

Protecting forests or saving trees? The EU's regulatory approach to global deforestation

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Abstract

Given the poor problem-solving effectiveness of international environmental law and a decline in multilateralism, unilateral approaches to halting deforestation globally have acquired increasing significance. Within this context, the European Union (EU) has adopted the EU Timber Regulation and the first and second Renewable Energy Directive, all of which have extraterritorial implications. Given continuing high rates of deforestation, the European Union has also been assessing which mix of instruments might prove more effective in preventing global deforestation. This article contextualizes these regulatory endeavours, analyses the specific interactions and features of existing instruments under EU law, such as due diligence obligations, sustainability criteria, certification schemes and bilateral agreements, and discusses the challenges arising from World Trade Organization (WTO) law regarding potentially more effective mandatory instruments. It finds that while the existing framework contains promising pathways for future regulation, designing sustainability criteria that are technically meaningful and also feasible from the perspective of WTO law requires greater policy coherence.

1 | INTRODUCTION

The forest fires that raged in the Amazon, the Pantanal, California and Australia in 2020 have once again brought the global threat to forests to the forefront of public debate. This threat is all the more dramatic given that deforestation and forest degradation are among the causes of the threefold challenge facing humanity: climate change, biodiversity loss and the spread of zoonotic diseases such as COVID-19.¹ In fact, the two main drivers of forest degradation and deforestation are climate change and land-use changes prompted by growing demand for particular foods, animal fodder and bioenergy

plants.² Even if deforestation in tropical and subtropical countries such as Indonesia and Brazil is linked predominantly to domestic consumption, the rate of 'embodied'³ deforestation in products exported to and consumed in the Global North, including the European Union (EU),⁴ remains very high.⁵

¹European Parliament, 'European Parliament Resolution of 22 October 2020 with Recommendations to the Commission on an EU Legal Framework to Halt and Reverse EU-Driven Global Deforestation' 2020/2006(INL) (22 October 2020) para 6; S Morand and C Laiauni, 'Outbreaks of Vector-Borne and Zoonotic Diseases Are Associated with Changes in Forest Cover and Oil Palm Expansion at Global Scale' (2021) 8 *Frontiers in Veterinary Science* 1.

²S Diaz et al, 'The Global Assessment Report on Biodiversity and Ecosystem Services—Summary for Policymakers' (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services 2019) 12.

³The concept of 'embodied deforestation' is used to link deforestation to consumption. It refers to the deforestation embodied (as an externality) in a product, good, commodity or service that is produced, traded or consumed.

⁴Between 2001 and 2018, 26 percent of the embodied deforestation from tropical and subtropical countries was exported; see A Heflich, 'An EU Legal Framework to Halt and Reverse EU-Driven Global Deforestation – European Added Value Assessment (European Parliamentary Research Service 2020) 7. Between 1990 and 2008, one third of the total global deforestation embodied in internationally traded crop products (excluding meat) was attributed to consumption within the EU; see N Devriendt et al, 'The Impact of EU Consumption on Deforestation: Proposal of Specific Community Policy, Legislative Measures and Other Initiatives for Further Consideration by the Commission – Final Report' (European Commission 2012) iv, 58.

⁵Heflich (n 4) 7.

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In this context, the EU has increasingly sought to address its role in deforestation and forest degradation beyond its own borders, adopting both voluntary and mandatory instruments such as preferential free trade agreements or cooperative partnership agreements with third countries and regulatory instruments focusing on certain commodities that embody high deforestation rates (forest-risk commodities, FRCs) such as timber and palm oil. In addition to these measures explicitly addressing deforestation, the EU has adopted and promoted sustainability measures and initiatives with regard to the circular economy and on corporate social and environmental responsibility.⁶

In its Communication on the European Green Deal, the European Commission repeated its intention to make increased efforts to address EU-driven deforestation and forest degradation beyond the EU's borders by deploying both regulatory and nonregulatory measures that promote imported products and value chains not involving deforestation and forest degradation.⁷ The Commission is expected to submit a legislative proposal in this regard in August 2021 at the earliest.⁸ Measures may include certification schemes and labelling, due diligence obligations to ensure sustainable and deforestation-free supply chains for FRCs placed on the EU market, bilateral agreements and financial instruments and tools such as the Product Environmental Footprint.⁹ While voluntary instruments to reduce the negative impact of production and consumption on the environment¹⁰ have been the frontrunners in the area of corporate social and environmental governance, voluntary approaches on their own have had a limited

effect¹¹ in numerical terms.¹² Recognition of the need for mandatory regulation has therefore increased.

Against this backdrop, this article examines existing and potential (mainly mandatory) instruments aimed explicitly at halting EU-driven deforestation. Building on the literature on unilateral measures with extraterritorial implications and on transnational forest governance, the article seeks to facilitate an understanding of the challenges involved in combining regulatory and other instruments while simultaneously designing due diligence obligations based on meaningful substantive (sustainability) criteria that comply with the WTO's General Agreement on Tariffs and Trade (GATT).¹³ The article begins by providing an overview of the broader regulatory context to be taken into consideration when drawing up regulations designed to address deforestation outside the EU. It then analyses the main features of the current legal framework, focusing on the due diligence obligations established by the EU Timber Regulation (EUTR), the sustainability criteria as laid down in the second Renewable Energy Directive (RED II), and the interplay between EUTR and RED II with cooperative and voluntary instruments. In view of the regulatory gaps and challenges identified, the article then discusses mandatory certification and due diligence obligations for FRCs as two potential measures setting high sustainability standards. It shows how requirements under the GATT will impact the possible material content of these EU measures addressing extraterritorial deforestation. It concludes by arguing that while the existing framework contains promising pathways for future regulation, designing sustainability criteria under mandatory certification schemes and due diligence obligations that are technically meaningful and also feasible from the perspective of WTO law requires greater coherence between the EU's environmental policies and its Common Agricultural Policy (CAP)—and this remains a major challenge.

2 | BROADER REGULATORY CONTEXT

Since the 1990s, the international community has sought to strengthen sustainable forest management by implementing several international instruments and agreements and by setting up corresponding international forums.¹⁴ Despite these efforts, global deforestation and forest

⁶These include environmental labelling, sustainability reporting for companies (Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of nonfinancial and diversity information by certain large undertakings and groups [2014] OJ L330/1 (CSR Directive), human rights due diligence in supply chains of certain minerals (art. 12–20 of the Regulation (EU) 2017/821 of the European Parliament and of the Council of 17 May 2017 laying down supply chain due diligence obligations for Union importers of tin, tantalum and tungsten, their ores and gold originating from conflict-affected and high-risk areas [2017] OJ L 130 (Conflict Minerals Regulation)), green public procurement (Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC [2014] OJ L 94 and Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC [2014] OJ L 94/243) and sustainable finance instruments (EU Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the Establishment of a Framework to Facilitate Sustainable Investment [2020] OJ L 198/13 (Taxonomy Regulation)); COWI, Ecofys and Milieu, 'Feasibility Study on Options to Step up EU Action against Deforestation Part I and Part II—Final Report' (Publications Office of the European Union 2018) 143.

⁷Commission (EU) 'The European Green Deal' (Communication) COM(2019) 640 final, 11 December 2019, para 2.1.7; Commission (EU), 'Stepping up EU Action to Protect and Restore the World's Forests' (Communication) COM(2019) 352 final, 23 July 2019. The propositions contained therein are likely to serve as a blueprint for the New Forest Strategy Post-2020, the publication of which has been repeatedly postponed. The New Forest Strategy will build on the EU Bioeconomy Strategy (2020), the EU Biodiversity Strategy for 2030 (2020) and the Farm to Fork Strategy (2020).

⁸Commission (EU), 'Deforestation and Forest Degradation—Reducing the Impact of Products Placed on the EU Market' <<https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12137-Deforestation-and-forest-degradation-reducing-the-impact-of-products-placed-on-the-EU-market>>.

⁹Commission (EU), 'Minimizing the Risk of Deforestation and Forest Degradation Associated with Products Placed on the EU Market', Ref. Ares (2020)744911 (5 February 2020). For an overview of measures, see COWI et al (n 6) 221.

¹⁰To name just a few standards developed under the auspices of the Organization for Economic Co-operation and Development (OECD) or the International Organization for Standardization (ISO): OECD, 'OECD Guidelines for Multinational Enterprises' (2011); OECD, 'OECD Due Diligence Guidance for Responsible Business Conduct' (2018); ISO 14001:2015 (Environmental management systems—Requirements with guidance for use); ISO 26000 (Social responsibility); and ISO/TS 26030:2019 (Social responsibility and sustainable development – Guidance on using ISO 26000:2010 in the food chain).

¹¹Heflich (n 4) 17; RB Stewart, 'Instrument Choice' in D Bodansky, J Brunnee and E Hey (eds), *The Oxford Handbook of International Environmental Law* (Oxford University Press 2007) 153.

¹²Heflich (n 4) 15.

¹³General Agreement on Tariffs and Trade 1994 (adopted 15 April 1994, entered into force 1 January 1995) 1867 UNTS 187 (GATT). Note that other rules of WTO law will not be analysed.

