Palm oil, the RED II and WTO law: EU sustainable biofuel policy tangled up in green?

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New European Union (EU) rules on biofuels have led to mounting tensions between the EU and some of its trading partners. A particularly contentious measure is the ‘freeze and phase-out’ of certain biofuels in the transport sector with a high indirect land-use change risk, as introduced by the recast of the Renewable Energy Directive. In light of Indonesia’s recent move to initiate proceedings against the EU at the World Trade Organization (WTO), this article systematically explores relevant key concepts of WTO law and analyses the compatibility of the EU measures with the General Agreement on Tariffs and Trade (GATT) and the Agreement on Technical Barriers to Trade (TBT Agreement). While the EU measures are carefully crafted to avoid potential WTO pitfalls—such as applicability of the TBT Agreement—the article identifies several critical aspects that raise doubts about the measure’s compatibility with WTO law. In particular, the seemingly deliberate targeting of palm oil casts doubt on the justification of the measure on environmental grounds.

1 | INTRODUCTION

In view of the climate crisis, reducing greenhouse gas (GHG) emissions and decarbonizing all sectors of the economy have become imperative. Thus, the European Union (EU) has introduced a legal and policy framework to promote the use of energy from renewable sources. Its core instrument, the Renewable Energy Directive (RED I), seeks to prioritize the use of biofuels to reduce GHG emissions in the transport sector. However, the ‘initial enthusiasm’ over biofuels subsided soon in light of their ‘considerable environmental and social costs’. In this context, a particularly thorny issue has been GHG emissions resulting from indirect land-use change (ILUC).

The recent recast of the Renewable Energy Directive (RED II) takes a new approach to addressing such emissions. The relevant provisions provide for a ‘freeze and phase-out’ of biofuels, which pose a high risk of indirect land-use change and are therefore associated with significant GHG emissions. The measure is principally origin-neutral and does not impose an import ban on the biofuels covered. Instead, it limits the extent to which these biofuels can be taken into account when calculating Member States’ consumption of renewable energy. However, based on the criteria laid down in a Delegated Regulation, palm oil—which is virtually not produced in the EU—is the only crop yielding high ILUC-risk biofuel and thus subject to the freeze and phase-out. For palm oil producers, the (economic) effects of this freeze and phase-out will be significant. Indonesia—the world’s largest palm oil producer and exporter—thus pushed ahead with proceedings at the World Trade Organization.
(WTO) targeting the new EU rules on biofuels in March 2020. Indonesia does not only question the effectiveness of the new EU legislation in terms of sustainability but also argues that it unfairly singles out palm oil and thus violates WTO law. Other palm-oil-producing countries, like Malaysia, Colombia or Costa Rica, have expressed similar concerns and have joined the proceedings as third parties.

Against this background, this article analyses the contentious EU measure under WTO law. After briefly addressing the issue of biofuels and land-use change (Section 2), we trace the development of the relevant legal provisions under EU law and explain the freeze and phase-out mechanism (Section 3). The focus then lies on the compatibility of the EU measure with key obligations under WTO law (Sections 4–6). While we find that the measure does not constitute a ‘technical regulation’ and therefore does not fall within the scope of the Agreement on Technical Barriers to Trade (TBT Agreement), we find that it is likely to be inconsistent with Articles I:1 and III:4 of the General Agreement on Tariffs and Trade (GATT). Moreover, in light of the legislative process that led to the adoption of the contentious EU measure, we are sceptical whether the measure in its current form can be saved under Article XX of the GATT.

2 | BIOFUELS AND LAND-USE CHANGE

In light of efforts to mitigate the effects of climate change, biofuels have been increasingly employed as a substitute for fuels produced from non-renewable sources (i.e. fossil fuels), whose use is generally associated with higher GHG emissions. Until now, biofuels produced from food and feed crops (‘first-generation biofuels’ or ‘crop-based biofuels’) account for the largest part of biofuels used. The rapid growth of their production has raised a number of concerns, for instance regarding food security.

Moreover, the increased demand in crop-based biofuels leads to environmental problems, which casts doubt on their actual GHG-saving potential. This increased demand builds pressure to use additional land for the cultivation of suitable crops. Such additional land is typically ‘created’ through conversion and deforestation of non-agricultural land. This direct land-use change (DLUC) leads to additional GHG emissions, which affect the total GHG-saving potential of these biofuels. Additionally, increased demand in first-generation biofuels may also lead to indirect land-use change. This occurs when crops for biofuel production displace the existing cultivation of crops for food and feed purposes. Again, new agricultural land is ‘created’ for food or feed production. However, land conversion and deforestation are ‘geographically disconnected’ from the crop production for biofuels.

