

A Political Economy of the European Union's Timber Regulation

Which member states would, should or could support and implement EU rules on the import of illegal wood?

Abstract

In 2010 the EU Timber Regulation was passed into law supported by a large majority of EU member states. The stated purpose of the Regulation was to prohibit the placement of illegally produced timber within EU markets and thereby promote more sustainable management of the world's forests. Drawing on sixty interviews and written records from nine member states across the EU, we identify variables to explain differences in the levels of political support, and formal and practical implementation of the Regulation. Through systematic assessment, we find that countries that are relatively wealthy, are significant importers of high risk wood, and that have active civil societies were most likely to support the Regulation and to implement its requirements in a timely manner. In contrast the poorest countries least engaged in high risk imports face the greatest challenges with compliance, suggesting an unequal distribution of costs relative to responsibilities.

Keywords

EU; compliance; implementation; equity; legality; timber trade

1. Introduction

The EU Timber Regulation (EUTR) is part of a suite of international initiatives that aim to promote sustainable forestry and forest industries by removing illegal timber from global supply chains. These illegal logging initiatives have gained widespread support among environmentalists, industry and governments (Sotirov et al. 2017), and thereby raised hope of internationally coordinated action in a sector historically plagued by stalemate (Humphreys 2006). The EU is a key player in these efforts, and passed the EUTR in 2010 to prohibit the placing of illegal wood on EU markets. The EUTR entered into force in March 2013.

The literature cites a number of reasons for the growing political momentum behind illegal logging initiatives like the EUTR. Their early roots can be traced to global concern over the loss of tropical forests, which reached a peak of 16 million hectares per year between 1990-2000 (FAO 2011). While much of this loss was due to agricultural expansion, timber harvest has played a facilitating role (Meyfroidt et al. 2010). In the 1990s, efforts were made to launch an international forest convention to stem forest loss, but decades of debate failed to produce agreement (Dimitrov 2005). Meanwhile, in the early 2000s, international attention began to shift towards the more narrowly defined issue of “legality”. Estimates emerged that nearly half of the logs harvested in some of the world’s most forested countries were felled illegally (Lawson and MacFaul 2010), leading to conclusions that addressing illegality would be an effective way to improve environmental and social sustainability (e.g. EC 2010, Kleinschmit et al. 2016).

As the new illegal logging initiatives emerged, they differed in several important ways from earlier international strategies. In addition to their narrower focus on legality rather than sustainability (Sotirov et al. 2017), they set narrower political boundaries at national or regional rather than global levels, thus making it easier to reach common agreement (McDermott 2014). Rather than challenge sovereignty through demands to meet a binding global agreement, they focused on helping states reinforce their own laws. These efforts also uncovered shared interests between industry and environmentalists – timber companies that could easily verify their legality held a competitive interest in squeezing out illegal timber; while environmentalists saw new leverage to protest destructive forest practices (McDermott 2014, Sotirov et al. 2017).

But just how widely shared are these interests, and what similarities and differences among countries and stakeholders emerge in the process of translating the broad concept of ‘legality’ into particular sets of binding requirements and practices? The EUTR, as outlined in Regulation No. 995/2010, is distinguishable among the growing range of illegal logging initiatives, in that it is a unitary supranational regulation devised and governed by the EU. As such, it requires shared responsibility and multi-lateral cooperation among the EU institutions and the twenty-eight EU member states. Similar to national initiatives in the US (the 2008 amendment to the Lacey Act) and Australia (the Illegal Logging Prohibition Act), the EUTR imposes a ban on the market entry of wood produced in a way that violates the laws of the country of origin. Likewise, the EUTR is binding in its entirety and directly applicable to all EU member states. But unlike the US and Australian national initiatives, the implementation of the EUTR requires that all of the twenty-eight EU member countries translate and enforce

it within their particular national legal and policy contexts. It is therefore possible to examine the power and interest dynamics that differently shape levels of support, formal and practical implementation across diverse EU countries (Sotirov et al. 2017). Is there a confluence of interests and consensus at the level of EU member states, similar to those observed in the US, for example (Cashore and Stone 2014)? What factors have shaped EU member state support for the EUTR, as well as the timeliness of its formal implementation and effectiveness of practical enforcement? And finally, what are the implications regarding the overall efficacy or equity of the EUTR? We argue that these larger questions of efficacy and equity are particularly timely given the ‘win win’ rhetoric surrounding the illegal logging movement (McDermott 2014), coupled with growing debates over equity within the EU (e.g. (Asteriou et al. 2014, Busemeyer and Tober 2015)) and beyond (e.g. (McDermott et al. 2013)).

The literature on Member State support for and compliance with EU regulations has varied in its emphasis on power and interest dynamics versus more technocratic or cultural explanations. A large body of work involves comparisons of the institutional ‘fit’ of EU policies with Member States’ domestic institutions, hypothesizing that the comparative cost or ease of domestic implementation explains state differences (e.g. (Knill and Lenschow 1998, Borzel and Risse 2003). Similarly, theorists have argued that ‘command and control’ approaches, which characterize the EUTR’s ban on the market placement of illegal timber and its various institutional requirements, often result in less institutional change and cross-national convergence in implementation than alternative ‘communicative’ or ‘competitive’ approaches, owing to their relative costs of compliance (Knill and Lenschow 2005).

While these assessments of institutional fit and associated costs provide important insights, their failure to consistently explain differences among Member States has spurred calls for more attention to the power and interest dynamics that shape state response (Mastenbroek 2005). Accordingly, our paper adopts a political economy approach, drawing on literature that identifies various market and political factors shaping state and industry support for environmental policies in the EU (e.g. (Borzel 2000, Bailer et al. 2014), and globally (e.g. Cashore et al. 2004, Humphreys 2006). We recognize that domestic politics hold sway across all phases of the policy process. Hence we compare Member State actions in relation to the EUTR holistically across multiple policy stages: from initial political support or opposition to the regulation (i.e. votes for or against the EUTR in the formulation stage), to formal implementation (i.e. the transposition/specification of EUTR rules into national legislation, additional national provisions in relation to procedure and enforcement) and practical implementation (i.e. the application of resources and actions to put rules into practice, monitoring and enforcement of target group behavior).

In the process of identifying variables that might affect the likelihood that a country *would* effectively implement the EUTR, meaning that they face the strongest incentives to do so, we also consider the relevance of the EUTR to a particular country, i.e. the degree to which they *should* implement it, that is the degree of their responsibility for bringing illegal wood into the EU. We hold that countries who import the largest volumes of illegal wood are responsible for the majority of the ‘problem’ this trade imposes worldwide. While major importing countries will likely face higher implementation costs due to the size of their imports, countries with low levels of imports are still burdened with the significant costs of

establishing and maintaining an effective EUTR infrastructure. Finally, by including relatively poor countries from Southern and Eastern Europe, we highlight the issue of governance (i.e. regulatory and industry) capacity, i.e. the degree to which they *could* implement the EUTR. We conclude by arguing for the importance of would, should and could questions in understanding the formulation and multi-level implementation of EU policy outcomes.

