement of timber trade legislation for their views on what constitutes enforceable trade regulations. Through its TREE network, Forest Trends received 17 responses from 14 countries.

Table D-2 Maximum penalties (EUR) for infringements of EUTR obligations (prohibition, due diligence and traceability) per MS (2017-2019)

	Prohibition			DD obligations			Traceability		
	Administrative fine	Criminal fine	Imprisonment	Administrative fine	Criminal fine	Imprisonment	Administrative fine	Criminal fine	Imprisonment
Austria	15 000 (30 000 for intent/repeat)			7 000			7 000		
Belgium	1 200 000	24 000 000	36	1 200 000	24 000 000	36	1 200 000	24 000 000	36
Bulgaria	1 500			1 500			1 500		
Croatia	1 505			1 505			1 505		
Cyprus			24			24			24
Czechia	193 585			193 585			1 936		
Denmark		none	12		none	12		none	12
Estonia	3 200	16 000 000	36	3 200	16 000 000	36	3 200		
Finland	No max.	No max.	24	No max.	No max.			No max.	
France	15 000, or 1 500/day	500 000	24	15 000, or 1 500/day	500 000	24	15 000, or 1 500/day	500 000	24
Germany	50 000	No max.	12	50 000			20 000		
Greece	50		120	50					
Hungary	47 500			11 100			6 350		
Ireland		250 000	12		250 000	12	250	5 000	
Italy		50 000	12	1 000 000			1 500		
Latvia	14 000	760 000, plus damages	96	7 000					
Lithuania	17 377			800			4 350		
Luxembourg		250 000	12		25 000	12		250 000	12
Malta	50 000	50 000	24	50 000	50 000	24	50 000	50 000	24
Netherlands		83 000; 830 000 for companies	72		83 000; 830 000 for companies	72		83 000; 830 000 for companies	72

	Prohibition			DD obligations			Traceability		
	Administrative fine	Criminal fine	Imprisonment	Administrative fine	Criminal fine	Imprisonment	Administrative fine	Criminal fine	Imprisonment
Norway		No max.	60		No max.	60		No max.	60
Poland	116 335			116 335			4 653		
Portugal	44 000			44 000			25 000		
Romania	2 100	3 200		2 000	3 000		2 000	3 000	
Slovakia	200 000			10 000 (legal person, 5 000(natural person)			10 000, or 200 per m^3		
Slovenia	50 000 (legal person); 5 000(natural person)			300 000 (legal person), 600 (natural person)			300 000 (legal person; 600 (natural person)		
Spain	1 000 000; or equivalent to value of timber or double the cost of reposition of damage caused if higher			1 000 000 or equivalent to value of timber or double the cost of reposition of damage caused if higher			1 000 000; or equivalent to value of timber or double the cost of reposition of damage caused if higher		
Sweden	No max.	No max.	6	No max.			No max.		
United Kingdom		No max.	24		No max.	24		5 870	

Source: (UNEP-WCMC, 2020)

Due diligence

The initial evaluation of the EUTR showed that in the 2013-2015 period, operators were gradually taking up the due diligence obligation and that there was more awareness of the problem of illegal logging among EU industry and consumers. However, there was uneven implementation and patchy enforcement during the first two years (European Commission, 2016). A strong perception was noted among stakeholders that CAs did not have the capacity they needed to apply the Regulation which discouraged the effective implementation of DDS. The results from the OPC conducted as a part of the evaluation further pointed out the following as the main challenges in setting up an effective DDS:

- difficulties in gathering information on applicable legislation in producer countries;
- the cooperation with suppliers;
- risk assessment and mitigation, which are generally considered a challenge for operators.

While there were indications that operators are gradually implementing DDS, demanding more and more information and legality assurance from their suppliers, the evaluation concluded that the obligation could not have achieved tangible results in preventing illegally harvested timber from being placed on the market (European Commission, 2016). This is due to the fact that the uptake of due diligence obligations has been uneven across operators. The findings of the biennial report (2015-2017) were similar; this found that overall compliance by the private sector was uneven and insufficient, with many operators' DDS not always meeting the EUTR requirements (European Commission, 2018). The results of an operator survey conducted by Thünen Institute (Köthke, 2010) found that in terms of compliance, only 28% of operators had introduced a DDS, however together they cover about 76 % of the total import value of all EUTR-products in Germany. In addition large enterprises and importers from high risk countries had a DDS significantly more frequently (Also the percentage figure may be higher given 26% of those surveys did not identify as operators).

The EUTR Biennial report (European Commission, 2018) explored some of the barriers to implementing DDS. Some stakeholders stated that the DD obligation poses a significant implementation challenge due to its novelty and insufficient guidance. Key barriers included difficulties understanding all the elements needed for sufficient DDS, difficulties in gathering information on applicable legislation in producer countries, lack of cooperation with suppliers and appropriate risk assessment and mitigation measures (European Commission, 2018) Under Article 8 of the EUTR, MOs could provide operators with a DDS if they do not have in-house capacity to develop their own. In the 2015-2017 period, interest amongst operators for MO services was very low and only a small proportion of operators took advantage of this provision (European Commission, 2018) This could be linked to the low levels of enforcement and the obligation on MOs to report on major failures of the DDS (European Commission, 2018)

A TREE survey, focusing on the enforceability of EUTR and similar regulations, found that more than 82% of respondents considered that better definitions of infringements would make it easier to demonstrate and judge whether or not compliance has taken place (Saunders J. , 2020) Furthermore, 79% of respondents tasked with enforcing the EUTR felt that due diligence is not defined clearly enough in the Regulation for inadequate risk assessment or mitigation to be subject to a penalty (Saunders J. , 2020) The report presenting the results of the survey states that issues with performing sufficient due diligence related to availability of actionable data and the fact that companies involved may seek a minimum viable level of compliance (Saunders J. , 2020). When asked why some elements of law have been less actionable under the EUTR, 54% of respondents stated that "companies [they] check do not

know the exact legal requirements that fall under these categories of legislation in their source countries/supply chain," and 46% stated the absence of data to demonstrate compliance with the legal requirements that fall under these categories of legislation in their source countries/ supply chains (Saunders J. , 2020). Over 82% of the survey respondents agreed or strongly agreed that perceptions of what constitutes "reasonable" due diligence vary extremely widely among NGOs, companies, regulators, prosecutors, judges, and State. Examples were noted of EUTR CAs requiring companies to translate documentation into the language of the importer/regulator (Saunders J. , 2020) Courts recently upheld a company appeal against a regulatory fine for repeated imports from the Congo Basin without application of a DDS on the grounds that the company staff cannot be expected to speak the language of the source country (French) or translate documents (Saunders J. , 2020) Saunders (Saunders J. , 2020) also argues that using fines is not as effective as using injunctions as a penalty. The example provided relates to a statement that shipments of teak from Myanmar would not be allowed through customs, but would have to be returned at the expense of the importer which was significantly more effective than legal cases in reducing the volume of product imported in Germany and Belgium (Norman, 2020).

A further issue with the due diligence obligations is its wide application – ranging from big corporate players to SMEs which can lead to different interpretations. The initial evaluation of the EUTR found that, if compared to large enterprises, SMEs seem to be in a disadvantaged position due to their low economies of scale, as the costs of the DDS is more or less fixed and it needs to be covered by a lower turnover (European Commission, 2016). The evaluation found that implementation of DDS is more difficult for SMEs due to difficulties understanding the technical requirements, lack of staff with adequate knowledge and experience necessary for exercising DD or limited financial resources (European Commission, 2016). A survey conducted by the Global Timber Forum with 27 SMEs[30] found that 25 of them had existing DDS whereas two were still developing some despite being legally required to have them in place (Global Witness, 2015). The 25 respondents kept consistent records of the volume purchased, and 22 kept a record of the species (Global Witness, 2015). The operators were asked if they ask suppliers for information regarding the legality of the products and:

- 21 asked for certified products only;
- 16 asked for verified legal products;
- 20 asked for customs forms;
- 20 asked for export permits;
- 25 asked for shipping documents;
- 14 asked for proof of export tax payments;
- 16 asked the supplier to provide a letter confirming all the wood is legal;
- 20 visited the supplier on a regular basis;
- 25 had a good relationship with the supplier;
- 20 trusted the supplier.

All of them performed some form of checks to verify the information (Global Witness, 2015). Twenty-four respondents checked the use and functioning of the DDS on a regular basis and one did not check the system at all (Global Witness, 2015). Overall, the report showed that most of the respondents, despite being SMEs, had acceptable DDS. However, it should be noted that the sample size was too

[30] The sample included seven French, eight UK, four Netherlands, five German and three Italian companies. And their wide range of sources included Brazil, Cameroon, Canada, China, Republic of Congo, Gabon, Ghana, Indonesia, Ivory Coast, Malaysia, Myanmar, Latvia, Peru, Poland, Suriname, Sweden, USA, Vietnam and EU MSs.

small to draw conclusions. It is also noteworthy that a significant amount of the support available for operators focuses on SMEs to even the level playing field.

Regarding the ease of proving insufficient DDS in court, Saunders (2020) states that some EU MSs have CAs with mandates that include the ability to take cases directly to court, such as the UK, Sweden, and Netherlands, whereas others, for example, Germany, have to find prosecutors willing to take cases. According to Saunders, non-specialist prosecutors and courts fail to grasp the complexity and importance of demand side measures in environmental trade (Saunders J. , 2020). By contrast, the EUTR CA in the Netherlands had a high number of cases and sanctions for non-compliant companies, and has direct access to specialist environmental courts (Saunders J. , 2020). CAs have reported resistance from prosecutors to taking cases and confusion from judges about what constitutes reasonable behaviour on the part of companies faced with the documented risks (Saunders J. , 2020). The first French case was handed down to commercial arbitration after a French court declared itself not competent to make the necessary judgements about activities outside its jurisdiction (Saunders J. , 2020).

Traceability

In 2018, the Hungarian CAs at the EUTR Department in the Forestry Directorate at the National Food Chain Safety Office issued a "Proposal for the EU Commission regarding the issue of strengthening effective monitoring of the activities of traders throughout the timber supply chain" (Hungarian Government, 2018). The document outlines key issues experienced with the traceability obligations under the EUTR (Box 0-1).

Box 0-1 Example of challenges experienced by Hungary

1. **There are no clear requirements on data collection, registration and record keeping for traders governed by the EUTR**

According to the Hungarian authorities, the definition of "traceability" under the EUTR is unclear which leads to uncertainties for all EUTR actors. The authorities found that currently only the list of suppliers and buyer partners could be checked without specific information on the product, including species, quantities. This means that the traceability obligations are impossible to be met once the timber has been placed on the EU market. To ensure the effective control of the timber supply chain the whole process of the supply chain must be traceable with regards both to the timber products and the operators placing them on the market, as well as the redistributors. The data on actual consignments should be directly connected to the operators and traders, as it is done for traceability in the food supply chain.

2. **Illegal timber is mixed with legal timber which makes traceability more difficult**

According to the Hungarian experience, the proportion of traders that focus on the commercialisation of illegal timber is small. However, many operators and traders trade small amounts of illegally sourced timber together with legally sourced timber with proper documentation, taking care to prevent having more timber than the documentation supports on their sites.

3. **There is a problem with chain selling and the identification of traders or operators**

The Hungarian CAs require registration for all activities linked to the timber supply chain. The actors who fulfil these obligations often act both as traders and operators, and it is often unclear what capacity they are acting in at any given time. Furthermore, the Hungarian experience has shown that even non-processed timber products which are directly removed from the forest can be affected by chain selling[31] which makes it more difficult to identify the status of operator or trader, or to identify the location of the commercial activities. Furthermore, proxy-companies based within the EU are also used by some traders.

Source: Hungarian Government (2018).

[31] After an operator has placed the timber on the market, traders/other operators resell it several times.

Competent authority cooperation

The evidence identified in the report to show that MS CAs are proactively and effectively cooperating with each other as required by the EUTR. Beside this, they also cooperate with customs, OLAF and Interpol despite the lack of formalised requirement to do so in the EUTR.

Previous analysis of the levels of cooperation were conducted by the WWF , based on surveys conducted with EUTR CAs of 16 MSs between October 2018 and March 2019, to review the enforcement of the EUTR (WWF, 2019). This study found that:

- Though collaboration between CAs is happening, there is still a lack of formalised cooperation and there is often a lack of timely communication between countries and among officials of the enforcement chain within countries.
- There is a lack of communication and routine information exchanges between central and regional CAs, or between CAs responsible for domestic and international timber products (in countries where these responsibilities are separated).

In addition, WWF made the following recommendations:

- There should be a more pro-active cooperation with other CAs and enforcement agencies, including customs, prosecutors and police investigators.
- CAs should work closely with customs to identify high risk shipments and intercept them for checks right at the port. This requires reinforced and formalised cooperation amongst the national enforcement entities and with counterparts in other MSs and internationally.
- The FLEGT Regulation/EUTR Expert Group should facilitate more regular exchange between different agencies involved in the implementation of the EUTR (e.g. customs, police or others) from different EU MSs to enhance cross-border cooperation.

Technical assistance

Table D-3 Assistance to operators – provided by CAs and/or National Government Agencies

	Assistance provided for:			
Country	**Checks**	**EUTR obligations**	**DDS**	**Other activities**
Austria	Yes	Yes	-	
Belgium	Yes	Yes	Yes	
Bulgaria	-	Yes	Yes	
Croatia	Yes	Yes	Yes	
Cyprus	Yes	Yes	Yes	
Czechia	Yes	Yes	Yes	
Denmark	Yes	Yes	-	
Estonia	Yes	Yes	Yes	
Finland	-	Yes	Yes	
France	Yes	Yes	Yes	
Germany	Yes	Yes	Yes	
Greece	-	Yes	Yes	CA website provided information on legislation, circulars on legislative status and implementation, and links for EUTR/FLEGT Regulation
Hungary	-	Yes	Yes	3670 telephone 1-to-1 consultations and 2547 emails (operators and traders). Announcements published on the CA website included the change of rules on the marketing and transporting of timber and timber products and guidance on purchase and distribution of social firewood. Media engagement in July-December 2018 totalled 142 appearances and a contribution to the “heat wisely at home” campaign. A lecture on applicable legislation under the EUTR was delivered to forestry experts.
Ireland	Yes	Yes	-	A 2018 awareness-raising campaign included an information pack sent to >1,200 operators. 1-to-1 awareness-raising included educational site visits. EUTR information was provided at the National Ploughing Championships (250,000 attendees) in 2017 and 2018, and the Irish Forestry Show in 2017. EUTR articles were published in 2 magazines. EUTR information and Brexit-related trader notices were issued. Presentations were delivered at a EUTR event in Belfast (2019) and the "Forest Industries Ireland" group. New EUTR guidance was published on the website in 2018, on obligations of operators and role of the CA.
Italy	-	Yes	Yes	
Latvia	Yes	Yes	Yes	Information including country, region, species, and chain of custody risks was provided to operators.
Lithuania	Yes	Yes	Yes	
Malta	Yes	Yes	Yes	
Netherlands	Yes	Yes	Yes	
Norway	Yes	Yes	Yes	
Portugal	-	Yes	Yes	Information packages comprising documentation on the EUTR, national legal frameworks, and DDS requirements were sent to all operators that

Assistance provided for:				
Country	**Checks**	**EUTR obligations**	**DDS**	**Other activities**
				registered on the ICNF EUTR web platform. External EUTR-related seminars were used to raise awareness and provide training to operators
Romania	-	Yes	Yes	
Slovenia	-	Yes	Yes	
Spain	Yes	Yes	Yes	
Sweden	Yes	Yes	-	
United Kingdom	Yes	Yes	Yes	

Source: WCMC (2020)

Forest governance in countries exporting timber and timber products to the EU

This section considers how the EUTR has indirectly influenced forest governance in countries which export timber and timber products to the EU.

Myanmar

The EUTR/FLEGT Regulation Expert Group has had a strong focus on timber legality risks in Myanmar, concluding since September 2017 that it is not possible to mitigate to a negligible level the risk that timber from Myanmar has been illegally harvested (European Commission, 2017) and reaffirming its concerns in subsequent meetings (European Commission, 2018; 2019a; 2019b; 2019c). Regular engagement with the relevant agencies in Myanmar (including participation of a Myanmar delegation at the June 2018 Expert Group, (European Commission , 2019b)), together with clear conclusions of the EUTR/FLEGT Regulation Expert Group, a focus on even implementation across MSs, cooperation among EU CAs and strong enforcement actions[32], have elicited numerous improvements to forest governance in Myanmar. For example:

- The export of products based on confiscated timber or conversion timber from land-use change has been prohibited since 2017 (MONREC, 2020);
- A new Forest Law was enacted in 2018;
- A moratorium on the harvesting of timber in the Bago Yoma Region has been put in place for ten years, starting from the 2016-17 fiscal year;
- MONREC developed a new 'Chain of Custody dossier' to assist operators in their due diligence (MONREC, 2018);
- Logging for teak is reported to be kept under 55% of the Annual Allowable Cut (MONREC, 2020);
- In 2017, MONREC committed to allowing independent observers – such as civil society organizations – to observe the harvesting process (European Union External Action, 2019);
- There has been an increase in the online publication of key documents e.g. the Annual Allowable Cut (AAC) for 2019-2020 was uploaded in November 2019 (although harvesting began in August) (European Commission, 2019d).

The Expert Group has welcomed ongoing progress by the Government of Myanmar towards increasing transparency and accountability in the supply chain (European Commission, 2018) but also recognises

[32] For example, EU seizures and prosecutions regarding teak from Myanmar are regularly reported in the Summary Records of the EUTR/FLEGT Expert Group and in EUTR Briefing Notes

continuing deficiencies in the national systems, including a lack of sufficient access to the applicable legislation and documentation from governmental sources (European Commission, 2019d).
Whilst the process towards negotiating a VPA with Myanmar has been halted, the European Commission participated in a national multi stakeholder group (MSG) meeting in Myanmar, 5 November 2019, in which the EU and Myanmar reinforced their joint commitment to forest governance and trade in legal timber (European Commission, 2019d).

Ukraine

Ukraine is a major exporter of EUTR-regulated timber and products to the EU (see Annex B – Analysis of deforestation data

Introduction and methodology

In the absence of a robust and temporally complete data set on levels of illegal logging, forest cover data (and associated afforestation or deforestation trends) can be used as a proxy for the state of forest resources over time. This in turn may provide insights into the possible effects of any changes in forest policy (Arevaop & Ladie, 2020).

It is important to note that there are limitations to this proxy method: Changes in forest cover may be due to both legal and legal logging, or due to other factors like clearance of land for agriculture or urban development, fires, and may be temporary or permanent.

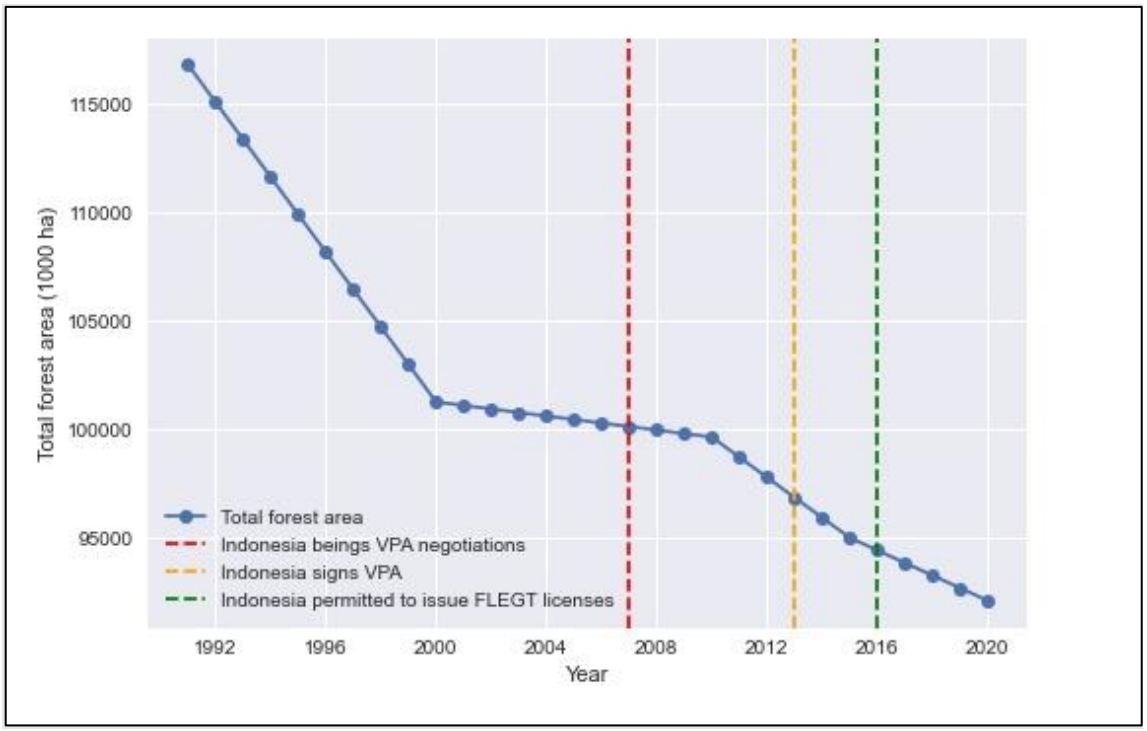
Data from the Forest and Agriculture Organization was used to provide an understanding of the changes in forest size. This dataset is compiled by the FAO's national correspondent for each country who identifies the most reliable and complete estimates (with the Landsat Satellite network found to be commonly used), the data collection and analysis follows a quality assurance process as defined by the Intergovernmental Panel on Climate Change (IPCC) guidance on land assessment was used . Detailed information of how the FAO dataset is collated is available on the FAO website . A limitation of the FAO dataset is that data has been historically reported once a decade before the review frequency was increased to a 5-year period from the year 2000, this meant that values for most years consisted of a linear estimation between reported years. Further, technical advancements in forest measurements techniques mean that there is a potential for previous higher margins of error in measurement to cause a step change in reported forest size. Other data sources were also considered, but many link back to the database compiled by the FAO (including models by the University of Maryland whose work feeds into the information displayed on the Global Forest Watch website) and did not offer additional insights.

Forest cover data was collated over a period from 1991 – 2020 for selected case study countries. This time period was selected to consider trends before and after adoption of the FLEGT Regulation and EUTR. A literature review using the google search engine and science direct library was undertaken to link evidence of key events with changes seen in the dataset.

Forest size trends in VPA countries

Case study: Indonesia

Figure B-1 Annual forest cover in Indonesia between 1991 and 2020



After opening discussions in 2007, the Indonesian government signed a VPA with the EU in 2013. Since November 2016, Indonesia is issuing FLEGT Regulation licenses. Figure B-1 Annual forest cover in Indonesia between 1991 and 2020

shows that total forest area reduced at a significant rate over the 1990s. The rate of reduction of forest cover slowed over the 2000's, but then accelerated again post 2010. Indonesia has three official categories of forest: conservation, protection and production. Over this period, production forests were the biggest areas of deforestation. Evidence from the literature attributes this rapid deforestation trend predominantly to the growth in the number palm oil plantations (Between 1990 and 2010, the total area used for the cultivation of palm oil grew from 1.1 million to 7.8 million hectors, but also to policy reforms which granted regional authorities more autonomy to install local regulation, in turn leading to a reduction in the ability of the Indonesian central Government to manage forest areas. Recognizing that regional authorities were failing to appropriately regulate timber harvesting, the central government passed new rules (2002) which blocked regional authorities' ability to issue logging and forest permits in state-controlled forests.

It is possible that the VPA may have had some impact in the 2000s. However there were a number of wider policy changes at national level which could have also contributed, in particular efforts of the Indonesian government to unilaterally introduce a licensing scheme from early 2000s . Indeed given the rate of forest loss began to decline before commencement of the VPA negotiations, attribution of effects to the VPA is problematic. What is clearer is that despite the VPA negotiations (and latterly licensing), forest loss accelerated and maintained a high rate of loss in the 2010s. Hence any potential impact of VPAs was clearly overwhelmed by other influencing factors.

Of course, what the deforestation data does not provide insight to is legality. It may be the case that even if expansion of palm oil plantations and/or local rights have driven higher rates of deforestation,

these activities may have been legal. The fact that it is reduction in forest cover in the '*production*' sector lends further weight that part of this activity may be legal. In conclusion it is evident deforestation continues at a significant pace. It is difficult to deduce from this data whether VPA has had an impact or not on legality, but clearly there are other, stronger drivers that highlight the wider issue that VPA (and EUTR) are limited in targeting legality as a driver of deforestation, rather than sustainability more broadly.

Case Study: Ghana

Figure B-2 Annual forest cover in Ghana between 1991 and 2020

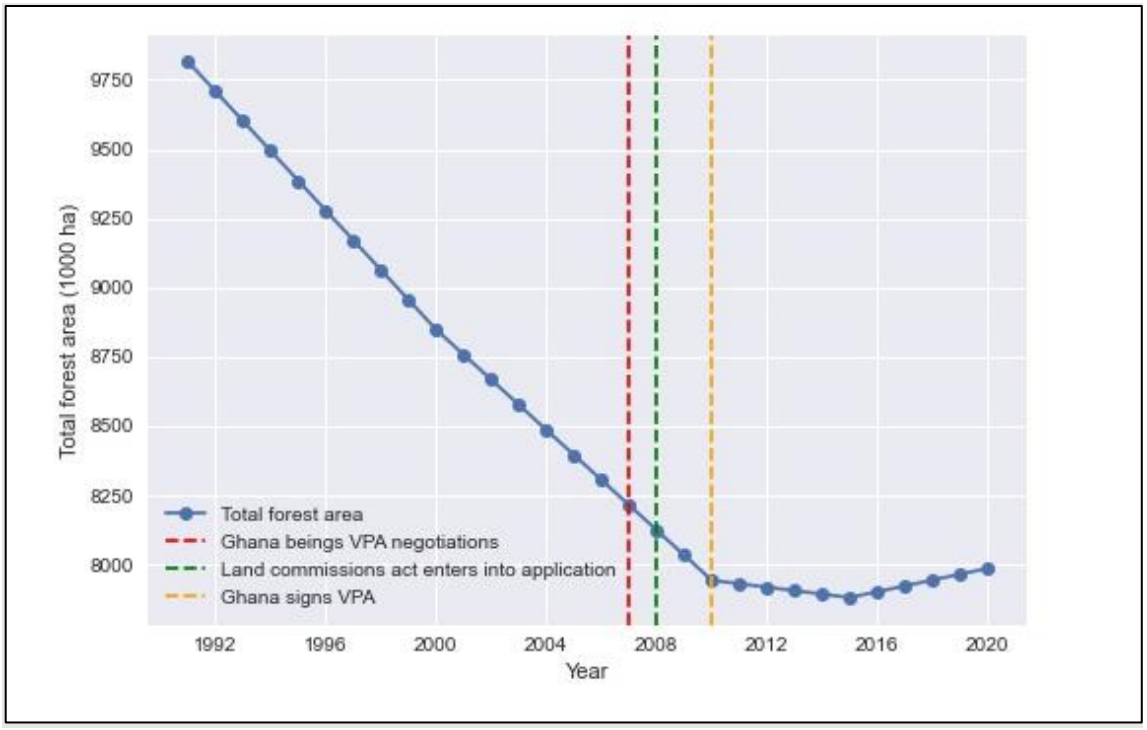


Figure B-2 shows that there was a large reduction in total forest size between 1992 – 2010. However, the rate of deforestation slowed significantly after 2010, and from 2015 was followed by a period of net afforestation to 2020. From the figure, we are not able to rule out the possibility that the VPA signed with the EU in 2010 may have had an impact on the rate of deforestation in Ghana, however with review of other legislations around this period, it is clear that several other policies and initiatives have been introduced which may also have influenced levels of forest cover.

National policies such as, the *land commissions act* , the '*Forestry Development Master Plan 2016 – 2036'*, the *'Ghana REDD+ Strategy (2016-35)'* and the '*National Climate-Smart Agriculture and Food Security Action Plan of Ghana (2016-2020)'* highlight that land (forest) conservation was a priority in the decade following the beginning of VPA negotiations with the EU. It has not been possible to identify, categorically, whether VPA negotiations were a key driver in the development of these policies. Our analysis, provided in Annex C, shows a fairly linear decreasing trend in the EU spending on EUTR regulated wood-based products from Ghana, with a relative drop of 76% in 2018 compared to 2007 export values, an absolute change of EUR 91 million. However, since the introduction of the aforementioned policies, the decreasing trend in EU imports from Ghana has halted although this does not break with broader trade partners regarding EU imports.

Further exploration of the literature has identified evidence that undermines the potential impact of the VPA. A study on the impacts on the timber industry by the VPA found that some timber producers stated that they have now stopped exporting their product to Europe and sell either to the internal or the Asian market. The same study highlights that there are several reasons for the decision by producers to change their target market with the increased level of bureaucracy and cost being a key theme in some of the reasons provided. Further, the study found that some timber processing firms and exporters went out of business or left the industry, this is cited to be partly due to limited timber resources available in addition to the additional costs associated with the VPA.

In summary, deforestation rates slowed significantly once the VPA was signed, perhaps suggesting a positive effect. However other initiatives may have also influenced levels of illegal logging. What can be concluded is that the VPA process does not seem to have instigated a stronger drive for deforestation prior to licencing commencing. More broadly the literature again questions the ability of the VPA to impact deforestation in Ghana given the agreement does not address other sources of demand for forest resources and space, namely agriculture , population growth and global demand for cocoa .

Forest size trends in non-VPA countries (EUTR impacts) – non-EU

Case study: Ukraine

Figure B-3 Annual forest cover in the Ukraine between 1993 and 2020

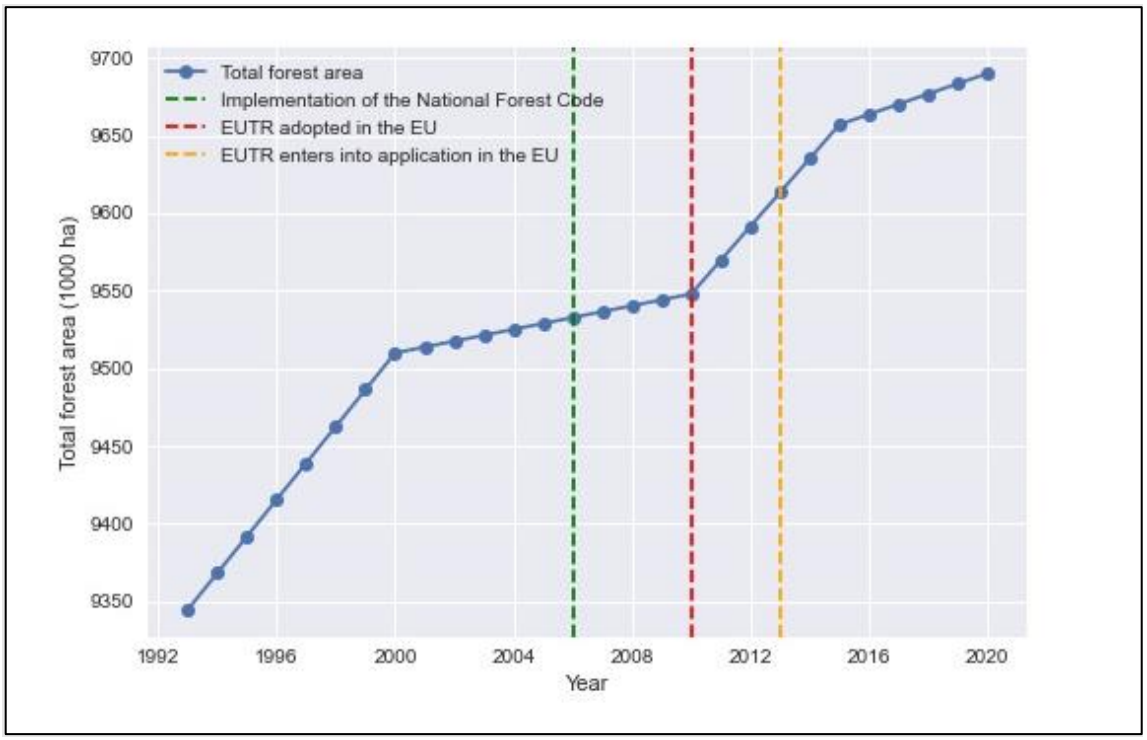


Figure B-3 shows that total forest area in the Ukraine has been increasing annually every year since 1993. This afforestation trend appears to accelerate from 2010, in line with the adoption of the EUTR (before the rate of growth slows again post 2016). Although this simple trend analysis suggests EUTR may have had a positive effect, analysis of the wider policy context in the Ukraine suggests there were other key policies and initiatives that are likely also to have had significant effects, limiting the ability to attribute these trends to EUTR.

The introduction of the national forest code and forest management programs are the key legal instruments introduced by the Ukrainian government that led to changes in forest management and timber practices. The forest code defines citizens' legal rights to access of forest resources and the use of '*sales purchase contracts'* which place a requirement on commercial timber traders to submit clear scope of activities (including plans for forest regeneration) in logging permit applications. The code also includes a new framework that grants regional authorities more responsibilities for forest management and places the economic potential of the forest secondary to that of its recreational functions. Environmental NGO '*Preferred by Nature'* report that alongside the legislative changes has been a demand by timber operators for their products to be certified through FSC accredited bodies, resulting in approximately half of Ukraine's forest to be FSC certified in 2019; this reportedly driven by the introduction of the EUTR and the requirement to assure timber legality combined with the important position of the EU as a trade partner to Ukraine. However, there are limitations within the paper-based tracking system, which enables operators to falsify information and undermine efforts to improve forest management practices (as discussed in Annex A).

Further, the Ukraine's timber trade was also found to be influenced by other factors outside of the Ukrainian government's direct control: as the EU placing a restriction on goods from the Crimea and Sevastopol after the annexation of the region . Evidence has also found that large European firms operating in the Ukrainian timber trade had responded to the EUTR by halting '*production*' operations in the country whilst restructuring themselves as an *'operator'* in EU countries where local suppliers could provide certification of produce . The Ukraine government have moved to reform practices in the timber trade in recent years. This is evidenced by the introduction of an electronic timber tracking scheme, increased penalties for illegal trade and the piloting of a public electronic register for harvesting and trade but none of these initiatives are linked in the literature to the EUTR. Stakeholders interviewed suggested that there is a political will to increase efforts to understand impacts on forest size in the future, exemplifying a recent decision to conduct the first national forest inventory since 1996; unfortunately financial constraints are likely to delay the completion to between 3 – 5 years.

It is therefore reasonable to conclude that the introduction of the EUTR has played a role in the afforestation seen in Figure B-3, particularly when considering that half of the Ukraine's forest is stated to be certified by the FSC. As seen in trade analysis of Figure C-18, Ukraine has seen a significant increase in the volume of its trade with the EU since the entry in force of the EUTR something potentially linked to the improved levels of timber legality certification and other forest management policies leading to a reduction in deforestation rates.

Case study: Russia

Figure B-4 Annual forest cover in Russia between 1993 and 2020

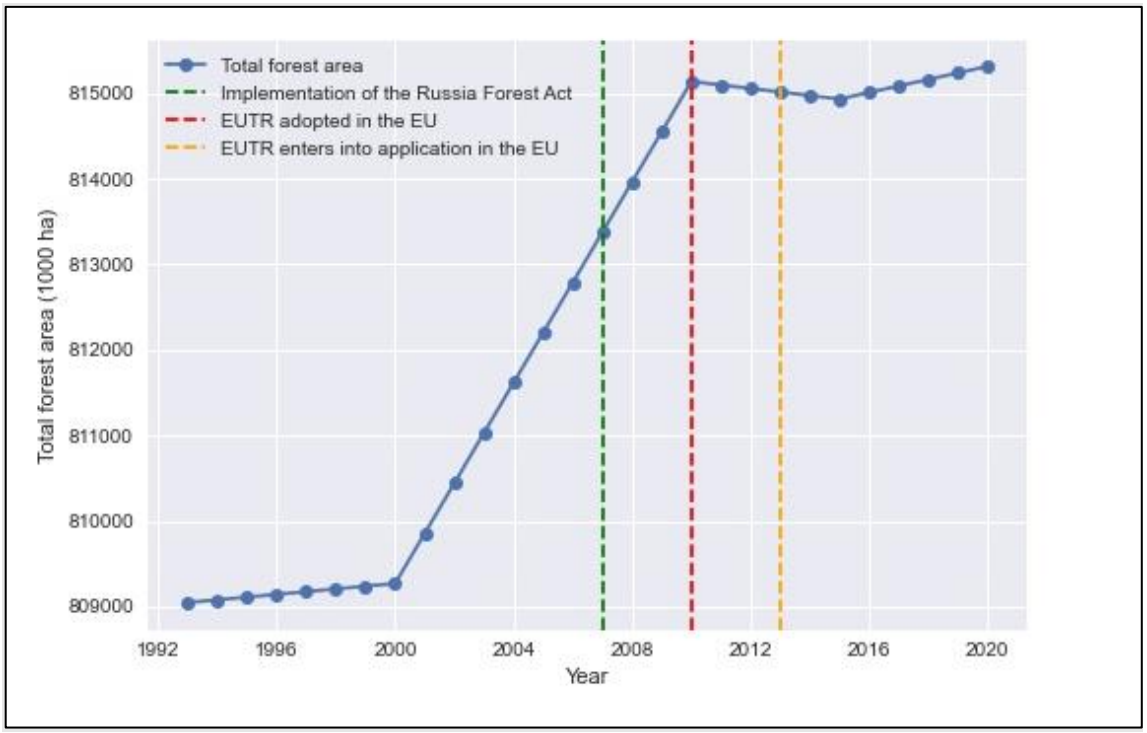


Figure B-4 shows that the total forest area increased during the observable period, which covered 40% of Russia's total land space. However, from 2010, the total forest size has remained broadly constant to 2020. Hence, from this data it is difficult to conclude that the implementation of the EUTR has had an impact on Russia's total forest size. Again, several other factors are at play outside the EUTR which influence forest cover. Since the early 2000's, International NGO's have had a presence in the Russian forestry sector, including a growing area of forest being FSC certified to help certify products sold internationally .

Research undertaken by the Petrozavodsk State University found a growing use of voluntary forest certification tools by timber merchants during the decade up to 2016. The paper highlights that Russia ranks second in the terms of area of forest certified by the FSC who issue approximately 40% of the total number of certificates through 16 of the 27 accredited FSC certification bodies (Accounting for approximately 40 million hectors of forest managed by 160 companies). The study suggests the EUTR is "*likely*" to be the key the key driver in the increased demand for certification services and therefore could be a possible explanation for the afforestation seen in Figure B-4.

The research partly supports the Forest and Agriculture Organization's (FAO) assessment that NGO's should be credited for pushing for changes to forest management policies in Russia, such as their role in highlight the limitations in the '*The Russia Forest Act'* which the FSC looked to address through a new FSC certification standard for Russian timber (FSC-STD-RUS-V6-1-2012). Despite the influence of NGO's and other local stakeholders, the FAO suggest that the decrease in funding provided to regional authorities for forest management purposes has weakened their ability to conduct effect forest management.

Counter to the influence of the EUTR, the EIA highlights that a high proportion of timber sourced in Russia is exported into China; and therefore that the EUTR does little to improve forest management practices by companies which service the demand from China. Evidence shows that this is especially true for SME's operating in eastern Russia who have little incentive to serve the European timber market due to their limited finance or technical capacity to adapt to the EUTR.

In conclusion, it appears that a combination of the EUTR and support for Russian timber merchants from an increasing NGO network has helped to conserve and grow forest areas in Russia, however, due to its proximity to China and other Asian markets, timber merchants continue to have the option to sell to markets outside of the EU trading block, avoiding the needed to follow desired forest management practices targeted in the EUTR.

Case study: Myanmar

Figure B-5 Annual forest cover in Myanmar between 1991 and 2020

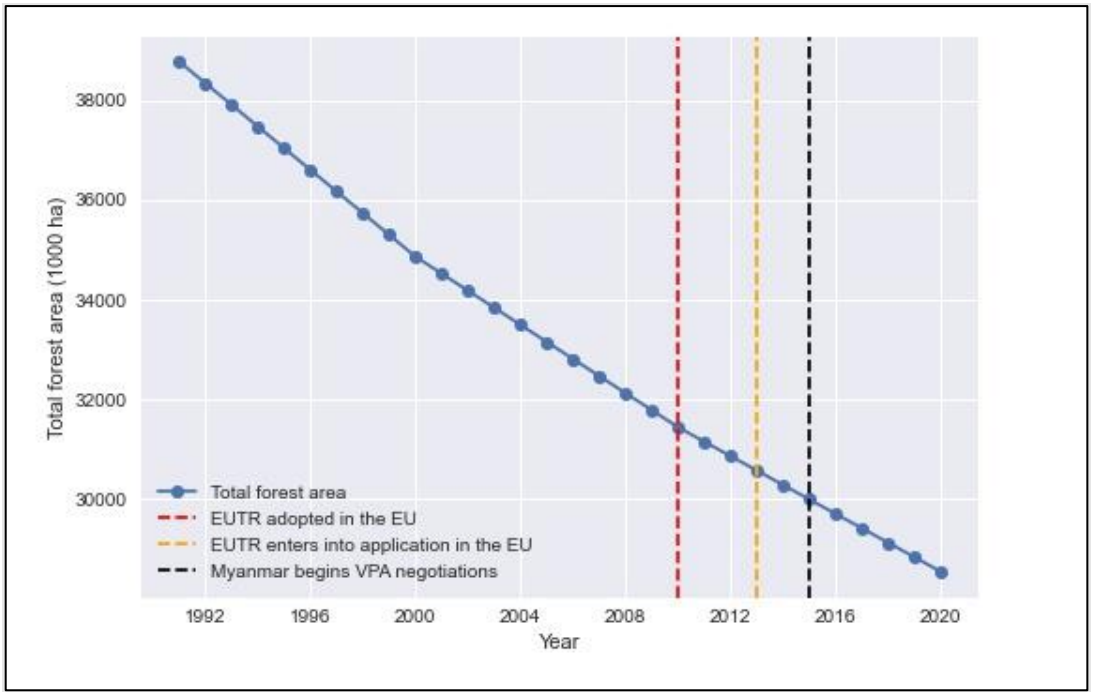
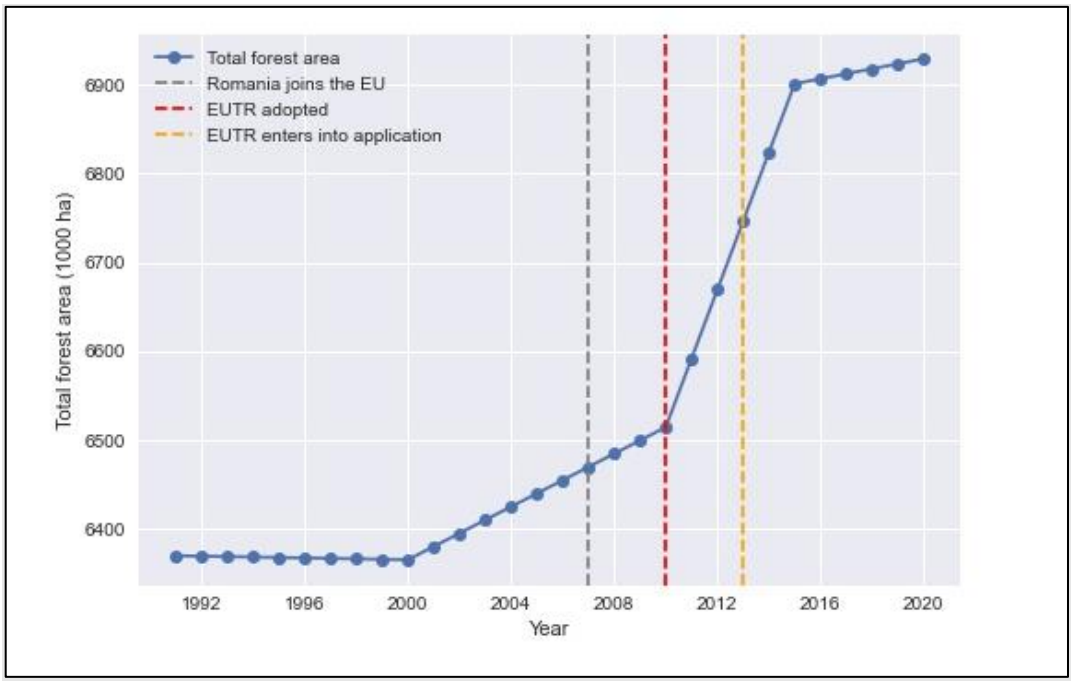


Figure B-5 shows that total forest area in Myanmar fell between 1992 and 2020, and the rate of deforestation was consistent over this period. On this basis it is difficult to conclude that the EUTR has had an impact in Myanmar (nor indeed the VPA process: Myanmar started to engage in the VPA process since 2015) . Myanmar has been working towards improving forest management practices since the EUTR was adopted, for example bringing forward: The *Environmental Conservation Rules* , the *National Land Use Policy* (2016), *Myanmar Sustainable Development Plan* (2018 – 2030) (2018) and *Forest Rules* . Prior to this there was a perceived lack of political appetite for new regulation partly due to close ties between the national government during this period and the economic interests of countries oligarchs who controlled the timber industry. The influence of the country's oligarchs began to wane following the establishments of a new government in 2011 that pushed for widespread reform.

Forest size trends in non-VPA countries (EUTR impacts) – EU

Case study – Romania

Figure B-6 Annual forest cover in Romania between 1991 and 2020



Widespread issues in the Romanian timber industry are well documented: The Environmental Investigation Agency (EIA) undertook a two-year study to report on practices in the country . The study highlighted historic issues with land ownership opened up areas of forest for exploitation and suggested that up to 49% of timber cut between 2008 and 2014 was illegally harvested. It noted businesses have developed practices to exploit loopholes in certification practices undertaken in Romania allowing a number of large Industry leaders have moved key business units to Romania to take advantage of the vast logging reserves (despite foreign businesses note being legally permitted to buy forest land).

Figure B-6 shows that after a period of fairly constant forest size from 1991 to 2000, total forest size started to grow post 2000. This rate of growth drastically accelerated from 2010 to 2015, before slowing to a reduced, but still positive growth from 2015. This perhaps suggests that the EUTR may have had some impact on levels of forest loss.

The EIA report concluded that the EUTR has had an impact on illegal logging practices in Romania as large timber companies had made clear efforts to restructure their operations so that they can be seen to comply with the new legislation. However, rather than fully complying with the spirit of the EUTR, the EIA report has shown that companies are in some cases doing the bare minimum so that they can, at the very least, make claim to be compliant. The report claims that, in effect, large timber companies have adapted their business so that they can take advantage of loopholes in the regulation to avoid having to undertake extensive due diligence. This involves buying timber from smaller local '*operators*' and acting themselves as '*traders*', and in turn reporting that measures have been undertaken to ensure that the timber is at minimal risk of being in violation of the regulation. Firms are then able to sell their product in the EU market with the claim that it has been certified to meet trade requirements when actually the certification requirements in Romania are not aligned to those stipulated in EU regulation. Indeed reports of illegal practices continue. Hence although forest area is seen to increase, it is difficult to attribute this to EUTR in the face of continued reports of illegality.

Case Study – Bulgaria

Figure B-7 Annual forest cover in Bulgaria between 1991 and 2020

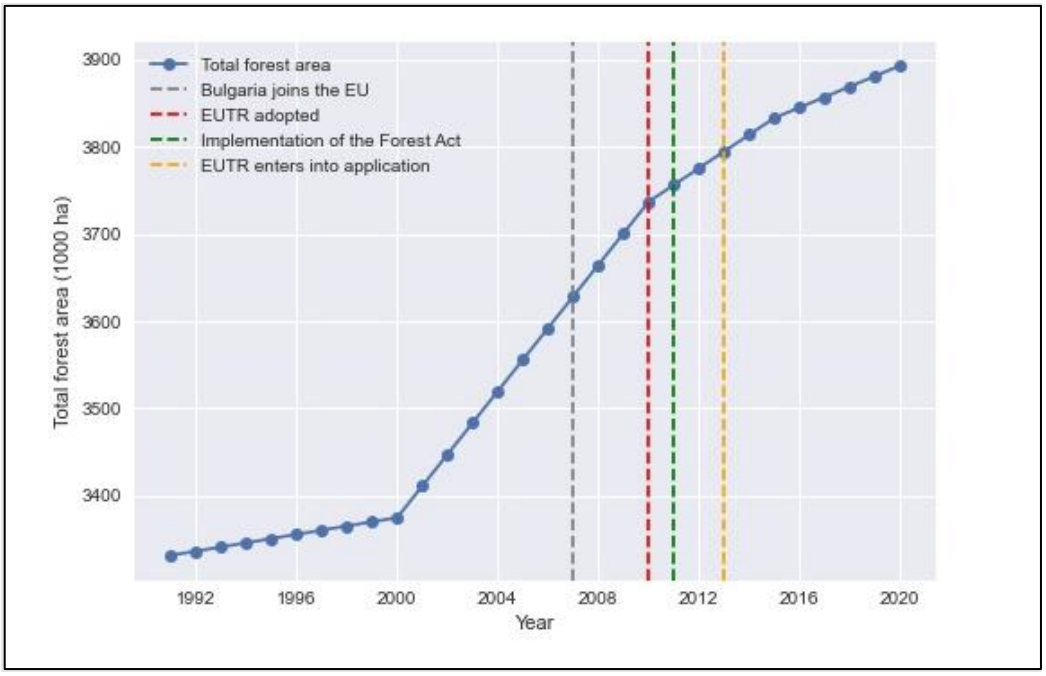


Figure B-7 shows that the total forest area in Bulgaria grew by approximately 18% between 1991 and 2020. The figure does not provide a clear indication of the EUTR having a dramatic impact on forest management practices within the country although a continued increase in forest cover should be noted. Any attribution of effects is again made problematic by wider changes in the governance of forest resources in Bulgaria. Revisions to the Forestry Act (2011) was a controversial moment in Bulgarian environmental law, which is best represented by the fact that its passing led to spontaneous protests in the country's capital city, Sofia. Multiple reasons were given for protests. Like Romania, the Bulgarian government decided to embark on a process of redistributing land nationalized during the countries communist period back to the families of the original owners, leaving approximately 23% of forest land under state ownership in 2011 . Critics of the new law, raised concerns that it enabled the reclassification of forest and conservation land, allowing timber businesses access to raw materials without the need of state approval. Further, the act enabled protected land to be used for ski resorts, and eased restrictions for developments to be built in forestry areas. The figures shows that forest growth slowed around the period of the implementation of the Forestry Act suggesting that it may have influenced forest growth. In recent years, Bulgaria has published several policies relating to the forest management , coupled with the implementation of a national FSC accredited standard .

Annex C – Trade analysis) and numerous reports indicate issues with timber legality risk (Earthsight, 2018; Earthsight, 2019a) . EU cooperation with Ukraine is essential in the context of trade and the European Commission is working with Ukraine bilaterally – under Article 294 (trade in forest products) of the 2014 EU-Ukraine Association Agreement[33], parties commit to working together to promote trade in legal and sustainable forest products (European Commission, 2019d).

Since 2014, options for reforming the forestry institutional structure of Ukraine have been high on the political agenda (UNECE & FA0, 2018), including priorities of separating the functions of economic activity and monitoring/control, redistribution of financial resources across regions, conducting a national forest inventory and assistance with tackling the issue of illegal logging (UNEP-WCMC, 2020) In 2018, an EU Technical Assistance and Information Exchange (TAIEX) mission took place, to analyse the institutional system of forest governance in Ukraine, identify issues/irregularities and develop proposals for institutional restructuring (European Commission, 2018).

