

UvA-DARE (Digital Academic Repository)

Experimentalist Interactions: FLEGT and the Transnational Timber Legality Regime

Zeitlin, J.; Overdevest, C.

DOI

10.2139/ssrn.3406065

Publication date 2019

Document VersionFinal published version

License CC BY

Link to publication

Citation for published version (APA):

Zeitlin, J., & Overdevest, C. (2019). *Experimentalist Interactions: FLEGT and the Transnational Timber Legality Regime*. (Amsterdam Centre for European Studies Research Paper; No. 2019/04), (SSRN Research Paper). Amsterdam Centre for European Studies. https://doi.org/10.2139/ssrn.3406065

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: https://uba.uva.nl/en/contact, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

UvA-DARE is a service provided by the library of the University of Amsterdam (https://dare.uva.nl)

Download date:10 Mar 2023



The Amsterdam Centre for European Studies

SSRN Research Paper 2019/04

Experimentalist Interactions: FLEGT and the Transnational Timber Legality Regime

By Jonathan Zeitlin & Christine Overdevest

Experimentalist	Interactions:	FLEGT	and	the	Transnational
Timber Legality Regime					
Jonathan Zeitlin & Christine Overdevest					

Amsterdam Centre for European Studies Research Paper 2019/04



This work is licensed under a <u>Creative Commons Attribution 4.0 International License</u>

Acknowledgments: Earlier versions of this paper were presented at conferences of the Society for the Advancement of Socio-Economics (SASE), the European Consortium on Political Research (ECPR), and the European Union Studies Association (EUSA); the Timber Legality Research Symposium at the University of Copenhagen; and the Political Economy and Transnational Governance (PETGOV) seminar of the Amsterdam Institute for Social Science Research (AISSR). For helpful comments and suggestions, we thank the participants in these events, as well as Chuck Sabel, Sigrid Quack, Jade Saunders, and Thorsten Hinrichs.

© Jonathan Zeitlin, Christine Overdevest 2019

Jonathan Zeitlin, Distinguished Faculty Professor of Public Policy and Governance, Department of Political Science and Amsterdam Institute of Social Science Research (AISSR), and Academic Director, Amsterdam Centre for European Studies (ACES), j.zeitlin@uva.nl

Christine Overdevest, Associate Professor, Department of Sociology, University of Florida, coverdev@ufl.edu.

www.aces.uva.nl

Abstract

This paper analyzes the interactions between the European Union's Forest Law Enforcement, Governance and Trade (FLEGT) initiative and other components of the emerging transnational timber legality regime, both public and private. It examines how far, and through what institutional channels and mechanisms, these interactions are producing a joined-up transnational regime, based on a shared normative commitment to combat illegal logging and cooperative efforts to implement and enforce it. The paper argues that the experimentalist architecture of the EU FLEGT initiative has fostered productive, mutually reinforcing interactions both with public timber legality regulation in other consumer countries and with private certification schemes. But this emerging regime remains highly polyarchic, with broad scope for autonomous initatives by NGOs and private service providers, along with national governments, international organizations, and multi-donor partnerships. Hence horizontal integration and coordination within it depend on a series of institutional mechanisms, some of which are distinctively experimentalist, while others can also be found in more conventional regimes. These mechanisms include cross-referencing and reciprocal endorsement of rules and standards; mutual learning and peer review through information pooling and comparison of enforcement approaches; public oversight and joint assessment of private certification and legality verification schemes; and the "penalty default" effect of public regulation in consumer countries, which have pushed both exporting countries and transnational firms to comply with the norms and procedures of the emerging transnational regime. The findings of this paper thus provide robust new evidence for the claim advanced in previous work that a joined-up transnational regime can be assembled piece-by-piece under polyarchic conditions through coordinated learning from decentralized experimentation, without a hegemonic power to impose common global rules.

Keywords: timber legality, forest governance, experimentalist governance, transnational governance, public regulation, private certification, European Union, FLEGT

1. Introduction

Over the past 15 years, something approaching a joined-up transnational timber legality regime has progressively emerged from the intersection of multiple public and private initiatives across different geographical regions and levels of governance. At the heart of this joined-up regime is the European Union's Forest Law Enforcement, Governance and Trade (FLEGT) initiative, which includes two main components: (1) negotiating Voluntary Partnership Agreements (VPAs) with producer countries to build domestic institutions that assure the legality of exported timber and promote sustainable forest governance; and (2) implementing legislation in the form of the EU Timber Regulation (EUTR) that makes it an offense to place illegally harvested timber from whatever source on the European market and obliges firms to demonstrate "due diligence" that they have not done so. As we have argued elsewhere (Overdevest 2014, 2018), the EU FLEGT initiative is built around an experimentalist governance architecture, based on extensive participation by public and private stakeholders in establishing and revising open-ended framework goals and metrics for assessing progress towards them through continuous monitoring and regular review of local implementation, underpinned by a penalty default to sanction non-cooperation.

During the same period, other major consumer markets such as the United States, Australia, and South Korea have likewise adopted legislation prohibiting the import of wood harvested illegally in its country of origin. In response, the major transnational private forest certification schemes – the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC) – have revised their standards and indicators to meet the ensuing timber legality verification requirements in these jurisdictions. These developments, together with ongoing campaigns by transnational NGOs and advocacy networks to expose legality violations, have put growing pressure on both consumer and producer countries around the world to adopt measures of various kinds to combat trade in illegal wood.

This paper analyzes the interactions between the EU FLEGT initiative and the other major components of the timber legality regime complex. It explores how far, and through what institutional channels and mechanisms, these interactions are producing a joined-up transnational regime, based on a shared normative commitment to combat illegal logging and cooperative efforts to implement and enforce it. First, however, section 2 sets out what is meant by a "joined-up transnational regime" for timber legality and discusses how to characterize it theoretically.

Section 3 analyzes the EU FLEGT initiative as the experimentalist core of the transnational timber legality regime complex, while sections 4 and 5 examine its interactions with public legality regulations in other consumer countries and private certification and service provision schemes respectively. Section 6 discusses the prospects for integrating China, the world's biggest importer and exporter of wood products, into the emerging transnational legality regime. Section 7 concludes by reviewing the key experimentalist mechanisms fostering horizontal coordination within the transnational timber legality regime, identifying outstanding gaps, and considering the prospects for further integration. This paper is based on exhaustive documentary research on materials produced by the principal institutions comprising the transnational timber legality regime complex, including the EU, national governments, international organizations, transgovernmental networks, NGOs, business associations, and think tanks, together with participation in a variety of expert and stakeholder meetings.

It also draws more than 100 interviews with public officials, civil society activists, business leaders, consultants, and independent experts in the EU, Ghana, and Indonesia conducted since 2011.¹ In this paper, we limit our references to individual interviews to support for specific factual and interpretive claims.

2. Characterizing the Transnational Timber Legality Regime

More than 25 years after the failure of proposals for a binding global forest convention at the 1992 Rio Earth Summit, there is still nothing like an overarching multilateral forest governance regime. The "Global Objectives" of the United Nations Forum on Forests's "Non-Legally Binding Instrument on All Types of Forest", which include preventing deforestation and promoting sustainable forest management, remain at a very high level of generality, with voluntary national reporting and no specific indicators to measure progress towards them. At a regional level, similarly, intergovernmental negotiations for a "Legally Binding Agreement on Forests in Europe" collapsed acrimoniously in 2013 and have never been resumed (UN Economic and Social Council 2017; Overdevest & Zeitlin 2015: 157, 163; Humphreys 2006, 2015). Other regional organizations, such as the Asia-Pacific Economic Cooperation Experts' Group on Illegal Logging and Associated Trade (EGILAT) and the

¹ For a full but anonymized list of interviews conducted between 2011 and 2016, see Overdevest & Zeitlin (2018: Appendix S1).

Association of South East Asian Nations' Senior Officials on Forestry Meeting are no closer to achieving a binding multilateral agreement among their members.²

Yet, as this paper will argue, something like a "joined-up" transnational regime has emerged over the past 15 years from interactions between multiple public and private initiatives or "schemes", operating across jurisdictions at different levels within what following Abbott (2012, 2014) could be called the "transnational regime complex for forest governance". This emerging regime is focused on ensuring timber legality and improving domestic forest governance, but with significant implications for related issues such as sustainable forest management.

In what sense can the various components of the transnational timber legality regime be considered "joined-up"? In this paper, we will focus on four major interrelated developments to support this claim:

- 1. Growing convergence among actors and initiatives around a shared problem definition and accompanying norms, principles, and framework goals for combating illegal logging.
- The diffusion of mutually reinforcing and often explicitly cross-referencing rules and standards across jurisdictions and schemes (both public and private).
- 3. Progressive institutionalization of practical cooperation among formally autonomous actors and schemes to advance these common goals, including information sharing, alignment of regulatory approaches, and collaborative enforcement activities.
- 4. An increasing focus on monitoring, review, and revision of practices, procedures, and programs at multiple levels, informed by comparison of implementation experiences across jurisdictions and schemes.

How can this emerging regime be characterized theoretically? As we have already observed, it is not a classic integrated multilateral regime, with a monopolistic international institution empowered by participating states to oversee a comprehensive set of hierarchical rules for a

6

https://www.apec.org/Groups/SOM-Steering-Committee-on-Economic-and-Technical-Cooperation/Working-Groups/Illegal-Logging-and-Associated-Trade; http://asean.org/storage/2016/10/Strategic-Plan-of-Action-for-ASEAN-Cooperation-on-Forestry-2016-2025.pdf.

Abbott defines a "transnational regime complex" as a "loosely connected but...still fragmented...group of institutions" operating in a global policy field that includes non-state and sub-national actors as well as states and interstate organizations (Abbott 2014: 60).

specific issue-area or policy domain – what de Búrca et al. (2013: 729-32) call "Mode One Global Governance". Nor can it be considered a "nested regime complex", as there is no single interstate institution which is "hierarchically superior to transnational schemes, with authority to resolve any rule inconsistencies" (Keohane & Victor 2011: 7; Abbott 2012: 583).

But the emerging timber legality regime is also far from representing a mere case of "polycentric governance", as conceived by Ostrom (2010) and others, in which a multiplicity of autonomous, self-organizing groups of actors tackle common-pool resource problems at various scales, but may learn from observation of each other's experiences and gradually come to form an overarching system through voluntary specialization on complementary functional niches (Abbott 2012: 584-7; Jordan et al. 2018; cf. also Hoffman 2011 on spontaneous "self-sorting" within contemporary climate governance). As the preceding discussion of "joined-up governance" indicates, there is too much formal coordination and explicit cooperation among the various components of the timber legality regime, both within and beyond the EU FLEGT initiative, to fit the polycentric model, including collaborative enforcement of sanctions for non-compliance with its norms and rules.

Neither can the emerging timber legality regime be properly characterized in terms of "orchestration", where a focal international organization, lacking hierarchical authority, implementation capacity, and enforcement powers, enlists the cooperation of intermediary actors with complementary capabilities and steers their activities through material incentives, ideational support, and other "soft" forms of influence (Abbott & Snidal 2009; Abbott 2012, 2013; Abbott et al. 2015). First, there is no single focal institution which orchestrates the transnational timber legality regime, even if, as we shall see, the European Commission does make some use of such indirect governance techniques within the EU FLEGT initiative. Second, orchestration as Abbott and colleagues define it focuses primarily on enhancing the scope and effectiveness of "regulatory standard setting", understood as voluntary norms of conduct "created largely by nonstate actors and address[ing] nonstate actors rather than states" (Abbott 2012: 572). By contrast, the timber legality regime, as its name suggests, centers around the implementation and enforcement of mandatory rules, some of which are based on binding agreements between states, even if these rules, as we shall see, function in a very different way than those of conventional hierarchical regimes. Finally, the roles performed by different types of actors in the timber legality regime, as we shall also see, are more polyvalent and polyarchic than in the classic orchestration model, as key steps in its development have frequently been initiated by non-state actors rather than international organizations or states.

On first inspection, the emerging timber legality regime might appear to resemble most closely what Keohane and Victor (2011) call a "loosely coupled regime complex": a non-hierarchically inter-linked set of institutions operating in the same transnational issue-area without an overarching governance architecture. Although there is indeed no hierarchical relationship between the main components of the timber legality regime complex, we argue in this paper that that it does have an identifiable core, in the form of the EU FLEGT initiative, whose experimentalist governance architecture plays a crucial role in fostering the development of a joined-up transnational regime.

Experimentalist governance can be defined as a recursive process of provisional goal setting and revision, based on learning from review of implementation experience in different settings. In its most developed form, experimentalism involves a multi-level governance architecture, whose four functional elements are linked in an iterative cycle. First, openended framework goals and metrics for gauging their advancement are established in consultation with relevant stakeholders by some combination of "central" and "local" units (public, private, or hybrid). Local units are then given substantial discretion to pursue these goals in ways adapted to their own specific contexts. But in exchange, they must report regularly on their performance, and participate in mutual monitoring, joint evaluation, and peer review. When they do not make good progress according to the agreed indicators, the local units are expected to take appropriate corrective measures, informed by the experience of their peers. Finally, the goals, metrics, and procedures themselves are periodically revised in response to the problems and possibilities revealed by the review process, and the cycle repeats. Often, such architectures are underpinned by "penalty defaults": measures aimed at inducing reluctant parties to cooperate in joint exploration and problem-solving by threatening to impose sufficiently unattractive alternatives (Sabel & Zeitlin 2012; de Búrca et al. 2014; Sabel & Victor 2017).

