Check for updates

Environmental Policy and Governance

WILEY

Environmental Policy and Governance

RESEARCH ARTICLE OPEN ACCESS

Meshing or Clashing Gears? Design (In)Coherences Between the EU Regulation on Deforestation-Free Products and Third Country Environmental Regulations

R. F. Ziegert[1] | L. Berning[1] | M. Cramm[2] | S. Wunder[2] | C. Azevedo-Ramos[3] | M. Sotirov[1]

[1]Chair of Forest and Environmental Policy, Faculty of Environment and Natural Resources, University of Freiburg, Freiburg im Breisgau, Germany | [2]European Forest Institute, Bonn, Germany | [3]Centre for Advanced Amazonian Studies (NAEA), Federal University of Pará, Belém, Brazil

Correspondence: R. F. Ziegert (rafaella.ziegert@ifp.uni-freiburg.de)

Received: 11 April 2025 | **Revised:** 14 October 2025 | **Accepted:** 2 December 2025

Keywords: Brazil | Cameroon | deforestation | EUDR | Gabon | land use | policy coherence | regulation interaction

ABSTRACT

As new regulations emerge to address deforestation and unsustainable land use, their interaction with existing national frameworks remains uncertain. This study examines the (in)coherence between the European Union Regulation on deforestation-free products (EUDR) and domestic deforestation and land use regulations in Brazil, Cameroon and Gabon. Using a regulation interaction coherence framework, we analyse policy documents and expert interviews. While overarching goals align in reducing deforestation, specific objectives reveal competitive dynamics based on national interests and whether the regulation is trade-restricting or market-facilitating. Incoherence arises in regulatory scope, deforestation-free requirements, cut-off dates, and the EUDR's partial recognition of existing standards. The legality requirement is largely coherent, offering a potential point for policy alignment. Enforcement mechanisms show mixed coherence, as regulations employ similar tools but differ in their sanction-based versus voluntary compliance nature and third-party monitoring. The EUDR's implementation may generate both synergies (e.g., compliance facilitation, shared monitoring tools) and conflicts (e.g., sovereignty concerns, regulatory costs, delegitimisation). These findings are critical for assessing the EUDR's effectiveness in reducing global deforestation. We argue that transnational regulations should foster synergy with national frameworks to enhance impact and prevent unintended regulatory fragmentation. Empirically, our study provides insights for designing transnationally coordinated socio-environmental policies. Theoretically, it advances research on policy coherence and public-private regulatory interaction. Future research should conduct ex-post impact assessments to evaluate the real-world implications of EUDR implementation.

1 | Introduction

Unsustainable and/or illegal land use, land use change and forestry practices causing deforestation, forest degradation, biodiversity loss, and greenhouse gas emissions are regulated through a mix of demand- and supply-side policies and voluntary initiatives (Begemann et al. 2021; Lambin et al. 2014; Lambin and Thorlakson 2018). Following the 1992 Earth Summit in Rio de Janeiro, the 1990s saw an increase in global (e.g., United Nations Convention on Climate Change), transnational (e.g., European Union (EU) Timber Regulation, forest and agricultural certification) and national (e.g., combating deforestation strategies, sectoral agreements) initiatives to address these issues. This includes public (e.g., national forest laws), private (e.g., non-governmental organisations (NGOs) and industry regulation) and hybrid (i.e., involving both public and private actors) regulations (Abbott and Snidal 2021; Dimitrov 2005; Sotirov et al. 2020). While the term *regulation* is frequently associated with legally binding public policy, it can also encompass non-state regulation, such as forest and agricultural certification, in

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2025 The Author(s). *Environmental Policy and Governance* published by ERP Environment and John Wiley & Sons Ltd.

view of contractual private law (Eberlein et al. 2014; Abbott and Snidal 2021). Therefore, this article will use the encompassing term *regulations* to refer to its three forms of initiatives (i.e., public, private and hybrid).

Transnational supply chains connect supply- and demand-sides across remote regions worldwide in complex, interconnected, *telecoupled* systems, where causes and effects transcend national borders, creating forms of mutual interdependency across distant regions (Lenschow et al. 2016; Meyfroidt et al. 2013). Regulatory supply-chain initiatives address forest and agricultural commodity production (e.g., timber, soy, cattle, palm oil), trade and consumption as crucial drivers of tropical deforestation (Hosonuma et al. 2012; Pendrill et al. 2022). They are highly interdependent since they regulate the same commodities, territorial scope and/or require similar standards (Cashore et al. 2021), posing theoretical and empirical questions about regulation interaction and (in-)coherence. Policy coherence has been defined as the state in which mechanisms achieve their goals without significant trade-offs, with their requirements and instruments aligned to support their goals (Jordan and Lenschow 2010).

Despite the puzzling co-existence of progressing global deforestation and forest degradation and multiple regulations to address them (Sotirov et al. 2020), systematic analyses of interactions between regulations on deforestation and forest degradation, especially across geographic scales, are still lacking in the scientific literature (Cashore et al. 2021; Lambin and Thorlakson 2018; Sellare et al. 2022; Schleifer and Fransen 2024). Furthermore, scholars have called for a better understanding of *homegrown* legality and sustainability regulations in the Global South, as well as their interaction with comprehensively studied transnational initiatives originating in the North (Marques and Eberlein 2021; van der Ven et al. 2021; Sun and van der Ven 2020). In particular, understanding regulatory (in-)coherences between their different forms (i.e., public, private, hybrid) is key to identifying effective policy mixes for improved environmental and socioeconomic outcomes (Howlett and Rayner 2007; Schleifer and Fransen 2024; Sotirov et al. 2022). These have been referred to as *smart regulation mixes*, where 'a pluralistic set of interventions and approaches characterised by mandatory, self-regulatory and market-based measures, as well as public and private orderings are needed to (...) produce more effective and efficient policy outcomes' (Williamson and Lynch-Wood 2021, 39).

To address the outlined empirical and theoretical knowledge gaps, we use the European Union Regulation on deforestation-free products (EUDR) as a case study. This new transnational trade regulation was adopted in 2023 to reduce the EU's and global deforestation footprint associated with supply chains of selected agricultural and forest commodities, referred to as forest risk commodities (FRCs). It represents a transnational regulatory change by introducing unprecedented EU deforestation-free and forest degradation-free requirements for cattle, cocoa, coffee, oil palm, rubber, soya and wood supply chains (Berning and Sotirov 2023, 2024). It serves as a timely example in analysing interactions between newly designed transnational environmental regulations and existing domestic regulations. Identifying what a new policy brings is vital to understanding opportunities for implementation synergies and challenges of unintended trade-offs, as 'more policy is not always more effective policy' (Utesch-Xiong et al. 2022, 1).

The EUDR has been identified as a viable policy option to potentially curb deforestation (Bager et al. 2021) by hardening corporate actors' accountability for negative socio-environmental externalities across their supply chains (Berning and Sotirov 2023). However, research also flags risks of unintended or undesired effects, such as disproportionately affecting smallholders (van Noordwijk et al. 2025; Zhunusova et al. 2022), trade leakage to less regulated markets and segregated supply chains (Bastos Lima and Schilling-Vacaflor 2024; Muradian et al. 2025; Vasconcelos et al. 2024), overlap with voluntary initiatives regulating the same FRCs, and opposition from third countries due to a high degree of unilateralism and undermining existing national initiatives (Berning and Sotirov 2024; Muradian et al. 2025; Oliveira et al. 2024). Investigating the EUDR's (in)coherence with third country regulations can help narrow knowledge gaps related to effectively designing demand- and supply-side regulation mixes. A third country is defined as a state that is not a member of the European Union (European Union Migration and Home Affairs, n.d.).

The policy coherence literature largely affirms that coherent policies can enable policy effectiveness (Bali et al. 2019; Cejudo and Michel 2017; Howlett and Rayner 2013). Others argue that policy coherence may not be effective for all societal goals, such as in reducing inequality (Browne et al. 2023) or in avoiding highly centralised governance (Meijers and Stead 2004). It is, therefore, essential to manage, rather than avoid, policy incoherence (Meijers and Stead 2004). Beyond coherence, policy mixes should be smartly designed to avoid policy instruments simply being 'stacked on top of each other' (Howlett and Rayner 2007, 1). However, significant empirical and theoretical knowledge gaps remain regarding whether and under which conditions policy mixes are smart. A smart mix is defined by the complementary, rather than contradictory, combination of policy instruments and the use of different regulatory approaches to achieve a specific policy outcome (Williamson and Lynch-Wood 2021). We contribute to this discussion by conducting an interpretative qualitative policy design and key expert interview analysis of an incoming transnational regulation in interaction with selected existing domestic regulations (see Section 3). We answer the following research question: To what degree is EUDR design (in)coherent with selected third country regulations governing domestic deforestation and land use change?

Our results highlight how policy design can determine the degree of coherence between new and existing regulations, possibly culminating in (un)intended consequences within a *transnational-national policy mix*. In the following, Section 2 explains the theoretical framework behind our regulation coherence analysis, followed by the justification for the selected regulations and methods for data collection and analysis (Section 3). Section 4 presents the results of the interaction between regulations at different scales. Concluding remarks discuss the main findings and limits of the research (Section 5), culminating in our contribution to future research and recommendations (Section 6).

17569338, 2026, 1, Downloaded from https://onlinelibrary.wiley.com/doi/10.1002/eet.70041, Wiley Online Library on [16/11/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

2 | Theoretical Framework

Guided by the school of thought of historical institutionalism (Hall 1993, 2010) and the related policy design literature (Howlett and Rayner 2013), this article uses the broader concept of *regulation* to refer to all public, hybrid and private policies and governance mechanisms that institutionalise rules and means of implementation and enforcement to attain institutional and actor behavioural change (Eberlein et al. 2014). While regulation is frequently associated with legally binding public policy, it can also encompass non-state regulation, such as forest and agricultural certification (Eberlein et al. 2014; Abbott and Snidal 2021). Public regulations are designed, implemented and enforced by public actors (e.g., national state actors, regional bodies (e.g., EU)). Private regulations are devised by private actors (e.g., NGOs, business actors) and are generally not legally binding under public law. While private actors largely adhere to private standards voluntarily, they are *parallel regulatory systems* interacting with formal legal systems by setting standards that augment, displace, or conflict with public regulations (Meidinger 2000, 232). Hybrid regulations include both public and private actors (Larsen et al. 2018; Moser and Leipold 2021), for instance, in sectoral agreements (Ziegert and Sotirov 2024).

Regulation interaction (in-)coherences can be assessed vertically, within and across scales of governance (e.g., national and international), and horizontally, within and across sectors (e.g., forestry, agriculture, environment) (Nilsson et al. 2012). This article adopts a vertical coherence perspective, analysing the interaction between the EUDR as a transnational environmental regulation and existing domestic regulations, and a horizontal perspective by analysing mechanisms regulating different FRCs and their related supply chains (e.g., soy and timber). Interaction can be analysed through the different stages of the regulation cycle, from agenda setting to rules formation, implementation and monitoring (Abbott and Snidal 2021; Eberlein et al. 2014; Tchinda and Talbot 2024). This article focuses on the *rules formation* stage, which is where regulatory standards are designed and decided upon (Eberlein et al. 2014).