At the 2nd meeting of the Ukraine-EU Trade and Sustainable Development Sub-Committee, the EU and Ukraine agreed work was needed on forest governance, including separation of monitoring, control and management functions (European Commission, 2018a). Ukraine announced it would be launching a National Forest Inventory (providing a strong foundation for forest-related reporting, planning and management), as well as taking steps towards introducing an electronic timber tracking system and adopting legalisation aiming at transparent regulation of timber sales (European Commission, 2018). At the 3rd meeting it was agreed that a videoconference involving all relevant ministries and agencies would take place to discuss *inter alia* working towards transparent and legal timber markets to assist EU and Ukraine in implementation of EUTR (European Commission, 2019).

The videoconference took place on 6 March 2020 and included DG Environment and EUTR CAs (European Commission, 2019d; European Commission, 2020). At the June 2020 EUTR/FLEGT Regulation Expert Group it was reported that the political situation in Ukraine was not very clear and that some new laws were in an uncertain state (European Commission, 2020).

The EUTR/FLEGT Regulation Expert Group has been drafting a conclusion on Ukraine, noting that "Ukraine as a whole is considered a risk country of harvest, requiring the provision of adequate risk mitigating measures" (European Commission , 2019b). Publication of the conclusion was put on hold pending the outcome of the above videoconference (European Commission, 2019d).

At the 4th meeting of the Ukraine-EU Trade and Sustainable Development Sub-Committee, October 2020, the intention to invite Ukraine for a discussion at the EUTR/FLEGT Regulation Expert Group in Q1 of 2021 was noted (European Commission, 2020).

[33] https://trade.ec.europa.eu/doclib/docs/2016/november/tradoc_155103.pdf

Annex E - Implementation of FLEGT Regulation

Progress of implementing VPAs under the FLEGT Regulation

Summary of progress and VPA coverage

VPAs have been introduced in order to help ensure that the timber imported into the EU from international countries is from legally harvested sources. To assess the progress made, it is necessary to examine not only the full partnerships agreed but also the countries which are currently in the process of signing a VPA.

To date, 15 countries have engaged formally in the VPA process:

- One (Indonesia) has progressed to the stage of formally issuing licences;
- Six have ratified VPAs (Cameroon, the Central African Republic, Ghana, Liberia, the Republic of the Congo and Vietnam);
- Two more have initialled VPAs following the conclusion of negotiation (Honduras and Guyana);
- Five more negotiations are ongoing (Côte d'Ivoire, the Democratic Republic of the Congo, Gabon, Laos and Thailand), and negotiations with Malaysia have recently been put on hold (European Commission, n.d.).

Hence a key limitation of the FLEGT Regulation is that after 15 years of operation, only one country has progressed to the stage of issuing licences. As a consequence, VPAs only covering a small proportion of timber imported to the internal market and of exports globally, and FLEGT licences cover even less.

A key issue around the FLEGT Regulation is mis-representation of its potential coverage and impact. Specifically, many stakeholders conflate countries in the VPA negotiation process as equivalent issuing licences. For example, it is typically reported between 70 % to 83 % of the EU-27's tropical wood imports (in value terms) came from 14 FLEGT-VPA countries between 2000 and 2018 (European Commission, 2020b). However, only Indonesia has fully ratified and implemented the agreement. It is the generation of the licensing system which is the core mechanism for implementing VPAs in order to verify the legality of timber being imported into the EU (McDermott S. a., 2017) and it is therefore a problem to consider the process as even partially effective before licenses have been issued. From the trade data, in 2017 the seven countries which provided the EU with the highest percentage of imports were Russia, China, the USA, Ukraine, Norway, Brazil, Canada, Belarus and Indonesia (Encarnación Moral-Pajares, 2020) – only Indonesia of which has been engaged in the VPA process. In addition, the total share (volume) of EU imports from countries engaged in the VPA process in 2018 was closer to 9.1% (ComExt)[34].

That said, the countries which are currently engaged in the VPA process are typically classified as 'high risk' countries[35]. Most recent CPI data (Corruption Perception Index, 2019) has defined all VPA countries (except Malaysia) as high risk under this definition. In addition, five out of the 15 VPA countries are on the Harmonized List of Fragile Situations: The Republic of the Congo, the Democratic Republic of the

[34] Volume of extra-EU imports of EUTR product coverage
[35] Defined as those with a national Corruption Perception Index (CPI) of less than 50 out of 100

Congo (DRC), the Central African Republic, Côte d'Ivoire and Liberia (EU FLEGT Facility, 2018). Hence even though the countries engaged are not the largest exporters, to a certain extent they do focus on exporters with the greatest associated risks.

The limited coverage of VPAs reflects two key challenges:

1. The interest of exporting countries to engage in the process;
2. Once engaged, the ability of partner countries to reach licencing.

Engaging exporting countries in the VPA process

There are a number of factors which have influenced the interest of exporting countries to engage in the VPA process.

First, negotiating with the EU on wood exports has been impacted by the declining importance of the EU as a net wood importer. China has grown to become the world's largest importer of wood products, with the United States in second (Environmental Investigation Agency, n.d.) Hence over the course of the evaluation period, the EU was increasingly less likely to be viewed as a key aspiration in securing timber trade deals (particularly if the VPAs are a lengthy process as highlighted by the long running ongoing negotiations with many countries – discussed further below). This is supported by the 2016 Evaluation of the FLEGT Regulation (European Commission, 2016) which acknowledged that China had become the largest importer of wood in the world, with Chinese imports reaching an all-time high in terms of both value (2018) and volume (2017). This shift is borne out in the trade data: timber imports to China from VPA engaged countries also significantly increased between 2010 and 2019, by 155% and 106% for volume and value respectively (EUFLEGT Facility, 2020).

In parallel to the growth of the Chinese timber market, regional demand across Africa, Asia and Latin America has also continued to grow (European Commission, 2016). The issue of decreasing influence in the EU is likely to be further exacerbated by the UK leaving the EU as the UK reported receiving the most FLEGT Regulation licenses in 2016 – the year the UK voted to leave the bloc (United Nations Environment's World Conservation Monitoring Centre, 2017)

The lack of involvement of many of the EU's key, high-risk importers in the VPA process is perhaps the clearest indication of the difficulties facing the engagement process. A review of Ukrainian timber trade in 2015 showed that of the EUTR-regulated timber products (estimated to total 7.63 million tonnes), over 62% were exported to the EU. In addition to this high level of trade, a number of illegal trade risks have been outlined in Ukraine, including the laundering of illegal timber, the prevalence of unnecessary sanitary logging and unauthorised harvesting (UNEP-WCMC, Ukraine Country Overview to Aid Implementation of the EUTR, 2018) The evident risk, coupled with the significant trade flows of timber from the Ukraine into the EU have made a Ukraine a prime candidate for enrolment in the VPA process. Amended forestry reform was introduced in Ukraine in 2019 increasing accountability for illegal logging (112 UA, n.d.). The reasons behind the failure to engage Ukraine in the VPA processes is unclear from a review of the literature, although discussions with DG ENV has highlighted that this may be due to a perception that VPAs are designed solely for tropical countries. Currently, all countries engaged in the VPA process could be considered 'tropical' sources of timber. Furthermore, this perception may be reinforced by the language of reporting around the FLEGT Regulation. For example, a recent factsheet from the FLEGT Regulation Facility noted that one of the key measures under the FLEGT Action Plan is to secure bilateral trade agreements on legal timber with tropical timber-

exporting countries (EUFLEGT Facility, 2019). This perception could have influenced the willingness of non-tropical countries to approach the EC to kick start the VPA process. The EC have recognised this challenge previously and have highlighted that it is of increasing importance to ensure that future VPAs are not aimed entirely at tropical countries given that imports of tropical timber have begun to fall (European Commission, 2016).

Third, the engagement process has also been determined, to an extent, by the resources available to the Commission services responsible for the negotiating process. Indeed, due to finite resources discussions have taken place with a view to cutting funding for new VPA countries and instead channelling resources into countries most likely to attain FLEGT licencing (Rebecca L. Rutta, 2018) .This is likely to have impacted the engagement process and led to a reduction in discussions taking place with potential new partners. The issue of limited resources, and the need to divert these resources towards those countries most interested and most likely to successfully navigate the VPA process, has effectively led to engagement with the FLEGT Regulation being a 'demand-driven' approach, pursuing countries that actively approach the EC rather than focusing on key, high-risk importers. To a certain degree this was part of the design of FLEGT Regulation as an experimental and innovative policy initiative, which from the outset was based on activities driven 'bottom-up' by the VPA negotiations in the partner countries (TEREA, 2016). However, as a result of this experimental approach, some stakeholders has signalled this has resulted in a lack of clear objectives, milestones and an implementation strategy (European Court of Auditors, 2015). That said, it is important to note that the Commission re-affirmed its commitment to progressing VPAs at all stages in the 2018-22 Work Plan (specifically point 3.2.1) (European Commission, 2018).

Fourth, there is a perception that the touted benefits for exporting countries of engaging in the VPA process may not arise. I.e. there is a perception amongst timber producing countries that the VPAs have not helped in gaining preferential access to EU markets (TEREA, 2016). This is emphasized by the emergence of China (as VPA partners trade-off what benefits there are to offset the costs relative to trading with other partners) and the issues around implementation and enforcement of the EUTR (which has undermined belief amongst VPA countries that they will have a market advantage). Indeed some interviewees (NGOs) felt the expectations had been raised to high initially regarding the potential benefits and several stakeholders (Indonesia stakeholders, OPC, December workshop) felt more could be done to promote FLEGT licenced products in the EU (OPC and interview).

Progressing VPAs to signature and licencing

Alongside difficulties in engaging exporters in the VPA process, a number of issues have emerged once partner countries have commenced the VPA process.

The duration over which exporting countries have engaged in the VPA process and not progressed to licencing has become an increasing concern. Several countries have been involved in the process for a number of years, and this has inflated the cumulative number of countries actively pursuing either reaching an agreement or implementing a licensing system at any one time. Cameroon, for instance, initially entered into a VPA agreement in 2011 only for progress to have halted. Indeed the EUTR IA in 2006 noted that negotiations were already underway at that point for six countries: Indonesia, Malaysia, Ghana, Cameroon, Gabon and Congo Brazzaville. The Commission has itself recognised that the process of negotiating VPAs has been slower than anticipated (TEREA, Evaluation of the EU FLEGT Action Plan (Forest Law Enforcement Governance and Trade) 2004-2014, 2016). This is reflected in the

opinion of some FLEGT Regulation donors and practitioners who agree the process is too time consuming, and suggestions for preparatory actives such as FLEGT Regulation piloting have been made to speed up the process (Rebecca L. Rutta, 2018). The length of time, effort required and difficulties encountered in concluding VPAs has a compounding effect – they increase the pressure on already finite Commission resources, potentially put off new would be entrants to the VPA process, and delay the point at which VPA countries can start licencing. Indeed the issue of 'FLEGT Regulation fatigue' has been raised due to the slow progress being made, leading to the question of whether many of the VPA countries will reach the same stage as Indonesia (Rebecca L. Rutta, 2018). During a recent FLEGT Regulation CA workshop this view was supported: one MS CA noted that the negotiation process is an issue, and that momentum is typically lost at a certain stage, as was the case with Ghana. Overall, (TEREA, Evaluation of the EU FLEGT Action Plan (Forest Law Enforcement Governance and Trade) 2004-2014, 2016) conclude that "The time required for reform processes to deliver results, in countries with poor governance, has been under-estimated". There are a number of drivers behind this.

In order to begin to issue FLEGT licences there are a number of requirements which need to be met. Good governance is one and is a key challenge to the implementation process, alongside lack of institutional capacity and widespread corruption. While negotiations of a VPA and changes in forest governance are likely to have direct positive impacts, their implementation is still conditional on the broader institutional setting of partner countries. As the review by (European Court of Auditors, 2015) points out such factors are a key explanation for slow progress (and sometimes continued illegal logging) in several VPA countries. Challenges concerning governance have been linked to delays in specific nations such as the Congo, whilst weak capacity of the forest administration services has been a concern in Liberia.

The vast majority of OPC respondents suggested that the complexity of TLAS for countries with weak institutions was a significant challenge for implementation, and 'corruption in VPA' countries was ranked as one of the most important challenges. The majority of OPC respondents also agreed insufficient capacity and resource of different stakeholder groups was one of the key barriers to concluding VPAs. This challenge was also underlined in a number of interviews (Commission services, NGOs). The majority of respondents to the OPC also flagged that partner countries may lack a clear understanding what is required of them at the start of the process (>75% agreed), and 64% agreed the requirement to include both domestic and imported timber products in the TLAS was a barrier to concluding VPAs.

There have been certain technical constraints which have led to delays; for instance in Cameroon the development of a TLAS is still far from being attained, mainly due to the failure of the project aiming to develop the timber tracking system. (European Court of Auditors, 2015)

Some VPA countries are post-conflict nations (e.g. CAR), which present unique challenges (Commission service interview).

The negotiation of the VPA with Malaysia has also been affected by the capacity of the exporting country government (implementation of a TLAS has required greater capacity than initially assumed (TEREA, 2016), but it has also encountered other unique obstacles. Specifically, there have been disagreements between devolved regions. The Native Customary Rights (NCR) in particular have caused issues for a number of years with respect to land tenure which are a key issue for the Indigenous

Peoples in Sarawak, and there may be a requirement for special handling of this issue by experts in NCR laws. This has been a significant obstacle to overcome for Malaysia to agree and ratify a VPA, and there is a view from the Sarawak timber industry that the costs are not worth the benefits given their biggest export markets lie away from Europe (Fern, 2020).

This may partly be driven by the way negotiations are handled in the partner country. It has been noted that in a number of VPA negotiations in the early stage of the FLEGT programme, both traders and local forest users for the partner countries have not been involved in the discussions (CIFOR, 2014). This, coupled with the view that the VPA negotiations typically do not encompass government agencies outside of those directly linked to forestry, can lead to potential issues with respect to reaching an agreement, implementing the final agreement and then enforcing it. It therefore seems feasible that the inclusion of only a narrow pool of government officials, and the exclusion of many of the organisations whose support will be required for the VPA to be successful, will likely lead to challenges in obtaining and subsequently sharing information with the EU. Indeed, illegal logging in many countries often involves thousands of small-scale local actors, including farmers logging forests for agricultural expansion. Formalising this large informal sector is a formidable challenge, particularly when no clear alternative livelihoods are offered to these actors (TEREA, 2016).

There is also the potential for differences between the initial agreements and what the national government then implements. For example, during negotiations Vietnam initially signalled their willingness to engage in an ambitious agreement, but has since been criticised for failing to achieve the 'spirit of the VPA agreement' with one former official stating that 'Vietnam is among the top countries to adopt comprehensive legislative documents, but is among the bottom country to implement them' (Fern, 2020). This example helps to highlight the challenge not only with negotiating an agreement, but for the partner country to follow through with its implementation.

The greater the issue with illegal logging, the more difficult VPAs will be to implement due to the conditions which need to be met to implement a VPA (i.e. meeting the requirements of the TLAS, setting up sufficient verification systems and developing the necessary legal framework to support the VPAs). The greater the prevalence of illegal logging the greater the challenge in reversing the current behaviour and implementing the internal framework needed for the VPA to be implemented and be successful. There are a number of examples of experiences which suggest that the current processes in place are blocking progress. In Cameroon it is suggested that the majority of current exports may not qualify for the definition of legality set in the VPA, whilst in the Ivory Coast has been hampered by a lack of necessary regulations (TEREA; S-FOR-S; Topperspective, 2016).

Political will is also a critical enabling force in positively influencing law enforcement in the forestry sector (Chatham House, 2020b): without governmental engagement to ensure environmental ministries are appropriately funded, drive capacity building and transparency, and to ensure the independence of anti-corruption commissions the ability to improve law enforcement and ensure the veracity of license systems seems impossible. The importance of political will was also highlighted through interview with Commission services who noted real leadership was needed to drive the step change needed and overcome the interests of those who may lose out from increased transparency in the system. The same interview noted that VPA progress may suffer where forestry is not a key economic sector (e.g. in Cameroon where palm oil exports are more important), which also leads somewhat to forestry authorities being marginalised, and relative to other initiatives (e.g. climate change) which have been

placed at the centre of economic transformation. It has also been identified in the literature that VPA negotiations, specifically in the early stage of the VPA programme, typically do not encompass government agencies outside of those directly linked to forestry which can lead to potential issues with respect to reaching an agreement, implementing the final VPA and then enforcing it (CIFOR, 2014). Through the OPC, the majority 'agreed' that insufficient political will was a key barrier to concluding VPAs (but this issue was not ranked as highly as others).

The slow progress of VPA negotiations and implementation has also led to questions around the motivations of partner counties, in particular around whether countries engage in order to combat illegal logging or to receive EU support to drive wider reform within the country. This question is particularly pertinent given the countries involved in the VPA process are typically less developed countries. Some stakeholders have noted these concerns alongside other factors, for example, in many of these countries setting up a timber tracking system remains a key challenge, hampered by both a lack of capacity and commitment (European Court of Auditors, 2015). The decline of the importance of the EU as a trading partner may also have played a role here. An example of this is Cameroon, which despite being in the process of implementing a VPA, the market share of timber products to the EU has decreased as Cameroon has begun to pivot towards Asia. Although this does not appear to have been the case across all VPA partners, it does suggest that beginning the VPA process does not imply that the partner country focuses on timber trade with the EU (Fern, 2020).

There has been evidence of communication issues between VPA countries and the EU with respect to the overarching FLEGT Regulation objectives. A 2016 European Commission working document (European Commission, 2016) stated that VPA partners have felt that it is necessary to change the current approach to achieving the FLEGT Regulation objectives to better reflect the realities on the ground. Whilst partner countries have not overtly attributed this issue to a deficiency in communication, it is reasonable to assume that a divergence between approaches sought by the EU and those recommended by partner countries could perhaps have been narrowed or avoided through improved communication. In addition, analysing the 2015 Performance Audit (European Court of Auditors, 2015) similarly provides evidence of opportunities for improved communication between the EU and partner countries. The audit notes that VPAs had failed to outline to the Commission how funding responsibilities should be divided, and describes that financial resources had not been allocated in the most effective manner. It is evident that there is a link between communication and resource allocation to VPA countries that could be improved upon.

Issues arising alongside the negotiation process

Whilst there are challenges for progressing the negotiation process itself, many issues also arise during (but outside) of the process. This is particularly important given the relatively large number of countries currently involved in this process (compared to one – Indonesia – which has completed the process) as well as typically lengthy duration of the process.

First, once engaged in the VPA process, illegal logging and deforestation may not necessarily decrease. For example Liberia's VPA was signed in 2011 and ratified in 2013, however FAO forest cover data (FAOSTAT, n.d.) suggests the rate of reduction in forested land increased from a reduction of -0.9% from 2000-4 and -1.5% from 2005-9, to -1.53% from 2009-14 and -1.95% from 2015-20.

Second, there may be ambiguity and confusion around the status of exports from VPA countries not yet licencing, and their position in negotiations. This view was echoed during the FLEGT Regulation CA workshop, with one MS noting that there is uncertainty for CAs the around status of countries that are engaged but which have not yet obtained VPA status. This uncertainty is likely to cascade to operators, and will be perpetuated by the misrepresentation of trade 'covered' by VPAs as discussed above.

Third, engagement in the VPA process has not always gone hand-in-hand with transparent and effective information sharing between the EU and partner countries, running counter to one of FLEGT Regulation's key objectives: to improve transparency. In some cases it can be more difficult for EU operators to obtain information from exporters in VPA countries than those who are not engaged in the process. One reason is that VPA countries may 'hide behind' the VPA process, and are therefore not required to be as upfront and transparent about the operations in their national timber industry (noted during December 2020 workshop). In addition, a further concern is around the verification of the information that is received from the countries in the VPA process. For example, for the Democratic Republic of Congo internal issues create substantial ambiguity around the veracity of information provided, although it is still engaged in the VPA process (noted in the September workshop).

Issues once licencing has begun

Finally, it is also important to note that there are still challenges once licensing has begun (outside the costs and detailed implementation challenges that are considered in subsequent questions). Although there is some evidence of effectiveness over recent years, resulting in progress towards sustainable forest management through forest law enforcement, improved forest governance and increased transparency, (Sucofindo, 2018) the agreement, as with many international agreements, is subject to fragility and changing opinion as subsequent governments come to power. In Indonesia, the trade ministry recently issued a regulation that would free wood product exporters from having to obtain licenses certifying that the wood comes from legal sources, known as v-legal ("verified legal") and required for wood products entering the EU market, in February 2020 (Mongabay, 2020), citing the COVID-19 pandemic as justification. Although the decision was later rescinded following concerns raised by stakeholders and consultation with the EU (UNEP-WCMC, 2020)., it is a clear reminder that the VPA remains subject to the continued, and at times uncertain, support of the Indonesian government. It is also important to consider that this was not an isolated incident, and that the idea of watering down the VPA agreement has twice before also been raised, further emphasising the fragility of the arrangement.

Review of processes put in place in VPA countries

FLEGT Regulation VPAs are seen as very challenging for partner country governments to implement (Overdevest & Zeitlin, 2018), as highlighted by the slow progress in the number of countries reaching FLEGT Regulation licensing status. The challenges are often due to the administrative and political requirements, in addition to their demands for multi-stakeholder participation and reforms to forest governance structures (Overdevest & Zeitlin, 2018). As stated in evaluation question 2.h, perceptions of the scope of the VPA processes (actors commonly consider the VPA process as only applicable to 'tropical' sources of timber- personal communication with the European Commission, 2020) and the language of the reporting of FLEGT Regulation (EUFLEGT Facility, 2019) can prevent certain actors engaging in VPA processes (such as the case in Ukraine). Despite this, the FLEGT Regulation procedures have been shown to (inter alia) provide a gateway to the inclusion of communities in forestry

management (EU FLEGT Facility, 2020), increase the transparency of non-compliance cases (Overdevest & Zeitlin, 2018), and lead to the development of various IT systems to simplify VPA-related procedures (EU FLEGT Facility, 2020) (as discussed in the previous section).

Under the FLEGT Regulation, three main features are required to be implemented: negotiate bilateral VPAs between developing countries and the EU to access a 'green lane' for licensed timber imports into the internal EU market; develop a national TLAS to ensure that domestic wood is legally harvested; and establish a joint committee of EU and partner country representatives to monitor and review the implementation of the VPA. The effectiveness of the tools and procedures related to each of these components are discussed under this evaluation sub-question.

VPA process

One of the benefits of the VPA process is the involvement of a broad range of forest stakeholders within the development of national legality standards. For example in Ghana, Civil Society Organisation (CSO) participation within VPA discussions led to a broadened governance scope, encompassing socio-economic aspects and forest user governance issues. Furthermore, the Ghanaian VPA commits to providing monitoring of social and economic effects in order to address any negative affects incurred on indigenous and local communities (LoggingOff, 2015) (Overdevest & Zeitlin, 2018). However, in certain cases, such as the VPA negotiations in Indonesia, certain groups were found to not be ingrained throughout forest rights discussions (CIFOR, 2014). Within the Timber Legality Assurance System (TLAS) (in Indonesia: Sistem Verifikasi Legalitas Kayu (SVLK)) legality standards in Indonesia, Indigenous Peoples' rights were originally included as a criteria to assessed within the SVLK legality standard, but these were subsequently removed from such processes. Despite indication by the CSO that indigenous rights would be addressed under the social and environmental aspects covered within the SVLK, it remains a concern that such rights are not respected (Overdevest & Zeitlin, 2018). For a broad overview of forest governance changes in VPA countries that have been influence by VPA processes, effectiveness question 1.e. presents relevant data.

Overall, VPAs have been found to increase the recognition of civil society's integral role in developing and implementing national policies in partner countries, ultimately resulting in accountable forest management within these countries respected (Overdevest & Zeitlin, 2018). Civil society and local community participation in VPAs has enabled a closer involvement in forest management and enhanced capacity to influence policy processes and decisions (FERN, 2019). Despite these positives, VPAs are still in the process of being implemented, ratified or negotiated in multiple countries, with issues surrounding political culture, weak legal frameworks, inadequate resources and enforcement and lack of functional data systems proving to be key challenges in to VPAs (Adams, Kayira, Tegegne, & Gruber, 2020).

Functioning of licensing

Evidence suggests that the functioning of the FLEGT Regulation licensing process is not entirely accurate and can lead to data anomalies. Data submitted by MS as part of their FLEGT Regulation reporting is often not fully aligned to the template structure provided by the Commission, often leading to challenges in linking customs data to licence datasets (UNEP-WCMC, 2020). Furthermore, inaccuracies in the use of HS codes by MS have been identified, resulting in products being covered by a FLEGT Regulation license when not required, and often requiring a reclassification of goods by customs. As such, this can create unnecessary administrative burdens, and potentially indicates that additional

guidance on the use of HS codes is needed (UNEP-WCMC, 2020). In addition, mismatches between FLEGT Regulation licenses and invoice/packing lists have been noted, particularly in regard to timber species, weight of products, and number of units of products (Putz & Krehan, 2017). Factors behind these data mismatches could relate to the contrasting actors who create licenses (such as exporters or licensing authorities), the irregularity of physical checks on products conducted on shipments, and the contrasting ways in which licenses can be created (Putz & Krehan, 2017).

As stated throughout the Effectiveness section of this report, resource issues are commonly cited as hindering due diligence approaches in EU MS. It can therefore be expected that VPA countries which often have fewer resources at their disposal encounter similar issues when providing information on timber/timber products and assessing/ mitigating the risk of illegality. VPA countries such as Vietnam and Thailand both import significant volumes of timber from high-risk countries (for example Vietnam was estimated to import 2.3million m3 of high risk imports in 2013 (Chatham House, 2014b) whereas Thailand sourced two thirds of all its log imports from a country noted as having poor forest governance (Myanmar) between 2000-2017 (Forest Trends, 2019b). However, from an overview of their respective FLEGT Regulation-related web content, there is a limited amount of resources available to support operators in conducting due diligence. In Thailand, an EU-FLEGT Regulation Secretariat Office website has been established yet FLEGT Regulation and EUTR related documentation are predominantly in English and offer little practical guidance to operators. Similarly for Vietnam, a website developed by the Centre for Education and Development contains high level information on the FLEGT Regulation on the whole. As such, the lack of centralised information points in VPA countries such as these can create further hindrances to stakeholders in these countries wishing to conduct due diligence with the limited resources at their disposal.

TLAS

In Indonesia, the TLAS (SVLK) operator-based licensing system has been applied slowly and unevenly (Overdevest & Zeitlin, 2018), largely due to the disproportionate costs involved for SMEs (Overdevest & Zeitlin, 2018) resulting in SMEs being unable to process certification requirements. In order to alleviate issues surrounding the SVLK, the system was revised to allow small-scale producers to create group certification cooperatives, ultimately lowering the costs for SMEs and greatly accelerating the implementation of the SVLK (Overdevest & Zeitlin, 2018).Furthermore, the Indonesian Ministry of Environment and Forestry (MoEF) has introduced a self-declaration of legality procedure which allows smallholders and SMEs to trade throughout the SVLK supply chain by declaring the origin and destination of their timber or timber products (Profundo, 2019).

Under the SVLK TLAS implemented in Indonesia, CSOs operate as independent monitors of the SVLK with the remit to file complaints to the CAs if any irregularities are observed. However, concerns have been raised that they have insufficient (financial and human) capacity in Indonesia to effectively carry out their role, which has in turn led to a lack of auditing of operators (Overdevest & Zeitlin, 2018). Furthermore, third-party auditors are required to be hired by operators to assess their legal compliance, although the stringency of such auditors varies considerably. As such, there are indications that the vested interests of such auditing firms have allowed illegally harvested wood to enter the supply chain of certified companies (Overdevest & Zeitlin, 2018), ultimately undermining FLEGT Regulation objectives.

Despite this, CSOs through their tracking of SVLK implementation have enabled performance gaps in the application of the SVLK to be exposed, detailing these flaws for review by EU officials and other relevant actors. Performance shortfalls identified include permits given for logging activities within environmental conservation zones; overlapping licenses for palm oil, mining, rubber plantations and forest concession areas; and evidence of illegally harvested timber entering supply chains. Such exposés of the SVLK system have enabled the European Commission and Indonesian officials to address these concerns prior to approving the Indonesian FLEGT Regulation licensing system, ultimately resulting in more stringent monitoring and reporting procedures in Indonesia (Overdevest & Zeitlin, 2018).

Indonesia has also made use of a timber legality information system named SILK, which acts as a platform to transparently publish and monitor cases of non-compliance by private sector actors. Several MS have noted difficulties in using the system for verifying FLEGT Regulation issued licenses (such as lack of access by CAs to the data on SILK, license data not existing, signatures missing, etc.) (European Commission, 2019). However, the system has allowed for a transparent overview of non-compliance cases, and issues surrounding language barriers seem to have been addressed through the upgraded website despite some concerns remaining on the overall quality of the platform (Profundo, 2019). Furthermore, the EU and Indonesia are proceeding with an e-licensing initiative to link the SILK and EU FLEGIT systems to improve coordination between Indonesia and CAs in EU MSs (EU FLEGT Facility, 2020). As exemplified by the experience of Indonesia, having a well-functioning electronic licensing system will simplify procedures and contribute to addressing the issues derived from paper-based equivalent systems. Indonesia issues close to 40,000 licenses annually, all of which are paper-based. This makes the paper trail complex to operate, increases risks of errors, and makes revisions to licenses more time consuming as licenses need to be physically sent back (EU FLEGT Facility, 2019).

Beyond Indonesia, the implementation of TLAS in Cameroon, Central African Republic, Congo, Ghana and Liberia have been found to be hindered by a series of capacity and governance aspects. These include low political will to collect and manage information regarding TLAS, a lack of infrastructure, delays in legal reforms and a lack of human or financial resources. As such, the functioning of TLAS in these countries is concluded to be insufficient (Adams, Kayira, Tegegne, & Gruber, 2020). In Ghana, the TLAS is based on a national Wood Tracking System (WTS), to ensure the traceability of timber flows. The system followed a centralised model, yet failed to be implemented adequately owing to issues including lack of remote access, design inflexibility and high costs, with the developer of the system lacking forestry-related experience. Following this, in 2012 a reformatted WTS system was developed, leading to the ability to: update sustainable forest management plans effectively and efficiently; provide VPA legality definitions for compliance issues; identify data discrepancies throughout the supply chain; provide financial control data; and provide coverage in the majority of the timber producing regions of Ghana (Overdevest & Zeitlin, 2018).

Joint Implementation Committees

Under the VPA implementation in Indonesia and Ghana, Joint Implementation Committees (JICs) are established and consist of the EU and the respective Partner country representatives for key procedural platforms for stakeholder involvement (Lesniewska & McDermott, 2014). The JICs meet biannually to review reports from independent auditors and information provided by civil society, as well as to address complaints and resolve disputes. Despite these mechanisms being in place, evidence suggests that these are experiencing internal representation issues (Cameroon), lack of leadership (Liberia), and limited functioning due to human and/or financial capacities (Congo) (Adams, Kayira, Tegegne, &

Gruber, 2020). In the case of Ghana, the JICs are seen to have not resulted in fundamental changes to forestry governance and management, despite such committees providing the forum for civil society representatives to pressurise national authorities (Hansen, Rutt, & Acheampong, 2018).

Following the implementation of the main elements outlined above, the final stages of the FLEGT process involves the issuance of licenses. The following section analyses the effectiveness of the licensing process itself.

Review of processes put in place by EU CAs

Roles

The FLEGT Regulation requires MS to designate CA(s) and put in place border control measures and procedures to follow when a shipment of FLEGT Regulation-licensed timber or timber products arrives from a VPA partner country, as consistent with the relevant Annex. The FLEGT Regulation Annual Synthesis Report for 2018 (UNEP-WCMC, 2020) noted that all MS had designated a CA and all but one (Portugal) provided information on the legislative act designating the CA. In 11 MS the customs authority was designated the CA (up from 9 in 2017) and in the remaining 17 MS, the CA and customs were separate. As noted in the report, in these cases it is critically important that arrangements are in place for effective cooperation between customs and the CA, and that delegation of tasks has been established, which was confirmed to be the case for all 17 MS. In 2018, out of 31,785 licences received by EU MS, over 99% (31,605) were validated / approved for import by CAs (UNEP-WCMC, 2020) (similar to 98% approval in 2017 (UNEP-WCMC, 2017b)). In 2018, 12 MS reported rejecting[36] a combined total of 66 FLEGT licences, with the highest number reported by France (down from 107 rejected licences in 12 MS in 2017).

At this stage it is worth noting that under FLEGT Regulation, customs have a clearly defined role in the system. Under Article 6 of the Commission Regulation (EC) No 1024/2008, licences are lodged with the CA, who then inform customs authorities when a licence has been accepted, and Article 13 states defined acceptance and verification procedures must be carried out in co-ordination between CAs and customs. Under Article 5 of Council Regulation (EC) No 2173/2005, customs can suspend the release or detain timber products where they have reason to believe that the licence may not be valid. Indeed, as noted above, in many cases MS have designated customs as the CA. This defined duty under FLEGT Regulation is in contrast to the EUTR, where customs participation is voluntary, and has perpetuated a number of issues (see EQ2a).

FLEGIT/TRACES

FLEGIT is an IT system managed by the Commission and used as a repository for FLEGT Regulation licenses intended for EU countries. In 2018 the FLEGIT/TRACES system was used to process FLEGT licences in 21 MS (up from 20 in 2017 (UNEP-WCMC, 2017b)), whereas 7 MS used national systems (these are Bulgaria, Greece, Latvia, Lithuania, the Netherlands, Spain, and the United Kingdom). That said, for the 21 MS using FLEGIT, the user (whether CA, customs or both) varies between MS. Furthermore, the format in which FLEGT licences were submitted also varies between MS (e.g. across paper, via FLEGIT/TRACES email and national electronic systems), and in some cases licences can be received in more than one format.

[36] Noting that a rejection of licence does not necessarily imply non-compliance (the latter of which applies to importing without a licence or where licence does not match shipment)

However, an important take-away from the 2018 analysis is that boosting the use of FLEGIT could help address existing reporting issues: FLEGIT can be used to directly export FLEGT licence data for reporting under Article 8(1). Several MS, some of which are among the largest importers of FLEGT Regulation-licensed shipments, do not submit license data in the reporting format recommended by the Commission, which can lead to data loss or difficulties with subsequent analysis. A more thorough use of FLEGIT would contribute to resolving these issues and making this process more efficient, and so would an alignment of national systems with FLEGIT, as two of the aforementioned MS which use national systems and which are amongst the largest importers of FLEGT Regulation-licensed shipments (the Netherlands and Spain) do not report data in the EC-approved format (UNEP-WCMC, 2020).

In terms of the systems themselves, the FLEGIT system is continuously updated. The 2018 synthesis report (UNEP-WCMC, 2020) noted that Belgium highlighted that regular updates to FLEGIT had improved it considerably, and two MS reported positive feedback on their cooperation with the Commission about the use of FLEGIT.

Several suggestions for improvements were also noted in this and other Synthesis Reports, and in EUTR/FLEGT Regulation Expert Group meetings, including:

- existence of an exchange across CAs on an operational level, for processing licences in FLEGIT;
- enabling users' administrators from national authorities to see the name of the user who validated and cleared the licence;
- making FLEGIT more user friendly (UNEP-WCMC, 2017b);
- clarification of what statistical information TRACES is meant to reflect (FLEGT licences issued or those cleared for free circulation (Ministry of Finance, Poland Customs Department, 2017).

The lack of substantive criticism voiced by MS despite the widespread use of the tool is likely to indicate that FLEGIT functions well (UNEP-WCMC, 2020).

Processing of licences

The number of days taken by MS to process licences was analysed in the 2018 Implementation Report for 24 MS. 53% of licences were validated by CAs the same day or the day after being received, 66% were validated within 3 days and 97% within 21 days. The longest amount of time taken to validate a licence was 282 days.

Six MS charge fees for the processing of FLEGT licences, from EUR 10 (GBP 9.60) in the UK to up to EUR 105.90 in Austria. Firstly the variation in fees perhaps signals a lack of coherence across MS. Furthermore, this has been flagged by Indonesian companies, associations and government officials as being an issue associated with the FLEGT Regulation (IMM, FLEGT VPA Independent Market Monitoring (IMM), 2017). In fact, this was raised with the EC by both Indonesia and Ghana, who in 2017 expressed concern that the introduction of fees may penalise FLEGT Regulation-licenced timber as opposed to timber not subject to the FLEGT Regulation licensing scheme, thereby achieving the opposite intention of the FLEGT Regulation.

Evidence suggests that the functioning of the FLEGT Regulation licensing process is not entirely accurate and can lead to data anomalies. Data submitted by MS as part of their FLEGT Regulation reporting is often not fully aligned to the template structure provided by the Commission, often leading

to challenges in linking customs data to licence datasets (UNEP-WCMC, 2020). For example, in 2018 over 684 million kg of timber and timber products were reported on validated FLEGT licences. However, over 2,993 million kg of FLEGT Regulation-licenced timber and timber products were reported as cleared for import by EU customs (UNEP-WCMC, 2020). A number of possible explanations are cited for this: imports where the HS codes would not have required a FLEGT licence; missing customs data; variable quality of national datasets submitted; licences received but not yet cleared by customs; reclassification of goods by customs to different HS codes; HS codes reported to a different number of digits; or quantities reported in different units of measure.

Not only does this create an issue for reporting, but some of these factors also have a bearing on implementation. Issuance of FLEGT licences for HS Codes outside the VPA scope and the mismatching of information between FLEGT licences and customs declarations (including mismatches in HS codes or country codes) were noted by CA(s) as challenges to implementation, often requiring a reclassification of goods by customs. In a presentation to the EUTR/FLEGT Regulation Expert Group in 2017, differences in HS codes were reported to have (in isolated cases) led to higher import duties than usual on certain products (e.g. in Poland (Poland Customs Department and Ministry of Finance, 2017)), and had also led to delays in processing of shipments through customs (IMM, 2017). IMM also noted this issue had been raised by Indonesian representatives who also recognised delays in processing as a result. This was also the subject of a 'Non-paper' in 2017 (EUTR/FLEGT Expert Group, 2017). In the 2018 Annual Synthesis Report the Netherlands noted recent investment in this issue had resulted in a drop in the number of mismatches.

Mismatch in information is not only limited to HS codes: Delays in clearance of shipments in Europe have been noted as the volumes/weights of the containers do not match the FLEGT licence (IMM, FLEGT VPA Independent Market Monitoring (IMM), 2017), (Putz & Krehan, 2017). Factors behind these data mismatches could relate to the contrasting actors who create licenses (such as exporters or licensing authorities), the irregularity of physical checks on products conducted on shipments, and the contrasting ways in which licenses can be created (Putz & Krehan, 2017).

Alongside incorrect data being entered on the FLEGT licence, it has also been highlighted (e.g. in Spain and Poland (UNEP-WCMC, 2017b)) that 'Certificate Y057' (indicating that a FLEGT licence is not needed) is incorrectly being indicated on the customs declaration (in box 44) for FLEGT Regulation products. The Spanish CA suggested this should be eliminated or limited in use to well-defined cases. Polish authorities have also noted the issue of incorrect declaration of codes relevant for FLEGT Regulation integration in TARIC and mismatches of tariff classification codes, which together have led to concerns around the correctness of reporting. Doubts were also raised around at what point Indonesia should be informed on the mismatch of classification (Ministry of Finance, Poland Customs Department, 2017).

More broadly, other issues have been raised by CAs around implementation (UNEP-WCMC, 2017b), including: the need for more practical guidance on implementing the FLEGT Regulation on the ground (e.g. for customs officers), and issues arising from receiving incomplete or damaged FLEGT licences. In addition, several issues with EU processes around the FLEGT Regulation have also been raised by Indonesian exporters. For some, the EU customs process for clearing FLEGT Regulation-licenced timber is seen as too complicated, and the fact that each licence is being verified is regarded by some as a

disadvantage for FLEGT Regulation-licenced compared to unlicensed timber (IMM, FLEGT VPA Independent Market Monitoring (IMM), 2017).

Verification checks and Enforcement in EU MS

Alongside the activities of partner countries, ***EU MS CAs*** also play an important role in enforcement. Once a VPA country starts FLEGT Regulation licensing, designated CAs must verify that consignments of timber from the VPA partner country have valid FLEGT licences, deploying at least one of two kinds of verification checks:

- Documentary - of licences to ensure they have the correct format, date and content;
- Physical - according to the normal procedures of customs authorities in EU MSs, to ensure a consignment conforms with the accompanying licence.

According to Article 5(4) of the FLEGT Regulation, the CAs must decide on the need for further verification of licences and shipments using a risk-based approach. In 2018 a total of 1,782 licences had additional verification checks carried out (e.g. by contacting the Indonesian Licence Information Unit (LIU)) across 19 MS (UNEP-WCMC, 2020) – equivalent to 6% of all licences received by CAs (up from 1,144 in 2017 across 17 MS). A total of 265 physical inspections of FLEGT Regulation-licenced shipments were carried out by 18 MS in 2018 – equivalent to 1% of licences received by CAs (up from 218 physical inspection by 12 MS in 2017). One question is whether verification carried out is sufficient: i.e. effectively balances the need to minimise risk of circumvention against the costs of enforcement.

Sufficiency of levels of verification checks will in part depend on the level of risk. That said, in the case of additional physical verification checks, a very high level of compliance is reported (94% in 2018 and 95% in 2017) and is consistent across years, suggesting perhaps low levels of risk (and hence a requirement for only a low proportion of shipments to be checked). However, given this result is based on reported data around checks, this in part may be influenced by the insufficiency of checks itself. With regard to risk it is important to note that risk around the circumvention of FLEGT Regulation (where shipments are checked multiple times: inspection of FLEGT Regulation licensed products takes place in Indonesia by the certifying bodies; FLEGT Regulation licensed products are checked by customs when leaving Indonesia; shipments are checked during custom clearance entering the EU; there are independent audits of the system and independent observers system) is perhaps less than that under the EUTR, where monitoring and enforcement of the system is focused on EU MS. One would expect to see MS CA focus greater resources therefore on enforcement under the EUTR than FLEGT Regulation. No data is collected regarding MS CA resources allocated to the FLEGT Regulation, so it is difficult to directly compare.

To determine whether the level of checks is sufficient is challenging due to data limitations around the checks performed: i.e. no data exists on the volumes of imports checked, nor on the geography or commodity focus of checks.

To further explore this issue, several indicators have been defined drawing on data reported through the annual reports (e.g. (UNEP-WCMC, 2020). These indicators, either by themselves or in combination with others, allow an assessment across implementing countries to compare the check levels and associated provisions and they may act as 'warning signs' that there are barriers to achieving 'sufficiency'. These indicators are presented in Table E-1.

In response to the Annual Synthesis Report for 2018 (UNEP-WCMC, 2020), 7 MSs noted that they did not have provisions in place to undertake additional verification checks on licences (see Figure 8 in 2019 report), nor did these MS include an indication of using a risk-based approach (or protocol to confirm that there are no doubts regarding the validity of the licence) to identify licences for additional checks (Table 8 in 2019 report). This is ***Indicator 1***. Art.5(5) of the FLEGT Regulation (Council Regulation (EC) No 2173/2005) and Art.6(5) and Art.9 of the Implementing Regulation ((EC) No 1024/2008) provide for additional verification of the licences. In the absence of such provisions, it appears that the validity of licences is not being assessed appropriately. Of the 7 MS which did not report having provisions, 6 did not perform any licence checks, whereas one MS (Slovakia) did report performing 8 licence checks in 2018. Also from Figure 8 in the Annual Synthesis Report for 2018, 6 MSs noted that they did not have provisions in place to undertake additional verification checks on shipments, nor did they include indication of using a risk-based approach to identify shipments for additional checks (Table 9 in 2019 report). This is ***Indicator 2***. However Art. 5(4) of the FLEGT Regulation states CAs shall use a risk-based approach to assess whether any shipments need to be checked and in the absence of such provisions, it appears that Art. 5(4) provisions are not being met. In this case, none of the 6 MSs reported any physical checks in 2018. In several cases, customs was also the CA (e.g. Croatia) so it is possible that additional provisions are not needed. In cases where customs is not a CA, Art. 12 of the Implementing Regulation notes that the CA may delegate specific functions to customs to check conformity of the shipment as per Art. 10 of the Implementing Regulations. The Annual Synthesis Report noted that an MoU was in place between customs and the CA in all other cases (e.g. France, Luxembourg). Although legal provisions are publicly available other provisions may not be, and it is therefore difficult to ascertain whether the content of these other provisions is comparable to legal provisions. Conversely, it is also possible that these other provisions may be more tailored, efficient or effective than perhaps cases where existing generic legislation is being referred to.

Indicator 3 considers the availability of customs data to the CA: if a CA is not able to access customs data on a regular basis, this calls into question whether it is able to effectively implement a risk-based strategy. The majority of CAs do not have direct access to customs data (see Table 1 in 2019 report), in particular in some cases where customs is also the CA. As such, many CAs rely on arrangements with customs to share data (either where CA must request data from customs, or customs submits data to the CA, or both) and there is a risk that the data provided is not complete. The frequency of data sharing varies between MS – some share data fairly frequently, for example France on a regular basis. However, in some cases data sharing is infrequent: for example Hungary and Luxembourg noted only sharing data on an annual basis. Furthermore, Spain and Italy noted having regular annual requests for data (alongside the possibility to share information on an 'as-needed' basis). In the latest Synthesis Report (UNEP-WCMC, 2020), all MS confirmed that CAs could access data on at least a monthly basis with the exception of Denmark (several others did not respond to this question, but in all cases customs were the (or one of the) CAs.

Some MS report that there is no requirement for customs to inform CAs of potential instances of non-compliant shipments (see Table 5 in 2019 report) – this presents ***Indicator 4***. In some cases, this is again where customs is also the CA, hence this could be a misnomer. However, for cases where the CA is separate from customs (France, Luxembourg, Romania and Spain), this again raises a potential concern as to how the obligation of co-ordination in Art. 13 of the Implementing Regulation is met, as the lack of this exchange does not help the CA to adjust their risk-based planning if they are not aware which operators 'failed' checks.

MS vary considerably in terms of how many verification checks were performed. Indeed many are concentrated in a single MS: Spain undertook over 50% of all licence verification checks in 2018 and the majority of physical verification checks (>160) were carried out by Belgium. ***Indicator 5*** considers the numbers of checks performed in relation to the volume of imports[37]. It is important to note, this does not consider the volume of imports on licences subject to checks – this information is not routinely collected but would be productive in considering sufficiency (i.e. even where a low number of licences are verified, if few large shipments are verified, this would reveal a more effective approach than simply looking at licence numbers). Instead, this seeks to compare the number of checks performed to volume of imports to understand in relative terms, whether some MS are undertaking more or less checks in comparison to others, based on the volume of imports.

In some cases, MS reported no checks but also that no FLEGT licences were received (i.e. Lithuania, Luxembourg and Romania).

Relative to the average volume of imports, several MS were 'below average' in terms of the numbers of checks they performed on licences (Cyprus and Poland), shipments (Estonia, Germany, Malta, Spain), or both types of verification check performed (Croatia, Denmark, France, Ireland, Italy, Netherlands, Slovenia, Sweden). I.e. in comparison to a typical MS, these MS either received more imports but did not do more checks and/or received similar levels of imports, but did less checks. As noted above, this does not reflect the volume of licences that were subject to checks as this data is unavailable. However, it is known whether 'volume' is one of the criteria used to determine if a check is required – this can be used to signal where although a CA undertakes a lower number of checks on average, there is a chance that on a volume basis these would represent a greater coverage. Combining this with average imports per check (i.e. removing those for which volume is a risk criteria), leaves the following MS which have a greater level of imports per check conducted:

1. Licences: Cyprus, Ireland and Sweden
2. Both: Croatia, Denmark, France, and Slovenia.

Interestingly, there are other MS that do not report doing any checks, but given low import volumes, fall below the average 'volume per check': Greece, Hungary, Portugal and Slovakia. In these cases it might be the case that a risk-based approach is being deployed and no checks were required given low levels of licences are received. Conversely, use of different (and more robust) risk criteria may have picked up checks that needed to be performed, but this cannot be assessed here.

As noted, this approach cannot define conclusively whether the 'highest standards' of additional verification checks performed by MS are sufficient. However, this does highlight that there may be doubts around the processes which facilitate checks and the deployment of an effective risk-based approach.

[37] Based on the top six FLEGT-licensed products reported on FLEGT licences received by CAs

Table E-1 Analysis of processes and verification checks carried out by MS CA

MS	Indicator 1 - Provisions (licences)	Indicator 2 - Provisions (shipments)	Indicator 3 - Data	Indicator 4 - Processes	Indicator 5 - # checks	
	Provisions in place for additional checks on licences	Provisions in place for additional checks on Shipments	Does MS have direct access to customs data?	Requirement for customs to inform CA of potential non-compliance?	Ratio of volume of imports** (kg) / # licence checks	Ratio of volume of imports** (kg) / # shipment checks
Austria			No – weekly		42,172	44,984
Belgium*			No – but CA = customs		96,643	166,505
Bulgaria*				No – but CA = customs	6,970	20,909
Croatia*	No – but CA = customs		No – but CA = customs		3,090,143	3,090,143
Cyprus			No - monthly		803,286	283,513
Czechia*			No – but CA = customs		149,604	124,670
Denmark			No – every 3 months and as needed		3,453,791	3,453,791
Estonia*			No – but CA = customs		14,135	424,056
Finland			No – monthly		10,174	30,523
France	No – but MoU between CA and customs		No – weekly	No	21,566,845	21,566,845
Germany			No – 'case-by-case' basis		293,931	8,266,812
Greece*	No – but CA = customs	No – but CA = customs	No – but CA = customs	No – but CA = customs	318,254	318,254
Hungary		No – but MoU between CA and customs	No - As needed (2019 report)		3,380	3,380
Ireland			No – monthly		498,064	1,245,161
Italy			No - As needed (2019 report)		2,847,325	2,135,493
Latvia					19,503	19,503
Lithuania*				No – but CA = customs	-	-
Luxembourg	No – but MoU between CA and customs	No – but MoU between CA and customs	No - As needed (2019 report)	No	-	-
Malta			No – as needed		22,098	353,573

MS	Indicator 1 - Provisions (licences)	Indicator 2 - Provisions (shipments)	Indicator 3 - Data	Indicator 4 - Processes	Indicator 5 - # checks	
Netherlands			No - monthly		51,113,826	25,556,913
Poland*					416,317	237,895
Portugal*	No – but CA = customs	No – but CA = customs		No – but CA = customs	111,782	111,782
Romania	No – but MoU between CA and customs	No – but MoU between CA and customs	No – as needed	No	-	-
Slovakia	No – but MoU between CA and customs	No – but MoU between CA and customs	No – as needed		4,296	34,365
Slovenia*				No – but CA = customs	18,525,379	18,525,379
Spain			No - As needed (2019 report)	No	15,859	14,067,109
Sweden*					468,094	702,141

Notes: '[Not defined]' denotes where no answer was provided by MS in response to the survey; '' denotes MS where CA is customs (or customs together with other entities); '**' Top six FLEGT Regulation-licensed products reported on FLEGT licences received and validated for import into the EU in 2018 by weight (kg)*
Legend: orange denotes where a potential issue is raised, but there may be negating evidence; red suggests more strongly where there may be an issue or challenge to a MS implementing a 'sufficient' level of checks; '2019 report' refers to (UNEP-WCMC, 2020)

Application of penalties by EU MS

In line with Article 5(7) of the FLEGT Regulation, customs may suspend the release of or detain timber products where they have reason to believe that the FLEGT licence may not be valid. Twenty-four MS reported that they may seize timber products, with the disposal of confiscated timber provided for in their national legislation (those that do not are Croatia, Portugal, Romania and Slovenia). Where the disposal of confiscated timber is provided for in national legislation, there is then variation around who is responsible for disposal.