¹⁴A Savarese, 'Forest Biodiversity' in E Morgera and J Razzaque (eds), *Biodiversity and Nature Protection Law* (Edward Elgar 2017) 203; BH Desai, 'International Protection of Forests' in R Wolfrum (ed), *The Max Planck Encyclopedia* (Oxford University Press 2011) para 16.

¹⁵International environmental law's performance in tackling deforestation and forest degradation and the related issues of climate change and biodiversity loss effectively has clearly been too weak. Consider, for example, Aichi Target 5, according to which by 2020 the rate of loss of all natural habitats, including forests, should have been at least halved and, where feasible, brought close to zero, so that degradation and fragmentation should have been significantly reduced. This target has clearly been missed. As the Fifth Global Biodiversity Outlook pointed out, although deforestation rates have slowed by a third in the last decade, 'deforestation may be accelerating again in some areas. Loss, degradation and fragmentation of habitats remain high in forests and other biomes, especially in the most biodiversity-rich ecosystems in tropical regions.' Convention on Biological Diversity (CBD), '5th Global Biodiversity Outlook' (15 September 2020) 13. Forest-related targets 11, 14 and 15 have not been achieved, and target 7 has only been partially achieved.

degradation have not been halted or sufficiently reduced.¹⁵ International environmental law has not been able to adequately address the two main drivers of forest degradation and deforestation, namely, climate change and land-use changes arising from the growing demand, inter alia, for soy, palm oil, coffee and meat, resulting in loss of forest cover, loss of carbon sink potential, rising greenhouse gas emissions, fragmentation of biotope networks and a further loss of biodiversity.¹⁶ The fact that international environmental law lacks effectiveness may be due to the factual complexity of deforestation. While there is scientific consensus regarding the ecological importance of forests, biodiversity and the reduction of greenhouse gases, the immediate costs of reorganizing land-use management, monitoring deforestation and transitioning to a climate-neutral economy can be considerable. Forest-rich countries also fear losing their economic competitiveness relative to other countries. Deforestation is thus one of today's 'wicked problems' that cannot be 'framed and understood in a linear cause-symptom-effect-relationship' but rather requires systemic change.¹⁷ Alongside the lack of international environmental law's problem-solving effectiveness¹⁸ in addressing deforestation, biodiversity loss and climate protection,¹⁹ we continue to witness a general decline in multilateralism. Global environmental regimes and forums alone are therefore unlikely to generate comprehensive solutions to the pressure on forests.

Hence, although international trade and environmental law experts have argued that multilateral environmental agreements are the better place to address global environmental problems,²⁰ the need for additional measures to protect forests has become clear.²¹ These include trade, development and investment policies that extend beyond multilateral cooperation and may encompass 'contingent unilateral' mandatory measures.²²

Unilateral measures of this kind are of particular interest because 'they differ from conventional external relations

tools'.²³ While their application 'is triggered by the existence of a territorial [link with the EU, these measures seek] to regulate conduct that takes place outside of the EU'.²⁴ In fact, having a broad substantial scope of application, their explicit aim is to incentivize structural developments beyond the EU's borders. Structural influence can be exercised in all kinds of policy areas, including through conditioned (denial or allowance of) market access, thus using the EU's market power. Structural influence can also be exercised through dialogue in particular with other major markets or within international forums. Along these lines, the EU has increasingly attempted to address global environmental problems such as deforestation by introducing regulatory instruments with extraterritorial implications,²⁵ thereby making use of both, 'leadership by example' and 'power-based leadership'.²⁶

However, instruments of this kind entail several problems and pose regulatory challenges. They may raise moral dilemmas (e.g. 'ecological imperialism')²⁷ and problems relating to their legitimacy.²⁸ They may also lead to socio-economic and ecological problems in third countries.²⁹ What is more, they may have limited effectiveness if all they do is relocate the unsustainable cultivation, production or extraction of commodities to other major markets³⁰ or shift pressure onto other ecosystems because their scope of application may be too limited (leakage effects). Such challenges can partly be addressed by impact assessment studies. Yet legislators will also have to take into account the fact that some obligations under multilateral environmental agreements such as the Convention on Biological Diversity (CBD), the Convention on International Trade in Endangered Species of Fauna and Flora (CITES) and the United Nations Framework Convention on Climate Change, international human rights treaties,³¹ as well as international customary law such as the no-harm rule, might legitimate or even require trade-related measures against deforestation, while other obligations may make them

¹⁴Diaz et al (n 2) 12.

¹⁵Cf S Ozinga, 'Getting the Incentives right—Why Partnership Agreements Should Be at the Heart of EU Efforts to End Deforestation' (FERN 2020) 4. While the concept of 'wicked problems' was first developed in the context of planning policy, it can readily be applied to some of today's environmental problems. See, for example, M Hulme, *Why We Disagree about Climate Change* (Cambridge University Press 2011) 334.

¹⁶For an analysis of international environmental law's (in)effectiveness in general, see, for example, D Bodansky, *The Art and Craft of International Environmental Law* (Harvard University Press 2010) 252, 261–262; E Louka, *International Environmental Law: Fairness, Effectiveness, and World Order* (Cambridge University Press 2006).

¹⁷There is no international forest convention but rather various instruments of soft law. A series of multilateral agreements exist that indirectly address forest degradation and deforestation, including the 1992 CBD, the 1992 UN Framework Convention on Climate Change (further specified by the 2015 Paris Agreement), the 1972 Ramsar Convention on Wetlands of International Importance, the 1972 World Heritage Convention, the 1994 United Nations Convention to Combat Desertification and trade-related conventions such as the 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the 2006 International Tropical Timber Agreement.

¹⁸M Matsushita et al, *The World Trade Organization: Law, Practice and Policy* (3rd edn, Oxford University Press 2015) 732; P Birnie, A Boyle and C Redgwell, *International Law and the Environment* (3rd edn, Oxford University Press 2009) 790.

¹⁹J Scott, 'Reducing the EU's Global Environmental Footprint' (2020) 21 German Law Journal 10, 13; J Scott, 'Zoonotic Disease Emergence and the EU's Global Environmental/Land Use Footprint' (UCL Centre for Environmental Law 2020) <<https://www.ucl.ac.uk/laws/events/2020/nov/online-zoonotic-disease-emergence-and-eus-global-environmentalland-use-footprint>>.

²⁰I Hadjiyianni, *The EU as a Global Regulator for Environmental Protection* (Hart 2019) 14.

²³ibid 2; D Bodansky, 'What's so Bad about Unilateral Action to Protect the Environment?' (2000) 11 European Journal of International Law 339, 339; N Krisch, 'The Decay of Consent: International Law in the Age of Global Public Goods' (2014) 108 American Journal of International Law 1, 1.

²⁴Scott, 'Reducing the EU's Global Environmental Footprint' (n 21) 13; J Scott, 'Extraterritoriality and Territorial Extension in EU Law' (2014) 62 American Journal of Comparative Law 87, 90; J Scott, 'The Global Reach of EU Law' in M Cremona and J Scott (eds), *EU Law beyond EU Borders: The Extraterritorial Reach of EU Law* (Oxford University Press 2020) 21, 22.

²⁵For an overview of the EU's multifaceted approach to environmental policy action outside the EU; see Hadjiyianni (n 22) 14.

²⁶ibid 15.

²⁷Scott, 'Reducing the EU's Global Environmental Footprint' (n 21) 10–16; CG Gonzales, 'Beyond Eco-Imperialism: An Environmental Justice Critique of Free Trade' (2001) 78 Denver University Law Review 981, 981.

²⁸Hadjiyianni (n 22) 50.

²⁹HH Wu, 'Territorial Extension of the EU: Environmental Law and Its Impacts on Emerging Industrial Economies, A Taiwan Case' (2020) 6 China & WTO Review 325, 325–350; A Lenschow, J Newig and E Challies, 'Globalization's Limits to the Environmental State? Integrating Telecoupling into Global Environmental Governance' (2016) 25 Environmental Politics 136, 136–159.

³⁰This is why dialogue between the EU and other major markets and analogue legal reforms are of great importance for the effectiveness of such instruments; see P Pirlot et al, 'Forests: A Multi-Sectoral and Multi-level Approach to Sustainable Forest Management' in C Adelle, K Biedenkopf and D Torney (eds), *European Union External Environmental Policy* (Palgrave Macmillan 2018) 167.

³¹A Zimmermann and N Weiss, 'Völker- und verfassungsrechtliche Parameter eines deutschen Lieferkettengesetzes' (2020) 58 Archiv für Völkerrecht 424.

illegal. Most importantly, questions of how to avoid conflict with another State's jurisdiction and particularly with WTO law make the design and content of unilateral measures with extraterritorial implications an even bigger—though not insurmountable—challenge.³² As WTO law constitutes an important regime that determines the permissibility and operation of unilateral measures, addressing this challenge is critical to the legitimacy of unilateral measures.