GHG emissions resulting from ILUC are considered substantial and may even be larger than those of DLUC. Several studies have suggested that ILUC emissions may even thwart GHG savings of biofuels and lead to a net increase in emissions. However, due to the geographical disconnect, ILUC and its GHG emissions cannot be directly observed, measured or attributed. The quantification of GHG emissions from ILUC relies on complex modelling, often based on reactions in global agricultural markets to increasing demand for biofuels. Differences in modelling choices and input data have led to methodological challenges and considerable variations in results. Thus, ILUC estimations are fraught with a high level of uncertainty, which must be taken into account when scrutinizing policy choices based on such estimates.

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1European Union – Certain Measures Concerning Palm Oil and Oil Palm Crop-Based Biofuels (Request for the Establishment of a Panel by Indonesia) WT/D/S593/9 (24 March 2020) (EU – Palm Oil, Request for the Establishment of a Panel). While the panel has been established on 29 July 2020, the dispute is still pending at the time of writing.

2See <https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds593_e.htm>.


14Douglas (n 15) 240.

15Jansson and Kalimo (n 19) 133.

16Ahlgren and Di Lucia (n 18) 2.

3  |  THE NEW EU RULES ON BIOFUELS

3.1  |  Regulatory background

In 2009, RED I was part of the legislative package implementing the EU’s 2020 climate and energy policy. The directive aimed to reduce EU GHG emissions by enhancing the use of renewable energy sources. Thus, it introduced an overall target for the share of energy from renewable sources.24 In addition, it included a sub-target for the transport sector, which—given its fuel dependency—plays a strategic role in the EU’s efforts to reduce GHG emissions.25 With regard to the issue of land-use change, RED I included sustainability criteria, which addressed some issues of DLUC.26 While the EU legislator was aware of the problem of ILUC and anticipated necessary changes in the future,27 it decided to merely include reporting obligations regarding ILUC in RED I.28

In 2015, an amendment to RED I, the ‘ILUC Directive’, addressed the issue in more detail.29 Given the complexities of ILUC, the EU legislator reached the following compromise solution: It limited the share of energy from biofuels produced from food crops, which could be taken into account when assessing Member States’ compliance with the renewable energy target in the transport sector, to 7%.30 At the same time, it exempted advanced biofuels, such as biofuels from residual waste or algae, from that limit. Advanced biofuels are generally associated with no or low levels of ILUC emissions.31 Their use was further incentivized by stipulating that they count ‘double’ for complying with the transport sub-target.32 However, according to the European Commission’s own assessment, ‘[t]he long and technically complex inter-institutional discussion on ILUC amendments created a considerable degree of uncertainty in the market, preventing investments in both food-based biofuels, as well as in advanced biofuels’.33

3.2  |  The RED II: A new attempt to address ILUC

Against this background, the recast of the Renewable Energy Directive for the post-2020 period presented a new opportunity to address the issue of ILUC. The Commission’s initial proposal largely followed the approach taken under RED I as amended by the ILUC Directive, providing for a cap on the share of crop-based biofuels counting towards Member States’ renewable energy targets in the transport sector. This cap would decrease from 7% to 3.8% in 2030.34 In addition, it added the possibility for Member States to set a lower maximum share or to distinguish between different types of crop-based biofuels, for example, based on ILUC considerations.35 The proposal did not otherwise address ILUC in connection with biofuels but introduced a new minimum target for advanced biofuels to further incentivize and mainstream their use.36

However, the European Parliament vehemently opposed the Commission’s approach. It had previously raised concerns that crop-derived biofuels could result in a net increase in GHG emissions when taking into account emissions from ILUC and had called on the EC to phase out palm oil, as a component of biofuels, preferably by 2020.37 An amendment to the Commission’s proposal adopted by the Parliament in plenary thus provided for a general 7% ceiling for crop-based biofuels (without any reduction targets) but stated that ‘[t]he contribution from biofuels ... produced from palm oil shall be 0 % from 2021.’38

In the trilogue phase of the legislative process, the issue of first-generation biofuels, including palm oil, remained highly political and very sensitive.39 From a trade policy perspective, the Parliament’s proposal was seen as ‘rais[ing] substantive concerns, in terms both of compatibility with the EU’s obligations in the [WTO] and of trade relations with palm oil producing countries’.40 Ultimately, the Parliament and the Council adopted RED II in December 2018. It contains what we term the ‘freeze and phase-out’, which is an attempt to reconcile the various political demands with the EU’s obligations under WTO law.