Article 5(8) of the FLEGT Regulation provides that: "each MS shall determine the penalties to be imposed where the provisions of this Regulation are infringed. Such penalties shall be effective, proportionate and dissuasive." In 2018 (UNEP-WCMC, 2020), the type of penalty reported as in place by the largest number of MS was provisions to impose imprisonment (20 MS), with 15 MS reporting maximum potential penalties of 1-5 years. Luxembourg reported the lowest maximum imprisonment term (1 month), whereas the longest maximum imprisonment term was reported by Latvia to be 15 years (under general sanctions for smuggling). Of the other types of potential penalties, 17 MS had provisions for 'administrative fines' (with maximum penalties ranging from EUR 700 in Latvia and EUR 1200 in Estonia, to EUR 1.2 million in Belgium). 17 MS had provisions for 'criminal fines', with no minimum penalties and maximum penalties ranging from confiscation of the goods (Hungary) to fines of EUR 24 million (Belgium). 9 MS could send notices of remedial action or warning letters, 7 MS could suspend the authority to trade, and 9 MS reported provisions for other penalties.

Hence across MS there is a wide range of maximum potential penalties that could be applied. From simply looking at the potentially penalties it is difficult to conclude whether they are dissuasive or not. Some of this variation can be attributed to the fact that some MS have dedicated legislation for the implementation of FLEGT Regulation, whereas for others the fines fall under more general legislation (e.g. customs) and MS may rely on such wider legislation for enforcement. In terms of proportionality, no evidence has been found which reports how the type and size of penalty is determined in each MS.

In addition, to assess the dissuasiveness of penalties one needs to consider what penalties are actually implemented in practice, in particular how the level of penalties compares to the maximums set in legislation, and even whether or not they are levied at all.

In 2018, only two MS (Bulgaria and Spain) applied Article 6(1)[38] (UNEP-WCMC, 2020). Bulgaria reported the temporary seizure of 24,207 kg of products (10,000 parcels) with HS Code 4802.56 (Uncoated paper and paperboard) as physical and document checks revealed that the country of origin was incorrect and data in the 2 FLEGT licences did not match data in the customs declaration. Spain reported that a shipment of 4,923 kg of products (253 units) with HS Code 9403.60 (furniture, other than for office, kitchen or bedroom use) were not admitted for free circulation into the EU. Likewise in 2017 (UNEP-WCMC, 2017b), two MS (Austria and Estonia in this case) applied this measure to 4 cases with a combined weight of 4,475 kg, all of which resulted in administrative penalties.

Bulgaria and the Netherlands applied Article 6(2) in 2018[39], the former where a scanned FLEGT licence was presented for validation (with an expired validity date) and the latter for a shipment which

[38] Where imports from partner countries were prohibited due to absence of a FLEGT licence
[39] Notifying the Commission of information suggesting circumvention of regulations

included a CITES species without a CITES permit. In 2017 only Germany noted applying this measure in the case of an alleged forged licence.

The published annual reports do not contain information on the size of penalties in these cases, so it is not possible to judge how these relate to the range possible. A further dimension to dissuasiveness is the speed at which penalties can be and are applied. However, no evidence has been found in the literature around this parameter.

Enforcement of VPAs

A further dimension to enforcement is of the VPA agreement itself with partner countries. As described above, issues have arisen over the course of negotiating VPAs (e.g. the example in Vietnam which has been accused of failing to achieve the 'spirit of the VPA agreement' (Fern, 2020)). In addition, once agreed, VPAs can be fragile and vulnerable to changes in the position of partner countries, as evidenced by the issues highlighted in Indonesia in early 2020 where Indonesian authorities unilaterally proposed potential changes to licencing procedures (Mongabay, Indonesia drops panned plan to scrap legality license for wood exports, 2020). This calls into focus the enforcement tools available to the EC in the event that partner countries do not follow and/or try to make changes to the agreement unilaterally.

The processes of negotiating and implementing a VPA (and hence enforcement processes) are different in each VPA country. That said, common actors are involved in its governance:

- The European Commission leads on VPA negotiations on behalf of the EU;
- Ratification of the VPA by the European Council and the partner country make VPA legally binding;
- During the implementation phase, the JIC (consisting of EU and the VPA partner country representatives) oversees implementation, monitors progress, handles grievances and addresses new challenges as they arise.

Furthermore, the VPA main text should include *"Conditions for the agreement's entry into force and for parties to amend, suspend, extend or terminate the agreement."* (European Commission, Undated). For example:

- The Indonesia VPA[40] contains: Article 20 refers to Settlement of Disputes, Article 21 to Suspension and Article 23 on Termination;
- The Ghana VPA[41] contains: Article 24 is on settlement of disputes, Article 25 on Suspension and Article 28 on Termination.

Communications between actors with respect to the FLEGT Regulation

In the 2018 Annual Synthesis Report (UNEP-WCMC, 2020), 26 MS provided opinion on implementation measures and challenges. Through this question, 11 (Austria, Denmark, Estonia, France, Greece, Ireland, the Netherlands, Poland, Slovakia, Slovenia and Sweden) reported ***collaboration between CAs*** over the year around implementation challenges (up from 10 in 2017 (UNEP-WCMC, 2017b)). Furthermore they also indicated that this cooperation had been beneficial. France specifically noted collaboration with Belgium, Italy and Spain, regarding goods arriving at French ports for onward transport by road to these three MS and Greece reported good collaboration with CAs regarding

[40] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:22014A0520%2802%29&from=EN
[41] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:22010A0319(01)&from=EN

clarifications on companies based in other MS. Two MS reported performing no collaboration with other CAs, either because they received no licences (Luxembourg) or had no issues (Cyprus).

Seven MS noted that information sharing at meetings of the EUTR/FLEGT Regulation Expert Group and at informal meetings was useful (Belgium, Croatia, Finland, Malta, Poland, Spain and United Kingdom). Indeed the records of the EUTR/FLEGT Regulation Expert Group meetings show that this forum appears to be an effective channel through which CAs can raise issues regarding the operation and implementation of the scheme and collaboratively develop solutions, as evidenced by the non-papers for example around mismatching of information. In addition, it is an opportunity for CAs to share best practice and lessons learned, from which there can be tangible outcomes. For example, Germany cited that after learning that other MSs accept 'Statement letters' as scanned documents sent by email (as opposed to original hard copies), they had changed and streamlined their procedure.

Finland also noted that collaboration with the Nordic Baltic group had been fruitful and Spain noted the value of the FLEGT Regulation, EUTR, CITES joint meeting, held in February 2019, and the seminar held between MS, the Commission and Indonesian Authorities, held in November 2018.

Nine MS noted collaboration with or ***support from the European Commission*** and several reported good communication with the European Commission regarding FLEGIT over 2018, up from 6 in 2017. Hence between CAs, and between CAs and the Commission there appears to be effective and productive communication.

The Synthesis report also provides insight into the channels of communication between ***CAs and customs*** (albeit in several cases these are one and the same). There is considerable variation in MS approaches to and frequency of customs data exchange, for example: Austria and France reported weekly and twice weekly data exchange respectively, whereas Luxembourg (who did not receive any FLEGT licences in 2018) reported receiving data annually, and other MS reported receiving data 'as needed' (sometimes in addition to regular data requests). There is also variation between MS in terms of the arrangements for exchange of information *other* than customs data between CAs and customs, as detailed in the Background Analysis to the 2018 Synthesis Report (UNEP-WCMC, 2020). In response to the survey, some MS (the number and which MS are concerned varies by point) did not confirm that the following likely important processes are in place, either that:

- The customs authority informs the CA of checks performed;
- There are regular meetings between CA and customs;
- Customs would suspend release of an import for free circulation until the CA has verified the FLEGT licence.

The fact that such processes have not been confirmed by all MS could flag a concern, in particular around the release of shipment before verification of the licence challenges the achievement of Article 4(5). There have also been reported instances where agreed procedures have not been followed, leading to the release for free circulation prior to validation of the relevant FLEGT licence. For example, in Poland, there have been instances where submission of the licence to the CA for acceptance has occurred only after release of the goods for free circulation (Ministry of Finance, Poland Customs Department, 2017). Customs data is essential for the CA to perform risk based checks and hence the exchange of data between CAs are vital for the effectiveness of the FLEGT Regulation. Whilst

it appears that the majority of CAs have relevant processes in place, we will explore with stakeholders whether these processes are effective and whether there are gaps for some MS.

With respect to ***communication with industry***, less opinion is documented in the literature reviewed to date. In 2017 IMM (IMM, FLEGT VPA Independent Market Monitoring (IMM), 2017), in a presentation to the EUTR/FLEGT Regulation Expert Group, raised the point that European Traders felt more and clearer communications on FLEGT Regulation licensing is needed, as is continued assurance that the system is robust. IMM also highlighted that it had a 'wish list' of actions to improve information exchange between the IMM and the MS CAs, in particular data around FLEGT licences received, physical inspections, remedial actions and penalties imposed.

Annex F – Analysis of costs and benefits

Costs associated with EUTR

Overview of approach and EUTR cost components

The main sources reviewed to assess the costs of the EUTR were the 2016 Commission Report Evaluating the EUTR (European Commission, 2016), the Commission Staff Working Document: Evaluation of EUTR (European Commission, 2008) as well as the External Contractor's report carried out by TESAF, EFECA, INDUFOR for the EU Commission reviewing the EUTR (TESAF, 2016). A more recent source used to evaluate MS costs was a background analysis of the 2017-2019 national biennial reports on the implementation of the EUTR carried out by WCMC. (UNEP-WCMC, 2017b) In addition, the Global Timber Forum supplier and consumer Due Diligence analysis was also used as a source to evaluate costs. (Global Witness, 2015) Finally, a 2019 study UNEP-WCMC [unpublished] on the insights from the implementation of the EUTR by operators was used to analyze costs for companies (UNEP-WCMC, 2020) and a study by M. Norman (in Forest Trends) was published in 2021 with information on costs for operators to implement due diligence.

Note that, overall, there was little information on the costs of EUTR in the literature and from the consultation activities. Existing cost estimates are based on small samples and should be considered with caution. Where possible, the analysis provides range estimates of low and high to improve accuracy as single points estimates will not accurately represent variation between operators, Member States, etc, and such ranges reflect the uncertainty around certain data points. Where available, several sources of information were triangulated to support the conclusions.

The implementation of the EUTR carries with it a range of costs for a range of actors, including:

- Establishment of the function of CAs, and laying down the rules on penalties applicable to infringements of the provisions of the Regulation;
- Increased costs for implementation and enforcement in some MSs – both monetary and non-monetary, which also include additional travel and subsistence costs;
- Additional legal costs associated with enforcement and prosecution for MSs;
- Additional costs associated with seizing goods for MSs;
- DDS requirements for the private sector;
- Costs of using Monitoring Organizations (MOs) for the private sector;
- Costs of MOs (developing their internal competences, capacities and systems to comply with requirements set for MOs);
- Costs for traders (traceability);
- Other costs (such as for communication, cooperation between MSs, and providing technical assistance, e.g. training of CAs).

Aggregate estimates of costs

A cost estimate for the application of a timber Regulation was initially included in the European Commission's Impact Assessment for the Proposal for a Regulation of the European Parliament and the Council Determining the Obligations of Operators who make Timber and Timber Products Available on the Market (European Commission, 2008). The study estimated the likely combined regulatory and private sector costs for implementing a DDS and enforcing legislation on trade of legally harvested timber and timber products to be mEUR 16 and mEUR 1 pa respectively.

The evaluation of the EUTR carried out in 2016 did not provide an estimate of total costs of compliance. The sections below provide information on the cost estimates split by actor and by country, and the information is further summarised in a section drawing together cost data to produce an overall estimate.

Cost estimates split by actor

Compliance costs for MSs

The 2016 study on the effectiveness of the EUTR during its first two years of implementation found that, for MSs, the allocated human resources ranged from 1 to approximately 200 people. The 11 MSs that provided information on their financial expenditure declared values ranging from EUR 20,000 to EUR 466,000 per year for 2 years. These costs covered a range of activities, including information-sharing activities and enforcement (European Commission, 2016). The study further found that generally the implementation process was slow in most MSs and, although a number of countries carried out checks on operators, those remained relatively limited during the evaluation period which lasted two years (2013-2015). Furthermore, in many cases, human and financial resources dedicated to checks on operators were very low compared to the number of operators in MSs, meaning that the deterrent effect of the enforcement activities was limited. Therefore, the impact of enforcement activities were not sufficient and only a small fraction of operators were subject to checks by CAs, which did not stimulate companies to actively develop and use a Due Diligence System and could not guarantee the robustness of existing systems. Overall, the evaluation concluded that regulatory costs reported by the EU MSs for the first two years of the Regulation's application were above the cost estimate from the 2008 IA of mEUR 1 pa as noted above, and they further concluded that the EUTR has increased the regulatory costs of the EU MSs (European Commission, 2016).

Resources deployed by MS CAs to implement and enforce the EUTR have been captured over the period of implementation by the biennial (now annual) Synthesis reports (UNEP-WCMC, 2018), (UNEP-WCMC, 2020), (UNEP-WCMC, 2020). A simplified summary of the data reported is captured in the following tables (note this does not capture all the detail and caveats provided by MS CAs around their reported cost data - please refer to references for full detail of the information and data reported by MS CAs).

Table F-1 – MS CA human resources available for the implementation and enforcement for the EUTR for each reporting period

Country	Between March 2015-February 2017, focused on		Between March 2017-February 2019, focused on		2019	
	Imported timber	**Domestic timber**	**Imported timber**	**Domestic timber**	**Imported timber**	**Domestic timber**
Austria	2.5 (2,953.5 working hours)	20 person months	FT: >94 [1]; PT: 0	FT: 3 [1]; PT: 0	1.5	2
Belgium	0.5 full time	0.5 FT (shared with imported timber)	FT: 4 [2]; PT: 0		2.5	
Bulgaria	20	20	FT: 0; PT: 18 [6]		4.5	
Croatia	1	1	FT: 3 [1*]; PT: 1 [0.33*]		1	
Cyprus	2 PT [60-70% of time spent on the implementation and enforcement of imported timber]	22 PT (30-40% of their time)	FT: 0; PT: 22 [4]		2.8	
Czech Republic	39 PT [EUTR implementation and enforcement is not full-time job]	39 PT [EUTR implementation and enforcement is not full-time job]	FT: 51 [20]; PT: 0		20	
Denmark	24	24	FT: 3 [2]; PT: 0		2.3	
Estonia	1 FT with others available for assistance	11 full time	FT: 9 [2]; PT: 0		10	
Finland	1 FT and 2 PT	1 FT and 2 PT	FT: 4 [2]; PT: 0		2	
France	6.3 FT	6.3 FT	FT: 6.5 [6.5]; PT: 0	FT: 2.8 [2.8]; PT: 0	6.5	2.8
Germany	~ 10 full time (only CA)	Several PT for each administrative region (16)	FT: 21 [12.4]; PT: 4 [2.68]		5	20
Greece	45	68	FT: 40 [20]; PT: 2 [1]		20	
Hungary	8	8	FT: 12 [12]; PT: 1 [0.5]		12.5	

Ireland	4	4	FT: 3 [2]; PT: 1 [0.25]		2.5	
Italy	90	2400	FT: 0; PT: Unspecified [601]	FT: 0; PT: Unspecified [63]	664	
Latvia	1 FT	1 FT	FT: 401	FT: 1; PT: 3	401	1
Lithuania	1 FT, with assistance from 11 regional specialists	1 FT	FT: 92 [15]; PT: 0		15	
Luxembourg	0.125	0.125	FT: Unspecified [0.125]; PT: 0		0.125	
Malta	1	N/A	FT: 4 [2.5]; PT: 0		1.5	
Netherlands	3	3 [including imported timber]	FT: 10 [2]; PT: 0		2	
Norway	1 PT (43% of time)	1 PT (17% of time)	FT: 0; PT: 1 [0.1]	FT: 1 [1]; PT: 3 [1]*	0.1	1
Poland	7	7	FT: 45 [9]; PT: 0		8.34	
Portugal	CA: 1 FT*, 1 PT (~65% of time)*; Regional CA:12 PT (10% of time); Azores: 1 FT, 11 PT (10% of time), 8 forest guards; Madeira: 1 FT*, 2 PT (10% of time)	Resources shared between imported and domestic	FT: 0; PT: 39 [9.6]		4.52	
Romania	Not specified	Not specified	FT: 11 [11*]; PT: 0		11	
Slovakia	Not specified	Not specified	FT: 12 [12]; PT: 2 [1		22.3	
Slovenia	2 FT	14 PT	Not specified	Not specified	30	
Spain	24 PT in March 2015; 42 PT in February 2017	24 PT in March 2015; 42 PT in February 2017	FT: Unspecified [2]; PT: Unspecified [134.6]		1.3	1
Sweden	2.2 FT	0.3 FT	FT: 0; PT: 2 [0.5]	FT: 1 [1]; PT: 2 [1]	2	
United Kingdom	5	5 [including domestic timber]	FT: 5 [5]; PT: 4 [2]		7	

Total	**2,897**	**1,372**	**1,291**
Total (excl. Latvia, Italy, Spain)	***369***	***168***	***223***

Notes: figures in square brackets denote FTE where people are spending less than 100% of their time on EUTR; FT = full-time; PT = part-time

Table F-2 - Financial resources available for the implementation and enforcement of the EUTR, by country, for each reporting period (all figures EUR pa unless otherwise specified)

	Between March 2015-February 2017, focused on		Between March 2017-February 2019, focused on		2019	
	Total annual budget for EUTR implementation, e.g. cooperation, training, reporting	**Total annual budget for EUTR enforcement, e.g. checks, remedial actions, issuance of penalties**	**Domestic timber**	**Imported timber**	**Domestic timber**	**Imported timber**
Austria	163 861 EUR		Not specified	EUR 164 626	0	193572
Belgium	0 EUR	10 000 EUR foreseen for species identification (not used)	No specific budget (EUR 55 000 used in the reporting period)		25000	
Bulgaria	[Not specifically allocated]		No specific budge		0	
Croatia	Not specified	Not specified	No specific budge		13.3	
Cyprus	71 500 EUR	371 000 EUR	EUR 5 000		5000	
Czech Republic	60 703 EUR	308 029 EUR	EUR 160 000 [CZK 4 000 000]		160000	
Denmark	10 000 EUR/year	15 000 EUR/year	EUR 7 500		15000	
Estonia	Not specified	Not specified	Not specified		77000	
Finland	100 000 EUR; plus 50 000 EUR for enforcement		EUR 100 000		35000	
France	Not specified	Not specified	No specific budge	No specific budge	No specific budge	No specific budge
Germany	No limitation to budget	No limitation to budget	No specific budge	No specific budge	10000	100000
Greece	Not specified	Not specified	Not specified (EUR 85 800 in the reporting period)		28000	
Hungary	10.2 million FT [32 918 EUR] including IT development and training	36.1 million FT [116 524 EUR] (plus 40 million [129 113 EUR] including wages)	EUR ~222 000		3000	
Ireland	No limitation to budget	No limitation to budget	No specific budge		10000	
Italy	Not specified	Not specified	No specific budge		No specific budge	No specific budge
Latvia	[Not specifically defined, allocated when necessary]	[Not specifically defined, allocated when necessary]	Not specified		Not specified	Not specified

Lithuania	7 500 EUR	7500	EUR 20 000-25 000	25000
Luxembourg	2 500 EUR	15 000 EUR	EUR 15 000	15000
Malta	[Not specifically defined, allocated when necessary]	[Not specifically defined, allocated when necessary]	No specific budge	No specific budge / No specific budge
Netherlands	370 000 EUR		Not specified	Not specified
Norway	250 000 NOK [26 641 EUR]	Not specified	No specific budge	0 / 12000
Poland	Not specified	Not specified	EUR 17 565.83 [PLN 75 581.20]	9884.48
Portugal	Not specifically defined. 22.000 EUR/year for checks including human resources.	[Not specifically allocated]	EUR 22 000	25000
Romania	Not specified	Not specified	No specific budge	0
Slovakia	[Not specifically allocated]	[Not specifically allocated]	EUR 57 000	400000
Slovenia	Not specified	Not specified	Not specified / Not specified	116000
Spain	[Not specifically allocated]	[Not specifically defined]	EUR 327 400	0
Sweden	2.5 million SEK [256 338 EUR] for iii) and iv)		EUR 46 657.25 [SEK 500 000]	15000
United Kingdom	0 EUR	750 000 GBP [875 639 EUR]	EUR 676 587.40 [GBP 620 000]	705215.9
Total (where data provided)	**> 3,000,000**		**> 1,980,000**	**> 1,980,000**

The reporting data found that both the human and financial resources available to CAs varied greatly across the MSs. Combined human resources ranged from as few as 0.125 full-time equivalent staff (Luxembourg) to as many as 601 full-time equivalent staff (Italy).

Given these gather data directly from MS and cover the implementation period, these are used as the basis for the analysis of CA implementation costs in this study. However, there are several important caveats and uncertainties associated with the reported figures:

- the majority of the figures provided by MSs are difficult to compare due to the varying levels of detail provided by countries in their national reports
- MS CAs were asked to report figures split by domestic and imported timber. In some cases, it is unclear whether these are separate resource or overlap, in particular for the 2015-17 reporting of human resources. In addition it is not clear in all cases in the 2015-17 resources whether the reported human estimates relate to FTEs or numbers of people working on EUTR (but who may not spend all their time dedicated to EUTR) – this reporting is clearer for the 2017-19 and 2019 figures
- In many, cases, MS do not report or were not able to specify quantitative estimates for both human (and more so) for financial resources. In addition, for financial resources, in some cases it is not possible to split out the budget dedicated to EUTR. Hence the aggregate estimates derived are only partial, and in the case of financial resources, omit many MS
- Some countries which reported unusually high numbers of FTEs might have reported also those not specifically devoted to EUTR (e.g. Latvia, Italy and Spain)
- It is important to note that in some cases, MS have gone beyond the basic requirements of the EUTR – e.g. checks on transporters and traders in Sweden and Hungary, It is not clear whether the resources dedicated to these 'additional' activities are included in the reported figures, but technically these costs should not be attributed to the EUTR
- In some cases the requested split of resources changed between reporting periods – namely the requested split of financial resources between the 2015-17 period to the 2017-19 period.

Given the data across MS is more complete for human resources, this is used as the basis of the estimated costs in this study. Furthermore, given the clarity improved on the overlap between resources dedicated to imports and domestic operators, and specifying the number of FTEs, the results from the 2017-19 and 2019 reporting periods are deemed more reliable. We have also decided to exclude the human resource estimates provided by Latvia, Spain and Italy given their estimates are outliers compared to the rest of the MS and do not seem to represent a credible estimate of FTEs dedicated to the implementation of EUTR. This presents an average annual resource deployed by MS CAs to implementing and enforcing the EUTR of between 168 – 223 FTEs. Noting the caveat that these estimates may include resources dedicated to 'additional' activities not required under the EUTR, the study selects the lower bound as its central estimate of costs.

Interviewees noted that the costs of CAs for the EUTR would depend on the number of operators within a specific country. An example was given that Germany has a large number of operators, between 20,000 and 30,000 operators, which in turn, requires about 15 FTE. Landlocked countries are likely to involve less staff as there are no ports. While one interviewee noted that it was not possible to breakdown the costs for customs authorities to implement and enforce the EUTR, it was however noted that those costs would vary between MSs as some MSs will receive more imports of timber and timber products coming from third countries than others. An assessment by the European Forest Institute in

2015 found that operators in countries that played a more active advisory role in the creation of the EUTR incurred fewer costs than those in countries which did not, which resulted in uneven capacity across operators to implement the EUTR.(EFI, 2015)

Additional results from the OPC showed that only a small number of respondents have attributed high costs to the implementation of the EUTR for authorities, with only 31 (18%) respondents (not only public authorities) agreeing that the costs were high for authorities. Overall, 6 respondents from public authorities agreed, 13 disagreed, 3 did not know and 1 was neutral. CAs indicated that dissemination activities on the EUTR with the aim to support businesses in complying were a key task and, in some cases, this included the organisation of online seminars for SMEs on creating and maintaining a due diligence system, etc. One interviewee mentioned a collaborative project involving six EU MSs that aim to provide tools for operators to better implement the due diligence system.

Finally, one interviewee noted that it was difficult to breakdown the costs for customs authorities to implement and enforce the EUTR, as customs officials are in charge of several restrictions/prohibitions.

Compliance costs for the private sector

The EUTR entails compliance costs for the private sector as well. These may include investments in information systems for due diligence, development of in-house expertise and training of staff. The magnitude of costs depends on a range of factors, including: the existence of previous responsible sourcing policies, the type and complexity of traded products, the number and geographic location of suppliers and, finally, the complexity of the supply chains. Other factors which influence due diligence costs include the quality of internal control systems in place prior to the application of the EUTR, and the size and product types merchandised by operator (TESAF, 2016).

Findings from the 2016 Evaluation on the Implementation of the EUTR (Hoare, 2015a) indicate that the compliance costs for the private sector were generally considered manageable by a few private sector representatives that responded to an independent consultancy survey, for companies already applying responsible sourcing policies. However, it should be noted that a limited number of firms replied out of those targeted. For this reason, the results cannot be considered as fully representative of all companies within the forestry sector. It should be noted however, that this evaluation of the EUTR came after only two years of its application, which is an insufficient time to assess its performance, particularly given the novelty of the compulsory DD requirement. The implementation and enforcement of the EUTR was slow and uneven during the first two years and still remains incomplete (Commission, 2016). The short application period of the EUTR partly explains the very limited information available on costs in any of the multiple information sources used in the 2016 review (Commission, 2016). The short application period of the EUTR partly explains the very limited information available on costs in any of the multiple information sources used in the 2016 review. Operators would have been the key source of information on the DDS related costs, but they were mostly unable to separate the EUTR induced costs from other costs or were unwilling to disclose the cost information to third parties. In addition, information on the costs of the services provided by MOs was not available due to their limited use (TESAF, 2016). Nonetheless, results from the online public consultation showed that, as for public authorities, only a small number of respondents have attributed high costs to the implementation of the EUTR, with only 67 (38%) respondents agreeing that the costs were too high for businesses.

According to a survey carried out with private sector stakeholders by the Global Timber Forum in 2015, 53% of the sample of 20 companies interviewed mentioned that they had incurred additional costs for developing and/or operating their DDS. Five respondents provided information on the magnitude of costs of developing a DDS, which ranged between EUR 5,000 and EUR 90,000. In particular, they mentioned that IT systems needed to be set up and the time spent on training to apply the DDS was high. The total annual cost of operating the DDS varied between EUR 10,000 and EUR 50,000 across three operators that provided such information. Moreover, the GTF survey of companies indicated that compliance with the legislation (combined legal and environmental compliance, incl. the EUTR) costs EUR 1,000 - 70,000 per year, with the average annual cost being about EUR 26,000. Furthermore, the survey found that 27 operators from five different countries had a member of staff dedicated to legal compliance, who were spending an average of 3.6 hours per week on environmental compliance (Global Timber Forum, 2015b). According to the same survey GTF carried out in 2015, exercising due diligence seems to have only slightly increased the purchase price of timber. Most respondents (86%) of the private sector survey that provided a response to this question reported an increase of between 1% and 10%. In addition to increases in direct investment and operational costs, the operators consulted generally perceived that the EUTR application has created additional obligations, burden and bureaucracy for the private sector. Several respondents to the 2015 private sector survey claimed that the development and maintenance of a DDS is time-consuming without bringing unambiguous added value (Global Timber Forum, 2015b).

The publicly available on-line stakeholder consultation carried out in the 2016 EUTR evaluation supported these statements with 82% of respondents feeling that the EUTR created additional obligations and burdens for business in the EU particularly in setting up a DDS (TESAF, 2016).

A more recent study carried out in 2019 (UNEP-WCMC, 2019b) based on a survey of operators, trade associations and CAs found that overall, including the operators reporting no or negligible costs, annual implementation costs per company ranged from EUR 0 to 8 million. It must be noted however that the EUR 8 million figure was a large outlier, with the median cost of EUTR implementation being EUR 10,000 and the mean cost EUR 38,500 (excluding the EUR 8 million outlier). The report also indicates that these small and medium sized enterprises were more substantially affected by the costs incurred given their reduced capacity in terms of turnover and staff to time to incur additional administrative burden from the EUTR. Several respondents provided a staff-time equivalent, ranging from one part-time staff member up to six full-time members of staff. Furthermore, the cost of implementation was estimated as a percentage of annual turnover by 19 operators from six countries and ranged from below 1% to over 25%, with a median of 1% and an average of 3.8%. The most commonly reported cost was 10% of annual turnover (reported by five operators from three countries), with a median cost of 5% and a mean of 7.2%, excluding cases where costs were reported as negligible. None or negligible costs (<1% of annual turnover) were reported by 30 operators in ten countries (excluding those who stated that this was nevertheless significant).

Finally, a report published in March 2021 (Norman, How is the European Union Timber Regulation impacting industry due diligence and sourcing practices, 2021) presents the results of a survey with operators that were subject to enforcement checks since the EUTR. In this context, 72 companies were interviewed, and out of those, 70 noted that they has hired dedicated staff to ensure EUTR compliance. Where answers were provided (however, the article does not indicate the number of answers provided), operators reported costs between EUR 10,000 and EUR 35,000 per year, with the majority reporting

costs between EUR 10,000 and EUR 20,000. The report also notes that companies often developed a specific timber sourcing policy after enforcement checks have taken place, and that about half of operators had policies in place by 2019.

Overall, there is a significant lack of data on costs from the various consultations undertaken for this project, and within previous studies carried out and the literature reviewed. Hence, there is a significant uncertainty around data points that are key to the analysis of costs for operators. It is noted that all five sources of cost ranges for operators present comparable ranges of costs, however, key elements of uncertainty are set out below:

- The quantified cost ranges provided in the literature (from previous surveys) all rely on samples of small size, e.g. between 3 and 16 respondents. The latest source (Norman, 2021) does not clearly state the number of respondents to the question of costs.
- In most sources, it was difficult for respondents to directly attribute costs to the EUTR specifically. This was noted in the reports from Norman, GTF and the survey from the previous evaluation in the EUTR. Although not explicitly noted in the WCMC report, only 16 respondents out of 122 provided a quantification of costs, which may reflect the difficulties to attribute costs directly to EUTR. It is possible that the costs ranges shown above cover other elements of legal and environmental compliance, wider than the EUTR.
- The participation of operators to such surveys relies on their awareness of the EUTR and its related obligations, which may result to skewed results. It is possible that a share of operators not aware of the obligations under the EUTR would not take part in the surveys. Likewise participation in such surveys is also driven by incentives to participate, which in this case relate to size of costs – i.e. those facing higher DD costs have a greater incentive to participate to raise awareness of this issue. Although there are ways to avoid sample bias, it is not clear whether such methods were applied in all the above studies. Nevertheless, some of the studies provide an estimate of the share of importers not having been impacted by the EUTR: while two studies report similar figures (e.g. 47% in the GTF study did not mention incurring additional costs and 50% for the Norman study of importers did not put in place a timber sourcing policy in response to checks), the WCMC study indicated that 36% said the EUTR resulted in no additional or in negligible costs.
- It is unlikely that the samples appropriate represent the profile of the industry more broadly, in particular the split between large companies and SMEs. In theory, it could be expected that SMEs have fewer separate sources of raw material and/or less complex supply chains, and thus potentially smaller costs. Noting that only 4-5% of importers are large (Eurostat data), differences in costs by size would affect the overall figures. However, such a difference was not specifically reported in the consultation and the figures across the studies show that SMEs had comparable costs to large companies. In addition, most samples shown in the above table have a good (if not representative) contribution of SMEs.
- Costs of importers may differ based on the origin of imports, i.e. importers with imports originating from high-risk countries could face higher costs of DD System. It is not clear from the studies from where the respondents sourced their imported products. However, extending the logic that those with higher costs are more likely to participate, there is a risk that the samples are over-represented by those with more challenging DD associated with importing from higher risk countries. Based on Eurostat data, about 41% of EU timber imports (Comext data) come from high-risk countries (as defined according to ILAT scores).

Regarding the use of ***Monitoring Organisations***, stakeholders participating in the publicly available on-line survey carried out in the 2016 evaluation had divergent views on whether the EUTR led to additional obligations and burdens for businesses. Respondents from small and medium-sized companies indicated that the burden to resort to external support (e.g. services from monitoring organisations) was higher than for larger companies. More recent estimates provided by IMM (stakeholder interview) showed that a due diligence carried out by an external consultant would likely cost between EUR 1000-2000 per supplier each year, with costs likely to decline over time as suppliers have repeatedly been vetted. Therefore, an average SME importer with about 10 to 30 suppliers would incur a cost of EUR 10,000 to EUR 60,000 per year, which corroborates with the magnitude of costs provided in previous study.

Administrative consequences for SMEs

The Due Diligence obligation of the EUTR applies to all company sizes. The 2016 evaluation found that large companies seem to have been able to adapt better and more quickly to the new requirements than SMEs, with results suggesting that the obligations for business in the EU in setting up a DDS are less burdensome on large companies than on SMEs. The responses by the SMEs also indicate that they needed more external support (e.g. MO services) than large companies. Furthermore, SMEs may seem to be in a disadvantaged position due to their low economies of scale as the costs of the DDS need to be covered by a lower turnover (TESAF, 2016). The evaluation carried out in 2016 was based on a very small sample, which responded to an online public consultation. It showed that some SMEs consider compliance with the EUTR a challenge, due to difficulties in understanding the technical requirements of the DDS, lack of staff with adequate knowledge and experience necessary for exercising the DD and/or limited financial resources to update their existing control systems (TESAF, 2016). There were some indications that not all SMEs had an adequate DDS in place, meaning that the initial application of the Regulation has not yet sufficiently contributed to levelling the playing field for economic operators. Nevertheless, evidence showed that the EUTR compliance costs for SMEs could be reduced if companies apply cost effective practices; avoid expensive IT solutions; and benefit from external technical support for developing and applying adequate DDS (Hoare, 2015a).

Moreover, the independent evaluation of the FLEGT Action Plan found that a larger numbers of supply chains and more complex supply chains imply higher costs for practicing Due Diligence; with some companies (e.g. in the Netherlands) indicating that they have made changes to their supply chains in order to limit the number of suppliers, and avoid higher costs of DD. There are concerns that, due to the costs for DD on either side of the supply chain for producers and suppliers, operators might cease to procure from SMEs in (tropical) producer countries. At the same time, some SMEs (e.g. in the Netherlands) have stopped importing directly and instead source tropical timber from larger importers or focus on temperate timber to avoid high costs (TESAF, 2016).

The OPC carried out as part of this Fitness Check confirmed the above findings and showed that in general EU smaller businesses were expected to incur the greatest increase in administrative costs. This greatest increase in administrative burden from the EUTR is expected for EU micro businesses, with 17 (12%) of respondents expecting this to increase by more than 50% and a further 20 respondents (15%) expecting an increase of between 25% - 50%. The online public consultation also reflected that the view that the EUTR contributed to the creation of a level-playing field among the market players within the EU received a very mixed response, whilst the statement that the burden of EUTR implementation is shared among different stakeholder types in a fair and equitable manner was met a strong level of

disagreement, with 37 respondents (47%) either disagreeing or strongly disagreeing. A total of 9 respondents (from a total of 33, 27%) stated that they thought costs were disproportionate for operators, particularly small companies (2, 6%), with the sole burden place on operators and not dispersed across supply chains (2, 6%) (due to the lack of due diligence requirements for traders etc.).

This was also reported in interviews with CAs noting that medium and large companies had greater amounts of profits that could be reinvested into compliance with the EUTR, as the relative cost (of compliance) to the volume of timber imported is not substantial for larger importers. On the other hand, smaller companies, which make up the majority of companies affected by the EUTR, are subject to a higher burden as they are likely to be unable to invest the time and economic resources needed compared to other medium or large companies. Interviews with CAs confirmed that there was not at the moment a level playing field in the EU given that small and medium companies would likely not be in a position to put a pressure on suppliers (like larger companies would) to provide information about the origin of timber. According to those CAs, the fact that enforcement and implementation varied across MSs also meant that there was not level playing field in the EU.

On the other hand, some NGOs noted that in some companies in had been implementing responsible purchasing policies (either voluntary or mandatory) before the EUTR entered into force: surveys from IMM showed that many of those companies did not experience significant extra cost to comply with the EUTR as they were already implementing similar systems. Therefore, for those companies, the EUTR contributed to levelling the playing field as other companies were forced to implement similar due diligence requirements.

Forest Owners

In the case of small private holdings, the introduction of a DDS in their forest management system could have a significant impact on their economic competitiveness. A study by Sisak et al. analyzed this in detail in the Czech Republic. The study found that small forest owners were not aware of the existence of the EUTR, whereas larger forest owners were more familiar with the Regulation and its requirements. The costs of implementing the DDS in the Czech Republic was found to be EUR 550 for small forest owners, and EUR 1600 for large forest owners (Sisak et al, 2016).

SMEs in producer countries outside the EU

The EUTR requirements do not directly apply to companies supplying operators placing timber and timber products on the EU market. However, they are implicated by the Regulation through its due diligence obligation, through requests from EU operators for DD related information. Companies had to invest time in providing the requested "documentation," and those that did not provide documentation in time lost their EU customers. In other cases, mostly where companies already had FSC or PEFC certification, no questions were asked at all (TEREA; S-FOR-S; Topperspective, 2016).

In practice, supplying companies are required to provide evidence on legality of their timber supplies for the EU market. The aforementioned GTF (2015) study assessed the approach to DDS of 15 SMEs in producer countries. For the companies that provided information on the issue, it was found that the cost induced by the EUTR DDS requirement led to an average of 17 additional hours per week for legal compliance. One of the key findings from the GTF study was that exporters had to invest considerably more than importers to ensure a reasonable level of legal compliance. The reason is that exporters must consider both domestic legislation and the requirements of their customers who have to comply

with the EUTR, the Lacey Act or the Australian Illegal Logging Bill. In terms of absolute expenses, six of the companies that participated were able to quantify the costs of compliance with the national legislation and, based on these responses, the average annual costs due to the EUTR was EUR 33 083 ranging between EUR 10 500 and EUR 85 000 per year. It must be noted however, that the sample covered in this study was small – with only 15 SMEs providing information on this (Global Timber Forum, 2015b).

Findings from the OPC indicated that non-EU businesses (regardless of their size) were expected to be impacted to a similar degree to EU medium businesses, with large EU businesses expected to be the least affected.

Costs split by country

MS cost variation

CAs report about human and financial resources allocated to the EUTR application and enforcement in the Biennial Reports. This information gives the most accurate estimates of the regulatory costs, including measures for prevention (e.g. checks on DDS) and prohibition, as CAs reported directly on regulatory costs (TESAF, 2016) (see tables presented above).

Private sector cost variation

While there was no evidence in the literature, results from the online public consultation showed that a large number of respondents (90, 55%) have stated that they agree or strongly agree that the costs of implementing the EUTR have varied for authorities across MSs. A relatively mixed response, leaning towards agreement was provided with respect to implementing the EUTR for businesses.

Drawing together cost data to produce an overall estimate

The table below summarises the information and presents the key obligations per type of stakeholder along with further quantitative estimates where available.

Table F-3 Drawing together cost data

Type of stakeholders	Main obligations	Further estimates
Operators (importers)	• DD requirement • Costs of using monitoring organisations	Costs for the private sector depend on the existence of previous responsible sourcing policies, the type and complexity of traded products, the number and geographic location of suppliers, complexity of supply chains and number of products. Several studies provide estimates of the costs of EUTR compliance per year per importing operator as shown in the previous table. In order to reflect the above uncertainty due to expected problems of awareness and of attribution, the following reduced range for annual compliance costs for DDS under the EUTR are used in the subsequent calculations: • Low estimate: EUR 1,000 (low range from the from Global Timber Forum, 2015) • High estimate: EUR 15,000 (best estimate from the most recent source Norman, 2021) • Best estimate: EUR 10,000 (mid-point, taking into account uncertainties around the studies gathering cost data). UNEP-WCMC provides estimates of the number of importing operators (indicative of 2019 below): Total number of importing operators: 142,825. It should be noted that the estimates indicate large variations across Member States. There can be many factors affecting the reported number of operators, so these data are therefore considered to be subject to some uncertainty – e.g. it is not certain whether all those included are actually 'active' each year (i.e. placing products on the market). Data is also available from Eurostat detailing number of enterprises operating in different economic sectors[42]. This data provides some disaggregation by industry, but it does not provide sufficient disaggregation to isolate those businesses engaged in trade of products under the scope of EUTR specifically, nor does it differentiate those that are placing products on the market for the first time. Given the UNEP-WCMC data is more specific in this respect, this is considered the best data for use as a proxy for the number of operators. Both the GTF study and Norman (2021) noted that only about half of operators incurred additional costs in response to the EUTR. Applying this assumption leads to a best estimate of the total number of operators (based on the UNEP-WCMC reported data) who have incurred costs of around 71,413.

[42] See Eurostat's Structural Business Statistics (SBS)

Type of stakeholders	Main obligations	Further estimates
		Based on the above number of operators and estimated costs of compliance to EUTR, the following ranges were calculated: **Total annual costs of EUTR compliance for importing operators per year: best estimate mEUR 714 (within a range mEUR 71 to mEUR 1,071)** Based on extra-EU28 exports (approx. 62.5 million tonnes), the following is estimated: EUTR costs of compliance per tonne imports (for importing operators): best estimate EUR 11 (within range EUR 1 – 17)
Operators (domestic)	• DD requirement • Costs of using monitoring organisations	There is substantially less information available around costs to domestic operators. Some of the studies carried out so far indicate that for domestic operators, the additional costs from EUTR have been manageable. Furthermore, it is notable that the COWI study into expanding the product scope did not estimate costs for domestic producers (only importers), and EUTR does not place additional requirements on EU forest owners in terms of ensuring legality (Stakeholder interview). However, more broadly stakeholders agreed that there was some additional burden from setting up systems, collecting and managing information required to underpin due diligence systems, and as such the costs of EUR are not zero in all cases. One study estimated that the costs of implementing the DDS in the Czech Republic was found to be EUR 550 for small forest owners, and EUR 1600 for large forest owners (Sisak et al, 2016). UNEP-WCMC provides estimates of the number of importing and domestic operators (indicative of 2019 below): Number of domestic operators: 5,122,897. However, it is estimated that domestic operators reported will often include all forest owners. For example, this figure includes over 1.5m forest owners in Germany, many of those own very small patches of forest, and will not be acting as operators (and hence undertaking due diligence) every year, and a proportion of those will never place products on the market. Therefore, it is assumed that about 50% of the above reported domestic operators will be operators under the EUTR every year, approx. 2,561,450. The same assumption was made on the effective number of domestic operators having timber specific policies in place, and therefore, this number is further halved, to 1,280,724 effective domestic operators. Given the uncertainty both around the level of additional costs, the proportion of operators facing additional costs and the numbers of ***domestic operators*** active in the market each year, it is not possible to produce a reliable quantitative estimate of cost. **B**ased on the evidence available, it is likely that the burden placed on domestic operators by EUTR is not zero in all cases. However, it is likely that the costs are lower than for importers, this was confirmed in an interview with EU forest owners, indicating that pre-existing requirements for the sustainable management forest plan (in place before the EUTR) were more demanding than EUTR.
Traders	• Traceability requirements	There were no further estimates of costs to comply with traceability requirements for traders. These costs were assumed to be negligible in the COWI product scope impact assessment study.

Type of stakeholders	Main obligations	Further estimates
Exporters in producing countries	• Provision of information / evidence on legality of timber	There were no further estimates of costs for exporters in producing countries. One study provided estimates for the cost of the DD System in SMEs in producing countries and notes that exporters must consider both domestic legislation and the requirements of their customers who have to comply with the EUTR. Based on a small sample of 6 companies, the average annual costs due to the EUTR was EUR 33,083 (from a range of EUR 10,500 and EUR 85,000 per year). Interviews with exporting country partners also confirmed that there were additional costs (e.g. in Ukraine, Cameroon), but in other cases costs were negligible (e.g. in Brazil where necessary documentation is already required to accompany all exports as a consequence of domestic legislation)
MSs	• Costs of implementation • Costs of enforcement • Additional costs associated with seizing goods • Cooperation with other MS • Providing technical assistance	MSs CAs provide an estimation of the number of FTEs covering EUTR duties for both domestic and foreign imports, in the biennial reports. Given these gather data directly from MS and cover the implementation period, these are used as the basis for the analysis of CA implementation costs in this study. However, there are several important caveats and uncertainties associated with the reported figures: • the majority of the figures provided by MSs are difficult to compare due to the varying levels of detail provided by countries in their national reports • MS CAs were asked to report figures split by domestic and imported timber. In some cases, it is unclear whether these are separate resource or overlap, nor whether human estimates relate to FTEs or numbers of people working on EUTR • In many, cases, MS do not report or were not able to specify quantitative estimates. In addition, for financial resources, in some cases it is not possible to split out the budget dedicated to EUTR. • Some countries which reported unusually high numbers of FTEs might have reported also those not specifically devoted to EUTR (e.g. Latvia, Italy and Spain) • It is important to note that in some cases, MS have gone beyond the basic requirements of the EUTR – e.g. checks on transporters and traders in Sweden and Hungary, It is not clear whether the resources dedicated to these 'additional' activities are included in the reported figures, but technically these costs should not be attributed to the EUTR • In some cases the requested split of resources changed between reporting periods – namely the requested split of financial resources between the 2015-17 period to the 2017-19 period. Given the data across MS is more complete for human resources, this is used as the basis of the estimated costs in this study. Furthermore, given the clarity improved on the overlap between resources dedicated to imports and domestic operators, and specifying the number of FTEs, the results from the 2017-19 and 2019 reporting periods are deemed more reliable. We have also decided to exclude the human resource estimates provided by Latvia, Spain and Italy given their estimates, are outliers compared to the rest of the MS and do not seem to represent a credible estimate of FTEs dedicated to the implementation of EUTR. This presents

Type of stakeholders	Main obligations	Further estimates
		an average annual resource deployed by MS CAs to implementing and enforcing the EUTR of between 168 – 223 FTEs. Noting the caveat that these estimates may include resources dedicated to 'additional' activities not required under the EUTR, the study selects the lower bound as its central estimate of costs. Based on an average wage across MSs in the EU of EUR 40,000 per year, the total costs of EUTR compliance for MSs CAs is approx. mEUR 7.2 per year. This cost is comparable to the total cost of EUTR compliance reported for MSs CAs in the 2016 evaluation of the EUTR, which provided a range of EUR 20,000 to EUR 466,000 per year, depending on the MSs. This corresponds to an approximate cost per MS of EUR 243,000, and results in total costs for the EU of mEUR 6.8.
European Commission	• Developing and issuing guidance • Co-ordination of expert groups	There were no further estimates of costs for the European Commission. It was reported that DG ENV contracted consultancy services to support the implementation of approximately EUR 800,000 between the end of 2016 to 2020.
Monitoring organisations	• Costs of developing their internal competences, capacities and systems to comply	There were no further estimates of costs for monitoring organisations. But what is available suggests costs are comparable to those where operators develop own systems. There has also been limited take up.
Aggregate costs		**mEUR 722 (range from mEUR 79 – 1,079)**

Opportunities identified to reduce the administrative burden of the EUTR

The EUTR evaluation carried out in 2016 found that, in the course of the EUTR implementation, several cost-effective practices were identified. This included cooperation between MSs authorities as well as between them and counterparts in third countries. Secondly, the use of substantiated concerns received from third parties concerning compliance with the Regulation and operators developing DDS, which meet not only the EUTR requirements but also other legal instruments (for instance, the USA Lacey Act and the Australian Illegal Logging Prohibition Act) was identified as another cost-effective practice. Another cost-effective practice identified was for operators to use voluntary third-party verified schemes (voluntary forest certification) in the risk assessment and risk mitigation process. Finally, the use, for Due Diligence purposes, of the results from the EU negotiations with the VPA countries concerning legality definitions and contacts with national authorities was also identified as a way of reducing costs.

The role of certification schemes was also highlighted in the 2016 review (Hoare, 2015a). Since the entry into force of the EUTR, the main timber certification schemes have adapted their standards to reflect the scope of the legality definition embedded in the Regulation and have emerged as a practical option that can be used by EU operators to contribute to their risk assessment and risk mitigation process. That said, the review also noted that the role of third-party verified schemes in the implementation of the legislation could be further clarified in the EUTR Guidance document.

A more recent study carried out in 2019 by UNEP-WCMC which collected suggestions from 48 operators found that the most frequently suggested improvements included standardised implementation of the EUTR across MSs (with 16 respondents suggesting this), and improvements to the guidance provided to operators, such as lists of required documents (15 respondents suggested this). Other improvements to the EUTR suggested included changes to the implementation of DD requirements, such as being carried out by centralised authorities in countries implementing the EUTR at the sub-national level (suggested by two respondents), DD only being required for CITES listed species, moving the responsibility to exporters, removal of DD requirements for imports below a specified threshold, and exemption of products from plantations from DD requirements (one respondent each). Suggestions for resources to assist EUTR implementation included the provision of information on relevant/required documents for different source countries (suggested by six operators), creation of a list of EUTR-approved suppliers (suggested by four respondents), creation of a standard risk assessment tool to be used across all MS (suggested by two respondents) and the creation of a centralised platform to allow suppliers to submit information required for DD (one respondent).

Four respondents recommended changing the product scope of the EUTR, with two requesting inclusion of all timber products, one inclusion of all finished wood products, and the last requesting exclusion of bamboo. Furthermore, certification was also a theme which emerged, such as recognition for FSC, PEFC and other "credible certification schemes" as a route to EUTR compliance (six respondents); creation of a certification for wood origin (one respondent); or third party certification of legality (one respondent). Respondents also mentioned the need for better communication of the aims of the EUTR to suppliers/customers, as well as between CAs and source countries (seven operators). (UNEP-WCMC, 2020)

In addition, a background analysis of the 2017-2019 national biennial reports on the implementation of the EUTR published by UNEP-WCMC in 2019 found further suggestions for improving the implementation

of the EUTR reported by MSs. In particular, Austria called for the production of more timber source country overviews to further support CAs and operators, and recommended an enhanced exchange of information, such as customs data, between countries. This was also supported by Greece who suggested that the European Commission could organise annual or biennial technical seminars focusing on international exchange of information on EUTR implementation, and by Ireland who called for continued engagement with operators and sustained provision of information to assist with the application of due diligence. Latvia similarly highlighted that a greater focus on enforcement and cooperation between CAs is needed when inspections are conducted for large companies that operate across several countries, and for suppliers and producers in high-risk third countries. Furthermore, the Netherlands recommended that provisions be made for CAs to share customs data, and Portugal considered that it was "essential" for CAs to learn from the experiences of other countries and to work together for more harmonised and consistent implementation of the EUTR. This was also supported by Spain.

Other points considered were the development of a uniform process for checks and fines across all countries, recommended by Greece, as well as the need to continue working towards uniform implementation of the EUTR, suggested by Belgium. The MS further suggested investigation of whether the EUTR should be amended, stating that the Regulation has a "vague legal basis, with much uncertainty for CAs and operators". Finally, Hungary noted that timely drafting and adoption of proposals of CAs based on legal cases, facts and inspection practices can facilitate successful court cases and increase the awareness and adherence to EUTR obligations. (UNEP-WCMC, 2020)

Several of the above recommendations found in the literature were further reported in the online public consultation. For example, 9 (15%) stakeholders stated that the Regulation did pose additional burdens, citing the need for centralised, electronic databases to prevent the duplication of due diligence on timber sources used in multiple products, increase transparency and ease the administrative burden placed on operators and traders. 8 (14%) stakeholders offered positive opinions on the burden: stating that administrative burdens were necessary or proportionate to the risks and impacts of illegal logging (5, 9%), or offered the opportunity to establish a new 'baseline' of business best-practice (3, 5%). Stakeholders also referenced a lack of clear definitions within the EUTR as compromising the objectives of the Regulation (6, 10%), particularly in regard to risk mitigation (Article 6), legality (Article 2), and defining adequate due diligence systems (Article 6). 17 respondents (55% business associations, 35% company/business organisation) stated that third party certification schemes should be favoured and recognised as contributing to due diligence, with 3 business associations stating that such certification should be given a 'green lane' under the EUTR.