The experimentalist architecture of the FLEGT initiative, as observed earlier, is based on extensive participation by public and private stakeholders from the EU and partner countries in establishing and revising open-ended framework goals (combating illegal logging and promoting sustainable forest governance) and metrics for assessing progress towards them (such as legality standards and indicators within VPAs) through continuous monitoring and regular review of implementation, resulting in generalization of promising experiences and periodic revision of plans, programs, procedures, and goals at both local and central levels. In contrast to orchestration, this architecture is underpinned not only by positive incentives, but also by negative sanctions through the EUTR, including financial penalties and the exclusion of non-conforming products from the EU market. But unlike in conventional hierarchical regimes, the purpose of these sanctions is not to compel recalcitrant firms and

states to comply with fixed rules, but rather to serve as a penalty default to induce such actors to respect the regime's procedures (by developing due diligence systems to avoid sourcing of illegal timber in the case of firms) and to cooperate in advancing its goals (by negotiating and implementing VPAs to combat illegal logging and improve domestic forest governance in the case of states).

Experimentalist governance is particularly well-suited to transnational domains, where there is no overarching sovereign to set common goals, while the diversity of local conditions makes enforcement of uniform fixed rules even less feasible than in domestic settings. Because experimentalist regimes depend on neither a central hierarchical authority nor a prior convergence of interests and values, but only on a common problem definition and broad open-ended goals, they likewise represent a promising framework for tackling contentious cross-border issues such as forest governance where there is no hegemonic power able to impose global rules (cf. de Búrca et al. 2013, 2014). Because experimentalist governance architectures are defined in functional rather than structural terms, moreover, they can be built in multiple settings at different territorial scales, which can then be nested within one another vertically and joined up horizontally. Hence, as we have argued in previous work, transnational experimentalist regimes can be gradually assembled piece by piece through a variety of pathways and mechanisms, rather than being constructed as a unified whole through conventional multilateral procedures (Overdevest & Zeitlin 2014; Zeitlin 2015).

The next section of this paper will analyze the EU FLEGT initiative as the core of the emerging transnational timber legality regime, showing how its experimentalist architecture has been progressively reinforced over time through successive cycles of recursive revision in response to implementation experience. The subsequent sections will explore how and to what extent the experimentalist architecture of the EU FLEGT initiative has led to the emergence of a joined-up transnational regime by fostering productive, mutually reinforcing interactions both with public legality requirements in other countries and with private certification schemes, focusing particularly on the institutional channels and causal mechanisms involved.

3. EU FLEGT as the Experimentalist Core of the Transnational Timber Legality Regime⁴

The EU FLEGT initiative was launched in 2003 by an ambitious Action Plan drafted by the European Commission, in consultation with civil society activists and think-tank researchers, which outlined a panoply of interrelated measures to tackle the problem of illegal logging and improve domestic forest law enforcement and governance in producer countries. Most important among the proposed measures were support to timber-producing countries and the negotiation with them of voluntary agreements to verify and licence the export of legally harvested wood to the EU market.⁵ While the Action Plan focused on timber legality, "better forest governance" was explicitly expected to support "the EU's wider objective" of encouraging "sustainable forest management", since many countries' legislation was already directed towards that goal (European Commission 2003: 5). The Action Plan built on the growing international consensus on the problem of illegal logging, which had emerged from multilateral discussions, notably the regional Forest Law Enforcement and Governance (FLEG) dialogues convened by the World Bank in the early 2000s, while adding trade regulation (T) as a powerful new lever to advance these shared goals. The FLEGT Action Plan committed the EU to continuing efforts to build an effective framework for controlling illegal trade in wood products in collaboration with other major importers. But it also envisaged that "in the absence of multilateral progress" the Commission would consider further unilateral measures, including "legislation to control imports of illegally harvested timber into the EU", which eventually led to the enactment of the EUTR in 2010 (European Commission 2003: 15; on the origins and development of the FLEGT Action Plan and the EUTR, see Overdevest & Zeitlin 2015).

3.1 The FLEGT VPAs

The VPAs are the keystone of the FLEGT architecture. The FLEGT Action Plan invites producer countries to negotiate bilateral agreements with the EU in order to secure access to a "green lane" for verified legal timber timber imports into the European market. As of April 2019, nine countries have agreed VPAs with the EU (Cameroon, Central African Republic, Ghana, Guyana, Honduras, Indonesia, Liberia, Republic of Congo, Vietnam), while

⁴ This section draws on and updates earlier work by Overdevest & Zeitlin (2015, 2018).

⁵ Other major measures outlined in the Action Plan included public procurement reforms, private sector initiatives, and financing and investment safeguards.

negotiations are underway with an additional seven (Côte d'Ivoire, Democratic Republic of Congo, Gabon, Laos, Malaysia, Thailand), and preparations for formal negotiations are ongoing with two more (Cambodia and Myanmar). Together, these seventeen countries account for 81% of global trade in tropical wood products and a similar proportion of EU tropical timber imports (IMM 2017: 4; http://www.flegtlicence.org/vpa-countries).6

FLEGT VPAs are legally binding trade agreements between the EU and partner countries. The EU has established a number of requirements for the conclusion of such agreements. First, partner countries undertake to develop an agreed set of definitions for legal timber, based on a multi-stakeholder review of existing national law, including international agreements to which they are a party, involving broad participation by civil society as well as private business. Where the review process reveals major gaps and inconsistencies in existing regulation, signatory governments commit to rectify these through legal and administrative reforms. Once agreed, these legality definitions are converted into a matrix, which includes detailed indicators for verifying compliance. The legality definitions themselves are then subject to periodic review and revision in light of implementation experience (EU FLEGT Facility 2010; https://www.vpaunpacked.org/legality-definition).

A second requirement of the FLEGT initiative is that partner countries develop a national timber legality assurance system (TLAS), overseen by an independent auditor, to ensure that domestic wood is legally harvested, transported, and exported. All such systems must also ensure the integration of imported wood into their supply-chain tracking and control mechanisms. In most VPA countries, the TLASs include separate independent civil society monitors or observers in addition to the third-party system auditor. To support such independent monitoring, all VPAs also include broad transparency requirements on public access to information on forest administration and the operation of the TLAS. The VPAs likewise include provisions for independent monitoring of their broader social, economic, and environmental impacts on the partner country, in order to identify and mitigate any unanticipated negative effect, as well as of the performance of FLEGT licensed timber in the EU and international markets (http://www.vpaunpacked.org/en/web/vpa-unpacked-multilang/vpa-elements).

⁶ The EU-FAO FLEGT Programme has also initiated a pilot programme for working on FLEGT objectives with seven non-VPA countries (Colombia, Guatemala, Madagascar, Mozambique, Peru, the Philippines, and Uganda), based on a local situational analysis and baseline assessment, a stakeholder workshop to set priorities and develop a national roadmap for improving forest governance, and the formation of a joint committee of EU, FAO, and government representatives to oversee and monitor agreed support activities (EU-FAO 2016: vii, 9-16).

Third, the VPAs establish a joint committee of EU and partner country representatives, which is responsible for monitoring and reviewing implementation of the agreement; resolving disputes; and recommending any necessary changes, including further capacity-building measures. These joint committees, which typically include representatives of civil society and private business as well as government officials, operate by consensus, but may refer unresolved disputes to arbitration. In Indonesia and Ghana, the countries furthest advanced with FLEGT licensing, these joint implementation committees (JICs) have served as effective platforms for domestic NGOs and other stakeholders to raise problems about the working of the VPA with support from the EU, and to set in motion collaborative processes for developing mutually acceptable solutions. In both countries, regular reviews of progress towards implementation of VPA commitments by these committees and multi-stakeholder bodies reporting to them give rise to new joint action plans, specifying corrective measures to be carried out by each side, subject to ongoing monitoring and review (Overdevest & Zeitlin 2018).

As its contribution to the VPA process, the EU commits to facilitating access for FLEGT licensed timber to the European market, while providing capacity-building support to domestic public and private actors. FLEGT has funneled significant aid from the EU, member states, and other international donors to assist government agencies, NGOs, and business associations in partner countries with TLAS development and the implementation of governance reforms mandated by the VPAs. Much of this support has been channeled through autonomous multi-donor institutions with specialized expertise, notably the FAO-EU FLEGT Programme, which distributes flexible smaller grants to governments, NGOs, and business associations for capacity-building projects; and the European Forest Institute EU FLEGT Facility, which provides technical assistance, facilitation, and advice on the negotiation and implementation of VPAs to partner country governments, domestic stakeholders, and the EU institutions, focused on participatory governance and TLAS design (European Commission 2016a: 9-10; http://www.euflegt.efi.int/what-we-do). Transnational NGOs such as Fern have likewise played a major role in supporting the involvement of domestic civil society platforms in VPA negotiations and monitoring stakeholder participation in their implementation, as well as in helping to shape EU policies themselves (Overdevest & Zeitlin 2015: 158-60; Fern 2018a). Since 2015, an Independent Market Monitoring (IMM) project, hosted by the International Tropical Timber Organization (ITTO), has been tasked with analyzing the impact of the FLEGT initiative on timber production in VPA countries and trade flows to the EU and other regions (http://www.itto.int/imm/; http://www.flegtimm.eu/).

Although there are no formal mechanisms for cross-national peer review within the FLEGT initiative, regular meetings of a range of transnational stakeholder forums have served as institutionalized platforms for information pooling, critical debate, and recursive learning from comparative experience with VPA negotiation and implementation in different local contexts (Overdevest & Zeitlin 2018: 68). An informal but increasingly structured transnational experience-sharing and support network has also developed among NGOs from VPA countries such as Indonesia, Ghana, Laos, Myanmar, and Thailand, addressing issues like stakeholder participation, independent monitoring, transparency, and smallholder inclusion (Jeffree 2017).

FLEGT VPAs are extremely challenging for partner country governments, both politically and administratively, in terms of their demands for multi-stakeholder participation and farreaching reforms of forest governance. They have also proved technically complex and arduous to implement. Some of the key implementation challenges concern the practical difficulties of designing effective timber-tracking and legality assurance systems under developing country conditions. But others stem from widespread but often hard to detect forms of corruption, as well as from pervasive weaknesses in domestic administrative coordination and governance capacity. In every partner country, assuring timber legality has turned out to be tightly bound up with thorny, deep-rooted political issues concerning the exploitation of natural resources, property rights, and land use, which the VPA implementation process has progressively exposed to public scrutiny and pressure for remediation. As a result of these challenges, fulfillment of VPA commitments and issuance of FLEGT export licenses have taken much longer than originally expected in all partner countries. In Indonesia, the first to complete the process, export of FLEGT-licensed timber began in 2016, nine years after the onset of negotiations with the EU and five years after the ratification of the VPA. In Ghana, where the issuance of FLEGT licenses is expected to start in 2020, the VPA implementation process has taken even longer (Overdevest & Zeitlin 2018; Ghana-EU 2018).7

Following critical assessments of the FLEGT Action Plan by the European Court of Auditors (2015) and an independent evaluation team (TEREA/S-FOR-S/TOPPERSPECTIVE 2016), the EU has recently introduced a series of revised measures to strengthen its central capacities for monitoring, review, and coordination of both the individual VPAs and the initiative as a whole. These measures build on the prior VPA monitoring activities of the

⁷ For recent overviews of the state of play in other VPA countries, see Perez (2017); EUTR/FLEGT Expert Group Minutes, 7/12/18; Fern (2018).

European Commission, the EU FLEGT Facility, and the EU-FAO FLEGT Programme (TEREA/S-FOR-S/TOPPERSPECTIVE 2016: vol. I, pp. 107-8), as well as on the transnational information-pooling and recursive learning platforms discussed earlier.

At the request of the European Council, the European Commission, in consultation with member state expert groups and external stakeholders, has developed a new multi-annual work plan for FLEGT implementation. Key elements of this work plan, which are already moving forward, include both the construction of an indicator-based framework for monitoring the global impact of the FLEGT initiative,8 and "enhanced mechanisms...to review progress on negotiating or implementing VPA[s]...on a regular basis and develop suitable strategies if progress is considered insufficient." The latter involve joint stocktaking exercises with the partner countries to identify outstanding challenges and assess the feasibility of achieving the VPA's objectives, followed by the establishment of a multi-year roadmap for supporting and monitoring implementation. Where this joint assessment does not lead to a renewed path forward for the VPA, the EU will consider alternative ways to promote FLEGT objectives with the partner country (European Commission FLEGT Ad Hoc Expert Group 2018: 2-3, 5-7, 15-16). At an operational level, the EU FLEGT Facility has developed a new set of planning, framing, and monitoring tools to overcome roadblocks within VPAs and drive implementation forward (EU FLEGT Facility 2018: 14-15). Both the Facility and the FAO-EU Programme have likewise stepped up their efforts to capture practical lessons from comparative analysis of FLEGT processes and use them to guide other countries involved in VPA negotiation and implementation, across issues ranging from shipment testing, traceability, and integration of imported timber into TLASs to independent monitoring, land tenure, and support to SMEs (EU FLEGT Facility 2018: 16; FAO-EU 2017).