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24RED I (n 2) art 3(1).
25ibid art 3(4).
35ibid. It is noteworthy that the proposed Article 7 did not contain any specific conditions for making such distinctions.
36Commission (EU) (n 34) art 25.
37European Parliament, ‘Resolution of 4 April 2017 on Palm Oil and Deforestation of Rainforests’ (2016/2222(INI) paras 77-82.
40Letter from EC Director-General for Trade, Jean-Luc Demarty to EC Director-General for Energy, Dominique Ristori (March 2018) (a redacted version of this letter is on file with the authors). In the trilogue, the Council was also concerned about the WTO compatibility; see Council (EU), ‘General Secretariat Note of 4 June 2018 to Council’, Doc 9287/18, 5.
3.3 | The freeze and phase-out and its trade implications

RED II provides for a ‘freeze and phase-out’ of high ILUC-risk crop-based biofuels in the transport sector. Its full effects result from the interplay of several provisions of the RED II and the Commission Delegated Regulation 2019/807.41 Article 25(1) RED II requires each Member State to ‘set an obligation on fuel suppliers to ensure that the minimum share of renewable energy within the final consumption of energy in the transport sector is at least 14% by 2030’.42 However, the contribution of all crop-based biofuels is limited in the calculation of this minimum share. This contribution may be no more than 1% higher than the share of those biofuels in the final consumption of energy in the transport sector in the relevant Member State in 2020; in any event, it may not exceed 7%.43

The share of biofuels produced from ‘feedstock for which a significant expansion of the production area into land with high-carbon stock is observed’ (‘covered high ILUC-risk biofuels’) is further limited for the purposes of this calculation. It may principally not exceed the consumption levels of such biofuels in the Member State in 2019 (‘freeze’). Additionally, this limit will gradually decrease to zero by the end of 2030 (‘phase-out’).

While the freeze and phase-out does not impose an import ban on any high ILUC-risk biofuels, it has obvious economic consequences for the covered biofuels. These biofuels will not be eligible for support schemes aimed at incentivizing the use of sustainable biofuels. Moreover, producers will not profit from the increasing demand for sustainable biofuels (e.g. through mandatory blending imposed on fuel suppliers). Rather, the demand for covered high ILUC-risk biofuels in the EU is likely to decrease significantly.44

The methodology for identifying biofuels covered by the freeze and phase-out is set out in the EC’s Delegated Regulation. The Delegated Regulation establishes two cumulative criteria for determining high ILUC-risk feedstock for which a significant expansion of the production area into land with high-carbon stock is observed. The first criterion concerns the average annual expansion of the global production area of the feedstock. The second criterion addresses the share of such expansion into land with high-carbon stock.45 Based on the figures provided in the Annex to the Delegated Regulation, only palm oil qualifies as a high ILUC-risk feedstock. Consequently, palm-oil-based biofuels are the only biofuels covered by the freeze and phase-out. An exception exists only for palm-oil-based biofuels certified as low ILUC-risk biofuels.

While the freeze and phase-out is principally origin-neutral, the criteria laid down in the Delegated Regulation single out palm oil—which is virtually not produced in the EU—as the only crop yielding high ILUC-risk biofuel. This raises questions as to the compatibility of the measure with WTO law. In December 2019, Indonesia requested consultations on the issue with the EU in the WTO.46 As the consultations failed to settle the dispute, Indonesia brought a formal request for the establishment of a panel in March 2020.47 This complaint illustrates the importance as well as the complexity of the issue of sustainable biofuels.48 In the following sections, we analyse some key issues which the EU freeze and phase-out of high ILUC-risk biofuels raises under WTO law.

A comprehensive analysis of all legal issues arising under WTO law is beyond the scope of this article. Thus, we focus on three fundamental questions.49 First, we analyse whether the freeze and phase-out falls within the ambit of the TBT Agreement (Section 4). Concluding that the freeze and phase-out is unlikely to qualify as a ‘technical regulation’ and therefore does not fall under the TBT Agreement, we then analyse whether it is compatible with the basic tenets of GATT non-discrimination law (Section 5). Finding the measure to be inconsistent with Articles I:1 and III:4 of the GATT, we finally turn to the question whether the EU measure can be justified under Article XX of the GATT (Section 6).

4 | TBT AGREEMENT

4.1 | Scope of application: ‘Technical regulation’

The TBT Agreement contains disciplines for a limited class of non-tariff measures that ‘seem to be different from, and additional to, the obligations’50 set out in the GATT. It applies to technical regula-

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41Commission Delegated Regulation (EU) 2019/807 of 13 March 2019 relating to the determination of high ILUC-risk feedstock for which a significant expansion of the production area into land with high-carbon stock is observed (2019) OJ L133/1 (Delegated Regulation).