Regulations take place internationally (i.e., concerning global issues with a worldwide scope), transnationally (i.e., across and beyond national borders, but not worldwide), nationally (i.e., encompassing a whole country's jurisdiction), or sub-nationally (i.e., specific jurisdiction within a country) (Sotirov et al. 2020). They consist of objectives (e.g., reducing biodiversity loss), requirements (e.g., deforestation-free), implementation instruments (e.g., risk assessments) and enforcement instruments (e.g., penalties and fines) (Nilsson et al. 2012), which interact within the same governance sphere. Governance spheres encompass private and public actors who administer particular modes of regulation, identifying claimed or attributed responsibilities for addressing specified issues and problems (Cashore et al. 2021). Such interactions within a governance sphere can portray different degrees of coherence (Eberlein et al. 2014; Cashore et al. 2021).

Based on policy coherence literature (Cejudo and Michel 2017; Howlett and Rayner 2007; Jordan and Lenschow 2010; Nilsson et al. 2012; Sotirov and Storch 2018) and governance interaction literature (Abbott and Snidal 2021; Cashore et al. 2021; Eberlein et al. 2014; Knudsen and Moon 2017; Tchinda and Talbot 2024), we understand regulation interaction as *coherent* when the regulations' elements are complementary. They are *complementary* when their goals, requirements and implementation and enforcement instruments collaborate (e.g., public-private partnership, public-public regulation, data sharing) or are aligned (exist independently but have similar characteristics). Conversely, regulations are *incoherent* when their goals, requirements, and implementation and enforcement instruments compete or are chaotic. *Competition* is when interactions are antagonistic (e.g., opposite goals or instruments at odds with the goals of other initiatives), competitive (e.g., competition for market, funding, reputation and authority), substituting (e.g., a regulatory space or gap), or co-opting (e.g., standards and instruments superimpose existing standards) (Cashore et al. 2021). *Chaotic* interactions refer to relationships between regulations that are unclear, unpredictable, and lack a point of comparison (e.g., no clear pattern to analyse) (Eberlein et al. 2014). Lastly, interacting layers (e.g., goals, requirements and implementation instruments) may exhibit more than one type of interaction (e.g., complementary and competitive), resulting in an *ambivalent* interaction that is both *coherent and incoherent* simultaneously.

Regarding the interacting layers, we distinguish Nilsson et al.'s (2012) policy objectives into *overarching goals* and *specific goals*. Overarching goals are usually more strategic and vision-based (e.g., EUDR's goal of reducing global deforestation). Specific goals are more focused objectives, seen as a step to achieve the main objective (e.g., EUDR's goal of minimising the Union's contribution to deforestation and forest degradation worldwide) (Muradian et al. 2025). We also redefine Nilsson et al.'s (2012) 'policy instruments and policy implementation' as *regulatory requirements* and *implementation and enforcement instruments*. Regulatory requirements are specific rules and standards that regulated actors must adhere to, including the scope and regulated subjects (e.g., EUDR's legality requirement). Implementation and enforcement instruments are the tools used to achieve the stated goals and standards (e.g., fines, audits, information disclosure).

Figure 1 visually represents our 'Regulation Interaction Coherence Framework'.

3 | Methodology

To answer our research question on the EUDR's designed (in)coherence with selected producer country regulations, we first identified the regulations to be assessed in interaction with the EUDR. Second, we collected data through the respective legislative texts and policy documents, as well as semi-structured interviews with key experts, and analysed it based on our analytical framework.

We sought to provide a comprehensive regulation (in)coherence analysis by selecting representative regulations that comply with the following criteria: (1) regulations from producer countries that have a relevant trade relationship with the EU, in terms of share and volume, and regulate the same commodities (e.g., Brazil's Amazon Soy Moratorium regulates soy, which is an important trade commodity for the EU and Brazil), (2) regulations

17569338, 2026, 1, Downloaded from https://onlinelibrary.wiley.com/doi/10.1002/eet.70041, Wiley Online Library on [16/11/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

that are domestically relevant (e.g., forest codes that regulate private property, which is where FRCs are produced), (3) regulations that have a unique regulatory design (i.e., each represents a different degree of public, private, or hybrid regulation) and (4) regulations that may be (or have been) impacted by the EUDR's implementation since they are in the same governance sphere (e.g., regulate deforestation). This resulted in the selection of regulations reported within Table 1:

Although the EU-Cameroon FLEGT VPA has been terminated, we still find it important to maintain it as an example of regulatory interaction, as VPAs still exist with other countries; it is a unique type of regulation related to transnational trade, and its termination is partly related to the EUDR.

Following the selection of regulations, we collected data from legislative and policy documents, as well as through interviews. Since our focus is on the regulations' design, our primary data analysis was the regulatory documents, then using the interviews to triangulate the document-based data, complementing and enriching it with essential quotes and comments emerging from a saturation of statements. The respective legislative texts and policy documents (Table 1) were downloaded for analysis from either official government websites (e.g., EUR-Lex Access to European Union law) or official websites of the agreement (e.g., ASM portal). Regarding hybrid regulations (ASM and Gabon's mandatory FSC), documents from official reporting (Agrosatélite for ASM) and from FSC (for Gabon), such as their national strategy and international reports on principles, criteria and system integrity, were also analysed.

In-person and online semi-structured key expert interviews were conducted with 107 experts who were involved in the design or implementation of the regulations or had expert knowledge (i.e., purposive sampling), followed by snowball sampling (i.e., interviewees suggested other experts in the field) (Neuman 2014). Interviewees included public actors, as well as international organisations, NGOs, research institutions, certification schemes, and business organisations across the forest and agricultural sectors. Written informed consent was obtained from the

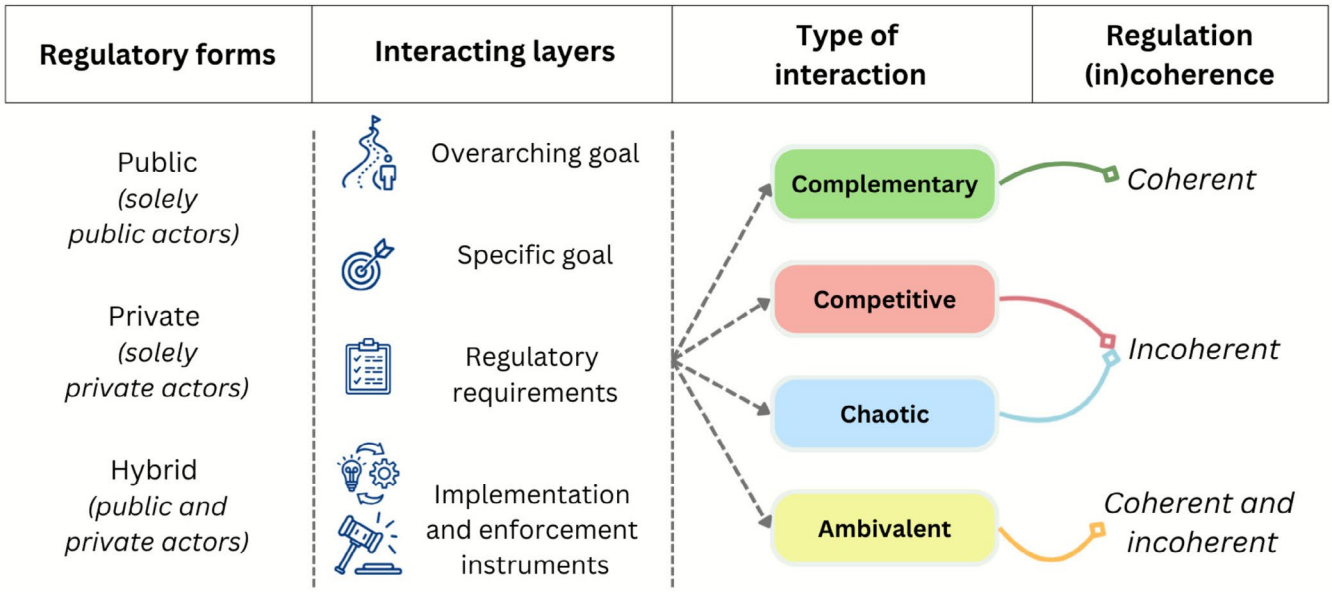

FIGURE 1 | Regulation interaction coherence framework (own illustration based on Eberlein et al. 2014, Cashore et al. 2021 and Nilsson et al. 2012, Sotirov et al. 2020).

TABLE 1 | Selected regulations for (in)coherence analysis with the EUDR.

Regulation form	ID	Name
National public regulations	Law 12.651/2012	Brazilian Forest Code
	Law 94/01	Cameroonian Forestry Law
	Law No. 016/01	Gabonese Forest Code
Subnational hybrid regulation	—	Brazil's Amazon Soy Moratorium (ASM)
Transnational-national, mainly public regulation	Council Regulation (EC) No 2173/2005	EU-Cameroon's Voluntary Partnership Agreement (VPA) under the EU Forest Law Enforcement, Governance and (FLEGT) Regulation
National hybrid regulation	—	Gabon's mandatory Forest Stewardship Council (FSC) certification

17569338, 2026, 1, Downloaded from https://onlinelibrary.wiley.com/doi/10.1002/eet.70041, Wiley Online Library on [16/11/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

interviewees (Flick 2018), and in a few cases where interviewees did not consent to be recorded, we took detailed notes.

Interviews were conducted from October 2023 to April 2024, in English, German, Portuguese and French, with experts based in Brazil, Cameroon, Europe, Gabon and the United States (Supporting Information 3). All direct quotes from interviews not conducted in English were translated by the authors. Interviewees were asked questions regarding policy (in)coherence between the selected regulations and the EUDR, as well as open-ended questions regarding which forms of regulation (e.g., private, public, hybrid) are most important for conserving biodiversity and reducing deforestation and forest degradation, and why. Interview partners also addressed questions related to the implementation of existing regulations and expectations around the EUDR's future implementation (Interview Protocol can be viewed in Supporting Information 1). Anonymised interviews were transcribed by researchers with the assistance of the Descript tool.

Finally, the documents and transcriptions underwent in-depth qualitative content analysis. A codebook (Supporting Information 2) was developed based on our analytical framework (Figure 1) using theory-derived deductive analytical categories and inductive open codes (Mayring and Fenzl 2019). The codebook includes definitions and examples that further elucidate how each concept in the framework was operationalised in our analysis. The codebook helped researchers ensure reliability in comparing their findings. Researchers held frequent meetings to exchange insights about their analysis, which was informed by the codebook and conducted using MAXQDA. Interviews are cited in this paper by their identification (ID) number (e.g., I2) (Supporting Information 3).

3.1 | Selected Regulations: An Overview

3.1.1 | EU Regulation on Deforestation-Free Products: Transnational Public Regulation

The EUDR was adopted to address perceived shortcomings in the hitherto existing policy and legal framework (FLEGT Regulation, FLEGT VPAs and EUTR) that did not directly address deforestation and excluded agricultural commodities (Recitals 32, 38). The EUDR entered into force on 29 June 2023, and it repeals the EU Timber Regulation (Regulation (EU) No 995/2010, EUTR) (Art. 38). The EUDR prohibits market participants from placing or making available on the EU internal market, or exporting from the EU, regulated commodities and products unless they confirm, through submission of a due diligence statement, compliance with the EUDR's deforestation-free and legality requirements.