Costs associated with the FLEGT licencing scheme

Aggregate estimate of costs

The key literature source containing information regarding the costs of the FLEGT Regulation was the Evaluation of the EU FLEGT Action Plan published in 2016. (European Commission, 2016) This document covers the first 11 years of implementation (2003-2014) of the EU FLEGT Action Plan. This FC does not consider the overall costs of the FLEGT Action Plan, but this source has been considered and reviewed given that the FLEGT Action Plan covers VPAs which are in scope of this FC. Furthermore, although this information does not cover the full implementation period under review in this Fitness Check, it still

provides a valuable source of information regarding experience up to 2014 (and hence remains relevant for this Fitness Check).

The evaluation was based on a wide-ranging consultation process that included an independent evaluation undertaken by an external consultant, surveys, single and multi-stakeholder workshops, targeted interviews, as well as unsolicited inputs from stakeholders. The main report published by the European Commission was consulted upon, as well as the accompanying staff working document and the report published by external consultants. Furthermore, a special report on EU support to timber-producing countries under the FLEGT Action Plan, carried out by the European Court of Auditors was also consulted. (Auditors, 2015)

The costs related to the FLEGT Action Plan originate primarily from EU and MS funded projects and programmes. The evaluation from 2016 found that the total investments under the FLEGT AP for the period 2003-2014 across activities made by the EU, its MS and other sources (including producer country governments, civil society and the private sector) amount to an estimated total of EUR 935 million (European Commission, 2016). However, only a proportion of this was spent on VPA signed and negotiating countries: mEUR 346 by the Commission and EU MSs and mEUR 38 from other sources.

The evaluation found that the cost of the VPA process in terms of time was substantial, with most stakeholders recognising that this was a consequence of its complex and comprehensive nature. In Congo, people thought the process was too long as too many issues were included, therefore more focus would be needed in the VPA process. (TEREA, Evaluation of the EU FLEGT Action Plan (Forest Law Enforcement Governance and Trade) 2004-2014, 2016) It must be noted however that although many sources were consulted in the evaluation, the figures presented should be considered indicative as information was often based on a limited number of respondents and the information gathered through the evaluation surveys was incomplete (European Commission, 2016).

The above findings were confirmed in the online public confirmation with a high number of respondents having stated that they agree or strongly agree that the costs of implementation for the FLEGT Regulation were too high for businesses (73, 46%) and authorities (68, 44%).

On request Commission services were able to provide additional data directly regarding resources invested in the VPA programme since 2014, as presented in Table F-5 below.

Cost estimate split by actor

Overall, the online public consultation indicated a mixed response as to whether the burden of FLEGT licensing schemes and its implementation was shared among different stakeholder types in a fair and equitable manner. The section below explores the costs by type of stakeholders.

Companies in producer countries

Companies in VPA countries have to comply with the TLAS and wood tracking system requirements. VPA countries covered in the 2016 evaluation of FLEGT Regulation include Cameroon, Central African Republic, Congo, Ghana, Indonesia and Liberia, although it is highly unlikely that these countries have invested any money for compliance. For many companies, the more rigorous application of legality frameworks has involved the adjustment of their standard operating procedures, adjustment of and/or investment in software and/or technology, rescheduling of positions and responsibilities within

organisations or even addition of new staff. Compliance with TLAS may also include compliance with legislation that covers health and safety in companies, social security, and contracting conditions, so that additional investments have to be made in personal protection and safety equipment, higher salaries and related allowances in accordance with the law. In some cases this has led to companies that had been operating informally for many years to get registered or obtain environmental permits (TESAF, 2016). This was further confirmed in a recent study (DG INTPA, 2019) noting that the VPA process has slightly contributed to reducing SME's costs paid as informal taxes globally; however, it notes that in Cameroon and Indonesia, there was evidence that the share of SME costs paid as formal taxes had gone up.

The cost burden placed on exporters depended on the existing processes exporters had in place, and in turn the treatment of such systems by the TLAS. For example, companies that had private sector certification before TLAS generally did not have to make major adjustments. Some VPAs recognise such certifications. In Indonesia, where SVLK certification is obligatory for most companies, FSC-certified companies had to invest additionally in SVLK certification, at a cost of EUR 2,000 - 3,000 every two years (TESAF, 2016). Additional information on the costs of certification and acquisition of licences by Indonesian exporters was provided through interview with Indonesian authorities and directly by the EU FLEGT Facility, as presented in Table F-5 below.

The online public consultation results indicate that, expectedly, a greater increase in administrative burden is expected for non-EU businesses (compared to EU businesses), although the size of the businesses does not appear to have an effect on the increased burden, with similar results reported for each non-EU businesses size.

Competent and customs authorities

Interviewees from CAs noted that customs also incurred costs, however the time spent by custom authorities in inspecting imports only became significant when there was an issue with the license; when issues arise, substantial time can be spent in communications between parties, including the CAs, with drastic increases of cost for both the competent and custom authorities. It was noted though that the majority of checks on imports would have no issue reported and the time spent would thus be minimal.

Approaches from CAs to establish IT systems differed, with some MSs developing new systems entirely dedicated to FLEGT (an example cost for the IT system in one MS was about EUR 200k), while others have expanded existing systems at a relatively low cost and others use the EU system and such IT costs are minimal compared to staff costs.

Cost estimates split by MS

Three groups of countries were identified within the context of the 2016 FLEGT Regulation evaluation: countries with a signed VPA (6 countries); countries negotiating a VPA (9 countries) and non-VPA/non-MS countries (31 countries). The table below shows an overview of the estimated average amounts invested in FLEGT Regulation for the period 2003-2014 in these countries for all action areas: including use of legislation, promoting legal trade, support to timber-exporting countries, financing and investment safeguards, support to private-sector initiatives, public procurement policies and action to address conflict timber.

Table F-4 Estimated Average amounts of investment in FLEGT AP (TEREA, Evaluation of the EU FLEGT Action Plan (Forest Law Enforcement Governance and Trade) 2004-2014, 2016)

Country Group	VPA signed (€M)	VPA negotiation (€M)	*Non-VPA/non-MS (€M)*	Total VPA signed and negotiating (€M)
EC/MS	206.1	140.1	*223.2*	**346.2**
Other sources (including the national government, civil society and public and private sector enterprises)	24.9	12.64	*15.6*	**37.6**
Total per country group	**231.0**	**152.7**	***238.8***	**383.8**

The table above shows that, where there is more investment by the Commission and MS, there is also more support from other sources, including national governments, civil society and public and private sector enterprises. In total, in:

- the six VPA signed countries, an amount of 231.0 €M was invested in FLEGT Regulation;
- VPA negotiating countries the total investment amounted to 152.7 €M.

The total investments for the three categories of countries amount to 622.5€M. Excluding the non-VPA / non-MS given it is implied that these costs do not relate to the VPA,s this presents a total cost invested in the VPAs of mEUR 384. The source finds that this would imply that the remainder of the total expenditure on FLEGT AP (935.5 €M), i.e. an amount of 313.0 €M, would have been spent within the EU for other 'global' and 'multi' activities under the FLEGT AP. The table also indicates that the total amount invested by the EC and its MS in specified producer countries amounted to 569.4 €M (TEREA, 2016).

The study also shows that there have been differences in FLEGT AP investments for the three distinct groups of partner countries outside the EU. According to the 2016 Evaluation, the reason for these differences may partly be due to a generally longer involvement of the VPA signed countries than the countries currently with a VPA under negotiation, also reflecting the fact that development of many VPAs have paused. In addition, the differences in FLEGT investments may also reflect the advance towards implementation of the TLAS elements, which additional efforts and therefore higher costs. The non-VPA/non-MS countries have received support for FLEGT related actions considered relevant and of priority, without going through the processes that characterise the VPA (TEREA, 2016).

The study also found that a limited number of MS has been providing significant support for the implementation of the FLEGT AP either with funding or human resources. This funding has been largely allocated for the implementation of support to producer countries. According to the study, FLEGT Regulation support by MS has been limited to essentially eight MS, with the United Kingdom providing the largest contribution, followed by Germany, the Netherlands, Sweden, Denmark, France, Finland and Luxembourg (TEREA, 2016).

Drawing together cost data to produce an overall estimate

The table below summarises the information and presents the key obligations per type of stakeholder along with further quantitative estimates where available.

Table F-5 Drawing together cost data to produce an overall estimate of costs of the FLEGT Regulation

Type of stakeholders	Main obligations	Further estimates
European Commission and EU Member States	• Conduct negotiations to conclude FLEGT VPAs. • Costs to develop the IT system FLEGIT	Between 2003 and 2014, an estimated mEUR 346 was spent by the Commission and MSs on all activities under the FLEGT Action Plan related to VPA countries (Signed and negotiating). (FLEGT AP evaluation) Note: this excludes reporting funding under the Action Plan in non-VPA/non-MS countries, as it is uncertain what proportion may relate to 'VPAs'. Since 2014, an approximated mEUR 70.3 was spent by the former DG DEVCO (now DG International Partnerships) in terms of financial commitments to the FLEGT VPAs, in addition to requiring 0.25 of an FTE to cover each individual VPA in an EU Delegation (noting that this varies from one country to another) (data provided directly by INTPA). DG ENV have also invested resources over the period from 2014. This includes around EUR 400,000 in consultancy support for monitoring, around mEUR 1.4 investment in FLEGIT and IT systems, and human resource costs of 2.5 FTEs (Data provided directly from DG ENV) To estimate total resource costs, total FTEs are combined with an average assumed wage of EUR 60,000 over 6 years of implementation from 2014.

Partner countries	• Conduct negotiations to conclude FLEGT VPA.
	• Developing a license schemes via a timber legality assurance system (TLAS).
	• Initiate legal and governance reforms.
	• Verification of legality of timber and issue of licenses.
		Between 2003 and 2014, an estimated mEUR 38 was spent by partner countries on all activities under the FLEGT Action Plan related to VPA countries (Signed and negotiating). (FLEGT AP evaluation)
		
		Costs for a licensing country: Indonesia
		• ***Indonesian public authorities:***
		  ○ The 2016 evaluation of FLEGT reported that the Indonesian government invested approximately mEUR 20 into the VPA process. (FLEGT AP evaluation).
		  ○ The Indonesian LIU invests around USD 100,000 pa in maintaining the ILK system, and has a budget of USD 200,000 for office and staff, with additional support from FAO to fill in the gaps. There are also costs for developing the online tracability system and system integration (Data provided through stakeholder interviews)

	• Auditing of legality assurance system.	• ***Independent monitors***
		  ○ The FLEGT AP evaluation reported that
		• ***Indonesian exporters (Certification):***
		  ○ The 2016 evaluation of FLEGT reported that the: *direct costs of SVLK certification (compulsory for most companies) are approximately Rps 30 – 40 M per company; a company has to be re-audited every 1-2 years (at similar costs)… So far approximately 1,000 big companies have been certified and 2,350 SMEs (GoI subsidises certification of SMEs), with a total estimated cost of €5 M.* (FLEGT AP Evaluation)
		  ○ Interview with stakeholder in Indonesia suggested the costs of certification were in the range of USD 600-700 for smaller players. There was a budget of mUSD 1.2 per annum to cover certification of smaller players (although it is not clear if this is all spent each year). Interviewee also noted there were around 4,200 players in the system, but was unable to provide a split by size (Stakeholder interview)
		  ○ Data provided by the EU FLEGT facility suggests certification costs range from EUR 392 – 1690 depending on size of actor, but that these are fully subsidized for households and small businesses (data provided directly)
		  ○ The data presents a wide range of costs with some, but not close corroboration. The annual budget to cover small businesses (mEUR 1.2 per annum) corroborates with the costs estimated in the FLEGT AP of the initial certification costs. This value also sits within the range when combining the certification costs provided by the FLEGT facility with overall numbers of operators. As such a total certification cost to date of mEUR 5 is adopted for this analysis.
		• ***Indonesian exporters (licences):***
		  ○ Interview with stakeholder in Indonesia suggested the costs per licence of USD 8-15 (Stakeholder interview)
		  ○ Data provided by the EU FLEGT facility suggests licence costs range from EUR 12-15 (data provided directly)
		  ○ *Combining the top and bottom values of this range with the numbers of FLEGT licences received to date suggests a cost range of mEUR 0.9 – 1.7*
		• ***Indonesian concessions:***
		  ○ The 2016 evaluation of FLEGT reported that the: *cost for certification of concessions is estimated to be 300 M Rps/concession of 100,000 ha. Based on distribution of concession size an estimated €15 M has been invested in certification of natural forest and an additional €10 M might be needed every 2 years for certification of plantation forest. The above mentioned direct certification costs only refer to the audit costs. Indirect certification costs (i.e. cost for preparation of the company in order to reach a certifiable level) are generally estimated to be at least as high as the direct costs. There would thus have been required an additional (one time) €25 M for indirect certification costs.*
		  ○ No further information on costs to concessions was provided by interviews

<table>
<tr><td></td><td></td><td>
No data is available on the costs to certifiers / licencers (although these may be covered by the charges levied for issuing certificates / licences, nor for periodic evaluations
Example costs for a negotiating country: Malaysia
In an interview, the government of Malaysia provided the following costs:

Costs of developing 3 TLAS (for each State): mMYR 55, or an equivalent mEUR 11 (conversion rate MYR 1 = EUR 0.2)
Costs for one-off audit of the system: MYR 500,000 or an equivalent of EUR 100,000
Costs of annual implementation: mMYR 3.5, or an equivalent of EUR 700,000. Note that it was not clear from the interview whether this also covered some costs for exporters, licensing, etc.. Assuming 8 years of implementation since the Peninsular Malaysia TLAS came into force in 2013, this equates to a total cost of mEUR 5.6.

</td></tr>
<tr><td>MSs CAs</td><td>Support negotiations and implementation.</td><td>
Some interviewed MSs CAs provided estimates for their costs, either in FTEs or in costs. Costs were deduced from FTEs, by applying an average wage in the EU public sector of EUR 40,000 per year.
<table>
<tr><th></th><th>FTE</th><th>Equivalent Cost</th><th># licenses cleared by CA in 2019</th></tr>
<tr><td>Belgium</td><td>1</td><td>40,000</td><td>2,531</td></tr>
<tr><td>Netherlands</td><td>2</td><td>80,000</td><td>9,034</td></tr>
<tr><td>Germany</td><td>3.5</td><td>140,000</td><td>4,853</td></tr>
<tr><td>Spain</td><td>3.5</td><td>140,000</td><td>1,764</td></tr>
<tr><td>Total</td><td>10</td><td>400,000</td><td>18,182</td></tr>
</table>
Based on the above figures, the average cost by a MS CA per license is approximately EUR 22. From the start of licencing in 2016, to the end of the 2019 reporting period, 93,636 licences have been validated by CAs. This results in a total estimated cost for MS CA (in terms of staff) mEUR 2.1

The above costs only cover staff costs of monitoring and enforcement. Through the interviews, 2 MS (Belgium and Spain) reported an estimate of upfront costs to set up IT systems of respectively EUR 200,000 and EUR 260,000. Two more MS reported no upfront costs. It is possible that other MS also incurred upfront costs, but without a wider sample, these are challenging to estimate.
</td></tr>
<tr><td>MSs customs</td><td>Ensure only FLEGT licensed timber enters the EU.</td><td>Interviewees from both the European Commission and CAs noted that customs also incurred costs, in order to carry out checks on timber imports. The majority of checks on imports are routine checks and the time spent can thus be minimal; however, the time spent</td></tr>
</table>

		by customs can become significant in cases where there is an issue with the license. CAs through interview indicated that the costs for customs were approximately the same as the costs incurrent by the CAs, so it is assumed that customs authorities incur a cost of approximately mEUR 2.1, as MSs CAs.
Importers	• Cost of coordinating FLEGT licence Cost of changing supply chains	CA interviewees noted that importers faced costs between EUR 60 (low estimate) and EUR 100 (high estimate) per license to arrange import under a licence. Based on the number of licenses (93,636), it is estimated that total costs for importers would be between mEUR 5.6 and mEUR 9.4.

Case study: Cost of VPA for Indonesia

The 2016 evaluation of the FLEGT Action Plan provides estimated costs for the implementation of the VPA in Indonesia.

- Contribution from the European Commission: mEUR 20
- Contribution from the UK (as part of their Multi-stakeholder Forestry Programme): between mEUR 18.8 (low estimate) and mEUR 60
- Contribution from government of Indonesia: mEUR 20
- Total contributions for the VPA in Indonesia: between mEUR 58.8 and mEUR 100

Comparing the above total costs with volumes of imports cleared by customs between 2016 and 2019, during which the licensing system was operational, provides a relative cost between EUR 29 and 49 per tonne of import. However, when comparing the overall costs over the period with the outcome of this process (i.e. legal logging only from Indonesia as there are no other VPA implemented), this results in a cost of about EUR 336-338 per tonne of import.

Literature review of benefits - EUTR

A review of the relevant literature has helped to identify a number of benefits as a result of the EUTR. This review focuses on capturing the broader benefits outside the key objectives (i.e. environmental impacts) that are analysed in detail in Annexes A-C.

Impact on Deforestation

Key stakeholders believe the EUTR to have been effective at reducing deforestation and forest degradation, as well as reducing emissions from deforestation and improving their sustainable management (European Commission, 2016). It was estimated that about 90% of imported timber was covered by the EUTR, suggesting that its impact was wide ranging across EU states. That said, the report notes ambiguity as to the exact nature of its impact, and was unable to provide an estimate as to the reduction in illegal timber trade. A more in-depth analysis on the impact on deforestation has been provided in Annex B which concluded there was generally a positive trend in size of forest area across MSs, indicating decreasing rates of deforestation. However, following a review of the literature it has been difficult to attribute tangible benefits as a result of decreasing deforestation. Further to this, the assessment of the prevalence of illegal logging in Annex A has highlighted the challenges in crediting the EUTR with changing levels of illegal logging (or deforestation) due to a lack of quantitative time series data outlining to assess the impact. Whilst the literature does appear to support the view that deforestation is decreasing, it is more challenging to both attribute this impact to the ETUR, and to ascertain the extent of which a reduction in deforestation is due to reduced illegal activity. It is therefore difficult to describe the expected benefits, such as reducing the economic, environmental and social costs associated with illegal logging.

Improved Transparency

Analysis has shown that following the implementation of the EUTR EU importers have been influenced by the level of transparency in supplier economies (Encarnación Moral-Pajares et al, 2020), confirming the hypothesis presented by the authors that the EUTR has promoted EU imports of timber from countries that have highly transparent government institutions (Encarnación Moral-Pajares et al, 2020).

Raising Awareness

A clearer benefit of the EUTR is the increased awareness of the issues and challenges associated with the timber industry. One report (European Commission, 2016) stated that, through the EUTR, MS have helped to increase awareness of the problem of illegal logging through campaigning. Through raising awareness of this issue, the EUTR has also led to benefits internationally, influencing non-EU countries to introduce demand-side policies aimed to reduce illegal logging. For example, it has encouraged other non-EU states to comply with the requirements and in some cases implement then (Norway, Iceland, Lichtenstein), and to implement their own legislation to combat the problems associated with the timber industry (Australia, Switzerland). Other countries, such as China, Japan and Korea have been encouraged to begin looking at introducing their own measures to achieve similar objectives to the EUTR. For instance, as noted earlier in the report, China has implemented its first dedicated legislation to prohibiting the import of illegal timber products in 2019 (Chinese Academy of Foresty, 2019). Further to this the EUTR, has encouraged some third countries to pursue FLEGT VPAs with the EU as increased flows from Indonesia into the EU have been attributed to compliance with the EUTR, encouraging additional countries (which have not been specified) to follow their lead as the sole issuer of FLEGT licenses (European Commission, 2016), in a bid to increase their own exports.

Improved awareness as a result of the EU Regulations is supported elsewhere in the literature, with a further view stating that the Regulation has helped to improve awareness of timber problems, particularly illegal logging, as well as its underlying causes (e.g. challenges of law enforcement of illegal logging in certain MSs). As well as raising awareness of timber issues for MSs, there is also evidence of greater recognition of the issues from within industry which has begun to examine its sourcing and supply chain commitments in greater detail (Patel, 2019)

However, although the EUTR has helped in part to improve general awareness on issues relating to illegal deforestation, there remains a lack of awareness of the requirements placed upon operators. As noted in Q2.k, the literature contains mixed evidence regarding the impact of the EUTR upon operators' awareness of their obligations under the EUTR, with one survey concluding that a significant proportion of operators were either unaware of its existence or only partially aware of its requirements (WWF, 2019). It is evident that although evidence of improving awareness exists within the literature, there remain limitations to the benefits of this. The apparent lack of awareness amongst operators is an example of this. It is important to note that evidence reviewed on the awareness of the EUTR, and in turn the requirements for change, has been fairly limited, and is likely to benefit from inputs from the OPC and targeted consultation.

Impacts for specific stakeholders

Businesses

The EUTR has allowed EU MSs to utilise combined market leverage to avoid the potential distortions in the EU which could occur if specific MSs did not have to abide by the same rules (European Commission, 2016) It can therefore be expected that the Regulation has helped to support the creation of a level playing field, thus helping to prevent the flow of less expensive timber into EU states. It can be expected that this will help to benefit businesses within MSs who were otherwise forced to compete with businesses which were not obliged to adhere to the same regulations.

Despite this, there remain some mixed feelings regarding the impact of the EUTR on business amongst stakeholders. A number of exporters have considered the Regulation to have been advantageous to their business, for example through the creation of a level playing field, whilst others (particularly from tropical countries) have cited challenges such as weak enforcement, increased bureaucracy and a lack of regulatory guidance (European Commission, 2016). It is also evident that a substantial number of operators remain unaware of the EUTR (WWF, 2019). This has suggested that the scope for greater benefits across stakeholders, but further resource is required to improve awareness across industry.

Local Population

Anecdotal evidence suggests that local residents and communities have also been positively impacted through the EUTR as a result of trickle down effects. For ex., EUTR inspections have recently led to a significant increase in the confiscation of illegal timber by Hungarian authorities (although it is important to recognise that whilst the EUTR has encouraged such actions, national authorities could have taken such actions irrespective of the ETUR). It is expected that the primary beneficiaries of the increases in confiscated wood in Hungary will be those in the local Hungarian population as the ownership of the timber will be transferred to local governments, NGO's and churches free of charge. The timber can be used for practical purposes such as firewood as well as other environmental and social needs. (UNEP-WCMC, 2020). Local populations in exporting countries are also reported to benefit

as a result of the EUTR through promotion of the rule of law including the rights of indigenous peoples and local communities (Patel, 2019).

One limitation of the analysis of benefits to specific stakeholders is the reliance upon anecdotal evidence, for instance the example of confiscated timber within Hungary, and a lack of information to support a more robust assessment of possible benefits. With respect to the evidence available, for example on supporting business, the analysis does also not conclusively show that the EUTR has delivered a benefit to this group, with mixed feelings amongst stakeholders being acknowledged.

Impacts for specific countries

Resources and support have also been allocated to each EU MS to help enforce the Regulations. It has been noted however, that with regards the EUTR, there have been great discrepancies in the resources available for its implementation. This has led to differences in the training provided across MSs, with some able to offer little to no training at all to support enforcement in recent years. (WWF, 2019).

Additional revenues could also accrue to EU MS CAs, although there are differences between the monetary costs and benefits borne by different MS. One case study has been provided on Romania, which reported a total additional benefit of €235.4m per year (consisting of: Illegal logging in Romania becoming legal €93m/year, additional revenue collected €7.7 m/year, additional VAT revenue collection €18.6m/year and higher price for FSC certified products €116.7m/year) (TEREA, 2016). These monetised benefits are estimates, rather than reported figures, but are based on evidence collected during MS visits and detailed stakeholder engagement. The benefits for the year are compared with significantly smaller costs of €63.9m/year. It is important to note however that these benefits and costs are estimated values, and it is should not be assumed that each EU MS will experience such clear monetary savings. Further information to gain a better understanding as to whether the monetary value gained by Romania is typical of an EU state, or if this nation has benefitted more than most due to its comparatively high levels of forest area.

Literature review of benefits - FLEGT Regulation

As with the EUTR, non-monetary benefits have been accrued through the FLEGT Regulation. This review focuses on capturing the broader benefits outside the key objectives (i.e. environmental impacts) that are analysed in detail in Annexes A-C.

Transparency

A 2018 report from the Commission to the European Parliament and the Council (European Commission, 2018) focussed on the benefits from the VPAs introduced under the FLEGT. It reported that the introduction of VPAs and the associated improved policy dialogue has helped support reform, leading to improved governance and legal reform. These benefits may somewhat be reflected in the progress made by individual countries under their VPAs, as shown in Table F-6.

Economic Impacts

There is evidence of benefits for exporters following the implementation of the FLEGT. In a small survey of 40 Indonesian exporters in 2017 shortly after licencing commenced, more than 70% reported that exporting wood had become easier as a result of licencing. Up unto this point, the same exporters noted that there had been as yet no perceptible increase in export volumes (or prices) since FLEGT

licencing, but ~85% expected an increase in European demand once the concept of FLEGT licencing was more widely known (IMM, FLEGT VPA Independent Market Monitoring (IMM), 2017). In the same presentation, in a separate survey of EU traders, only 14% recognised an increase in demand for timber from Indonesia since licencing commenced, but 73% agreed they would give preference to FLEGT licenced timber over other competing sources.

There is also a suggestion in the literature that the two regulations have led to synergies, as noted in a more recent 2018 report from the Commission to the European Parliament and the Council (European Commission, 2018). Specifically, VPA partner countries are supporting the achievement of compliance with EUTR requirements through the use of the TLAS (although as the only licencing nation this is only the case for Indonesia). A recent survey (IMM, 2018) shown that stakeholders predominately agree that the VPA has helped to ease the importing of timber from Indonesia into the EU, with a majority also at least partially agreeing that they would prioritise FLEGT-licensed timber when compared to unlicensed timber as this helps to reduce their risk. Further to this, Indonesian licensed products have continued to grow in terms of EU imports, both in terms of volume and also comparatively with other states (IMM, 2019) highlighting the impact of the VPA. However, any benefits are limited given that only Indonesia is currently issuing licences, and hence also limited to EU MS with greater levels of trade with Indonesia.

A further economic benefit is increased tax revenue as a result of an increased level of legitimate timber trade. One such example is from the Republic of Congo, which reported increased income generated from the issuing of permits and fines to timber organisations (European Commission, 2016). This is an area where improved enforcement would help to increase monetary benefits. The initial FLEGT IA (European Commission, 2004) estimated potential additional tax revenues for three case study countries, assuming they signed a VPA. The potential tax benefits gained per annum were calculated as $2.2m for Brazil, $16.5m for Cameroon and $15.6m for Indonesia, under the assumption that illegal timber activity switches to legal (rather than being reduced or switching export market). Data does exist on government revenues derived from forestry (International Budget Partnership, 2018), however, the data is often found to have many inconsistencies.

Impacts for specific stakeholders

One of the aspects of the FLEGT which has helped benefit local communities is that engagement in the VPA process has led to a promotion legal reform within that country. In Congo the VPA process was credited with helping to ensure a wide-ranging and thorough consultation process on the Forest Code reform, including with indigenous communities across forest regions (Bollen, 2020). Further to this, the VPA process has helped to support community rights due in part to the commitment contained within VPAs to understand and monitor how the VPA impacts on livelihoods and try to minimise negative effects (FERN, Improving Forest Governance: A Comparison of FLEGT VPAs and their Impact, 2013).

Impacts for specific countries

The benefits of the Regulations have been gained by both EU and non-EU states. Although many international countries are not directly impacted by either Regulation, benefits have been achieved globally through a 'raising of the bar' that has occurred as a result of the Regulation. (TEREA, 2016). This has helped to not only improve forest governance, transparency and awareness of the issues linked to illegal deforestation, but has helped to enhance the use of forest certification systems by companies.

It was noted in the mid-term evaluation (European Commission, 2016) that this has had led to numerous benefits in non-EU states, such as improved forest governance, increasing the involvement of civil society, improving transparency and accountability in the forest sector, and levelling the playing field.

The benefits achieved through the FLEGT are particularly prevalent in countries which have begun the process of implementing a VPA, which serve the purpose of allowing the partner country to issue FLEGT licenses to combat illegal timber harvesting and trade. Policy action associated with the FLEGT is expected to lead to increased tax revenue, with the Republic of Congo reporting this to be the case, as well as income generated from the issuing of permits and fines to timber organisations (Commission, Evaluation of the EU Action Plan for Forest Law Enforcement Governance and Trade (FLEGT), 2016) Additional revenues could also accrue to EU MS CAs, although there are differences between the monetary costs and benefits borne by different MS.

FLEGT support has also been provided to partner countries to help ensure its objectives can be met. Whilst much of this support is aimed at improving transparency in order to help ensure information shared with the EU is credible, other aspects have helped to improve capacity building and good governance (TEREA, 2016) to the benefit of the partner countries. Improved forest governance within VPA partner countries is considered to be one of key benefits of the VPA process. A number of case studies are available within the literature citing the unprecedented stakeholder engagement with civil society as a result of the VPA process, in partner countries including the Republic of Congo, Cameroon and Liberia (FERN, 2013). The initiation of the VPA process has helped to encourage wider consultation with local stakeholder groups, leading to improved forest governance across the sector. The benefits accrued through improved forest governance have been analysed in further detail in Q1.d.

Resources have been provided from the EU in order to support partner countries to achieve the objectives of the FLEGT Regulation. This support has been targeted specifically at countries which meet set criteria, including a high prevalence of illegal logging and a strong commitment to combatting this issue (European Court of Auditors, 2015). The 2015 Performance Audit continues to note that a key support measure has been the allocation of human and financial resources, although it has been noted that this has been hindered by the absence of a central FLEGT fund. This has prevented funding being allocated most efficiently through a definitively outlined set of criteria. Much of the support provided has been aimed at helping partner countries establishing the TLAS, enforcement of national legislation and the issuing of licenses and is therefore directed at the institutions responsible for this, as has been the case in Indonesia and Cameroon. That said, some VPA countries have received consistent and long-term support, including Liberia, Indonesia and Ghana, but other VPA partner countries have received no or very little support, including the Central African Republic and Guyana. In addition, countries have received support despite not negotiating a VPA (Brazil, Malawi, Ethiopia and Uganda). Indeed, “FLEGT support for processes in non-VPA countries is increasingly considered to be equally relevant for improving forest governance globally, and non-FLEGT funds are also used in support of global FLEGT processes” (TEREA, Evaluation of the EU FLEGT Action Plan (Forest Law Enforcement Governance and Trade) 2004-2014, 2016).

Table F-6 Forest governance changes in VPA countries

Country	VPA ratified	Licences issued	TLAS	Domestic timber	CAs assigned	Resources available	Stakeholders consulted	Legislation	Issues
Cameroon	✓	x	–	✓*	x	x	✓	✓****	TLAS in progress, Preferred by Nature high timber legality risk profile despite VPA.
Central African Republic	✓	x	–	x	x	✓***	✓	✓****	TLAS in progress, Preferred by Nature high timber legality risk profile despite VPA.
Republic of Congo	✓	x	–	✓*	x	–***	✓	✓****	TLAS in progress, capacity constraints noted, NECPon high timber legality risk profile despite VPA.
Côte d'Ivoire	X	x	x	✓*	✓**	✓***	✓	–	Negotiations in progress.
DRC	X	x	x	x	x	–	✓	✓	Negotiations in progress.
Gabon	X	x	x	x	x	x	x	–	Negotiations in progress.
Guyana	X	x	x	x	✓**	✓***	✓	✓	Negotiations in progress.
Ghana	✓	x	–	✓*	✓	✓	✓	✓	TLAS in progress, Preferred by Nature relatively high timber legality risk profile despite VPA.
Honduras	X	x	x	x	✓**	✓	✓	–	Negotiations in progress.
Indonesia	✓	✓	✓	x	✓	✓	✓	✓	Revision of TLAS led to a dispute with EU in 2020.
Laos	X	x	x	x	✓**	✓	✓	–	Negotiations in progress.
Liberia	✓	x	–	✓*	✓**	✓	✓	–	TLAS in progress Preferred by Nature high timber legality risk profile despite VPA.
Malaysia	X	x	x	x	x	x	–	x	Negotiations on hold.
Thailand	X	x	x	✓	✓	–	✓	✓	Negotiations in progress.
Vietnam	✓	x	✓	✓	✓	✓	✓	✓	Preferred by Nature relatively high legality risk profile despite VPA.

*Legend: *Not yet operational, **Joint body with EU only, *** Capacity building for public sector only, **** Clarification of scope of legality only*
✓- In place; — - In progress; x - Not in place

Annex G – Relevance of the EUTR and FLEGT Regulation

Illegal logging and trade

Policies to reduce and abolish illegal trade of timber remain relevant. Between 2000 and 2012 net losses of areas with more than 50% tree cover amounted to about 8% globally (Hansen, et al., 2013). While regional variations exist, the rate of tree cover loss is found to be increasing in tropical rainforest ecozones with an additional 0,2 Mha annually (Hansen, et al., 2013). More recent estimates do not show clear reversals of these trends (e.g. (Curtis, Slay, Harris, Tyukavina, & Hansen, 2018) (Global Forest Watch, 2020)), with annual primary humid forest loss hovering around 3- 4Mha and global forest loss between 20-30Mha annually. Figures provided by FAO, using a different methodology, point to losses in primary forest cover of 14 Mha, 7 Mha and 26 Mha for Africa, Asia and Latin America respectively (FAO, 2020) between 2000 and 2020. FAO estimates that the global rate of primary forest cover loss has slowed between 2010 and 2020 (12 Mha) as compared to 2000 to 2010 (loss of 35Mha). This picture is true for all continents except for Africa, where the rate of primary forest cover loss increased between 2010 – 2020. Estimates by Global Forest Watch and FAO on changes in forest cover differ for other forest domains due to different assumptions and methodologies. This is illustrated by considering Russia, in absolute terms the country with the largest forest area. Global Forest Watch assesses that in absolute terms, net tree cover loss in Russia was larger than in any other country between 2000 and 2012 (36.5 Mha). FAO, conversely, registers a net gain in forest cover for Russia between 2000 and 2010 of 0.5 Mha.

Studies that attribute rates of deforestation to specific factors reveal complex patterns of multiple causes. A review by Geist and Lambin (2001) suggests that most often agricultural expansion, infrastructure expansion and logging drive deforestation simultaneously. Cases in which legal or illegal logging is the sole and only factor causing deforestation are rare. This finding also holds in more recent case studies (Austin, Schwantes, Gu, & Kasibhatla, 2018), even though logging could still be the prime factor causing deforestation in selected regions. This complex interplay makes it impossible to put a precise figure on the share of forest loss caused by logging

Illegal timber trade at a global level has remained persistent since the FLEGT Regulation was initiated in terms of geographic location (Russia, Brazil, Indonesia and Malaysia), driven by high profits and forest conversion – with timber entering domestic, rather than international markets. Estimates of illegal logging and related timber trade differ substantially, due to the nature of illegality and because of the differences in the scope of estimation, definitions of illegality, data sources and estimation methods used. Despite reductions in the production and import shares of illegal wood products in some major producer and consumer countries (Kleinschmit, Mansourian, Wildburger, & Purrett, 2016) , illegal logging and timber trade at the global level remains persistent. Most illegally-produced tropical hardwood timber is produced in the informal sector and consumed in domestic markets; only a small portion (nearly 10% of total global trade value of wood products) is internationally traded, which has usually better quality and higher profit margins than domestically-marketed timber. Timber from illegal forest conversion for commercial agriculture has become an increasingly large proportion of global illegal logging and related timber trade, whereas the role of traditional, large scale logging has diminished in illegality. High profitability of wood products and agricultural products grown on lands

converted from forests and consumer preferences for special wood species drive illegal logging and related timber trade. Most illegal primary wood products from tropical forests are from Brazil, Indonesia and Malaysia, and imported by China and India. Russia has become the largest single source of illegal timber from temperate and boreal forests (Kleinschmit, Mansourian, Wildburger, & Purrett, 2016).

There is also a continuing perception that nearly a third of timber from the 15 VPA countries is illegal (European Commission (EC), 2020). The perceived level of risk assigned to the VPA countries overall and individually (by percentage/number of EUTR MS (recognising that the level of risk assigned to a country can vary e.g. regionally or depending on supply chains) averages 27%.

More research is needed to better document and quantify the magnitude of illegal logging and trade in order to understand whether EUTR and FLEGT Regulation have an impact in reducing it (Pepke, et al., 2015). Broader and closer global cooperation across geographic regions and sectors is needed to combat illegal logging and trade, alongside better data that directly measure illegal logging and related timber trade; measurements of quantities and values of illegal production and trade originating from informal logging, industrial logging, forest conversion and other illegal activities; and also a better understanding and quantification of statistical errors and inconsistencies in the conventional production and trade data (Kleinschmit, Mansourian, Wildburger, & Purrett, 2016). In both respects, the FLEGT Regulation (and to a certain extent the EUTR) could be viewed as relevant.

Alongside a continuation in illegal logging activities, imports of timber and timber products remain important for the EU, retaining the risk that EU imports could drive illegal logging and that illegally logged timber could be present in the EU market. However, patterns of imports and exports have changed over time (although it is difficult to disentangle which effects are due to the Regulations and other variables).

Global trade in timber and timber products decreased sharply due to the global financial crises after 2008 to 2015, with this decrease most pronounced in Australia, the USA and the EU-28 (Masiero, Pettenella, & Cerutti, 2015). Imports by countries such as China and India were much less affected. And while the value of EU imports has increased slightly in the most recent years, the value of imports in China (as well as the US) has increased more strongly. As a result, the global share of imports by the EU-28 decreased slightly from 37% to 36%, while the value of imports by China increased from 12% to 15%. Seven EU states are major importers of timber. Germany is by far the largest importer, although it does not buy a significant amount from tropical countries. France, Belgium, the Netherlands, Belgium and UK are the main importers and their shares have not changed much over the years (Centrum tot bevordering import uit ontwikkelingslanden (CBI), 2017).

As Moral-Pajares et al. ((Moral-Pajares, Martinez-Alcala, Gallego-Valero, & Caviedes-Conde, 2020)) point out, seven countries supply up to three quarters of total imports of the EU-28 (in 2017). These countries are Russia, China, the USA, Ukraine, Norway, Brazil, Canada, Belarus and Indonesia. Conversely, countries with which the EU has reached a Voluntary Partnership Agreement (VPA) (Cameroon, Central African Republic, Côte d'Ivoire, DR Congo, Gabon, Ghana, Guyana, Honduras, Indonesia, Laos, Liberia, Malaysia, Rep. of Congo, Thailand, Vietnam) only supply a minor share of direct imports to the EU-28. Amongst these Indonesia and Cameroon are the largest exporters to the EU-28 (4.0 and 2.3% respectively in 2017), while imports from the other VPA countries represent less

than 1.0% of the total. Imports of timber and timber products from China, with which the EU has a bilateral agreement on reducing illegal timber trade, amounted to 12.1% in 2017.

Detailed scientific assessments of changes in global timber trade, and the potential effects of FLEGT Regulation an EUTR policies include Masiero et al. (Masiero, Pettenella, & Cerutti, 2015), Andrighetto (Andrighetto, 2018), Becher (Becher, 2019) and Moral-Pajares et al. (Moral-Pajares, Martinez-Alcala, Gallego-Valero, & Caviedes-Conde, 2020). These studies document a trend whereby EU-28 tropical timber imports have slowly been substituted for non-tropical timber imports. This decline also holds for tropical timber imports from VPA countries. This trend is shown in trade data since the early 2000s, before the advent of the global financial crises in 2008 and before the actual implementation of FLEGT Regulation and EUTR policies. When considering the imports from VPA-countries to the EU-28, Australia and the US combined, then imports declined by 60% by volume and 34% by value between 2001 and 2013 (Masiero, Pettenella, & Cerutti, 2015). The import of logs captures this trend most strongly. While in 2001 about 51% of logs from VPA countries were imported by EU countries, this declined to only 10% by 2013. Conversely, China and India are currently the largest importers of logs from VPA countries. These shifts are explained both by increasing demand in Asian countries, resulting from an emerging middle class, as well as by outsourcing of manufacturing from EU countries to other countries. The effect of FLEGT Regulation and EUTR is thus difficult to disentangle from this trend and cannot be seen as the sole contributor to changing trade flows.

While the years after 2013 have witnessed an increase in timber imports by EU countries, helped by further economic recovery, this did not reinforce EU-28 trade with VPA countries. On the contrary, overall EU-28 imports from VPA countries declined from 9.64% in 2012 to 7.52% in 2017. Apart from of the Republic of Congo, all VPA countries registered a decline in exports to the EU-28 over this period (Moral-Pajares, Martinez-Alcala, Gallego-Valero, & Caviedes-Conde, 2020). A similar picture emerges from the analysis by Becher (Becher, 2019) focusing on the implementation of EUTR regulation up to 2018, revealing a declining trend of both tropical and non-tropical timber imports by the EU-28 before 2013. After 2013, when EUTR implementation started (as well as a period of general economic recovery), an increasing trend of imports can be witnessed. But increased imports only originate from temperate regions.

These studies highlight a shift towards EU-28 imports from temperate countries. The findings discussed could indeed be viewed as supportive of a conclusion that the share of illegal imports to the EU-28, particularly from tropical countries, is decreasing, possibly as a result of the EUTR and FLEGT Regulation. However, a key caveat of these studies is that they are based on official trade statistics, which may not capture trade in illegally logged timber well. For instance, it has been suggested that several West-African countries ship illegal timber to Brazil, which is subsequently exported as Brazilian timber to EU markets (UNEP-WCMC, 2018).

Nonetheless, one estimate of illegal trade flows suggests a considerable decrease in illegal imports by the EU-28 (TEREA, Evaluation of the EU FLEGT Action Plan (Forest Law Enforcement Governance and Trade) 2004-2014, 2016). This is based on one study providing estimates on illegal trade flows (Lawson & MacFaul, 2010), quoted in (TEREA, Evaluation of the EU FLEGT Action Plan (Forest Law Enforcement Governance and Trade) 2004-2014, 2016)). While many uncertainties on the precision of estimates remain, the data suggest that from 2003 to 2013 the volume of round wood equivalent (RWE) imported by the EU-28 decreased by roughly by half. When the FLEGT Action Plan was initiated in 2003, about

40% of illegal timber entering the EU-28 originated from Indonesia and several African countries (Cameroon, Gabon, Ghana, Ivory Coast, Liberia). The other 60% originated from Russia and other states on the periphery of the EU. By 2013, only 20% of illegal timber originated from African countries, mainly from Cote d'Ivoire and Cameroon. Illegal imports by other importers, including Japan, Korea and the US also decreased substantially. Conversely, China registered a large increase in imports of illegal timber, much of which originates in Russia and selected Asian and Pacific countries. Again, how much of the reduction in illegal imports by the EU-28 can be explained by EUTR and FLEGT Regulation, and how much is explained by structural changes in global trade is difficult to assess.

That said, illegal timber is still considered to be present on the EU market, although the number of operators and type of monitoring practices differ widely; they indicate that 5.2% of domestic timber and 36% of imported timber checked is illegal (European Commission (EC), 2020). For domestic timber and timber products 7,916 operators (16% of the total) were checked by 21 EUTR MSs and 5.2% were found not to be compliant with EUTR obligations and for imported timber and timber products 1,384 operators (approx. of the total 1% of the total of 131,678 in the EU) were checked by 28 EUTR MSs and 35.7% were found not to be compliant with EUTR obligations (European Commission (EC), 2020). Indeed, reports indicate that illegal timber continues to be imported to the EU-28, often through countries where enforcement of EUTR policies is weaker. Supply chains for illegal timber products are typically complex, and invariably involve corrupt practices facilitating illegal logging and illegal exports. Evidence about supply chains of illegal timber products makes clear that even with well negotiated VPAs in place, monitoring, controls and enforcement remain a major challenge. This particularly applies to countries with weak institutional capacity and fragile governance arrangements (e.g. (UNEP-WCMC, 2020).

However, many stakeholders point out that the exclusive focus of EUTR and FLEGT Regulation on illegal timber trade misses the broader policy goal of halting deforestation. Neither policy mechanism focuses explicitly on deforestation but FLEGT Regulation can still aid in reducing (illegal) deforestation (Tegegne, Cramm, & van Brusselen, 2018). However, it is also observed that during many of the VPA negotiations "fundamental drivers of deforestation and forest degradation are largely ignored because they make interventions messier and more political" (Rutt, Myers, Ramcilovic-Suominen, & McDermott, 2018). The single largest driver of deforestation is the expansion of agriculture and livestock rearing, fuelled by increasing and changing demand for food products, itself being driven by strong growth population particularly so in Sub-Saharan Africa (Alexandratos & Bruinsma, 2012) (Ordway, Asner, & Lambin, 2017). Global population, and aggregate demand for agricultural products, is not expected to peak before 2050 and pressure on forests will remain in the decades to come. In the process of converting forests to agriculture, timber can be viewed as an initial by-product, the actual illegal logging often done by numerous smallholders. In the absence of (or support for) alternative livelihoods these practices are likely to remain. For these reasons, the need to better align FLEGT Regulation and EUTR to policy ambitions on deforestation, including those of the EU itself, as well as international coalitions has thus been recommended (TEREA, Evaluation of the EU FLEGT Action Plan (Forest Law Enforcement Governance and Trade) 2004-2014, 2016) (Fern, 2020).

Product scope

The product list covered by the EUTR excludes various secondary or processed timber products such as some types of furniture, musical instruments, charcoal, coffins and various paper products (Probos, 2014) (Masiero, Pettenella, & Cerutti, 2015). Furthermore the list with products covered by EUTR

reveals inconsistencies, covering non-wood based products containing fibres from bamboo and rattan (Cowi A/S, Indufor and Milieu, 2019).The studies assessing shifts in trade between EU-28 and third countries quantitatively, as discussed in the previous section, focused on timber and timber products covered by the EUTR. The key observation that primary timber imports by the EU-28 have been declining for a considerable time (before EUTR and FLEGT Regulation implementation) may reflect the relocation of manufacturing of many secondary products from the EU-28 to third countries.

Secondary timber products comprise 18.6 % of the total of primary and secondary products combined (average over 2008 – 2013), but in terms of value they amount to 49.9% of the total imports by the EU-28 (Probos, 2014). Probos (Probos, 2014) explores the size and structure of trade in products not covered by EUTR with the UK, Germany, France, the Netherlands and Italy the five largest importers of secondary timber products not covered by EUTR. In terms of value, books are the most valuable item imported by the EU-28 not covered by EUTR, followed by other types of printed matter, chairs, charcoal, tables and kitchenware. The countries from which these items are imported vary per type of the product, but in most cases China and the USA are the largest supplying countries. A key exception is charcoal which is imported from a wide array of countries of which Ukraine, Nigeria, Paraguay, Cuba and Argentina are the largest.

While these data make clear that the share of secondary timber-based products not covered under EUTR is sizable, at least based on a measurement of value, it is less clear how much manufacturing of these products relies on the illegal trade of primary timber products and whether FLEGT Regulation and EUTR has an impact. The reasoning for this conclusion the quantitative studies available assess direct trade between the EU-28 and timber supplying countries for most of the products covered under EUTR, only. The studies neither consider non-EUTR listed timber products, nor indirect trade from timber supplying countries via, for instance, China to the EU-28. Again, these studies rely on official trade data that may not reveal much on illegal trade and shifts thereof. These are key knowledge gaps that studies need to address (Pepke, et al., 2015).

The absence of quantitative data on the reliance of non-EUTR timber products on illegal timber trade should not be equated with proof of the absence of such trade. Several studies suggest that illegal timber may be used in manufacturing of these products before they are exported to the EU-28. For instance (UNECE & FAO, 2018), highlight that illegal logging of timber in Russia's far East is widespread (80% of logging in this region is estimated to be illegal). The majority of this timber is exported to China where it is mixed with other timber sources before being re-exported, also likely ending up on markets of the EU-28. Russia has also continued to be the most significant wood-importing country for Finland.

As argued, in terms of value the market for products not covered by EUTR is sizeable, but expanding the scope increases the regulatory burden, costs that fall primarily on the operators in the respective sectors. Moreover, costs are notably higher when value chains, and the difficulty of establishing the origin of timber products uses, are more complex. Clearly, a trade-off exists between the gains in covering additional illegal flows of timber under EUTR, and the costs of doing so.

The EC commissioned a study to assess the impact of expanding the product scope covered by EUTR (Cowi A/S, Indufor and Milieu, 2019). The study provides insight into gains in coverage with respect to illegal timber trade and the associated costs (

Table G-1 below). The policy options in the Table suppress some of the variation in the cost-efficiency for the underlying the sub-items covered (more details are reported in (Cowi A/S, Indufor and Milieu, 2019). In the best case, for instance, including charcoal under EUTR has a cost of only 2 € per m3 of illegal RWE removed from EU markets, a cost-efficiency that is higher than the current product coverage. On the other hand, the best cost-estimate for wooden tools (at 64€ per m3) is higher than the best cost estimate for including all wood-based products (policy option C).The choice of including additional product categories should therefore diligently weigh costs and benefits of additional illegal trade covered and the desire to create a more level-playing field.

Therefore, which products to include is a political choice, also being governed by a possible motivation to create a level-playing field for EU-based producers of non-EUTR timber products (Cowi A/S, Indufor and Milieu, 2019). One noteworthy product group is printed media. The printing sector themselves mention unfair competition from non-EU suppliers as a concern, since imports of paper pulp or raw paper by EU-based printers are covered under EUTR, but imports of printed media are not However, including the printed media under EUTR may only have a limited impact on illegal trade in timber, while adding a significant cost burden to the sector (Cowi A/S, Indufor and Milieu, 2019). It is unlikely that the societal gains for including this product group under EUTR outweigh the associated costs.

Table G-1 Cost-effectiveness of expanding product scope of EUTR

Policy option	Product groups (CNs) covered under EUTS	Cost-efficiency (€ per m3 high risk RWE removed from EU market)	
		Best estimate	Alternative estimate
A	Current product scope of EUTR	3.9	15.1
B1	Current product scope extended with: Charcoal (4202); Wooden tools (4404, 4405, 4417, 4421, 8201, 8205, 8206, 8214); Furniture (4419-4421, 7009, 9401 – 9406).	5.6	15.1
B2	Policy option B1 extended with: Boats/Ships (8901 – 8907).	6.0	16.0
B3	Policy option B2 extended with: Musical instruments (9201 - 9208).	20.2	48.2
C	All products that may contain timber. Policy option B3 extended with: Printed media (4901 - 4911); Toys (9503 -9508); umbrellas (6601 -6603); Miscellaneous Manufactured articles (9603, 9604, 9606, 9608- 9610, 9614, 9615, 9619); Miscellaneous chemical products (3805-3807); Plastics (3912, 3917, 3920, 3921); Vegetable Fibres (5308, 5311); Filaments (5401, 5403, 5405, 5408); Staple Fibres (5502, 5504, 5507, 5507- 5511, 5515, 5516); Explosive (3604, 3605); Photographic (3703, 3704); Leather (4202); Straw (4601, 4602); Footwear (6403, 6405); Iron and Steel (7321); Machinery (8480); Electrical equipment (8518, 8527, 8529); Other vehicles (8708); Precision instruments (9017, 9023); Clocks (9102, 9103, 9105); Arms (9302-9305); Miscellaneous articles (9615); Art (9701 - 9705).	32.6	67.1

Source: Table based on Tables 1-3 and 1-7 from (Cowi A/S, Indufor and Milieu, 2019).

Annex H - Coherence of the EUTR and FLEGT Regulation

Internal coherence of EUTR

This analysis seeks to confirm if the EUTR is internally coherent, observing if its various components align in order to reach EUTR objectives. As such, it is necessary to gain an overview of the existence of any synergies or inconsistencies between actions which are expected to work together. This includes, inter alia, observing if terminology used within the EUTR is clear and understandable, roles and responsibilities are unambiguous, and prescribed actions are complementary to attaining objectives.