These challenges notwithstanding, from an EU law perspective unilateral measures offer an important regulatory advantage: when adopting such measures, the EU can rely on its competences to either harmonize the functioning of the internal market or adopt environmental measures,³³ while simultaneously side-stepping 'the constitutional complexities associated with EU external competence' to ratify multilateral agreements.³⁴ This regulatory advantage also exists where the EU wishes to address deforestation or regulate FRCs on the internal market. Here the EU can mainly rely on its environmental competences³⁵ or its competence to approximate provisions which have as their object the establishment and functioning of the internal market.³⁶

3 | CURRENT EU FRAMEWORK ADDRESSING DEFORESTATION

The EU's 2003 Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan was adopted to address illegally harvested timber and timber products derived from such timber (Section 3.1). As the growing use of renewable energy results in growing imports of biological materials from third countries, the EU has also addressed land-use change linked to the cultivation of bioenergy plants, including forest biomass through its legislation on renewable energy (Section 3.2). As will be shown, by adopting these frameworks, the EU has combined mandatory with voluntary instruments. It has adopted mandatory due diligence obligations in the supply chain regarding the legality of timber harvest and established the possibility of financial support schemes for demonstrably sustainable bioenergy commodities. The EU has invited partner countries to conclude bilateral agreements which enable access to the internal market for timber products from producer countries that fulfil certain criteria. To address the lack of monitoring and enforcement options in the context of extraterritorial resource management and to make compliance for norm addressees easier, the EU has also integrated a range of existing voluntary verification and certification schemes. By taking these measures, the

EU has contributed to the establishment of transnational forest governance.³⁷

3.1 | Instruments under the FLEGT action plan

With its FLEGT Action Plan, the EU has inaugurated a complementary set of cooperative instruments addressing both the demand and the supply side of the European timber market. As the central pillar of instruments addressing the demand side, the EUTR³⁸ establishes due diligence obligations and legality criteria for access of timber to the internal market. Focusing on the supply side, bilateral Voluntary Partnership Agreements (VPAs) support the establishment of sustainable forest management systems and legal timber logging schemes in partner countries and guarantee access of timber harvested in these countries to the internal market. The EUTR and VPAs, taken together, are intended to reduce the import of illegally logged timber and incentivize stakeholders to establish sustainable forest management in third countries.

3.1.1 | EUTR: Due diligence with regard to the legality of harvesting

The central pillar of EUTR is its due diligence approach. In the area of corporate social responsibility, this concept was introduced in 2011 in the United Nations (UN) nonbinding Guiding Principles on Business and Human Rights (UNGPs) and has been incorporated into various other standards which, in turn, have generated regulatory initiatives at national and supranational levels.³⁹ Due diligence obligations of market actors enable governments to address complex global trade settings involving diverse actors, diffused responsibilities and generally weak transparency regarding global supply chains. Being obligations of conduct and means but not of result, they can be a workable option in such settings, given that requiring a full guarantee of certain production standards would put a disproportionate burden on market actors.

In procedural terms, due diligence most often requires companies to adopt and maintain a management system that serves to identify, avoid and reduce actual or potential risks and objectively foreseeable damages in their supply chains. It may also require them to encourage their business partners (including suppliers and subcontractors), where practicable, to apply principles of responsible business conduct and to

³²Hadjiyianni (n 22) 50; EV Henn and J Jahn, 'Rechtsgutachten: Zulässigkeit und Gegenstand umweltbezogener Sorgfaltspflichten in einem deutschen Lieferkettengesetz' (BUND, Greenpeace and DUH 2020); Scott, 'Extraterritoriality and Territorial Extension in EU Law' (n 24) 89; J Crawford, *Brownlie's Principles of Public International Law* (8th edn, Oxford University Press 2012) 456.

³³G Marín Durán and E Morgera, *Environmental Integration in the EU's External Relations* (Cambridge University Press 2012) 25.

³⁴Hadjiyianni (n 22) 19.

³⁵Consolidated Version of the Treaty on the Functioning of the European Union [2016] OJ C202/47 (TFEU) arts 11 and 191–192.

³⁶*ibid* art 114(1) and (3).

³⁷The EU's measures have influenced the legal approaches taken by the US and Australia. See J Zeitlin and C Overdevest, 'Experimentalist Interactions: Joining up the Transnational Timber Legality Regime' (2020) 14 *Regulation and Governance* 1.

³⁸Regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down obligations of operators who place timber products on the EU market [2010] OJ L295/23 (EUTR).

³⁹Office of the High Commissioner on Human Rights, 'Guiding Principles on Business and Human Rights: Implementing the "Protect, Respect and Remedy" Framework' (2011) <https://www.ohchr.org/documents/publications/guidingprinciplesbusinesshr_en.pdf>; OECD Guidelines for Multinational Enterprises (n 10); OECD Due Diligence Guidance for Responsible Business Conduct (n 10). See further L Smit et al, 'Study on Due Diligence Requirements through the Supply Chain' (European Commission 2020) 156; Henn and Jahn (n 32).

use their influence in the supply chain to bring about change in the behaviour of suppliers, where necessary by terminating business relationships.⁴⁰

Substantively, due diligence obligations require a material standard, goal or improvement rule that norm addressees should endeavour to ensure. This standard can potentially refer to the legal order of exporting States (i.e. host State law), human rights standards or sustainability and environmental standards.⁴¹ However, as will be discussed below, when establishing substantive standards for extra-territorial settings, GATT requirements pose some challenges.⁴²

Under the EUTR, all operators are prohibited from placing illegally logged timber and timber products derived from such timber (as defined in the Annex of EUTR) on the internal market, irrespective of their origin.⁴³ With this ban, the EU followed up on nonbinding statements it had made since the late 1990s in the context of numerous initiatives by the G8, the International Tropical Timber Organization, the UN Forum on Forests and the CBD. Accordingly, operators must endeavour to ensure the *legality* of the timber harvest according to the law of the country of origin.⁴⁴ Operators must conduct a due diligence risk assessment as to whether timber imported by them has been illegally harvested. They must collect information about the timber they intend to import, assess the likelihood that it has been legally harvested and take measures to reduce the risk of importing illegally logged timber.⁴⁵ Hence, the 'regulation does not demand proof of legality of all timber products entering the EU market but specifies elements of the due diligence systems that operators must implement in order to minimize their risk of handling illegal timber'.⁴⁶ If operators do not carry out proper due diligence, they may be subject to penalties under national law,⁴⁷ even if the commodity placed on the market is itself not proven to be illegal.⁴⁸

To facilitate compliance with their due diligence obligations, operators can make use of due diligence supervision systems under national legislation and any voluntary supply chain mechanisms established by an external monitoring organization. Such an organization (e.g. the Forest Stewardship Council [FSC] or the Programme for the Endorsement of Forest Certification) must meet the requirements of the EUTR due diligence system⁴⁹ and be approved by the European Commission.⁵⁰ However, the use of such organizations does not alleviate the operators from their due diligence obligation

and liability remains with them. As soon as timber has entered the market, traders who, in the course of a commercial activity, sell or buy on the internal market timber or timber products already placed on the internal market have to be able to identify throughout the supply chain the operators or the traders who have supplied the timber and timber products.⁵¹

The EUTR not only ignores FRCs other than timber but also contains a limited range of timber products as defined in its Annex. The EUTR also distributes responsibilities unevenly between operators and traders, thereby making it easier for operators to circumvent their due diligence obligations.⁵² Moreover, the substantive side of the due diligence obligations is limited to the criterion of legality of harvest. This criterion does not necessarily address leakage effects that shift pressure onto other ecosystems, such as nonwooden peatlands, nor does it tackle human rights abuses which often occur in the context of deforestation. It is also not clear whether the legality requirements serve merely to relocate FRCs cultivated, produced or extracted unsustainably to other markets.⁵³ Most importantly, while the use of due diligence systems established by a monitoring organization as foreseen under the EUTR is critical for companies to prove compliance with their due diligence obligations⁵⁴ regarding the legality of harvest, two recent studies have shown that even strong standards such as the FSC and Roundtable on Sustainable Palm Oil suffer from 'weak implementation combined with a lack of transparency and product traceability'.⁵⁵ Accordingly, many 'certified companies continue to be linked to forest and ecosystem destruction, land disputes and human rights abuses'.⁵⁶ Put simply, the study shows that a certified product is not the equivalent of a deforestation-free product. Hence, improving certification schemes will be key to ensuring effective forest governance.⁵⁷

3.1.2 | Voluntary partnership agreements

According to Article 3 of the EUTR, timber and timber products with a CITES licence or a FLEGT licence originating from FLEGT partner countries are considered to have been harvested legally. It is here that VPAs with third countries come into play. The aim of these bilateral agreements that the EU has progressively concluded with timber-producing countries since 2005 is to provide a guarantee to partner

⁴⁰OECD Due Diligence Guidance for Responsible Business Conduct (n 10) Chapter II paras 13–22; Smit et al (n 39) 158.

⁴¹See Section 4.2.2. Cf D Krebs, 'Home State Environmental Due Diligence Obligations with Regard to Transnational Value Chains' in P Gailhofer et al (eds), *International Liability for Environmental Harm* (2021) fc.

⁴²See Section 4.