42RED II (n 4) art 25(1).

43Ibid art 26(1).

44See generally E Webster, ‘Transnational Legal Processes, the EU and RED II: Strengthening the Global Governance of Bioenergy’ (2021) 1c 30 Review of European, Comparative and International Environmental Law.

45Delegated Regulation (n 41) art 3.

46European Union - Certain Measures Concerning Palm Oil and Oil Palm Crop-Based Biofuels (Request for Consultations by Indonesia) WT/DS593/1 (16 December 2019).

47EU – Palmoil, Request for the Establishment of a Panel (n 6). While the panel was established in July 2020, the dispute is still pending at the time of writing.

48Ibid.

49For example, we do not address the subsidy issue. For an analysis of EU biofuels policy and subsidies see, for example, S Switzer and JA McMahon, ‘EU Biofuels Policy – Raising Questions of WTO Compatibility’ (2011) 60 International and Comparative Law Quarterly 713, 718ff. Other issues, such as the sustainability criteria set out in RED II, have already been discussed in the context of RED I and, thus, will not be explored in detail. For analyses of WTO issues raised by RED I, see, for example, Mignolli (n 3) 236–240; R Leal-Arcas and A Fils, ‘Legal Aspects of the Promotion of Renewable Energy within the EU in Relation to the EU’s Obligation in the WTO’ (2014) 5 Renewable Energy Law and Policy Review 3; C Daugbjerg and A Swinbank, ‘The WTO and the EU’s Sustainability Criteria for Biofuels’ (2014) 22 Journal of European Public Policy 429; M Meredith, ‘Malaysia’s World Trade Organization Challenge to the European Union’s Renewable Energy Directive: An Economic Analysis’ (2012) 21 Pacific Rim Law and Policy Journal 399; Douma (n 12); A Mitchell and C Tran, ‘The Consistency of the European Union Renewable Energy Directive with World Trade Organization Agreements: The Case of Biofuels’ (2010) 1 Renewable Energy Law and Policy Review 33.

tions, standards and conformity assessment procedures. Whether the freeze and phase-out falls into one of these categories is therefore a `threshold issue’ as regards the applicability of the TBT Agreement.

Annex 1.1 of the TBT Agreement defines a `technical regulation’ as a document which lays down product characteristics or their related processes and production methods, including the applicable administrative provisions, with which compliance is mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method.

Broadly speaking, the first sentence concerns technical regulations stipulating technical requirements; the second sentence covers mandatory labelling requirements.

The freeze and phase-out is not concerned with labelling requirements. Whether it constitutes a `technical regulation’ within the meaning of Annex 1.1 is subject to a three-tier test: it must apply to an identifiable group of products, lay down product characteristics or their related processes and production methods (PPMs), and compliance must be mandatory. The freeze and phase-out arguably applies to an identifiable group of products, that is, biofuels. Also, compliance is mandatory, as EU Member States are required to create an obligation for fuel suppliers to ensure the minimum share of renewable energy within the transport sector. Moreover, the share of high ILUC-risk biofuels should gradually decrease to zero by the end of 2030. Thus, whether the freeze and phase-out qualifies as a `technical regulation’ seems to depend on whether it lays down `product characteristics’ or `their related PPMs’.

Both terms lack a precise definition and their interpretation is subject to much debate. In the following sections, we set out our understanding of each term before assessing whether the relevant provisions in the RED II and the Delegated Regulation lay down `product characteristics’ or `their related PPMs’—neither of which we find to be the case.

4.2 | Product characteristics

4.2.1 | Intrinsic and related characteristics

The exact meaning of the term `product characteristics’ is subject to much debate. Annex 1.1 of the TBT Agreement does not specify whether the term only refers to physical characteristics or whether it also includes certain non-intrinsic properties of a product or (even) PPMs. According to the Appellate Body (AB), `product characteristics’ within the meaning of Annex 1.1 include `any objectively definable `features’, `qualities’, `attributes’, or other “distinguishing mark” of a product’ and may, for example, relate to, `a product’s composition, size, shape, colour, texture, hardness, tensile strength, flammability, conductivity, density, or viscosity’.