The analysis here has been split into the various themes of evidence encountered throughout the analysis, namely: clarity of definitions; due diligence systems; transposition into national legislation; roles and responsibilities; and product scope.

Clarity of definitions

Despite evidence noting that the EUTR effectively fosters collaboration and communication between MS, the even implementation and enforcement of the EUTR across the Union is yet to be realised. One factor behind this is the lack of clarity regarding certain terminology within the EUTR, meaning that actors can interpret provisions in different ways. In 2016, guidance documentation was presented to clarify certain aspects of the EUTR, including definitions of: 'placing on the market' (Article 2); 'negligible risk' (Article 6); and 'complexity of supply chain' (Article 6) (European Commission, 2016).

'Negligible risk'- under Article 6 (c) of the EUTR, due diligence risk assessment procedures should detail if timber or timber products present a risk of being illegally harvested (greater detail presented in the 'due diligence section below). Stakeholders have commented in EUTR/FLEGT Regulation Expert Meetings that the definition of 'negligible' is unclear, resulting in subjective views on 'negligible risk' being formed by relevant actors and also potentially impacting how it is ingrained in national legislation. This could result in DD systems assessing similar timber products at different risk levels, ultimately undermining the functioning of the market. As an example of potential issues this is causing, a recent import of teak from Myanmar was seized and rejected by Germany due the operator being unable to provide evidence of negligible risk (IEEP, 2020). Instances of similarly illegal timber have been documented as entering Europe through countries with weaker enforcement of the EUTR (Forest Trends, 2020). For a complete commentary on negligible risk and the challenges for implementation of prohibition that it created, please refer to the analysis of question 2b.

'Complexity of supply chain'- To help operators gather relevant information on due diligence risk assessments, Article 6(1)(b) states that information on '…the complexity of the supply chain' should be compiled by operators. Members of the EUTR/FLEGT Regulation Expert Group have stated during their 27TH meeting that a clear definition of 'supply chain' could assist in improving traceability/transparency of reporting. This would ultimately assist in identifying the physical/financial owner of the timber or timber product at specific stages of the supply chain in addition to clarifying the legal responsibilities at each stage (European Commission, 2020). However, the European Economic and Social Committee (EESC) has previously commented that "the expected impact of controlling the risk of placing illegal products on the market is progressively reduced as operators in the supply chain get nearer to the final

consumer", meaning that subsequent operators (i.e. not the initial operator placing timber products on the market) do not have the obligation to establish DDSs and are limited to provide only basic information (European Commission, 2009).

"Traceability'- Article 5 of the EUTR requires traders to provide basic information on their suppliers and buyers, to facilitate the traceability of timber/timber products along the supply chain once placed on the market. Evidence suggests that the interpretation of the level of detail of record keeping by traders is nuanced, and there is a need for a standardised data requirement (Hungarian Government, 2018). Without traders abiding by a minimum set of criteria in their record-keeping, achieving a detailed overview of the supply chain and potential non-negligible risk products may present challenges to attaining the objectives of the EUTR.

Due diligence systems (DDS)

At the core of the EUTR is the establishment of a DDS by organisations involved in the placement of timber/timber products on the EU market. Evidence suggests that various components of this requirement are unclear, or can lead to various coherence-related issues throughout implementation. The EUTR requires a DDS to comprise of three main elements to prevent illegal timber/timber products entering the EU market and supply chain: information gathering, risk assessment and risk mitigation. Organisations may establish their own DDS or outsource these tasks to a monitoring organisation (MO) that is officially recognised by the European Commission. The lack of take-up of MOs among EU operators – to date the European Commission has only acknowledged thirteen MOs – may have missed an opportunity for a more standardised approach to DDS, hindering advancements of EUTR. As previously stated under question 2.c, this low number of MOs could be linked to operators' perceived low risk of being checked by CAs, low levels of enforcement or the obligation on MOs to notify CAs of major failures of operators to properly use their due diligence systems. Multiple stakeholders throughout the roadmap feedback noted that further guidance is required to clearly define what constitutes 'good' DDS. European Commission guidance documentation produced in 2020 outlines key elements of due diligence systems, but criteria which could indicate best practice are not incorporated. In addition to this, differentiating the interaction between Article 4 and Article 6 can lead to difficulties in court cases establishing where infringements within the EUTR have occurred (personal communication with the European Commission, 2020).

Under Article 6 (1) (b) of the EUTR, it is stated that DDS should include risk assessment procedures which take into account a set of risk assessment criteria. If such an assessment concludes that the risk is non-negligible, then a set of measures must be carried out to 'to minimise effectively that risk'. However, the Article does not explicitly state that such non-negligible, potentially illegally harvested timber or timber products cannot be placed on the market. Furthermore, there is no mention of legal consequences if inadequate DD risk assessment procedures are implemented. Guidance documentation has pointed to this and has suggested that "if the risk cannot be mitigated to a negligible level the operator should not place the timber on the EU market" (European Commission, n.d). As commented on in the sections above, the unclear definition of 'negligible' and the lack of metrics to define this further adds to legal uncertainty. In addition, while the country profiles produced by WCMC are useful sources of information for CAs when they country risks, but these documents may not necessarily hold up in courts as they are guidance documents. Including a link to such documents in the Regulations may provide a more robust legal basis for this in the future.

Transposition into national legislation

The EUTR requires MS to embed the Regulation within national laws, requiring the establishment of appropriate penalties for infringements of the Regulation into national legislation. Such fines relate to the placing of illegally traded timber or products derived from such timber on the market, due diligence and traceability provisions of the EUTR (UNEP-WCMC, 2018). Evidence suggests that the enforcement of the EUTR by national law varies considerably, dependent upon the trade regimes established within each EU MS. For example, MS with large and lucrative domestic markets for timber often enforce large fines and strict criminal prosecutions for infringements. This is in contrast to countries with smaller domestic production and larger share of imports, early movers of implementation of the EUTR, but with softer, more collaborative measures applied to traders and operators (McDermott & Sotirov, 2018). This is further emphasised by the large disparity in the inclusion of criminal sanctions and maximum fines by MS for EUTR infringements, creating an uneven playing field within the internal market (WWF, 2019).

Furthermore, multiple MS have encountered difficulties and delays in transposing the DD requirements of the EUTR into national law, as the concept is not always easily interpreted into the various legal approaches of MS (WWF, 2019). This can feed into the aforementioned narrative, where relatively wealthy MS, importing significant volumes of high risk wood, and have active civil societies are more likely to both support the EUTR and implement its requirements in a timely manner. In addition, the delays in adoption of the relevant legislation to enforce the EUTR in some MS has led to often sporadic checks on operators and monitoring organisations (European Commission, 2016). Even though it might be arguable that this is not an issue related to internal coherence of the legislation, it is noteworthy to mention that this indicates an uneven implementation of the Regulation and subsequent functioning of the internal market which could ultimately create a race to the bottom and could increase the risk of trade disputes (EFI, 2015).

Roles and responsibilities

Under the EUTR 'operators' can also be classified as 'traders', which can result in a lack of clarity on the obligation to implement DD systems, prohibit certain activities and provide traceability information. Due to the differences in such obligations dependent on the specified role of actors, operators may seek to become traders in order to defer due diligence responsibilities. Multiple stakeholders noted in the roadmap feedback that further guidance for operators is required in order to enable a level playing field amongst operators of various scales, and between operators and traders (European Commission, 2020). Furthermore, evidence suggests that this lack of clarity can result in the exploitation of customs loopholes, where operators are based outside of the MS (or even the EU) they are importing to, resulting in difficulties in enforcing legislation upon them.

On a similar point, the Environmental Investigation Agency noted in its feedback submitted in the context of this evaluation that operators sometimes use different entities to import timber or timber products on their behalf, which are not considered obliged to comply with the DD requirements of the Regulation (European Commission, 2020). Furthermore, some companies avoid compliance with DD requirements by clearing their goods at customs in another European country than their registered country. These companies avoid controls in the importing MS because they are not registered with any legal set-up, and also avoid controls in their home country because the import is not registered there (European Commission, 2020). This further adds to the difficulties in understanding who is placing timber/timber products on the market.

Product scope

As the EUTR is based on a restricted list of timber and timber products, as detailed in its Annex, there is continued placement of illegally-sourced timber/products onto the EU market, for items outside the EUTR product scope. The annex of the EUTR lists relevant product classes included under the regulation, but has been criticized for not covering certain product types, particularly in relation to printed material, packaging and some furniture items (IEEP, 2020). As such, significant volumes of such products continue to be imported to the EU, meaning illegally harvested timber is prevalent in the internal market, including in the form of books, magazines and newspapers (Levashova, 2012). A recent consultation by the Commission and more recent report by COWI (Cowi A/S, Indufor and Milieu, 2019) revealed that many stakeholders did not consider the product scope of the EUTR as optimal, and felt that more timber products should be included (European Commission, 2017). Recent research implies that 92% of the total amount of Round Wood Equivalents (RWE) are covered by the EUTR (Cowi A/S, Indufor and Milieu, 2019). However, a screening of all CN 8-digit codes reported that only 44% (i.e. 334 out of 777 CN 9-digit codes) were currently covered by the product scope (Cowi A/S, Indufor and Milieu, 2019). The task, therefore, is to determine key additional code to add that would lead to the greatest protection from illegal timber.

Another summary report (European Commission, 2017) states that the EUTR's incomplete coverage include CN49 products including printed books, newspapers, pictures, and other products of the printing industry, such as manuscript typescripts and plans (European Commission, 2017). Pulp and paper of Chapter 47 and 48 of the Combined Nomenclature exclude a large range of products from falling subject to the Regulation including hospital articles, hygiene items (i.e. toilette paper, tampons and napkins for babies) and book covers, papers, cups and other dish-like items, to name but a few (Preferred by Nature, n.d.). The difficulty here appears to be that the wood fibre composition of these items is often hard to take apart and hence creates difficulties in the assessment of whether the final product is of high risk. Paper and pulp imports continue to be a large market, where China remains a leading import source to the EU (European Commission , 2013). This particular dependence on China as an importer raises concerns to the level of legality risk regarding paper and print products.

Packaging (HS 4415 and 4819) is included in the Annex of the EUTR, however, a clause is added that excludes packaging used as material to support or protect other products on the market as well as an exception of bamboo-based and recovered products (European Commission, Undated). Additionally, packaging which is shaped or fitted to contain specific articles are not included either (e.g. musical instrument case). Hence, when these wood products are placed on the market as packaging of another product, they are not covered by the Regulation.

Another large market of wood products that is greatly excluded in the EUTR relates to furniture. The recent report by COWI shows that a particular scope of concern appears to be the coverage of wood in furniture (CN94), of which 25% of the total volume of wood is not covered by the EUTR. While it is considered that most wooden furniture is covered (HS 9403 30, 9403 4, 9403 50 00, 9403 60, 9403 90 30) a number of products are exempt or not included. Bamboo furniture, medical, surgical, dental and veterinary furniture is not included under the Regulation (Preferred by Nature, n.d.). Additionally, seats (CN 9401) of various types such as dining room chairs, office chairs, garden chairs, sofas and armchairs are entirely excluded from the EUTR (wooden articles of furniture not falling under CN 4420 are also excluded (NEPCon, 2016). Again, China is the leading import region of wood furniture to Europe

(Oliver, 2020), once more raising concerns that the exclusion of these products from the Regulation creates a loophole for high risk timber products to enter the European market.

Internal coherence of FLEGT Regulation

Sub question 10.b. analyses the internal coherence of the FLEGT Regulation and VPAs through the assessment of how the various components under the Regulation function together to achieve its objectives. It also looks into coherence issues linked to the VPA negotiation process. Evidence suggests that the FLEGT Regulation is a good example of internal policy coherence, with the main previous evaluation of FLEGT Regulation reporting positively on the internal coherence of its provisions (Terea, S-for-S, & TopPerspective, 2016). This view was corroborated in the online public consultation, with 53% of respondents stating that there were no coherence issues, while the other did not outline instances of such issues (question 54). In addition to some mandatory elements to include (see the below sub-section on Minimal content and ensuring legality in VPAs as a foundation for coherence), it is important to note that VPAs must cover all timber from the VPA country (domestic timber and any imported timber) and that the legality system must regulate timber destined for the EU, but all timber being exported. Despite the positive overall assessment of the FLEGT Regulation and the common provisions of VPAs, some issues exist with regards to the coherence of the FLEGT Regulation and the coherent implementation of the VPAs.

Discrepancies between license form and actual shipment and/or customs declaration, including in the interpretation of HS codes

Issues related to the processing of licenses are elaborated upon in detail in Annex E. Of particular importance to coherence, in 2019, FLEGT Regulation licenses were validated within three days of receipt in 69.7% of cases, and 676 FLEGT Regulation licenses out of 33 302 received were subject to checks beyond the basic verification of the license (including, for instance, contacting the Indonesian license information unit for clarification) by 19 MS (European Commission, 2020). CAs of EU MS commonly report challenges with regards to FLEGT Regulation licenses. There are mismatches between the Harmonized System (HS) codes contained in the FLEGT licence and the HS codes contained in the EU customs declaration, which represent the majority of issues identified. Indeed, in 80% of licenses where custom validation found irregularities, the problem was due to mismatching HS codes by exporting authorities and EU customs authorities (EU FLEGT Facility, 2019). Almost one third (29%) of respondents to an open public consultation question on the FLEGT Regulation (question 7) thought that the different interpretation of HS codes between the EU and partner countries was a significant or a very significant challenge. This issue was also raised during the interview conducted with FLEGT CAs. Other mismatches between information contained in the shipping documents and the FLEGT licence are commonly cited (e.g. on species, weight, quantity, country code or invoices) (EU FLEGT Facility, 2019). These issues were also raised in feedback provided by stakeholders (European Commission, 2020). Finally, a last type of mismatch can occur, whereby FLEGT Regulation licenses are issued for HS codes outside of the scope of the FLEGT Regulation and of the Indonesian VPA (European Commission, 2020) (UNEP-WCMC, 2020). This predominantly concerns FLEGT licences issued for small and medium enterprises. In Indonesia, companies remain divided on whether FLEGT Regulation has made exporting to the EU easier (ITTO/IMM, 2019).

Clarifying these mismatches may be time consuming, with the fact that the system is paper-based and that language barriers may exacerbate this problem. Almost 40 000 paper-based FLEGT Regulation licenses are issued annually in Indonesia, which creates a high level of complexity when following the

paper trail and increases the risk of errors. In addition, if the paper-based license needs to be revised, it needs to be physically sent back for edits, which takes more time than if licenses were electronic (EU FLEGT Facility, 2019). The difficulties and inefficiencies related to the paper-based licenses were also discussed during the interview conducted with FLEGT CAs. There is an awareness of mismatching issues, both in Indonesia and within the EC. The problems were touched upon during the 26th meeting of the EUTR/FLEGT Regulation Expert Group in December 2019, and Indonesia has already taken steps to address them, for instance by issuing circulars to clarify questions/problems and by disseminating licensing requirements among main stakeholders (European Commission, 2014) (EU FLEGT Facility, 2019). At MS level, the Dutch CA reported in its 2019 annual FLEGT Regulation report that mismatches of HS codes and their correct use remains an issue on which they are working. To seek to resolve such issues, they received an Indonesian delegation comprised of government and sector associations (NVWA, 2020). Improving information exchange between EU and Indonesia, perhaps in the form of guidance and training, could minimise mismatches. In addition, agreeing on a comprehensive list of products with associated agreed customs and TARIC codes during VPA negotiations (and with the involvement of DG TAXUD in this process), could avoid mismatches with codes between license and EU customs (stakeholder interviews with FLEGT CAs). Currently. the EU and Indonesia are considering a move to electronic licensing to address the aforementioned issues linked to paper-based licenses by conducting a pilot project; however, the process is not yet in place and is dependent upon the functioning of both SILK and FLEGIT (EU FLEGT Facility, 2019). In Germany, only one electronic license has been received to date via the pilot project, even though they contacted some operators to encourage them to switch to e-licenses (stakeholder interviews with FLEGT CAs).

Coherence issues around procedures for checks and reporting across MS

Incoherence has been observed with regards to checks and reporting procedures. Agencies undertaking checks on licenses and license shipments under FLEGT Regulation (i.e. either customs or CAs, or both) decide to follow-up with additional verification based on different criteria, potentially indicating a mismatch in communication between countries. This could also create an uneven EU playing field, whereby operators import products covered under the Regulation from MS with less stringent procedures (European Commission, 2019). DG TAXUD explained that traders may choose entry points to the EU where MS controls are less stringent, but that risk information forms can be shared by customs authorities to help others find the at-risk traders (stakeholder interviews). This practice would contribute to minimising the risk of a strongly uneven EU playing field.

With regards to questions of procedures, MS report on the quantities of imported timber in different manners and provide varying degrees of information more broadly speaking. For example, in 2018, Romania did not submit licence information in a suitable format, and some countries provide incomplete or insufficiently detailed customs data (for example, data from Greece was incomplete, the UK did not provide customs data associated with FLEGT licence numbers, and the Netherlands data for retrospective customs declarations was not associated with licence numbers) or failed to do so altogether (Italy, Romania) (UNEP-WCMC, 2018). Moreover, in the FLEGT Regulation Background Analysis and in the Annual Report of 2018, considerable delays in reporting were noted for some MS, in addition to missing information. In the reporting for the year 2018, only 22 MS had submitted their annual reports by the 30th of April 2019 deadline, 5 more had done so in May, and 1 in July. Additional information and clarifications were then required, and data analysis finally begun in Sept 2019, with 6 datasets still incomplete, 3 outstanding queries and 3 missing customs and/or licence data. The last update was received the following January. The fact that in 2018, the differences between the number

of licences received by MS (31 785) and the number of shipments cleared for import by customs (23 238) was very significant called into question the credibility of the licencing scheme, and highlight the problems associated with reporting. It is noteworthy that this discrepancy was even greater before the data cleaning mentioned just above, and that is was further reduced in 2019 (UNEP-WCMC, 2019) (UNEP-WCMC, 2019). These delays in reporting and incomplete information can create several issues, notably: the creation of discrepancies, possibly leading to data not being always being comparable (even though significant amount of data cleansing, standardisation and formatting and communication take place to address these issues); delays in identifying and addressing issues; and the impossibility to share data publicly in a timely manner, therefore leading to transparency concerns as MS cannot be accountable in due time (UNEP-WCMC, 2020).

Cooperation between CAs and Customs Authorities within the EU, and communication/resolution of issues with Indonesia

Within MS, the division of competencies assigned to the CAs and the Customs Authorities through two different Regulations can be challenging when the two are different entities (UNEP-WCMC, 2020). During an interview, one CA noted that while communication with customs used to be unproblematic, issues have arisen as custom authorities want to gain autonomy and, therefore, take actions that are the reserve of CAs. Regarding cross-border interactions within the EU, MS which provided information on collaboration with other CAs and with the EC in 2017 reported positively on these experiences (European Commission, 2019). However, in 2018, one of the conclusions from a workshop with MS was that coordination and implementation could be improved, for instance via informal meetings or specific enforcement groups involving FLEGT Regulation CAs, customs, DG TAXUD, and other stakeholders (European Commission, 2020). At the international level, multiple MS noted difficulties in using the Indonesian Timber Legality Information System (SILK), such as a lack of access to the data on SILK by CAs, license data not existing in the database, and missing signatures, amongst other problems (European Commission, 2019). These issues were touched upon in previous sections. More broadly, in a workshop with MS summarised in the minutes of the EUTR/FLEGT Regulation 27th Expert Group meeting, communication with Indonesia to resolve issues was deemed slow (European Commission, 2019). MS, on the other hand, are divided on this topic: 8 MS reported that communication with Indonesia's LIU was generally good and 3 said that response times became quicker, while 2 said responses took too long and 4 that they took longer than the 21-day limit set in the VPA (UNEP-WCMC, 2020). From the Indonesian side, an example of coordination issue between EU CAs and Indonesian authorities is given by the NGO Kaoem Telapak about the Hermanos B.V case. It argues that, in this case of fraudulent use of wrong HS codes, Indonesian authorities could have prevented the exports if the Dutch authorities had shared information about the case (Kaoem Telapak , 2020).

Minimal content and ensuring legality in VPAs as a foundation for coherence

As a foundation on which internal coherence can be built, VPAs should have a minimum content and licences should ensure legality. All VPAs share a minimal content which includes a TLAS, with a legality definition (ideally aligned with EU definition, as elaborated upon in question 10c), supply chain control, verification of compliance, FLEGT Regulation licensing, and independent audits. TLAS also lay out frameworks for monitoring and evaluating implementation and commitments to improve transparency and other aspects of forest governance (EU FLEGT Facility, n.d.). One potential avenue for greater alignment shared in the open consultation with regards to the content of VPAs was to address loopholes within the FLEGT Regulation by requiring FLEGT licenses to list all species and timber origins present in a product (question 54). Another loophole was mentioned stakeholder interviews, whereby a timber

product containing metal in it is not considered a timber product (stakeholder interviews with CAs). Due to the large discrepancies between the situation in VPA-negotiating countries and the context needed to start issuing licenses, issues take time to solve, and there is a need for engaging CAs at the development and implementation stages of VPAs, in order to resolve issues efficiently (stakeholder interviews with NGOs).

But going beyond the presence of these elements in its text, the VPA should ensure legality, meaning that its TLAS should be credible and function well. As stated in effectiveness question 1.a, 10 MS consider VPA processes to contribute towards minimizing the presence of illegally harvested timber and timber products on the EU internal market, 16 stated the contribution of the VPA processes was unknown, and 1 thought they did not contribute to the objective (UNEP-WCMC, 2019). One concern voiced during the interviews was that whether FLEGT-licensed timber is always legal is uncertain, given governance-related issues (stakeholder interviews with NGOs). This raises questions as to whether the efforts made to resolve coherence issues during the FLEGT Regulation custom checks at EU borders are worth pursuing, considering the uncertainty about the impacts VPAs processes have had on curtailing illegal logging in exporting countries. Keeping this concern in mind, Indonesia recently started to issue licenses and the other countries have not yet reached this stage; therefore, the effects of VPAs could materialize once countries are farther ahead in their implementation. In addition, in the case of the Cameroon VPA, and even without licensing in place yet, the Ministry of Forestry expressed the view that its VPA is clear, and that it contributed to better enforcement of existing forest protection regulations, amongst other benefits (e.g. transparency and stakeholder engagement) (targeted consultations).

Coherence between EUTR and FLEGT Regulation

Sub question 10.c requires an analysis of the various components of both the EUTR and FLEGT Regulation simultaneously, to observe if these components align with each other to reach their respective objectives. As such, the analysis will present an overview of the existence of any synergies or inconsistencies between actions which are expected to work together. The EC has previously assessed that the EUTR and the FLEGT Regulation licensing scheme are coherent with each other (European Commission, 2016). Their scope and objectives are aligned, both being part of the FLEGT Action Plan (European Commission, 2016). This judgment was corroborated by other stakeholders in the literature (e.g. the EIA in the context of Indonesia) (EIA), by DG TAXUD and CAs in stakeholder interviews, as well as in the open public consultation conducted as part of this Fitness Check (questions 7 and 54). Notably, stakeholders reported few challenges relating to a lack of coherence between the obligations under the FLEGT Regulation and the EUTR, with 23% stating it was not a challenge at all (question 7). Coherence between the EUTR and FLEGT Regulation is important to achieve as the uptake of VPA processes is partly dependent upon the effectiveness of EUTR implementation in EU MS, meaning that incoherence could undermine VPAs negotiated under the FLEGT Regulation. The EUTR was an impetus to initiate or move forward VPA processes, but more could be done to ensure and communicate on EUTR implementation and enforcement. In addition, to a small extent, evidence suggests that VPA processes facilitate compliance with – and enforcement of – EUTR requirements. One major point that MS ascribe importance to relates to the need to align the definition of legality in some countries negotiating VPAs with the definition included in the EUTR. There is also a risk that inconsistencies of the product scope between the EUTR and FLEGT Regulation VPAs will complexify product imports once more VPA countries reach the licensing stage.

The uptake of VPA processes is partly dependent upon the effectiveness of EUTR implementation

The EUTR creates an incentive for third countries to negotiate FLEGT Regulation VPAs (Commission, 2016), on the condition that the former is appropriately implemented and enforced in EU MS. The EUTR has given additional motivation to timber producing countries to initiate or accelerate FLEGT Regulation VPA negotiations processes, so that their products do not need to be subjected to DDS by EU operators once the system is operational (European Commission, 2016). However, in Indonesia, it has been reported that some businesses have raised concerns that complying with DD requirements under the EUTR seems easier than FLEGT Regulation-licensing (Environmental Investigation Agency (EIA), 2020). In an interview, one NGO questioned why checks are still being performed in the EU on shipments with FLEGT licenses and argued that this contributes to exporting countries not seeing the benefits of FLEGT licensing, while another NGO argued that FLEGT-licensed products should not receive a 'green lane' treatment as long as the enforcement of legality requirements are not assured. The EC argues that the perception that EUTR requirements are easier to comply with than TLAS is not evidence-based, and that an effective and rigorous enforcement of the EUTR is necessary to change this perception (European Commission, 2016). Some NGOs agree on this point: notably, the Environmental Investigation Agency suggests that EUTR enforcement - including case handling and the result of penalties – could be better showcased, and that checks in some MS on EUTR-regulated timber should be improved in order to prevent traders from benefitting from the shifting of shipments to more permissive MS (Environmental Investigation Agency (EIA), 2020). Moreover, a 2013 FERN study also argues that, for the EUTR and the FLEGT Regulation to be mutually supportive, the EU and MS have to ensure a robust and effective implementation of the EUTR across all MS (FERN, 2013). The need for an effective implementation and enforcement (checks and fines) of the EUTR to motivate countries to engage in the VPA process was also raised by NGOs (2) and a CA during a stakeholder workshop (held on the 10/12/2020). It is important to note that there has been gradual improvement over time, notably via the meetings of the EUTR/FLEGT Regulation Expert Group every two months (as well as the informal EUTR Enforcement Group), and due to recent work to support effective implementation detailed in the Summary Records of the meetings, Briefing Notes, and EU analyses of National Reports. A solution could therefore be to better communicating implementation and enforcement efforts achieved.

VPA processes facilitate compliance with – and enforcement of - EUTR requirements

Both the 2015-2017 and the 2017-2019 biennial reports on the implementation of the EUTR note that, to a certain extent, the establishment of VPA processes in third countries has facilitated compliance with EUTR requirements (European Commission, 2018) (UNEP-WCMC, 2019). For the period 2015-2017, relatively few MS stated that the FLEGT Regulation licensing system in Indonesia facilitates compliance with the EUTR (4 out of 22 MS), with some expecting that this will be the case in the future, and only two considered knowledge and expertise from FLEGT Regulation processes to be useful for EUTR inspections. In the subsequent biannual report, VPAs with Indonesia, Vietnam, Cameroon and Malaysia were considered particularly important for MS' implementation and enforcement of the EUTR, with 10 MS reporting that VPA processes have facilitated operator and/or trader compliance with EUTR requirements. Comparing both ongoing and completed VPA processes, their perceived relevance by MS to the implementation of the EUTR was mainly dependent upon the different levels of trade exposure. On the other hand, authorities in countries with VPAs under negotiations can be reluctant to share information requested by CAs for DD under the EUTR, with exporters arguing that the information was unavailable or not needed anymore (DG ENV and 1 NGO). Such issues may precede the VPA process, as countries willing to begin the negotiations are usually those experiencing the most difficulties with EUTR requirements (1 research institute) (stakeholder workshop help on the 10/12/2020).

With regards to enforcement, under the EUTR and FLEGT Regulation, MS are free to lay down national sanctions, on condition that those are effective, proportionate and dissuasive. If sanctions for non-compliance under the EUTR are more lenient than those under FLEGT Regulation, the VPA processes and FLEGT Regulation licensing systems could be undermined. As of 2017, there was no report of significant difference between sanctions under national FLEGT Regulation and EUTR regulations, with most countries reporting similar levels of fines for comparable legal offenses (UNEP-WCMC, 2020). These similar levels of fines are important to promote coherence between EUTR and FLEGT Regulation, and especially to ensure the update of the latter. However, as reported under several evaluation questions (notably, questions 2.a.2, 2.a.3 and 2.i.2), considerable variability of sanctions for identical offences under either the EUTR or the FLEGT Regulation can be observed across MS.

The implementation and enforcement of the EUTR could hinder VPA negotiations by impacting delicate diplomatic relations

Whilst EUTR is a demand-side measure and FLEGT Regulation VPAs focuses on the supply side, there are instances where the effective implementation and enforcement of EUTR could hinder VPA negotiations. For example, there remains a high risk of timber illegality in many of the countries where a VPA is being negotiated or implemented and it is expected that CAs and the EUTR/FLEGT Regulation Expert Group should continue to ensure the effective implementation and enforcement of EUTR, regardless of whether a third country is a VPA country. The EUTR/FLEGT Regulation Expert Group may publish conclusions on high-risk countries, to facilitate a common approach across the EU, which has been the case for Myanmar (June 2018, conclusions upheld as stated in EUTR/FLEGT Regulation 23rd Expert Group meeting summary record) (European Commission, 2019) and for Brazil (June 2018 and December 2018 conclusions, upheld as stated in the 25rd Expert Group meeting summary record) (European Commission, 2019), with a conclusion being drafted for Ukraine. Whilst no conclusion to date has focused on a VPA country, this possibility could be foreseen in the future. Additionally, under a support contract for the implementation of EUTR and FLEGT Regulation, the EC has commissioned the production of a number of EUTR overviews of timber source countries, to assist CAs and operators in assessing the risks to timber legality (UNEP-WCMC, 2019). These overviews go through an extensive process of external review, including from the relevant national government agencies and non-governmental stakeholders and experts. So far, 10 overviews have been published, including three on VPA countries (Cameroon, Ivory Coast and Malaysia) (European Commission, 2020). There is a risk that such overviews could impact relationships with VPA countries with which the EC needs to maintain good diplomatic relations for the process to move forward. The length of time that some of these draft overviews take to reach the stage of publication may be an indication that issues have been encountered during the process of peer review.

Inconsistencies between VPAs and the EUTR on the product scope

The FLEGT Regulation gives a minimal product scope that must be covered, but each VPA may include additional products. This means that any product which is not covered by a FLEGT licence and which is imported into the EU will fall under the EUTR and will require operators to undertake DD. This issue was also mentioned in the open public consultation (question 54), during interviews with CAs, as well as during a stakeholder workshop (held on the 10/12/2020). In the later, stakeholders tended to converge on the view that the product scope should be enlarged and harmonised (2 NGOs, 2 CAs, DG ENV), a view that was also shared in an interview with other CAs. Moreover, some HS codes are covered under FLEGT, but not under the EUTR (e.g. HS Code 4417, 4419, 9401.61, and 9401.69) (input from third

country agency, OPC). For now, only Indonesia has reached the licensing stage, and it was noted that confusion already arises surrounding product scope (stakeholder workshop, 10/12/2020). DG TAXUD did not report confusion by customs as they have only a role regarding FLEGT licenses control, nor with the enforcement of the EUTR (stakeholder interview). However, once more VPA countries reach the licensing stage, the situation could become chaotic as operators and other entities in MS will need to clarify which product types from which countries fall under either the EUTR or FLEGT Regulation licensing systems. This difficulty will add to the existing complications deriving from the different interpretation of HS codes (see question 10b above).

Inconsistencies between FLEGT Regulation VPAs and the EUTR on legality of (confiscated) illegally harvested timber

There have been – and still exist – some issues surrounding the definition of legality between the EUTR and some VPAs. Under the EUTR, legality is interpreted in terms of harvest, rather than property. The implication is that illegally harvested timber remains illegal regardless of the legalisation of its ownership through enforcement actions (i.e. confiscation). The EU-Cameroon VPA allows for the auction of confiscated timber, in accordance with national laws (stakeholder interview with the Cameroonian Forestry Ministry). Similarly, the EU-Ghana VPA pre-dates the EUTR and allows for the inclusion of confiscated/legalised timber in its Timber Legality Assurance System (TLAS). This could prove to be problematic as it potentially undermines the EUTR and FLEGT Regulation through allowing illegal timber to be traded within Ghana. At present, this issue appears to mainly concern rosewood (*Dalbergia* spp., listed in CITES Appendix II since 2017), which Ghana primarily exports to SE Asia and China, and not the EU (European Commission, 2019) (European Commission, 2019). Therefore, whilst the Ghana VPA enables the export of confiscated timber that has subsequently been legalized, this currently only represents a theoretical conflict with EUTR, if in practice it mainly applies to rosewood timber, that is exempt from EUTR due to its CITES listing. At the 26th meeting of the Expert Group, it was confirmed that MS concerns had been voiced to Ghana and that the EC would explore possible solutions with Ghana (European Commission, 2019). Ghana may agree to exclude confiscated illegal timber from exports to the EU, but may be less inclined to apply this rule to other countries.

A similar issue was raised in the case of Vietnam. Similarly to Ghana, confiscated timber is allowed to enter the Vietnam Timber Legality Assurance System (VNTLAS), meaning that potentially illegally sourced timber that has been confiscated can then legally enter the supply chain. This issue has been discussed with Vietnam and during the 25th EUTR/FLEGT Regulation Expert Group meeting (European Commission, 2019). Subsequently, Vietnam confirmed that it will align with the EUTR/FLEGT Regulation understanding of legality. The EC clarified that this alignment should be detailed in its national legislation (European Commission, 2019). This outcome highlights that inconsistencies in definitions can be resolved, which is an encouraging sign for resolving other issues surrounding coherence in legality definitions in other countries. However, in Vietnam another legality issue persists, whereby timber classified as “in transit” falls beyond the scope of the proposed VNTLAS because it is not necessarily included in official Vietnamese import data, potentially allowing some smuggling to continue (EIA, 2018).

Promoting an effective and coherent EUTR/VPA approach to tackle illegal logging, and non-VPA countries

To follow an effective and coherent approach to address illegal logging and trade, the EU needs to focus on both demand-side (i.e. the EUTR) and supply side (i.e. FLEGT Regulation VPAs and subsequent

licensing systems) measures. However, currently VPAs have been negotiated with a few countries only, and the imports of these countries combined account for a small proportion of current EU imports. China (17.7% of EU imports in 2018),[43] Brazil (11.7%), the Russian Federation (10%) and Ukraine (3.9%) (UNEP-WCMC, 2019) all have a high risk of illegality and are not involved in VPA processes. The situation in these countries is regularly discussed in EUTR/FLEGT Regulation Expert Group meetings (for instance, China in the 27th meeting, Brazil in the 28th meeting, and Ukraine in both) (European Commission, 2020) (European Commission, 2020) and they are also identified as some of the top non-VPA countries of relevance to EUTR implementation by MS (UNEP-WCMC, 2020). The key risks surrounding illegality in these countries tend to revolve around compliance with legislation, corruption, evidence on illegal harvesting, complexity of the supply chain, and restrictions on timber trade (UNEP-WCMC, 2018).

Coherence with EU environmental policy objectives

Evaluation questions 11a explores the coherence of the EUTR and FLEGT Regulation with EU environmental policy objectives. This includes analysing recent policy developments, such as the EU Green Deal, the EU Bioeconomy Strategy, the Common Agricultural Policy, nature legislation and other policies, including those related to Circular Economy. The analysis seeks to uncover if the EUTR and FLEGT Regulation establish an aligned level of protection as compared to other EU environmental policies, and if the Regulations have created synergies or overlaps with other Community objectives.

Perspectives from recent policy developments

In this sub-section we summarise policy developments which have occurred since the implementation of the EUTR and FLEGT Regulations which could impact the coherence of the initiatives.

European Green Deal (EGD)

The European Green Deal (EGD) was introduced under the political tenure of European Commission President Ursula von der Leyen in late 2019, with the primary objective to establish sustainability and carbon neutrality throughout the EU. Through striving towards a circular economy, decarbonising the energy sector, restoring biodiversity and reducing pollution, inter alia, the EGD places climate change at the forefront of the political agenda. To provide further impetus to the political importance of the EGD, there is a requirement that 'all EU actions and policies will have to contribute to the European Green Deal objectives.

In relation to the EUTR and FLEGT Regulation, the EGD includes several references and actions which directly impact forests and the forest-based sector, including:

- Tackling illegal logging through ensure that regulatory cooperation to promote EU standards are enshrined within trade agreements;
- Enhancing the quantity and quality of EU forested area through re- and afforestation to improve the resilience of forests in the face of climate change whilst also promoting the circular bio-economy; and,
- Through various actions implemented under the forthcoming EU Forest Strategy, it is proposed that a new EU Forestry Strategy will come to force, which will aim to achieve 'effective afforestation, and forest preservation and restoration in Europe, to help to increase the absorption of CO2, reduce the incidence and extent of forest fires, and promote the bio-economy'.

[43] Although, in the case of China, an EU-China bilateral Coordination Mechanism exists on Forest Law Enforcement and Governance.

A key component of the EGD is the promotion of 'imported products and value chains that do not involve deforestation and forest degradation', offering a clear alignment to the objectives of the EUTR and FLEGT Regulation. This further reinforces the Communication on Stepping up EU Action to Protect and Restore the World's Forests, which aims to tackle the negative impacts of the EU imports of commodities on tropical forests (European Commission, 2019). A key point here is that the aforementioned Communication seeks to "increase supply chain transparency and minimise the risk of deforestation and forest degradation associated with commodity imports in the EU". The Communication and EGD can therefore be interpreted as having an increased ambition vis-à-vis the EUTR. However, the objectives of the EUTR and FLEGT Regulations form key components of this vision, through their mechanisms which promote transparency and traceability of timber and timber based products, in addition to achieving deforestation free supply chains. As such, despite the more ambitious scope of the EGD to the sustainable sourcing of commodities, the holistic approach to tackling deforestation and forest degradation through the promotion of value chains that do not incur negative impacts on forests is considered to align the EGD with both the EUTR and FLEGT Regulation.

Farm to Fork

The EU Farm to Fork Strategy – which was launched in 2020 and which is positioned at the heart of the EGD (European Commission, n.d) – seeks to make food chains fair, healthy and environmentally friendly. The aim is to assist food system in their transition to becoming climate neutral and environmentally sustainable. through transitioning to a neutral/positively climate and environmental impacting food system. The Strategy calls for the Commission to examine EU rules on feed materials used in agricultural systems which can be grown on deforested lands or lead to deforestation itself. Furthermore, the Strategy addresses external deforestation and forest degradation with the objective to "present in 2021 a legislative proposal and other measures to avoid or minimise the placing of products associated with deforestation or forest degradation on the EU market." As such, it can be foreseen that requirements set by the EUTR and FLEGT Regulation, through their respective traceability/transparency and legality measures on timber and timber-based products will be an integral component to the 2021 legislative proposal for a framework for sustainable food systems, one of the commitments of the Farm to Fork Strategy.

EU Biodiversity Strategy to 2030

The EU Biodiversity Strategy to 2030 establishes a long-term vision to protect nature and reverse the degradation of ecosystems. The Strategy seeks to achieve this through two main implementation actions (enhancing protected areas and restoring ecosystems), governance actions (enforcement, sustainable corporate governance, taxation, natural capital accounting) and external EU actions (related to global biodiversity objectives, trade policy and international cooperation). Of greatest alignment to the EUTR and FLEGT Regulation within the legislative proposal is the notion that "EU actions do not result in deforestation in other regions of the world" (European Commission, 2020) and the proposal that the Commission will introduce measures to "to avoid or minimise the placing of products associated with deforestation or forest degradation on the EU market" (European Commission, 2020).

Within the EUTR Regulation, actors are encouraged to present compliance with 'applicable legislation' in risk assessment procedures and through developing practical guidance to operators. The forms of legislation this covers are stated in Article 2 (h) of the EUTR, which includes inter alia, environment

and biodiversity legislation within timber harvesting countries. In addition, Article 6 (b) allows operators to include third party certification/verification schemes within their due-diligence systems, with many of these schemes addressing biodiversity concerns (Ituarte-Lima, Dupraz-Ardiot, & McDermot, 2019). As such, the range of applicable legislation which is covered by the EUTR could encompass biodiversity-related legislation in harvesting countries, which in turn broadly align with the EU Biodiversity Strategy to 2030. However, the focus of legality aspects within the EUTR fails to focus on empowering local-forest producers to access rights to forest resources, which could undermine the 'principle of equality' stated within the Biodiversity Strategy (European Commission, 2020) (it is worth noting here that compliance with 'applicable legislation' under Article 2 (h) of the EUTR does cover "third parties' legal rights concerning use and tenure that are affected by timber harvesting", yet it does not explicitly mention sustainability). OPC respondents (3, 23%) stated in open text that biodiversity loss is not considered within legality considerations, and that including this within the scope of the EUTR and/or FLEGT Regulation would bring greater coherence to biodiversity-related legislation.

The EU Bioeconomy Strategy (2018)

The EU Bioeconomy Strategy (an update of the original 2012 Strategy) seeks to accelerate the deployment of a sustainable EU bioeconomy (all sectors and systems that rely on biological resources, their functions and principles, (European Commission, 2018) through 5 (non-legally binding) goals: ensuring food and nutrition security; managing natural resources sustainably; reducing dependence on non-renewable, unsustainable resources; limiting and adapting to climate change; strengthening European competitiveness and creating jobs. The Bioeconomy Strategy delivers a series of action points to achieve these overarching goals, some of which indirectly encompass the prescribed objectives of the EUTR and FLEGT Regulations. Action 3.3.1 (Enhance the knowledge on the bioeconomy, including on biodiversity and ecosystems to deploy it within safe ecological limits, and make it accessible through the Knowledge Centre for Bioeconomy) seeks to, inter alia, fill knowledge gaps on consumption and production impacts of bio-based products (which includes timber/timber products) on ecosystem functioning. Such data is sought by the Strategy in order to support sustainable forestry within the EU, which is aligned with the preamble 3 and 5 of the EUTR (although achieving sustainable forestry is not an objective of EUTR or FLEGT Regulation).

A key component of the second objective of the Bioeconomy Strategy (managing natural resources sustainably) is biomass. The EU has an increasing demand for biomass, and the Strategy seeks to exploit areas with 'underutilized biomass potential' through assisting MS develop sustainable biomass strategies. This also encompasses the use of wood waste for energy production. Such wood products are exempt from the scope of EUTR, therefore no barriers are placed on actors seeking to align with this Bioeconomy Strategy objective. Aside from these components, there is little alignment between the Bioeconomy Strategy and the EUTR and FLEGT Regulations, yet there is also no indication of any coherence-related issues between the policies.

Circular Economy Action Plan (CEAP)

The EU Circular Economy Action Plan (European Commission , 2020) (CEAP) – launched in 2020 as part of the EGD - has the primary objective of achieving climate neutrality through the promotion of a regenerative growth model which keeps resource consumption within planetary boundaries. This is sought through the design of sustainable products, empowering consumers and enabling circularity in industrial processes. Within the CEAP, reference is made throughout to carbon removals, including

through the restoration of ecosystems, forest protection, afforestation, sustainable forest management and carbon farming initiatives. Despite there being no direct linkage made here to the EUTR and FLEGT Regulations, the demonstrate with Regulations are aligned to the CEAP and broader Union objectives through the linkage that the CEAP makes to sustainable forest management, albeit from a climate rather than a legality perspective.

In addition to the above, the product scope of the EUTR and the encouragement of certain materials within construction stated under the accompanying document to the CEAP (European Commission, 2019) demonstrates some alignment of scope. Under this accompanying document, it is stated that national legislation "on building codes is sometimes silent on materials, or not up to date with the development of building products which could increase the energy efficiency and performance of buildings from a sustainability perspective [...]", with products such as "engineered wood products" stated as viable to retain long-term carbon pools. These products are within the scope of the EUTR (for example, products 4408 "Sheets for veneering […] of a thickness not exceeding 6mm", and product 4412 "Plywood, veneered panels and similar laminated wood" under the Annex of the EUTR), highlighting the potential role of such legally sourced products being utilized in construction within the EU.

Other EU policies

EU Wildlife Trade Regulations (EUWTR)

The EU Wildlife Trade Regulations (EUWTR) consists of a series of regulations aimed at implementing the requirements of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) throughout all EU MS. Although a review of the interplay between EUWTR and EUTR in 2018 led to a closer alignment with EUTR, the subject of tracing legality is still emphasized to a lesser extent within the EUWTR (Womack L. , Glaser, Sinovas, & Malsch, 2019). The scope of legality is also narrower under EUWTR, in that it relates to 'laws for the protection of fauna and fauna' whereas under EUTR, applicable legislation in the country of harvest is much broader and includes rights to harvest, third parties' legal rights concerning use and tenure, environmental and forest legislation and trade and customs. Furthermore, certain sources of timber under EUWTR/CITES require no verification of legal acquisition, such as timber meeting criteria of monospecific plantations (source A) and pre-Convention timber (source O) (Womack L. , Glaser, Sinovas, & Malsch, 2019). This raises particular concern for newly- CITES listed timber species (particularly where there are stockpiles or legality risks with plantation timber) where placing on the EU market would previously have been subject to due diligence under the EUTR. Due to the alignment of the EUWTR annexes and CITES appendices, a further analysis is presented below (under "Coherence with international frameworks and regulations).

Coherence with wider EU policy objectives

Evaluation question 11b goes beyond the broad EU legislation analysed in EQ11a, with a more specific focus on trade and custom aspects. This will entail observing if the EUTR and FLEGT Regulation result in barriers to trade, and/or, if the Regulations complement trade and customs objectives. Additionally, the differences in MSs' customs regulations and enforcement of the two Regulations are taken into consideration.

Renewable Energy Directive (RED)

Article 29 of RED outlines a list of provisions related to the sustainability of bioenergy. Paragraph 6 states that forest biomass which is harvested must align with 'the legality of harvesting operations'

(Paragraph 6 (a) (i)) established by the national/sub-national laws of the harvest country. The term 'legality of harvesting operations' encompasses the following requirements (Navigant Consulting, EFI, IEEP, Oeko, 2020):

- Rights to harvest timber within legally gazetted boundaries;
- Payments for harvest rights and timber including duties related to timber harvesting;
- Timber harvesting, including environmental and forest legislation including forest management and biodiversity conservation, where directly related to timber harvesting;
- Third parties' legal rights concerning use and tenure that are affected by timber harvesting;
- Trade and customs, in so far as the forest sector is concerned.

The harvest country can provide proof of harvesting legality using the certificate of due diligence under EUTR, whereas if sufficient 'reliable and independent information' related to Article 29 of RED cannot be provided, then certification schemes can be used to provide this information. As such, RED defers to the EUTR for proof legality of timber used for biofuel purposes.

EU Trade Regulation

The fundamental purpose of the Treaty of Lisbon is to improve the coherence in the Union's actions. The treaty contains provisions requiring that EU external trade policy adopts fundamental rights and environmental protections in a coherent manner[44]. Hence, as a key treaty of the EU, coherence with EUTR/FLEGT Regulation plays a significant role in ensuring that MSs all contribute and coherently enforce measures to improve sustainable management of international resources. Arguably, the EUTR may not deploy the opportunities offered by the Lisbon Treaty to their full extent in order to prevent environmental harm, because the Regulation does not forbid imports from countries with no certified timber governance system (Douma & van der Velde, 2016).

Trade Agreements with non-EU countries

Free Trade Agreements (FTAs) remove or reduce customs' tariffs in bilateral trade with one or more countries. FTAs negotiated by the EU with third countries have, since the 2009 EU-Korea FTA, included chapters on trade and sustainable development (TSD) with an article on forests. Currently, 12 EU FTAs contain such a chapter, 6 of which[45] are already being implemented (Kettunen, Bodin, Davey, Gionfra, & Charveriat, 2020). They contain some common provisions with regards to illegal logging, although some slight differences can be observed, for instance direct references to FLEGT Regulation. While no clause in their articles on forests directly contradict requirements set in the EUTR or FLEGT Regulation, issues of vagueness, trust in the laws of the country of harvest, and lack of either enforceability or financial sanctions for breaching them may lead to some practical incoherence between EU FTAs on the one hand, and EUTR and FLEGT Regulation on the other. Some place this coherence problem in a context where environmental regulations and social safeguards are still seen as obstacles to the trade agenda, rather than as foundations to use trade policy as a tool for sustainability (Kettunen, Bodin, Davey, Gionfra, & Charveriat, 2020). Stakeholders (1 NGO, OPC; Question 16) noted that the EUTR in itself is a legitimate form of trade regulation. However, they also noted that general EU trade policies

[44] Consolidated version of the Treaty on European Union, Art.21.2(f): "[The Union shall define and pursue common policies and actions, and shall work for a high degree of cooperation in all fields of international relations, in order to] […] help develop international measures to preserve and improve the quality of the environment and the sustainable management of global natural resources, in order to ensure sustainable development" and Art.21.3: "The Union shall ensure consistency between the different areas of its external action and between these and its other policies […]".

[45] Korea, Central America, Colombia/Peru/Ecuador, Georgia, Moldova and Ukraine

are inconsistent with environmental regulations and therefore, EU FTAs were not contributing to the fight against illegal logging – thus effectively undermining ambitions of the EUTR.

A specific article on trade in forest products is found in regional FTAs to which the EU is a party conducted with several countries/regions. The articles mostly contain commitments to work collaboratively to improve forest law enforcement and governance, as well as to promote trade in legal and sustainable forest-based products. These commitments remain rather generic in the FTAs agreed upon, or currently still in negotiation, with several countries, among which with Cameroon, Colombia, Peru, Central America, the EFTA, Ukraine, Vietnam (European Commission , 2020), and Mercosur (European Commission, n.d.). More specific provisions surrounding illegal logging and related trade, including with respect to third countries and/or on the listing and conservation of timber species listed under CITES are found in trade agreements conducted or being negotiated with the Republic of Moldova, Georgia, Singapore (European Commission, 2019), Canada (European Commission, 2018), New Zealand (European Commission, 2019), Australia (European Commission, 2019), Mexico (European Commission, 2019) and Japan (European Commission , 2018). Other agreements also explicitly reference the possibility of concluding bilateral agreements under FLEGT Regulation, for instance with the Republic of Moldova, Georgia, Cameroon, Central America, and Vietnam (Monteiro, 2016). This highlights that, although FTAs cover similar points in relation to illegal timber, some are more specific and have a greater scope than others.

Another notable point concerns clauses on respect for the laws and regulation of the country of harvest, found for example in the agreements with New Zealand, Australia, Japan, Canada and Mercosur. One analysis conducted by FERN of the FTA with Japan argues that this clause could negatively impact the fight against illegal logging and trade in illegal timber. Indeed, it places Japan's voluntary measures on illegal logging (the Clean Wood Act) on par with the EUTR, by encouraging timber trade in accordance with the laws and regulations of the country of harvest. FERN lists three risks stemming from these incoherent clauses between the FTA and the EUTR: Japanese companies would be given a competitive advantage, EU efforts to set up VPAs with third countries under FLEGT Regulation could be undermined, and illegal timber imports into Japan could increase from countries with weak and unsustainable forestry practices (FERN, 2018). Identical clauses in other FTAs could be incoherent with EU policies, depending on the requirement set in domestic legislations of third countries with which the FTAs are negotiated.

Coherence could also be curtailed by the fact that EU FTAs TSD chapters are not subject to enforceable dispute settlement procedures, and no financial penalties are set up for non-compliance. This exclusion from such mechanisms could create imbalances in the way different issues are treated in FTAs, to the detriment of forest-related provisions (Kettunen, Bodin, Davey, Gionfra, & Charveriat, 2020). Most importantly to this analysis, this also means that articles seeking to make FTAs coherent with the aim or the provisions of the EUTR and FLEGT Regulation may not be thoroughly implemented nor enforced in EU trade partner countries, thereby potentially undermining the effectiveness of those Regulations.