⁴³EUTR (n 38) art 4(1).

⁴⁴*ibid* art 4; Pirlot et al (n 30) 170.

⁴⁵EUTR (n 38) art 6.

⁴⁶D Brack, 'Combating Illegal Logging: Interaction with WTO Rules' (Chatham House 2013).

⁴⁷Note that Member States allocate different and often insufficient funds for the implementation of EUTR.

⁴⁸EUTR (n 38) art 19.

⁴⁹*ibid* art 4(3) and (8).

⁵⁰For questions regarding compatibility with Agreement on Technical Barriers to Trade (TBT), see M Du, 'Clearing the Fog: Forest Stewardship Council Labelling and the World Trade Organization' (2021) 30 *Review of European, Comparative and International Environmental Law* 81.

⁵¹EUTR (n 38) art 5(1). See D Brack, 'Tackling Deforestation and the Trade in Forest-Risk Commodities: Consumer-Country Measures and the "Legality Approach"' (Forest Policy Trade and Finance Initiative 2019).

⁵²ClientEarth, 'Position Paper regarding EU rules on Illegal Logging' (2020) 4; Cf Commission (EU), 'Impact Assessment Study for the Revision of the Product Scope of the EU Timber Regulation' (European Commission 2019) <<https://op.europa.eu/en/publication-detail/-/publication/fd26ad03-9895-11e9-b2f2-01aa75ed71a1>>.

⁵³Pirlot et al (n 30) 178. But see the positive trends on the Chinese market; Zeitlin and Overdevest (n 37) 16.

⁵⁴Brack (n 51).

⁵⁵Greenpeace International, 'Destruction Certified' (2021).

⁵⁶*ibid* 12; T Mai-Moulin et al, 'Effective Sustainability Criteria for Bioenergy: Toward the Implementation of the European Renewable Directive II' (2021) 138 *Renewable and Sustainable Energy Reviews* 3.

⁵⁷In this context, see the new theory of public-private regulatory interactions developed by S Renckens, *Private Governance and Public Authority* (Cambridge University Press 2020).

countries that legally harvested timber will be imported into the EU. VPAs are therefore a central pillar of the EU's FLEGT framework.

For a partner country to be eligible to conclude a VPA with the EU, it must first engage in a multistakeholder process to agree on the definition of the legality of timber based on existing forestry, environmental, labour and fiscal regulations as well as indigenous community rights.⁵⁸ This process must ensure broad civil society and private business participation.⁵⁹ The FLEGT partner country establishes a timber legality assurance scheme and a timber export licensing scheme to ensure that only products verified as legally produced can be exported to the EU. The timber legality assurance scheme often includes independent civil society monitors and a third-party auditor. In turn, the EU provides technical and financial assistance for capacity building and reforms within the forest governance system of partner countries. The EU also ensures access to the European market for timber and timber products accompanied by a valid FLEGT licence. VPAs establish joint committees which consist of representatives from both the partner country and the EU and, in many cases, civil society organizations and private actors. Such committees monitor the implementation of the timber legality assurance and timber export licensing schemes and ensure that they are working satisfactorily.⁶⁰

However, significant challenges arise with regard to implementing VPAs.⁶¹ Clearly, the FLEGT architecture with its civil society participation, 'independent monitoring, and joint implementation review, [is often able to empower] domestic nongovernmental organizations with local knowledge to expose problems on the ground, hold public authorities accountable for addressing them and contribute to developing provisional solutions'.⁶² However, notwithstanding the capacity-building assistance provided by the EU, partner countries may lack civil society structures to fully participate in the improvement of forest governance and law enforcement.⁶³ Important stakeholders in third countries may also oppose forest governance reforms because of the benefits they reap from pre-VPA social structures such as corruption.⁶⁴ Moreover, the process of implementing a VPA is very time-consuming. Although VPAs have already been concluded with nine countries (Ghana, Guyana, Honduras, Indonesia, Vietnam, the Republic of Congo, Cameroon, the Central African Republic and Liberia), only Indonesia had established effective timber legality assurance and export licensing schemes and started exporting FLEGT-licensed timber in 2016; Ghana is expected to do so in 2021.⁶⁵

These critical points notwithstanding, the institutional strengthening of forest management entailed by a VPA implies that the ecological footprint of commodities destined both for the European

market and for consumption in the producing country is reduced. VPAs are therefore an essential tool in the construction of a transnational forest governance architecture.⁶⁶

3.2 | Forest-related issues under EU renewable energy legislation

Alongside the FLEGT framework, the EU has established a complex renewable energy legislative framework aimed at reducing the EU's overall greenhouse gas emissions. This framework simultaneously promotes renewable energy and addresses the adverse impacts associated with the production of bioenergy plants, namely, direct and indirect⁶⁷ land-use change through deforestation and the conversion of nonagricultural land.⁶⁸ The framework currently comprises the Renewable Energy Directive (RED II)⁶⁹ and the Commission Delegated Regulation,⁷⁰ which supplements RED II (ILUC Regulation). Member States were required to bring into force the laws, regulations and administrative provisions necessary to comply with RED II by 30 June 2021.

In line with the focus of this article, this section looks at the forest-specific aspects of the renewable energy legal framework. It explains RED II's incentive-setting mechanism and its sustainability criteria, which apply to fuels derived from both agricultural and forest biomass and address direct land-use change. As indirect land-use change (ILUC) raises complex legal and interdisciplinary concerns on its own,⁷¹ it will not be discussed in detail here.

3.2.1 | RED II: Sustainably produced renewable energy fuels eligible for financial support

RED II sets a target for the gross final consumption of energy from all renewable sources for electricity, heating and cooling at 32 percent by 2030 (for the entire Union) and for the transport sector at 14 percent.⁷² Member States are required to set their own national

⁶⁶Ozinga (n 17); Zeitlin and Overdevest (n 53).

⁶⁷Indirect land-use change occurs when the cultivation of crops for biofuels, bioliquids and biomass fuels displaces traditional production of crops for food and feed purposes.

⁶⁸For a larger contextualization of bioenergy production, see E Webster, 'Transnational Legal Processes, the EU and RED II: Strengthening the Global Governance of Bioenergy' (2020) 29 *Review of European, Comparative and International Environmental Law* 86, 88.

⁶⁹Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources [2018] OJ L328/82 (RED II), which is a revision of the Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC [2009] OJ L140/16.

⁷⁰Commission Delegated Regulation (EU) 2019/807 of 13 March 2019 supplementing Directive (EU) 2018/2001 of the European Parliament and of the Council as regards the determination of high indirect land-use change-risk feedstock for which a significant expansion of the production area into land with high carbon stock is observed and the certification of low indirect land-use change-risk biofuels, bioliquids and biomass fuels [2019] OJ L133/1 (ILUC Regulation).

⁷¹The EU has sought to address ILUC not least by means of the ILUC Regulation; for details see J Stubenrauch et al, *Forest Governance. Overcoming Trade-Offs between Land Use Pressure, Climate and Biodiversity Protection* (Springer 2021) fc.

⁷²RED II (n 69) arts 2(1), 3(1) and 25(1).

⁵⁸J Zeitlin and C Overdevest, 'Experimentalism in Transnational Forest Governance: Implementing European Union Forest Law Enforcement, Governance and Trade (FLEGT) Voluntary Partnership Agreements in Indonesia and Ghana' (2018) 12 *Regulation and Governance* 64, 67.

⁵⁹Cf P Satyal, 'Civil Society Participation in REDD+ and FLEGT Processes: Case Study Analysis from Cameroon, Ghana, Liberia and the Republic of Congo' (2018) 97 *Forest Policy and Economics* 83.

⁶⁰Zeitlin and Overdevest (n 58) 67; Pirlot et al (n 30) 171.

⁶¹Zeitlin and Overdevest (n 58) 68.

⁶²ibid 64.

⁶³Pirlot et al (n 30) 176.

⁶⁴ibid.

⁶⁵Heflich (n 4) 12.

contributions toward collectively meeting the binding overall Union target as part of their integrated national energy and climate plans.⁷³ To ensure that the overall target is reached, RED II does not prohibit placing certain (unsustainably produced) bioenergy on the market. Instead, it makes use of financial support schemes to incentivize the production of biomass for energy uses that fulfils certain sustainability criteria.