2. The analytical framework

There is a large and growing body of research explaining differences in support for, and implementation of, regulations and standards across EU countries (Borzel 2000, Knill and Lenschow 2005, Falkner and Treib 2008, Bailer et al. 2014) and the forest sector (Cashore et al. 2004, Humphreys 2006, Overdevest and Zeitlin 2012). This paper's analysis draws, in particular, on the work of Cashore et al (2004), Börzel (2000) and Bailer et al. (2014), who identify specific market and political variables that we argue are of particular relevance to the EUTR. Cashore et al. (2004) have focused on the global uptake of forest certification, a non-state, market-driven system of environmental standard-setting, auditing and labeling. For example, they consider how a country's import or export dependence shape industry receptiveness to certification. In a complementary manner, Börzel (2000) and Bailer et al (2014) have examined variables that explain differences in Member State support for EU legislation, including policy salience and the costs of adoption for governments and domestic industries.

While a review of the literature suggests that certain market, political and structural logics may influence state regulations and market-based certification in similar ways, mandatory state-based instruments are unique in holding the sovereign authority to enforce compliance across an entire sector. This raises unique normative as well as strategic issues. In particular, it highlights the question of which countries bear the greatest responsibility or “should” support and implement the EUTR from the perspectives of equity and effectiveness. The core goal of the EUTR is to ensure that wood sourced from illegal logging is not placed on the EU market (EC 2010). As such, it stands to reason that those EU countries involved in importing the greatest amount of wood which is considered at ‘high risk’ of illegality, i.e. originates from a country where illegal logging is widespread (EC 2016),¹ would be most responsible, both strategically and ethically, for ensuring that the EUTR achieves this goal.

While this generally suggests that import dependent and relatively wealthy countries who are most responsible for the problem ‘should’ support and implement the EUTR, there are additional reasons why perhaps they ‘would’. Firstly, their leading role in importing high risk products increases the domestic policy salience of the EUTR, and hence the likelihood of domestic mobilization and pressure to address the issue through compliance (Börzel 2000). Secondly, and as argued by Cashore et al (2004) in the context of forest certification,

¹ The cited European Commission guidance document lists several other factors that determine levels of risk, including the reputation of the companies involved and the complexity of the supply chain. However, and as further outlined in our methods section, the focus of this paper is on the primary, national-level dynamics that may predict a Member State’s support for, and compliance with, the EUTR.

domestic forest industries are relatively less influential in import-dependent countries, and hence hold less power to resist civil society pressures on their industry.

In contrast, export dependent countries and/or countries with relatively strong domestic industries might be more likely to resist international regulations that could threaten their access to external markets.

Of course the perceived levels of such threat will depend, to some degree, on rules for compliance. In the case of the EUTR, it was decided that the primary responsibility of compliance would rest with the ‘first placer’ of timber on EU markets, who must be able to demonstrate ‘due diligence’ in ensuring the wood is legal. Other ‘traders’ within the EU supply chain would be then responsible “to record from whom products were purchased ... and to whom they were sold” (if sold to another trader) (BRC 2012: 5). As indicated in an EUTR guidance document, this means that all wood originating from countries external to the EU will be subject to the scrutiny of companies and Competent Authorities in importing countries, which in many cases will be wood traders and retailers (EC 2016: 17-19). These ‘first placers’ or ‘operators’ may or may not be located in the same EU country where the wood products are consumed. In the case of non-EU wood in particular, they could be traders located in a country with a major seaport, for example, who legally own the wood as it enters the EU and then sell it to other traders or retailers overland. On the other hand, most timber produced within the Member States is likely to be sold as raw timber to traders and/or undergo some form of processing within country, and hence the ‘first placer’ is likely to be a logging contractor or processor who resides within the same country where the wood is produced (Ibid).

While the first placer provision might thus reduce the perceived risk for domestic producers of being judged for their legality by authorities in other Member States, there is still little reason to expect that domestic forest producers would welcome the risk of such outside interference. In support of this argument, the EU domestic forest owners and industry actively lobbied for the EUTR to apply only to first placers, thereby mitigating the threat that domestic wood would be subject to additional external evaluation for legality beyond the usual domestic procedures of legal enforcement. In general, domestic producers' main argument has been that all wood from within the EU was a "negligible risk", as it is being legally sourced given sustainable forestry practices according to rule of law (Sotirov et al. 2017)

Another variable which has been associated with shaping country support for international forest governance, is the strength and effectiveness of civil society pressure in a country; that is, the stronger the voice of civil society, the more effective it will be in pressuring domestic governments to act (Cashore et al. 2004). Hence we would expect greater commitment to the EUTR in countries with a strong and active civil society.

Furthermore, if civil society pressure is instrumental in motivating a country to embrace the EUTR, we'd expect the most controversial wood products to generate the greatest response. To date the role of the tropical wood trade in forest loss and degradation has generated the largest and most long-standing international controversies (Humphreys 2006). Therefore, we'd expect tropical wood imports to place disproportionately heavy pressure on countries to address illegal logging through support for the EUTR and its formal implementation.

At the same time, since implementation of the EUTR is mandatory and applies to a long list of wood imports, and all domestic EU wood would qualify as “negligible risk” (see above), industries that qualify as ‘first placers’ of high risk wood face particularly high costs to ensure that wood is legal. In those cases where the ‘first placer’ resides in another country, for example in a neighboring country with a major seaport, the industries in the final destination country might view the EUTR as offering a ‘win win’ of enhanced reputation along with relatively little liability. Regardless of where the ‘first placer’ resides, we’d expect countries which consume large quantities of high risk wood to support and *formally* implement the EUTR, i.e. to adopt its implementing legislation in a timely way. However this formal compliance may or may not translate into the intensive *practical* implementation of the EUTR through high levels of resourcing and strict enforcement.

All of these observations, taken together, lead to the following two hypotheses:

H1 Countries that import relatively large quantities of high risk, and especially tropical wood, are more likely to support the EUTR and/or to implement its requirements into domestic legislation in a timely way.

H2 Countries with an active civil society demanding action against illegal logging are more likely to support the EUTR and to implement its requirements into domestic legislation in a timely way.