Coherence among EU MSs customs and Regulations

As was the case with country support for the EUTR, the formal implementation and consistency in enforcement varies between EU countries (WWF, 2019; UNEP-WCMC, 2020). As such, the EUTR and FLEGT Regulation do not directly create inconsistencies with national regulations but different approaches taken in structural set-up have caused large variances in implementation and enforcement

between EU countries. For example, the disparity between how MSs implement their CA's, monitor operators and conduct checks have shown to be significant (UNEP-WCMC, 2020). Of the number of reported checks on operators in all MSs, 35.7% were found to be non-compliant with EUTR obligations (European Commission, 2020). The highest number of checks reported on duty holders of imported timber were in Germany and Italy (>200) (European Commission, 2020). Meanwhile, Belgium (EU's largest importer of tropical timber) had planned to conduct 180-200 checks for 2018 (UNEP-WCMC, 2020), an ambitious task it was not able to achieve and instead reported less than 50 checks for the period of 2017-2019 (European Commission, 2020). Overall, the range of planned vs. performed checks reported by MSs ranged from less than 50% to over 100% (UNEP-WCMC, 2020). In addition to discrepancies in the implementation of the EUTR, there are also differences in the legal frameworks to enforce it; from remedial action and interim measures to penalties for infringement, MSs have varying practical applications of the EUTR (UNEP-WCMC, 2020).These disparities provide loopholes whereby companies know that they will face less stringencies and risks for checks in some MSs compared to others, allowing for easier entrance into the EU market.

MS have implemented the EUTR in multiple ways, ranging from 'hard' formal approaches such as Germany, to 'soft' approaches implemented by the UK and the Netherlands (McDermott & Sotirov, 2018). In Germany a Timber Trade Security Law was enacted which issues high financial penalties for administrative offense. In the Netherlands implementing legislation is achieved through the Flora and Fauna Act, but in contrast to Germany the practical implementation is characterised by less formal penalties, with notices of remedial actions through compliance checks being the most common form of regulation. The UK follows a similar approach to the Netherlands, albeit through its Forest Law Enforcement, Governance and Trade Regulations, and the Timber and Timber Products (Placing on the Market) Regulations.

Meanwhile, Austria established the "Timber Trade Monitoring Law", which appointed several CAs who've taken on individual tasks, separating the enforcement and regulation among various departments. Despite the formal incorporation of the law, studies reported there are few staff appointed to control all operators and traders. Additionally, there appears to be a lack of expert knowledge to conduct checks along customs and other operations (McDermott & Sotirov, 2018). In contrast, Bulgaria introduced only a few amendments (i.e. three new articles) to its Law on Forests. These inconsistencies further translate into different application of the way due diligence is applied by MSs, leading consequently, to incoherence not only in the implementation of EUTR but furthermore in the customs regulation and the level of stringency applied. Since due diligence is only applied at the point of entrance, this means that once a traded timber product manages to enter the EU, it can continue circulating in the market without further regulation (McDermott & Sotirov, 2018).

Penalties in cases of non-compliance differ in severity across countries. Types of breaches and the consequent penalties are MS dependent. Examples of different types of regulation breaches, for which there have been reported penalties in MSs include: not correctly exercising due-diligence obligations, placing illegal species of wood on the EU market, providing falsified documentation for the legality of the wood and sourcing timber from exporters that are otherwise associated to illegal logging in countries of origin (Client Earth, 2018). While penalties for such breaches are free to be determined by MSs, general principles of coherence with national law as well as other EU instruments must be applied. This results in a variety of penalties and their severity in response to breaches. In some cases, EU traders and business operators can be either administrative or criminal, with EUTR being punishable by

imprisonment or by high fines (Kettunen e. a., 2020). This imbalance creates an incentive for some companies to relocate their operations to MSs with weaker legislation and more lax enforcement to avoid the penalties associated with breaching the Regulation (Kettunen, Bodin, Davey, Gionfra, & Charveriat, 2020).

In addition, the rate of implementation of the EUTR in EU MSs has also varied considerably, with Greece, Italy and Spain implementing the EUTR more slowly than other MS (McDermott & Sotirov, 2018). Finally, reactions of governments to formal reports about concerns on illegal timber shipments coming into the EU and levels of enforcement have varied greatly, and NGOs have reported no actions on issues raised in some cases (McDermott & Sotirov, 2018). Overall, the variability in implementation of the EUTR both in terms of functioning and regulation, shows evidence of allowing illegal timber to enter the markets through MS customs regimes that are more lenient.

Coherence with international development policies (human rights, labour rights, protection of indigenous communities)

A problematic aspect of the FLEGT Regulation is that by handing over the responsibility to define legality to national legislation in exporting countries, the EU may not keep up with some of its commitments, especially in relation to human rights, labour rights, and the protection of indigenous communities. VPAs themselves do not exhibit a structure to evaluate national laws in relation to international human rights laws (Forest Peoples Programme, 2016), which could place FLEGT in contradiction with broader EU and international policy and legislation. Issues can also arise when the legal framework in the VPA country does recognizes those rights, but they are not applied in practice (Terea, S-for-S, & TopPerspective, 2016).

Indonesia's national timber legality assurance system (Sistem Verificasi Legalitas Kayu or SVLK) relies on environmental and social assessment (known as AMDAL) and on annual reporting of mitigation activities (RKT and RKL/RPL) submitted by companies. However, AMDAL documents have been deemed to be routinely fraudulent, with large sections taken from reports on other, unrelated operations. These documents are subsequently approved by government officials, highlighting that auditors fail to investigate legality (Forest Peoples Programme, 2016). The inability to empirically assess companies' respect of environmental and social safeguards laid out in SVLK means that the legal framework in Indonesia may be partly incoherent with EU international development policies.

Coherence with international frameworks and regulations

Coherence with international agreements

Overall, stakeholders felt that EUTR and FLEGT Regulation were coherent mostly to highly coherent with international agreements (Open Public Consultation; Question 17). However, NGOs (2) and government institutions (1) noted that EUTR and FLEGT Regulation lacked coherence with international human rights legal frameworks, including customary land and indigenous people rights (Open Public Consultation; Question 17). The concerns expressed indicated that neither have sufficiently aligned themselves with international human rights instruments and EU commitments to them.

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and EU Wildlife Trade Regulation (EUWTR)

CITES is an international agreement between governments which aims to ensure that the international trade in wild animals and plants does not threaten their survival. The agreement uses a permit-based

system of trade controls, and Parties to the Convention designate Management Authorities to administer licensing systems and issue permits based on the advice of Scientific Authorities (CITES, n.d.).

The EUTR and FLEGT Regulation were both drafted in an effort not to undermine the EU's commitment to CITES. As such, both regulations contain an exemption whereby CITES permits are considered to comply with the requirements of the EUTR and FLEGT Regulation, so that timber and related products covered by a CITES permit can be placed on the EU market, without operators having to undertake due diligence obligations as laid out in the EU Timber Regulation (Article 3) or the need for a FLEGT licence (Article 4(3)) to be issued (Womack L. , Glaser, Sinovas, & Malsch, 2019). Under the EUTR, an explicit reference to CITES is made (preamble 10), and it introduces a presumption of legality for timber and timber products (Article 3) covered by the CITES permit. Stakeholders overall felt that EUTR and FLEGT were highly coherent with CITES (65%, Open Public Consultation; Question 17).

The primary difference between the EUTR and CITES/EUWTR is the concept of legality. This principally relates to the scope of the respective legislation, the requirement for verifying legality, and the level of information required to demonstrate when the risk of illegally sourced timber is high (Womack L. , Glaser, Sinovas, & Malsch, 2019) . In respect to the scope of the respective legislation, the EUTR focuses on a range of wood related products, without necessarily specifying the species, while CITES targets species. In regards to legality, the EUTR focuses strongly on due diligence obligations and considers a broad scope of laws (including human rights issues such as land rights, labour rights etc.) in the country of harvest, of which the compliance is under the responsibility of the operator (Womack L. , Glaser, Sinovas, & Malsch, 2019). CITES/EUWTR allows legal acquisition to be at the discretion of the Parties, resulting in standards and best-practices varying largely. FLEGT Regulation is similar to CITES in that the legality findings and licenses are done by the government of the exporting country itself. However, definitions and methods used to ensure legality in FLEGT Regulation is much more comprehensive than for CITES (Womack L. , Glaser, Sinovas, & Malsch, 2019).

According to Saunders and Reeve (2014) the exemption from EUTR requirements for products traded with CITES/EUWTR permits caused concerns due to the possibility of there being an increased trade in illegally acquired timber/timber products as well as creating additional enforcement challenges for the enforcement authorities (Saunders J. R., 2014). This stems in part from the complexity of CITES listings including timber species but not necessarily all parts of product derivates (i.e. annotation may specify that the species listed only covers logs, sawn wood and veneer sheets, or excludes finished products) (European Commission, 2019).Practical implications further become apparent when considering listing a new timber species under CITES/EUWTR. Under CITES/EUWTR, for pre-Convention timber (source O - specimens that were acquired prior to the date on which the species was listed on CITES), there is no obligation to verify legal acquisition; the Management Authority of the country of export must be satisfied that the specimens was acquired before the provision of the Convention applied for that specimen. Womack et al (2019) states "Whilst imports of very old timber may be of lower concern, for any new species/genera listed in the CITES Appendices/EU Annexes, any timber harvested prior to the date of listing could be imported without any verification of legal acquisition, whereas prior to CITES-listing, operators placing timber on the EU market for the first time would have had to carry out due diligence under EUTR."

An additional factor that may further confuse operators relates to Annex D of the EUWTR. While the Annexes A to C of EUWTR largely correspond to Appendices I-III of CITES in terms of species (but also contain some non-CITES species including those protected under EU Internal legislation), Annex D, for which there is no equivalent in CITES, includes species where trade levels need to be monitored (for example, species which might be eligible for listing in the other Annexes). The import of Annex D species into the EU requires an import notification, but no further documentation is requested (neither non-detriment findings, nor verification of legal acquisition) from CITES/EUWTR perspective. Therefore, species listed in EUWTR Annex D are not covered by the CITES exemptions under EUTR and FLEGT Regulation, and would require either EUTR due diligence or a FLEGT licence, as appropriate. These complex nuances in what is, or is not, covered by the CITES exemption, and the necessary document requirements for different timber products, may present an additional source of confusion among operators and customs.

Reducing Emissions from Deforestation and Forest Degradation (REDD+)

FLEGT Regulation and VPAs have been shown to be able to strengthen the REDD+ processes. In recent years, assessments of FLEGT Regulation and REDD+ have shown that the two are complementary, where it has become practically impossible to progress on REDD+ without addressing legality and governance issues related to FLEGT Regulation (Terea, S-for-S, & TopPerspective, 2016). In that sense, FLEGT Regulation can be regarded as prerequisite to REDD+.

Although in general FLEGT Regulation and REDD+ are seen to have a synergistic relationship, there are still some differences in scope. Both are related to the forest sector, yet they have emphasis on different factors. For example, timber is only a minor part of REDD+, where agriculture is often emphasised as a stronger driver for deforestation than logging. Therefore, the implementation of the specific elements of one regime has direct impacts on the other, as there are often still similar actors involved. The FLEGT Regulation would require greater consideration of climate-related issues in order to increase its coherence (Tegegne, Cramm, & van Brusselen, 2018).

Due to the two regimes impacting similar actors and stakeholders, some analysts have argued that coherence could also be increased by harmonising their operations, procedures, data collection, processing and analyses, capacity building and information derivation systems. As an example, linking information systems operating under FLEGT Regulation (TLAS) and REDD+ (NFMS) could support the generation of verified, legal and traceable carbon credits under REDD+, further improving synergies between the two (Broekhoven, 2014). This is particularly relevant for countries entering into a VPA and establishing a national REDD+ program and therefore a relevant subject to further investigate.

Sustainable Development Goals and the Paris Agreement

In theory, VPAs as a result of FLEGT Regulation underpin many aspects of sustainable development enshrined in the SDGs. FLEGT Regulation mandated VPAs have the potential to address parts of SDG goals 8, 12 , 13, 15 and 16 among others (Terea, S-for-S, & TopPerspective, 2016). However, room for improvement in coherence and synergies remain, such as transferring FLEGT Regulation monitoring practices (which act as a model for ensuring that multiple stakeholders are included in decision making processes) to SDG processes (Chatham House, 2016).

The Paris Agreement is an essential part of the EU's commitment to achieving the SDGs. FLEGT Regulations were developed to contribute to the EU' commitment to the Paris Agreement and plays an

important part of its Forest Strategy. In general, FLEGT Regulation remains coherent with the Paris Agreement, as new commitments have previously informed the implementation process (European Commission, 2018). The multilateral framework of the Paris Agreement provides new opportunities to anchor FLEGT Regulation into a wider global narrative (European Commission, 2018). Overall, stakeholders felt that that FLEGT was well aligned with the SDGs and EU's commitment to the Paris Agreement (Open Public Consultation; Question 17). No evidence was found regarding the FLEGT regulations impact on assisting EU MSs and VPAs in developing their Nationally Determined Contributions (NDC). Furthermore, indicators to monitor and evaluate FLEGT Regulation could be applied to governance of forests in non-VPA countries. In particular, monitoring of countries' Nationally Determined Contributions (NDCs) can benefit from FLEGT Regulation data collection and help reference countries commitments to both forestry and climate.

World Trade Organisation (WTO) rules

Both the EUTR and FLEGT Regulation were designed to comply with WTO rules through not discriminating between domestic and imported timber/timber products and through imposing identical due diligence requirements on all operators. The unilateral approach undertaken by the EUTR and FLEGT Regulation is aligned to the multilateral WTO approach, as the 'buy in' by developing countries is apparent as it offers such countries an opportunity to participate in a jointly governed legality assurance system whilst also imposing obligations on European actors to exercise due diligence to respect local legal standards (Overdevest & Zeitlin, 2018). However, concern may arise here if DDS lead to disparate impact on the export of legally sourced timber (Gerates, 2014). For example, in the case that MS provide different due diligence standards than others, certain partner countries may be at a disadvantage when trading with these MSs compared to those with less stringent due diligence and EUTR/FLEGT Regulation enforcement. The EUTR and FLEGT Regulations are also regarded as keyway to 'sidestep' previous difficulties of enacting legally binding, multilateral agreements through the means of the WTO (which were previously opposed due to sovereignty concerns). The shift in international focus sustainability to 'legality' have given a way around the debate of sovereignty, by bypassing the need for an agreement on sustainability and instead focusing on the enforcement of the law. Particularly the neutrality regarding definitions of sustainability, and the content of a country's laws, which opened the door for unilateral government actions restricting trade in 'illegal' products and thus enabling the EU to impose restrictions on trade without violating WTO rules which prohibit unilateral imposed sustainability standards on products (Gerates, 2014). Stakeholders (2) from business association and business organisations, noted that companies must explain their requirements better and in an easy-to-understand way so as to guarantee fair competition under the WTO.

New York Declaration on Forests

The New York Declaration on Forests is a 2014 voluntary, non-binding international declaration calling for action to halt global deforestation, first endorsed at the United Nations Climate Summit in September 2014. As one of the early international voluntary initiatives, coherence is important so as to promote international cooperation. Together, the EUTR and FLEGT Regulation serve as a form of systemic support for forest governance (i.e. goal 10 of the New York Declaration on Forests). However, the EUTR and FLEGT Regulation only focus on the timber sector and do not tackle imports of other products with embedded deforestation. One implication is that they only partially address the problem of deforestation which the New York Declaration on Forests seeks to address (NYDF Assessment Partners, 2019).

Convention on Biological Diversity (CBD)

The EUTR and FLEGT Regulation VPAs are both somewhat misaligned with the CBD's focus on local livelihoods. Both the CBD and the EUTR share the common objectives of safeguarding biodiversity and local livelihoods. However, the former includes principles related to inclusive governance and sustainable use which conflict with the latter's focus on the primacy of state laws independently of neither their sustainability nor their alignment with international human rights law. Arguably, the EUTR risks to reinforce legal frameworks that advantage large-scale export production over local forest access, use and benefits, which would not align with the CBD's focus on local people's access to forest resources nor its focus on disadvantaged (Ituarte-Lima, Dupraz-Ardiot, & McDermott, 2019). Turning to VPAs, explicit references to the CBD are only found in the VPAs negotiated with Cameroon and with the Republic of Congo, highlighting a lack of systematic reference to the CBD in the VPAs. The two VPAs mention the CBD in the list of agreements considered to determine the legality of forest products, and the Republic of Congo VPA goes further by including a mention of the CBD in its Article 16 on stakeholder involvement in the implementation of the Agreement. In addition, none of the VPAs are concerned about the existence and appropriateness of human right laws in exporting countries, leading to an ad hoc and variable protection of community rights across the concerned countries. This could create a risk of legitimizing existing legislation and governance regimes dispossessing communities of their lands to the benefit of business enterprises or even national governments, which would be inconsistent with the CBD's objective of "fair and equitable sharing of the benefits arising out of the utilization of genetic resources". As previously mentioned, concerns regarding coherence with human rights commitments were also noted by a number of stakeholders (Open Public Consultation; Question 17).

International Tropical Timber Agreement

The International Tropical Timber Agreement (ITTA) has the overarching objective to "promote the expansion and diversification of international trade in tropical timber from sustainably managed and legally harvested forests and to promote the sustainable management of tropical timber producing forests" (Article 1). The objectives of the ITTA thus mutually reinforce the objectives of the EUTR and FLEGT Regulation. This is particularly apparent through Article 1 (h) to "improve market intelligence and encourage information sharing on the international timber market" and Article 1 (k) "improving… distribution of tropical timber and timber products exports from sustainably managed and legally harvested sources". In addition, the scope of the ITTA covers all VPA countries under FLEGT Regulation (with the exception of Laos), further reinforcing the synergies between the respective legislation.

Coherence with other Certifications

Both FSC and PEFC have substantially revised their standards and procedures to align them with the due diligence/due care requirements in timber producing countries to align with EUTR requirements (Zeitlin & Overdevest, 2019). The PEFC Due Diligence System (DDS) goes further than EUTR by applying to a larger product range and, is compulsory for every stage of the supply chain, and not only for the first placement on the EU market (Pepke, et al., 2015). In certain cases, the FLEGT Regulation regime was initiated when it was recognised that there was scope to supplement the voluntary market-based FSC regime with a more formal regulatory regime. As such, the FSC regime helped serve as a basis and policy model for the FLEGT Regulation regime in many countries where VPAs were established (Broekhoven, 2014). FLEGT Regulation VPAs can provide working examples of traceability mechanisms and auditing processes to help pioneer best practices in other countries (Hinrichs, 2012) . Voluntary

certification can also benefit from VPAs, as the latter tend to provide greater clarity on relevant legal requirements and enhance transparency (publicly available information). Associated overall improvements in governance and law enforcement resulting from VPAs also benefit certification (Hinrichs, 2012).

In contrast, the implementation of FLEGT Regulation has led to changes in PEFC and FSC requirements in order to meet the conditions of FLEGT Regulation (Zeitlin & Overdevest, 2019). Indeed, since 2006 studies have shown that following implementation of the EUTR and similar regulations, the number of forest areas certified by both FSC and PEFC increased substantially (Zeitlin & Overdevest, 2019; Cerutti PO, 2020).

FSC and PEFC certificates can assist in providing evidence of sustainability and legality, which can be beneficial in the VPA application procedure through demonstrating reduced risk when conducting due diligence (Hinrichs, 2012). Nonetheless, FSC and PEFC certification does not provide an exemption from due diligence required by EUTR/FLEGT Regulation. Under the EUTR, certification schemes require further scrutiny. The Commissions Expert Groups have voiced concerns regarding countries in which corruption is a key risk for illegality, particularly because the schemes need to be traceable and transparent (FLEGT/EUTR Expert Group, 2019). However, when an operator checks the FSC certificate data online, information regarding a temporary suspension of the certificate is not visible online. This, along with the audit reports not being made public, cause serious concern in the transparency of the certification. Hence, the Commission has cautioned against using certifications for due diligence, and have in fact requested FSC and PEFC to publish past statuses of certificates (FLEGT/EUTR Expert Group, 2019). In stakeholder workshops held on 24/02/21, national certification schemes were noted as being weak, thus requiring further due diligence especially in countries of high risk. Furthermore, one stakeholder mentioned the complexity of the situation by providing an example whereby PEFC itself is not enough to ensure EUTR compliance and that official national documentation of the country of origin did not ensure legality. This overall undermines the potential success of certification schemes. In countries were corruption and bribery are commonplace, and the State is implicated in the illegal timber trade, it becomes practically impossible to verify that the harvest (on the occasion of an annual visit by a representative of a certification scheme) was actually fulfilled in a sustainable manner (UNEP-WCMC, 2020). Nonetheless, one interviewee (Interview 02/02/21) highlighted that certification initiatives should be given the same recognition as TLAS under FLEGT. At the stakeholder workshop on 24/02/21, the concern regarding corruption in certification was also highlighted, with some participants noting cases where certification schemes continued to be distributed even after various reporting of illegal timber had been made. Hence, the current viewpoint is that certification alone is insufficient to guarantee compliance and importers must continue to conduct due diligence, to which a certification may contribute.

Generally, stakeholders believed that FLEGT licenses were easier to obtain, less costly and more credible when compared to other certification schemes (Open Public Consultation; Question 19, 46). Overall, however, respondents did not feel confident about FLEGT leading to a more positive consumer perception than private certification schemes. Interviews also showed that stakeholders from CAs felt that certifications give a false sense of security to operators. Position papers CEI-Bois (CEI-Bois, 2020) and CEPI (CEPI, 2015) expressed the opinion that certification schemes should be further integrated by expanding their applicability to risk assessment criteria and be uniformly recognised by all CAs in the EU. Indeed, during the workshop held on 10th of December 2020, the general concern with certification

schemes was that a lot of confusion remained about their extend of applicability, which required clarification, but stakeholders from the NGO's and business organisations agreed that certifications should not lift the DDS obligation, but rather work as a complementary tool.

Coherence with other national timber regulations

The EUTR was among the first national regulations imposed on timber products globally, with only the U.S. Lacey Act existing before. Since then, many timber consuming countries have established their own timber regulations, with attempts to collaborate and create coherence with other national regulations, including the EUTR. Coherence among these national regulations ensures strengthened international efforts and a clear stance against illegal timber.

The Lacey Act is a U.S. law originally passed in 1900 to protect wildlife from trafficking. In 2008 it was amended to include plant products, making it the world's first ban on the trade of illegally sourced wood products (European Parliamentary Research Service, 2020). As one of the few other national legal instruments combatting illegal timber, coherence between EUTR and the Lacey Act play an international importance. The Lacey Act and EUTR/FLEGT Regulation are currently considered some of the strongest legislation in attempts to combat illegal deforestation. The EUTR along with the Lacey Act have encouraged consumer countries to extend their respective legislation within similar legislative acts or consider measures with similar objectives (UN FAO, 2019). Despite this some differences between the two pieces of legislation exist, particularly regarding the scope of products and responsibility for compliance (Terea, S-for-S, & TopPerspective, 2016). Nonetheless, the two regimes cross reference. For example, the Lacey Act prohibits trafficking in wood sold in violation of any foreign law, non-compliance- with provisions of the EUTR can also be used to prosecute under US law (Zeitlin & Overdevest, 2019) . Reciprocity between the two laws extends liability to illegal timber products, thus reinforcing both and helping close loopholes in transnational legality regimes (Zeitlin & Overdevest, 2019) .

Australia's illegal logging laws, like similar legislation in the European Union and the United States, has been designed to support the trade of legal timber into the Australian market. The laws consist of the *Illegal Logging Prohibition Act 2012* (the Act) and the *Illegal Logging Prohibition Regulation 2012* (the Regulation). The EUTR is aligned with the Australian legislations, minimising the impacts on Australian business importing timber products from Europe (Ragnar Jonsson, 2015).

In Asia, two of the important national regulations are linked to South Korea and Japan.
In 2012 South Korea introduced Article 34 of the Act on Sustainable Use of Timbers (the Act) to focus on countermeasures against illegally felled timber. The Act was revised in 2017 to include mandatory legislation which regulates the legality of imported and domestically produced timber/timber products, stating that unverified timber cannot be sold in South Korea (and must be either subsequently destroyed or returned to its country of origin). As such, the scope of the EUTR/FLEGT Regulation and the Act are very similar, and licenses issued under FLEGT Regulation are also considered to comply with the Act. The coherence between these two regulations is particularly important since South Korea has a long standing trade cooperation with Indonesia, one of the countries that have entered the FLEGT Regulation VPA agreement with the EU.

A difference between the Act and the EUTR and FLEGT Regulations which could potentially indicate coherence-related issues is the scope of what constitutes legally harvested timber. Under the Act,

timber is regarded as illegal when it is harvested against the laws of the Republic of Korea and/or the country of harvest. Under the EUTR, timber considered as legally harvested if it aligns with legislation in the country of harvest, including legislation surrounding environment, forestry, harvest rights, trades and customs. It is unclear from the evidence base if this has led to any distortions in trade regimes due to these differences in scope. In interviews with NGOs (28/01/2020), stakeholders noted that many countries had been replicating and borrowing parts of the EUTR into their own laws. However, it was not possible to identify evidence regarding the extent to which this has been the case in the Act. Following this, Japan adopted the voluntary "Clean Wood Act" in May 2016. Under the Act, operators voluntarily register with the government, and are subsequently recognised as taking measures to verify the legality of their wood and wood products, ultimately bringing significant reputational benefits to operators. Compared to the financial penalty structure in place under the EUTR, the principle means of penalty under the Clean Wood Act is the revocation of registration.

Coherence with the China Bilateral Coordination Mechanism

China is in the process of establishing the China Timber Legality Verification Scheme (CTLVS) in order to comply with new requirements, set in the LAA and EUTR (Jonsson, 2015). In the meantime, the EU and China have established a Bilateral Coordination Mechanism (BCM) in order to work together to stop illegal logging and the associated trade in illegal timber globally. The Chinese Academy of Forestry and the EU FLEGT Regulation Facility jointly manage activities set out in the BCM work plans. They regularly report progress to China and the EU, and conduct mid-term evaluations of work plans. The EU MSs closely coordinate their work on forest law enforcement, governance and trade (FLEGT Regulation) with the European Commission to ensure it supports the BCM objectives (Commission, EU-China Bilateral Coordination Mechanism, 2009) . The BCM frames an integrated set of activities which are carried out through the annual work plans, such as supporting the setting up of new legislation in China by facilitating policy dialogues on the promotion of legally-sourced timber and timber products and information exchange between China, the EU and countries negotiating or implementing FLEGT Regulation Voluntary Partnership Agreements (European Commission, 2019) . However, the observed increased trend in value of imports from countries with no VPA agreements into the EU even with the EUTR in place (see question 2a) indicates that the impact of these bilateral agreements to reducing illegal logging are low. Indeed, with China being the largest global importer of wood, and in parallel being the major supplier of illegal wood in the European market, the bilateral agreement may not be incoherent with EUTR but ultimately does not seem to be leading to an increase in effectively combating illegal logging (see question 2a). In 2019 a revised Forest Law was adopted in China, which bans the buying, processing or transporting of illegally harvested timber (UNEP-WCMC, 2020). The new law empowers forestry authorities to supervise and inspect timber of illegal sources. Chin has strengthened its commitments to develop high-quality and effective forest ecology systems by strengthening of protection and promoting afforestation. The crucial point now is how this law will be implemented and whether this will extend to timber from other origins, since the law principally addresses the management of China's domestic forests.

Studies have found that the continued import of illegal timber into EU comes in part from companies importing from China conducting poor due diligence, and in other cases due to processed products not being covered within the scope of the EUTR (Indufor, 2016). Indeed, our baseline assessment highlights the dependence of the EU on China as a trading partner, and the severe concern of high risk products entering the EU markets (see section 2.5.4).

In interviews with NGO stakeholders (28/01/2020), one stakeholder noted that amendments brought into the Chinese timber law saw an effort from the timber authorities to try and replicate, to some extent, the EUTR into their own national law. Further evidence regarding the coherence of EUTR and China's national legislation could not be obtained. It is critical that regulations consider each other and strive towards improvements in their coherence, especially between countries with high trade flux such as the EU with China. As such, amendments to China's national law on timber need to receive more attention in order to evaluate, and progress of the CBA needs to be made more transparent in order to allow further assessments.

NON-TECHNICAL ANNEXES
Annex I - Procedural information

Lead Directorate General

The Directorate-General (DG) for Environment was leading the preparation of this initiative and the work on the Fitness Check in the European Commission.

Organisation and timing

The study to support the Fitness Check took place between 25 May 2020 and 25 March 2021. An inter-service steering group (ISSG) was established for preparing this initiative. A version of each deliverable was shared prior to the meeting for comment. Comments provided by the ISSG were considered and incorporated as appropriate in either future or updated drafts of the deliverables.

Consultation of the RSB

RSB meeting comments	Reflection in text
The report does not sufficiently identify the benefits of both Regulations in view of their high costs and their limited effectiveness to date.	The report now further explains the benefits in section 5.1 and 5.2: improved governance systems in third countries; improved forest management, forest inventory and law enforcement; improved transparency and more information available; increased pressure on all actors along the supply chains; increased awareness of the issue; enhanced stakeholder participation; inspiring other countries to fight illegal logging.
The report does not draw clear conclusions on whether the Regulations are 'fit for purpose'. It lacks clear take-aways for future decision-making.	The Fitness Check has found limited evidence on the effect of the EUTR and, in particular, FLEGT Regulation on global illegal logging and associated trade. Challenges related to the implementation of the EUTR and, especially the FLEGT Regulation regarding their effectiveness and efficiency that have been identified are listed in 6.2. under Lessons Learnt.

On top of the above listed main recommendations of the RSB, the amended SWD also addresses the more detailed set of comments made by the RSB in Section C - What to improve - of its opinion in the relevant sections of the impact assessment:

The report should better explain the main driving factors behind the limited effectiveness of the Regulations. It should explain the relative importance of each of these factors and indicate to	The main problems are listed in section 5.1; for the EUTR, those are a lack of cooperation and information exchange between CAs and customs authorities as well as the application of DD; for the FLEGT Regulation, they are weak governance in partner countries, absence

what extent they are within EU control (e.g. regulatory design and implementation failures).	of political will and lack of economic incentives (see also Box 3) as well as corruption.
The report should bring out the 'fitness check' angle of the evaluation more clearly and better indicate what links exist between the two Regulations in terms of synergies, complementarities, overlaps or streamlining potential (e.g. for monitoring or enforcement).	The report explains that few synergies exist; e.g. costs for operators under the EUTR decrease if they can find and source FLEGT-licensed timber (5.1).
The report should better demonstrate the different types of benefits that both Regulations intendedly and unintendedly produced. The report should explore (qualitatively if quantified evidence is not available) to what extent illegal logging has been reduced because of benefits such as increased awareness and better forest governance in wood-producing countries. The report should explain better whether the benefits outweigh the costs of the Regulations. It should indicate what the potential is for reducing the high compliance and operating costs of the Regulations.	The different types of benefits are now described in more detail in 5.1 and 5.2. Their roles in reducing illegal logging through raising awareness, enhanced stakeholder participation and improved governance is described in 5.2. The report clarifies that the benefits outweigh the costs of the EUTR but not of the FLEGT Regulation (5.2). Also, the potential for cost reduction is now described in greater detail: in case of the EUTR, a revised DD system and better cooperation between authorities would be more cost-efficient (6.2); as for the FLEGT Regulation, DD costs could decrease if more countries had an operational licencing system, however, this improvement would be outweighed by development costs which would remain disproportionately high (5.2).
In view of possible unintended consequences such as 'leakage', the report should indicate whether complementary measures might be necessary to fight deforestation worldwide based on the evaluation findings.	The report identifies possible complementary measures on the basis of the EUTR's DDS. The problem of leakage can be addressed by working closely together with other consumer countries (6.1).
The conclusions should make a more critical, evidence-based judgement of how the Regulations have performed. They should clarify to what extent they remain relevant and draw clearer lessons for policy-makers.	Section 6.2 on lessons learnt was revised with several additions that clearly list lessons for policy-makers. The EUTR remains relevant and the DDS has proven to be promising in terms of both effectiveness and efficiency. Whereas the FLEGT Regulation should be repealed due to its key instrument, the VPAs, having had very limited impact on illegal logging and the connected trade, entirely outweighed by its immense procedural costs as detailed in 5.1, 5.2 as well as 6.2.
The report should dedicate more attention to the issue of data limitations and draw lessons for future data-collection as a way to facilitate better measurement of the degree of future success of both Regulations.	The issue of data limitations is addressed in 5.2

External expertise

The study to support the Fitness Check of the EUTR and FLEGT Regulation used the expertise of the Commission Expert Group/Multi-Stakeholder Platform on Protecting and Restoring the World's Forests, including the EU Timber Regulation and the FLEGT Regulation.

The study was also supported by extensive stakeholder engagement activity, as summarise in Annex M.

Answering the evaluation questions/evaluation matrix

The evaluation matrix is presented in Annex J. This is based on the sixteen areas for assessment set out in the evaluation roadmap (European Commission, 2020b). Compared with the roadmap:

- Under Efficiency, two areas ('To what extent have the objectives been met?' and 'What have been the (quantitative and qualitative) effects of the intervention?' have been combined into one overall question – EQ1 – as they were considered to overlap substantially in subject area;
- Under Relevance, two areas ('To what extent is the intervention/initiative still relevant?' and 'To what extent have the (original) objectives of the intervention (still) correspond to the needs within the EU?') have also been combined into one question – EQ8 – as again, on review, they appear to seek to address the same subject and overlap substantially;
- Under EU Value Added, two areas ('What is the European added value of the initiative/intervention compared to what could have been achieved by MSs at national and/or regional levels in its absence?' and 'To what extent does the initiative comply with the principles of subsidiarity and proportionality?') have been combined into one question – EQ13 - as it was considered that these could be explored together given synergies between them.

The initial evaluation matrix in Annex J sets out the following aspects for each evaluation question, which were used to structure the study approach:

- Sub-questions: Sub-questions have been developed for each of the 13 evaluation questions assessed. These draw out aspects of each question based on our interpretation and understanding of the evaluation questions.

In relation to each question, we have mapped out the:

- Assessment criteria: these describe the operational questions we would seek to answer for each sub-question. They will also be used to support the development of questions to be asked to stakeholders as part of the interviews and surveys;
- Indicators: This column highlights potential indicators that can be used to monitor/measure the respective impacts. These indicators provide a metric which can be used to measure the different components of the intervention logic. In defining these indicators we have drawn upon existing indicator frameworks relating to the FLEGT Regulation, EUTR and illegal logging and trade more broadly;
- Data analysis approach: This describes in detail the overall approach and the methods and tools used by which we attempt to answer the question.;
- Data sources and data collection methods: This describes the key sources we have used to answer the question as well as the way in which the data has been gathered e.g. via consultation of selected stakeholders.

Annex J - Evaluation matrix

Effectiveness

Sub-questions	Success criteria	Indicators	Data analysis approach	Data sources/Data collection methods
1. To what extent have the objectives of the Regulations been met? And to what extent can the observed effects be credited to the EUTR and FLEGT Regulation?				
a. What has been the effect of the Regulations on illegal logging and associated trade?	• Proportion of illegal timber and timber products has reduced from EU, countries exporting to EU and in VPA countries • Reduced rates of illegal logging globally (also consider VPA versus non-VPA countries) • VPA countries changing to a perceived lower risk level over VPA process • Countries with VPA benefit through better access to market	• Changes on timber products trade volumes • Volume/value of EU imports from VPA countries and countries considered high risk • Volume and proportion of timber and timber products from illegal sources globally	• Qualitative (quantitative where possible) analysis of levels of illegal logging over time • Qualitative (quantitative where possible) analysis of associated trade globally, and in specific regions and how these have changed with the introduction of EUTR and FLEGT Regulation. This will capture imports to the EU. For instance: • Quantitative analysis of number of VPA agreements and implementation, and critical analysis of how this relates to changes in trade flows / levels of illegal logging. • Quantitative analysis of implementation of due diligence by EU operators and critical analysis of how this relates to changes in trade flows / levels of illegal logging.	• Databases/ reports on VPA implementation (EU Forest Institute's EUFLEGT Regulation Facility, European Commission) • EUTR national reports • Illegal logging reports in literature globally, in high risk countries and in VPA countries. • Stakeholder consultation (interviews, survey(s), meetings) with VPA partner countries and EU Commission (in particular around attribution of effects) • Forest cover data (FAO state of the World's forest, Global Forest Watch etc.) • Country overviews, Preferred by Nature country profiles • FLEGT Regulation Independent Market Monitor reports: https://www.fii.site/
b. What contribution have the Regulations made to reduce the quantity of illegally harvested timber and timber products placed on the internal market?	• Reduction of illegal timber and timber products being placed on the internal market • Reduction in volume/value of imports from countries considered high-risk • Number of compliance checks has remained constant/increased • Reduced number of operators in breach with EUTR obligations (also consider VPA countries separately) • Reduced number of enforcement actions per number of EUTR checks (also consider VPA countries separately)	• Volume/value of imports from countries considered high risk • Number of compliance checks performed, under both EUTR and FLEGT Regulation (CAs and customs) • Number of operators in breach with EUTR obligations (also consider VPA countries separately) • Number of enforcement actions per number of EUTR checks (also consider VPA countries separately) • Number of breaches with FLEGT Regulation found during checks of licences/shipments	• Qualitative analysis of number and results of CA checks/enforcement pressure • Qualitative analysis of reports of illegal trade in timber and timber products per MS, domestic and imported • In practice it will be difficult to decouple the overall reduction in imports from other factors that may have affected them. Reduction in illegal timber imports alongside a reduction in total imports does not mean that the first is cause for the second. Relevant information from the stakeholder consultation might help clarify how far the impacts can eb attributed to EU action.	• EUTR and FLEGT Regulation national reports • Overview of CA EUTR checks • Case study on illegal logging impacts in a VPA country • Databases/ reports on VPA implementation (EU Forest Institute's EU FLEGT Regulation Facility, European Commission, MS CAs) • Stakeholder consultation (in particular around attribution of effects)

Sub-questions	Success criteria	Indicators	Data analysis approach	Data sources/Data collection methods
	• Reducing number of breaches with FLEGT Regulation found during spot checks of licences/shipments • Reduced reports of illegality in relation to Indonesian timber and timber product exports	• Number of reports/estimates of exports of illegal Indonesian timber/timber products		• Case studies on the operation of EUTR in the absence of FLEGT Regulation VPAs • Literature review
c. What contribution have the Regulations made to increase legal timber and timber products being placed on the internal market?	• Increased imports from Indonesia (FLEGT Regulation licensing) or VPA countries	• Volume/value of imports from Indonesia (FLEGT Regulation licensing) or VPA countries that are about to start issuing FLEGT licences	• Quantitative and qualitative analysis of imports of timber and timber products	• Trade data (Eurostat COMEXT data) • FLEGT licence/actual import data • Country overviews (risk indicators), Preferred by Nature country profiles • Literature review • Stakeholder consultation
d. To what extent has EUTR improved the transparency in the supply chain?	• Timber and timber products placed on the internal market are reliably traceable (operator-trader and trader-trader transactions) • Reduced number of traders and operators in breach with EUTR traceability obligations • Reduced number of enforcement actions relating to traceability per number of EUTR checks • CAs have increased use of traceability obligation during planning of checks • Consumers have increased confidence that products purchased are not from illegal sources	• Number of traders and operators in breach with EUTR traceability obligations • Number of enforcement actions relating to traceability per number of EUTR checks • CA use of traceability obligation during planning of checks • Consumer confidence in products purchased	• Quantitative analysis of recording keeping by EU traders • Qualitative analysis of results of CA checks/enforcement pressure • Qualitative analysis of consumers views • If possible, engage a small number of CAs to test this traceability during their next checks.	• Background analysis of national reports on EUTR; • Overview of CA EU Timber Regulation checks • Stakeholder consultation – consumers (if possible), NGOs, trade associations • CA interviews
e. To what extent have the Regulations promoted improved forest governance and legislative change of relevant forest law?	• VPA countries taking further legislative or regulatory action to make forest law more robust • VPA countries have established relevant authorities or equivalent to deal with the topic of timber product legality • VPA countries have increased resources devoted to implementation and enforcement • VPA countries have improved enforcement of forest law and/or actions to improve governance • Approach to developing VPA has been inclusive, involving civil	• Legislative actions by VPA country governments • Governance structure of timber operations in VPA countries • Units/Resources devoted to implementation and enforcement of timber regulation • Effectiveness of enforcement actions by VPA versus non-VPA countries • Levels of illegal logging in VPA versus non-VPA countries • Stakeholders opinion of enforcement effectiveness, changes	• Case study approach targeting analysis of literature and stakeholder views for particular VPA partner countries • Qualitative analysis of stakeholder responses • Quantitative analysis of levels of enforcement actions • -Assess legislative reform in VPA countries versus legislative reform in non-VPA countries	• Stakeholder consultation • Legislative reform process in VPA countries (Commission, EFI) • Literature review • Databases/ reports on VPA implementation (EU Forest Institute's EUFLEGT Regulation Facility, European Commission, MS CAs)

Sub-questions	Success criteria	Indicators	Data analysis approach	Data sources/Data collection methods
	society, private sector, and co-operation between MS and EC	in forestry regulation and governance • Range of stakeholders engaged in VPA process		
2.	**What factors have contributed to or hindered their achievement?**			
a.	How effective has MS implementation and enforcement of EUTR been?			
i. How effective has the establishment of the legislative framework in MSs been?	• Appropriate and complete transposition of obligations into national law, consistently across the EU • EUTR MSs have powers to undertake necessary checks • Roles have been adequately, clearly and effectively assigned (e.g. CAs) • EUTR MSs take additional actions to facilitate implementation • EUTR MSs have effective, proportionate, and dissuasive penalties which are coherent across the EU	• Completeness of transposition of obligations into national law • Sufficiency of powers assigned to EUTR MSs to undertake necessary checks • Suitability of assigned roles within EUTR MSs (e.g. CAs) • Additional actions by MSs to facilitate implementation • Scale of sanctions taken per EUTR MSs (e.g. notice of remedial actions, fines, seizure of timber, suspension of authorisation to trade, imprisonment) • Level of severity of penalties	• Qualitative analysis of type and scale of sanctions possible per MS. • Comparison of legal frameworks across EUTR MSs	• Background analysis of national reports on EUTR • Legislation analysis • Stakeholder consultation (interviews, survey(s)) • Literature review
ii. How effective have MSs EUTR checks been?	• MSs conduct a comparable number of high-quality checks • All MSs are using risk criteria consistently within and across MSs to decide on compliance checks • MS checks cover the majority of operators linked to the highest proportion of imports (value/volume) • MSs have comparable resources/ staff considering their duty holder population/trade levels	• Quantity of inspections/checks • Quality of inspections performed on operators and traders • Proportion of all operators'/traders' checked • Proportion of all imports (and from high risk countries) covered by checks • Number checks on MOs • Resources / number of staff invested to perform audits, as a ratio to number of duty holders / levels of imports • Number of authorities/inspectors performing audits	• Quantitative and qualitative analysis of frequency and quality of duty holder compliance checks (judged based on stakeholder inputs, instances of reports of poor quality checks, and review of a sample of checks to test duration / quality of templates) • Also where possible, looking specifically at MS checks on imports from high risk countries • Quantitative analysis of MS budget and resources available for EUTR and compliance activities) • Analysis of import patterns	• Background analysis of national reports on EUTR; Overview of CA EU Timber Regulation checks • Stakeholder consultation (interviews, survey(s)) • Trade data (Eurostat)
iii. How effective have EUTR MS penalties been?	• Enforcement action is taken for breaches of obligations by duty holders • Enforcement is effective, proportionate, and dissuasive • Penalties applied are effective, proportionate, and dissuasive	• Enforcement action taken • Penalties applied • Documentation of audits is complete and clear • Results of follow-up checks • Stakeholder perception on penalties	• Analysis of enforcement actions taken, considering the duty holder population • Analysis of sample of documentation and records regarding audits • Analysis of the awareness and perception of stakeholders	• Datasets/ reports (Eurostat, Background analysis of national reports on EUTR and FLEGT Regulation; Overview of CA EU Timber Regulation checks, summary record of the

Sub-questions	Success criteria	Indicators	Data analysis approach	Data sources/Data collection methods
	• Audits are transparent		• Quantitative analysis of continuing high-risk trade following penalties per EUTR MS per annum.	meetings of the EUTR/FLEGT Regulation Expert Group) • Stakeholder consultation (interviews, survey(s), stakeholder meetings) incl. Duty holders, MS CAs
a. To what extent has due diligence under EUTR been implemented effectively by operators?	• All operators are aware of their obligations • Operators have a clear and common understanding of what DD means and depth of processes required • All operators have DD systems in place, that are well developed and well-functioning with regard to the necessary level of information gathering, and checks on the veracity of information collected • Operators take appropriate action to ensure negligible risk in situations where there is limited information and or evidence of non-negligible risk (e.g. switching to other suppliers) •	• Operators awareness of the regulation • Operator understanding of DD and level of sufficient checks • Quantity of operators using DD systems • DDs are reviewed regularly and adjusted where risks change • Length of time for which DD system have been implemented • Number of instances of non-compliance identified by CAs, both for lack of DD and poor quality DD systems • CA perceptions of quality of DD systems • Use of MO services • Number of companies taking action in response to identification of negligible risk ,and type of action taken • Imports from high risk countries • imports from countries with high levels of corruption • Awareness of risks/forest issues by operators	• Analysis of levels of awareness and understanding through stakeholder consultation • Quantitative analysis of DD systems in operation, including number, time of operation and number of non-compliances (and reason for non-compliance), and number/use of MO services • Analysis of stakeholder opinion on quality of DD systems (CA) and how often updated (operators), evidence of actions taken in response to negligible risk (both) • Analysis of corruption index in key EU exporting countries, and stakeholder views on whether corruption has increased or decreased and the impact of the Regulations	• Background analysis of national reports on EUTR; • Overview of CA EU Timber Regulation checks, • Stakeholder consultation (interviews, survey(s), stakeholder meetings) with Duty holders, MS CAs – in particular asking operators about the length of time of implementation of DD and review • Literature review • Data concerning levels of corruption in different countries globally, e.g. https://www.transparency.org/en/cpi#
b. To what extent has determination of negligible risk under EUTR created challenges for implementation of prohibition?	• Definition of negligible risk is clear • Existence of common understanding among authorities, operators, legislators/prosecutors etc. in all MSs of negligible risk • Clear to all that consequence of non-negligible risk should be not placing product on EU market. • Easy to prove insufficient DDS in court. • Easy to prove legality in another jurisdiction	• Understanding of negligible risk amongst stakeholders, both clarity and consistency • Existence of guidance and support in the implementation of "negligible risk" • Number of instances of non-compliance • Number of enforcement measures taken – seizure or penalties (at EUTR MS level and EU level) • Actions taken in response to identification of non-negligible risk	• Qualitative analysis of stakeholder opinion regarding: the clarity and guidance on key concepts, consistency of understanding and perception on enforcement • Analysis of the ease to prove insufficient due diligence in court, and the implications for burden of prove - Quantitative analysis of the number of cases upheld • Qualitative analysis of stakeholder inputs confirming whether non-	• Stakeholder consultation (interviews, survey(s), meetings) with authorities, operators, legislators/prosecutors • EU case law on "due diligence" in the context of EUTR • Literature sources, e.g. European Commissions' "Study on due diligence requirements through the supply chain"

Sub-questions	Success criteria	Indicators	Data analysis approach	Data sources/Data collection methods
	• Perception amongst operators, traders, CAs and EUTR MSs that regulations will be upheld	• Number of cases where enforcement measures could not be upheld at EC level • MSs where enforcement measures could not be upheld (is this an issue just for some EUTR MSs?) • Perception of ability to enforce regulation	negligible risk results in not placing product on EU market.	
c. How are CAs (CAs) cooperating on EUTR implementation /enforcement?	• MS CAs are notified of illegal trade in other MSs in a timely manner in order to support their monitoring of compliance. • MS CAs are notified of changes in the number of domestic operators in a timely manner in order to support their monitoring of compliance	• Levels of Information/data sharing between CAs and operators • Levels of Information/data sharing between CAs and customs • Levels of Information/data sharing between CAs • EUTR MS co-ordination tools • Stakeholder views on MS coordination	• Quantitative and qualitative analysis of frequency and quality of data exchanged relating to the compliance checks. • Qualitative analysis of stakeholder opinion	• Background analysis of national reports on EUTR; • Summary record of the meetings of the EUTR/FLEGT Regulation Expert Group published in the Register of Commission Expert Groups) • Stakeholder consultation (interviews, survey(s), stakeholder meetings) with Duty holders, MS CAs
d. How are CAs providing technical and other assistance and guidance to operators?	• Increase in awareness/capacity of operators	• Number of awareness raising/capacity building activities • Type of activities and means of delivery • Views by CAs and operators	• Analysis of operators reached through awareness/capacity building activities • Assessment of feedback from authorities and operators	• Background analysis of national reports on EUTR • Stakeholder consultation • MS CAs
e. How effective has the implementation of EUTR traceability obligations been?	• Authorities identified to carry out checks on traders are competent • Authorities have sufficient resources and powers • Traders' records are complete	• Which authorities have been identified to carry out checks on traders? • Resources allocated by CA to implementing traceability • Powers provided to CAs to implement traceability • Number of checks performed, and as a proportion of all traders	• Links to question 1	• Background analysis of national reports on EUTR and FLEGT Regulation; • Overview of CA EU Timber Regulation checks • Stakeholder consultation • Literature review
f. How effective has the role and functioning of EUTR Monitoring Organisations been?	• Existence of common understanding as to role of operators • MOs are accessible to operators and their systems are being deployed • Operators view MOs as useful and relevant • MOs have reduced compliance burden for operators • Checks on MOs are undertaken across all countries and reveal high level of performance and remedial actions taken where issues identified	• Role of MO well defined according to stakeholder perception • Number and location of MOs established • Number of operators seeking assistance of/using systems developed by MOs • Number of SMEs using MOs • Opinion of operators regarding MOs • Proportion of imports (by volume/value) covered by MO systems	• Qualitative assessment of stakeholder opinions around: clarity of MO roles (MO and CAs); quality of MO systems; usefulness of MOs (operators) • Quantitative analysis of numbers and location of MOs and engagement with operators / use of systems • Quantitative assessment of levels of trade covered by MO systems • Quantitative analysis of MOP audits – numbers and nature of non-compliances	• Background analysis of national reports on EUTR; • Overview of CA EU Timber Regulation checks • European Commission data • Stakeholder consultation

Sub-questions	Success criteria	Indicators	Data analysis approach	Data sources/Data collection methods
	• MOs take appropriate action in the event of failure by an operator to properly use their DDS, including notification of CAs in the case of significant of repeated failure by an operator	• Quantity and quality (according to stakeholder inputs / audit results / number of withdrawals) of systems and advice developed by MOs • Cost of using system developed by MO relative to internally developed system • Number and outcome of checks on MOs • Number of withdrawals of recognition of MOs • MO communications with CAs regarding failure of use of DDS	• Link to efficiency questions regarding costs	
g. What progress has been made on the implementation of the VPAs under FLEGT Regulation?	• High number of VPAs signed since the FLEGT Regulation entered into force. • High number of VPA countries issuing FLEGT licences • VPA agreement with partner countries cover a significant part of EU timber (product) imports • FLEGT Regulation VPA process is effective and progresses with limited barriers/challenges/issues • Once VPAs are implemented, partner countries remain committed	• Number of VPAs signed since FLEGT Regulation entered into force • Number and status of VPAs still under negotiation. • Number of VPA countries issuing FLEGT licences • Coverage of total imports to EU • Time it takes for VPA negotiation by phase. • • Issues/challenges experienced in VPA process • Perceptions of those who have not engaged in FLEGT Regulation VPA process	• Quantitative analysis of number of VPA agreements at different stages of agreement and implementation and coverage of EU imports. • Quantitative analysis of time and costs to agreeing VPAs, using Standard Cost Model (SCM) – link to efficiency questions • Quantitative analysis of national report data related to VPA implementation. • Qualitative analysis of stakeholder opinions around VPA process, barriers/issues and status of current VPA countries • Case study analysis of non-VPA country of opinions with respect to engaging in VPA process	• Databases/ reports on VPA implementation (European Forest Institute's EU FLEGT Regulation Facility, European Commission) • Stakeholder consultation (interviews, survey(s), meetings) with VPA partner countries and EU Commission • Efficiency questions
h. How effective has the implementation of FLEGT Regulation procedures been in partner countries and MSs?				
i. How effective are the processes and tools put in place by partner countries?	• Tools put in place to facilitate implementation are effective, functioning and are being used (including FLEGIT/TRACES system) • Processes in partner countries to address problematic cases are robust • Changes to national law and governance reflect VPA as negotiated • FLEGT licences cover those agreed in the VPA	• Tools/processes are in place (as planned under the VPA) • Quality of tools put in place (E.g. IT tools) • Tools are functioning and are being used (including FLEGIT/TRACES system) - .e.g. level of usage • Opinion of robustness of procedures in the partner country regarding addressing problematic cases/challenges of FLEGT licences • Instances of problematic cases and resolution	• Link to coherence analysis • Comparison of tools put in place against VPA negotiated • Identification of tools put in place • Quantitative analysis of levels of usage vs anticipated usage • Qualitative review of stakeholder opinion regarding quality and effectiveness of processes, and around ability to resolve problematic cases effectively • Review of evidence around problematic cases (e.g. licencing issues) and resolution	• Literature review • Summary record of the meetings of the EUTR/FLEGT Regulation Expert Group published in the Register of Commission Expert Groups • Stakeholder consultation