3.2 | Cluster of National Public Regulations: Brazilian Forest Code, Cameroonian Forestry Law and the Gabonese Forest Code

The Brazilian Forest Code (Law 12.651/2012), first established in 1934 and amended several times until 2012, regulates the conservation of native vegetation, protected areas, the supply of raw forest materials, the origin of forest products, and prevents forest fires in private rural lands (Art. 1). Public forests in Brazil are regulated mainly by the Public Forests Management Law (11.284/2006) and the National System of Nature Conservation Units Law (9.985/2000). The Cameroonian Forestry Law (Law 94/01), adopted in 1994, entered into force in 1995 and implemented under Decree No. 95/531, sets out the application of the forestry regime in Cameroon. It regulates forestry, wildlife, and fisheries, ensuring sustainable conservation within the use of these resources and ecosystems (Art. 1). The Gabonese Forest Code (Law No. 016/01) was adopted in 2001; subsequent laws, decrees, ordinances, and orders complement its implementation (e.g., National Technical Guide for Forest Management, 2004). It regulates the water and forestry sectors in Gabon, ensuring sustainable management and rational use of forests, wildlife and fishery resources (Art. 3).

3.3 | Brazil's Amazon Soy Moratorium: Subnational Hybrid Regulation

Brazil's ASM is an agreement signed in 2006 by major soybean traders (e.g., members of the Brazilian Association of Vegetable Oil Industries, the National Association of Grain Exporters and environmental NGOs, led by Greenpeace) (Gibbs et al. 2015). Companies agreed not to sell, purchase, or finance soy from areas in the Amazon biome that were deforested after July 2008. The public sector joined in 2008, supporting the monitoring system and transforming it into a hybrid governance regulation. The ASM is governed through its multi-stakeholder Soy Working Group, and its enforcement highly depends on a monitoring process including satellite data from the National Institute for Space Research's Amazon Deforestation Monitoring Project and the state's Rural Environmental Registry (CAR) (Ziegert and Sotirov 2024).

3.4 | EU-Cameroon's FLEGT-VPA: Transnational–National Mainly Public Regulation

The FLEGT-VPA between the EU and Cameroon was signed in 2010, adopted (ratified) in 2011, and terminated by the European Commission on 02 October 2024 (European Commission 2024). It was a trade agreement aimed at fighting illegal logging in Cameroon to ensure legal Cameroon-EU timber supply chains. It was voluntarily negotiated between the two parties and became legally binding upon its ratification (Zeitlin and Overdevest 2021). A FLEGT-VPA is meant to lead to a FLEGT licencing scheme, whereby timber and wood products exported to the EU would be accompanied by a FLEGT license, fulfilling the due diligence requirements under the EUTR and allowing them a *green lane* entry to the EU (Dieguez and Sotirov 2021; Köthke et al. 2023). However, the EUDR, which repeals the EUTR, does not ensure this *green lane* as it only fulfills EUDR's legality requirement (Art. 10–3). Furthermore, the EU-Cameroon VPA process did not reach this implementation stage due to political, economic, and technical challenges (Carodenuto et al. 2024).

17569338, 2026, 1, Downloaded from https://onlinelibrary.wiley.com/doi/10.1002/eet.70041, Wiley Online Library on [16/11/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

EUDR	National public forest laws (Brazil, Cameroon, Gabon)	Brazilian Amazon Soy Moratorium	EU-Cameroon FLEGT-VPA	Gabon Mandatory FSC Certification
Overarching goal	**Complementary**	**Complementary**	**Complementary**	**Complementary**
• Contribute to a reduction in global deforestation	• Protect native vegetation and reduce land degradation	• Reduce deforestation caused by soy production	• Ensure all timber and derived product imports into the EU from Cameroon have been legally produced or acquired	• Increase Gabon's forestry sector sustainability, quality, and market attractivity
Specific goal(s)	**Ambivalent**	**Complementary**	**Competitive**	**Complementary**
• Minimise the EU's contribution to global deforestation and forest degradation • Reduce the EU's contribution to greenhouse gas emissions and biodiversity loss	• Regulate economic use of land.	• Not sell or produce soy that has caused deforestation in the Brazilian Amazon biome	• Promote trade in timber and derived products and the development of forest industries in Cameroon, creating market-related incentives	• Achieve 100% FSC certification of all forestry operations in Gabon by 2025
Regulatory requirements	**Ambivalent**	**Ambivalent**	**Ambivalent**	**Complementary**
Scope: forested land in producer countries; seven commodities and its derived products **For market participants:** Prohibition clause → • Deforestation-free requirement (deforestation- and forest degradation-free after the 31 December 2020 cut-off date) • Legality requirement • Due diligence statement submission obligation; with minimum information requirements (e.g. geolocation) through a centralized information system **Regulatory requirements for the European Commission and interested EU Member States:** • Mandatory cooperation with third countries, in particular those classified as high risk under the benchmarking system	• **Scope:** all private lands in national jurisdiction; not commodity-specific • Legal requirement to protect a certain % of native vegetation (Brazil and Cameroon) • Sustainable use of fauna and flora • Cut-off date July 2008 (Brazil)	• **Scope:** relevant municipalities in the Amazon biome; soy commodity • Regulates 116 municipalities and lands of 5,000 ha or more • Signatory companies do not sell, purchase, or finance soy from properties in the Amazon that were either deforested or are on the Federal list of "slave-like working conditions" • Legal requirement of land use • Cut-off date July 2008	• **Scope:** all national jurisdiction; timber and derived products • Legality requirement: matrices for legal timber with five criteria (e.g. logging and forest management) • Includes social, economic and environmental safeguards for local and indigenous communities • Offers a trade-facilitating approach with the EU market (FLEGT licensing grants direct entry to the EU market)	• **Scope:** all national jurisdiction; timber and derived products • SFM Standard (environmentally sound, socially beneficial, and economically viable) • Prohibits conversion of natural forests to plantations or to non-forest land use • Legality requirement • Human rights principles • Cut-off date 31 December 2020
Implementation & enforcement instruments	**Ambivalent**	**Ambivalent**	**Ambivalent**	**Ambivalent**
• Minimum inspection obligations for EU Member State competent authorities • Penalties for non-compliance (e.g. fine, confiscation of products) • Civil society co-governance: third parties (e.g. NGOs) can review the processing of substantiated concerns	• Legally binding: sanction-based enforcement • State information provision and monitoring systems • Document analysis • In-loco verification by state agencies • Criminal sanctions and penalties • No civil society co-governance	• Market ban: economic disincentive for producers who do not comply with deforestation-free requirements • Voluntary hybrid monitoring and enforcement by signatories (companies, NGOs and governmental agencies) • Companies hire external auditors and determine own traceability systems • Annual monitoring using national deforestation data, remote sensing and CAR	• Establishment of a Legality Verification System • Provisions of transparency and information provision, including reporting requirements • Participation of the stakeholders in the implementation of the Agreement • Market-related incentives (e.g. promotional campaigns)	• Government to provide support to forestry business towards FSC certification • Withdrawal of license to operate if not certified by deadline • Independent third-party audits and system integrity (FSC)

FIGURE 2 | Designed (in)coherence between the EUDR and third country domestic regulations.

3.5 | Gabon's Mandatory FSC: National Hybrid Regulation

In 2018, a Gabonese Presidential Declaration held that all forest concessions would need to become FSC certified by 2022 (later postponed until 2025), or otherwise cease their operations. This mandatory FSC certification policy seeks to address economic concerns about the Gabonese timber sector's contribution to the local economy and the apparent limited competitiveness of Gabonese wood products in international markets (Présidence de la République Gabonaise 2018). The policy seeks to expand FSC's Sustainable Forest Management (SFM) standard at a national jurisdictional level (Pirard et al. 2023).

4 | Results

The following section follows the analytical framework to detail the designed interactions between the EUDR and selected domestic regulations, highlighting their characteristics and degree of coherence (Figure 2).

4.1 | Overarching and Specific Goals

Regarding their regulatory design, we identified a complementary type of interaction for all mechanisms' overarching policy goals based on their alignment in seeking to reduce deforestation and/or land degradation. The findings, however, differ regarding their specific goals.

4.1.1 | EUDR and National Public Regulations

The EUDR's overarching policy goal is to reduce global deforestation by achieving its specific policy goals of minimising and reducing the Union's contribution to global deforestation and forest degradation, and reducing its contribution to greenhouse gas emissions and biodiversity loss (Art. 1). The national public forest laws from Brazil, Cameroon, and Gabon have complementary overarching goals since they coordinate in their aim to protect native vegetation and reduce land degradation. These forest laws aim to regulate the protection and sustainable use of their forests (see Section 4.1). An international NGO representative illustrated this coherence by stating that the EUDR is aligned with Brazil's Forest Code and its ambition to end deforestation by 2030: 'the ambition, the objectives, are aligned' (I98).

However, concerning specific goals, the Brazilian Forest Code also regulates the economic use of land, considering agriculture and forestry for national economic growth (Art. 1, 2). Similar contexts exist in the Cameroonian and Gabonese Law, where forest exploitation and management are foreseen and regulated (Chapter III and Chapter II, respectively). Although national forest laws may allow a certain percentage of economic use of forestlands, which would compete with the goal of deforestation reduction, ensuring sustainable management practice is still aligned with reducing forest degradation. Moreover, land owners regulated by Forest Codes can still decide not to deforest their land and would not suffer any penalties for it (being coherent with a deforestation reduction goal). This concludes in an ambivalent interaction, since their

17569338, 2026, 1, Downloaded from https://onlinelibrary.wiley.com/doi/10.1002/eet.70041, Wiley Online Library on [16/11/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

overarching goals are complementary, yet the specific goals may compete.

4.1.2 | EUDR and Brazil's ASM

Consistent with the EUDR, the ASM aims to achieve the coherent overarching goal of reducing soy-induced deforestation. ASM's specific goal of halting soy production-driven deforestation in the Amazon aligns with the EUDR's goal of minimising EU consumption-embedded deforestation impacts in Brazil–EU soy supply chains.

4.1.3 | EUDR and EU-Cameroon FLEGT VPA

In relation to the EU-Cameroon FLEGT VPA, its overarching goal is to ensure that all timber and derived product imports into the EU from Cameroon have been legally produced or acquired (Art. 2). Overall, both instruments are aligned in the overarching goal of reducing deforestation and land degradation in Cameroon. However, their specific goals compete, since by focusing on the Union's contribution, the EUDR has a trade-restricting goal by laying down additional rules regarding the placing and making available on the Union market of certain products using certain commodities (including wood) (Art. 1, see Section 4.3). This clashes with the EU-Cameroon VPA's specific market-creating goal of promoting trade in timber and derived products and the development of forest industries in Cameroon (Art. 18), creating economic opportunities for resident local communities and enterprises (Art. 2-2).