Cashore et al (2004) and Bailer et al (2014) both highlight how countries with strong domestic industries are more likely to oppose legislation that imposes additional costs or trade barriers on those industries. In our case of the EUTR, countries whose industries are

dependent on exporting relatively large volumes of wood might initially oppose the EUTR as adding new costs or barriers to trade of their own wood products with other EU countries. However, we would add that whether or not a country supported or opposed the EUTR in its negotiation phase is less likely to be a strong predictor of EUTR formal and practical implementation. This is because in-country implementation addresses only the screening of competing wood products from other countries, rather than the country's own exported products. Indeed once the EUTR has been passed, countries with large and strong forest industries may support more rigorous EUTR implementation with the anticipation this will enhance their competitive advantage in domestic markets. For this reason, the following hypothesis applies only to support for the passing of the EUTR, not to its domestic implementation.

H3 Countries with forest industries that are not heavily invested in wood product exports are more likely to vote in support of the EUTR. However, once the EUTR has been adopted, countries with major wood exporting industries may support rigorous domestic implementation of the EUTR as it applies to imported wood products.

While all of these factors might explain country incentives to support or resist the EUTR, it is also important to examine differences in country capacities to respond to those incentives. In particular, there are substantial differences among EU member states in the strength of their economy as well as their governance (i.e. regulatory and industry capacity). These constraints have become particularly notable in Southern Europe which continues to undergo a major economic recession. One might expect poorer new EU member states and those countries in major economic recession to not support the EUTR, since it represents an

additional and costly administrative burden. However, according to Bailer et al (2014:41), it is the rich and competitive, rather than poor Member States who are most likely to oppose EU legislation. This can be explained by the strong lobbying power of domestic industries in rich countries, which may incentivize richer Member States to signal their support for these industries by opposing burdensome EU legislation. Regardless, even if poorer countries do not voice their opposition to the adoption of the EUTR in the expectations of benefits from the EU integration project, one would expect them to be less timely in formal implementation and less effective in practical enforcement of EU requirements due to their weaker governance capacity.

H4 Countries that are relatively poor, or whose economies are experiencing significant recession, are less likely to implement the EUTR's requirements into domestic legislation in a timely way, or to apply it effectively.

Having thus theoretically established key independent variables predicting country motivations and capacities in relation to the EUTR, we then apply an analytical framework for assessing their actual demonstrated levels of support, degrees of formal implementation and levels of practical implementation.

In regards to support for the EUTR, our analysis compares the positions of case study Members States during the 2008-2010 negotiations, as well as their final vote in 2010.

Our analysis of formal implementation involves a systematic assessment of, firstly, whether or not the country has passed domestic legislation to implement the EUTR by the official deadline (March, 1st 2013), and secondly the content of that legislation. In regards to content,

we examine whether or not the following EUTR rules have been completed: a prohibition clause (which explicitly prohibits the placing of illegal timber on the EU market by first placers, referred to as ‘operators’), a due diligence system (DDS) (a system, required under the EUTR, for determining if operators have demonstrated the necessary due diligence in avoiding high risk illegal timber), a clear nomination of a competent authority, a system for checking up on operators to uncover violations, and the establishment of penalties in case of EUTR violations. We also consider the degree of civil society participation in EUTR implementation and whether or not the country has prepared a list of operators known to be involved in relevant wood product imports.

Our analysis of practical implementation involves both standardized and qualitative dimensions. For all countries, we consider the location of the Competent Authority (CA) responsible for EUTR domestic implementation, the perspectives of interviewees on the adequacy of the resources thus far committed (assessed by interviews and review of implementation reports), and whether or not there have been cases of non-compliance brought forward and enforcement actions taken in response. Finally, we consider other issues raised by interviewees that provide further relevant insights.

3. Methods

This paper is informed by data collection and analysis carried out for nine case study countries, including Austria, Bulgaria, Germany, Greece, Italy, the Netherlands, Spain, Sweden, and the UK. The case study selection captures the structural variety across Northern,

Western, Southern, Eastern and Central Europe. This refers to variation in the political (old vs. new EU member states, centralised vs. decentralised political systems) and socio-economic (strong vs. weak economies) contexts as well as in forest policy (different forest laws and regulatory capacities) and forest industry (timber exporting vs. timber importing countries).

This combination of most similar and most different case study countries assured that the contexts of analysis were analytically equivalent (Collier 1993). Because of this, and the fact that our research drew on in-depth qualitative analysis to understand causal processes (Hall 2006), selection bias was less of a concern than it would be had we relied purely on quantitative methods and statistical regression (Collier 1993). The case study countries were also selected because they had accessible evidence and topical relevance (George and Bennett 2005: 25).

The paper drew on a range of available qualitative and quantitative data to explore plausible explanations for early support for, and implementation of, the EUTR. The results should not be interpreted as definitive, but rather as shedding further light on how different incentives may have influenced country behavior. Consistent with this approach, we use ordinal data to produce relative ‘scores’ for country support and implementation. The scores represent relative rankings only, and do not imply that the weighting of each point is equal. We argue that such a relativistic approach, combined with the use of in-depth qualitative data to examine causal explanations, is most appropriate given the complexity and dynamism of the political and economic processes that shape EU Member State response to the EUTR and other EU regulations.

Empirical data were drawn from a range of sources, including semi-structured interviews, documents, and statistical databases. Sixty expert interviews were held in person or on the phone with key informants in these countries. The interviewees represented member states' competent authorities, domestic and EU associations of private and public forest owners, timber traders, forest industries, economic operators and timber traders, environmental NGOs, scientists, consultancies and forest certification bodies. To complement and validate the interviews, a content analysis was conducted of dozens of documents of EU institutions, member states' implementing laws and progress reports as well as policy papers of forest sector and environmental interest groups, and scientific reports.

In regards to measuring our independent variables of timber production, consumption and trade, we drew on the statistical databases of EUROSTAT and the International Tropical Timber Organization. This focus on national level data matched our interest in the behavior of national governments. That is, we were interested in how the characteristics of the country's forest industry as a whole shapes the interests of national governments.

Data is notably lacking on the distribution of 'first placers' of high risk wood, meaning it is not possible to determine what percentage of high risk wood that a country consumes first entered the EU through a 'first placer' in another EU country. However if the available statistics highlight particular countries as major consumers of high risk wood, this in itself would make the issue of illegal trade politically salient regardless of how the wood entered the country. Furthermore, if the majority of a country's industry that trades in high risk wood

are not first placers, this lends further weight to our hypothesis that countries which consume high volumes of high risk wood will support the EUTR, since non-first placers stand to gain reputational advantage from the appearance of eradicating illegality in their supply chains at relatively low cost and risk to themselves.

The interviews were carried out between January and December 2014. The interview analyses were validated and complemented by document analyses. For this, national implementation reports until April 2015 and other relevant literature were reviewed. Therefore our analyses reflect the state of domestic implementation at this cut-off date, that is, the first five years after the EUTR was adopted in 2010. We argue that these first five years were a critical period for understanding the political economy of the EUTR. Country uptake in later years, in contrast, is more likely to have been influenced by additional intervening factors such as the EU's efforts to enforce the Regulation (e.g., through EU infringement proceedings, exchange of experience among EU institutions and member states) as theorized by Sotirov et al. (2017) and others; it therefore tells us little about the relative economic interests and political priorities of the country in question, which is the main concern of this paper.