These enhanced mechanisms for monitoring, review, and recursive learning, which reinforce the experimentalist governance architecture of the FLEGT initiative, already appear to be delivering positive results within national VPA processes. Thus according to the EU FLEGT Facility, a 2017 stock-take in the Republic of Congo has led domestic stakeholders to recognize the need for revision of the VPA implementation framework, and to collaborate in developing improved planning and monitoring tools for that purpose (EU FLEGT Facility 2017a; Republic of Congo-EU 2018: Annexe 2).9 In Liberia, similarly, the JIC and National

⁸ The European Commission has mandated the Centre for International Forest Research (CIFOR) to develop this global monitoring framework, in collaboration with the EU FLEGT Facility, the FAO-EU FLEGT Programme, and other FLEGT partners (*IMM News* Spring 2018: 16).

⁹ Discussions with members of a delegation from the ROC participating in a VPA Lesson-Sharing Conference in Ghana in November 2018 confirmed the pivotal role of this stock-taking exercise in

Multi-Stakeholder Monitoring Committee are using a multi-year "Forward Planner" to set implementation priorities and track progress in carrying out jointly agreed actions within the VPA (EU FLEGT Facility 2017a; Liberia-EU 2018: Annex 3). In Vietnam, where the VPA was agreed in 2017 and has not yet been formally ratified, a "Joint Preparation Committee", working through a multi-stakeholder process, has developed a "Joint Implementation Framework" for setting, monitoring, and revising strategic priorities within a multi-annual action plan, building on the experience of FLEGT processes in other partner countries (EU FLEGT Facility 2017a; Vietnam-EU 2017). In Honduras, where the VPA was agreed in June 2018, a decisive breakthrough was the joint field-testing of the TLAS legality definition and verification methodology, which not only identified practical problems to be resolved, but also "created transparency, awareness and common understanding" among the participating stakeholders about the country's main forest governance challenges and the legal and administrative reforms needed to make the new system work (EU FLEGT Facility 2017a).

3.2 The EU Timber Regulation

Alongside the VPAs, the other key element of the FLEGT architecture is the EUTR, which creates an "underlying offense" of placing illegally logged timber products on the EU market, and obliges all operators doing so for the first time to demonstrate "due diligence" that they were legally harvested in their place of origin (domestic or foreign), subject to fines and other criminal penalties. Traders are obliged to keep records of their suppliers and customers so that wood circulating within the EU market can be traced back to its original source. The EUTR establishes three possible pathways for meeting its due diligence requirements. The first is possession of a valid FLEGT export license or CITES permit,10 which serves as a "green lane" into the EU market. Second, operators can develop their own due diligence system, which includes securing detailed information on timber sources and species, as well as on suppliers' compliance with national legislation, coupled with the creation, implementation, and regular evaluation of risk-assessment and risk-mitigation procedures. Third, they can use a turnkey system developed by a third-party monitoring organization (MO) recognized by the European Commission (http://ec.europa.eu/environment/forests/timber_regulation.htm; Overdevest & Zeitlin 2015: 148-50).

-

revitalizing the VPA implementation process, notably by fostering collaboration between the Finance, Planning, and Forestry ministries.

¹⁰ For guidance on the verification of CITES permits under the EUTR, see European Commission (2018a).

The EUTR Implementing Regulation specifically encourages the use of private certification and legality verification schemes as tools for demonstrating due diligence, as long as the systems are publicly available, incorporate the requirements of the nationally applicable legislation, and include "appropriate checks, including field-visits...by a third party at regular intervals no longer than 12 months" to verify compliance, together with full traceability and controls to ensure that illegal timber does not enter the supply chain. Operators are also expected to assess in detail how the legality verification standards set by these schemes are "applied and enforced...on the ground", and to check whether there are any "substantiated reports about possible shortcomings or problems". The EUTR thus places private certification and legality verification schemes under a measure of public oversight, thereby integrating them into the broader transnational legality regime. But liability for effectively excluding illegal timber from the market remains with the operator, not the scheme (European Commission 2012: Art. 4; EUTR/FLEGT Expert Group).

EU member states are responsible for setting penalties for violations of the EUTR, which must be "effective, proportionate and dissuasive", and for establishing competent authorities to enforce its provisions through regular checks on operators placing wood on the EU market. Implementation of the EUTR is overseen by the European Commission, which can bring infringement proceedings against member states for non-compliance, provide interpretative guidance, and propose revisions to the regulation where needed. The EUTR requires national competent authorities (CAs) to investigate "substantiated concerns" about trade in illegal timber brought forward by third parties, including NGOs (European Commission 2016c; EUTR/FLEGT Expert Group 2017). Transnational NGOs such as Greenpeace and the Environmental Investigation Agency (EIA) have used this provision to raise formal complaints about imports to Europe of illegally logged wood from a number of countries, including Brazil, Cameroon, and Myanmar (T. Hinrichs 2014; EIA 2017; EUTR/FLEGT Expert Group Minutes 18/2/15, 2/12/16, 21/2/17, 19/4/17, 20/9/17, 23/11/17, 19/4/18, 19/6/18).

The EUTR enhances the attractiveness of signing a partnership agreement with the EU by threatening to impose significant liability risks and costs on firms importing timber from non-VPA countries. In this way, it can be understood as a penalty default. The "underlying offense" of trafficking in illegally harvested timber, which can lead to severe consequences, including seizure of shipments, suspensions of authorization to trade, fines, and imprisonment, can likewise be seen as a penalty default inducing operators to develop effective due diligence systems to minimize their sourcing risks (Overdevest & Zeitlin 2018).

Many member states were initially slow to establish competent authorities for EUTR implementation, to develop procedures for checking and evaluating operators' due diligence systems, and to introduce legal penalties for violations (Saunders 2013; Hoare 2015: 42-3; European Commission 2016d). Such delays are hardly surprising, since neither the EU nor the member states had pre-existing systems in place for ensuring the legality of imported timber, but had to construct them together from scratch to meet the regulation's novel requirements (Overdevest & Zeitlin 2015: 161-2). This uneven implementation left significant gaps through which illegal timber could enter the EU market, thereby weakening the Regulation's dissuasive effectiveness, a point highlighted by the European Court of Auditors (2015) and the independent evaluation of the FLEGT Action Plan (TEREA/S-FOR-S/TOPPERSPECTIVE 2016, vol. I, pp. 50, 52-8).

But following infringement proceedings initiated by European Commission, all member states (with one partial exception)¹¹ have now met the basic requirements for implementing the EUTR (European Commission 2018b: 12). To support uniform implementation, pool information, compare experiences, identify best practices, and develop common methodologies and procedures, member state competent authorities and the European Commission have created an EUTR/FLEGT Expert Group, which meets five times a year. CAs have likewise established an informal enforcement network, with a confidential website for sharing documents, inspection reports, and event notifications, including third-party substantiated concerns. Alongside regular reviews of EUTR enforcement and updates on new developments, Expert Group meetings include presentations by recognized Monitoring Organizations, private certification bodies, NGOs raising substantiated concerns, and producer-country governments contesting such claims. On this basis, the Expert Group reaches authoritative conclusions on the validity of these concerns in specific cases (e.g. teak from Myanmar and timber from the Brazilian Amazon), and has developed a series of guidance documents covering key issues such as risk mitigation measures, third-party verification schemes, and conflict timber.12

National authorities have also begun to work together in smaller groups to map supply chains in high-risk countries, assess the adequacy of companies' due diligence procedures,

¹¹ An infringement proceeding is ongoing against Slovakia, which is still in the process of amending its legislation to adequately cover timber imports.

For the mission, minutes, and materials of the Expert Group, see http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=32
<a href="mailto:see-align: center-align: center-a

provide common training, and carry out joint inspections. Such cooperation has become increasingly formalized through regular meetings of geographical sub-groups of CAs from the Nordic-Baltics, the British Isles, the Mediterranean, and Central and Eastern Europe, aimed at developing common approaches, learning from one another's experience, and harmonizing EUTR implementation across their regions (UNEP-WCMC 2018a: 5, 10; UNEP-WCMC *Briefing Notes* Apr.-May 2017, Aug.-Oct. 2017, Apr.-May 2018; EUTR/FLEGT Expert Group Minutes 20/9/17, 23/11/17, 19/6/18; Masuda 2017).

As a result of these developments, the level of EUTR enforcement activity has increased significantly in recent years, including site visits, due diligence assessments, corrective action requests, injunctions, and sanctions or financial penalties. Between March 2015 and February 2017, member state competent authorities conducted 2798 checks on imported timber, resulting in 525 notices of remedial action, 139 penalties, and 286 administrative measures. According to surveys conducted by the United Nations Environment Programme's World Conservation Monitoring Centre (UNEP-WCMC), responding CAs carried out 1511 checks on importing timber operators and traders between March 2017 and June 2018, with a clear rising trend over this period. The majority of these checks and enforcement actions concerned operators' failure to conduct adequate due diligence, which is much easier to detect, prove, and follow up on than violations of the prohibition on trafficking in illegal timber, while also promising to have a more profound impact on transnational supply chains (European Commission 2018b; UNEP-WCMC 2017, 2018 a, 2018b; Hinrichs interview). But both UNEP-WCMC and the transnational NGO Client Earth regularly publicize high-profile enforcement actions, court cases, and penalties for both types of EUTR violation, thereby multiplying their deterrent effect.

Although there is still wide variation in enforcement activities across competent authorities, as well as in the penalties imposed for violations by national courts, intensified monitoring and comparison of EUTR implementation has put pressure on laggard member states to improve their performance. In 2017, for example, the European Commission, following a complaint lodged by Client Earth, opened infringement proceedings against Belgium for failing to carry out sufficient checks on imported timber. In response, the Belgian CA has stepped up its inspection and enforcement actions, while also creating a discussion platform with timber sector associations and CSOs to improve EUTR implementation (Client Earth 2018; Client Earth EUTR News November 2017; UNEP-WCMC Briefing Notes, Apr.-May & Sept.-Oct. 2018). Taken together, this combination of information pooling, comparative implementation monitoring, and collaborative enforcement within the EU has enhanced the effectiveness of the EUTR and reinforced its role as a penalty default for the FLEGT initiative and the emergent transnational timber legality regime more generally.

The FLEGT Action Plan's linkages to broadly supported multilateral goals provided a crucial source of international legitimacy for the EU's unilateral initiatives to combat illegal logging and promote sustainable forest governance. Both the FLEGT VPAs and the EUTR were carefully designed to comply with WTO rules, as well as to win the consent of developing countries, whose objections had blocked earlier efforts to negotiate a global forest convention (Overdevest & Zeitlin 2015). Rather than imposing "northern" environmental standards on the global south, the EU's approach to forest legality and governance respects territorial rights and sidesteps politically sensitive sovereignty issues. It offers developing countries an opportunity to participate in a jointly governed system of legality assurance, while imposing parallel obligations on European firms to exercise due diligence in respecting local legal standards. In this way, the FLEGT initiative creates a path to building a transnational consensus around what constitutes illegal timber and how best to control it, encompassing both producing and consuming countries. At the same time, moreover, the experimentalist governance architecture of the FLEGT initiative provides a robust institutional framework for monitoring, review, and recursive learning from decentralized implementation, in which promising experiences can be generalized across borders and operational problems detected and addressed at both central and local levels. The polyarchic structure of this governance architecture, like that of the EU itself, which combines a measure of central coordination by the Commission and the Council with extensive scope for autonomous initiatives by other actors, has likewise stimulated a multiplicity of stakeholders, including NGOs, business associations, and international organizations as well as national governments to collaborate in advancing shared goals. For each of these reasons, as we shall see in the next sections, the EU FLEGT initiative has contributed to the stepwise construction of a joined-up transnational regime through mutually reinforcing interactions with both public timber legality regulation in third countries and private certification schemes.

4. Experimentalist Interactions: Public Legality Regulation in Consumer Countries

The EU was not the first wood-importing jurisdiction to enact public regulation aimed at combating trade in illegally logged timber. The pioneer was the United States, which in 2008 extended the coverage of the Lacey Act (originally adopted in 1900) from fish and wildlife to plants. This amended legislation, also known as the Legal Timber Protection Act (LTPA), makes it a criminal offense to import, trade, or otherwise handle any timber taken,

transported, or sold in violation of foreign laws. Penalties, which can include imprisonment, fines, and confiscation of goods, depend on the level of intent of the violator, and the extent to which "due care" was exercised to avoid foreseeable risks of trafficking in illegal wood. To facilitate detection of illegal timber, importers are obliged to submit customs declarations with information on the scientific name of the species, the value and quantity of the shipment, and the country of origin, falsification of which is likewise a criminal offense (Birchell 2013; Brack & Buckrell 2011; Leipold & Winkel 2016).