4.1.4 | EUDR and Gabon's Mandatory FSC

Lastly, Gabon's mandatory FSC and the EUDR's overarching goals are complementary, since the former aims to improve the sustainability and attractiveness of Gabonese timber. Its specific policy goal is to achieve 100% FSC certification of all forestry operations in Gabon by 2025 (Présidence de la République Gabonaise 2018), which coordinates with the EUDR's specific goal of ensuring sustainable EU supply chains (including wood) (Art. 1).

4.2 | Regulatory Requirements

Compared to the goals, the designed regulatory requirements of third country regulations showed higher levels of incoherence. The EUDR aims to prevent the placement and making available on (or export from) the Union market of products that contain, have been fed with, or have been made using the seven FRCs: cattle, cocoa, coffee, oil palm, rubber, soya, and wood if they are associated with deforestation and forest degradation (Art. 3). The EUDR has, therefore, a commodity- and forest-focused scope. The EUDR consists of three main requirements: (1) deforestation-free, (2) legality standard, and (3) mandatory due diligence statement obligations (Art. 3). *Deforestation-free* means that relevant commodities were produced on land that has not been deforested (for wood products only, that has not been degradingly harvested), with a cut-off date of 31 December 2020 (Art. 2). The EUDR's legality standard requests compliance with applicable laws concerning the legal status of the area of FRC production. This includes, among others, land use rights, environmental protection, and human rights protected under international law (Art. 2). Additionally, market participants must submit a mandatory due diligence statement, confirming compliance with these two standards (Art. 3, Annex II).

The EUDR's three-tiered due diligence system includes information, risk assessment and mitigation, as well as reporting and record-keeping obligations. Obligations include, among others, geolocation information requirements for plots of land, to be described by latitude and longitude coordinates and information requirements in relation to the presence of Indigenous People and their land use or ownership claims (Art. 8-12, for further details see Regulation (EU) 2023/1115). A benchmarking system—categorising producer countries and parts thereof as low, standard, or high risk—foresees simplified due diligence requirements for operators and traders sourcing relevant products from areas with low deforestation and degradation risk ratings, and expanded obligations for EU Member States' competent authorities to conduct more mandatory compliance checks in the case of standard and high-risk ratings (Art. 13, 16, 29). Furthermore, the Commission and interested Member States must cooperate with producer countries, in particular those classified as high-risk, to support them in meeting the EUDR's FRC production requirements (Art. 30).

4.2.1 | EUDR and National Public Regulations

While the EUDR is focused on forest ecosystems only, the national forest regulations regulate a broader area of native vegetation (e.g., all biomes in Brazil). This regulatory scope expresses an incoherent competitive element, since, for example, the EUDR allows imports from the seven regulated commodities when produced in native vegetation areas that are not classified as *forests* (e.g., *Cerrado* in Brazil). Such conversions can still cause biodiversity and carbon losses and could be non-compliant with third country forest laws (i.e., deforesting beyond legally allowed percentages). The EUDR may, however, still undergo a Review that determines the extension of its scope to include other wooded land (Art. 34). In addition to the forest definition scope, the EUDR still allows imports from non-regulated commodities (e.g., corn) from forest areas (as defined by the EUDR), despite potentially being non-compliant with third country forest laws. A variety of actors highlighted that the incoherence found in the forest definition and commodity scope can cause issues as they clash with national definitions of ecosystems and may not address larger issues of legal land conversion (e.g., land grabbing) or biodiversity loss (e.g., I49; I63; I68). Demand- and supply-side interviewees stressed the importance of national legislative frameworks encompassing the whole territory as the most important lever to combating deforestation domestically (e.g., I67; I78; I38). This is best illustrated by a Cameroon-based knowledge provider who stated: 'The fundamental tool is national legislation because everything that's going to be done will be based on this law' (I15).

17569338, 2026, 1, Downloaded from https://onlinelibrary.wiley.com/doi/10.1002/eet.70041, Wiley Online Library on [16/11/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Regarding the deforestation-free requirement, the Brazilian Forest Code states that private land owners must preserve at least 20% of native vegetation on their lands. These requirements are higher for private lands located in the *Cerrado* (35%) and Legal Amazon (80%) (Art. 12). Similarly, the Cameroonian forest estate is divided into permanent domains (i.e., where forest has to be preserved) and non-permanent domains (i.e., where forest areas can be converted for other uses) (Part III). The Gabonese Forest Code does not specify areas for legal deforestation; instead, it outlines guidelines to control forest exploitation, promoting sustainable management (Section 1). Nevertheless, by allowing a certain percentage of legal deforestation, the national forest regulations conflict with the EUDR's deforestation-free requirement, which superimposes producer country laws. Regarding permitting a percentage of deforestation, a Europe-based forest sector business representative highlighted the Brazilian Forest Code's rigour: 'A lot of people in Europe don't know what the Brazilian Forest Code really means and how strict it is (...) we have 2.6 million hectares of land, out of this, 1 million, so 40% is preserved, untouched (...) and that goes up to 80% if you are in the Amazon. I've never seen such a strict Forest Code in Europe' (I70). Furthermore, the Brazilian Forest Code has a July 2008 cut-off date as the deforestation limit for those who require a land title (Art. 7, §3), which is incoherent with and stricter than the EUDR's December 2020 cut-off date. The national forest regulations still coherently overlap with the EUDR's legality requirement, since by nature they also request compliance with the national legal framework, sustainable use of fauna and flora, and private land owners need to obtain all legal permits. Given that the former requirements are incoherent, but the latter are coherent, the regulations have an ambivalent interaction with regard to their requirements.

4.2.2 | EUDR and Brazil's ASM

Regarding the ASM's regulatory requirements, its scope covers only soy as a commodity and has the geographical scope of 116 municipalities in the Amazon biome that host more than 5000 ha of soy production (Grupo de Trabalho da Soja 2016; Agrosatélite, n.d.). This area falls within the scope of EUDR as it spans forests which are consistent with the forest definition adopted by the EUDR. Moreover, as the EUDR, it also establishes deforestation-free requirements that go beyond the Brazilian Forest Code (Art. 3). However, like with the Brazilian Forest Code, there is an element of competition regarding the cut-off date. The ASM has set 22 July 2008 as a cut-off date, but the EUDR established 31 December 2020 as its cut-off date. This legitimises a 12-year gap for those producers who may not have abided by the ASM but can still enter the EU market. This regulatory incoherence has been noticed by experts, who fear that the EUDR could threaten the ASM's long-standing national legitimacy and existence. A Brazil-based agricultural certification body representative illustrated this by stating: 'There are producers and state governors who are against the moratorium. The possibility of changing the cut-off date is very attractive to many people, including the traders, who by doing so can please those producers who were always against [the ASM]' (I85). An agricultural business association representative also flagged a potential weakening of the moratorium: 'The moratorium appeared in 2006 because of the Europeans and now they ask for a more flexible cut-off date, why don't we change [it]?, but (...) by making the cut-off date more flexible we would be giving a message of impunity to those farmers who ignored it and continued deforesting, and a feeling of injustice to those who complied' (I89).

Regarding the legality requirement, the ASM also requires compliance with key labour rights, such as the prohibition of child and forced labour, and land use rights (as checked by the CAR and Forest Code), but does not regulate forest degradation, anti-corruption, third parties' rights, or other human rights related to production beyond labour rights (Grupo de Trabalho da Soja 2016), which the EUDR regulates.

4.2.3 | EUDR and EU-Cameroon FLEGT VPA

Considering the EU-Cameroon FLEGT VPA, it institutionalises a legality requirement to distinguish lawful from unlawful timber (VPA Annex II) by defining timber legality matrices based on five criteria, namely administrative and legal aspects, logging and forest management, transport, social aspects, and environmental aspects. Additionally, the VPA includes social, economic, and environmental safeguards for local and indigenous communities aimed at assessing the impact of the VPA on their lives and taking appropriate steps to mitigate any adverse effects (Art. 17), similar to the EUDR's risk assessment due diligence requirements requesting, inter alia, the assessment of the presence of Indigenous Peoples (Art. 10). While the EUDR's and EU-Cameroon FLEGT VPA's legality requirements converge, the EUDR co-opts by additionally regulating legal deforestation through its deforestation-free requirement.

An element of competition also exists since the EUDR does not recognise VPA's FLEGT licenses to the full extent anymore (see Section 4.1), thus rendering the agreement less legitimate and less beneficial for the third country. In this context, a Europe-based knowledge provider expressed that 'it's a real shame and quite a serious mistake that the Commission decided to abandon the VPA approach' (I58). However, a Europe-based governmental authority representative argued that they 'have been monitoring and implementing FLEGT for 20 years with the two underlying European regulations (...) and the EUDR represents a logical further development of these previous instruments (...) but the FLEGT Action Programme was an important first step' (I48). This has been demonstrated by the EU's decision to terminate the EU-Cameroon FLEGT VPA with the justification that 'the Republic of Cameroon has not fulfilled the obligations under the VPA [and that] the Commission believes [that] the VPA no longer fulfils the *relevance* requirement in recital 81 of the EU Deforestation Regulation' (European Commission 2024, 6).

4.2.4 | EUDR and Gabon's Mandatory FSC

Gabon's mandatory FSC policy institutionalises an SFM standard, as set and defined by FSC. Highlighting *environmentally sound, socially beneficial, and economically viable* forest management, the standard is built around 10 principles

17569338, 2026, 1, Downloaded from https://onlinelibrary.wiley.com/doi/10.1002/eet.70041, Wiley Online Library on [16/11/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

covering, for example, compliance with laws, workers' rights, Indigenous Peoples' rights, community relations, environmental values, monitoring, assessment, and implementation of management activities (FSC 2023). Similar to the EUDR's deforestation-free requirement, the SFM standard prohibits the conversion of natural forests to plantations or to non-forest land use, with the same cut-off date of 31 December 2020. Both the SFM standard and the EUDR require compliance with specified legality requirements, such as the principle of free, prior, and informed consent; they therefore are very much coherent with each other.

4.3 | Implementation and Enforcement Instruments

All of the implementation and enforcement instruments of the selected regulations presented an ambivalent (*coherent and incoherent*) interaction with the EUDR. The EUDR's implementation and enforcement mechanisms include new risk-based minimum inspection obligations for competent authorities (Art. 16). The EUDR also establishes that Member States' rules on dissuasive penalties must include a minimum list of penalties, such as fines and the confiscation of products and revenues (Art. 25). Additionally, the EUDR establishes a civil society co-governance mechanism by institutionalising an access to justice mechanism that entitles third parties (e.g., NGOs) to review the processing of substantiated concerns (i.e., duly reasoned non-compliance claims) by competent authorities (Art. 16, 32).

4.3.1 | EUDR and National Public Regulations

Similar to the EUDR, the national forest regulations rely on a strong public regulation-based command and control approach by institutionalising sanction-based enforcement mechanisms. The Brazilian Forest Code's implementation relies on information provisions and systems monitored by the state (e.g., CAR, the National Environment System, Sustainable Forest Management plans, the Forestry Origin Document), as well as document analysis and in-loco verification by governmental agencies. Enforcement instruments include applying criminal sanctions and fines to the misuse and exploitation of vegetation contrary to the provisions of the law (Art. 2). Similarly, the Cameroonian Forestry Law (Part VI) and the Gabonese Forest Code (Art. 262-284) stipulate the State's prerogative for monitoring and law enforcement, prosecution procedures, offences, and penalties. Regarding civil society co-governance with third parties, the national forest regulations do not provide such an inclusive process, having their enforcement mechanisms mainly based on state agencies; this presents incoherency, which results in an ambivalent regulation interaction for the EUDR and the Forest Codes concerning implementation and enforcement instruments.