The data collection and analysis were based on a common questionnaire and coding framework. The operationalization of the main variables and the policy analysis are presented below.

4. Results

4.1 Who should, would and could support and/or implement the EUTR?

4.1.1 High risk imports

The largest share of the EU's trade in high risk wood comes from China and Russia (Forest Trends 2013). Imports of primary processed tropical wood have dropped to quite low levels in recent years in all of the case study countries (Figure 1). Nevertheless, there is still considerable cross-country variation. In particular, the Netherlands, the UK, Germany and Italy import the greatest volumes of these wood products. Imports to Spain have shown the largest decline, from relatively high levels in the early 2000s, to less than 100,000 cubic meters in 2013, while imports into the other case study countries have remained negligible.

Figure 1 Imports of primary tropical wood products (industrial roundwood, sawnwood, veneer, plywood)

[Insert figure 1]

Source: (ITTO 2015)

Note: The countries are listed in descending order of the size of their tropical imports in 2012.

While the EU sources much of its primary processed tropical wood directly from tropical countries, a significant percentage of these and other high risk wood products enter the EU

via China in the form of secondary processed products, such as furniture. Taking this into account, a recent Forest Trends report indicates that the UK is the largest EU importer of timber and wood products from China, accounting for 30% of the total. Germany and the Netherlands are the next largest importers of Chinese wood products of our case study countries, accounting for 15% and 8% respectively (Forest Trends 2013).

Russia, another high risk country, is a relatively major supplier of primary processed wood products to Germany, Sweden, the UK and Austria (Figure 2).

Figure 2 Imports of primary processed wood products from Russia and tropical countries, 2012

[Insert figure 2]

Source: (EUROSTAT 2015a, ITTO 2015)

In sum, Hypothesis 1 would indicate that the Netherlands, the UK, Germany and Italy are the most responsible for importing high risk tropical wood products and hence might be most vulnerable to civil society pressure. At the same time, timber and timber product imports from China and Russia also carry relatively high risk of illegality, and Germany, Sweden, the UK and Austria are among the leading EU consumers of these imported products.

4.1.2 Civil society pressure

Environmental NGOs in Germany, the Netherlands and the UK have been a key driving force for both political support (Sotirov et al. 2017) and domestic formal implementation of the EUTR.¹ Their actions have included tropical timber boycotts in the 1990s,

investigations of criminal timber trade through supply chains, public opinion surveys and lobbying for EU and national legislation against illegal logging.

Environmental NGOs in Austria have supported measures against illegal logging on the international scale in the past. However, on the national scale they have participated neither in the political support for, nor in the domestic implementation of the EUTR, reportedly due to lack of human resources and interest in the forest-relevant issues.² There is also little evidence of environmental NGO pressure in Sweden as regards the EUTR at a scale sufficient to counter the strong position of the domestic forest industry. In Greece and Spain, pressure and actions of environmental NGOs have remained at low levels.³

In Bulgaria, environmental NGOs were very active in demanding domestic measures against illegal logging within the country in the recent past (Sotirov 2010). However, civil society groups have focused their activities and resources on the better domestic implementation of EU nature conservation policy (Sotirov et al. 2015). They have so far failed to pressure for domestic EUTR implementation due to other policy priorities, lack of human and financial capacity and the stronger role that state forest authorities hold in governing EUTR implementation.⁴

In 2013 and 2014, environmental NGOs in Italy expressed concerns about low domestic penalties and little resources as well as suspicious timber shipments entering the country. However, civil society has since expressed disappointment that they could not effectively influence state authorities to address these EUTR-relevant issues (Pasqualotto 2015).

In sum, Germany, the Netherlands and the UK are the countries where civil society put national authorities under strongest pressure to take action against illegal logging and support and formally implement the EUTR in a timely way. In contrast, civil society in Austria, Bulgaria, Greece, Italy, Spain, and Sweden, seems to be unable to exercise pressure due to other policy priorities or lack of capacities and/or political influence. These countries seem to not have been pushed by civil society to support the EUTR and to formally implement it in a timely way.

4.1.3 Export dependence

Among our case study countries, the UK, Italy, the Netherlands and Greece import more primary and secondary wood products than they produce. The same holds for paper products, although in Bulgaria the difference between paper production and imports (by weight) is slight (Figure 3).

**Figure 3 Production, Import and Exports of Sawnwood + Wood based Panels,
Average for 2005 - 2012**

[Insert Figure 3]

Source: (EUROSTAT 2015a)

Sweden and Austria are the most export dependent of our case study countries. Their exports amount to roughly two-thirds of what they produce in terms of sawnwood and wood based panels combined (see Figure 3 above), and they also export over three-quarters of their paper

production. Germany is the largest exporter of all of these products by volume. However, it also the largest producer and consumes closer to half of its production domestically.

In regards to furniture and other secondary processed wood products, EUROSTAT data was available only for the value of international trade, with no comparable figures for production. However, this still makes it possible to consider the overall trade balance for these products. From that perspective, Italy stands out as the most export dependent of our case study countries, exporting over two and a half times the amount of furniture it imports. The UK and the Netherlands are both heavily import dependent, while the value of Germany's and Bulgaria's imports and exports are roughly equal (Figure 4).

Figure 4 Average value of secondary processed wood product imports and exports, by value, 2006 - 2012

[Insert Figure 4]

Source: (EUROSTAT 2015a)

In sum, the UK, Netherlands and Greece are the least export dependent of our case study countries, and hence according to Hypothesis 3 we might expect relatively less pressure from their domestic industries to reject the EUTR as a potential barrier to wood product exports. Sweden and Austria, however, lie on the other end of the spectrum with relatively high levels of export dependence.

4.1.4 Economic Wealth and Regulatory Capacity

The case study countries vary considerably in their economic condition and governance (regulatory and industry) capacity, which in some cases (notably Greece) has continued to decline fairly dramatically since the 2010 adoption of the EUTR (Figure 5).

Figure 5 Gross Domestic Product (GDP) per inhabitant, at market prices

[Insert Figure 5]

Source: (EUROSTAT 2015b)

Note: The countries are listed in descending order of the size of their GDP per inhabitant in 2012.

If Figure 5 is considered in light of Hypothesis 4, it would suggest that Bulgaria, Greece, Spain and Italy have relatively low economic capacity, which in turn would affect their regulatory and industry capacity to implement the EUTR.