These examples suggest that, in the AB’s view, product characteristics typically concern physical properties, which are intrinsic to a product. However, the AB has made clear that product characteristics are not limited to intrinsic features and qualities but also include `related’ characteristics (not to be confused with `related’ PPMs, which are dealt with below). Such `related’ characteristics include, for example, the means of identification, the presentation and the appearance of a product. While this list is not exhaustive, the `related’ characteristics mentioned by the AB have in common that they are `discernible on the product itself’.

Moreover, in EC – Seal Products, the AB found that the Panel had erred in finding that the contested EU seal regime laid down product characteristics. According to the AB, neither the identity of the hunter nor the type or purpose of the hunt could be viewed as product characteristics. None of these features could be detected in or on the respective product. Thus, the AB’s ruling

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52While standards differ from technical regulations in being non-mandatory, conformity assessment procedures are procedures `used, directly or indirectly, to determine that relevant requirements in technical regulations or standards are fulfilled’ and thus presuppose a technical regulation or standard; see TBT Agreement (n 9) Annex 1.2 and 1.3, respectively.

53D Sifonios, Environmental Process and Production Methods (PPMs) in WTO Law (Springer 2018) 255.

54EC – Sardines (n 51) para 176. P Mavroids, `Driftin’ too Far from Shore – Why the Test for Compliance with the TBT Agreement Developed by the WTO Appellate Body is Wrong, and What Should the AB Have Done Instead’ (2013) 12 World Trade Review 509, 522, argues that the AB’s finding in US – Tuna II (Mexico) (United States – Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products (Appellate Body Report) WT/DS381/AB/R (16 May 2012), that the United States’ measure was a technical regulation, even though tuna could be marketed without the `dolphin-safe’ label, `cannot be right’. See also L Ankersmit and JC Lawrence, `The Future of Environmental Labelling: US – Tuna II and the Scope of the TBT’ (2012) 39 Illegal Issues of Economic Integration, 127, 133ff.

55See A Mitchell and D Merriman, `Indonesia’s WTO Challenge to the European Union’s Renewable Energy Directive: Palm Oil & Indirect Land-Use Change’ (2020 fc) 12 Trade, Law and Development 1, 49-50. For the same result in the context of RED I, see Mitchell and Tran (n 49) 42.

56RED II (n 4) art 25.


58EC – Asbestos (n 50) para 67.


implies that the earlier reference to ‘related’ characteristics was no ‘invitation to regard all non-intrinsic properties of a product or PPMs as “product characteristics”’.62 As Levy and Regan have pointed out, such a broad definition of ‘product characteristics’ would make the reference to ‘their related PPMs’ in Annex 1.1 pleonastic, as any measure laying down PPMs would invariably also lay down ‘product characteristics’.63 Such an interpretation, however, would be at odds with the principle of effective treaty interpretation, which requires that every term be given proper meaning rather than being deprived of any significance;64 this also applies to the interpretation of the provisions of the WTO Agreement.65 According to the AB, a treaty interpreter is ‘not free to adopt a reading that would result in reducing whole clauses or paragraphs of a treaty to redundancy or inutility’.66 As an interpretation conflating PPMs with product characteristics would render the clause ‘or their related PPMs’ redundant it should, in our view, generally be avoided.

4.2.2 | Assessment: Does the freeze and phase-out lay down ‘product characteristics’?

The relevant provisions in the RED II and the Delegated Regulation concern the calculation of EU Member States’ gross final consumption of energy from renewable sources in the transport sector. The freeze and phase-out does not prohibit the placing of any crop-based biofuels on the EU market. Nor does it impose requirements concerning the physical characteristics of biofuels or related characteristics, such as the labelling of products as ‘biofuels’. Rather, the freeze and phase-out concerns the extent to which covered high ILUC-risk biofuels may be taken into account when calculating Member States’ minimum shares of renewable energy consumption. Moreover, it lays down exceptions for low ILUC-risk biofuels, based on specific sustainability criteria and additionality criteria, which are mainly concerned with PPMs. Neither the criteria for determining high ILUC-risk crops, nor the sustainability criteria or the additionality criteria prescribe or impose any objectively definable features or qualities or related characteristics of crop-based biofuels. Thus, in our view, the freeze and phase-out cannot be considered to lay down ‘product characteristics’ within the meaning of the first sentence of Annex 1.1. Whether it lays down ‘their related PPMs’ will be addressed in the next section.