While the EU FLEGT Action Plan encouraged US environmental NGOs to push for the LTPA, the latter fueled political support for the EUTR, and inspired the European Parliament to insist on a prohibition clause creating an "underlying offense" of placing illegal timber on the European market, which was absent from the Commission's original proposal (Hoare 2015: 49; Leipold et al. 2016; Sotirov et al. 2017). The adoption of legislation prohibiting trade in illegal timber by two of the world's largest importers, who together accounted for more than 50 per cent of the global market, marked a crucial step towards the construction of a joined-up transnational regime, both by force of example and by reducing the risk of trade diversion. Alongside transnational NGOs and VPA signatory countries such as Indonesia¹⁴, both the EU and the US have sought to reinforce this emerging regime by pressing other major timber-consuming countries to introduce similar measures, including through the incorporation of commitments to combat illegal logging in bilateral and plurilateral trade agreements.¹⁵

This transnational campaign inspired by the successive enactment of the US LTPA and the EUTR triggered a "norm cascade" (Finnemore & Sikkink 1998) of legislative responses among other major timber-importing countries in the Global North. In 2012, Australia adopted the Illegal Logging Prohibition Act (ILPA), which makes it a criminal offense to place illegally harvested wood from whatever source on the national market. Like the EUTR, the implementing regulation obliges firms to develop documented due diligence systems for

¹³ Due care was not defined in the LTPA, but is understood in US tort law as "that degree of care which a reasonably prudent person would exercise under the same or similar circumstances" (Birchell 2013).

¹⁴ For Indonesia's advocacy role in the adoption of public legality regulations in timber-importing countries, see Leipold et al. (2016: 299); EU FLEGT Facility (2018a: 1).

¹⁵ Examples include the US and EU agreements with South Korea, as well as the pending EU-Japan agreement, although the latter has been sharply criticized by NGOs for its acceptance of Japan's non-binding Clean Wood Act (European Commission 2016b: 10-11; Fern 2016, 2018c). The Trans-Pacific Partnership (TPP) agreement originally included language modeled on the Lacey Act committing signatories to restrict trade in timber harvested in violation of foreign laws, but this was removed after the US's withdrawal (WRI 2018).

assessing and minimizing the risk that timber has been illegally logged and to attest compliance with these requirements in customs declarations, subject to substantial financial penalties (ADAWR 2018b: 7; Leipold et al. 2016; McMaugh 2016). In 2016, Japan introduced a Clean Wood Act, which requires firms to "endeavor" to use only legally harvested timber. Firms which undertake to ensure the use of legally sourced wood can register with government-accredited bodies and must carry out due diligence under their oversight; in case of non-compliance, they lose their right to use the title of "registered operator", but no financial penalties apply (Momii 2016; EU FLEGT Facility 2018a).16 In 2017, South Korea revised its 2012 Act on the Sustainable Use of Timbers to prohibit the importation and sale of illegally harvested timber, subject to both criminal and civil penalties for infringements, including suspension of business registration and destruction or return of non-conforming products, as well as fines and imprisonment. Operators are required to submit a declaration documenting that timber products have been legally harvested in their country of origin, which is verified by public authorities before an import permit can be granted (Lee 2018; EU FLEGT Facility 2018b). Among large "northern" wood consumers, only Canada has not passed new legislation to combat trade in illegal timber, but has instead extended to non-CITES species enforcement of the 1992 Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act (WAPPRIITA), which like the US Lacey Act prohibits importation of any plant product "possessed, distributed or transported in contravention of any law of any foreign state" (Williamson 2016; Government of Canada, 2017).17

Over the past decade, the major timber-importing jurisdictions of the Global North (with the partial exception of Japan) have thus converged not only on a shared normative commitment to combat illegal logging within and beyond their own borders, but also on a broad common strategy for pursuing this goal through a combination of trade regulation and public enforcement. At the same time, however, the governance architectures for timber legality regulation differ significantly across these jurisdictions, as a result of variations in domestic coalitions among NGOs and industry groups, as well as pre-existing legal and administrative arrangements (Leipold et al. 2016). Public timber legality regulations in other jurisdictions

¹⁶ This Act builds on an earlier voluntary system for the verification of legal or *goho* wood, developed by the Japanese Forestry Agency to promote compliance with Japan's 2006 Green Purchasing Law, whose use in the construction of public buildings was mandated by new legislation in 2010 (Momii 2014).

¹⁷ According to a recent EIA report, in April 2018, Mexico, which is regarded as "a a significant import and trading hub for illegal timber from Latin America" also "passed a law banning the import of illegal wood products and requiring a degree of supply chain traceability" (Johnson & Gehl 2019).

lack most of the explicit experimentalist features of the EU FLEGT initiative. They take foreign laws as they stand, without seeking to reconcile ambiguous and contradictory legislation or fill regulatory gaps, unlike the updated and agreed legality standards produced by the FLEGT VPAs. Public authorities, customs officials, prosecutors, and judges are thus placed in the difficult position of assessing the current state of foreign laws and regulatory practices in order to determine whether a given timber shipment has been harvested illegally.

In the US, importers are now required to file Lacey Act declarations through a single automated system. The Department of Agriculture's Animal Plant Health Inspection Service (APHIS) currently receives more than 3400 such declarations per week, which it lacks the capacity to review in depth, and is developing a reference database aimed at automatically targeting high-risk imports (Gardner 2018; TREE meeting summary, 23-24/10/17: 9; TREE Newsletter Fall 2016; Johnson & Gehl 2019; Hoare 2015: 41-2). LTPA enforcement relies primarily on inspections by US Customs and Fish and Wildlife agents, usually based on tipoffs from competitors, whistle-blowers, and/or NGOs, leading to high-profile prosecutions and criminal penalties for major violations. Such prosecutions are extremely resourceintensive, hence necessarily infrequent. The resulting penalties, which include multi-year compliance programs under court supervision as well substantial fines and forefeitures, are intended not merely to exert a "chilling effect" on other importers, but also "to move the entire industry toward better implementation of due care standards, by increasing industry awareness of illegal logging schemes, and enhancing understanding about what level of knowledge companies should possess" (Colbourn 2018; TREE meeting summary 5-8/4/16: 9 [quotation]; Duggan 2016; Leipold & Winkel 2016: 42 [quotation]; Hoare 2015: 41; Birchell 2013). Canada encourages wood importers to adopt due diligence systems to meet their legal sourcing obligations under WAPPRIITA, but successful prosecutions must meet high evidentiary requirements, including "affidavits from officials of the country where the offence occurred" (Williamson 2016; Government of Canada 2017).

Australia has focused its enforcement efforts on ensuring compliance with the ILPA's due diligence obligations through assessments of the largest trading firms, along with importers of specific high-risk products and pathways, such from conflict and fragile states. During the initial "soft-start" period, which ended in 2017, assessed firms were not penalized for inadvertent non-compliance, but received a "Note of Advice" setting out what they needed to change to meet the law's requirements, which will serve as a baseline for future compliance audits. The Department of Agriculture has developed a series of Country-Specific Guidelines to assist firms with their risk assessments, but importers remain responsible for considering any other information that they know or "ought reasonably to know" indicating that the

product may include illegally logged timber (ADAWR 2018b: 9, 13 [quotation]; Commonwealth of Australia 2018: §12 [quotation]; McMaugh 2016). 18

Japan leaves responsibility for checking registered operators' due diligence systems with publicly accredited Registering Organizations, but empowers government ministries to require individual wood-related businesses to report on how they are "ensuring the use of legally-harvested wood and wood products" and to carry out site inspections on their premises for this purpose (EU FLEGT Facility 2017b: 6; Norman & Saunders 2017: 7). South Korea does not formally require firms to develop due diligence systems, but obliges them to document the legality of imported timber import, which is verified by the Korea Forestry Promotion Institute and checked physically by the Korea Forest Service before the shipment is allowed to clear customs. Like Australia, South Korea has also developed a series of Country-Specific Guidelines to assist importers with their risk assessments (Client Earth 2017; Lee 2018; Saunders & Norman 2019).

Given the wide variation in legal and adminstrative frameworks, the complexity of wood supply chains, and the difficulties of obtaining reliable information about the situation in producer countries, ongoing collaboration among public authorities and other concerned actors is essential in order to ensure joined-up and effective enforcement of demand-side timber regulations. Such collaboration, which was initiated by transnational NGOs and think tanks with support from national governments and private foundations, began with the EU and the US, but has progressively expanded to include enforcement officials from a wider range of consumer countries, including Australia, Canada, Japan, and South Korea. To assist the newly created Competent Authorities with preparations for EUTR implementation, Chatham House and the US-based Forest Trends organized an intensive series of meetings in 2013-14 with industry experts, NGOs, trade associations, and certification bodies, including training sessions with Lacey Act enforcement agencies in Washington, D.C., and a European study tour for US and Australian officials. In 2015, Forest Trends established the Timber Regulation Enforcement Exchange (TREE) as "a forum for officials to gain detailed insight into high- and low-risk timber flows entering their countries, discuss practical enforcement issues with each other and relevant experts from the forest sector...establish emergent norms for Due Diligence/care in relation to different forest products, and build relationships with producer country governments, industry representatives, and other stakeholders involved in combating illegal logging and promoting global markets for legal timber." This network,

¹⁸ This compliance approach is explicitly based on Ayres & Braithwaite's (1992) responsive regulation pyramid (ADAWR 2018a: 8).

which meets twice a year in different locations, operates as a transnational counterpart to the EUTR/FLEGT Expert Group, and covers many of the same issues, such as national legality requirements and due diligence standards, sourcing risks in different countries and regions, substantiated concerns of illegal logging, cross-border cooperation, and innovative enforcement practices, including the use of traceability systems and timber forensics. After the public segment of each meeting, which is open to NGOs, businesses, and other stakeholders, officials from the participating countries meet in closed session for hands-on training in case handling, document review, and other enforcement techniques.¹⁹

Such transnational collaboration has not only helped to ensure a better flow of information about illegal timber sourcing risks among public regulatory authorities, but also to bring their enforcement approaches closer to one another and bridge gaps in the emerging timber legality regime. Thus, for example, discussions within the TREE network directly shaped the provisions of the Environmental Compliance Plan (ECP) developed by the US Department of Justice (DOJ) in the pathbreaking 2016 Lumber Liquidators (LL) plea agreement, which was explicitly modeled on the EUTR's due diligence requirements and designed to set a standard for other comparable operators to follow. According to Patrick Duggan, one of the prosecutors in this case:

[W]e wanted to focus on front-end due diligence to ensure that LL was never in a position where they had to question the legality of a shipment *after* the purchase was made. We required them to follow a more European model of front-loading the due diligence instead of DOJ having to investigate afterwards. Hence, I spoke with a number of TREE members about how they deal with risk categorization. Those conversations resulted in section 5 of the ECP...which divides products into risk categories based on the supplier company risk as well as the product risk. The level of due diligence required then varies depending on the overall risk category....The UK, Netherlands, and Denmark were especially helpful in providing input on the specific factors they consider.²⁰

Conversely, because the Lacey Act prohibits trafficking in wood sold in violation of any foreign law protecting plants, it can also be used to prosecute non-compliance with the provisions of the EUTR, which is considered a "predicate offense" under US law. Since the

-

https://www.forest-trends.org/who-we-are/initiatives/#ssection-5; https://www.forest-trends.org/events/timber-regulation-enforcement-exchange-hamburg/; https://www.forest-trends.org/events/timber-regulation-enforcement-exchange-london/. For information on the development of TREE, we are grateful to Jade Saunders (Forest Trends/Chatham House) and Thorsten Hinrichs (German Federal Ministry of Food and Agriculture).

Personal communication, 25/10/18; for the text of the ECP, see https://www.sec.gov/Archives/edgar/data/1396033/000114420415058462/v421764 ex10-1.htm; cf. TREE meeting summary 5-8/4/16; Duggan (2016).

EUTR's prohibition and due diligence requirements apply only to the operator first placing wood on the European market, while Lacey Act prosecutions face a high burden of proof, reciprocity between the two laws extends liability to illegal timber products exported from the EU to the US (such as superyachts with Burmese teak decking), thereby reinforcing both and helping to close a significant loophole in the transnational legality regime (EIA Forests 2018; Colborn 2018).