4.1.5 Scoring of overall hypothesized incentives

Table 1 provides a summary of all of the above findings in regards to the hypothesized variables predicting a country's incentives to support and/or implement the EUTR in a timely manner. Each country, and each variable, has been scored on a scale of 0 to 2, with 0 = no incentive or negative incentive to 1 = some incentive to 2 = strong positive incentive. The result is a wide range of "scores", with the Netherlands and the UK the most highly incentivized to support the EUTR, followed by Germany and Italy, and Austria, Sweden, Greece and Bulgaria the least incentivized.

Table 1 Relative strength of hypothesized incentives to support the EUTR

		H1	H2	H3	H4	
Strength of incentives		High risk wood imports †	NGO pressure	Not export dependent ‡	Wealth	Score
High	Netherlands	2	2	2	2	8
	UK	2	2	2	2	8
	Germany	2	2	1	2	7
Medium	Italy	2	1	1	1	5
	Austria	1	0	0	2	3
	Sweden	1	0	0	2	3
Low	Spain	0	0	1	1	2
	Greece	0	0	2	0	2
	Bulgaria	0	1	0	0	1

† particularly tropical wood, but also considering the role of Sweden and Austria (as well as of Germany and UK) as important importers of Russian and Chinese wood.

‡ A “2” score here means that exports (of primary processed wood products (ppwp) and secondary processed wood products (spwp) are negligible), a “1” means that the volume of exports is more significant but still totals less than half the volume of production, and a “0” signifies that the volume of exports total more than half of production.

4.2 Who did support, implement and enforce the EUTR?

We found significant variation among case study countries in regards to their political support for the EUTR, in a manner mostly consistent with our analysis of incentives. Table 2 compares countries in terms of the strength of their incentives to support the EUTR (see Table 2) with their actual, demonstrated support. For the latter, “none” indicates the country opposed the EUTR during the negotiation phase in 2008-2010 as well as in the final vote to enact the EUTR in 2010. “Medium” indicates opposition during negotiation but a final vote

in support (there were no cases of the reverse, i.e. support during negotiation and a negative vote). Finally, “high” indicates support throughout the negotiating and voting processes.

Table 2 A comparison of the relative level of hypothesized incentives to support the EUTR and actual support in voting processes (based on Sotirov et al. 2017)

Strength of incentives		Incentives	Support*
High	Netherlands	8	high
	UK	8	high
	Germany	7	medium
Medium	Italy	5	medium
	Austria	3	medium
	Sweden	3	none
Low	Spain	2	high
	Greece	2	medium
	Bulgaria	1	high

* As explained above, “Support” indicates actual support, as demonstrated through voting behavior.

The Netherlands and the UK, the two countries with the strongest incentives according to our political economy analysis, have been ongoing champions of the EUTR (Sotirov et al. 2017). Germany ranks almost as high in terms of incentives, but initially opposed the EUTR before switching positions and approving it. Italy and Austria and Sweden rank in the middle in terms of incentives, and as such began in opposition to the EUTR but came around to vote for it in 2012 (except Sweden). In contrast Sweden, the most export dependent of our case study countries, remained in opposition throughout. The cases where actual country support shows the least match with incentives are Spain, Bulgaria and, to a lesser extent, Greece. This is consistent with the hypothesis of Bailer et al (2014), that it is the rich and competitive Member States with strong domestic industries (such as Austria, Germany, Sweden) that are most likely to oppose EU legislation as a means of signaling solidarity with those industries.

Indeed the case of Germany, with its strong and well organized forest owners associations, may highlight the particular importance of this variable in explaining Germany's initial vote in opposition to the EU despite their significant role in high risk imports and active civil society.

In regards to the formal implementation of the EUTR, once it was passed, we exclude the variable of export dependence in predicting country performance. As discussed in the introduction, this is because in-country implementation involves the screening of other countries' wood rather than a possible barrier to exports. Table 3 therefore summarizes the results for only the three remaining types of hypothesized incentives.

Table 3 Relative strength of incentives to formally implement the EUTR

		H1 “Should & Would”	H2 “Would”	H4 “Could”	
Strength of incentives		High risk wood imports †	NGO pressure	Wealth & Capacity	Score
High	Netherlands	2	2	2	6
	UK	2	2	2	6
	Germany	2	2	2	6
Medium	Italy	2	1	1	4
	Austria	1	0	2	3
	Sweden	1	0	2	3
Low	Spain	0	0	1	1
	Bulgaria	0	1	0	1
	Greece	0	0	0	0

† Particularly tropical wood, but also considering the role of Sweden and Austria (Germany and UK) as important importers of Russian and Chinese wood.

In order to compare these hypothesized incentives with formal implementation, we assigned implementation scores to countries across four dimensions – enactment of legislation, content of legislation, lists of operators and civil society participation. The first category, enactment of legislation, considers whether domestic implementing legislation for the EUTR had been adopted by the official deadline (a “2” indicates yes and a “0” no). We then consider the content of the legislation, how many of the following four key rules of the EUTR have been addressed: a prohibition clause, a due diligence system, a system of checks and a system of penalties. One point was assigned for each of these rules accordingly. The ‘list of operators’ addresses whether countries have prepared a list of all relevant wood importers and traders, with 2 indicating a complete list, 1 a partial list, and 0 no list. Finally, ‘civil society

participation’ addresses the degree to which the process of EUTR domestic implementation provides formal means for the involvement of civil society actors (2 indicating active involvement of NGOs, 1 some/partial involvement, 0 no involvement). Table 4 below summarizes the results.

Table 4 Relative levels of actual formal implementation of the EUTR

	Adoption of Legislation	Content of Legislation	List of operators	Civil society participation	Total score
Germany	2	4	2	2	10
Netherlands	2	4	2	2	10
UK	2	4	1	2	9
Austria	2	3	2	0	7
Bulgaria	2	3	2	0	7
Sweden	0	4	2	1	7
Greece	0	4	0	0	4
Italy	0	3	0	1	4
Spain	0	3	0	0	3

Table 5 compares these results (Table 4) with the list of hypothesized incentives (Table 3).

Table 5 A comparison of hypothesized incentives and actual formal implementation

Incentives		Formal implementation
High	Netherlands	10
	UK	9
	Germany	10
Medium	Italy	4
	Austria	7
	Sweden	7
Low	Spain	3
	Greece	4
	Bulgaria	7

As was the case with country support for the EUTR, the degree of formal implementation is in many cases not inconsistent with structural incentives to implement. However it appears the least predictive for the cases of Italy and Bulgaria. The following qualitative and case-by-case analysis further explores these differences, and considers whether, and in what way, the EUTR's formal implementation has been applied on the ground.