Since one of the EUDR's conditions is production in accordance with the relevant legislation of the producer country, compliance with these national laws can help prove compliance with the EUDR's legality requirements. National monitoring systems and forest laws can also support demonstrating compliance with the EUDR's deforestation-free requirements. Nonetheless, an international retailer and a Europe-based knowledge provider shared their concern as to how they would be able to prove 100% compliance with the national laws of their suppliers, knowing that many national laws are not properly enforced (I50; I68). A representative of a European-based governmental authority also stated that the implementation rate and effective enforcement vary among countries (I52). On the other hand, interviewees shared the perspective that the EUDR's implementation could positively interact with the national forest regulations by accelerating and supporting their application on the ground (I66), such as assisting in the implementation of the CAR in Brazil, which lacks resources in conducting its full analysis (I96; I76; I90). A Brazil-based NGO representative emphasised that the EUDR has already accelerated existing processes of traceability in the country, including the development of a national platform for agricultural product traceability (I101). Sharing a different perspective, a Gabon-based international NGO representative stated: 'It's good to have this challenge from European consumers (...) but I think it's rather more interesting to see Gabon engaging with other producing countries to compare their robust national systems to prove legality, and feed this into the debate' (I31).

4.3.2 | EUDR and Brazil's ASM

Similar to the enforcement of the EUDR's prohibition clause, the ASM works with a comparable market ban (i.e., moratorium), foreseeing the creation of a list of banned producers identified by their monitoring system, which will not have their soy bought or financed by the signatory companies (Agrosatélite, n.d.). Nonetheless, their intervention logic differs since compliance with ASM's requirements relies on voluntary enforcement by companies, NGOs, and governmental agencies. Companies that are signatories to the ASM determine their own traceability mechanisms to comply and decide how to share information and provide transparency (I92). The EUDR, on the other hand, relies on a stronger public regulation-based approach, as it is enforceable through hard penalties by EU competent authorities and establishes a standardised and centralised information system for the submission of due diligence statements.

To ensure accountability, the ASM undergoes rigorous monitoring by different public and private actors in its Soy Working Group, whereas the EUDR relies on market participants' inspection by EU Member States' competent authorities. Similar to the EUDR's access to justice mechanism, the ASM establishes a civil society co-enforcement instrument by officially granting them a watchdog role. Regarding traceability, whereas the ASM monitors areas with a minimum of 25 ha or more of soy, the EUDR monitors the sourcing plot for the production of the relevant commodity, which, if smaller than four hectares, can be a single point, and if larger, polygons should be used to describe the perimeter of each plot of land (Art. 2). This shows different requirements to achieve the same policy goal, which can motivate companies that abide by both to either choose or combine their implementation instruments.

Compliance proof with the ASM could potentially support proving compliance with the EUDR's deforestation-free and legality requirements since their requirements overlap (Section 4.3).

17569338, 2026, 1, Downloaded from https://onlinelibrary.wiley.com/doi/10.1002/eet.70041, Wiley Online Library on [16/11/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

This is best illustrated by an agricultural business association representative: 'The moratorium makes it easier for producers in the Amazon biome to comply with the EUDR, since those who respect the moratorium have already been respecting the EUDR since 2008' (I89). Several interview partners highlighted how, not only regarding the ASM, but also how private and hybrid regulations can support EUDR compliance efforts through their longstanding voluntary commitments and experience therewith (I58; I59; I92). A representative of an agricultural sector certification standard-setting body highlighted this by stating that 'voluntary zero deforestation commitments are key (...) and the EUDR should reinforce them' (I57).

Interviewees further highlighted that a smart and positive interaction between the EUDR and the ASM could occur to enhance implementation effectiveness if the ASM's previous efforts are considered. An EU official stated that subnational approaches may have a more precise traceability strategy that could assist in proving compliance with the EUDR (I55), and an international organisation representative stated how subnational approaches have the benefit of being multi-stakeholder platforms (I66). Moreover, a Brazil-based agricultural business association representative emphasised that it would be mutually beneficial if the EUDR acknowledges the ASM in its implementation and if companies that are already part of the ASM can use that system and knowledge to produce EUDR soy-compliant products, not scratching it out to give way to a new legislation (I89). A Brazil-based agricultural certification body representative adds that the EUDR may complement the ASM's requirements with its legally binding legality requirement in making sure these properties are compliant with the Forest Code and have their CAR analysed (I85).

4.3.3 | EUDR and EU-Cameroon FLEGT VPA

Regarding the VPA and its traceability strategy, it does not specify geolocation requirements, unlike the EUDR. To support its implementation, the VPA contains specific provisions on transparency and information publishing (Article 21 and Annex VII) and the participation of stakeholders in implementing the agreement (Article 16 and Annexes III-A, III-B, and X). Similar transparency and information mechanisms exist in the EUDR, including reporting requirements for enterprises, EU Member State authorities, and the European Commission. The VPA also provides for market-related incentives (e.g., promotional campaigns) to access the EU market (Art. 18), and it includes an independent audit to check the performance and efficiency of the FLEGT licencing scheme (Art. 11). However, the EUDR reduces this market incentive by removing the *green lane* for FLEGT licenced timber, adding an incoherent characteristic as to how the regulations are implemented and enforced, concluding in an ambivalent regulatory interaction.

With respect to this superimposition, an EU official acknowledged the countries that have been in the process towards a VPA, or have one, since they 'have been doing all this work on timber legality assurance systems, have good traceability systems [and should] be in a position to easily meet the [EUDR's] deforestation-free requirement' (I55). Indeed, a Cameroonian governmental authority representative stated that given their work and experience with their Forest Information Management System and the VPA, they 'should be comfortable with the [EUDR]' (I5). Regarding the delegitimisation of mechanisms under the EUDR, a Cameroon-based NGO representative highlighted that 'one of the reasons for the conflict on traceability is that government officials do not understand why the EU should decide on what is a good national traceability' (I6).

4.3.4 | EUDR and Gabon's Mandatory FSC

Gabon's mandatory FSC certification provides scant details on its instruments to achieve its policy goal. An agreement between the Gabonese government and FSC in 2020 has launched activities to support businesses in Gabon in acquiring FSC certification and to enhance the marketing of Gabonese wood products on the international market (FSC 2020). Its main implementation enforcement is through license withdrawal if a forestry business has not achieved FSC certification by the set deadline (Présidence de la République Gabonaise 2018), much like EU Member States' have the mandate to sanction businesses in the EU in cases of non-compliance with the EUDR. Regarding businesses obtaining the FSC certificate and upholding the SFM standard, the FSC system itself relies on independent audits conducted by third-party, accredited organisations, which are intended to ensure the integrity of the system (FSC 2024).

Nevertheless, Gabonese finance and research organisation representatives mentioned that the question still remains as to who will pay for business certification costs, and a roadmap to achieve this goal is still missing (I34; I35). Other Gabon-based interviewees (i.e., businesses and a research organisation) stated that this declaration lacks a formal decree or legislation, noting that it could have been included in the Forest Code to ensure integrity with the national legislation framework (I25; I26; I28). Nonetheless, in practice, FSC's Principle 1 includes compliance with national laws, which would encompass the Forest Code (FSC 2023).

Regarding how this regulation can support EUDR compliance, the EUDR has introduced minimum information requirements (e.g., geolocation) for third-party verified schemes, such as FSC, when used as complementary risk assessment information to demonstrate EUDR compliance. Thus, although the enforcement instruments are mainly in line with each other, the EUDR dominates and co-opts by defining the role of external third-party verified schemes, such as the FSC, under its purview. On this co-optation element, a Gabon-based NGO representative stressed: 'I don't know how to improve the dialogue between producer countries and consumers, [but it should] not [be] based on imposing due diligence regulation, but on the basis of what conditions are needed to improve national certification processes and to [better] understand the markets (...) There's almost a willingness on the part of producer countries to start giving risk levels to consumer countries too' [in reference to the EUDR's benchmarking system] (I32).

Regarding the general role of certification in EUDR implementation, a Germany-based forestry business representative expressed concern, stating: 'Or you can do it all with certification systems, or you don't need [them], and everything else is done by

17569338, 2026, 1, Downloaded from https://onlinelibrary.wiley.com/doi/10.1002/eet.70041, Wiley Online Library on [16/11/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

the EU (…) It is an extreme administrative monster where I have to do double or triple work' (I41). Conversely, an international retailer representative and a representative of a European-based forest sector certification standard-setting body informed that certification bodies are upgrading and working hard to support the EUDR process by having more public documentation and being able to carry the information through the supply chains (e.g., using blockchain), so as not to become irrelevant (I50; I51). Indeed, it has been observed that third-party verified schemes, such as FSC, have been developing extra *regulatory modules* to assist their clients in reporting and informing how EUDR requirements are met (FSC 2025), to deal with this superimposition. Furthermore, a Europe-based governmental authority representative highlighted the added value of certification within the former EUTR implementation: 'Anyone familiar with the implementation of the EUTR knows that a good certificate is still better than nothing. It is a very important first step in proving things; when control authorities align their control strategies with risk criteria, they do not first look at the certified companies, but rather at those that have nothing at all' (I48).

In reference to implementing EUDR's Article 30 on cooperation with producer countries for implementation, many interviewees stated that it was drafted precisely to manage governance trade-offs. They mentioned that together with the Forest Partnerships and the Team Europe Initiative, these processes are essential to provide capacity support as a crucial corrective to producer countries (e.g., I43; I60; I97). As an international organisation representative puts it: 'Development cooperation will play an important role to do damage control for smallholders, for leaving areas behind (…) and, diplomatic clashes' (I66). A Europe-based research organisation representative was, however, critical about this expectation, saying: 'it is a very problematic attitude to say that international partnerships or development cooperation must now solve the problem with smallholder farmers (…) It is absolutely unrealistic that they will solve the increased transaction costs and the increased risk for traders, because that is decided by the market, not politically' (I68). As a suggestion, a Brazil-based NGO representative added that this cooperation does not need to be from the EU, but the EU can assist South–South cooperation for the exchange of technology and instruments (I101).

5 | Discussion

5.1 | Overarching and Specific Goals

This article assessed the degree of EUDR design (in)coherence with selected third country regulations governing domestic deforestation and land use change. Our findings first show that all analysed mechanisms have coherent overarching policy goals based on their aligned broader aim of reducing deforestation or land degradation.

Second, the level of coherence varies between the EUDR's and the domestic regulations' specific goals (i.e., two mechanisms show characteristics of complementarity, one of competition, and the other one with both, so ambivalent). The incoherence stems from competitive differences in (1) specific national and regional aims (i.e., forest laws allow for economic use of land, and the EUDR focuses on EU trade commodity-specific supply chains) and (2) distinct objectives of providing a market incentive for a country's commodity export (i.e., FLEGT VPA) versus a trade-restricting characteristic (i.e., EUDR).