5. Experimentalist Interactions: Private Certification and Service Providers

The experimentalist architecture of the EU FLEGT initiative has helped to join up the separate components of the timber legality regime complex through productive interactions not only with public regulation in other consumer countries but also with forest certification schemes, trade associations, and other private service providers. The EUTR, as we have seen, allows firms to satisfy its due diligence requirements by working with a recognized Monitoring Organization, and encourages them to use private certification and legality schemes that meet specified conditions in their internal risk assessment process. A number of VPAs currently in the implementation process such as Cameroon and Republic of Congo likewise include provisions for incorporating recognized private certification schemes into their FLEGT licensing systems.²¹

Unlike the EUTR, the US LTPA does not explicitly encourage third parties to provide due diligence systems, although participation in private certification schemes may be adduced as evidence due care in avoiding sourcing of illegally logged (http://www.laceyduecare.com/). The Australian ILPA allows importers to use recognized Timber Legality Frameworks - including FSC and PEFC certification as well as FLEGT licenses – as a risk assessment pathway, though firms remain responsible for assessing their accuracy and reliability in each case, as well as any other information that would call the product's legality into question (ADAWR 2018b: 17, 44; 2017: 30). To demonstrate due diligence in ensuring the use of legally harvested timber, the Japan Clean Wood Act likewise allows operators to utilize forest certification and chain-of-custody schemes (EU FLEGT Facility 2017b: 7). But only the detailed standards for imported timber issued by the Korea Forest Service officially recognize FSC and PEFC certification as proof of legality (EU FLEGT Facility 2018b: 9-10).

⁻

http://www.euflegt.efi.int/es/q-and-a-cameroon; http://www.euflegt.efi.int/background-congo#art19.

In both the EU and the US, trade associations, NGOs, and private service providers have sought to assist timber-importing and processing firms to comply with the legality requirements of the EUTR and LTPA through a variety of channels, including forest certification. The European Timber Trade Federation (ETTF), an early supporter of the EUTR (Sotirov et al. 2017: 73), has developed a due diligence system in collaboration with the Danish environmental NGO NEPCon, which its national affiliates are encouraged to offer their members.²² Several ETTF national affiliates have become recognized MOs, as has NEPCon, alongside a range of other standardization, certification, and auditing bodies.²³ Soon after the EUTR's passage, ETTF hired a consultancy to assess existing private forest certification and legality verification schemes, whose report showed that none of them fully complied with the legislation, and identified key areas for improvement. NEPCon now produces regularly updated guides to how far the FSC and PEFC meet the EUTR's requirements, based on a common evaluation framework, along with a panoply of tools for ensuring legal timber sourcing (Butler 2013; Proforest 2012; Cupit 2018; www.nepcon.org). In the US, similarly, the Forest Legality Alliance, a coalition of environmental NGOs and industry associations instrumental in the passage of the LTPA, has created online declaration and risk assessment tools, while a closely related multi-stakeholder partnership has developed "Lacey Act Due Care Consensus Standards", which encourage wood businesses to join FSC, PEFC, or Seneca Creek/AHEC US Hardwood certification schemes (Leipold & Winkel 2016: 37-42; http://forestlegality.org/risk-tool; http://www.laceyduecare.com/).

Both the FSC and the PEFC have substantially revised their standards and procedures to align them with the due diligence/due care requirements of public legality regulations in timber-consuming countries. So too have a number of PEFC-affiliated schemes in countries such as the US, Malaysia, and Brazil. The most significant modifications to these schemes have concerned the redefinition of the applicable national laws to include trade and customs regulations; the provision of detailed information to customers on the species and local origin of certified products in high-risk countries; and the incorporation of mandatory due diligence procedures into the FSC Controlled Wood and FSC and PEFC chain-of-custody standards. To prevent abuse of the latter, the FSC now prohibits organizations that have not handled certified products since their last audit from using the scheme's trademark. It has also launched an Online Claims Platform to assist customers in validating transaction volumes to ensure that mixing of non-certified material has not occurred, together with a

²²http://www.ettf.info/eu-timber-regulation;

https://www.NEPCon.org/certification/legalsource/legalsource-due-diligence-system.

²³ For a current list, see http://ec.europa.eu/environment/forests/timber regulation.htm.

transnational wood identification testing program to investigate species and origin claims in high-risk supply chains (Saunders 2014; PEFC 2015a; FSC 2018; TREE meeting summary, 13-15 March 2019).

Contrary to expectations, few EU timber operators have signed up to use due diligence systems provided by recognized Monitoring Organisations. Beyond the additional costs involved, the main explanation, according to the 2016 EUTR evaluation, seems to be "the fact that MOs have an obligation to report to the CA on major failures in the use of a DDS by operators". As a NEPCon official told the TREE network, "there is minimal interest in MO services because companies feel like they are inviting 'law enforcement' in, and problems will be reported to CAs". Conversely, however, MOs (including NEPCon itself) "have reported providing technical assistance to thousands of operators to develop their own DDS" (European Commission 2016d: 25; Cupit 2018).

Scholars initially disagreed about whether the EU FLEGT initiative and the adoption of public legality regulation in other timber-consuming countries would stimulate demand for private sustainable forest management certification schemes such as the FSC and PEFC (Cashore & Stone 2014; Overdevest & Zeitlin 2014), or only for less costly private legality verification systems (Bartley 2014). Since 2006, however, as Figure 1 shows, the forest area certified by both the FSC and the PEFC has increased substantially, with sharp accelerations following the passage of the LTPA, EUTR, and ILPA.²⁴ Much of this growth, moreover, has occurred outside Europe and North America, which still account for the vast bulk of certified forests (UNECE 2017: 15-18; 2018: 18-20). In Indonesia, the number of FSC certified forest management units increased from 5 in 2007, before the onset of VPA negotiations with the EU, to 34 in March 2019, while the certified area more than tripled, from 739,368 to 2,539,000 hectares (FSC 2019; Marion Karmann, FSC, personal communication). PEFC certification likewise jumped from 727,078 hectares in 2015 (the first year reported) to 3,903,695 in December 2018 (PEFC 2015b, 2018). In the FSC case, this growth in certification was driven not only by growing demand from foreign customers (including large Japanese firms), but also by financial and capacity-building support from international donors and NGOs, such as the Borneo Initiative and The Nature Conservancy (Ruslandi et al. 2014; https://theborneoinitiative.org/; PT Gunung Gajah Abadi & PT Karya Lestari interviews). Nor is FSC certification easy to maintain: a number of Indonesian forest management units have had their certificates suspended in recent years (including two

²⁴ Approximately 16.5% of the combined total of 503 million hectares in mid-2017 was estimated to be certified by both schemes (UNECE 2018: 18).

natural forest concessions in East Kalimantan we visited in March 2018), typically for failing to clear corrective action requests within the deadline specified by the auditor.²⁵

Figure 1: Forest area certified by major schemes 2006-2017

Note: *FSC data as of June 2017; PEFC data as of March 2017.

Source: FAO-UNECE 2017: 15.

Accompanying this surge have been periodic demands from the major schemes and their customers for public recognition of private certification as evidence of due diligence and as a "safe harbor" against liability for illegal timber trafficking. Both the FSC and the PEFC have urged the European Commission and the national Competent Authorities to harmonize their approach to the use of private certification in EUTR compliance, whether by providing regularly updated EU-wide evaluations of their risk assessment and legality verification procedures (FSC 2015), or by recognizing approved "EUTR-compatible" certification as proof of "negligible risk" and ultimately as a "green lane" into the European market (PEFC

One of these concessions, Karya Lestari, has since been recommended for reinstatement: https://info.fsc.org/details.php?id=a023300000d4kJ8AAI&type=certificate; the other, Gunung Gajah Abadi, remains suspended: https://info.fsc.org/details.php?id=a024000000AkssuAAB&type=certificate&return=certificate.ph p. Between March 2018 and March 2019, at least seven FSC certified forest management units in Indonesia appear to have been suspended or allowed to lapse (FSC 2018, 2019). For an analysis of responses to FSC corrective action requests in Indonesia between 2000 and 2010, see Bartley (2018: 106-8).

2015a). Large wood operators such as IKEA, which maintains a demanding due diligence system for its complex global supply chain, have likewise pressed the EU to recognize international forest certification schemes like the FSC "as <u>one</u> important part of the necessary due diligence system" in order to foster a common approach to EUTR compliance across the 28 member states (IKEA 2018; EUTR/FLEGT Expert Group Minutes 7/12/2108). In the US, too, some industry representatives advocate recognition of FSC certification "as a possibility to demonstrate due care...while 'franchising out risks'" (Leipold & Winkel 2016: 42). Following an independent consultancy-led review and "Regulatory Impact Statement" on the effects of Australia's illegal logging regulations, the Liberal-National government, which came to power after the passage of the ILPA, proposed in 2017 that PEFC and FSC certified timber should automatically be "deemed to comply" with the Act's due diligence requirements in order to reduce the cost burden on businesses (ADAWR 2017, 2018a).

So far, however, none of these proposals for public recognition of private forest certification have been accepted, with the partial exception of the 2017 South Korean legislation.²⁶ US authorities have been clear from the outset that private certification, although useful in demonstrating due care, does not absolve operators of liability for Lacey Act violations, and the "main suppliers" in all of the recent high-profile LTPA cases (including Lumber Liquidators) were "FSC-certified in some capacity" (Johnson & Gehl 2019; Conniff 2018). The EUTR/FLEGT Expert Group recognizes the need to clarify and improve its guidance to CAs and operators on the use of third-party certification in EUTR due diligence, but continues to insist that the latter cannot substitute for independent risk assessments in highrisk areas (Hinrichs interview; EUTR/FLEGT Expert Group Minutes 19/4/18; Forest Trends 2016). Thus in March 2018, an operator importing FSC-certified wood from Cameroon was fined by the UK CA for failing to conduct due diligence on its legality (UNEP-WCMC Briefing Note Feb-Mar. 2018). In Australia, the government's proposed "deemed to comply" arrangement for certified wood imports were rejected by the Senate in the face of criticisms from transnational NGOs such as Forest Trends, who emphasized the "well-documented problem" of "fraud within even the most robust certification schemes", including the FSC, and their "challenges in controlling chain of custody, particularly through any sort of processing or multi-country trade hubs", as well as opposition from domestic producer

²⁶ The Korea Forestry Service has stated that "products from high risk countries will be investigated after customs clearance, even if certified", while working with the international community to monitor evidence of fraud and efforts to combat it within certification schemes (Saunders & Norman 2019: 11).

interests like the forestry workers' union (Forest Trends 2016; https://issuu.com/timberandforestryenews/docs/issue-498).

In the longer term, it is conceivable that the EUTR/FLEGT Expert Group or a more formalized version of the TREE network could take responsibility for producing authoritative, regularly updated evaluations of private certification schemes' risk assessment and legality verification procedures, as the FSC proposes, while leaving ultimate liability for trafficking in illegal timber with the operators themselves. Such coordinated evaluations could provide greater interpretive consistency and security for well-intentioned operators seeking to use private certification in complying with public legality regulations in different jurisdictions (Hoekman & Sabel 2019: 8), while nonetheless creating "an environment where companies will invest resources in maintaining their records and reporting to ensure no fraud in the system...or improving the credibility of [certification] schemes" (Forest Trends 2016).

In the meantime, however, a panoply of organizations, both private and public, have stepped in to bridge this gap in the transnational timber regime by bringing together reliable, up-todate information on illegal sourcing risks in different countries and sectors. Thus, for example, the World Resource Institute (WRI), a transnational NGO which was active in the passage of the LTPA, has created in collaboration with a network of government, civil society, and business partners an Open Timber Portal to provide quality-controlled information about the legality of forest operations in producer countries, drawing on a variety of sources, including public and company documents, independent monitoring reports, and geospatial data (Vallee 2017; TREE meeting summary 23-25/10/17; http://www.opentimberportal.org/). The European Forest Institute coordinates a Global Timber Tracking Network (GTTN) to promote technically "innovative approaches to verify trade claims of wood-based products" through the development of standardized testing protocols and guidelines, a reference database, and a service providers' directory (https://www.nature.com/articles/d41586-019-01035-7; Van Brusselen et al. 2018; Hinrichs www.globaltimbertrackingnetwork.org). Brazilian-based interview: BVRio, a multistakeholder organization which is now expanding to cover China, Indonesia, and West Africa, has established a Responsible Timber Exchange Platform for trading in legally sourced wood, based on big data analysis of all available primary information, including legal infractions and embargoes, and satellite imagery documents, (Parker www.bvrio.org/timber). NEPCon and BVRio publish periodically updated country-specific due diligence guides, as do UNEP-WCMC, the Australian Department of Agriculture, and the Korea Forest Service (Parker 2018; NEPCon 2018; https://www.unep-wcmc.org/featuredprojects/eu-timber-regulations-and-flegt). UNEP-WCMC, the EU FLEGT Facility, and

Client Earth all publish regular electronic newsletters, which collect and disseminate current information on public enforcement actions and substantiated concerns of illegal logging around the world, including those involving private certification schemes. Hence even in the absence of a single authoritative clearing house for the transnational timber legality regime, credible sources of information for operators seeking to mitigate the risks of illegal sourcing are becoming increasingly widely available.

6. China: Integrating the Elephant in the Room

A critical challenge for the emerging timber legality regime is its capacity to integrate China, the world's largest wood importer. Although domestic consumption accounts for more than three-quarters of total demand, China nonetheless remains the world's largest exporter of wood products, above all furniture and plywood. Around 60% of Chinese wood exports (by value) are directed to markets that have adopted public timber legality regulations, including 44% to the US and the EU alone (Wellesley 2014; Richer 2015; Speechly 2016; Barua et al. 2016; personal communication, James Hewitt). Hence the Chinese state and Chinese wood exporters have come under growing transnational pressure from both foreign governments and campaigning NGOs to demonstrate their willingness and capacity to avoid trafficking in illegally harvested timber.