Germany, whatever its initial reluctance to support the EUTR, emerged in our research as among the most committed of our case studies to both formal and practical implementation. To implement the EUTR (and FLEGT), Germany enacted the Timber Trade Security Law (Holzhandels-Sicherungs-Gesetz, HolzSiG) which came into force on July 2011. According to this law, the appointed Competent Authority (CA) is the Federal Office for Agriculture and Food (Bundesanstalt für Landwirtschaft und Ernährung), a subsidiarity body of the Federal Ministry of Food and Agriculture (BMEL) with the latter being in charge of international and European forestry issues. The financial penalties for administrative offenses

are relatively high, ranging from 20,000€ up to 50,000€. This formal implementation is complemented by a database of operators and traders, which have been identified as being subject to the Regulation. According to interviews with a representative of the CA, as well as a leading environmental NGO, the country has devoted sufficient resources to ensure the EUTR's implementation.⁵ The CA representative noted that, in addition to resources allocated to day-to-day operations, resources have also been committed to build capacity and expertise within CA staff. The CA carried out 221 checks on economic operators on site. The checks resulted in 120 notices of remedial action and 12 penalties (BLE 2015). Regarding the role of environmental NGOs, some government and industry respondents reported that they were a key driving force for implementation, and worked closely with the CA.⁶ In fact, there were two cases of non-compliance in which Greenpeace and the monitoring organization Resource Extraction Monitoring revealed an illegal timber import, and the CA took over the case. The illegality was proven and the timber delivery was confiscated.⁷ However, other NGO interviewees considered their influence to be relatively limited in regard to a stricter domestic implementation of the EUTR.⁸

This relatively 'hard' approach to formal and practical implementation is not inconsistent with our previous analysis of incentives. Germany is the largest wood producer, importer and exporter of our case study countries, suggesting that the domestic forest industry has a significant political voice within the country. While the industry may not have initially supported the EUTR due to concerns it would serve as a barrier to German exports or regulatory burden, they might conversely support a "hard" approach to implementation as a means to screen out competing timber products originating from elsewhere and to level the

playing field on the market (Schwer and Sotirov 2014). A further explanation can be the commitment German federal forest authorities have taken to combat illegal logging outside the EU (Sotirov et al. 2017).

The Netherlands, a country which strongly backed adoption of the EUTR, also scored high in the formal implementation of the Regulation. The Dutch implementing legislation is located in the Flora and Fauna Act, and the CA is the National Food Authority. However, in contrast to Germany, the Netherlands has demonstrated a “soft” approach to practical implementation characterized by learning by doing. Until February 2015, 98 checks were carried out with companies or environmental NGOs being welcome to ‘whistleblow’ suspicious timber trade operations. The checks resulted in 24 notices of remedial actions rather than formal penalties. Fines, seizures of wood, or prosecution are possible by law, although none have been enforced yet (NVWA 2015). One NGO interviewee stated that more fines and punishment are needed in order to deter operators from the illegal timber trade.⁹ There appears to be general consensus that inspectors have not received enough training yet and that there are not enough staff or resources dedicated for the EUTR to be properly enforced. The Netherlands Timber Trade Association has been active in implementation alongside Greenpeace, business groups, and universities, and reports plans to help train these new inspectors. Considering our above discussion of incentives, the Netherlands’ soft approach to implementation might be explained by the costs that implementation imposes on its relatively large and import dependent wood industry coupled with the lack of a significant domestic forest industry with interests in screening wood imports.

The UK is similar to the Netherlands in having shown strong political support for the EUTR. During the EUTR negotiation process the UK was a focal point for those state and non-state actors in support of EU legislation tackling illegal logging (Sotirov et al. 2017). Having been one of the strongest pushers of the legislation, the EUTR was quickly incorporated into the UK law through the Forest Law Enforcement, Governance and Trade Regulations, and the Timber and Timber Products (Placing on the Market) Regulations, which came into force in March 2013. Under these regulations, a fine or a prison sentence of up to two years can be given for placing illegal timber or for failing to comply with due diligence requirements. Additionally, the National Measurement Office was designated as the CA in the UK.

However, like the Netherlands and unlike Germany, the approach taken by the UK CA to practical implementation has been categorized by some interviewees as “soft”.¹⁰ In fact, of the 102 checks carried out, most were desktop reviews without an inspection on site. Until February 2015, the checks resulted in 20 notices of remedial actions (DEFRA 2015). The CA has focused on pilot tests, close collaboration and knowledge exchange with mainly big companies which have long experience with supply chain tracking systems and timber legality assessment. Civil society and NGOs are perceived to have a high degree of participation in the UK, with stakeholder meetings and consultations being held for the law’s implementation. However, one NGO interviewee¹¹ claimed that substantiated concerns raised to the authorities about possible illegal timber operations have not been rigorously investigated. Finally, although the UK is perceived to have more resources dedicated to the EUTR than most of the other countries examined here, some stakeholders argue that those resources are far from adequate for full practical enforcement.¹²

In the case of Austria, the country established the “Timber Trade Monitoring Law” (Holzhandelsüberwachungsgesetz) which came into force on August 2013. The law appoints several competent authorities, with the Federal Forest Office (Bundesamt für Wald) appointed to control the importers, control the monitoring organizations, and report on implementation. Further competent authorities are the District Administrative Authority, the National Forestry Department, and customs. However, despite the formal incorporation of the law (with the exception of a clear system of checks), there are few staff appointed to control all operators and traders. Additionally, there appears to be a lack of expert knowledge to conduct checks and other operations¹³. It was also said that the Federal Forest Office is lacking financial resources to implement the EUTR and to fulfill additional tasks, with no precise issuance on how many controls should be conducted and how much budget is available to do so.¹⁴ Until February 2015, only 14 checks on timber importers were carried out according to a risk based plan without issuing any penalties (BMLFUW 2015). Finally, environmental NGOs in the country supported the EUTR on the international scale but on the national scale they have participated neither in the formal implementation nor in the practical application of the EUTR due to lack of resources and interest.¹⁵ All of these findings are consistent with our findings that Austria has relatively little incentive to invest heavily in the EUTR.

To implement the EUTR, the government of Bulgaria undertook only a few amendments of the Law on Forests by introducing three new articles concerning the nomination of the Executive Forest Agency under the Ministry of Agriculture and Food as the CA, the measures and the amount of the penalties (ranging between 25 and 2,500 euros). In regards to public

participation in Bulgaria, even though the CA organized several informational seminars and workshops, there has been little environmental NGO participation in the implementation of the Regulation, with some of these organizations claiming to be ignored in the process by the state forest authorities.¹⁶ Until February 2015, few checks on timber importers were carried out. Some cases of non-compliance by domestic timber suppliers were reported but no penalties have been applied yet (EFA 2015). According to a number of interviewees, the financial and administrative capacities should be increased in order to achieve a proper practical implementation of the EUTR.¹⁷ Some interviewees emphasized the necessity to also secure the willingness and real commitment of the state forest authorities as a precondition for effective implementation.¹⁸

In sum, Bulgaria has formally incorporated the EUTR into the national forest law in a rather minimalistic way including symbolic penalties. Unlike Austria, Germany, and the UK, the Regulation is not translated to the domestic forest sector through a specific law but it is expected to have a direct effect. Similar to Austria, at the time of this study Bulgaria had failed to determine a clear system of checks, and practical implementation had been undermined by lack of financial resources, and by insufficient human staff and willingness of forest authorities to conduct checks on timber traders and importers¹⁹.