To address the direct land-use change related to the production of renewable energy from agricultural and forest biomass, Article 30(1) of the Directive stipulates that Member States must require operators to demonstrate that biofuels, bioliquids and biomass fuels—irrespective of the country of origin—meet certain sustainability and greenhouse gas emissions saving criteria for all bioenergy end-uses. These criteria go beyond the legality requirement under the EUTR by additionally addressing sustainable land management for fuels produced from agricultural and forest biomass and greenhouse gas savings. Only biofuels, bioliquids and biomass fuels that meet these criteria can contribute toward both the Union target set in Article 3 (1) and the renewable energy shares of Member States and are eligible for national support schemes.⁷⁴

To verify compliance with the sustainability criteria laid down in Article 29(2) to (7), Member States must take measures, including the implementation of national standards, to ensure that economic operators submit reliable information. To reduce the administrative burden related to the divergent national sustainability compliance regulations, the Commission can decide by means of implementing acts that third-party voluntary schemes containing standards for the production of renewable energy fuels may be used to demonstrate compliance with sustainability criteria.⁷⁵

For the sake of the Directive's effectiveness, RED II sets binding sustainability criteria for biomass fuels used in bigger installations.⁷⁶ Whereas the sustainability criteria laid down in Article 29(2) to (7) may be applied voluntarily to all biofuels, including liquid ones, the fourth subparagraph of Article 29(1) stipulates that gaseous and solid fuels produced from biomass (biomass fuels) 'shall' (read: must) 'fulfil' the sustainability criteria laid down in paragraphs 2 to 7 if used in installations of a certain size.⁷⁷ When transposing RED II into national law, Member States may limit the application of these criteria (and thus support schemes) to biomass used in bigger installations if they wish to lessen the administrative burden linked to proving compliance with the criteria.⁷⁸ However, Member States are also free to 'apply the sustainability and greenhouse gas emissions saving criteria to biomass fuels used in installations with lower total rated thermal input'.⁷⁹

⁷³ibid art 2(2).

⁷⁴ibid art 29(1) first subparagraph.

⁷⁵ibid art 30(4).

⁷⁶See also Mai-Moulin et al (n 56) 3.

⁷⁷Installations that produce electricity, heating and cooling, or fuels shall have a total input of at least 20 megawatt (MW) (solid biomass fuels including wood) or 2 MW (gaseous biomass fuels).

⁷⁸See RED II (n 69) recital 104. Some have misleadingly concluded that Member States can only apply them to bigger installations; see K Henneberg et al, 'Naturschutz und fortschrittliche Biokraftstoffe' (Bundesamt für Naturschutz 2020) 26.

⁷⁹RED II (n 69) last sentence of art 29(1).

3.2.2 | Sustainability criteria for fuels produced from agricultural biomass

With regard to biofuels, bioliquids and biomass fuels produced from *agricultural biomass* such as soybean and maize, the sustainability criteria laid down in Article 29(3), (4) and (5) focus on direct land-use change. In view of extended and unsatisfactory multilateral negotiations, such criteria had already been adopted unilaterally in 2009 under RED I.⁸⁰ RED II modifies some of the existing criteria and introduces new ones.⁸¹

RED II requires that raw material for energy uses should not be obtained from land that had a high biodiversity value in or after January 2008. This cut-off date means that agricultural biomass produced on land cleared before 2008 is considered to be sustainable.⁸² Land or ecosystems encompassed by this criterion are inter alia primary forests⁸³ and other wooded land where there is no clearly visible indication of human activity, highly biodiverse forest and other wooded land which is species-rich and not degraded, areas designated by domestic or international law for nature protection purposes, highly biodiverse grassland and peatlands and wetlands. While these modified and newly added criteria extend the number of protected ecosystems, comprehensive studies show that they still leave several sustainability gaps, not least with regard to human rights abuses and issues of food security.⁸⁴

3.2.3 | Forest biomass eligible under the directive

RED II introduces criteria for biomass produced from forestry (forest biomass) that are different to those applied to agricultural biomass. Scientists and civil society organizations such as FERN had urged the EU to 'restrict the forest biomass eligible under the directive to residues and wastes'.⁸⁵ They had rightly argued that timber logged for energy purposes—whether originating from sustainably managed forests or not—increases carbon in the atmosphere since 'it emits far

⁸⁰One outcome of the negotiations was CBD, 'Decision X/37, Biofuels and Biodiversity' UN Doc UNEP/CBD/COP/DEC/X/37 (29 October 2010). Under the auspices of the UN Food and Agriculture Organization (FAO), the Global Bioenergy Partnership (<www.globalbioenergy.org>) brings together all stakeholders in this field to develop joint strategies. See E Morgera, 'Ambition, Complexity, and Legitimacy of Pursuing Mutual Supportiveness Through the EU's External Environmental Action' in B Van Vooren, Blockmans and J Wouters (eds), *The EU's Role in Global Governance: The Legal Dimension* (Oxford University Press 2013) 201.

⁸¹For details, see Mai-Moulin et al (n 56).

⁸²Cf R Fuchs et al, 'Europe's Green Deal Offshores Environmental Damage to Other Nations' (2020) 586 *Nature* 671.

⁸³Here reference is made to primary forest in accordance with the definition used by the FAO in its *Global Forest Resource Assessment*, which countries worldwide use to report on the extent of primary forest or where they are protected by national nature protection legislation; see RED II (n 69) recital 97.

⁸⁴Mai-Moulin et al (n 56) 2, 10; S Majer et al, 'Gaps and Research Demand for Sustainability Certification and Standardization in a Sustainable Bio-Based Economy in the EU' (2018) 10 *Sustainability* 7; Commission (EU) 'Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable resources (recast)' COM(2016) 767 final, 30 November 2016.

⁸⁵J Beddington et al, 'Letter from Scientists to the EU Parliament Regarding Forest Biomass' (2018) <https://chnslab.weebly.com/uploads/1/3/9/4/13947448/letter_of_scientists_european_parliament_on_use_of_forest_biomass_for_bioenergy_january_14_2018_.pdf>.

more carbon than burning fossil fuels for each kilowatt hour of electricity produced.⁸⁶

While the EU did not follow this advice, presumably prioritizing the economic interests of timber-producing Member States such as Sweden, RED II includes a new risk-based approach the purpose of which is to minimize the risk of taking into account energy produced from forest biomass derived from unsustainably managed forests for national support schemes and national renewable energy targets. Accordingly, Article 29(6) and (7) establish both forestry-specific sustainability and land-use, land-use change and forestry (LULUCF) criteria. Put simply, these criteria make it easier to provide financial support for fuels produced in countries whose policies are consistent with the Paris Agreement.

Article 29(6)(a) of RED II requires that the country in which forest biomass is harvested has national or subnational laws as well as monitoring and enforcement systems in place to ensure the legality of harvesting operations and that areas designated for nature protection purposes are protected. The Directive creates synergies with VPAs and the EUTR in particular, since the EUTR applies to fuel wood in any of its forms. Additionally, Article 29(6)(a) requires that harvesting is carried out with due consideration for maintenance of soil quality and biodiversity to minimize negative impacts and that harvesting maintains or improves the long-term production capacity of the forest. In theory, these quite ambitious criteria raise the bar by requiring more than just legally logged forest biomass, since legality as such does not necessarily ensure sustainable forest management. For the sake of avoiding unjustifiable *de facto* discrimination⁸⁷ against products of a specific origin and thus potential conflict with WTO law, Article 29(6)(b) provides for a ‘fall-back option’. It stipulates that even if evidence of compliance with the criteria at the national or subnational level is not available, forest biomass fuels can still be counted toward the national targets and are eligible for financial support if management systems are in place at the level of the forest sourcing area to ensure that carbon stocks and sink levels in the forest are maintained or strengthened over the long term.

3.3 | Interim conclusion

The EU uses a mix of instruments to address EU-driven deforestation beyond its borders, taking a product- and sector-oriented approach. EUTR combines due diligence obligations for timber with voluntary certification schemes and cooperative bilateral agreements. By relying on the concept of due diligence, the EU seeks to mitigate uncertainties and a lack of responsibility in global value chains. In principle, voluntary instruments are key since their tracking and controlling mechanisms can help to prove compliance with certain standards that the regulating State cannot enforce abroad. However, their current dysfunction has yet to be addressed. Cooperative instruments such as the VPAs within the FLEGT framework initiate stakeholder processes

aimed at ensuring sustainable forest management for products destined not only for the European market but also for domestic consumption in the producing countries. Their practical challenges notwithstanding, VPAs remain a crucial tool for addressing global deforestation.

In turn, by obliging Member States to establish support schemes for bioenergy that meet specific sustainability criteria, the EU is seeking to address the danger of both biodiverse forests being cut down for agricultural biomass production and the direct use of timber for bioenergy. The current sustainability criteria applied to agricultural and forest biomass have, however, been found to be unsatisfactory from a sustainability perspective and actually ought not to be applied to raw forest biomass at all. They even run the risk of fuelling deforestation.⁸⁸

Nonetheless, taken together, the EUTR and RED II's sustainability criteria offer promising regulatory pathways for more effective regulation in the future. As will be shown in the next section, the legality approach as applied by the EUTR is a first step toward introducing more comprehensive substantive due diligence criteria for all kinds of FRCs.

4 | POLICY COHERENCE AS A CHALLENGE FOR POTENTIAL FUTURE MANDATORY INSTRUMENTS

As mentioned above, the European Commission is expected to submit a legislative proposal of a potential mandatory instruments addressing global deforestation in August 2021 at the earliest. While it is difficult to foresee which instrument(s) will finally be adopted, we can expect that, as part of the legislative process, the EU institutions will draw on their regulatory experience with the EUTR, VPAs, RED II and other instruments with extraterritorial implications such as the Regulation on Illegal, Unreported and Unregulated Fishing⁸⁹ and the Conflict Minerals Regulation.⁹⁰ A series of stand-alone and combined instruments addressing demand, supply and financing can indeed be envisaged to improve the effectiveness of the EU's framework for halting global deforestation.⁹¹

⁸⁸The Commission will assess whether these forestry criteria can indeed effectively minimize the risk of using forest biomass derived from unsustainable production by the end of 2026; see RED II (n 69) art 29(9). Further adaptation of the criteria may then be necessary.