Over the past decade, the Chinese government has become increasingly explicit in endorsing the fight against illegal logging as a global norm with which domestic enterprises should comply. Thus China participates actively in the APEC Experts Group on Illegal Logging and Associated Trade (EGILAT), which has developed a 'common understanding' of the problem and has developed a multi-year strategic plan to combat it (Speechly 2016: 36-7; https://www.apec.org/Groups/SOM-Steering-Committee-on-Economic-and-Technical-Cooperation/Working-Groups/Illegal-Logging-and-Associated-Trade). China has also signed a series of bilateral agreements on tackling illegal logging with the US, EU, Australia, Japan, Indonesia, Myanmar, and Mozambique (Speechly 2016: 34-6; Wellesley 2014: 10). The China-EU FLEG Bilateral Cooperation Mechanism (BCM), which held its eighth annual meeting in 2018, currently focuses on supporting new Chinese legislation to promote legallysourced timber, providing input to guidelines for Chinese overseas enterprises, developing trilateral cooperation with Indonesia around FLEGT licensing, and strengthening synergies with African VPA countries (http://www.euflegt.efi.int/es/activities-china; Speechly 2016: 32-3). The 2018 China-Mozambique MoU on forest conservation and illegal logging includes the World-Wide Fund for Nature (WWF) as part of its secretariat to enhance implementation by helping to collect trading data and coordinating with Chinese companies to support sustainable timber production.²⁷.

Since 2007, the Chinese Ministry of Commerce and State Forestry Administration (SFA) have produced three sets of guidelines on sustainable forest management, trade, and investment by Chinese overseas enterprises, which demand strict compliance with host country laws and regulations. But these guidelines remain voluntary, without any monitoring, reporting, or due diligence requirements to avoid illegal timber sourcing. Potentially more powerful are green credit guidelines adopted in 2012, which require banks to 'strengthen environmental and social risk management for overseas projects' and ensure that their sponsors 'abide by applicable laws and regulations' of the host jurisdiction, though here too formal monitoring and compliance arrangements remain limited (Speechly 2016: 25-6, 27-8; Barua et al. 2016: 47-8; Brack 2014).

In collaboration with the UK, the EU, and domestic industry associations, the Chinese government is seeking to construct a national timber legality verification system. A central component of this emergent system is a Timber Legality Verification Standard (TLVS) developed by the China National Forest Products Industry Association, which together with the China Timber and Wood Products Distribution Association covers more than 80% of Chinese importers and exporters. The TVLS sets out requirements for verification of compliance with applicable domestic laws both at the forest management level and throughout the chain of custody, including due diligence procedures. To build Chinese companies' capacities to implement these standards, the China-UK Collaboration on International Forest Investment & Trade (InFIT) and the Chinese Academy of Forestry (CAF) have created a China Responsible Forest Product Trade and Investment Alliance (China-RFA), which provides information, tools, and training on how to institute due diligence systems to comply with foreign timber legality regulations. While the standards themselves remain voluntary, their adoption by companies, subject to third-party certification and auditing, is expected to be spurred by the incorporation of legality requirements for imported timber into national regulation, plans for which are being developed by the SFA (EU FLEGT Facility 2017b, 2018b; Forest Trends 2017; Chen 2016.)28

https://www.reuters.com/article/us-mozambique-forest-logging/mozambique-reforms-timber-sector-to-counter-illegal-logging-idUSKBN1KG1F8; https://medium.com/@WWF/chinese-cooperation-is-good-news-for-mozambiques-forests-f21e3d2c2224.

²⁸ For earlier versions of these proposals, which included bilateral government-to-government agreements with timber-exporting countries alongside an industry association certification scheme,

Since the introduction of the US LTPA, the EUTR, and the Australian ILPA, Chinese wood processing firms have increasingly shifted their imports away from high-risk countries and sources, despite being obliged to pay a higher price per unit for legally verified timber. Not only did the share of tropical hardwoods in Chinese imports decline, but so too did that of timber from high-risk natural forests relative to lower-risk sources such as plantations. High-risk softwood imports from Russia were likewise replaced by more expensive certified timber from the US, Canada, New Zealand, Australia, and Europe (Barua et al. 2016; Wellesley 2014). While these shifts were driven by broader market trends, notably the growing scarcity of tropical natural timber, public legality requirements in consumer countries also appear to have played a significant part, as much of this legally verified wood was re-exported in processed form to northern markets. Thus, for example, an international survey of timber legality enforcement authorities conducted by Forest Trends found that China was the source country most frequently affected by buyer decisions to stop purchasing from risky suppliers (TREE Newsletter Autumn 2016). At the same time, however, transnational NGOs like Global Witness have exposed continuing evidence of illegal logging by Chinese companies in countries like Papua New Guinea and the Solomon Islands, and the volume of Chinese illegal wood exports to northern markets remains high, even if their relative share has declined (Global Witness 2017, 2018a, 2018b; Barua et al. 2016; Wellesley 2014).

Chinese forest enterprises themselves vary widely in size, management structure, and capacity to monitor and control their supply chains. A recent survey conducted by the CAF and western researchers found a high level of basic awareness of foreign legality requirements not only among export-oriented companies, but also among their domestic suppliers. The most common responses among the export-oriented firms were to apply third-party certification (mostly FSC controlled wood and chain of custody),²⁹ to provide information in accordance with customers' requirements, to establish internal supply-chain management and due diligence systems, and to change to low-risk suppliers. The study also shows that beyond the complexity of their supply chains, Chinese wood-exporting enterprises perceive the complexity of the transnational legality regime itself, with its varying verification standards, due diligence requirements, and penalties for non-compliance, as a major source of additional costs and constraint on their engagement. Hence the long-term

see Speechly (2016: 46-7); Wellesley (2014: 11-12).

²⁹ China has the highest number of FSC CoC certificates in the world (7349), but many of these are held by firms which do not actually handle certified products and are prohibited from using the FSC trademark under the scheme's revised rules (FSC 2019).

effectiveness of this joined-up regime will arguably depend not only on the capacity of consumer countries like the EU and the US to ensure that the emerging Chinese Timber Legality Verification System meets their own requirements and standards, but also on their capacity to align these with one another, for example through a process of benchmarking and mutual equivalence assessment within the TREE network, in order to present a common interpretive face to third-country suppliers (Nathan et al. 2018; cf. Hoekman and Sabel 2019).³⁰

7. Conclusions

Although there is still no overarching global forest governance regime, an increasingly joined-up transnational regime for timber legality has nonetheless developed over the past 15 years. This joined-up regime, as this paper has shown, is characterized by four main elements: growing convergence among autonomous actors and initiatives around a shared problem definition and accompanying norms, principles, and goals for combating illegal logging; the diffusion of mutually reinforcing and often cross-referencing rules and standards; progressive institutionalization of practical cooperation to advance these goals, including collaborative enforcement of sanctions for non-compliance; and comparative monitoring, review, and revision of implementation approaches at multiple levels across jurisdictions and schemes.

The emerging transnational timber legality regime is centered around the EU FLEGT initiative, whose experimentalist architecture has fostered productive interactions both with public regulation in other countries and with private certification schemes. But this joined-up transnational regime, as this paper has also shown, remains highly polyarchic, with broad scope for independent initiatives by non-state actors such as transnational NGOs and private service providers, along with national governments, international organizations, and multi-donor partnerships, in addition to the EU itself.

Horizontal integration and coordination of actors within this emerging regime thus depends on a series of experimentalist mechanisms, whose operation this paper has analyzed. One such mechanism is the normative and enforcement externalities resulting from crossreferencing and mutual endorsement of rules and standards across public authorities and

³⁰ The ISEAL Alliance (2019) has recently produced a draft *Good Practice Guide* for benchmarking voluntary sustainability standards, whose principles include ongoing monitoring of continued alignment.

private certification schemes, which Oren Perez (2011) has termed "ensemble regulation". Examples discussed above include enforcement reciprocity between the EUTR and the US Lacey, which helps to close loopholes in both legal frameworks, and the revision by the FSC and the PEFC of their standards and procedures to align them with new public legality regulations in timber-importing countries. A second experimentalist mechanism for horizontal integration and coordination is mutual learning and peer review through information pooling, comparison of enforcement approaches, development of common methodologies and tools, collaborative training and inspection activities, and joint assessment of "substantiated concerns" of illegal logging by front-line enforcement officials from different jurisdictions within the EUTR/FLEGT Expert Group and TREE network. A third closely related mechanism is public oversight and review of private certification and national legality verification schemes within these networks, which as suggested above could eventually develop into a full-blown system of comparative benchmarking and ongoing equivalence assessment. A final experimentalist mechanism is the "penalty default" effect of the EUTR and other public regulations in timber-importing countries, which have pushed major processing and exporting countries like China to cooperate with the emerging transnational legality regime, while also inducing transnational firms to develop due diligence systems aimed at minimizing the risks of illegal sourcing within their supply chains.

The transnational timber legality regime has expanded steadily in scope and extent in recent years, as new countries have agreed FLEGT VPAs with the EU and/or introduced public legality regulations for wood harvesting and trade, while coverage of private forest certification and legality verification schemes has also expanded. The emerging regime has likewise proved remarkably resilient to domestic and international political upheavals, including the advent of right-wing deregulatory governments in both Australia and the US (Leipold et al. 2016; WRI 2018), as well as Brexit, where the UK has announced that it will continue to enforce EU rules for timber imports, including due diligence requirements, even in the case of a no-deal exit (https://www.gov.uk/guidance/trading-timber-imports-and-exports-if-theres-no-brexit-deal).

The analysis in this paper thus confirms the claim advanced in previous work that a robust joined-up transnational regime can be assembled piece-by-piece under polyarchic conditions through coordinated learning from decentralized experimentation, without a hegemonic power to impose common global rules (Overdevest & Zeitlin 2014). At the same time, as the paper also shows, significant gaps nonetheless remain within the emerging timber legality regime, which if left unfilled are likely to constrain its future expansion and effectiveness. Most salient among these is the proliferation across jurisdictions of overlapping legality

standards, verification procedures, due diligence requirements, and penalties, which as we have seen in the case of China, raise the barriers and costs for firms seeking to comply with the underlying norm against trafficking in illegally logged wood. Here too, however, as suggested above, experimentalist mechanisms of benchmarking and mutual equivalence assessment through transnational institutions such as the TREE network offer a promising route to aligning the legality requirements and standards of participating jurisdictions, without imposing a single set of uniform rules and procedures across the emerging transnational regime.

Acronyms

ADAWR Australian Department of Agriculture and Water Resources

APEC Asia Pacific Economic Cooperation

APHIS Animal Plant Health Inspection Service (US)

BCM Bilateral Cooperation Mechanism

CA Competent Authority

CAF Chinese Academy of Forestry

CITES Convention on International Trade in Endangered Species

CoC Chain of Custody

DDS Due Diligence System

DOJ Department of Justice (US)

ECP Environmental Compliance Plan

EGILAT Experts' Group on Illegal Logging and Associated Trade

ETTF European Timber Trade Federation

EU European Union

EUTR European Union Timber Regulation

FAO Food and Agriculture Organization of the United Nations

FLEG Forest Law Enforcement and Governance

FLEGT Forest Law Enforcement, Governance and Trade

FSC Forest Stewardship Council

GTTN Global Timber Tracking Network

ILPA Illegal Logging Prohibition Act (Australia)

IMM Independent Market Monitor

InFIT International Forest Investment & Trade (UK-China Collaboration)

ITTO International Tropical Timber Organization

JIC Joint Implementation Committee

LL Lumber Liquidators

LTPA Legal Timber Protection Act

MO Monitoring Organization

PEFC Program for the Endorsement of Forest Certification

SFA State Forestry Authority (China)

TLAS Timber Legality Assurance System

TLVS Timber Legality Verification Standard (China)

TPP Trans-Pacific Partnership

TREE Timber Regulation Enforcement Exchange

UNECE United Nations Economic Commission for Europe

UNEP-WCMC United Nations Environment Program-World Conservation Monitoring Centre

VPA Voluntary Partnership Agreement

WAPPRIITA Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act (Canada)

WWF World-Wide Fund for Nature

WRI World Resources Institute

WTO World Trade Organization

References

- Abbott KW (2012) The Transnational Regime Complex for Climate Change. *Environment and Planning C: Government and Policy* 30, 571-90.
- Abbott KW (2014) Strengthening the Transnational Regime Complex for Climate Change. *Transnational Environmental Law* 3: 57-88.
- Abbott KW, Genschel P, Snidal D, Zangl B (eds) (2015). *International Organizations as Orchestrators*. Cambridge University Press, Cambridge.
- Abbott KW, Snidal D (2009b) Strengthening International Regulation through Transnational New Governance: Overcoming the Orchestration Deficit. *Vanderbilt Journal of Transnational Law* 42, 503–577.
- ADAWR (2017) Reforming Australia's Illegal Logging Regulations: Regulation Impact Statement, www.agriculture.gov.au/forestry/policies/illegal-logging/consultation-engagement.
- ADAWR (2018a) Statutory Review of the Illegal Logging Prohibition Act 2012, http://www.agriculture.gov.au/forestry/policies/illegal-logging/review-and-consultation.
- ADAWR (2018b) *Illegal Logging Compliance Plan*, http://www.agriculture.gov.au/forestry/policies/illegal-logging/compliance-and-enforcement.
- Ayres I, Braithwaite J (1992) Responsive Regulation: Transcending the Deregulation Debate, Oxford University Press, New York.
- Bartley T (2014) Transnational Governance and the Re-centered State: Sustainability or Legality? *Regulation & Governance* **8**, 93–109.
- Bartley T (2018) Rules without Rights: Land, Labor, and Private Authority in the Global Economy. Oxford University Press, Oxford.
- Barua SK, Penttilä J, Malström M (2016) China as a Timber Consumer and Processing Country: An Analysis of China's Import and Export Statistics with In-Depth Focus on Trade with the EU. Report for WWF-UK by Indufor Oy, https://www.researchgate.net/publication/309284462.
- Birchell J (2013) United States Lacey Act: Implications for Supply Chains. Presentation, Chatham House, London, 18 January, https://www.illegal-logging.info/content/us-lacey-act-implications-supply-chains.