5.2 | Regulatory Requirements

Third, coherence among the regulatory requirements of the EUDR with third-country regulations was mainly ambivalent (*coherent and incoherent*), with one regulation being complementary. Albeit high overlap with the legality requirement in all mechanisms, incoherences appeared in relation to the regulatory (1) scope (i.e., forest ecosystem focused and commodity selection), (2) deforestation-free requirement (i.e., forest regulations allowing a percentage of legal deforestation), (3) cut-off-date requirement (i.e., Brazilian Forest Code and ASM have an earlier cut-off date of 2008), and (4) delegitimisation by incomplete recognition of existing regulations' requirements in its (EUDR's) requirements (i.e., EU-Cameroon VPA, which was recently terminated).

Specifically, with regard to the legality requirement interaction, we view different possible scenarios once the EUDR is implemented: (a) more producers comply with the national environmental laws, (b) fewer goods are imported from the country (e.g., because national laws are not enforced or are over-ambitious), and/or (c) countries may end up changing these environmental laws to ease the plight for their commodity exporters. The question being: Will the EUDR's legality criterion lead to a strengthening of enforcement of national laws, or to debilitating changes in national environmental laws, thereby protecting the economic interests of national commodity exporters?

5.3 | Implementation and Enforcement Instruments

Fourth, the interaction between the implementation and enforcement instruments of the EUDR with all third country regulations proved to be ambivalent. Coherence was present in the similar use of tools or strategies (e.g., remote sensing, auditing, information provision). Incoherence was evident through differences in sanction-based versus voluntary enforcement, as well as the role of civil society and third parties in monitoring and review. Furthermore, when assessing whether compliance with an existing regulation can help prove compliance with the EUDR, co-optation characteristics appeared. This occurs because EUDR implementation instruments superimpose existing national instruments and other private voluntary standards (e.g., third-party verified schemes, maps, geographic scope, and traceability systems required for due diligence statements). Nonetheless, a way third-party verified schemes have been managing this superimposition is by developing extra *regulatory modules* to assist their clients in reporting and informing how EUDR requirements are met (FSC 2025).

Our results further show that the degree of incoherence amongst the regulations' enforcement instruments reveals two questions for the implementation stage: (1) how can these mechanisms support EUDR compliance? (coherence) and (2) how could the

17569338, 2026, 1, Downloaded from https://onlinelibrary.wiley.com/doi/10.1002/eet.70041, Wiley Online Library on [16/11/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

EUDR possibly delegitimise and change characteristics of existing regulations? (incoherence). With regard to the mechanisms' ability to prove compliance with EUDR requirements, we found that what plays a role are (1) governance format (e.g., public legislation vis-à-vis private, considering legality requirement), (2) scope (e.g., overlap in area regulated), and (3) similar standards (e.g., SFM) or requirements (e.g., cut-off date, deforestation-free). Interviewee perceptions also shed light on possible positive policy interactions that can emerge beyond the regulations' designs. These are achieved by accelerating and supporting national legislation on the ground (e.g., traceability systems, or with the CAR analysis in Brazil) and by recognising the systems and work done in subnational approaches (e.g., those with stronger requirements and a multi-stakeholder approach).

5.4 | Leveraging or Limiting Effectiveness Through Interaction?

The EUDR's possible debilitation or delegitimisation of current regulations lies in the incoherence in (1) regulatory requirements, as exemplified by the case of ASM signatories thinking of easing their cut-off date to 2020, (2) regulated scope, as illustrated by the broader scope of forest national regulations (e.g., encompassing the *Cerrado* in Brazil), (3) non-recognition or partial recognition of existing enforcement instruments (e.g., traceability tools and systems) and existing standards (e.g., FSC, FLEGT-licenced wood) for due diligence requirements. Concerning the cut-off date, in fact, recent developments have pointed to one of the biggest ASM signatories, Cargill, leaving the agreement by changing its deforestation commitment cut-off date to 2020 (Assessoria de Comunicação 2025; Freitas and Barros 2025). Therefore, despite coordinated overarching goals, effective implementation to achieve these aims may only occur if these other designed elements are smartly managed.

Regarding the scope incoherence, our study contributes to the growing literature on jurisdictional and *place-based governance* approaches in relation to supply chain interventions (Schleifer 2023; Macdonald et al. 2024). A mismatch in scope definition can create leakage, uncertainty, and compliance challenges, often reflecting certain interests discussed during the agenda-setting and design phase of a regulation. For example, the new Forest Code in Brazil, introduced in 2012, was known for being a heavily negotiated compromise between the agricultural and environmental sectors in Brazil, where great power lies in land ownership and land use (Soares-Filho et al. 2014). Brazil's ASM has also been criticised for its Amazon-only scope, not regulating most of Brazil's soy production, which is largely present in the *Cerrado*, and is designed in the interest of large soy producers (Ziegert and Sotirov 2024). Gabon's mandatory FSC certification is innovative for repurposing supply chain private governance into a jurisdictional and national scope, yet its implementation and enforcement still remain a question, as well as if it is a worthy trend to be replicated. In its turn, the EUDR is equally innovative as it is public legislation focused on regulating certain supply chains beyond EU boundaries. Its designed scope (i.e., specific commodities and forest definition) is EU demand- and supply-chain-oriented (Muradian et al. 2025) and was also a politically negotiated decision (Berning and Sotirov 2024). Recent studies, however, inform that 17.5% of the EU's deforestation exposure was from commodities not regulated by the EUDR, such as cashew nuts and corn, the latter having Brazil as its main exporter (Titley 2024). The same goes for financial institutions and other wooded land that are not regulated but could potentially be added to the EUDR's scope in its upcoming reviews (Berning and Sotirov 2024).

5.5 | Smart Policy Mixes

Our results also highlight that state legislation, with its national jurisdictional scope, is considered the most crucial piece of regulation to combat deforestation and biodiversity loss; however, its effectiveness is weakened by fragile enforcement. To ensure that a new policy enhances the effectiveness of achieving the policy goal of reducing deforestation and land degradation, we argue that transnational environmental regulation could support national enforcement rather than superimpose it, as exemplified in the possible scenarios described. Muradian et al. (2025) conclude their research by recommending demand-oriented and territorial approaches to curb global deforestation as a whole. We contribute to the literature by suggesting close attention to the interaction between public-private and transnational-domestic regulation, as well as policy mixes. A smart mix would encompass whole land use governance (not only forest terrain), with an emphasis on national enforcement, while considering trade-induced impacts through demand and supply-side regulations. In EUDR implementation, this could be through Article 30. Its appropriate application and nation-specific cooperation were also highlighted in our results as a way to manage governance incoherence.

Our study enhances what has already been called upon in the policy coherence literature, which is the focus on identifying smart policy mixes and managing identified incoherence (Meijers and Stead 2004; Howlett and Rayner 2007; Schleifer 2023). This is relevant to increase the achievement of common goals. As our results show, even when regulations have a common overarching goal, other elements of their design may create tension with other regulations, hindering higher chances and effectiveness in achieving the common goal. Identifying and managing (in)coherent elements in the interaction between transnational and national regulations is needed to avoid creating regulatory fragmentation, differing requirements, enforcement uncertainties, and delegitimisation of current requirements and processes, which could lower implementation effectiveness.

Nevertheless, incoherence also exists within national boundaries (e.g., complying with a Forest Code may be at odds with receiving government subsidy for agricultural expansion; or governmental promotion of infrastructure and energy development may be incoherent with rigorous environmental licencing and regulation). This discloses an important question that can be further researched: To what extent is transnational–national incoherence more impactful than intra-national policy incoherence? A key characteristic of our example is that the EUDR is a trade regulation. Thus, albeit legally binding, it regulates specific supply chains, which will then influence how the market around them is shaped. The force behind compliance is not only due to penalties but also due to whether companies want to continue exporting to the EU for economic interests. Nonetheless,

17569338, 2026, 1, Downloaded from https://onlinelibrary.wiley.com/doi/10.1002/eet.70041, Wiley Online Library on [16/11/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

the EUDR caught attention because of its unilateral characteristic (Muradian et al. 2025). The difference between transnational–national and intra-national is a matter of sovereignty. Transnational legislation steps on the toes of sovereignty concerns, especially due to historical, political, and trade relations, posing legitimacy questions. In the lack of an international agreement, transnational regulation will have an element of competition with national legislation and individual country interests. This should be considered when measuring how much diplomatic and financial *damage control* may be needed.

5.6 | Theoretical Contribution

Theoretically, we also contribute to the state-of-the-art research on policy coherence and regulatory interactions by presenting a new conceptual framework based on Eberlein et al. (2014), Cashore et al. (2021) and Nilsson et al. (2012), to analyse specific layers of interaction in the vertical and horizontal coherence between the regulatory design of transnational legislation and the design of domestic regulations. Our uniqueness is looking at transnational policy mixes of demand- and supply-side regulation (in)coherence. We enlighten the nuances of this non-dichotomic definition of *policy coherence*, recognising that the interaction can reflect different degrees of coherence. We demonstrate that policy design can determine the degree and character of coherence, potentially leading to (un)intended consequences within a transnational-national policy mix. Pinpointing the elements that may contribute to a synergetic implementation can help avoid diplomatic clashes and unintended consequences, such as the weakening of national initiatives. Furthermore, by analysing the regulation interaction through each layer, one can reflect on the consequence of a goal vis-à-vis an implementation instrument being incoherent, since each layer carries its significance. Our results highlight the importance of examining how policies are designed for implementation, rather than just whether their goals are coherent. It may make sense that national regulations have different implementation and enforcement instruments, given their local context, yet a transnational regulation should first understand existing instruments before adding others.

5.7 | Limitations

Limitations to our research design and methodology lie in the selection and number of mechanisms and documents, given the extensive number of regulations that form a domestic framework in third countries. Each regulation may also have associated documents that provide further clarification of certain requirements. We recognise that other countries or examples may yield different results, such as the EU-Indonesia FLEGT VPA, which further research can focus on. However, the Cameroon example can still illuminate the intricacies of this type of transnational trade regulation and its case is particularly interesting due to its termination, precisely given the European Commission's attempt to reduce the role of FLEGT VPAs under the EUDR.

Despite a limited amount of analysed regulations, we were still able to cover a fair range of different regulatory forms in a qualitative analysis. No interaction was found to be *chaotic*, and this may be due to the selected mechanisms and because we only looked at the regulatory design stage. Adding the imperfections of policy implementation could eventually also turn coherently designed instruments into *chaotic* interrelations (cf. Eberlein et al. 2014). Furthermore, although our analysis was based on policy design, it was an asymmetric comparison of interaction because one regulation (EUDR) has not yet been implemented. The theoretical framework, however, can be replicated and applied to expand the analysis in greater depth for a country or across countries. All of this leads to possible research to be further conducted.

6 | Conclusion

This study assesses the degree of (in)coherence between the design of the EUDR and selected third country regulations addressing domestic deforestation and land use change. By identifying and analysing regulatory (in)coherence across goals, requirements, and enforcement instruments, our findings contribute to a deeper understanding of what is at stake for transnational environmental legislation when interacting with domestic policy mixes. While overarching regulatory goals tend to align, specific design elements of the EUDR diverge from those in the selected domestic regulations (e.g., scope, legality definitions, cut-off dates, and implementation mechanisms). Although certain misalignments may be expected, reflecting national contexts, these incoherences raise both technical and political concerns, particularly regarding the legitimacy of transnational interventions in sovereign regulatory spaces.