⁸⁹The Council Regulation (EC) No 1005/2008 of 29 September 2008 establishes a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing [2008] OJ L286/1 is based on a complementary set of instruments similar to the EUTR and the VPAs: first, a third-country carding system whereby the EU can issue yellow or red cards if the country is not respecting international fisheries agreements and second, a mandatory catch certification scheme attesting that imported and exported fish has been caught legally; see T Markus, ‘Resource Responsibility through European Regulations for Trade in Fisheries Products’ (2019) 17 *EuRUP* 490.

⁹⁰The Conflict Minerals Regulation (n 6) refers to the procedural due diligence standards set by the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.

⁹¹Heflich (n 4) 20; COM(2019) 352 final (n 7); COWI et al (n 6); Devriendt et al (n 4); S Bager et al, ‘Reducing Commodity-Driven Tropical Deforestation: Political Feasibility and ‘Theories of Change’ for EU Policy Options’ (2020) <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3624073>.

⁸⁶*ibid.*

⁸⁷See Section 4.2.

This section first draws on three potential mandatory instruments that have already been assessed by different impact assessment studies commissioned by the EU. These are mandatory certification for imported products, due diligence obligations in the supply chain of FRCs and mandatory labelling intended to influence consumer behaviour (Section 4.1). In light of requirements under the GATT, this section then focuses on the potential substantive contents of due diligence obligations and mandatory certification for FRCs. As indicated in the introduction, WTO law constitutes an important regime that determines the permissibility and operation of unilateral measures. For reasons of legitimacy, compatibility with WTO law is crucial if the EU is to set standards that will bring about structural change both in exporting countries and in other important consumer markets. The GATT is the most relevant WTO agreement within this context (Section 4.2).⁹² Although the exact design of these instruments is not yet clear, it can already be said that a lack of policy coherence between the EU's environmental policies and its Common Agricultural Policy may entail incompatibility with GATT. If the EU does not resolve its policy inconsistencies, standards that may exercise influence along the value chain are likely to be weak.

4.1 | Three options for mandatory instruments

Among mandatory mechanisms, at least three regulatory options directly related to deforestation⁹³ might be considered. First, the most discussed option is mandatory due diligence obligations with extended sustainability criteria. With regard to the Commission's upcoming legislative proposals, the European Parliament has suggested a regulation that encompasses mandatory due diligence obligations, reporting, disclosure of information and third-party involvement. Regarding due diligence obligations, the European Parliament has suggested that a regulation should encompass, in personal

⁹²Although the interpretation of the scope of the agreements in this context is not settled, it can be assumed that the Agreement on Sanitary and Phytosanitary Measures (SPS) and the TBT Agreement as mutually exclusive instruments (Matsushita et al (n 20) 434) rarely apply to measures aimed at protecting forests beyond the regulating State's borders. This is particularly true if these measures regulate PPMs—such as logging methods or related land-use change—not having a 'sufficient nexus with the characteristics' of a product (*European Communities—Measures Prohibiting the Importation and Marketing of Seal Products* (Appellate Body Report) WT/DS400/AB/R; WT/DS401/AB/R (22 May 2014) para 5.12 (EC – Seals)). It is a controversial but prevailing view that unincorporated PPMs or nonproduct-related PPMs are not 'technical regulations' 'laying down product characteristics or their related processes' in the sense of Annex 1.1 of the TBT Agreement (S Mayr, B Hollaus and V Madner, 'Palm Oil, the RED II and WTO law' (2021) *Review of European, Comparative and International Environmental Law* 1, 6). Rather, these agreements generally cover PPMs that relate 'directly to the characteristics of the products concerned' (e.g. pesticides used on food crops leave residues in food products); see Hadjiyianni (n 222) 227; Matsushita et al (n 20) 746, 748, 753; S Charnovitz, 'The Law of Environmental PPMs in the WTO: Debunking the Myth of Illegality' (2002) 27 *Yale Journal of International Law* 59. Note that if the SPS or TBT Agreements apply, such measures may only be justified if they aim to protect the environment of the trade-restricting State but not of the exporting State.

⁹³In addition to these options, the Commission is assessing the feasibility of a legal framework for sustainable corporate governance that imposes both human rights and generic environmental sustainability due diligence obligations on companies. As this option relates to environmental due diligence more generally and not merely (but also) to forests, it will not be further discussed here. See the legislative initiative procedure: European Parliament, 'Corporate Due Diligence and Corporate Accountability', 2020/2129(INL) (11 March 2021) <<https://oeil.secure.europarl.europa.eu/oeil/popups/ficheprocedure.do?reference=2020/2129%28INL%29%26I=en>>.

and material terms, 'all operators, irrespective of their legal form, size or complexity of their value chains' that place all kinds of *domestic or imported* forest and ecosystem-risk commodities and derived products on the EU market. The Parliament further suggested that the substantive content of due diligence should refer not only to the legality as under the EUTR but also to 'sustainability of the harvesting, production, extraction and processing of the commodities' as well as human rights standards, with particular regard for the rights of indigenous peoples.⁹⁴ The Parliament has also called for a definition of deforestation, for penalties to be imposed in case of noncompliance and for access to justice for victims.⁹⁵ In the view of the Parliament, the regulation should be designed to be supplemented by bilateral agreements with partner countries.

As a second option, the Commission has considered mandatory sustainability certification for imported FRCs that would prevent unsustainable products from entering the market. To evaluate this option, the Commission ordered a study on legislative measures and other initiatives. Accordingly, under this option, importers would need 'to demonstrate that the commodities they are importing are deforestation-free. To this end, commodities [would] need to be certified by a recognized certification body, using a scheme that has been approved by the European Commission to certify the forest footprint of (food) products. Commodities that are not certified [would not be able to] enter the EU.'⁹⁶

Finally, a third option could be mandatory labelling of food products that contain FRCs, to—roughly speaking—give consumers a choice between a better price and a better environmental footprint. However, this policy option, relying on the free will of consumers, would have very little effect on deforestation rates.⁹⁷ By contrast, mandatory due diligence obligations and mandatory certification and their combination are likely to reduce the EU's forest-related ecological footprint significantly (by 65–76 percent).⁹⁸ I will therefore focus on the prospects of GATT compatibility of due diligence obligations with high sustainability standards and certification for imported FRCs.

4.2 | GATT requirements for sustainability standards

Mandatory sustainability certification and obligations of due diligence aim at influencing processes and production methods (PPMs) applied in the country of harvesting, production, extraction and processing of FRCs. Such PPMs with extraterritorial implications generally have no influence on the physical characteristics of the final product. Instead, they target externalized production costs and thus the behaviour of actors, some of which are located beyond their own borders. Hence, the relation of the regulating State to the regulated facts is weaker than in the case of PPMs that affect the physical characteristics of the

⁹⁴European Parliament (n 1) Annex.

⁹⁵ibid.

⁹⁶Devriendt et al (n 4) 58.

⁹⁷Heflich (n 4) 32.

⁹⁸ibid 42.

product.⁹⁹ This setting has led to protracted debates as to whether a regulating State (or the EU) can invoke its sovereign freedom to regulate PPMs (legislative jurisdiction) or whether it unjustifiably interferes with the right of other States to equal competitive opportunities protected by WTO law.¹⁰⁰ This question is crucial when analysing whether and to what extent potential sustainability requirements encompassed by the two measures at issue may imply *de jure* or *de facto* discrimination according to Articles I:1 and III:4 GATT¹⁰¹ and, if so, whether this can be justified according to Article XX GATT. As will be shown, the GATT does allow legislators considerable leeway with regard to forest protection as long as trade, environmental and agricultural policies are coherent.

4.2.1 | Discriminatory effects of broad sustainability requirements encompassed by certification and due diligence obligations

To determine whether a measure is discriminatory, one has to establish whether products at stake are 'like' products and, if so, whether the imported product is treated less favourably than the domestic product or than another nondomestic product. In determining whether products are 'like', a panel will always and unavoidably have some margin of discretion.¹⁰² However, four criteria will influence a panel's determination of whether products are like: (i) the physical characteristics of the products, (ii) the product's end-uses, (iii) consumers' tastes and habits¹⁰³ and (iv) tariff classification.¹⁰⁴ A sustainability (i.e., deforestation-free) certification requirement imposed on imported forest-risk food products only would constitute *de jure* discrimination against 'imported products vis-à-vis like domestic products' under Article III:4 GATT (national treatment).¹⁰⁵ Imported food products such as soy, meat, maize, coffee and cacao are also produced within the EU's territory.¹⁰⁶ They would have to meet sustainability requirements that domestic products would not have to meet. In addition, sustainability certification standards, as nonproduct-related PPMs¹⁰⁷ that protect extraterritorial resources, could also favour products with a specific origin over other products from less developed countries (Article I:1

GATT, most favoured nation treatment)¹⁰⁸ where environmental and human rights standards are lower. This also holds true for measures establishing due diligence obligations with regard to sustainability and human rights standards in the supply chains.¹⁰⁹ Such a broad due diligence standard may result in operators preferring to place products from more developed rather than from less developed countries on the European market.