4.3 | ‘or their related PPMs’

4.3.1 | Product-related and non-product-related PPMs

The exact meaning of ‘their related PPMs’ in the first sentence of Annex 1.1 is, again, subject to debate.67 A particularly controversial issue is whether the phrase ‘their related PPMs’ covers not only product-related PPMs (PR-PPMs) but also non-product-related PPMs (NPR-PPMs).68 PR-PPMs are characterized as ‘affecting the physical characteristics of the final product’.69 Their purpose can be, for example, to ensure a product’s functionality or to safeguard consumers. In contrast, NPR-PPMs are ‘designed to achieve a social purpose’.70 Examples include prohibitions on the use of environmentally unfriendly sources of energy or child labour in the production of a product.71 Unlike PR-PPMs, these NPR-PPMs ‘do not affect the physical characteristics of the final product put on the market’.72 Based on the text of Annex 1.1 and the negotiating history,73 it is often considered the prevailing view that the phrase ‘their related PPMs’ does not cover NPR PPMs. Thus far, however, the issue has not been resolved in WTO case law.74

4.3.2 | Sufficient nexus

The AB interpreted the phrase ‘or their related PPMs’ for the first time in EC – Seal Products. It clarified that the phrase ‘indicating[d] that the subject matter of a technical regulation may consist of a [PPM] that is related to product characteristics’, and thus not to the product.75 Moreover, the AB explained that whether a measure lays down ‘related PPMs’ depends on whether the PPMs prescribed ‘have a sufficient nexus to the characteristics of a product’.76 Despite finding that the EU seal regime did not lay

[63] Ibid 355.
[67] Du (n 57) 401.
[68] It is widely recognized that PR-PPMs are subject to the TBT Agreement; see, for example, Marin Durán (n 67) 96. For a summary of the debate see, for example, E Vranes, ‘Climate Labelling and the WTO: The 2010 EU Ecolabelling Programme as a Test Case under WTO Law’ (2011) European Yearbook of International Economic Law 205, 213–214; A Maggio, Environmental Policy, Non-Product Related Process and Production Methods and the Law of the World Trade Organization (Springer 2017) 172. On the wider debate on NPR-PPMs see, e.g., J Pauwelyn, ‘Recent Books on Trade and Environment: GATT Phantoms still Haunt the WTO’ (2004) 15 European Journal of International Law 575, 589ff.
[69] Marin Durán (n 60) 96. See also Sifonios (n 53) 255. S Charnovitz, ‘The Law of Environmental “PPMs” in the WTO: Debunking the Myth of Illegality’ (2002) 27 Yale Journal of International Law 59, 65, emphasizes that certain PPMs ‘are related to the product even though adherence to a particular process may not be directly detectable in the product’ (emphasis in the original).
[70] Charnovitz (n 69) 65.
[71] Van den Bossche and Zdouc (n 50) 887.
[73] Skeptical as regards the explanatory value of the travaux préparatoires and negotiating history see, for example, Marin Durán (n 60) 108.
[74] Du (n 57) 401; Sifonios (n 53) 256.
[75] EC – Seal Products (n 61) para 5.12.
[76] Ibid. See also Du (n 57) 400; J Norpoth, ‘Mysteries of the TBT Agreement Resolved? Lessons to Learn for Climate Policies and Developing Country Exporters from Recent TBT Disputes’ (2013) Journal of World Trade 575, 578.
down product characteristics, the AB did not examine the logical follow-up question, that is, whether it laid down related PPMs. As the Panel had not sufficiently explored the issue with the parties, the AB refrained from completing the legal analysis, merely noting that ‘the line between PPMs that fall, and those that do not fall, within the scope of the TBT Agreement raises important systemic issues’.

While this observation underlines that not all PPMs are covered by the TBT Agreement, important questions remain unresolved. In particular, the AB gives no hint as to what a ‘sufficient nexus’ actually requires. Thus, while this criterion potentially allows for a more nuanced assessment of PPMs than the dichotomy of PR-PPMs and NPR-PPMs, what exactly constitutes a ‘sufficient nexus’ is an open question.

This uncertainty is reinforced by the lack of clarity of the term ‘product characteristics’, which serves as the reference point for ‘their related PPMs’. A broad reading of the term ‘product characteristics’ could, for example, include (certain) non-physical characteristics. Thus, NPR-PPMs could qualify as ‘technical regulations’ if they have a sufficient nexus to these broadly defined ‘product characteristics’. However, defined more narrowly (as suggested above), the term covers intrinsic physical properties of a product and related characteristics, which are detectable in or on the product put on the market. Consequently, PPMs that have no sufficient nexus to this more limited set of characteristics are not covered by the definition of a ‘technical regulation’ in the first sentence of Annex 1.1.