Our study underscores the importance of reconciling transnational with existing national regulatory frameworks. This is particularly crucial for instruments like the EUDR, which seeks to regulate production and land use practices beyond the EU's own jurisdiction. We argue that any future transnational environmental regulation should aim to engage with and build upon existing domestic efforts. For example, leveraging effective local traceability systems and acknowledging subnational initiatives could not only reduce conflicts and compliance costs but also promote more durable and locally grounded solutions, avoiding leakage and helping to align instruments across jurisdictions. Moreover, the study highlights the value of smart regulatory and cooperation mechanisms, such as EUDR's Article 30, as potential tools for managing regulatory incoherence. These can help adapt to governance specificities, promote cross-compliance, and ultimately support more effective and legitimate implementation.

Given our ex-ante regulatory design analysis, we recommend an ex-post assessment of the EUDR's implementation stage. Future research could also conduct the same framework analysis using other domestic regulations in relation to the EUDR, or a comparative analysis of transnational-national versus intra-national regulatory (in)coherence. Finally, this research adds to the growing literature calling for the identification and management of incoherence in global environmental governance. A balanced regulatory mix, one that bridges public and private governance and transnational and domestic frameworks, is essential for achieving aligned goals. As the EUDR moves from design to practice, its success may partly depend on its ability to serve not only as a trade regulation but as an inspiration

17569338, 2026, 1, Downloaded from https://onlinelibrary.wiley.com/doi/10.1002/eet.70041, Wiley Online Library on [16/11/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

and a driver to bridge the gap between demand–supply and transnational-domestic measures in the regulation and reduction of global deforestation and land degradation.

Acknowledgements

We would like to thank Martin Tchamba, Lucie Temgoua, Abubakar Shidiki, and Herman Zanguim from the University of Dschang, who contributed to some data collection used in this article. We would also like to thank the revision and collaboration of Hassina Uwiringiyimana (European Forest Institute) and Opi Outhwaite (UN Environment Programme World Conservation Monitoring Centre) in earlier stages of this article. Finally, we would also like to acknowledge the support of Fernanda da Cunha Carvalho, Hannah Corina Lemos Correia e Silva, Leonie Schurr, Loreto Constanza Koller Mohr, Luisa Buss, Maysa Schiefer da Costa Lima, Mickelly Cuba, Paula Oddone Souza, Rai Prado Morgado, Ricardo Possuelo, and Thiago Gomes Pilotto, who assisted in the transcription of interviews as part of the article's data collection. We also appreciated the feedback received during the fifth Open Science Meeting of the Global Land Programme in Oaxaca, Mexico, November 2024. This research has been funded by the European Research Executive Agency under the HORIZON Research and Innovation Actions grant agreement no. 101060765, the Georg-Ludwig-Hartig-Stiftung, the Müller-Fahnenberg-Stiftung, and the Wissenschaftliche Gesellschaft Freiburg. Open Access funding enabled and organized by Projekt DEAL.

Funding

This work was supported by the European Research Executive Agency (101060765), Georg-Ludwig-Hartig-Stiftung, Müller-Fahnenberg-Stiftung and Wissenschaftliche Gesellschaft Freiburg.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

References

Abbott, K. W., and D. Snidal. 2021. *The Spectrum of International Institutions: An Interdisciplinary Collaboration on Global Governance*. Routledge.

Agrosatélite. n.d. "Soy Moratorium Portal." Accessed October 15, 2024. https://moratoriadasoja.com.br/.

Assessoria de Comunicação. 2025. "Saída da Cargill da Moratória da Soja Põe em Xeque Máscara de Empresa Sustentável e Com Compromisso Ambiental." Terra de Direitos. https://terradedireitos.org.br/noticias/noticias/saida-da-cargill-da-moratoria-da-soja-poe-em-xeque-mascara-de-empresa-sustentavel-e-com-compromisso-ambiental/24113.

Bager, S. L., U. M. Persson, and T. N. P. dos Reis. 2021. "Eighty-Six EU Policy Options for Reducing Imported Deforestation." *One Earth* 4, no. 2: 289–306. https://doi.org/10.1016/j.oneear.2021.01.011.

Bali, A. S., G. Capano, and M. Ramesh. 2019. "Anticipating and Designing for Policy Effectiveness." *Policy and Society* 38, no. 1: 1–13. https://doi.org/10.1080/14494035.2019.1579502.

Bastos Lima, M. G., and A. Schilling-Vacaflor. 2024. "Supply Chain Divergence Challenges a 'Brussels Effect' From Europe's Human Rights and Environmental due Diligence Laws." *Global Policy* 15, no. 2: 260–275. https://doi.org/10.1111/1758-5899.13326.

Begemann, A., L. Giessen, D. Roitsch, et al. 2021. "Quo Vadis Global Forest Governance? A Transdisciplinary Delphi Study." *Environmental Science & Policy* 123: 131–141. https://doi.org/10.1016/j.envsci.2021.03.011.

Berning, L., and M. Sotirov. 2023. "Hardening Corporate Accountability in Commodity Supply Chains Under the European Union Deforestation Regulation." *Regulation & Governance* 17, no. 4: 870–890. https://doi.org/10.1111/rego.12540.

Berning, L., and M. Sotirov. 2024. "The Coalitional Politics of the European Union Regulation on Deforestation-Free Products." *Forest Policy and Economics* 158: 103102. https://doi.org/10.1016/j.forpol.2023.103102.

Browne, K., A. Dzebo, G. Iacobuta, et al. 2023. "How Does Policy Coherence Shape Effectiveness and Inequality? Implications for Sustainable Development and the 2030 Agenda." *Sustainable Development* 1, no. 14: 3161–3174. https://doi.org/10.1002/sd.2598.

Carodenuto, S., F. R. Ziga-Abortta, and M. Sotirov. 2024. "External Europeanization Through Timber Trade Agreements: Tracing Causality in Environmental Governance Reform." *Political Geography* 109: 103065. https://doi.org/10.1016/j.polgeo.2024.103065.

Cashore, B., J. S. Knudsen, J. Moon, and H. van der Ven. 2021. "Private Authority and Public Policy Interactions in Global Context: Governance Spheres for Problem Solving." *Regulation & Governance* 15, no. 4: 1166–1182. https://doi.org/10.1111/rego.12395.

Cejudo, G. M., and C. L. Michel. 2017. "Addressing Fragmented Government Action: Coordination, Coherence, and Integration." *Policy Sciences* 50, no. 4: 745–767. https://doi.org/10.1007/s11077-017-9281-5.

Dieguez, L., and M. Sotirov. 2021. "FSC Sustainability Certification as Green-Lane for Legality Verification Under the EUTR? Changes and Policy Learning at the Interplay of Private Governance and Public Policy." *Forest Policy and Economics* 131: 102568. https://doi.org/10.1016/j.forpol.2021.102568.

Dimitrov, R. S. 2005. "Hostage to Norms: States, Institutions and Global Forest Politics." *Global Environmental Politics* 5, no. 4: 1–24. https://doi.org/10.1162/152638005774785499.

Eberlein, B., K. W. Abbott, J. Black, E. Meidinger, and S. Wood. 2014. "Transnational Business Governance Interactions: Conceptualization and Framework for Analysis." *Regulation & Governance* 8, no. 1: 1–21. https://doi.org/10.1111/rego.12030.

European Commission. 2024. "Council Decision on the Termination of the Voluntary Partnership Agreement Between the European Union and the Republic of Cameroon on Forest Law Enforcement Governance and Trade in Timber and Derived Products to the Union (2024/0245 (NLE))." https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52024PC0446.

European Union Migration and Home Affairs. n.d. "Third Country." https://home-affairs.ec.europa.eu/networks/european-migration-network-emn/emn-asylum-and-migration-glossary/glossary/third-country_en.

Flick, U. 2018. *The SAGE Handbook of Qualitative Data Collection*, edited by U. Flick. SAGE Publications. https://doi.org/10.4135/9781526416070.

Freitas, H., and C. J. Barros. 2025. "Cargill Sinaliza Saída da Moratória da Soja." Repórter Brasil. https://reporterbrasil.org.br/2025/02/cargill-sinaliza-saida-moratoria-soja-amazonia/.

FSC. 2020. "FSC in Gabon: Starting the Journey Towards 100% Certification." https://fsc.org/en/newscentre/general-news/fsc-in-gabon-starting-the-journey-towards-100-certification.

FSC. 2023. "FSC Principles and Criteria for Forest Stewardship." FSC-STD-01-001 V5-3. https://connect.fsc.org/document-centre/documents/resource/392.

17569338, 2026, 1, Downloaded from https://onlinelibrary.wiley.com/doi/10.1002/eet.70041, Wiley Online Library on [16/11/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

FSC. 2024. "System Integrity." Forest Stewardship Council. https://fsc.org/en/system-integrity.

FSC. 2025. "Regulatory Module." FSC Aligned for EUDR. https://www.fsc-eudr-journey.org/fsc-aligned-eudr-regulatory-module.

Gibbs, H. K., L. Rausch, J. Munger, et al. 2015. "Brazil's Soy Moratorium." *Science* 347, no. 6220: 377–378. https://doi.org/10.1126/science.aaa0181.

Grupo de Trabalho da Soja. 2016. "Termo de Compromisso—Renovação da Moratória da Soja—Bioma Amazônia." https://www.sojanalinha.org/wp-content/uploads/2023/05/Moratoria-Soja-Amazonia.pdf.

Hall, P. A. 1993. "Policy Paradigms, Social Learning, and the State: The Case of Economic Policymaking in Britain." *Comparative Politics* 25, no. 3: 275–296. https://doi.org/10.2307/422246.

Hall, P. A. 2010. "Historical Institutionalism in Rationalist and Sociological Perspective." In *Explaining Institutional Change: Ambiguity, Agency, and Power*, edited by J. Mahoney and K. Thelen, 204–223. Cambridge University Press.

Hosonuma, N., M. Herold, V. De Sy, et al. 2012. "An Assessment of Deforestation and Forest Degradation Drivers in Developing Countries." *Environmental Research Letters* 7, no. 4: 044009. https://doi.org/10.1088/1748-9326/7/4/044009.

Howlett, M., and J. Rayner. 2007. "Design Principles for Policy Mixes: Cohesion and Coherence in 'New Governance Arrangements'." *Policy and Society* 26, no. 4: 1–18. https://doi.org/10.1016/S1449-4035(07)70118-2.

Howlett, M., and J. Rayner. 2013. "Patching vs Packaging in Policy Formulation: Assessing Policy Portfolio Design." *Politics and Governance* 1, no. 2: 170–182. https://doi.org/10.17645/pag.v1i2.95.

Jordan, A., and A. Lenschow. 2010. "Environmental Policy Integration: A State of the Art Review." *Environmental Policy and Governance* 20, no. 3: 147–158. https://doi.org/10.1002/eet.539.

Knudsen, J. S., and J. Moon. 2017. *Visible Hands: Government Regulation of Corporate Social Responsibility in Global Business*. Cambridge University Press.