4.2.2 | Justifying sustainability standards

Discriminatory PPMs such as sustainability certification requirements and due diligence obligations aimed at establishing substantive standards for extraterritorial settings are only justified according to Article XX GATT if they, first, pursue a legitimate objective as encompassed by the exceptions under Article XX.¹¹⁰ They must either 'relate to the conservation of exhaustible natural resources' (Article XX(g))—which encompass forests¹¹¹—or be 'necessary' to protect public morals (Article XX(a)) or human, animal or plant life or health (Article XX(b)).¹¹² Second, the procedural and substantive requirements under the *chapeau* of Article XX must be met.¹¹³ While the case law regarding these issues is rather complex, some guidelines can be established.

Jurisprudence has not, in principle, decided whether the exceptions under Article XX(a), (b) and (g) have some kind of jurisdictional, in particular territorial, limitation. WTO dispute settlement bodies have limited themselves to case-specific considerations, finding that there was a 'sufficient nexus' between the regulating State and the object of protection.¹¹⁴ While there is broad debate among WTO scholars on what constitutes a 'sufficient nexus',¹¹⁵ it should suffice here to recall that the general rules under customary international law regarding extraterritorial prescriptive jurisdiction provide some guidance on this issue.¹¹⁶ Bearing in mind the effects doctrine, a sufficient nexus might at least exist with regard to global commons such as the climate or biodiversity that are both affected by global deforestation.¹¹⁷

¹⁰⁸ibid.

¹⁰⁹J Bäumler, 'Nachhaltiges Wirtschaften in globalen Lieferketten: Gesetzliche Sorgfaltspflichten von Unternehmen im Lichte des WTO-Rechts' (2020) 58 Archiv des Völkerrechts 464, 489.

¹¹⁰According to GATT (n 13) art XX(b) and (g), nothing in the Agreement 'shall be construed to prevent the adoption or enforcement by any contracting party of measures ...

(a) 'necessary to protect public morals', (b) necessary to protect human, animal or plant life or health ... (g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption.' GATT, ibid art XX(a) may also cover measures in an environmental context, see EC - Seals (n 92).

¹¹¹For details, see Matsushita et al (n 20) 743.

¹¹²Note that the 'necessity' assessment of Article XX(a) and (b) is not exactly the same; see Matsushita et al (n 20) 727, 729.

¹¹³Hadjiyianni (n 22) 251.

¹¹⁴United States - Import Prohibition of Certain Shrimp and Shrimp Products (Appellate Body Report) WT/DS58/AB/R (12 October 1998) (US - Shrimp) para 121; EC - Seals (n 92) para 5.173.

¹¹⁵Charnovitz (n 92), for example, distinguishes between inwardly and outwardly directed measures with extraterritorial effect.

¹¹⁶Cf Dobson (n 99) 83ff.

¹¹⁷C Ryngaert, *Selfless Intervention: The Exercise of Jurisdiction in the Common Interest* (Oxford University Press 2020) 162.

⁹⁹NL Dobson, 'The EU's Conditioning of the 'Extraterritorial' Carbon Footprint' (2018) 27 Review of European, Comparative and International Environmental Law 75, 76.

¹⁰⁰D Sifonios, *Environmental Process and Production Methods (PPMs) in WTO Law* (Springer 2018) 79ff.

¹⁰¹Certification requirements and obligations of due diligence could also effectively impose quantitative restrictions on imports and exports of products (GATT (n 13) art XI:1). This will not be analysed further here, but see Matsushita et al (n 20) 717.

¹⁰²Japan - Taxes on Alcoholic Beverages (Appellate Body Report) WT/DS8/AB/R; WT/DS9/AB/R; WT/DS10/AB/R (4 October 1996).

¹⁰³In the context of nonproduct-related PPMs being more or less environmentally friendly, the third criterion (consumer choice) has particularly been debated. Some have argued that from the perspective of consumer preferences, sustainably produced products would be fundamentally different from unsustainable products. See Matsushita et al (n 20) 746; A Safonis and AR Ziegler, 'Tuna-Dolphin Forever? The Development of the PPM Debate Related to Trade and Environment in the WTO' (2020) 7 Indian Journal of International Economic Law 106, 120ff.

¹⁰⁴Matsushita et al (n 20) 163.

¹⁰⁵GATT (n 13) art III:4.

¹⁰⁶French overseas territories such as Guyana and Martinique also produce coffee and cacao.

¹⁰⁷Safonis and Ziegler (n 103) 106-133.

Moreover, both, the Marrakesh Agreement¹¹⁸ and the principle of systemic integration,¹¹⁹ imply that the exceptions under Article XX cannot be interpreted in isolation but rather need to be interpreted in an evolutionary manner having regard to the need of environmental protection.¹²⁰ Along these lines, PPMs are likely to be covered by an exception if the regulating State adopted them in pursuance—or view—of multilaterally binding agreements. These include universal human rights treaties¹²¹ or multilateral environmental agreements, such as Paris Agreement or the CBD, to which both the importing and exporting members are a party.¹²²

Against this backdrop, sustainability criteria should, in principle, be covered by GATT Article XX(a), (b) and (g) if they have been adopted in pursuance of multilateral environmental agreements. For example, standards as encompassed by Article 29 RED II may be covered by Paris Agreement. Although State parties to the Paris Agreement can define ‘nationally determined contributions’ with regard to their territorial—and not consumption-based—emissions, it is argued here that States may also address the loss of extraterritorial carbon sink potentials because such measures support the very objective of this universal agreement, which is to reduce greenhouse gas emissions and to stabilize the global climate. Clearly, a State party to Paris Agreement cannot be obliged to act against the very objective of this agreement by omitting the regulation of its extraterritorial consumption-based emissions.

PPMs may also be based on or refer to nonbinding but internationally agreed guidelines and soft-law instruments.¹²³ In view of this option, Heflich has suggested that due diligence obligations with regard to food FRCs should refer to the OECD-FAO Guidelines for Responsible Agricultural Supply Chains (2016).¹²⁴ These Guidelines set procedural and substantive standards that in many respects reflect ecosystem-friendly or organic agriculture. However, despite being far more precise, several rules and mechanisms under the framework of EU agricultural law and the CAP allow significant adverse impacts on the environment. More specifically, the minimum conditions (‘cross-compliance’, known from 2021 onwards as ‘enhanced conditionality’) which apply to all EU agricultural producers allow significant adverse

impacts on inter alia biodiversity,¹²⁵ soil erosion and the climate.¹²⁶ If due diligence obligations were to oblige all operators to endeavour to ensure respect for agricultural standards as foreseen under the OECD-FAO Guidelines, there could be a risk of creating a conflict of rules for European farmers. Depending on the specific context and rules of the Guidelines, EU products from nonorganic agriculture may no longer be placed on the internal market since operators may not be able to comply with their due diligence obligations. Hence, for the sake of legal consistency, the reference to the OECD-FAO Guidelines would need to be limited to some of its rules, or alternatively, several CAP standards would need to be reviewed.¹²⁷ Yet reforming the CAP to embrace greater sustainability has repeatedly proven to be difficult.¹²⁸ This example highlights the urgent need for policy coherence when addressing transnational environmental problems.

To the extent that extraterritorial PPMs measures are not covered by a legitimate objective within the meaning of Article XX(g) but within the meaning of Article XX(a) or (b), they must not be more trade restrictive than ‘necessary’ to fulfil the objectives of Article XX(a) or (b) (necessity test). Put simply, no other reasonable alternative must exist.¹²⁹ Along these lines, a simple legality requirement, for example, referring to a host State law protecting forests as foreseen under the EUTR should easily pass the necessity test. Such a reference merely strengthens the enforcement of legal standards applicable in the home State.¹³⁰ So do certain types of ‘fall-back clauses’. For example, as described above, where there is no forest management systems in place at the national level, Article 29(6)(b) RED II allows for forest biomass fuels to be eligible for financial support if management systems are in place at the level of the forest sourcing area. Such a fall-back option can significantly reduce the negative impacts on trade that sustainability criteria as established under Article 29(6)(a) RED II may have. The goal of reducing deforestation caused by imported products can probably be achieved in the same way through a management system at the sourcing area level as through a management system at the national level. However, if a regulating State chooses to set its own standards without taking into account international developments,¹³¹ the necessity test will be more severe and may not be passed in view of the other States’ sovereignty.

To the extent that PPMs with extraterritorial implications fall, in principle, under at least one of the exceptions, it is in view of the

¹¹⁸The Agreement Establishing the WTO recognizes ‘that their relations in the field of trade and economic endeavour should be conducted with a view to raising standards of living, ensuring full employment and a large and steadily growing volume of real income and effective demand, and expanding the production of and trade in goods and services, while allowing for the optimal use of the world’s resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment’. Agreement Establishing the World Trade Organization (adopted 15 April 1994, entered into force 1 January 1995) 1867 UNTS 3 recital 1 (emphasis added).