Sweden was one of the strongest detractors of the EUTR during its negotiations (Sotirov et al. 2017). Domestic producers did not support the EUTR because they feared it would impose new regulatory constraints and burdens, including substantial changes to Sweden's *laissez-faire* forest law.²⁰ Consistent with this resistance, as of the dates of this study Sweden's EUTR implementing legislation was still at a draft stage and had not yet been passed. There

have been two legal drafts made (one by the Ministry of Agriculture and one by the National Forest Agency), and it was expected that the Forest Agency's draft (which is considered stronger in terms of penalties) will pass and that the final enactment will occur in September 2015. Prior the approval of this version, there was a short public consultation period. However, as interviewees have pointed out, in general there has been little environmental NGO pressure in the country.²¹ The Forest Agency has been appointed as the Competent Authority, and has participated with timber companies in pilot runs. These pilots have resulted in recommendations to the companies to improve their due diligence systems. Punishments in the draft version of the legislation range from non-compliance fees to up to a maximum 4-year prison sentence. Regarding resources allocated to implement the Regulation, the CA suggests they are currently not well staffed but that this is expected to change once the domestic legislation has passed. However, the CA also notes there is little concern about funding, as the atmosphere around the EUTR is "quite positive".²² Indeed according to our analysis of incentives, and Sweden's relatively high levels of wealth and capacity, once the EUTR is enacted in the country there will be little reason for domestic producers to resist applying it to timber imports entering Sweden in order to screen out competitors and 'level the playing field'.

Greece, Italy and Spain represent countries where the formal implementation of the EUTR has proven to be a slower process than in the other case study countries. Notably all of these countries are undergoing a significant economic recession, to the point that Greece has come close to bankruptcy (Frangakis 2015). After 2009 the wood and wood products sector in

Greece lost about 60-70% of its market mostly because of the decline in construction, so the future of the sector looks uncertain.²³

At the time of this research, Greece's implementing regulation for the EUTR was still in draft stage and waiting for a ministerial decision. However the draft builds upon pre-existing Greek legislation and includes full formal transposition of the Regulation (including monetary penalties and a system of checks).²⁴ The CA appointed for the EUTR is located within the Ministry of Environment, Energy and Climate Change, and it is the same authority that has taken over responsibilities for implementing FLEGT within the country. However, no practical application and no checks were carried out until February 2015 (MPREE 2015). Staffing in the CA may be insufficient to conduct all the check on operators and traders that will be needed²⁵, and some interviewees expected that the legislation will not be effectively implemented²⁶. As one interviewee said "there are concerns about the possibility of the EUTR being a law on paper".²⁷

Until March 2015, no action and no progress was reported in terms of domestic formal and practical implementation of the EUTR in Greece (MPREE 2015). As one could expect, the financial crisis has had severe impacts on Greece, with important cuts in resources and personnel in the public administration, which directly affects the prioritizing of resources being allocated for EUTR implementation.²⁸ It was further anticipated that problems of staff may be particularly acute at the regional level.²⁹ In addition, some operators have concerns about the costs as well as the confidentiality of the additional documents they will need to submit. Under the current economic conditions even large industries may find it challenging to support the necessary staff and resources to produce the documentation,³⁰ and are

concerned that doing so may reveal sensitive information about suppliers, prices, etc. to their competitors.³¹ Against the backdrop of these industry concerns, participation of environmental NGOs in Greece has been low. It seems that only one NGO has been pressuring the Government to implement the Regulation.³² Yet, despite all of these limitations, some interviewees expressed the opinion that big companies in Greece are already adjusting and changing suppliers in order to avoid future problems.³³

Italy has not been proactive on the domestic implementation of the EUTR and has “dragged” the process of establishing penalties and a system of checks³⁴. The Italian government designated the Directorate General for Rural Development (DISR III) at the Ministry of Agriculture and Forests as the CA in charge of coordinating EUTR implementation. The constitutional complexity of the Italian legislative and political system, the economic recession and also the low priority of the EUTR in the national political agenda were mentioned as the main reasons for the delay in the formal domestic implementation of the EUTR.³⁵ Environmental NGOs expressed concerns that the proposed penalties are too little to properly encourage legal behavior among economic operators.³⁶ Additionally, Italian environmental NGOs declared that few resources have been allocated for the enforcement units.³⁷ In 2013 and 2014 different environmental NGOs formally reported through substantiated concerns suspicious timber shipments coming in the EU through Italy. However they received no reply by government authorities and reported with disappointment no action on these issues.³⁸ At this early stage of implementation, the CA officers were supposed to perform preventive inspections and keep suspicious material in quarantine,

which did not happen. Until February 2015, no checks on operators were carried out (MoAF 2015).

Finally, in Spain, some of the main provisions required to formally implement the EUTR have been included in drafts for a reform of the National Forest Law (“Ley de Montes”). However, no official national legislation has been passed by the cut-off date of this study. Like in Italy and Greece, the reasons for this delay according to our interviewees include the low position of the illegal logging legislation on the political agenda and budget constraints. Moreover, the reluctant attitude of the state administration and a struggle about the respective responsibilities of the involved state authorities across levels of government also delayed formal implementation.³⁹ In the federal political system of Spain, the distribution of competences for EUTR implementation is complex and contested. Even though the Ministry of Agriculture is officially listed as the CA at the register of the European Commission, the 17 autonomous regions will be responsible to carry out the supervision of the economic operators. Until February 2015, state authorities conducted no checks on operators (MAAMA 2015). As a consequence of the missing domestic legislation, many operators do not know what the exact requirements are.⁴⁰ Hence the majority of operators have not implemented the EUTR in practice and are following a “wait and see” strategy.⁴¹

Nevertheless, and despite the lack of legal enforcement, some (bigger) Spanish operators started implementing the EUTR. Among their proposed motives for doing so are the demonstration of corporate social responsibility and better timber marketing opportunities.⁴² For example, some multinational companies that export their timber (products) to other EU countries with more advanced EUTR implementation, e.g. like the UK, Germany or the

Netherlands, have reported that they have conducted audits to respond to requests by their business partners that demand compliance.⁴³ Further, the Spanish association of timber importers (AEIM) obliged its 140 members to run a Due Diligence System.⁴⁴

5. Conclusion

This study presented a list of hypotheses to predict political support, formal and practical implementation of the EUTR across nine select EU member states. These variables are rooted in political economy scholarship and relate to differing patterns of trade, differing levels of civil society engagement and differing country governance capacities.