Köthke, M., M. Lippe, and P. Elsasser. 2023. "Comparing the Former EUTR and Upcoming EUDR: Some Implications for Private Sector and Authorities." *Forest Policy and Economics* 157: 103079. https://doi.org/10.1016/j.forpol.2023.103079.

Lambin, E. F., and T. Thorlakson. 2018. "Sustainability Standards: Interactions Between Private Actors, Civil Society, and Governments." *Annual Review of Environment and Resources* 43: 369–393. https://doi.org/10.1146/annurev-environ-102017-025931.

Lambin, E. F., P. Meyfroidt, X. Rueda, et al. 2014. "Effectiveness and Synergies of Policy Instruments for Land Use Governance in Tropical Regions." *Global Environmental Change* 28: 129–140. https://doi.org/10.1016/j.gloenvcha.2014.06.007.

Larsen, R. K., M. Osbeck, E. Dawkins, et al. 2018. "Hybrid Governance in Agricultural Commodity Chains: Insights From Implementation of 'No Deforestation, No Peat, No Exploitation' (NDPE) Policies in the Oil Palm Industry." *Journal of Cleaner Production* 183: 544–554. https://doi.org/10.1016/j.jclepro.2018.02.125.

Lenschow, A., J. Newig, and E. Challies. 2016. "Globalization's Limits to the Environmental State? Integrating Telecoupling Into Global Environmental Governance." *Environmental Politics* 25, no. 1: 136–159. https://doi.org/10.1080/09644016.2015.1074384.

Macdonald, K., R. Diprose, J. Grabs, et al. 2024. "Jurisdictional Approaches to Sustainable Agro-Commodity Governance: The State of Knowledge and Future Research Directions." *Earth System Governance* 22: 100227. https://doi.org/10.1016/j.esg.2024.100227.

Marques, J. C., and B. Eberlein. 2021. "Grounding Transnational Business Governance: A Political-Strategic Perspective on Government Responses in the Global South." *Regulation & Governance* 15, no. 4: 1209–1229. https://doi.org/10.1111/rego.12356.

Mayring, P., and T. Fenzl. 2019. "Qualitative Inhaltsanalyse." In *Handbuch Methoden der Empirischen Sozialforschung*, edited by N. Baur and J. Blasius, 2nd ed., 633–648. Springer Fachmedien. https://doi.org/10.1007/978-3-658-21308-4_42.

Meidinger, E. 2000. "Private Environmental Standard Setting, Human Rights, and Human Communities." SSRN Scholarly Paper 2000–101. https://papers.ssrn.com/abstract=2477153.

Meijers, E., and D. Stead. 2004. "Policy Integration: What Does It Mean and How Can It Be Achieved? A Multi-Disciplinary Review." Berlin Conference on the Human Dimensions of Global Environmental Change: Greening of Policies—Interlinkages and Policy Integration.

Meyfroidt, P., E. F. Lambin, K.-H. Erb, and T. W. Hertel. 2013. "Globalization of Land Use: Distant Drivers of Land Change and Geographic Displacement of Land Use." *Current Opinion in Environmental Sustainability* 5, no. 5: 438–444. https://doi.org/10.1016/j.cosust.2013.04.003.

Moser, C., and S. Leipold. 2021. "Toward 'Hardened' Accountability? Analyzing the European Union's Hybrid Transnational Governance in Timber and Biofuel Supply Chains." *Regulation & Governance* 15, no. 1: 115–132. https://doi.org/10.1111/rego.12268.

Muradian, R., R. Cahyafitri, T. Ferrando, et al. 2025. "Will the EU Deforestation-Free Products Regulation (EUDR) Reduce Tropical Forest Loss? Insights From Three Producer Countries." *Ecological Economics* 227: 108389. https://doi.org/10.1016/j.ecolecon.2024.108389.

Neuman, W. L. 2014. *Social Research Methods: Qualitative and Quantitative Approaches*. 7th ed. Pearson Education Limited.

Nilsson, M., T. Zamparutti, J. E. Petersen, B. Nykvist, P. Rudberg, and J. McGuinn. 2012. "Understanding Policy Coherence: Analytical Framework and Examples of Sector–Environment Policy Interactions in the EU." *Environmental Policy and Governance* 22, no. 6: 395–423. https://doi.org/10.1002/eet.1589.

Oliveira, G. M., R. F. Ziegert, A. Pacheco, et al. 2024. "Blind Spots in the EU'S Regulation on Deforestation-Free Products." *Nature Ecology & Evolution* 8: 1–2. https://doi.org/10.1038/s41559-024-02465-x.

Pendrill, F., T. A. Gardner, P. Meyfroidt, et al. 2022. "Disentangling the Numbers Behind Agriculture-Driven Tropical Deforestation." *Science* 377, no. 6611: eabm9267. https://doi.org/10.1126/science.abm9267.

Pirard, R., P. Pacheco, and C. Romero. 2023. "The Role of Hybrid Governance in Supporting Deforestation-Free Trade." *Ecological Economics* 210: 107867. https://doi.org/10.1016/j.ecolecon.2023.107867.

Présidence de la République Gabonaise. 2018. "Discours du Chef de l'Etat. Visite de La Scierie de Mevang (Rougier Gabon)."

Schleifer, P. 2023. *Global Shifts: Business, Politics, and Deforestation in a Changing World Economy*. MIT Press.

Schleifer, P., and L. Fransen. 2024. "Smart Mix Politics: Business Actors in the Formulation of Global Supply Chain Regulation." *Review of International Political Economy* 31: 1–25. https://doi.org/10.1080/09692290.2024.2367582.

Sellare, J., J. Börner, F. Brugger, et al. 2022. "Six Research Priorities to Support Corporate Due-Diligence Policies." *Nature* 606, no. 7916: 861–863. https://doi.org/10.1038/d41586-022-01718-8.

Soares-Filho, B., R. Rajão, M. Macedo, et al. 2014. "Cracking Brazil's Forest Code." *Science* 344, no. 6182: 363–364. https://doi.org/10.1126/science.1246663.

Sotirov, M., and S. Storch. 2018. "Resilience Through Policy Integration in Europe? Domestic Forest Policy Changes as Response to Absorb Pressure to Integrate Biodiversity Conservation, Bioenergy Use and Climate Protection in France, Germany, The Netherlands and Sweden."

17569338, 2026, 1, Downloaded from https://onlinelibrary.wiley.com/doi/10.1002/eet.70041, Wiley Online Library on [16/11/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Land Use Policy 79: 977–989. https://doi.org/10.1016/j.landusepol.2017.04.034.

Sotirov, M., B. Pokorny, D. Kleinschmit, and P. Kanowski. 2020. "International Forest Governance and Policy: Institutional Architecture and Pathways of Influence in Global Sustainability." *Sustainability* 12, no. 17: 7010. https://doi.org/10.3390/su12177010.

Sotirov, M., C. Azevedo-Ramos, L. Rattis, and L. Berning. 2022. "Policy Options to Regulate Timber and Agricultural Supply-Chains for Legality and Sustainability: The Case of the EU and Brazil." *Forest Policy and Economics* 144: 102818. https://doi.org/10.1016/j.forpol.2022.102818.

Sun, Y., and H. van der Ven. 2020. "Swimming in Their Own Direction: Explaining Domestic Variation in Homegrown Sustainability Governance for Aquaculture in Asia." *Ecological Economics* 167: 106445. https://doi.org/10.1016/j.ecolecon.2019.106445.

Tchinda, A., and D. Talbot. 2024. "Barriers and Enablers of Environmental Policy Coherence: A Systematic Review." *Environmental Policy and Governance* 34, no. 1: 77–92. https://doi.org/10.1002/eet.2057.

Titley, M. 2024. "EU27 Countries in the Spotlight for Deforestation Exposure." Trase. https://doi.org/10.48650/5XRC-VG04.

Utesch-Xiong, F., G. Leymann, and S. M. Lundan. 2022. "More Policy Is Not Always Effective Policy: How Policy Coherence Affects Firm Internationalization." *International Business Review* 33: 102082. https://doi.org/10.1016/j.ibusrev.2022.102082.

van der Ven, H., Y. Sun, and B. Cashore. 2021. "Sustainable Commodity Governance and the Global South." *Ecological Economics* 186: 107062.

van Noordwijk, M., B. Leimona, and P. A. Minang. 2025. "The European Deforestation-Free Trade Regulation: Collateral Damage to Agroforesters?" *Current Opinion in Environmental Sustainability* 72: 101505. https://doi.org/10.1016/j.cosust.2024.101505.

Vasconcelos, A. A., M. G. Bastos Lima, T. A. Gardner, and C. L. McDermott. 2024. "Prospects and Challenges for Policy Convergence Between the EU and China to Address Imported Deforestation." *Forest Policy and Economics* 162: 103183. https://doi.org/10.1016/j.forpol.2024.103183.

Williamson, D., and G. Lynch-Wood. 2021. *The Structure of Regulation: Explaining Why Regulation Succeeds and Fails*. Edward Elgar Publishing.

Zeitlin, J., and C. Overdevest. 2021. "Experimentalist Interactions: Joining Up the Transnational Timber Legality Regime." *Regulation and Governance* 15, no. 3: 686–708. https://doi.org/10.1111/rego.12350.

Zhunusova, E., V. Ahimbisibwe, L. T. H. Sen, et al. 2022. "Potential Impacts of the Proposed EU Regulation on Deforestation-Free Supply Chains on Smallholders, Indigenous Peoples, and Local Communities in Producer Countries Outside the EU." *Forest Policy and Economics* 143: 102817. https://doi.org/10.1016/j.forpol.2022.102817.

Ziegert, R. F., and M. Sotirov. 2024. "Regulatory Politics and Hybrid Governance: The Case of Brazil's Amazon Soy Moratorium." *Global Environmental Change* 88: 102916. https://doi.org/10.1016/j.gloenvcha.2024.102916.

Cited Laws

Brazilian Forest Code—Law 12.651/2012.

Brazilian National System of Nature Conservation Units Law—Law 9.985/2000.

Brazilian Public Forests Management Law—Law 11.284/2006.

Cameroonian Forestry Law—Law 94/01 of 20 January 1994.

EU Regulation on Deforestation-free Products—Regulation (EU) 2023/1115 of the European Parliament and of the Council of 31 May 2023 on the making available on the Union market and the export from the Union of certain commodities and products associated with deforestation and forest degradation and repealing regulation (EU) no. 995/2010 (O JL 150 of 09.06.2023).

EU Timber Regulation—regulation (EU) no. 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market (OJ L 295 of 12.11.2010).

EU-Cameroon VPA of 2010. EU-Cameroon FLEGT Voluntary Partnership Agreement Between Cameroon and the European Union.

Gabonese Forest Code—Law 016/01 of 31 December 2001.

Supporting Information

Additional supporting information can be found online in the Supporting Information section. **Data S1:** eet70041-sup-0001-Supinfo1.docx. **Data S2:** eet70041-sup-0002-Supinfo2.docx. **Data S3:** eet70041-sup-0003-Supinfo3.docx.

17569338, 2026, 1, Downloaded from https://onlinelibrary.wiley.com/doi/10.1002/eet.70041, Wiley Online Library on [16/11/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License