In our view, the stricter interpretation is supported by a difference in the wording of the first and second sentence of Annex 1.1. While the first sentence refers to ‘product characteristics’ and ‘their related PPMs’, the second sentence more broadly refers to labelling requirements applying to ‘a product, process or production method’. Indeed, the TBT Agreement has been found to cover labelling requirements, even if they deal with NPR-PPMs. In our opinion, this is stringent as the label itself constitutes a physical, (quasi-)intrinsic characteristic of the product put on the market. Importantly, this is the case irrespective of the content or the subject matter the label addresses. In this respect, however, labelling requirements significantly differ from other regulatory measures, which do not incorporate PPMs in the same way and therefore require a separate assessment of the ‘sufficient nexus’ to the characteristics of a product to establish whether they lay down ‘their related PPMs’.

4.3.3 | Assessment: Does the freeze and phase-out lay down ‘their related PPMs’?

Against this background, we now analyse the extent to which the freeze and phase-out lays down PPMs which have a ‘sufficient nexus’ to ‘product characteristics’ of crop-based biofuels.

The Delegated Regulation stipulates two cumulative criteria for determining high ILUC-risk feedstock. The average annual expansion of the global production area of the feedstock since 2008 must be higher than 1 percent and must affect more than 100,000 hectares. Moreover, the share of such expansion into land with high-carbon stock must be higher than 10 percent, according to a formula laid down in Article 3(b) of the Delegated Regulation. Importantly, neither of these criteria addresses the biofuel production processes of individual producers or of producers in specific country. Rather, both criteria concern consequences of the growth of global agricultural production and the increased demand for different crops from all sectors at an aggregate level. Thus, in our view, these criteria cannot be considered as ‘laying down’ (i.e. establishing, prescribing) any processes or production methods. Besides, they also seem completely unrelated to any product characteristics of crop-based biofuels. Subsequently, we will analyse whether the various criteria for certification of low ILUC-risk biofuels lay down related PPMs.

The sustainability criteria for certification of low ILUC-risk biofuels fall into two categories: land-related criteria and emissions-related criteria. The land-related criteria concern the type of land from which the raw material for the production of biofuels is obtained. Article 4(1)(a) of the Delegated Regulation in conjunction with Article 29(3)-(5) RED II principally excludes biofuels from being certified as low ILUC-risk if raw material is obtained from land with a high biodiversity value, land with high-carbon stock or land that was peatland in January 2008. However, the fact that biofuels are produced, for instance, from land with a high biodiversity value does not seem to have a sufficient nexus to any of their intrinsic or related characteristics. Thus, the land-related criteria do not lay down related PPMs.

The emissions-related sustainability criteria concern GHG-emission savings from the use of biofuels as compared to fossil fuels. Article 29(10) RED II prescribes minimum thresholds from 50% to 65% for biofuels in the transport sector. The RED II lays down the methodology for calculating the GHG emissions from the production and use of biofuels in Part C of Annex V. The total emissions are the sum of the emissions from the extraction or cultivation of raw materials, (direct) land-use change, processing, transport and distribution, and the fuel in use; deductions are made for emissions savings from soil carbon accumulation via improved agricultural management and carbon dioxide (CO₂) capture.

The crucial question is whether the emissions-related sustainability criteria lay down related PPMs. When calculating the emissions savings, emissions from the whole production process, from transport
and distribution and the fuel in use have to be taken into account. In our view, GHG emissions created by burning biofuels can be considered an objectively definable feature of biofuels and thus constitute a ‘product characteristic’. However, in the calculation of the emissions savings, the emissions of the biofuel in use are considered zero as the CO₂ emitted equals the carbon captured during growth of the feedstock. Thus, the GHG emissions created by the use of biofuels are of no relevance in terms of total emissions and the emissions savings.85

The remaining criteria relate to biofuel production processes of individual producers, as well as transport and distribution. In our view, only the former can be considered PPMs. However, PPMs such as improved agricultural management or the extraction of methane from the emissions of a processing plant are neither related to the GHG emissions created by burning biofuels (which we consider a ‘product characteristic’), nor do they appear to have a sufficient nexus to any other characteristics of the final product.86 In light of these considerations, we find that the emissions-related sustainability criteria do not lay down ‘related PPMs’ within the meaning of the first sentence of Annex 1.1.87