¹¹⁹Vienna Convention on the Law of Treaties (adopted 23 May 1969, entered into force 27 January 1980) 1155 UNTS 331 (VCLT) art 31(3)(c).

¹²⁰As the Appellate Body underlined, the ‘specific language of the preamble to the WTO Agreement [gives] colour, texture and shading to the rights and obligations of Members under the WTO Agreement(s)’. See *US–Shrimp* (n 114) para 155.

¹²¹Bäumler (n 109) 424.

¹²²VCLT (n 119) art 31(3)(c); Hadjiyianni (n 22) 251; B Cooreman, ‘Addressing Environmental Concerns through Trade: A Case for Extraterritoriality?’ (2016) 65 *International and Comparative Law Quarterly* 229, 239.

¹²³A good example of the hardening of soft instruments is the EU Conflict Minerals Regulation (n 6), which incorporates the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.

¹²⁴Heflich (n 4) 25 and 32.

¹²⁵R Gregory et al, ‘An Analysis of Trends, Uncertainty and Species Selection Shows Contrasting Trends of Widespread Forest and Farmland Birds in Europe’ (2019) 103 *Ecological Indicators* 676; G Pe’er et al, ‘A Greener Path for the EU Common Agricultural Policy’ (2019) 365 *Science* 449; G Pe’er et al, ‘Agriculture Policy—EU Agricultural Reform Fails on Biodiversity’ (2014) 344 *Science* 1090.

¹²⁶G Pe’er et al, ‘Action Needed for the EU Common Agricultural Policy to Address Sustainability Challenges’ (2020) 2 *People and Nature* 305.

¹²⁷Along these lines, within the context of measures aiming at the conservation of natural resources (Article XX(g)) such as forests, biodiversity and the climate, the measures concerned would need to be ‘made effective in conjunction with restrictions on domestic production and consumption’, which means that they would need to impose restrictions on both imported and domestic products; Birnie et al (n 20) 773.

¹²⁸For details, see Pe’er et al (n 126).

¹²⁹Birnie et al (n 20) 770.

¹³⁰See Section 3.1.1.

¹³¹Such own standards would be home State law that has no basis in internationally agreed standards. For details, see Hadjiyianni (n 22) 233.

substantive and procedural requirements established under the *chapeau* of Article XX GATT that a State's right to regulate will be limited. The function of the *chapeau* is to prevent abuse or misuse of the exceptions. Hence, measures should neither imply arbitrary or unjustifiable discrimination nor be a disguised restriction on international trade. A regulating State must exercise its rights 'bona fide, that is to say reasonably'¹³² and enter into negotiations in good faith with the countries concerned.¹³³ If, despite good faith efforts, the States concerned are unable to find a common approach, a State may be allowed to regulate on its own.¹³⁴

Against this backdrop, the EU will need to design the material content of due diligence obligations and certification standards with great care. The most difficult—and maybe insurmountable—obstacle for broad sustainability standards under a mandatory certification scheme will be to prove that there is no arbitrary discrimination. Arbitrary discrimination may be found, for instance, where FRCs with the same end-uses, such as soy-based and palm oil-based biofuels, are treated differently although their impact on (indirect) land-use change is rather similar.¹³⁵ Along these lines, the existing criteria imposed through the CAP and the European framework of agricultural legislation may fail to justify imposing sustainability certification standards on non-EU producers only.¹³⁶ As said, several rules under the CAP have been shown to have enormous environmental impacts. Hence, either the mandatory certification standard would need to be designed in view of the EU's current minimum standards under the CAP (thereby setting rather low sustainability standards) or—for the sake of legal consistency and policy coherence—several standards required under CAP would need to be reviewed. A meaningful definition of sustainability criteria under a mandatory certification scheme for imported products will therefore be a major challenge.

To conclude, legality and human rights criteria do not pose (major) GATT issues. If such a standard would apply under a mandatory certification scheme and due diligence obligations with regard to all FRCs placed on the internal market, this would mark a first step in the right direction. However, the design of environmental sustainability criteria will be a more difficult task. The EU may base its regulation on international standards or international agreements, as is the case for Article 29(2) to (7) RED II, which supports the objective of Paris Agreement. The measures may also refer to nonbinding standards

such as the OECD-FAO Guidelines. However, the EU's measures would need to apply either to both imported and domestic products—which poses a challenge with regard to policy coherence—or will be at risk of not being justified under Article XX GATT. If the EU wishes to set standards that differ entirely from international ones, such standards would be subjected to more severe scrutiny regarding the 'necessity' of the measure (Article XX(a) and (b)) and regarding arbitrariness (the *chapeau* of Article XX). The EU would also need to have negotiated with the countries concerned.

5 | CONCLUSIONS

Unilateral approaches to global problems such as regulatory measures with extraterritorial implications have long been viewed critically because they challenge two pillars of the Westphalian world order: exclusive territoriality and international consensus.¹³⁷ Unilateral measures have therefore been said to be the 'second-best' option to multilateralism.¹³⁸ However, as the case of EU forest governance shows, two decades of regulatory experiences that have seen a gradual combining of trade-related unilateral measures with cooperative and voluntary instruments have brought forth more stakeholder-inclusive approaches that address the drivers of deforestation. Where conflicts of interest have blocked an effective multilateral forest convention, a twofold approach combining unilateralism and bilateralism (as exemplified by the EUTR and VPAs) appears to be a promising pathway for future EU forest regulation.

As has been shown, the effectiveness of the established forest framework can still be increased by reforming the EUTR and voluntary schemes and by developing further mandatory instruments. While mandatory certification imposed on imported products risks raising serious WTO concerns (given that it is likely to imply arbitrary discrimination under the *chapeau* of Article XX GATT), due diligence obligations imposed on all operators who place all kinds of FRCs on the internal market can be designed in such a way so as to be compatible with WTO law. With a view to both policy coherence with other policy areas such as agriculture and the maintenance of a coherent legal framework within the EU, the substantive environment-related sustainability criteria for FRCs will need to be carefully designed. As WTO law prohibits double standards, the EU will either need to strengthen the coherence of its approaches to sustainability in its different policy areas or adopt comparatively low sustainability standards under a new due diligence framework.

As a major consumer market and trading bloc, the EU has an important role to play in sustainable forest management. To increase the effectiveness of future instruments and prevent unsustainable FRC flows being redirected to other markets, the EU will need to convince other big markets to develop similar sustainability schemes. This is particularly true for emerging transition economies whose growing

¹³²US - *Shrimp* (n 115) para 158.

¹³³ibid para 171; Matsushita et al (n 2020) 730, 734; Birnie et al (n 20) 776.

¹³⁴This is one of the reasons why the sustainability criteria under RED I are likely to be covered by Article XX GATT; see Section 3.2.2.

¹³⁵Note that due to the specific criteria set by the ILUC Regulation (n 70) together with RED II (n 69), only oil palm crop-based biofuels—and not soy—qualify as deriving from high ILUC-risk feedstock. This differential treatment of palm oil-based biofuels has prompted Indonesia to file a lawsuit against the EU with the WTO (*European Union—Certain Measures Concerning Palm Oil and Oil Palm Crop-Based Biofuels* (Constitution of the Panel Established at the Request of Indonesia) WT/DS593/10 (12 November 2020); it will be challenging for the EU to prove that the discrimination between different oil crop-derived biofuels based on the related ILUC risk is 'merely inadvertent or unavoidable' (*United States - Standards for Reformulated and Conventional Gasoline* (Panel Report) WT/DS2/9 (20 May 1996) paras 28–29) and thus not 'arbitrary and unjustifiable' under the *chapeau* of GATT Article XX. For details, see A Mitchell and D Merriman, 'Indonesia's WTO Challenge to the European Union's Renewable Energy Directive: Palm Oil & Indirect Land-Use Change' (2020) 12 Trade, Law and Development 5, 41.

¹³⁶This has been suggested by Heflich (n 4) 32, however, without further analysis.

¹³⁷S Schmalenbach, 'Völker- und unionsrechtliche Anstöße zur Entterritorialisierung des Rechts' in *Grenzüberschreitungen, Veröffentlichungen der Vereinigung der Deutschen Staatsrechtslehrer* (de Gruyter 2017) 245, 262.

¹³⁸Bodansky (n 23); Krisch (n 23) 1; Hadjiyianni (n 22) 14.

market and consumption footprint threatens to outweigh the impact of EU measures. Moreover, it is doubtful whether the measures discussed can indeed reduce the EU's consumption to a level that respects planetary boundaries. Alongside approaches aimed at reducing the EU's extraterritorial environmental footprint, the most crucial steps to take involve minimizing consumption itself¹³⁹ and simultaneously increasing regional self-sufficiency in raw materials. Such measures may bring about the systemic change needed to address the 'wicked problem' of deforestation.

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¹³⁹ Scott, 'Reducing the EU's Global Environmental Footprint' (n 21) 16.