Sub-questions	Success criteria	Indicators	Data analysis approach	Data sources/Data collection methods
		• FLEGT licences issued across different products	• Analysis of the opinions of Commission services on the tools and processes put in place by partner countries • Analysis of data around FLEGT licences issued and product coverage	
ii. How effective is enforcement?	• Enforcement by partner countries where breaches with relevant national legislation are identified; penalties are effective, proportionate, and dissuasive • Enforcement by MS where breaches with the FLEGT Regulation are identified; penalties are effective, proportionate, and dissuasive	• Number of audits carried out in VPA countries. • Number of audits carried out in MS • Number of challenges to licences brought by CAs; • Number of challenges to licences brought by VPA countries • Size of enforcement actions in EU MS and VPA countries • Perception of effectiveness of enforcement in MSs and partner countries.	• Analysis of the opinions of Commission services and wider stakeholders around effectiveness of enforcement procedures • Quantitative analysis of audits and enforcement actions taken by VPA partner countries	• Literature review • Summary record of the meetings of the EUTR/FLEGT Regulation Expert Group published in the Register of Commission Expert Groups • Stakeholder consultation
iii. How effective is communication and reporting (within MSs, with partner countries, with other stakeholders/duty holders)?	• FLEGT Regulation CAs and customs are co-operating and there is effective sharing of data and information • Partner countries communication with EU MSs and COM is sufficient, both in terms of frequency and coverage and depth of issues	• Type/number of channels of cooperation between CAs; CAs and customs; CAS and COM and partner countries and CAs/COM • Frequency of use of channels /communication for above channels • Quality of communications for above channels	• Review of nature of communication between MS, MS and COM and partner countries • Analysis of levels and frequency of communication • Analysis of the opinions of stakeholders around quality, effectiveness and sufficiency of communication • Case study analysis of stakeholders in targeted VPA countries	• Literature review • Summary record of the meetings of the EUTR/FLEGT Regulation Expert Group published in the Register of Commission Expert Groups • Stakeholder consultation
iv. How effective have processes and procedures put in place in EU MSs been?	• Licences are being processed and checked as intended and processes are effective • Customs procedures effectively identify non-valid FLEGT licences • Required customs procedures do not pose unnecessary burden to imports	• Processes are in place to process and check licences • Use of FLEGIT (e.g. level of use relative to expected levels) • Number of licences processed / checked • Time required for processing licences / checks • Number of non-compliant licences identified • Opinion of stakeholders regarding licence checking processes	• Qualitative analysis of national reports, use of processes and systems • Qualitative analysis of responses to stakeholder consultation, in particular around quality/effectiveness of processes and potential issues	• Background analysis of national reports on FLEGT Regulation • Summary record of the meetings of the EUTR/FLEGT Regulation Expert Group • Stakeholder consultation (Feedback from CAs) • Trade statistics (imports from ID in Comext and as per national reports align)
i. How effective has MS reporting on implementation of EUTR and FLEGT Regulation been?	• Reporting across MSs is timely, complete, correct, and effective and meets the obligations set out in the Regulations	• Completeness and correctness of MS reports • Timeliness of exchange of information for reporting purposes • Timely provision of data by customs	• Analysis of MSs reports • Analysis of opinions regarding reports provided and co-operation between those owning the data	• Background analysis of national reports on EUTR • Background analysis of national reports on FLEGT Regulation • Summary record of the meetings of the EUTR/FLEGT Regulation

Sub-questions	Success criteria	Indicators	Data analysis approach	Data sources/Data collection methods
	• Effective co-operation between CAs and customs – i.e. customs providing relevant data in timely way	• Sufficiency of data provided by customs • Stakeholders perception of successful cooperation		Expert Group published in the Register of Commission Expert Groups • Stakeholder consultation
j. What has been achieved in terms of building a uniform understanding and awareness of the EUTR and FLEGT Regulation throughout the EU? Which approaches have/have not worked to raise awareness?	• All duty holders understand their obligations and responsibilities under the EUTR and FLEGT Regulation. • Implementation is consistent across EU MS • The EUTR/FLEGT Regulation Expert Group provides opportunity to exchange and harmonise approaches • Cap4Dev is used consistently for sharing of relevant information • High awareness of Regulations for actors in the supply chain • High awareness of regulations amongst citizens and consumers	• MSs/EFTA representative attendance at EUTR/FLEGT Regulation Expert Group meetings • CAs share information on implementation and enforcement experiences (at meetings, bilaterally, via Cap4Dev etc.) • Consistency of implementation across EU • Trade patterns across MSs react to EUTR/FLEGT Regulation Expert Group opinions • Level of awareness of Regulations for actors in the supply chain • Level of awareness of regulations amongst citizens and consumers	• Quantitative analysis of meeting attendance by MSs. • Qualitative analysis of the level of exchange of information • Qualitative analysis of stakeholder consultation around: whether MSs feel they understand their obligations and what more is required to assist them and use of EUTR guidance, and supply chain / consumer awareness	• Background analysis of national reports on EUTR and FLEGT Regulation; Overview of CA EU Timber Regulation checks • Stakeholder consultation (interviews, survey(s), meetings) with duty holders • Literature review
3. What have been the unintended/unexpected effects of the intervention, including on trade?				
a. Have levels of illegal logging in VPA countries stayed the same or even increased?	• Levels of illegal logging have not increased since VPA has been signed • Sources of EU exported timber and timber products have not shifted from illegal to existing legal sources within a given VPA country	• Volumes or extend of illegal logging in VPA countries • Impact of VPAs on risk-level (NEPC on score)	• Link to effectiveness question 1 • Case study approach focusing in more detail on specific examples	• Link to effectiveness question 1
b. Has trade in illegally sourced timber and timber products shifted to less regulated/sensitive markets? (This includes less regulated markets within EU)	• Imports of timber and timber products have remained stable both in terms of level and origin, since the FLEGT Regulation VPAs and the introduction of the EUTR • High risk timber and timber products exports from VPA countries are not shifted to non-EU markets • No reports of imports switching to MSs with perceived weaker enforcement	• Trade volume to EU and non-EU markets from key exporters to EU • Trade to different MSs within EU (in comparison to perceived levels of enforcement)	• Quantitative analysis of trade flows. • This analysis will need to consider other factors (e.g. market forces) which may have also influenced trade patterns and flows. • Qualitative analysis of commentary around drivers of observed patterns in trade flows • Analysis of stakeholder views around impact of Regulations	• COMEXT trade analysis • Reports and commentary describing trade flows and underlying drivers • Stakeholder engagement
c. Has there been a shift in products placed on the market to those not covered by EUTR (as provided for in EUTR Article 20(3))?	• EUTR covered products are not displaced by products out of scope. • No product category has seen a decline due to the EUTR (and/or there are underlying demand side reasons to explain any changes in flows)	• Volume/value of products placed on EU market, split by type of product (as categorised under EUTR Annex for those covered by EUTR).	• Quantitative analysis of volume and value of timber and timber products imported into EU MSs. • Quantitative analysis of exporting country and temporal changes in exporting countries.	• Databases/reports (COMEXT data, Duty holder feedback on supply chain)

Sub-questions	Success criteria	Indicators	Data analysis approach	Data sources/Data collection methods
d. Has there been a shift to non-timber-based products?	• Timber products have not been substituted for non-timber-based alternatives due to the effect of the Regulations and the burden placed on businesses	• Quantity of timber products placed on market • Quantity of non-timber-based alternatives placed on the market	• Quantitative analysis (where possible) around timber and its alternatives. • Case study approach might be appropriate given wide range of potential products for assessment	• Datasets looking at sales of timber and non-timber alternatives • Stakeholder consultation (interviews, survey(s), meetings) with Duty holders, MS CAs; business registers
e. Have businesses (esp. SMEs) changed business lines/closed (could also reflect shift of location outside EU to circumvent obligations)?	• No businesses dealing in legal timber and timber products have closed • No shift in number of operators from MSs to those not covered by the EUTR • Operators are not found to be taking actions to not comply with regulations – e.g. using 'letterbox' companies to avoid detection • No loss of employment	• Number of businesses that have closed or changed business lines in EU • Number of 'operators' based outside the EU • Use of 'letterbox' companies • Employment in timber sector	• Qualitative analysis of businesses that have closed or changed product lines. • Qualitative analysis of commentary around drivers of observed patterns in business openings/closures • Analysis of stakeholder views around impact of Regulations • Analysis of stakeholder opinion on use of 'letterbox' companies, and switching of operators to becoming traders • Quantitative analysis of employment trends	• Databases of business statistics (Eurostat) • Data held by CAs around numbers of operators/traders • Stakeholder consultation (interviews, survey(s), meetings) with Duty holders, MS CAs; business registers
f. Smaller operators have incentive to make changes which do not work towards achieving overall objective	• Smaller EU operators do not switch to buying from larger EU companies to escape DD obligations (operators become traders); • Smaller EU operators do not switch to larger non-EU suppliers who can more easily provide information on supply chain (and need to collect information from fewer suppliers)	• Number and size of operators • Number of traders, of different size • Size of non-EU timber operators exporting to EU • Evidence on response of businesses to Regulations • Compliance with due diligence by larger operators that trade	• Link to effectiveness question 2c • Analysis of responses to stakeholder responses providing insights around operators' responses • Quantitative analysis of number and size of operators and of traders • Would also need to consider benefits of consolidation – e.g. economic cost savings, greater efficiency and lower environmental impacts of larger entities	• Data held by CAs around numbers of operators/traders • Stakeholder consultation (interviews, survey(s), meetings) with Duty holders, MS CAs; business registers
g. Have the Regulations influenced other legislation targeted at reducing illegal logging in non-EU jurisdictions	• Introduction of EUTR-like demand side policies to regulate timber imports in non-EU countries (E.g. US, Australia, Japan, South Korea, Switzerland)	• Regulation in non-EU countries • Chronology/reported links to introduction of EUTR and/or FLEGT Regulation • Commentary that links implementation to example set by EUTR • Recognition by non-EU countries of FLEGT licence as an identification of legal timber	• Qualitative assessment of non-EU regulations regarding timber trade	• Review of non-EU Regulations e.g. US, Australia, Canada, VPA-partner countries.

Efficiency

Sub-questions	Success criteria	Indicators	Data analysis approach	Data sources/Data collection methods
4. To what extent has the intervention been cost-effective? What is the relation between benefits and costs?				
a. What are the costs of the EUTR (monetary and non-monetary)? What factors have influenced these costs?	• Costs are minimised/reasonable • EUTR MOs have reduced compliance burden for operators • Lower DD burden for operators importing under FLEGT licences	• Direct and indirect administrative costs, covering all actors (duty holders (CAs, operators, traders), other businesses, EC, EUTR MSs). These include: a. Due Diligence obligations of operators (information gathering, risk assessment & risk mitigation) – where using MO or self-determined systems; b. Administrative and enforcement costs of EUTR MSs CAs c. Costs of record-keeping obligations of traders d. Costs to businesses in timber source countries (including provision of information to support DDS) e. Costs to the European Commission f. Cost to EU consumers • Split by those importing under FLEGT licences and those not • Other direct and indirect costs (e.g. capex, opex, hassle, etc) covering all actors, in both EU and other countries • Other economic costs (e.g. trade, market prices)	• Appraise impacts quantitatively where possible and seek to assign monetary values. • Note: quantitative analysis for EUTR and FLEGT Regulation will be difficult based on existing information in the literature. E.g. only a handful of MSs might report this information, info covers varying time periods, varying metrics, with lots of gaps • Where this is not possible, assess impacts qualitatively • Estimate the direct and indirect administrative costs arising from EUTR using Standard Cost Model (see section below). Substantive compliance costs are likely to be greater than purely administrative costs. Due Diligence obligations of operators can be significant if importing from risky countries. • Identify factors that have influenced costs	• Literature review, including: ○ Background analysis of national reports on EUTR; ○ Overview of CA EU Timber Regulation checks ○ COM report on effectiveness of EUTR during first two years (2016), Staff Working Document and background consultant's report ○ GTF (2015) supplier and consumer Due Diligence analysis ○ UNEP-WCMC [unpublished] Insights from the implementation of the EUTR by operators • Stakeholder consultation - targeted survey questions for practitioners (public authorities and duty holders) on the quantification of time spent and investments to feed into estimation of administrative and substantive costs; wider feedback from stakeholders through meetings and interview on their views regarding the proportionality between costs and benefits • ITTO data for market prices
b. What are the costs of FLEGT Regulation (monetary and non-monetary)? What factors have influenced these costs?	• Costs are minimised/reasonable • Required customs procedures do not pose unnecessary burden to imports	• Direct and indirect administrative costs, covering all actors (duty holders, other businesses, EC, MSs), in both MSs and VPA partner countries. These include: ○ Cost to EU MSs in setting up and handling FLEGT licences Cost of establishing and functioning of a FLEGT Regulation licensing system in VPA countries (noting only Indonesia has reached stage of issuing FLEGT licences)	• Appraise impacts quantitatively where possible and seek to assign monetary values • Where this is not possible, assess impacts qualitatively • Estimate the direct and indirect administrative costs arising from FLEGT Regulation using Standard Cost Model (see section below) • Case study of VPA partner countries • Note: there are lots of 'FLEGT Regulation' projects in VPA countries, working with multiple	• Case studies (e.g. on key VPA countries at different stages of negotiation and implementation) • Background analysis of national reports on the FLEGT Regulation; • Evaluation of the EU FLEGT Action Plan 2004-2014 final report (2016), and COM Staff Working Document • 2015 Performance Audit of the FLEGT Action Plan

Sub-questions	Success criteria	Indicators	Data analysis approach	Data sources/Data collection methods
		○ Costs to market participants of obtaining FLEGT licences ○ Broader FLEGT Regulation VPA process: ○ Funding from the European Commission, MSs voluntary contributions, donors and from VPA countries for the VPA process ○ Costs of preparation, negotiation, development and implementation of a VPA in partner countries • Other direct and indirect costs (e.g. capex, opex, hassle, investments in VPA partner countries, etc) • Other economic costs (e.g. trade, market prices)	stakeholders and addressing general issues of governance, corruption, illegal logging etc. It is difficult to identify specific funding for the VPA process from general funding on FLEGT Regulation issues • It is also noted that not all costs associated with negotiating VPAs may be directly associated with FLEGT Regulation (as Regulation itself covers FLEGT licencing system but not all the VPA negotiation and implementation up to the point of licencing). Approach will look in detail at costs of implementation of FLEGT licencing, and will adopt a 'lighter-touch' analysis of costs for VPA preparation, negotiation, development, etc • Identify factors that have influenced costs	• Official documents regarding FLEGT Regulation VPA process (www.euflegt.efi.int) • As 4a
c. What are the benefits of the Regulations (monetary and non-monetary)? What factors have influenced these benefits?	• Benefits are maximised	• Revenue benefit to sources of legally logged timber • Environmental benefits (e.g. benefit for carbon stock, biodiversity, avoid degradation, etc) • Social benefits (e.g. human rights, working conditions) • Other economic benefits (e.g. trade) • Split benefits where possible by EUTR and FLEGT Regulation	• Appraise impacts quantitatively where possible and seek to assign monetary values so they can be compared in cost-benefit analysis. Where this is not possible, assess impacts qualitatively • Identify factors that have influenced benefits	• As 4 a and 4b
d. To what extent are the costs justified and proportionate, given the impact of both Regulations and the benefits they have delivered?	• Benefits exceed costs (monetary and non-monetary) • Cost/benefit ratio	• Total costs • Total benefits • Balance of costs and benefits (including qualitative impacts)	• Assess how cumulative costs compare to the impacts and benefits. • Noting that it will be difficult to monetise many of the costs and benefits, this will be presented using appropriate techniques through which impacts assessed qualitatively and quantitatively can be compared	• Draws on 4a-c above
5. **How proportionate were the costs of the intervention borne by different stakeholder groups and sizes taking into account the distribution of the associated benefits?**				

Sub-questions	Success criteria	Indicators	Data analysis approach	Data sources/Data collection methods
a. How have the costs of EUTR varied across different stakeholder groups (split by type and size of actor)? What factors have influenced the distribution of costs? Have the interventions created a "level playing field" for operators?	• Costs have been manageable for all business types and sizes • Implementation burden on operators is independent of products involved • Costs (e.g. products with main timber certification schemes) have not been a barrier to SMEs -- small producers have not been excluded from exporting to the EU by complexity of DD • Implementation of Regulation has reflected varying capacities amongst businesses of different sizes (e.g. guidance for duty holders is available particularly for SMEs) • Cost-effective practices as defined in the 2016 Evaluations have been clearly conveyed to SMEs and cost savings have been made	• Costs associated with EUTR, split by: ○ type of actor – CAs, operator (domestic and/or imported timber), trader, MSs, EC, other business ○ business size (micro, small, medium, large) • Comparison of costs to overall operating costs • Number of businesses • Turnover of businesses/entry exit from market, split by business size	• Quantitative analysis where available splitting using outputs for questions 4a • This will also assess cost burden of new entrant due diligence before and after introduction of EUTR Regulation to assess impacts • Analyse implementation of EUTR by MSs to assess if actions have been taken to reduce burden for SMEs – e.g. CAs checks focused on larger operators, provision of support and resources to help SMEs, costs to SMEs of using MOs • Estimate cost reduction achieved based on burdens placed on companies outside these specific measures • Gather opinion on communication of cost-effective practices, and extent to which these have been adopted. Develop case study to illustrate range of potential cost savings • Analyse factors which have influenced split of costs between actors – e.g. have operators required forest owners to adopt certification to reduce operators' costs? Did owners have other costs passed down by operators?	• outputs for questions 4a • Stakeholder engagement
b. How have the costs of implementing the FLEGT Regulation varied across different stakeholder groups (split by type and size of actor)? What factors have influenced the distribution of costs?	• Costs have been manageable for all actors (including forest owners, businesses, EU FLEGT Regulation CAs and customs) and sizes • Costs (e.g. products with main timber certification schemes) have not been a barrier to SMEs? • Regulation has been developed to account for varying capacities amongst businesses of different sizes • Costs for SMEs been minimised through effective implementation	• Costs of FLEGT Regulation split by: ○ type of actor – EU CAs, EU customs, EU importers, EU traders, partner country CAs, partner country licencing authorities, partner country businesses, other businesses involved in supply chain, MSs, EC ○ business size (micro, small, medium, large) • Comparison of costs to overall operating costs • Number of businesses	• As a), except using outputs from question 4b • Case study of VPA partner countries	• outputs for questions 4b • Stakeholder engagement

Sub-questions	Success criteria	Indicators	Data analysis approach	Data sources/Data collection methods
		• Turnover of businesses/entry exit from market, split by business size		
c. How have the benefits of the Regulations varied across stakeholder groups (split by type and size of actor)? What factors have influenced the distribution of benefits?	• Benefits have accrued proportionately across business types and size	• Benefits split by: ○ type of actor ○ business size	• Quantitative analysis where available splitting outputs for question 4c • Case study of VPA partner countries	• outputs for questions 4c
d. How proportionate are the benefits to costs for each group (split by type and size of actor)?	• Are there specific business sizes that have experienced disproportionate costs or benefits?	• Total costs, benefits and balance between costs and benefits (including qualitative impacts) split by ○ type of actor • business size	• Assess how costs compare to the impacts and benefits for different actors and size of actor (where possible)	• Draws on 5a-c above
6. Presence of significant differences between MSs and non-EU countries in implementation? If there are significant differences in costs (or benefits) between MSs, what is causing them? How do these differences link to the intervention?				
a. How have the costs of EUTR varied across different EUTR MSs and non-EU timber producer/supplier countries? What factors have influenced the distribution of costs? Have the interventions created a "level playing field" for operators?	• Costs fall proportionately to the number or operators or proportion of timber imports into each EUTR MSs • Implementation by MS has not led to differences in costs • There is a level playing field for operators across MSs • Costs to non-EU businesses are proportionate to level of timber exports to EU • Costs are lower for VPA countries • Costs are not prohibitive for those only exporting small volumes	• Costs for both for authorities and operators associated with EUTR, split by EUTR MSs (includes number of checks, staffing hours etc by MSs), relative to Level of imports by country / number of importers; • Costs associated with EUTR for non-EU timber producing/supplier countries (both for authorities and operators), relative to level of exports • Variability of costs between operators/CAs in different MSs	• Quantitative analysis where available splitting using outputs for question 4a, comparing between MS • Qualitative: feedback on implementation experience by operators across different MSs, and from MSs authorities themselves. • Examine the specific reasons/parameters that have led to differences in the costs or benefits among MSs and how important they are (e.g. variation among MSs in implementation of each element (e.g. due diligence of new entrants, supply chain records) • Case study analysis of non-VPA country (to avoid overlaps with FLEGT Regulation)	• outputs for questions 4a • EUTR Literature review – e.g. Commission report on effectiveness of EUTR; Commission reports on implementation of EUTR; overviews of compliance checks performed • Stakeholder consultations - Views from Cas and duty holders on the harmonised implementation at EU level
b. How have the costs associated with the implementation of the FLEGT Regulation varied across MSs and VPA partner countries? What factors have influenced the distribution of costs?	• Costs have fallen proportionate to the number of operators or proportion of timber imports into each MSs • Costs to non-EU timber producer/supplier countries are	• Costs for operators and CAs associated with FLEGT Regulation, split by MS and VPA partner countries , relative to volume, value and share of trade from VPA countries	• Quantitative analysis where available splitting using outputs for questions 4b • Case study of VPA partner countries and compared to costs in the absence of VPA agreement.	• outputs for question 4b • FLEGT Regulation Literature review – Commission reports on FLEGT Regulation implementation and MSs national reports, FLEGT

Sub-questions	Success criteria	Indicators	Data analysis approach	Data sources/Data collection methods
	proportionate to share, volume and value of trade			Regulation implementing legislation of MSs • Stakeholder consultations - Views from CAs and duty holders on the harmonised implementation at EU level
c. How have the benefits of the regulation varied across MSs and other countries? What factors have influenced the distribution of benefits?	• Benefits have accrued proportionately across MSs and third party countries	• Benefits split by MS and other countries (for EUTR) • Benefits split by VPA partner country (FLEGT Regulation)	• Quantitative analysis where available splitting using outputs for questions 4c	• Outputs for questions 4c • Stakeholder engagement
d. How proportionate are the benefits to costs for each MS and non-EU timber producing/supplier countries?	• Costs are proportionate to benefits for all EU MSs • Costs are proportionate to benefits for VPA partner countries • Costs are proportionate to benefits for non-EU countries	• Total costs split by MS • Total benefits split by MS and non-EU country • Balance of costs and benefits (including qualitative impacts) split by MS and other countries	• Assess how costs compare to the impacts and benefits for different EU MSs and non-EU countries (where possible)	• Draws on 6a-c above
7. **Are there opportunities to simplify both Regulations and/or reduce unnecessary regulatory costs without undermining the intended objectives?**	• All elements of the EUTR and FLEGT Regulation are proportionate relative to the benefits they provide • MSs checks are cost-efficient • Implementation across MS is consistent	• Split of costs by duty/action under both Regulations • Qualitative indices on cost-benefit ratios • Opinion on different measures under the FLEGT Regulation and EUTR • Difference between MS's implementation of the regulations which lead to simplifications.	Qualitative: feedback from stakeholders will be used to judge which aspects (MSs checks, first time due diligence checks, supply chain records, VPA award process) could have been made more efficient without impact on overall objectives of the Regulations. • Triangulation of results from other evaluation questions in efficiency	Stakeholder consultation (surveys, targeted OPC) particularly MSs authorities and industry representatives • Literature Review

Relevance

Sub-questions	Success criteria	Indicators	Data analysis approach	Data sources/Data collection methods
8. To what extent is the intervention/initiative still relevant? To what extent have the (original) objectives of the intervention (still) correspond to the needs within the EU?				
a. Does the problem of illegal logging and trade of illegal timber and timber products persist?	• VPAs have stopped illegal trade in timber and timber products. • EUTR has minimised the risk of illegal timber is placed on the EU Market	• Levels of illegal logging • Number of illegal imports of timber and timber products into internal market	• Quantitative analysis of the levels of illegal logging globally, and in EU exporting countries • Quantitative analysis of the number of illegal imports of timber and timber products per annum To EU market • Link to effectiveness questions	• Databases/reports (Eurostat, EU FLEGT Regulation Facility, UNEP reports on compliance) • Stakeholder consultation (industry, civil society, Duty holders, MS CAs, European Commission, UNEP, VPA partner countries)
b. To what extent is the current scope of products and actors under EUTR coverage adequate in ensuring that policy objectives are reached?	• All timber and timber products associated with illegal logging are covered by FLEGT Regulation and EUTR. • Volumes of unregulated products are insignificant and/or are negligible risk • Product scope does not create an unlevel playing field for EU operators (e.g. printed paper, fibres) • Volumes of recycled timber products are insignificant as a proportion of all raw material feedstock • All operators placing products on the market are covered (low quantity not covered – e.g. based outside EU)	• Volumes/values of categories of timber product on the market and categories of timber products regulated (and not) by the EUTR and FLEGT Regulation. • Volumes/values of recycled timber products entering the EU market. • Number of operators on EU market that are based in non-EU countries	• Qualitative analysis of timber and timber products on the EU market. • Qualitative analysis of recycled timber products entering the EU market. • Qualitative analysis of incoherence in scope. • Qualitative analysis of the EUTR provision to investigate whether a loophole exists	• Databases/reports (e.g. "The impact of EU consumption on deforestation: Comprehensive analysis of the impact of EU consumption on deforestation"), analysis of trade data (Eurostat/COMEXT, FLEGT Regulation and EUTR) • Duty and stakeholder consultation (interviews, survey(s), meetings) • Literature review
9. Has the initiative been flexible enough to respond to new issues	• The EUTR and FLEGT Regulation have been adapted in line with changes in trade behaviours. • Regulations have been flexible to adapt to changes in trade flows – e.g. rise of Chinese imports, sourcing timber from Africa and Asia	• Changes to Regulations following implementation – e.g. Introduction of new timber and timber products to Annex II and III of FLEGT Regulation and the Annex of the EUTR. • Changes in trade flows	• Qualitative analysis of changes to the Annex of EUTR and FLEGT Regulation and of timber and timber products which should be added to the Annexes due to increased social and environmental impacts in exporting country • Stakeholder opinion regarding flexibility of Regulations to challenges.	• Databases/reports (Eurostat, EUFLEGT Regulation Facility, UNEP reports on compliance) • Stakeholder consultation (industry, civil society, Duty holders, MS CAs, EU Commission, UNEP, VPA partner countries)

Coherence

Sub-questions	Success criteria	Indicators	Data analysis approach	Data sources/Data collection methods
10. To what extent are the Regulations consistent and coherent internally and between themselves?				
a. To what extent is the EUTR internally coherent?	• The EUTR provisions are coherent between each other • MSs transposition is clear and consistent with EU legislation • No requirements unnecessary, unclear or contradictory. • Provisions support objectives.	• Stakeholder views on coherence • Clarity of provisions. • Appropriateness of transposition into MSs law • Consistency of the articles • Clarity of requirements, in particular: operator requirements around due diligence • Clarity of definitions, in particular: what MOs are and how they are intended to operate; 'timber' instead of wood; lack of definition for 'recycled' • Overlaps/Contradictions/Gaps	• Link to effectiveness questions • Qualitative review and discussion on whether the provisions are all working together and the EUTR is delivered in a coherent and simple manner	• Desk research • Legal analysis - review of legal proceedings and guidance that would imply lack of clarity or coherence and critical review of the EUTR. • Overviews of CA EU Timber Regulation checks • and background analyses for the EUTR national reports • records of the EUTR /FLEGT Regulation expert group meetings • Stakeholder consultation
b. To what extent is the FLEGT Regulation internally coherent?	• The FLEGT Regulation provisions are coherent between each other • Inconsistency of customs HS codes between EU and partner countries has not caused any issues • No requirements unnecessary, unclear or contradictory. • Provisions support objectives.	• Stakeholders views on internal coherence of FLGETR. • Consistency of definitions, in particular: Interpretation of customs codes, 'timber' instead of wood • Overlaps/Contradictions/Gaps	• Link to effectiveness questions • Qualitative review and discussion on whether the provisions are all working together and the FLEGT Regulation is delivered in a coherent and simple manner	• As a)
c. To what extent are the Regulations coherent between each other?	• Provisions of the EUTR and FLEGT Regulation are coherent with each other. • There are no issues/challenges associated with the way the Regulations work together • Regulations work together and harness synergies to better achieve the overall objectives	• Stakeholder views of coherence between EUTR and FLEGT Regulation • Overlaps/Contradictions/Gaps • Issues / challenges associated with the way the Regulations work together • Costs of undertaking DD under FLEGT licence relative to absence of licence • Supply patterns and potential shift to importing from Indonesia	• Link to effectiveness questions • Link to efficiency questions • Qualitative review and analysis of stakeholder opinion on whether the provisions are all working together and the EUTR is delivered in a coherent and simple manner	• As a) • Link to effectiveness questions • Link to efficiency questions • Stakeholder engagement • Literature review
11. To what extent are the Regulations coherent with wider EU policy objectives?				
a. To what extent is the initiative coherent with other EU environmental policy objectives, in particular biodiversity, deforestation, agriculture and	• The objectives of the EUTR and FLEGT Regulation are in line with EU environmental policy objectives and Regulations have contributed positively to EU international obligations (e.g. climate change, biodiversity)	• Contribution to the specific environmental objectives • Instances of interaction and existence of possible inconsistencies • Stakeholders views on FLEGT Regulation and EUTR as contributing to fulfil these environmental objectives.	• Qualitative assessment whether the Directive and other EU environmental and wider EU policies are coherent, there are no weaknesses, gaps, overlaps or inconsistencies that may arise as a result of incoherence between the EUTR/FLEGT Regulation and the other EU policies.	• Stakeholder consultation (interviews, survey(s), workshop) with EU and national authorities • Literature review of objectives and requirements of other policies and strategies and relevant literature e.g. EU Green Deal; the 6th Environmental Action Programme; EU

Sub-questions	Success criteria	Indicators	Data analysis approach	Data sources/Data collection methods
environmental crime?	• FLEGT Regulation and EUTR do not set a lower level of protection than other EU environmental policies. • EUTR and FLEGT Regulation have created synergies and/or avoided overlaps, contradictions and conflicts with other Community objectives,			action plan for the Circular Economy; EU biodiversity strategy to 2020.
b. To what extent is the initiative coherent with wider EU policy, including customs, trade?	• FLEGT Regulation and EUTR do not result in barriers to trade and is consistent with trade agreements with third countries • FLEGT Regulation and EUTR compliment customs rules.	• Instances of interaction and existence of possible inconsistencies • Stakeholder views on the FLEGT Regulation and EUTR as contributing to fulfil these wider objectives.	• Qualitative assessment whether the Regulations and other wider EU policies are coherent, there are no weaknesses, gaps, overlaps or inconsistencies that may arise as a result of incoherence between FLEGT Regulation/EUTR and the other EU policies.	• Stakeholder consultation (interviews, survey(s), workshop) with EU and national authorities • Literature review of objectives and requirements of other policies and strategies and relevant literature
12. How does the intervention fit with the international regulatory frameworks, including Conventions, in the area of timber?	• The objectives of EUTR and FLEGT Regulation are in line with international regulatory schemes. • FLEGT Regulation and EUTR do not set a lower level of protection than international environmental policies. • Operators (and CAs) are clear on interactions between certification and EUTR (i.e. that it may not be sufficient risk mitigation to simply switch to certified timber)	• Consistency of the provisions and definition • Instances of interaction and existence of possible inconsistencies or contradictions. • Consistency with Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) legality equivalency presumptions • Consistency and legality equivalency of interaction with other certification schemes (e.g. FSC, PEFC, etc)	• Qualitative assessment whether the Regulations and international policies (National and international agreements) are coherent, there are no weaknesses, gaps, overlaps or inconsistencies that may arise as a result of incoherence between FLEGT Regulation /EUTR and the international community.	• Literature review of national legislation in other timber consumer countries e.g. USA, Australia and Canada. • International conventions, agreements, protocols e.g. International Tropical Timber Agreement, Convention on International Trade in Endangered Species of Wild Fauna and Flora

EU-added value

Sub-questions	Success criteria	Indicators	Data analysis approach	Data sources/Data collection methods
13. **To what degree have FLEGT Regulation and EUTR enabled MSs and their CAs to take successful action to improve beyond what would have been possible without EU action?**	• Reduced placing of illegally harvested timber and timber products on the EU market • Reduction of illegal timber activities in VPA partner countries. • Improvement in supply chain traceability • Improvement in forest law enforcement and governance • Level playing field for industry across the EU • Created /captured synergies • Facilitated coherence • Avoided overlaps • Regulation complies with principles of subsidiarity and proportionality	• Level of illegal/high risk trade in timber and timber products across all EU MSs. • Level of illegal timber activities in VPA partner countries. • Supply chain traceability • Levels of forest law enforcement and governance • Costs of implementation and enforcement • Clarity and coherence	• Qualitative analysis of outcomes compared to what would have been achieved had action been pursued at level other than that of the EU • Qualitative analysis of imports of timber from high risk countries of harvest into the EU • Qualitative assessment of illegal timber activities in VPA partner countries. • Qualitative discussion on synergies and overlaps	• Databases/reports (Eurostat, EU FLEGT Regulation Facility, UNEP compliance reports, impact assessments, cumulative cost assessments) • Review of individual MSs actions with respect to reducing illegal logging and presence of illegal timber on EU market • Stakeholder consultation (interviews, survey(s), workshop) with industry, duty holders, MSs CAs, VPA partner countries

Annex K – Consultation synopsis

Submitted to the European Commission, DG Env on 15 February 2020.

Annex L - Review of external policy and wider drivers to support the baseline

This Annex sets out the supporting research which underpins the definition of the baseline. In particular, this contains the detail of the review of other policies, initiatives and socio-economic developments which could have interacted with and/or influenced the achievements of the EUTR and FLEGT Regulation. This considers both policies and initiatives in place prior to the introduction of the FLEGT Regulation and EUTR, and those introduced over the implementation period.

Policy and initiatives

Evolution of the legal framework

Following the implementation of the Regulations, there have been a number of policy initiatives that have been taken forward or introduced which may interact with the Regulations or influence the achievement of their objectives. This includes policies directly targeting the production of illegal timber or placing it on the internal market, and those which may indirectly influence these objectives. These activities were undertaken at national, EC and international level.

Policy targeting illegal timber trade

The ***EU-China Bilateral Coordination Mechanism on Forest Law Enforcement and Governance*** (BCM) was established in 2009, following an EU-China Forest Law Enforcement and Governance conference in Beijing in 2007. Through the BCM, the EU and China work together to stop illegal logging and the associated trade in illegal timber globally. The BCM is a forum for policy dialogue, a mechanism for sharing information on policies and legal frameworks, and for coordinating initiatives to stop illegal logging and associated trade. Given the BCM shares the same objectives of FLEGT Regulation/EUTR, there could have been an interaction in effects. This interaction will be centred on timber producing countries which export to both China and the EU (given both take action through supply chains). Five of the top eight exporters are common between China and the EU (Cameroon, Indonesia, Malaysia, Republic of the Congo, and the DRC) suggesting that the potential for interaction is high. However, the potential for interaction also depends on the nature and ambition of the actions in the annual workplans. To date, many of the actions centre around information exchange and capacity building limiting the potential for interaction. Some of the activities have been targeted towards support to the development of the Chinese Timber Legality Verification System, however compliance with this Regulation has been on a voluntary basis to date (with the exception of public procurement), as such the potential for interaction appears low.

The United Nations Forum on Forests (***UNFF***) adopted the ***Non-legally Binding Instrument on All Types of Forests*** on 17 December 2007. In 2015, it was renamed it as the United Nations Forest Instrument (UNFI). The UNFI has 4 global objectives, the first of which is to reverse the loss of forest cover worldwide through sustainable forest management. Hence the objectives of this instrument, although broader, could directly overlap with those of the FLEGT Regulation/EUTR. One of the actions to achieve the objectives is to review and, as needed, improve forest-related legislation, strengthen forest law enforcement and promote good governance at all levels in order to support sustainable forest management and to combat and eradicate illegal practices. However, a 2013 FAO implementation

status report on this scheme highlighted there had been limited implementation (and in fact limited awareness) of the UNFI to that point (FAOSTAT, n.d.). That said, the pilot implementation of the Forest Instrument reportedly helped to articulate and demonstrate the contribution of forests to national economies, including by supporting other sectors, such as agriculture and food security, energy, tourism and water. As a result, some countries, including VPA countries Ghana and Liberia, identified forestry as one of the drivers of economic growth in their recent five-year national development plans. In addition, seven countries (including VPA country Gabon) were supported in efforts on awareness-raising, stocktaking, priority-setting and reporting.

As per the UNFF 11th session report (2015), a total of 69 countries reported on steps taken since 2007 to prevent and reduce international trafficking of illegally harvested forest products. Frequently reported measures were improved enforcement of existing legislation (in 57 countries), export controls (in 49 countries), import controls (in 44 countries), new legislation (in 41 countries) and bilateral agreements between exporting and importing countries (in 22 countries) (United Nations, 2015). It was reported that several timber-exporting countries have introduced bans on the logging of particular species of trees (including VPA country Côte d'Ivoire). In addition, measures taken to improve the enforcement of existing legislation include enhancing surveillance capacity; developing integrated electronic information systems for tracking the movement of timber (e.g., in Brazil and Guatemala); strengthening the capacity of government regulatory agencies and improving the coordination between forest services and the police, military and customs officers at all levels; and training prosecuting lawyers and judges. This suggests there could be activities which also drive towards the objectives of the Regulations, having a direct and potentially significant overlap in impacts. That said, for some of those countries reporting were either MS noting their involvement in EUTR, or exporting countries involved in the FLEGT Regulation VPA process, hence limiting the potential for overlap. However, for those involved in the VPA and UNFI processes, it may be unclear which is the driver of action. Further work is needed to explore the reported actions in more detail to distinguish how many and how ambitious the non-EUTR and non-FLEGT Regulation measures were reported.

In April 2017, the UN General Assembly adopted the ***United Nations Strategic Plan for Forests (UNSPF), 2017-2030***. Its mission was to promote sustainable forest management and the contribution of forests and trees outside forests to the 2030 Agenda for Sustainable Development. At the heart of the UNSPF are 6 Global Forest Goals and 26 associated targets to be achieved by 2030, which are voluntary and universal. Of particular relevance here are: Global Forest Goal 1, which aims to reverse the loss of forest cover worldwide through sustainable forest management, increase efforts to prevent forest degradation and contribute to the global effort of addressing climate change, and; Global Forest Goal 5, which seeks to promote governance frameworks to implement sustainable forest management. This is a universal programme and the objectives (although broader than those of the FLEGT Regulation and EUTR) are directly aligned in some areas, for example on the improvement of forest law enforcement and governance. That said, participation is voluntary and review of the 14th and 15th session monitoring reports has not identified any definitive actions taken by participants which could directly interact with the Regulations (United Nations, 2019) (United Nations, 2020).

CITES (the ***Convention on International Trade in Endangered Species of Wild Fauna and Flora***) is an international agreement between governments and entered into force in July 1975. Its aim is to ensure that international trade in specimens of species of wild fauna and flora does not threaten their survival . The range of trade is diverse, ranging from live animals and plants to a vast array of wildlife products

derived from them (CITES, n.d.). At present, there are over 900 species of tree protected by CITES. All import, export, re-export and introduction from the sea of species covered by the Convention has to be authorized through a licensing system. Each Party to the Convention must designate one or more Management Authorities in charge of administering that licensing system and one or more Scientific Authorities to advise them on the effects of trade on the status of the species. Each Party has adopted so-called CITES implementing legislation. These are national laws that allow the Party to implement and enforce the provisions of the Convention, including (Art VIII of the Convention), namely: (a) to penalize trade in, or possession of specimens acquired in violation of the Convention or both: and (b) to provide for the confiscation or return to the State of export of specimens illegally traded or possessed.

CITES is implemented in the EU through a set of Regulations known as the ***EU Wildlife Trade Regulations*** (EUWTR). The first step towards this was made through the forming basic regulation (Council Regulation (EC) No 338/97) on 9th December 1996, followed by amendments (EC) No 865/2006, (EC) No 100/2008, (EU) No 791/2012, (EU) No 792/2012. For certain specified products or derivatives of species of plants (i.e. wooden musical instruments, timber logs, sawnwood) covered by CITES, there will be a strong overlap between the impact of CITES and EUTR/FLEGT Regulation both on the legality of trade and on the transparency of the supply chains. Indeed, timber and timber products covered by the provisions of CITES (timber and timber products of species listed in Annexes A, B or C of the EUWTR) are considered to be legally harvested and to comply with the EUTR and be exempt from the FLEGT licencing requirement (UNEP-WCMC , 2019). This maintains coherence between the Regulations, but also suggests that the EUTR/FLEGT Regulation have no additional impact for species covered by CITES. Of course, the EUTR covers a wider range of timber and timber products listed in its Annex, including solid wood products, flooring, plywood, pulp and paper. It also applies to timber originating from within the EU. Also it is important to note that recent evidence gathering around CITES suggests that the current practices of some CITES Parties with regard to making and verifying legal acquisition were lacking and implementation was not without challenge, for example: some Parties lack legislation requiring the Management Authority to verify whether a CITES-listed specimen was obtained legally, and challenges faced by Parties included lack of resources, difficulties in establishing a chain of custody and fraudulent documentation (CITES Secretariat (unpublished), 2018).

The ***Extractive Industries Transparency Initiative (EITI)*** sets a global Standard for natural resource extraction, used by EITI member countries to improve governance and management of their extractive industries. To assess progress towards meeting the Standard's requirements, member countries produce annual public reports consolidating figures on government revenue received from extractive industries and extractive sector payments to government, as well as contextual information on natural resource governance. Whist originally introduced in 2003 focusing on fiscal reporting in the oil, gas and mining sectors, several timber producing countries have started to include reporting on the forestry sector. For example, Malawi since 2017 and Myanmar since 2019 (Forest Trends, 2019). Including forestry in these reports increases transparency and accountability and facilitates public scrutiny into potential discrepancies, which in turn could improve governance and management of forest resources. Hence for those countries which include forestry under their reports, there could be a strong overlap particularly with the FLEGT Regulation around driving improvements in transparency and governance. That said, of the 15 countries involved in the VPA process, 10 are also involved in EITI reporting[46]. Furthermore, of those 10 engaged, only four (Liberia since its first report in 2008/9, Republic of Congo, Guyana and

[46] Indonesia, Cameroon, CAR, Ghana, Liberia, Republic of the Congo, Honduras, Guyana, Cote D'Ivoire, DRC

Democratic Republic of Congo since 2016) have produced reports which cover the forestry sector, and two more have committed to including forestry in forthcoming report (Ghana and CAR – although reporting in the CAR has been suspended due to instability) (Fern, 2019) (EITI, 2020).

The European Neighbourhood and Partnership instrument east countries forest Law Enforcement and Governance II Program (***ENPI FLEG*** II) completed in 2017 and aimed to aimed to improve forest law enforcement and governance in 7 countries: Armenia, Azerbaijan, Belarus, Georgia, Moldova, Russia, and Ukraine. This ran from 2013 and followed on from a preceding project covering the same countries which ran from 2008-12. The reported impacts include contributing to improving transparency in forest governance and management, building capacity, and fostering greater collaboration between stakeholders (ENPI-FLEG) Likewise, the Africa Forest Law Enforcement and Governance (***AFLEG***) Ministerial Conference in Cameroon in 2003 resulted in the AFLEG Declaration and Action Plan. No further information could be found to date regarding further activities under this programme and hence the potential interactions with the Regulations. At the ***East Asia Ministerial Conference on Forest Law Enforcement and Governance*** (EA FLEG) in Bali in 2001, the conference adopted the Bali Declaration, whereby participating countries committed themselves to, inter alia, intensify national efforts and strengthen bilateral, regional and multilateral collaboration to address forest crime and violations of forest law. A 2010 review of the EA FLEG highlighted a number of improvements had already been achieved across a number of countries, but many constraints and needs remained (Asia-Pacific Forestry Commission, 2010).

There have been several ***meetings and initiatives aimed to combat illegal logging and trade*** and lay down the requirements for legal timber trade and sustainable forest management. For example, with support from the Food and Agriculture Organization of the UN (FAO), the Philippines also moved towards promoting the trade of legally sourced timber and wood products. Further research is needed here to establish potential overlaps.

Alongside action taken multilaterally at international level, individual countries also introduced policies to combat illegal logging and associated trade. Although these actions were taken outside the EU, this unilateral action could suggest similar action may have been taken by MS in the absence of the EUTR/FLEGT Regulation.

In the US, the ***LACEY Act*** is a 1900 United States law that bans trafficking in illegal wildlife. In 2008, the Act was amended to include plants and plant products such as timber and paper. Under the amended Act, it is unlawful to import, export, transport, sell, receive, acquire or purchase, in interstate or foreign commerce, any plant taken or traded in violation of the laws of the United States, a U.S. state, tribal territories, or foreign countries. The law has three components: (a) a ban on the trade in the US of illegally sourced wood products; (b) a requirement to submit import declarations on certain wood products which include information on country of origin, species, volume, and value; and (c) penalties for violating the law. The law requires U.S. buyers to avoid buying illegally sourced timber, but it is left up to each individual U.S. buyer to determine how best to conduct due care (legal definition is different from DDS) and avoid illegal timber in the market, in accordance with its own risk profile and level of comfort with its suppliers. Due care is a flexible concept that has been developed over time by the U.S. legal system. Due care means "that degree of care at which a reasonably prudent person would exercise under the same or similar circumstances. As a result, it is applied differently to different categories of persons with varying degrees of knowledge and responsibility". It is possible that the impacts of the Lacey Act could overlap with those of EUTR/FLEGT Regulation. (As with China and

the BCM) any interaction will be through common sources of timber and timber products. The US imports timber products from countries like China, Indonesia, Vietnam, Malaysia, Mexico, Brazil, Peru, and Russia, many of which are also key exporters to the EU and are known to be high-risk countries. The extent of the interaction will also depend on the effectiveness of the US regulations. Since the Lacey amendments took effect, imports of illegal wood into the United States are reported to have declined by between 32 and 44 % (UCSUSA, 2015) .This is attributed to two effects. First, over this period, the US saw an overall decline in consumption served by imports. Second, (and more importantly) there was an observed change in the locations where China, a key exporter to the US, was sourcing its timber (Chinese imports of logs and sawn wood originating in high-risk countries declined dramatically—from 80 percent in 2007 to 45 percent in 2013). However, the switch was from high to low risk countries, rather than necessarily driving reductions in illegal logging or improvements in governance in high-risk countries – whether there has been any wider indirect market impact is unclear.

In Australia, the I**llegal Logging Prohibition Act** commenced in 2012, and established Australia's illegal logging framework (Australian Government, 2020). The act makes it a criminal offense to intentionally, knowingly or recklessly import wood, pulp and paper products into Australia, or to process Australian raw logs that have been illegally logged (EU FLEGT Facility, 2012). It also outlines that businesses must undertake Due Diligence on certain regulated processes. The legislation only places requirements on Australian businesses, and establishes equal treatment for suppliers of timber, regardless of nationality (EU FLEGT Facility, 2012). Again, any interaction in effects will occur where there are commonalities in sources of timber and timber products.

In Japan, the ***Japanese Clean Wood Act*** became operational in 2017. The purpose of the Act is to provide assurance that wood available in Japan was harvested legally. It recognizes legality based on the policies of the government of the country that is the source of the wood. The Japanese Government has created profiles which outline various country's policies on legal forest harvest. The Act requires registered operators to maintain verification documentation for 5 years. The objectives of the policy again align closely with those of the EUTR/FLEGT Regulation. Again, any interaction in effects will occur where there are commonalities in sources of timber and timber products. Japan's key importing countries of forest products are: China, USA, Vietnam, Indonesia, Canada, Philippines, Malaysia, Finland, Russia, many of which are key exporters to the EU. Also the overlap will depend on the effectiveness of the Japanese measure. It is notable that compliance is voluntary except for government-funded construction projects and only 397 of the estimated 20,000 businesses eligible for registration had volunteered to do so between May 2016 and April 2020 (Forest Trends, 2019). This shows the limited efficacy of the current act.

South Korea adopted the **South Korean Act on the sustainable use of timber** in 2012, with implementation starting October 2018. Part of the measure required the State and local governments to establish and implement measures to prevent distribution or use of timber illegally cut inside or outside the Republic of Korea. The key obligation for operators is to submit an import declaration including evidence that the timber or timber products imported are legal. The Government is developing country-specific guides to help importers better understand what constitutes legal timber in its key sourcing countries. These countries include Vietnam, Indonesia, Thailand and Lao People's Democratic Republic. Again this act shares same objectives of EUTR/FLEGT Regulation on illegal timber trade with interactions being determined by commonality of imports and effectiveness, however no information could be found of effectiveness given the recentness of implementation.

Other initiatives

Beyond certification schemes there are other voluntary initiatives and there has been a general trend of increased Corporate Social Responsible (CSR) and Environmental Social Governance (ESG) awareness. Although the establishment of policies and initiatives vary from company to company, large consumer goods companies, retailers and banks have been working to improve procurement efficiency and enhance environmental and social impacts (FAO, 2017). An increasing number of private companies are making voluntary commitments to eliminate deforestation from their supply chains, and zero-deforestation pledges have reached an impressive scale (FAO, 2017). On palm oil alone, 19 major consumer goods companies, including L'Oréal, Kellogg's and Danone, adopted zero deforestation policies between January and September in 2014 (UNFCCC, 2014) .

The compliance requirements in these corporate policies often include FSC and PEFC and assurance of legal sourcing and sustainable harvesting (FAO, 2017). However, in contrast to PEFC and FSC, most of these voluntary commitments have occurred since the introduction of EUTR and FLEGT Regulation. For example, the New York Declaration on Forests (NYDF), where signatories pledged to halve the rate of global forest loss and eliminate deforestation from the production of agricultural commodities by 2020 was endorsed by more than 150 governments, companies and business associations, indigenous peoples' and civil society organizations at the United Nations Climate Summit in September 2014 (UNFCCC, 2014). The governments of Germany, Norway and the United Kingdom of Great Britain and Northern Ireland issued a joint statement strongly supporting the declaration, and committing their governments to "strengthening existing and creating new partnerships with forest countries By September 2019 the list of NYDF supporters has grown to include over 200 endorsers[47] (Forest Trends, 2020) (UNEP , 2019). The NYDF combines goals expressed in the context of a number of individual pledges and agreements, including the Paris Agreement, the Sustainable Development Goals, the Bonn Challenge, the 2020 Strategic Plan on Biodiversity, climate and forest financing pledges, and supply chain commitments. If realized, these goals have the potential to reduce annual carbon emissions by 4.5 to 8.8 billion tonnes of CO2-equivalent per year, approximately equivalent to the annual emissions of the United States. The emissions reduction from deforestation together with enhanced carbon removals from forest restoration could provide 24-30% of the climate solution (UNEP , 2019).