- Brack D, Buckrell J (2011) Controlling Illegal Logging: Consumer-Country Measures. *Chatham House Illegal Logging Briefing Paper* 2011/01, https://www.chathamhouse.org/publications/papers/view/109642.
- Brack D (2014) Chinese Overseas Investment in Forestry and Industries with High Impact on Forests: Official Guidelines and Credit Policies for Chinese Enterprises Operating and Investing Abroad. Forest Trends, https://www.forest-trends.org/publications/chinese-overseas-investment-in-forestry-and-industries-with-high-impact-on-forests/.
- Cashore B, Stone M (2014) Does California Need Delaware? Explaining Indonesian, Chinese, and United States Support for Legality Compliance of Internationally Traded Products. *Regulation and Governance* **8**: 49–73.
- Chen J (2016) China Timber Legality Verification Scheme (CTVLS). Presentation to Chatham House Illegal Logging Update and Stakeholder Consultation Meeting, London, 16 June, https://www.illegal-logging.info/content/26th-illegal-logging-update-and-stakeholder-consultation-meeting
- Client Earth (2017) Comparison of Illegal Logging Laws in the European Union, the United States, Australia and Japan, https://www.clientearth.org/comparing-illegal-logging-laws-eu-usa-australia-2/.
- Client Earth (2018) National EUTR Penalties: Are They Sufficiently Effective, Proportionate and Dissuasive? https://europa.eu/capacity4dev/file/71432/download?token=q6xPoIlC.
- Colbourn E (2018) The Lacey Act: Lessons Learned from a Decade of Enforcement. Presentation to conference on 'Timber Trade and the Conservation of Forests Five Years EUTR', Thünen Institute, Hamburg, 8-9 October, https://www.thuenen.de/media/ti/Infrastruktur/.../09/08/03/Colbourn USDJ.pdf.
- Commonwealth of Australia (2018) Illegal Logging Prohibition Regulation 2012, compilation No. 6, 5 December.
- Conniff R (2018) Greenwashed Timber: How Sustainable Forest Certification Has Failed, *Yale Environment 360*, 20 February, https://e36o.yale.edu/features/greenwashed-timber-how-sustainable-forest-certification-has-failed.
- Cupit O (2018) EUTR Compliance through the Lens of a Monitoring Organization. Presentation to EUTR/FLEGT Expert Group meeting, Brussels, 19 April, ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail...docid=13208
- de Búrca G, Keohane RO, Sabel CF (2013) New Modes of Pluralist Global Governance. *New York University Journal of International Law and Politics* 45, 723-86.
- de Búrca G, Keohane RO, Sabel CF (2014) Global Experimentalist Governance. *British Journal of Political Science* 44, 477–486.
- Duggan P (2016) U.S. v. Lumber Liquidators, Inc. Presentation to Chatham House Illegal Logging Stakeholders Update Forum, London, 16 June, https://www.illegallogging.info/.../Day%201 Session%202 Patrick%20Duggan.pdf.
- EIA Forests (2018) A Tale of Two Laws: Using Existing EU and US Laws to Strengthen Action on Illegal Timber Trade, https://eia-international.org/report/tale-two-laws/.
- EU-FAO FLEGT Programme (2016) Annual Report 2016, www.fao.org/3/a-i6805e.pdf.

- EU FLEGT Facility (2010) *Current Guidance in the Development of Legality Definitions in FLEGT Voluntary Partnership Agreements*. http://forestindustries.eu/content/current-guidancedevelopment-legality-definitions-flegt-voluntary-partnership-agreements.
- EU FLEGT Facility (2017a) *Annual Report: Highlights and Insights from 2017*. http://www.euflegt.efi.int/es/publications/eu-flegt-facility-highlights-and-insights-from-2017.
- EU FLEGT Facility (2017b) *Introduction to China's Timber Legality Verification System*. http://www.euflegt.efi.int/publications/introduction-to-china-s-timber-legality-verification-system.
- EU FLEGT Facility (2018a) A Comparison of the Japanese Clean Wood Act and the EU Timber Regulation, URL.
- EU FLEGT Facility (2018b) Feasibility Analysis of the Incorporation of Timber Legality Requirements into Chinese Laws or Regulations to Promote Trade in Legal Forest Products. http://www.euflegt.efi.int/es/publications/feasibility-analysis-of-the-incorporation-of-timber-legality-requirements-o.
- European Commission (2003) Forest Law Enforcement Governance and Trade (FLEGT): Proposal for an EU Action Plan, COM (2003) 251 final, Brussels, 21 May.
- European Commission (2012) Commission Implementing Regulation (EU) No 667/2012 on the Detailed Rules Concerning the Due Diligence System and the Frequency and Nature of the Checks on Monitoring Organisations as Provided for in Regulation (EU) No 995/2010 of the European Parliament and the Council Laying Down the Obligations of Operators Who Place Timber and Timber Products on the Market. *Official Journal of the EU* L. 177/16, 7 July.
- European Commission (2016a) Evaluation of the EU Action Plan for Forest Law Enforcement Governance and Trade (FLEGT). SWD(2016) 276, Brussels, 2 August.
- European Commission (2016b) *Trade Sustainability Impact Assessment of the Free Trade Agreement between the European Union and Japan*. Publications Office of the EU, Luxembourg, https://ec.europa.eu/chafea/agri/content/trade-sustainability-impact-assessment-free-trade-agreement-between-european-union-and-japan.
- European Commission (2016c) *Guidance Document for the EU Timber Regulation*. C(2016) 755 final, Brussels, 12 February.
- European Commission (2016d) Evaluation of Regulation (EU) No 995/2010 of European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market (the EU Timber Regulation). SWD(2016) 34 final, Brussels, 18 February.
- European Commission (2018a) Guidance Document on Steps to Be Taken by EU Member States in the Case of Doubts as to the Legality of Timber from CITES-listed Species Imported into the EU, 2018/C 376/01. 18 October, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52018XC1018(01).
- European Commission (2018b) EU Timber Regulation Biennial Report for the Period March 2015-February 2017. COM(2018) 668 final, Brussels, 5 October.

- European Commission FLEGT Ad Hoc Expert Group (2018) Work Plan 2018-2022 for the Implementation of the Forest Law Enforcement, Governance and Trade Action Plan, http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupMeetingDoc&docid=19708.
- European Court of Auditors (2015) Special Report No 13/2015: EU Support to Timber-producing Countries under the FLEGT Action Plan. http://www.eca.europa.eu/en/Pages/DocItem.aspx?did=33292.
- EUTR/FLEGT Expert Group (2017) *Guidance Document Substantiated Concerns*. http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupMeetingDoc&docid=8851.
- EUTR/FLEGT Expert Group (2018) The Role of Third-Party Verification Schemes in Risk Assessment and Risk Mitigation. draft guidance document, http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupMeetingDoc&docid=13316.
- FAO-UNECE (2017) Forest Products Annual Market Review 2016-2017, https://www.unece.org/forests/fpamr2017.html.
- FAO-UNECE (2018) Forest Products Annual Market Review 2017-2018, https://www.unece.org/forests/fpamr2018.html.
- Fern (2016) Japan's New Law Fails to Meet G7 Commitment to Halt Trade in Illegal Timber: Government Must Ensure Robust Regulations and Broad Industry Participation. 25 May, https://www.fern.org/news-resources/japans-new-law-fails-to-meet-g7-commitment-to-halt-the-trade-in-illegal-timber-379/.
- Fern (2018a) Fern Annual Report January-December 2017, https://www.fern.org/news-resources/annual-report-2017-77/.
- Fern (2018b) *FLEGT VPA Update*, *December 2018*, https://loggingoff.info/library/trade-agreements-and-transparency-under-construction-vpa-update-december-2018.
- Fern (2018c) *The EU-Japan Free Trade Deal: A Threat to the Fight against Illegal Timber?* https://www.fern.org/news-resources/the-eu-japan-free-trade-deal-a-threat-to-the-fight-against-illegal-timber-53/.
- Finnemore M, Sikkink K (1998) International Norm Dynamics and Political Change. *International Organization* **52**: 887-917.
- Forest Trends (2016) Letter to Australian Department of Agriculture and Water Resources, December, https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=12&cad=rja&uact=8&ved=2ahUKEwiC1MHC1 rhAhVEZlAKHVrkD5wQFjALegQIBBAC&url=http%3A%2F%2Fwww.agriculture.gov.au%2FSiteCollectionDocuments%2Fforestry%2Frissubmissions%2Fforest-trends.pdf&usg=AOvVaw28THC479VD8-NDFMbmCPUW.
- FSC (2018) FSC Facts & Figures, 1 June, https://ic.fsc.org/file-download.facts-figures-june-2018.a-7470.pdf.
- FSC (2019) FSC Facts & Figures, 1 March, https://ic.fsc.org/file-download.facts-figures-march-2019.a-8240.pdf.

- Gardner S. (2018) Supporting Lacey Act Compliance. Presentation to to conference on 'Timber Trade and the Conservation of Forests Five Years EUTR', Thünen Institute, Hamburg, 8-9 October, https://www.thuenen.de/media/ti/Infrastruktur/Thuenen-Kompetenzzentrum_Holzherkuenfte/fuenf_Jahre_EUTR/Vortragsfolien/09_08_02_G ardner_USDA.pdf.
- Ghana-EU (2018) Aide Memoire Technical Session of the Joint Monitoring and Review Mechanism, 17 July, http://www.euflegt.efi.int/documents/10180/438736/JMRM+Aide+Memoire+Technical+session+17+July+2018.pdf/1844a726-4356-1159-314b-de149938d9c9.
- Global Witness (2017) Stained Trade: How US Imports of Exotic Flooring from China Risk Driving the Theft of Indigenous Land and Deforestation in Papua New Guinea, https://www.globalwitness.org/en/campaigns/forests/stained-trade/.
- Global Witness (2018a) *A Major Liability*: Illegal Logging in Papua New Guinea Threatens China's Timber Sector and Global Reputation, https://www.globalwitness.org/en/campaigns/forests/major-liability-illegal-logging-papua-new-guinea-threatens-chinas-timber-sector-and-global-reputation/.
- Global Witness (2018b) *Paradise Lost: How China Can Help the Solomon Islands Protect Its Forests*, https://www.globalwitness.org/en/campaigns/forests/paradise-lost/.
- Government of Canada (2017) 5 Ways Canada Prevents Illegal Logging, http://www.nrcan.gc.ca/forests/canada/laws/17479.
- Hoare A. (2015) *Tackling Illegal Logging and the Related Trade: What Progress and Where Next?* Chatham House, https://www.chathamhouse.org/publication/tackling-illegallogging-and-related-trade-what-progress-and-where-next.
- Hoekman B, Sabel CF (2019) Open Plurilateral Agreements, International Regulatory Cooperation and the WTO. *EUI Working Papers* RSCAS 2019/10, Robert Schuman Centre for Advanced Studies, European University Institute, http://cadmus.eui.eu/handle/1814/60905.
- Hoffmann MJ (2011) Climate Governance at the Crossroads: Experimenting with a Global Response after Kyoto. OUP, Oxford.
- Humphreys D (2006) Logjam: Deforestation and the Crisis of Global Governance. Earthscan, London.
- Humphreys D (2015) Negotiating the Future under the Shadow of the Past: The Eleventh Session of the United Nations Forum on Forests and the 2015 Renewal of the International Arrangement on Forests. *International Forestry Review* 17, 385-99.
- IKEA (2018) EU Timber Regulation: From an Operator's Perspective. Presentation to EUTR/FLEGT Expert Group meeting, 7 December, ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail...docid=25128.
- ISEAL Alliance (2019) *Sustainability Benchmarking Good Practice Guide*. Draft v.02 for consulation, 1 March, https://www.isealalliance.org/sustainability-news/consultation-open-iseal-developing-guide-good-benchmarking-sustainability.
- Jeffree M (2017) FLEGT Boosts Civil Society Self-Help. *European Timber Trade Federation News*, 28 March, http://www.flegt.org/news/content/viewItem/flegt-boosts-civil-society-self-help/28-03-2017/87.