We find that the predicted variables are generally consistent with country support of the EUTR, except in the case of the three poorest countries in our sample. In these latter cases, we hypothesize that other political factors may have trumped countries voting according to their apparent self interest. EUTR formal implementation follows a similar pattern, except that countries with export dependent forest industries that initially resisted the EUTR due to concerns over market access, appear less resistant to supporting its formal implementation within their own borders. This shift of position becomes more pronounced in the context of practical implementation. Here we observe that Germany, a country with a large and lucrative domestic market that was initially resistant to the EUTR, has taken a relatively “hard” approach to its implementation involving high fines and criminal prosecution. Such an approach is not inconsistent with an industry supportive of domestic timber production and reduced foreign competition. In contrast, the Netherlands and the UK, countries with small domestic and large importing industries that were early champions of the EUTR, have taken

a “softer” and more collaborative stance with traders and operators. Finally, implementation has been particularly weak in countries in Eastern and Southern Europe, where GDPs are low and/or economic recession has hit hardest.

Most importantly, our political and economic analysis of country support raises interesting questions about the appropriate distribution of responsibility for implementing the EUTR. The UK, as an important importer of high risk tropical, Russian and Chinese wood products, would seem to bear relatively significant responsibility for EUTR implementation. In contrast, wood imports of any kind into Greece and Bulgaria are negligible in comparison with more wealthy EU countries. These latter countries face disproportionate barriers in financing, staffing and managing the infrastructure needed to meet EU requirements for implementation, including the design and enforcement of legislation, coordinated systems of due diligence, enactment of fines and judicial processes, etc. Thus if we consider not only who “should” but who “could” implement the EUTR, it further highlights inefficiencies as well as inequities in the distribution of EUTR responsibilities.

That said, the EU and its Member States are complex, dynamic and interactive entities, and there is much room for further research on EUTR implementation. For example, research is needed on how collaboration among EU Member States may contribute to the EUTR’s effectiveness and equity. Likewise it would be interesting to examine if and how the prevalence of third party certification might impact implementation (e.g. since certification may improve capacity for wood tracking); or the involvement of the country’s wood industry in wood production outside of the EU (e.g. if industry players are confident their production is verifiably legal they might seek competitive advantage by supporting strong enforcement

of the EUTR), and/or a country's level of investment in supporting FLEGT activities in developing countries. Finally, more research is needed to understand the structure of EU supply chains for high risk wood, including the location and distribution of 'first placers' vis a vis the end consumer, and how the EUTR requirements may impact this. That is, to what extent might due diligence requirements for first placers drive industry consolidation and/or create new market niches for firms specializing in legality verification?

Yet regardless of the variables considered in future research, we argue that the issues of who should, who would and who could comply are all equally important for assessing supranational policies, like the EUTR, that tackle important and intertwined economic, social and ecological issues. Finding satisfactory answers to each will be critical support for achieving a more sustainable and equitable global forest trade.

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¹ Interviewee 16, Competent Authority-Germany; Interviewee 17, Timber Trade Federation-Germany.

² Interviewee 1, Competent Authority-Austria; Interviewee 2, Industry-Austria; Interviewee 3, Chamber of Commerce- Austria.

³ Interviewee 24, science and research, Interviewee 25, NGO

⁴ Interviewee 13, NGO-Bulgaria.

⁵ Interviewee 16, Competent Authority-Germany; Interviewee 18, NGO-Germany.

⁶ Interviewee 16, Competent Authority-Germany; Interviewee 17, Timber Trade Federation-Germany.

⁷ Interviewee 16, Competent Authority-Germany; Interviewee 17, Timber Trade Federation-Germany

⁸ Interviewee 15, 18, NGO-Germany

⁹ Interviewee 48, NGO-Netherlands

¹⁰ Interviewee 45, NGO-UK

¹¹ Ibid.

¹² Interviewee 44, Think-tank-UK; Interviewee 45, NGO-UK.

¹³ Interviewee 1, Competent Authority-Austria.

¹⁴ Interviewee 1, Competent Authority-Austria.

¹⁵ Interviewee 1, Competent Authority-Austria; Interviewee 2, Industry-Austria; Interviewee 3, Chamber of Commerce- Austria.

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- ¹⁶ Interviewee 13, NGO-Bulgaria.
- ¹⁷ Interviewee 4, Competent Authority-Bulgaria; Interviewee 6, Researcher; Interviewee 12, Certification Company-Bulgaria; Interviewee 14, NGO-Bulgaria.
- ¹⁸ Interviewee 4, Competent Authority-Bulgaria; Interviewee 13, NGO-Bulgaria.
- ¹⁹ Interviewee 13, NGO-Bulgaria
- ²⁰ Interviewee 51, NGO-Sweden; Interviewee 52, CA-Sweden
- ²¹ Interviewee 51, NGO-Sweden; Interviewee 52, CA-Sweden
- ²² Interviewee 52, CA-Sweden
- ²³ Interviewee 30, Industry
- ²⁴ Interviewee 27, CA
- ²⁵ Interviewee 27, CA
- ²⁶ Interviewee 24, science and research; Interviewee 26, Operator; Interviewee 29, Private forest consultant; Interviewee 30, Industry.
- ²⁷ Interviewee 24, science and research.
- ²⁸ Interviewee 24, science and research; Interviewee 27, CA; Interviewee 29, Private forest consultant; Interviewee 30, Industry.
- ²⁹ Interviewee 27, CA
- ³⁰ Interviewee 24, science and research
- ³¹ Interviewee 24, science and research
- ³² Interviewee 24, science and research, Interviewee 25,eNGO
- ³³ Interviewee 25,eNGO; Interviewee 26, Operator
- ³⁴ Interviewee 31,Operator; Interviewee 39, CA
- ³⁵ Interviewee 35, eNGO; Interviewee 39, CA
- ³⁶ Interviewee 35, eNGO; Interviewee 36, eNGO
- ³⁷ Interviewee 36, eNGO; Interviewee 40, CA
- ³⁸ Interviewee 35, eNGO
- ³⁹ Interviewee 53, Regional Official; Interviewee 55, Timber Sector Association; Interviewee 56, eNGO-Spain; Interviewee 57, Operator.
- ⁴⁰ Interviewee 55, Timber Sector Association.
- ⁴¹ Interviewee 58, Consultancy; Interviewee 59, Forest certification organization.
- ⁴² Interviewee 58, Consultancy; Interviewee 60, Forest certification organization.
- ⁴³ Interviewee 57, Operator.
- ⁴⁴ Interviewee 54, Timber importers association.