In 2010, the Consumer Goods Forum stated its 400 corporate members would achieve zero net deforestation by 2020. However, despite 74% of companies recognising at least one material business risk associated with the key commodities driving deforestation, many are not on track to achieve zero net deforestation by 2020 (Reuters, 2017; UNFCCC, 2014) . Furthermore, there are concerns that voluntary and government plans only focus on large companies, without preventing medium and small-sized firms importing large amounts of commodities from previously forested land. Large food firms in the UK, including McDonald's, are urging the government to toughen up the legislation post UK exit from the EU and extend the regulations so they apply to all deforestation, whether legal or illegal, and apply to all company sizes to create a level playing field (BBC News, 2020). In December 2019, some of the world's biggest chocolate manufacturers called on the EU to strengthen human rights and environmental due diligence requirements of companies in global cocoa supply chains (EIA, Toxic Trade: Forest Crime in Gabon and the Repbublic of Congo and Contamination of the US Market, 2019). In light of these signals from the private sector, and the fact many of these net zero deforestation commitments are not on track, these initiatives may have had some impact on the baseline in the

[47] EU signatories included: Belgium, France, Germany, Lithuania, Netherlands, United Kingdom, Denmark, Estonia, EU, Slovenia and Sweden

absence of EUTR and FLEGT Regulation, albeit perhaps not as much as anticipated and originally pledged.

Wider legislation

As part of its 'Clean Energy for all Europeans' package, the European Commission in 2016 proposed an update of the **Renewable Energy Directive** for the period 2021 – 2030 (RED II). In particular, the RED II introduced for the first time sustainability criteria for forestry feedstocks as well as GHG criteria for solid and gaseous biomass fuels. Operators should adopt a risk-based approach to minimise the risk of using unsustainable forest biomass for the production of bioenergy. Article 29 of the Directive sets out criteria to minimise the risk of using forest biomass derived from unsustainable production, the first of which is ensuring the legality of harvesting operations. Hence RED I is likely to have had limited overlap with the Regulations over the Fitness Check appraisal period (but going forward there may be more interaction and overlap between the two policy areas).

On 17 May 2017, the EU Parliament and EU Council adopted new import **regulation on 'Conflict Minerals'** under Regulation 2017/821, which will apply across the EU from January 2021. Importers of the respective minerals need to comply with, and report on, supply chain due diligence obligations if the minerals originate (even potentially) from conflict-affected and high-risk areas. To the extent that operators import both timber and 'conflict minerals', and to the extent common CAs are responsible for verifying due diligence, there may be some influence in the administrative burdens associated with implementation. However, this will only occur in the future.

The Union Customs Code was adopted in October 2013, although most of its substantive provisions applied from May 2016. The regulation established the Union Customs Code (UCC), setting out the general rules and procedures applicable to goods brought into or taken out of the customs territory of the European Union, adapted to modern trade models and communication tools. This also includes TARIC, the integrated Tariff of the European Union, a multilingual database integrating all measures relating to EU customs tariff, commercial and agricultural legislation, e.g. products subject to CITES. Although the Code seeks to generally support the checking of legality of imports, it is difficult to conclude that this would have been effective in enforcing legality of products outside those which are specifically defined in legislation – e.g. in the case of timber, legality is not defined by product but depends on the legislation in source country and how timber was obtained.

In 2015, the UN General Assembly unanimously adopted a range of ***Sustainable Development Goals*** to be achieved by 2030. SDG 15 aims, amongst other things, to sustainably manage forests, underpinned by Target 15.2 which focuses on sustainable management of forests. In addition, reduction of illegal logging can contribute to a number of other SDGs, such as alleviation of poverty (SDG1) and mitigating climate change (SDG13). The SDGs are not legally binding but MSs are expected to take ownership and establish national frameworks for the achievement of the 17 Goals. The FAO reports progress on a regular basis, however the indicators are somewhat high-level. For example, the most recent report presented progress towards sustainable forest management (SDG INDICATOR 15.2.1) by monitoring changes in the rate of forest loss, which between 2010-2015 slowed down approximately 25% when compared to the 2000-2005 period. Given these are high level ambitions and monitoring indicators, interaction with the effects of the Regulations are anticipated to be low.

The United Nations Framework Convention on Climate Change (**UNFCCC)** entered into force in March 1994, with the objective "stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system". Article 4 of the UNFCCC

includes the commitment to promote the sustainable management, conservation and enhancement of sinks of greenhouse gases, including forests. Protocols and Programmes brought by UNFCCC are not legally binding but member parties are expected to take ownership and achievement the goals and objectives. Furthermore their primary aim is to reduce loss of carbon sinks, rather than reduce illegal logging. Hence it is anticipated that the potential for overlap here is likely to be negligible.

Public procurement

There were also a range of public procurement policies at MS level applicable to timber products, that preceded the FLEGT Regulation and EUTR. As can be seen in Table K-1, Germany, United Kingdom, Denmark, France and the Netherlands, all introduced policies relating to the public procurement of timber before the establishment of the FLEGT Regulation in 2005. For example:

- In Germany, the federal government introduced legislation in the 1970s requiring tropical timber used in federal building projects to be certified as sustainable. Work on revising and extending this approach began in 2003 (Chatham House, 2004);
- In the UK, voluntary guidance advising government departments to purchase timber and timber products from sustainable and legal sources was issued in 1997. In 2000 this became a binding commitment (Chatham House, 2004);
- In Denmark, the parliament agreed in June 2001 that central government should adjust public procurement policies in order to ensure that purchases of tropical timber would be based only on legal and sustainable sources. Guidelines for purchasers were published in June 2003 and the scope was extended (general timber) (Chatham House, 2004);
- In France, the government decided in 2002 to develop timber procurement policy to favour FSC or equivalent systems, originally for tropical timber but now for all timber (Chatham House, 2004);
- In 2004 Dutch cabinet decided that timber purchases by central Government bodies would have to be of guaranteed legal origin and where possible from sustainably managed sources (UNECE, 2004).

Following introduction of FLEGT Regulation and EUTR there have also been an increase in relevant public procurement policies at MS level. All of these MS policies are summarised in table K-1.

Table K-1 Overview of different MS Public Procurement Timber Policies over time

MS	Introduction	Products covered	Criteria	Forms of proof acceptable
Germany	1970s Revised: 2011	All wood based products made mainly from virgin material	-Legal - Sustainable	FSC & PEFC or equivalents.
United Kingdom	1997 Revised: 2013	All wood based products including paper	- Legal - Sustainable - FLEGT Regulation	FSC & PEFC acceptable. FLEGT Regulation-Licensed. Until 2014 assessments made by Central Point of Expertise (now defunct)
Denmark	2001 (tropical) 2003 (general) Revised: 2013	All wood based products including paper	- Sustainable	FSC & PEFC acceptable. Nature Agency assesses schemes against criteria.
France	2002 Reviewed: 2011	All wood based products including paper	- Legal - Sustainable - Recycled papers	Any product or chain of custody certificate. FLEGT licences. Evidence of management plan. Ecolabels. Industry code of conduct - self declaration of compliance. Customs documents to qualify legal/ sustainable products when entering the EU market.

MS	Introduction	Products covered	Criteria	Forms of proof acceptable
Netherlands	2004	All wood based products including paper	- Legal - Sustainable (encouraged) - Recycled	FSC & PEFC acceptable. FLEGT Regulation Licensed. Timber Procurement Assessment Committee assesses schemes against criteria on a case by case basis.
2005 - Introduction of FLEGT Regulation				
Belgium	2006	Wood based products excluding paper	- Sustainable	SC & PEFC or equivalents.
Cyprus	2007	Paper	- Legal - Sustainable (encouraged) - Recycled	Legal: FSC & PEFC, FLEGT licences, third party legal verification. Sustainable: Verified as sustainably managed (with no scheme specified).
Lithuania	2007 Revised: 2013	All wood based products including paper	- Legal - Sustainable	FSC & PEFC. FLEGT licences. Third party legal verification
Latvia	2008	All wood based products including paper	- Legal	Certification. FLEGT licences
Spain	2008	Paper Furniture	- Sustainable - Recycled	FSC & PEFC. Ecolabels
Finland	2009 Revised: 2010	All wood based products including paper	-Legal -Sustainable -FLEGT Regulation	FSC & PEFC. FLEGT licences. Ecolabels Other reliable indicators
Italy	2009 Revised: 2013	Copy & graphic paper. Windows & doors. Office furniture	- Legal - Sustainable - Recycled papers	FSC & PEFC. Ecolabels FLEGT licences Verifiable self-declarations Third party legal verification. State approved export permits
2010 - Introduction of EUTR				
Austria	2010	All wood based products including paper	- Legal (all products except furniture) - Sustainable (furniture) - Preference for recycled (paper) - FLEGT Regulation	FSC & PEFC or equivalents. FLEGT licences. Voluntary legality verification
Czech Republic	2010	Furniture	- Legal - Sustainable (encouraged) - Recycled	Legal: FSC & PEFC, FLEGT licences, third party legal verification. Sustainable: Verified as sustainably managed (with no scheme specified).
Malta	2011	Furniture	- Legal - Sustainable (encouraged) - Recycled	FSC & PEFC acceptable. FLEGT Regulation-Licensed. Timber Procurement Assessment Committee assesses schemes against criteria on a case by case basis.
Slovenia	2011	Paper Furniture	- Legal - Sustainable (encouraged) - Recycled	Legal: FSC & PEFC, FLEGT licences, third party legal verification. Sustainable: Verified as sustainably managed (with no scheme specified).
Sweden	2011	All wood based products including paper	- Legal “Acceptable”	Legal: FSC & PEFC, FLEGT licences, third party legal verification. Acceptable: FSC & PEFC, FSC Controlled Wood or equivalent
Bulgaria	2012	Paper	- Legal - Sustainable	Legal: FSC & PEFC, FLEGT licences, third party legal verification.

MS	Introduction	Products covered	Criteria	Forms of proof acceptable
			(encouraged) - Recycled	Sustainable: Verified as sustainably managed (with no scheme specified).
Ireland	2012	Paper Timber in construction	- Legal - Sustainable - Recycled papers	FSC & PEFC. FLEGT licences.
Luxembourg	2014	All products listed in EUTR	- Legal - Sustainable - FLEGT Regulation	Legal: FSC & PEFC, FLEGT licences, third party legal verification. Sustainable: Verified as sustainably managed (with no scheme specified).
Croatia	2015 Revised: 2012	Paper	- Legal - Sustainable (encouraged) - Recycled	Legal: FSC & PEFC, FLEGT licences, third party legal verification. Sustainable: Verified as sustainably managed (with no scheme specified).
Slovakia	2016	Paper Furniture Office building design	- Legal - Sustainable (encouraged) - Recycled	Legal: FSC & PEFC, FLEGT licences, third party legal verification. Sustainable: Verified as sustainably managed (with no scheme specified).
Poland	4th national action plan for GPP was introduced in 2017	No specific criteria identified for wood-based products	*No criteria seen*	
Portugal	Criteria are under development.	Potentially will include all EC GPP product / use categories	*No criteria seen*	
Estonia	*No criteria seen*			
Greece	*No criteria seen*			
Hungary	*No criteria seen*			

Source: (International Tropical Timber Organisation, 2019)

These MS public procurement policies vary in terms of initial establishment date (indeed some of these policies were established well before FLEGT Regulation (2005), with Germany's public procurement policy relating to wood-based products going as far back as the 1970s). They also vary in their definition of criteria, coverage of timber products and whether they are voluntary or mandatory. However, they all aim to require, or at least encourage, government buyers to source legal and often sustainable timber, and hence could have interacted with the aims of the Regulations. (International Tropical Timber Organisation, 2019). Their interaction with the Regulations may have been limited by the fact that these only covered public procurement and in five MS, and hence not all EU imports.

Certification schemes

The Forest Stewardship Council (FSC) runs a ***global FSC forest certification system*** with two key components: forest management and chain of custody. FSC regards legality as an essential but not necessarily sufficient step towards sustainable forest management worldwide (FSC, 2013) .FSC aims to achieve certification of forests to credible, independently verified standards of responsible forest management. This was established in 1993 before both the EUTR and FLEGT Regulation (FSC, 2020) . By 2003, 20,000 FSC-certified products were on the market and there were 40 million hectares of FSC-certified forests worldwide (FSC, 2014) .The area of FSC-certified forests worldwide continued to grow post introduction of FLEGT Regulation and EUTR. By 2008 more than 100 million hectares were certified to FSC's Principles and Criteria, distributed over 79 countries. As of 2015, in four of the six countries with ratified VPAs, the FSC certified forest area totalled almost 5.5 million hectares. The VPAs with the

Central African Republic, Cameroon, Liberia and the Republic of Congo include the possibility of recognizing private certification of forests as compliant with the FLEGT Regulation-Timber Legality Assurance System. FSC has national standards which include a FLEGT Regulation legality grid, in Cameroon and the Republic of Congo, which have considerable timber trade with the EU (FSC, 2015). Whilst FSC certification preceded FLEGT Regulation and EUTR, it may be that they increased consumer awareness and contributed to the growth of FSC. As of January 2020, total FSC-certified forest area worldwide was approximately 204.38 million hectares (Statista, 2020) – around 5% of the world's total forest area. Following the establishment of FSC, as the demand for certified sustainable forest management became global, according to PEFC, the FSC was considered unsuited to boreal and temperate forest practices (it had been developed primarily for tropical forests), and could not accommodate 'group certification' for small forest areas. In this way, many private forest owners considered the certification costs a barrier (PEFC, 2018).

As a result, the ***Programme for the Endorsement of Forest Certification (PEFC)*** was formed in 1999. Originally, FSC and PEFC address legality in different ways, which is one of the reasons why PEFC material is not accepted as Controlled Wood in the FSC system (NEPCon, 2012) . The global PEFC Chain of Custody Standard used a broad legality definition covering environmental and social legislation. However, today PEFC also now requires that the legality definition agreed through a VPA is reflected in their Sustainability Standards (FLEGT, 2016). PEFC's Chain of Custody (CoC) certification involves a third-party assessment to ensure compliance with PEFC's Sustainability Benchmarks and requires that every aspect of the production chain be traceable back to a sustainably managed forest (Fiora, n.d.). Following PEFC's establishment, the next few years saw rapid levels of growth, with 100 million hectares of PEFC-certified forest area in 2005 and then 200 million hectares in 2008 (PEFC, 2020) . As of June 2020, 319 million hectares of forest area was PEFC certified, and more than 12,000 PEFC Chain of Custody certificates had been issued (PEFC, 2020) . PEFC currently does not cover the following VPA implementing countries; Cameroon, Central African Republic, Ghana, Liberia, Republic of Congo and Vietnam (FLEGT Independent Market Monitor, 2020). . Based on joint research, PEFC and FSC concluded that in mid-2019 the total global certified area is 430 million hectares[48] (PEFC, 2020), around 10% of the world's total forest area (of 4.06 billion hectares). Therefore, these certifications may well have had a significant impact on the baseline, in the absence of EUTR and FLEGT Regulation. However, it is notable that two implementing VPA countries, Central African Republic and Liberia are neither PEFC nor FSC certified (FLEGT Independent Market Monitor, 2020).

Socio-economic drivers

Changing timber product preferences and demand: Since the Regulations were introduced there have been changes in consumer timber product preferences both in terms of the timber types and timber substitutes. This shifts part of the demand from tropical to other types of timber. There are now several innovative (and cheaper) products on the market that can substitute regular timber products (CBI, 2017). For example, currently Europe is the second-largest market for medium density fiberboard (MDF) and in 2019 accounted for more than 20.0% of the market revenue (Grand View Research, 2020). Whilst composites and treated European timber and bamboo are increasingly replacing some products (e.g. tropical hardwood decking), others are harder to replace (e.g. garden furniture made of

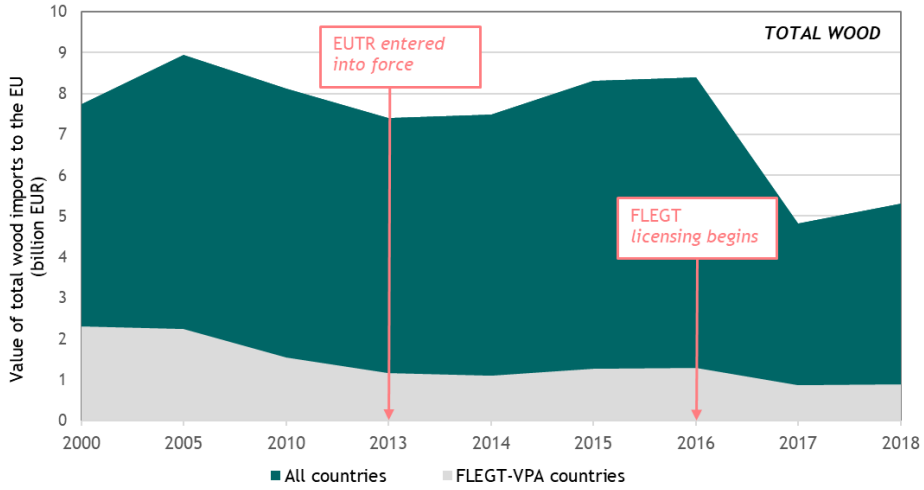
[48] *Note: of which 93 million hectares of global forest area were double certified (18% of the total certified area). Double certification exists in 33 countries* (PEFC, 2020)

tropical hardwoods) and have retained their popularity (CBI, 2017). It is also notable that more processed materials (e.g. MDF) are harder to trace through the supply chain and ensure legality.

There have also been changes in the type of wood products imported from different regions. For example, EU plywood imports from central Africa have fallen significantly since 2011 due to competition from cheaper Chinese products. EU imports from central Africa now consist primarily of rough sawnwood and veneers (Forest Trends, 2013).

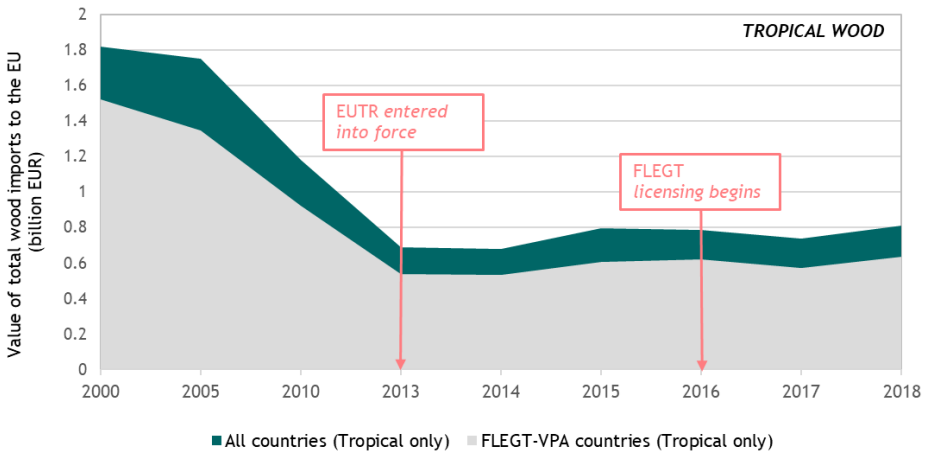
Total wood imports to the EU have stayed fairly constant from 2000 to 2016, before declining (see Figure K-1). There has also been a general trend of reducing tropical wood imports into the EU between 2000-2018, with total tropical wood imports worth 1.82 billion EUR in 2000, and declining to 0.81 billion EUR in 2018, as seen in Figure K-2. However, unlike total wood imports, this decline began as early as 2005.

Figure K-1 EU-27 Total wood imports from 2000-2018 in the context of FLEGT Regulation and EUTR



Data source: (EUROSTAT, 2020)

Figure K-2 EU-27 Tropical wood imports from 2000-2018 in the context of FLEGT Regulation and EUTR.



Data source: (EUROSTAT, 2020)

Furthermore, in terms of societal development, consumers have become increasingly aware of sustainability issues (e.g. climate change, biodiversity loss and deforestation) and the impact of their purchasing decisions. For example, a consumer awareness study has shown sizeable increased

awareness of FSC in Nordic countries (Finland, Norway and Sweden) (FSC, 2014). An EU wide poll has also found overwhelming support among the EU public for regulating products that drive deforestation, with 87% indicating that new laws are needed (EIA, Toxic Trade: Forest Crime in Gabon and the Repbublic of Congo and Contamination of the US Market, 2019). In this way, as timber product preferences have changed in Europe and as consumers in Europe have become more aware of forest certification (e.g. FSC, PEFC etc.), this may have impacted the volume of illegal timber and timber products placed on the internal market.

Growing role of Asian/Chinese companies in international timber market: Another change that could have affected illegal logging is the growth in forestry product manufacture in China. As a result of this growth, combined with a serious shortage of domestic timber supply, China has become an increasingly important player in world timber trade. China is now the largest importer of industrial logs and the second largest importer of forest products in the world, and the growth rate of these imports remains high (FAO, 2020). Currently millions of tonnes of timber enters China annually, with its wood manufacturing sector dependent on materials imported from overseas (Global Forest Watch, 2019). However, China did not, until 2019, have dedicated legislation in place prohibiting the import of illegal products (Chinese Academy of Forestry, 2019). Illegal timber was therefore often imported and used to produce goods later marketed in the EU. As of 2017, more than half of China's timber product exports (52%) were bound for countries (the US, the EU, Australia, and most recently, Japan) with operational measures aiming to exclude illegally harvested timber from their imports (Earthsight, Complicit in Corruption, 2018). Specifically, China was the EU's top trading partner between 2006-2018 accounting for 17.9% of imports of EUTR regulated products to the EU. In 2018, most of China's top 10 tropical timber suppliers (e.g. Solomon Islands, Cameroon, Indonesia and Malaysia etc.) ranked in the bottom quarter of global ranking on measures of governance, for example in terms of rule of law and control of corruption (Global Witness, 2020). In fact, between 2007 and 2018, 38% of China's timber product imports were from countries deemed to have 'high' or 'highest' risk of poor forest governance and associated links to illegal logging, defined by 14 indices of business, political, governance and corruption risks (although high, this represents a significant decrease since 2007 when the proportion was over two thirds (EU FLEGT Facility, 2018)). On average, countries supplying pulp and paper to China, receive a lower risk rating than those supplying other timber products. In terms of conflict-stricken countries, in 2017 China imported more than USD 2 billion of timber products from countries on the World Bank Harmonized List of Fragile Situations. This represents 8% of total imports, but nearly a fifth of hardwood log and sawnwood imports. In 2017, Chinese companies also imported more than USD 2 billion of logs from 33 countries with either full or partial LEBs (log export bans), amounting to 22% of China's total imports of logs from all countries (EU FLEGT Facility, 2018).

A consequence of this shift in demand is reflected in central Africa where European concessionaires are gradually selling their assets to Asian investors, who have substantial capital. Withdrawal of European companies is associated with decline in FSC certification. For example, Rougier and Wijma (European companies) represented nearly 700,000 certified hectares in Cameroon, but now their Chinese successors do not have the incentive to maintain those certifications, given the lack of Chinese import regulations (Mongabay, 2018) . However in December 2019, Chinese legislators revised the country's Forest Law for the first time in 20 years (ClientEarth, 2020). The amended forest law includes a ban on buying, transporting, and/or processing illegally sourced timber, and requires processing companies to establish a data record of raw materials and products. However, given how recent the change is, the positive impacts of this change in legislation are most likely still to come. This growth in

illegal forest imports from China, at least up to 2019, therefore represents a wider socioeconomic change, that may have affected levels of illegal logging and the volume of illegal logging placed on the internal market.

Technological and societal developments: As early as 2012 there was a 'whole array of technologies available in the market and being used to track timber and timber products' according to the International Tropical Timber Organisation (ITTO) (ITTO, 2012). Different technologies have been harnessed for a range of uses in the timber sector. For example, some developments have enabled timber tracing and labelling technologies to be developed, supporting the rapid collection of large amounts of data that can be electronically time-stamped and cross-checked against records at critical control points in the supply chain (e.g. RFID systems) (Ioakeim K. Tzoulis, 2014). Some concession owners utilise these tracking systems to avoid lower quality wood products being mixed into their supply chains. Other systems are used by NGOs to prove illegal logging activities. Networks have also been established such as the Global Timber Tracking Network (GTTN) that promotes the operationalisation of innovative tools for wood identification and origin determination (Global Timber Tracking Network, 2020). The GTTN project was first initiated in 2012 by Diversity International with funding from Germany, represented by the Federal Ministry of Food, Agriculture (and Consumer Protection) (Global Timber Tracking Network, 2017) . The network is developing a global database of DNA and stable isotope fingerprints of major commercial timber species, which could help reinforce illegal logging laws and certification standards by helping verify that the species listed in the paperwork is legal and labelled correctly (Sustainable Procurement of Forest Products, 2020) . Another organisation, BVRio created in 2011, includes work screening timber and timber products from Brazil, for illegality across the national supply chain that includes mapping of international trade flows offered by Trase data tools (Trase, 2016). However, despite these developments, adoption of traceability systems by MSs and high-risk producer countries is difficult to determine. Overall, it appears unlikely that these technologies were widely adopted before 2010. Therefore, disentangling whether the adoption of these technologies would have been effective at reducing illegal logging in the absence of EUTR/FLEGT Regulation is challenging.

Impacts of COVID-19: The global Covid-19 pandemic has arguably already had impacts on timber production and imports. In the United States (US), an increase in demand for hygiene products has caused increased demand for wood pulp specifically, whilst economic uncertainty has reduced demand for lumber (Frontiers, 2020). In Europe, sawmills and the timber industry are already carrying full inventories of unsold goods and cannot shift their stock. Some mills have now closed due to Covid-19, as have some furniture factories. Citizens spending more time in their homes and purchasing wood products has not compensated for demand levels pre-pandemic, and therefore the oversupply of timber products coupled with a lack of demand has seen timber prices collapse across Europe. This may have led to reductions in illegal timber imports. However, in contrast, on the ground in timber producing countries there are indications of an increase in illegal logging activities, perhaps facilitated by the knowledge that travel restrictions may hinder the attention, scrutiny and monitoring of illegal activities from forestry officials, independent auditors and civil society groups. A study using satellite data undertaken by WWF has revealed Tropical rainforests declined by 6500 square kilometres in March 2020, an area seven times the size of Berlin (WWF, 2020) .In Brazil, forest destruction was already at a high level in March 2019, at 70,000 hectares. However, deforestation rose by 55% in the first four months of 2020 compared with the same period last year (WWF, 2020). There has also been increased logging activity in Colombia, Cambodia, Indonesia, Nepal and Madagascar since the start of the COVID-

19 pandemic (Fair, 2020). These surges in illegal logging can be attributed reduced monitoring by enforcement authorities and social upheaval (Fair, 2020). For example, in Brazil, the number of deforestation monitoring agents in the Amazon was reduced by the Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA), citing the health risks of sending employees to the field. With fewer officers, illegal land clearing is far less likely to be exposed by law enforcement, prompting illicit forest activities to increase (ORBITAS, 2020).

Furthermore, as the world struggles to cope with the Covid-19 pandemic, there may be the temptation to relax environmental regulations in order to facilitate trade. For example, in Indonesia, as part of a package of measures to alleviate the administrative burden of business, legislation was issued lifting the obligation that exporters would need to obtain licences verifying that timber and timber products came from legal sources, unless required by the importer (Regulation No 15/2020, issued by the Ministry of Trade on 27 February 2020) (UNEP-WCMC, Briefing Note for the Competent Authorities (CA) implementing the EU Timber Regulation, 2020). There were concerns that this change of legislation would be in contradiction to the EU-Indonesia FLEGT Regulation VPA, however, after consultations were undertaken, Indonesia eventually issued a new regulation that reinstated the previous legislation (UNEP-WCMC, Briefing Note for the Competent Authorities (CA) implementing the EU Timber Regulation, 2020).The combination of regional climate extremes and changes in demand for wood driven by Covid-19 will also influence forest use in the medium to long term. In the longer term, forests may face an increased risk of being cut down and degraded as a result of the economic fallout from the Covid-19 pandemic. This is due to the fact a third of the world's people still depend on wood to cook and for millions who have lost casual work in cities, returning to their homes in rural areas makes it more likely that trees will be felled for food and fuel (World Economic Forum, 2020).

Annex M - Methods and tools used in preparing the analytical support document(s) and/or underpinning analyses

The Fitness Check of the FLEGT Regulation and EUTR aims to assess how the Regulations are working, whether they have the correct scope, and the degree to which their intended impacts have been achieved. The evaluation process follows the European Commission's Better Regulation Guidelines for evaluations and fitness checks. It assesses the regulations against five evaluation criteria of effectiveness, efficiency, relevance, coherence and EU-added value, in line with the evaluation questions set out in the Roadmap. Ricardo and partners are delivering the supporting study to the official Fitness Check of the FLEGT and the EUTR being conducted by the European Commission. This will provide the necessary analytical background to the Staff Working Document which will be published by the Commission.

The evaluation covers all parts of the regulations, including the VPAs signed under the FLEGT Regulation. It considers the period between 2005 and 2020 for the FLEGT Regulation and 2010 and 2020 for the EUTR. The fitness check has made use of several strands of information:

- Desk research
- Field research
  - Online public consultation (OPC)
  - Targeted stakeholder engagement – interviews
  - Targeted stakeholder engagement – stakeholder workshops.

This Annex presents the methodologies for each of these strands of evidence gathering.

Desk research

Desk research has comprised of literature/evidence assessment. Evidence and literature has been sourced by a number of routes:

- From references in the terms of reference for this support study.
- From current work being undertaken by project partners.
- From reports and other evidence signposted by EC.
- From a review of literature.
- From respondents to stakeholder engagement for this study through response to the online public consultation, targeted stakeholder survey, interviews, focus groups and workshops.

In total over 460 literature sources have been reviewed in detail, providing evidence related to all of the evaluation criteria.

Detailed analysis of data has also been undertaken. The sources and methodologies applied to analyze the following parameters are set in further detail in the following sections: Illegal logging (Annex A), deforestation (Annex B) and trade flows (Annex C).

Field research

Online public consultation (OPC)

An online public consultation (OPC) is a requirement of the Better Regulation Guidelines. It offers an opportunity for any interested individual from any stakeholder group to give their opinion on the main evaluation questions.

The OPC for the Fitness Check was launched on the Commission's website[49] on 3 September 2020. In line with the Better Regulation Guidelines, the OPC was open for 12 weeks and was concluded on 26 November 2020. The questionnaire was developed in English and was translated by the Commission services into all 23 EU official languages ensuring greater accessibility. It consists of two main parts: one addressed to the general public and one to expert stakeholders.

The questionnaire started with an introduction of the regulations and the consultation process. It then presented a first set of questions that identified the respondent. The questionnaire also sought to understand the respondents' familiarity with the two regulations. The survey contained multiple choice questions, using Likert-scales of 5 options (most negative to most positive). The scales for most questions included one or more 'opt-out' responses, such as 'I do not know' or 'No response' to avoid forcing respondents into giving an opinion they do not feel qualified to give. Where relevant, questions included "other" option. When selected by respondents, an open text field was provided to capture any additional feedback. Respondents were able to answer all questions. However, the questionnaire consisted of a generic part which was targeted to the wider public and a specific section for participants with more extensive understanding including public authorities, business and trade organisations, NGOs, academia and relevant international organisations and third countries authorities. Finally, respondents had the opportunity to provide any further comments in a free-text comment box. There were 175 responses to the OPC, alongside 29 attachments.

The submissions to the OPC were analysed in detail – analysis steps were:

1. Questionnaire data was obtained from EC Survey system. Data was inspected and the format adjusted as needed. For the OPC, no significant update of formatting/data structure was required.
2. Questionnaire raw data was imported and cleaned using Python and the Pandas library, to ensure consistency and repeatability.
3. Graphics were created using the Matplotlib charting library. This library and any other related libraries used to generate figures are fully open source and therefore all charts can be reproduced and distributed by the EC without further references and/or difficulty.
4. Campaign analysis using a tool developed in Python which checks cosine similarity by Ricardo was ran on all open text responses.

The qualitative analysis of the open text responses was carried out using expert judgement. The two aims of the analysis were to identify answers that would aid in answering the evaluation questions along the 5 evaluation themes. The steps undertaken included reading through each and every response (using knowledge on co-ordinated responses to expedite the process) and clustering responses together when a common theme was identified. The final steps involved screening non-clustered responses to identify interesting suggestions to highlight. Our analysis is presented in Annex K.

Targeted stakeholder engagement: interviews

49 https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/11630-Illegal-logging-evaluation-of-EU-rules-fitness-check-/public-consultation

The study included a combination of individual and group interviews. The targeted stakeholder engagement process took place in the form of four key steps.

Step 1: Preparation of interview guideline / questionnaire

An effective questionnaire, which enables access to quality, data focused input, is a fundamental tool when conducting targeted consultations. Questionnaires have been prepared in support of both the Impact Assessment and Fitness Check. The Better Regulation Toolbox #54 notes that closed questions are key for quantitative information, whereas open questions are better for qualitative information. Only open questions have been used in the interview questionnaires, with some supporting questions to focus on key issues and data gaps. The interview questionnaires were tailored to the specialisms and background of each stakeholder/stakeholder group. The questionnaires were also written in a way to enable written responses.

Each interview included a simple introduction, allowing the project team to provide an overview of the objectives and scope of the project, while also offering the stakeholder a chance to provide an introduction on their organisation and position. For written respondents a few short questions were provided to ensure an understanding of the stakeholder type is recorded, including:

- An overview of introductory questions required for the targeted stakeholder consultation questionnaire.
- Stakeholder name, organisation, and contact details.
- Stakeholder categorisation based on a preselected list.
- Dates of importance (when the interview was held when the minutes were approved.
- Statement of anonymity (whether the stakeholder approves the contents for use/quoting).

Step 2: Stakeholder selection

A preliminary list of stakeholders was identified for the targeted consultation through a process of stakeholder mapping and using the project team's established network among relevant stakeholders, namely EU and international institutions, MSs' representatives, industry and environmental NGOs and academic institutions. The list of stakeholders was subsequently finalised in consultation with DG Environment. For the selection of candidates for the targeted interviews, the guiding principles, and criteria in the Table M-1 were applied.

The final list of individual and group interviewees is presented in Table M-2. Once the final list was agreed, the project team identified the appropriate contact points in the selected organisations to introduce the relevant assessment and the expected topics to be covered in the possible interview. This was also done to enable stakeholders to inform their networks in a timely fashion in case additional information was required in support of the interview and to allow the project team to identify unforeseen topics that should be covered and/or treated with sensitivity. Following this first informal exchange, a formal invitation was sent to the organisation by email. Lastly, once organisations accepted and a date was set, an interview questionnaire, including information on the project background and contact details of the interviewer were shared. At the time of submission of this report, three interviews are still pending (Brazil, Cameroon, and Indonesia).

Table M-1 Guiding principles and criteria for selecting stakeholders for interview

Guiding principle	Justification
Priority will be given to stakeholders most impacted by the implementation of the proposed policy options and measures or absence of implementation	To ensure representation of those stakeholders for whom the stakes are highest
Priority will be given to stakeholders that have fist-hand experience related to the EUTR and FLEGT.	First-hand experience will provide the most helpful and credible evidence to support and illustrate answers to the evaluation questions
Priority will be given to experts as they can help to fill in information gaps	Experts in a certain area (e.g. CAs overseeing implementation, the forestry industry, or NGOs) can help to provide further insights or reveal blind spots.
A fair balance will be sought between diverging stakes	Although the intended focus on answering remaining open questions in the evaluation matrix may lead to an emphasis on certain topics or stakeholders, consideration will be given to ensure a sufficiently wide and diverse selection of interviewees to ensure a stakeholder group with credible representation

Table M-2 Stakeholder list

Stakeholder	Attendees
European Commission, DG DEVCO	1
European Commission, DG TAXUD	1
European Commission, DG NEAR	1
European Commission, DG Trade	1
EUTR CAs	8
FLEGT CAs	4
Forest owners	3
Business associations	7
NGOs	7
Indonesia public authorities	1
Cameroon public authorities	1
Malaysia public authorities	1
Brazil public authorities	1
Ukraine public authorities and academia	2

Step 3: Organization and facilitation of interviews

Due to the restrictions introduced in the EU in response to the Covid-19 pandemic, all interviews took place remotely, using online teleconferencing software. In addition, and to ensure a high response rate and valuable input from key stakeholders, written responses to the questionnaire were accommodated. Stakeholders were provided an opportunity to state whether or not they would like their organisation's name listed in the final reporting and were given the opportunity to review the inputs they provided to the consultation process. All stakeholders were provided with a copy of the minutes of their interview which they could revise as they saw fit, to remove any potentially sensitive inputs. Finally, the stakeholders were asked whether they agree for their feedback to be shared with DG Environment.

Step 4: Analysis

The interviews have provided variety of interview minutes, written feedback, and additional attachments and studies. All of this information will be synthesised and analysed to contribute to the draft final and final Fitness Check reports.

Stakeholder events

Due to the COVID-19 pandemic, both stakeholder events were organised as virtual events, using a WebEx meeting organised by the European Commission. In both cases, participants received the agenda and the topics in advance of the discussion, to ensure that they were sufficiently prepared.

The first stakeholder workshop supporting the Fitness Check was held on 18 September 2020. The workshop formed part of a EUTR/FLEGT Regulation Expert Group meeting where the progress with the study was presented. The meeting agenda was published on the Expert Group meeting web page[50]. The aim of the workshop was to assist the project team in gathering evidence and to discuss some in-depth questions with the MSs' CAs. Three topics were discussed:

- Definition and interpretation of 'negligible risk' and its impact on enforcement of the EUTR
- Challenges to CAs around implementation and enforcement of EUTR
- Progress and process of putting VPAs in place.

The second stakeholder workshop took place on Thursday 10th December 2020. This was held virtually to coincide with the Multi-Stakeholder Platform on Protecting and Restoring the World's Forests, including the EUTR/FLEGT CAs, NGOs, industry, monitoring organisations, academics, and certification bodies. The agenda and summary record were also published on the EUTR/FLEGT Expert Group web page[51][52]. Participants were split in breakout groups and three topics were discussed with each group in turn:

- Due Diligence as a concept and information gathering (EUTR)
- Effectiveness, enforcement, and traceability (EUTR)
- FLEGT Regulation and contribution of VPAs to the EUTR implementation.

The minutes from the meetings are presented in Annex K.

Limitations of the study

A summary of key limitations and gaps are presented in the following table, including implications for the work and mitigating actions taken. Some limitations apply specifically to the analysis of the EUTR, some to assessment of the FLEGT Regulation, and some apply to both.

Table M-3: Limitations of the current study

Limitation/ gap	Mitigating action	Implications for the Fitness Check
General limitations		
Due to the broad scope of the EUTR and FLEGT Regulation, it was not possible to investigate all aspects and effects in all	The evaluation of certain questions adopted a case study approach rather than a complete geographic, sector and product wide assessment.	Low

[50] https://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupMeetingDoc&docid=43536
[51] https://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupMeetingDoc&docid=45122
[52] https://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupMeetingDoc&docid=47572

Limitation/ gap	Mitigating action	Implications for the Fitness Check
countries, sectors and products in detail within the scope of this study.		
Lack of robust and comprehensive (both in terms of time series and geography) around levels of illegal logging and illegal timber entering the EU market. Furthermore levels of reporting are not necessarily equivalent to levels of illegal activity – e.g. an increase in transparency might lead to greater levels of reporting, but not necessarily a change in the underlying levels of illegal activity.	What data is available around levels of illegal logging has been collated and analysed, alongside linked data sets (such as ILAT and Preferred by Nature risk scores). In addition, the study has also analysed alternative but linked metrics: trade data flows and deforestation rates. The study has also gathered stakeholder opinion through different channels. By considering a wide range of evidence and triangulating between them, the analysis presents the evidence available and draws conclusions based on the overall weight of evidence, whilst critically reflecting on the robustness of evidence to clearly present the confidence in the conclusions drawn.	Moderate – even after triangulating across the evidence available, there is considerable uncertainty around the conclusions and no definitive assessment can be made of the impact of either Regulation on illegal logging or the level of illegal timber entering the EU. However, this has not fundamentally challenged the deduction of broader recommendations to support the IA.
Drawing conclusions regarding impacts of the Regulations on illegal logging from deforestation data is challenging. Other variables may influence forest cover, not least national policy. Timber classified as 'legal' within the exporting country may still be cleared for reasons of agricultural expansion and hence lead to permeant reduction of forest cover.	The analysis has considered external factors driving deforestation as much as possible. Evidence has been triangulated across multiple sources and presented clearly, including suitable caveats. All conclusions are presented in the context of the robustness of the findings.	Moderate – as above.
Trade data as a proxy to illegal logging and trade is uncertain. Trends in timber trade may be influenced by other variables such as trends, costs, and fashion. Furthermore trade data is only available at country level, whereas legality is determined at specific source level – hence even trade from high-risk countries can be legal. Likewise this will not highlight changes from illegal to legal sources within countries.	The analysis has considered external factors driving trade flows as much as possible. Evidence has been triangulated across multiple sources and presented clearly, including suitable caveats. All conclusions are presented in the context of the robustness of the findings.	Moderate – as above.
The risk levels and CPIs of a country do not provide conclusive evidence on illegal trade timber trade specifically, and some	The analysis includes clear caveats about the role of risk levels and CPIs. Furthermore, evidence from literature and the consultation activities are used to	Low

Limitation/ gap	Mitigating action	Implications for the Fitness Check
are broader measures covering other sectors of the economy.	supplement the findings around implications of corruption on illegal exports.	
There is limited data on costs of implementation available from the literature.	The study sought to complement data from the literature with evidence from stakeholder consultation as far as possible. However, given the scope of the study the breadth of stakeholder engagement was bounded. All cost figures and conclusions drawn from this are clearly presented alongside appropriate caveats, including regarding the coverage of data.	Moderate – a complete estimate of cost for either Regulation has not been possible. However, this has not fundamentally challenged the deduction of broader recommendations to support the IA.
Some impacts cannot be quantified, let alone monetized (e.g. improvements in governance). Lack of quantitative assessment of effects and benefits prevents direct comparison to costs, in particular for specific actors or MS	Where possible, the analysis has sought to find quantitative data on the impacts of the Regulations, but in many cases this does not exist. This has been complemented with qualitative evidence and stakeholder sentiment to develop a qualitative narrative around the comparison of costs to benefits. The analysis also presents alternative, simplified metrics to help balance costs and benefits, albeit with caveats attached.	Moderate – this has limited the comparison of costs to benefits. However, this has not fundamentally challenged the deduction of broader recommendations to support the IA.
Stakeholders often base their answers on their subjective opinion without providing further explanations or data to support their statements, which increases the uncertainty and the risk of misleading/biased answers	We have developed our methodology to maximise the opportunity to collect robust evidence around the Regulations, for example including qualifying questions and open text boxes to test the knowledge of OPC respondents, and carefully selecting those chosen for targeted interview. In the targeted interviews, interviewers also pressed for validation of statements made. When reviewing evidence collected, analysts were made aware of possible biases in sentiments and stakeholders roles in the Regulations. All stakeholder opinion is triangulated against evidence provided in the literature and data.	Low
By creating two baselines to assess the policies individually, this potentially creates issues regarding drawing	Given the nature of the assessment is based on case studies and is predominantly qualitative (rather than a	Low

Limitation/ gap	Mitigating action	Implications for the Fitness Check
conclusions around the overall effects of the policies together.	modelled, quantitative analysis), it has still been possible to draw conclusions around the combined effects whilst avoiding issues around overlaps and interactions.	
EUTR		
It has been challenging to assess the sufficiency of checks, i.e. defining the number of operators that need to be checked for the checks to be sufficient. Currently, data is not collected by CAs on the volumes of timber and timber products checked and most CAs have only estimates of the number of operators.	Where possible, information on volumes checked and general views on the challenges with implementation were collected in the stakeholder consultation to supplement the analysis.	Low
FLEGT		
There is a lack of information around some elements of FLEGT enforcement in EU MS, e.g. volume of timber in licences checked, instances of infringements and subsequent actions.	This was prioritised as an area for further evidence gathering with stakeholders. Evidence was also gathered regarding the overall efforts placed on implementing the FLEGT Regulation relative to the EUTR and relative risks.	Low
There is somewhat misleading reporting of data in the literature leading to overplaying the impacts of the VPAs. I.e. the statement that VPAs cover 80% of tropical timber imports. However tropical timber forms only a small proportion of high-risk EU imports. Furthermore, the existence of VPAs do not imply licencing, which is when legality is ensured.	Data from the literature has been clearly presented and contrasted against our own analysis of the trade data.	Low

Annex N – Stakeholder Consultation Strategy

Introduction and context

The **EU Timber Regulation (EUTR),** laying down the obligations of operators who place wood and wood-based products on the EU market, and the **Forest Law Enforcement, Governance and Trade (FLEGT) Regulation,** setting up a licensing scheme for imports of wood into the EU, are part of the EU FLEGT Action Plan. Both instruments are designed to work in a complementary way by addressing, respectively, the supply and the demand sides of wood trade[53].

The **FLEGT Regulation** (Council Regulation (EC) No 2173/2005) has been adopted as a supply side measure; it establishes the FLEGT licensing scheme for imports of timber from non-EU countries with which the EU have concluded Voluntary Partnership Agreements (VPAs). These imports are to be covered by FLEGT licences, issued by the partner country, which by implementing a Timber Legality Assurance System (TLAS) and other associated measures, ensures that exported timber and timber products* have been legally harvested according to the laws of their country of origin. For more information on the FLEGT Regulation, please visit the European Commission website.

The **EUTR** aims to reduce illegal logging by **prohibiting EU operators** from placing illegally harvested wood and derived products on the EU market, thus requiring EU operators who place timber products on the EU market for the first time to exercise **due diligence**. While applicable to a wide range of timber and timber products, some products (e.g., recycled products, printed paper, timber bought or sold by private individuals for personal use) are not covered. The EUTR is implemented and coordinated by competent authorities in each EU Member State. For more information on the EUTR, please visit the European Commission website.

As both regulations are closely related, the Commission is carrying out a common fitness check to evaluate the functioning of both the FLEGT Regulation and EUTR. The fitness check will look at the effectiveness, efficiency, coherence, relevance and EU added value of both regulations in contributing to the fight against illegal logging globally.

Within the evaluation process, a stakeholder consultation strategy has been developed in compliance with the EU Better Regulation Guidelines. As such, this strategy allows stakeholders to provide input *a priori* on the appropriateness of data collection and the consultation approach, ensuring that the scope, scale and emphasis of consultation activities are sufficient. This consultation process is aimed at gathering the views of the concerned public and of a wide range of relevant stakeholders to help inform the Commission on the Fitness Check of the FLEGT Regulation and EUTR.

For more information on why the Commission is carrying out this Fitness Check, please consult the Evaluation / Fitness Check Roadmap.

Stakeholder mapping

[53] European Commission, (2020), Evaluation/Fitness Check Roadmap, Fitness Check of the Forest Law Enforcement, Governance and Trade (FLEGT) and the EU Timber Regulations
*In the formal title "EU Timber Regulation" the word timber is being used but covers wood and wood-based/derived products.

The relevant stakeholders may be grouped as follows[54]:

EU Member States' authorities in charge of implementation and administration of the regulations at the member-state level. These stakeholders have a highly relevant and specific experience, gathered while designing and implementing the EUTR and FLEGT policies regulations including strengths and weaknesses. The information may be valuable to help inform the Commission whether such measures have been successful and whether they can be replicated.

Concerned citizens from the EU and from third countries, including those who may be affected by deforestation in their respective countries, and, as such, have first-hand knowledge of impacts and to what extent the FLEGT Regulation and/or the EUTR are helping address these.

Third countries' stakeholders, including those from wood-producing and -processing countries exporting to the EU, such as law makers, public authorities and communities from these countries, and who are concerned with the products covered by the EUTR when they are exported to the EU and/or FLEGT licensing schemes. Businesses that sell products covered by the EUTR to EU importers should provide them upon request with the information that helps them to carry out due diligence. Business from these countries could in turn revert to their public authorities in order to gather some of the required information.

Businesses and trade associations, including SMEs and micro firms, include (groups of) businesses who must adapt their commercial activities according to the FLEGT Regulation and/or the EUTR in order to deal with timber products covered by the Regulations (e.g. operators under the EUTR, traders, and other businesses potentially concerned). Businesses possess first-hand knowledge about how these regulations have affected their activities and what impact these changes have had for them, while trade associations usually possess knowledge about how their members deal with the FLEGT and the EUTR, either at the national or the EU level. This will enable them to provide extensive and coordinated input during the consultation process.

Consumers and consumer organisations include consumers who purchase timber products and the organisations concerned with consumer experience, including product properties (value, quality, sustainability, etc.) and/or information transparency from actors across the various supply chains. Consumers and consumer organisations can have a high interest in the FLEGT Regulation and the EUTR, although they are not directly involved in their implementation or enforcement.

Some other non-governmental organisations, particularly some NGOs, have a high interest in the issue of illegal logging. Their input will be useful to help estimate impacts of the FLEGT and the EUTR Regulations.

International organisations which monitor illegal logging on an international scale may understand the overall impact of illegal logging in a variety of countries, as well as how the situation has evolved over time. Such macro-level insights will be useful to understand the impacts that both EU regulations have had.

[54] As spelled out in the European Commission, (2020), Evaluation/Fitness Check Roadmap of the Forest Law Enforcement, Governance and Trade (FLEGT) and the EU Timber Regulations https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/11630-Illegal-logging-evaluation-of-EU-rules-fitness-check-

Finally, stakeholders representing the forest sector e.g. forest owners, forest managers, concession holders, national forest agencies all dependent of growing and harvesting wood have knowledge on how to comply with applicable national laws but also faces the competition from illegal logging and new market demands are an important source of knowledge of the functioning of EUTR and/or FLEGT from the perspective of "growing" wood.

Methods and tools

The consultation activities will take place between July and December 2020. The main aim of the public consultation is to gather public views and evidence for the fitness check of the EUTR and FLEGT Regulations, in line with the Better Regulation guidelines.

To gather relevant insights from the stakeholders listed above, the following consultation tools will be used:

Online public consultation

The internet-based public consultation will include questions tailored to examine the effectiveness, efficiency, relevance, coherence, and EU added value of the implementation of the two regulations.
The OPC will be open to the general public and will be available on the dedicated portal of the European Commission for a period of 15 weeks. The questionnaire will be available in all EU languages.

Targeted stakeholder consultation

Targeted consultations through interviews and focus groups will be carried out to gather specific evidence through the collection of data from relevant stakeholders. Targeted interviews will take place either through teleconference conversations or through written responses. The interview guide developed for teleconference conservations and focus groups will be also be used as a basis for the written responses. These will complement and add depth to the inputs collected under the OPC and ensure that data gaps are filled, and opinions are substantiated.

Stakeholder meetings

Stakeholder meetings will be organised to assist identifying and discussing issues that will need to be assessed by the fitness check. They will entail discussions and critical assessments of the emerging findings of the fitness check and may help to garner further information. The meetings will be timed to coincide with a meeting of the Commission Expert Group on the EUTR and the FLEGT Regulation.

Overview of tools used to consult different stakeholders

The table below shows how each of the different stakeholders will be consulted.

Stakeholder type	Consultation approach		
EU institutions			X
Citizens	X		
EU Member State Authorities	X	X	X
Third-country stakeholders	X	X	X
Businesses and trade associations	X	X	X
Consumers and consumer organisations	X	X	X
Non-governmental organisations	X	X	X
International organisations	X	X	X

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