- Johnson A, Gehl, D (2019) The 2008 "Illegal Logging Amendments": A Ten-Year Review of the Lacey Act's Impact on Law, Policy and the Environment, https://www.americanbar.org/groups/environment energy resources/publications/nat ural resources environment/2018-19/winter/the-2008-illegal-logging-amendments-tenyear-review-the-lacey-acts-impact-law-policy-and-environment/.
- Jordan A, Huitema D, van Asselt H, Forster J (eds) (2018). *Governing Climate Change: Polycentricity in Action?* CUP, Cambridge.
- Keohane RO, Victor DG (2011) The Regime Complex for Climate Change. *Perspectives on Politics* 9, 7-21.
- Lee S (2018) Korea's New Legislation against Illegal Logging and Associated Trade. Presentation to Chatham House Global Forum for Forest Governance, London, 9 November, https://www.illegallogging.info/sites/files/chlogging/GFFG_Day2Session1_SunmiLeeFORWEB.pdf.
- Leipold S, Sotirov M, Frei T, Winkel G (2016) Protecting "First World" Markets and "Third World" Nature: The Politics of Illegal Logging in Australia, the European Union and the United States. Global Environmental Change 39: 294-304.
- Leipold, S Winkel G (2016) Divide and Conquer: Discursive Agency and the Politics of Illegal Logging in the United States. *Global Environmental Change* **36**: 35-45.
- Liberia-EU (2018) Aide Memoire Sixth Meeting of the Joint Implementation Committee, Monrovia, June 13-14.
- Masuda S (2017) Nordic Baltic Cooperation & Customs Data. Presentation to TREE meeting, Valencia, 25 October, https://www.forest-trends.or/wp-content/uploads/2018/01/doc 5698.pdf.
- McMaugh T (2016) Australian Government's Illegal Logging Laws. Presentation to TREE meeting, Prague, 5-8 April, https://www.forest-trends.org/wp-content/uploads/imported/2c.%20for%20UPLOAD%20Teresa%20PRESENTATION%2 o-%20AUS-%20TREE%20prague.pdf.
- Momii M (2014) *Trade in Illegal Timber: The Response in Japan*. Chatham House, https://www.chathamhouse.org/publication/trade-illegal-timber-response-japan.
- Momii M (2016) Recent Developments on Timber Legality Regulations in Japan An Overview. Presentation to Chatham House Illegal Logging Update and Stakeholder Consultation Meeting, London, 16 June, https://www.illegallogging.info/sites/files/chlogging/Day%201 Session%201 Mari%20Momii.pdf.
- Nathan I, Chen J, Hansen CP, Xu B, Li Y (2018) Facing the Complexities of the Global Timber Trade Regime: How Do Chinese Wood Enterprises Respond to International Legality Verification Requirements, and What are the Implications for Regime Effectiveness? *Forest Policy and Economics* 92: 169-80.
- Ostrom E (2010) Beyond Markets and States: Polycentric Governance of Complex Economic Systems. *American Economic Review* **100:** 641-72.
- Overdevest C, Zeitlin J (2014) Assembling an Experimentalist Regime: Transnational Governance Interactions in the Forest Sector. *Regulation & Governance* 8, 22–48.

- Overdevest C, Zeitlin J (2015) Forest Law Enforcement Governance and Trade (FLEGT): Transnational Dynamics of an EU Experimentalist Regime. In: Zeitlin J (ed) *Extending Experimentalist Governance? The European Union and Transnational Regulation*, pp. 137–165. OUP, Oxford.
- Overdevest C, Zeitlin J (2018) Experimentalism in Transnational Forest Governance: Implementing European Union Forest Law Enforcement, Governance and Trade (FLEGT) Voluntary Partnership Agreements in Indonesia and Ghana. *Regulation & Governance* 12, 64-87.
- Parker J (2018) BVRio Responsible Timber Exchange. Presentation to VPA Lesson-Sharing Conference, Accra, Ghana, 26-27 November.
- PEFC (2015a) *PEFC Contribution to the Review of the EU Timber Regulation*, http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetailDoc &id=24441&no=7.
- PEFC (2015b) PEFC Global Statistics: SFM & CoC Certification, December, https://label.pefc.org/images/documents/PEFC_Global_Certificates_-__December_2015.pdf.
- PEFC (2018) PEFC Global Statistics: SFM & CoC Certification, December, https://label.pefc.org/images/documents/PEFC_Global_Certificates_-_Dec_2018.pdf.
- Perez L (2017) EU FLEGT VPAs Update. Presentation to Illegal Logging Update and Stakeholder Consultation Meeting, Chatham House, 19 June, https://www.illegallogging.info/sites/files/chlogging/Day1Session1LucaPerez.pdf.
- Perez O (2011) Private Environmental Governance as Ensemble Regulation: A Critical Exploration of Sustainability Indexes and the New Ensemble Politics. *Theoretical Enquiries in Law* 12: 543-79.
- Proforest (2012) Assessment of Certification and Legality Verification Schemes: For the European Timber Trade Federation (ETTF), <a href="https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=2ahUKEwiqr8ql3vrhAhWMJVAKHbdcDiEQFjAAegQIABAC&url=https%3A%2F%2Fwww.proforest.net%2Fproforest%2Fen%2Ffiles%2Fassessment-of-certification-and-legality-verification-schemes-2013-full-report.pdf&usg=AOvVaw2CnCbmqICcrIMsLroofAi
- Republic of Congo-EU (2018) Aide-Mémoire du Huitième Comité Conjoint de Mise en Oeuvre (CCM) de l'Accord de Partenariat Volontaire (APV-FLEGT) entre la République du Congo et l'Union Européenne, Brazzaville, 7-8 June, http://www.euflegt.efi.int/documents/10180/438736/Aide-me%CC%81moire+CCM8.pdf/4150e22c-ob71-86c1-d334-4ad5a7e47c45.
- Richer E. (2015) Overview of China's Timber Imports & Exports. Presentation to TREE workshop, Barcelona, 14 April, https://www.forest-trends.org/publications/overview-of-chinas-timber-imports-and-exports/.
- Ruslandi, Klassen A, Romero C, Putz FE (2014) Forest Stewardship Council Certification of Natural Forest Management in Indonesia. In *Forests under Pressure Local Responses to Global Issues*, IUFRO, 255-73, https://www.iufro.org/science/special/wfse/forests-pressure-local-responses/.
- Sabel CF, Victor DG (2017) Governing Global Problems under Uncertainty: Making Bottom-Up Climate Policy Work. *Climatic Change* 144, 15-27.

- Sabel CF, Zeitlin J (2008) Learning from Difference: The New Architecture of Experimentalist Governance in the EU. *European Law Journal* 14, 271–327.
- Sabel CF, Zeitlin J (2012) Experimentalist Governance. In: Levi-Faur D (ed) *The Oxford Handbook of Governance*, pp. 169–183. OUP, Oxford.
- Saunders J (2013) *EUTR Survey Paper*, Chatham House, http://illegallogging.info/uploads/EUTRSurveyPaperJadeSaunders.pdf.
- Saunders J (2014) *Certified Products and EUTR Compliance in the Furniture Sector*, Chatham House, https://www.chathamhouse.org/publications/papers/view/199154.
- Saunders J, Norman M (2019) Regulating the Trade in Illegal Timber: Republic of Korea Update, State of Play October 2018, Forest Trends, https://www.forest-trends.org/publications/regulating-the-trade-in-illegal-timber-republic-of-korea-update/.
- Sotirov M, Stelter M, Winkel G (2017) The Emergence of the European Union Timber Regulation: How Baptists, Bootleggers, Devil Shifting and Moral Legitimacy Drive Change in the Environmental Governance of Global Timber Trade. *Forest Policy and Economics* **81**: 69-81.
- Speechly H (2016) Scoping Study on EU-China Relationships in the Forestry Sector. Fern, https://www.fern.org/news-resources/scoping-study-on-eu-china-relationships-in-the-forestry-sector-380/.
- TEREA/S-FOR-S/TOPPERSPECTIVE (2016) Evaluation of the EU FLEGT Action Plan 2004–2014, Final Report, https://ec.europa.eu/europeaid/evaluation-eu-flegtaction-plan-forest-law-enforcement-governance-and-trade-2004-2014 en.
- UNEP-WCMC (2017) Overview of Competent Authority EU Timber Regulation Checks, March-May 2017, http://ec.europa.eu/environment/forests/pdf/Overview_of_CA_checks_March_May_2 017_FINAL.pdf.
- UNEP-WCMC (2018a) Overview of Competent Authority EU Timber Regulation Checks, June-November 2017, http://www.wcmc.io/Overview_CA_checks_June-November_2017.
- UNEP-WCMC (2018b) Overview of Competent Authority EU Timber Regulation Checks, December 2017-June 2018, http://www.wcmc.io/Overview_CA_checks_December_2017-June_2018.
- UN Economic and Social Council (2017) Resolution Adopted by the Economic and Social Council on 20 April 2017: United Nations Strategic Plan for Forests 2017-2030 and Quadrennial Programme of Work of the United Nations Forum on Forests for the Period 2017-2020, E/RES/2017/4, http://daccess-ods.un.org/access.nsf/Get?OpenAgent&DS=E/RES/2017/4&Lang=E.
- Vallee M (2017) The Open Timber Portal: Incentivizing Legal Timber Trade by Improving Access to Information. Presentation to TREE meeting, Valencia, Spain, 23-25 October, https://www.forest-trends.org/wp-content/uploads/2018/01/doc_5694.pdf.

- Van Brusselen J, Schmitz N, Schifferdecker G (2018) GTTN: Global Timber Tracking Network. Presentation to to conference on 'Timber Trade and the Conservation of Forests Five Years EUTR', Thünen Institute, Hamburg, 8-9 October, https://www.thuenen.de/media/ti/Infrastruktur/Thuenen-Kompetenzzentrum_Holzherkuenfte/fuenf_Jahre_EUTR/Vortragsfolien/09_10_van_B russelen GTTN.pdf.
- Vietnam-EU (2017) Vietnam-European Union Voluntary Partnership Agreement of Forest Law Enforcement, Governance and Trade (VPA-FLEGT) Joint Implementation Framework (JIF), version 4, December, http://www.euflegt.efi.int/documents/10180/399868/Vietnam-EU+VPA_Joint+Implementation+Framework_December+2017_English.pdf/c8289e4e-d857-31f9-067c-bf4329df83ad.
- Wellesley L (2014) *Trade in Illegal Timber: The Response in China*. Research Paper, Chatham House, https://www.chathamhouse.org/publication/trade-illegal-timber-response-china.
- Williamson M (2016) Canada's Efforts to Combat Illegal Logging and Its Trade. Presentation to China-Canada Roundtable on Illegal Logging, Beijing, 2 December.
- WRI (2018) With US Out of TPP, So Are Measures to Curb Illegal Logging, 14 March, https://www.wri.org/blog/2018/03/us-out-tpp-so-are-measures-curb-illegal-logging.
- Zeitlin J (ed) (2015) Extending Experimentalist Governance? The European Union and Transnational Regulation. OUP, Oxford.

Minutes and Newsletters

Client Earth EUTR News, https://www.clientearth.org/eutr/.

EUTR/FLEGT Expert Group Minutes, http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=3282.

Independent Market Monitor Newsletter, http://www.flegtimm.eu/index.php/component/users/?view=remind&Itemid=101.

TREE meeting summaries

2013-2017: https://www.forest-trends.org/who-we-are/initiatives/#ssection-5.

2018-2019: https://www.forest-trends.org/events/timber-regulation-enforcement-exchange-london/

TREE Newsletters, 2016: https://www.forest-trends.org/who-we-are/initiatives/#ssection-5

UNEP-WCMC, Briefing Notes for the Competent Authorities Implementing the EU Timber Regulation, https://www.unep-wcmc.org/featured-projects/eu-timber-regulations-and-flegt.

Interviews and Personal Communications

Patrick Duggan, US Department of Justice Environmental Crimes Section, email 25 October 2018.

PT Gunung Gajah Abadi and PT Karya Lestari, interviews with managers and staff, East Kalimantan, 12-14 March 2018.

James Hewitt, independent consultant and timber trade expert, email 9 April 2019.

Thorsten Hinrichs, German Federal Ministry of Food and Agriculture (BMEL), European and International Forestry Unit, interview 22 October 2018.

Marion Karmann, FSC, email 5 April 2018.

Jade Saunders (Chatham House/Forest Trends/TREE), interview London 25 September 2018; email correspondence September-October 2018.