Finally, we turn to the so-called additionality criteria. According to Article 4(1)(b) of the Delegated Regulation, biofuels may only be certified as low ILUC-risk biofuels if they have been produced from additional feedstock obtained through additionality measures which meet the criteria set out in Article 5 of the Delegated Regulation. Additionality measures must have been taken no more than 10 years before certification and must meet at least one of the following criteria: (i) they become financially attractive or face no barrier preventing their implementation only because the biofuels can be counted towards the target for renewable energy under the RED I or RED II; (ii) they allow for cultivation of food and feed crops on abandoned land or severely degraded land and (iii) they are applied by small holders. In our view, all three criteria clearly concern NPR-PPMs. Neither the financial feasibility of production, nor the type of land used for production, nor the identity of the producer seem to have a ‘sufficient nexus’ to any intrinsic or related characteristics of the biofuels produced. Consequently, we find that none of the additionality criteria lay down ‘related PPMs’.88

4.4 Conclusion

According to the AB, whether a measure constitutes a ‘technical regulation’ requires an analysis on a case-by-case basis, taking into account the characteristics of the measure as well as its design and operation.89 In case of doubt, a measure’s ‘integral and essential’ aspects carry most weight, while the legal characterization must eventually be made ‘in respect of ... the measure as a whole’.90

In our above analysis, we find that the relevant provisions in the RED II and the Delegated Regulation do not lay down ‘product characteristics’ or ‘their related PPMs’. This finding is subject to one exception. For the purposes of calculating emissions savings, the RED II includes GHG emissions created by burning biofuels. Only in this respect, the sustainability criteria actually appear ‘related’ to a product characteristic. However, in our view, this is of limited relevance as the emissions resulting from the burning of biofuels are considered to be zero, and therefore have no impact on the calculation of emissions savings. Consequently, we conclude that the freeze and phase-out ‘as a whole’ does not constitute a ‘technical regulation’ within the meaning of Annex 1.1.91

However, even if the freeze and phase-out is not subject to the disciplines of the TBT Agreement, it remains subject to the GATT. Thus, in a next step, we analyse the measure in light of key GATT non-discrimination disciplines.

5 Non-Discrimination under the GATT

5.1 Legal bases

In our analysis of the EU freeze and phase-out, most-favoured-nation treatment and national treatment—the key non-discrimination disciplines under GATT Articles I and III:4—are of particular relevance. If the EU measure were found to be inconsistent with the obligations under either of these provisions, the question arises whether it may be justified under the general exceptions in Article XX.

According to the AB, ‘[t]he essence of the non-discrimination obligations is that like products should be treated equally, irrespective of their origin’.92 While both Articles I:1 and III:4 are concerned with the equality of competitive opportunities for like products, they prohibit different forms of discrimination.93

Simply put, the obligation to provide most-favoured-nation treatment prohibits discrimination ‘between and among like products of different origins’.94 More technically, Article I:1 provides that with respect to matters referred to in Article III:4 ‘any

85 For this reason, we also find that the RED II does not ‘lay down’ product characteristics with regard to GHG emissions, which result from using the biofuel.
87 On the contrary, Mitchell and Tran (n 49) 42 find (in the context of RED II) that the emissions-related sustainability criteria relate to product characteristics and therefore ‘fall within the definition of Annex 1.1’.
88 Another question is whether the certification regime for low ILUC-risk biofuels sets out ‘applicable administrative provisions’ within the meaning of Annex 1.1. In EC – Seal Products (n 61) para 5.13, the AB explained that relevant administrative provisions must either ‘refer’ to or be ‘relevant’ to product characteristics or their related PPMs. The Delegated Regulation requires economic operators to duly collect and thoroughly document the evidence needed to identify additional feedstock and substantiate their claims. Moreover, it obliges economic operators to submit reliable information, arrange for an adequate standard of independent auditing and provide evidence that audits are being conducted. In so far as these (administrative) provisions concern the financial feasibility of production, the type of land used for production and the identity of the producer, they do not seem to refer to product characteristics or their related PPMs.
89 For example, US – Tuna II (Mexico) (n 54) para 188; EC – Seal Products (n 61) para 5.19.
90 EC – Seal Products (n 61) paras 5.19, 5.29.
91 Mitchell and Merriman (n 55) 54 similarly conclude that ‘the Renewable Energy Package is not a ‘technical regulation’ within the meaning of Annex 1 of the TBT Agreement and is thus not subject to Articles 2.1 and 2.2 of that Agreement’.
93 EC – Seal Products (n 61) para 5.82.
94 Ibid para 5.79 (emphasis in original).
advantage, favour, privilege or immunity granted by any [Member] to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other [Members]. In our analysis under Article I:1, we will thus focus on three main elements: whether the EU measure at issue confers an advantage on a product originating in the territory of any WTO member and whether this advantage is not extended immediately and unconditionally to like products originating in the territory of all Members.

The national treatment obligation, in contrast, prohibits discrimination of ‘imported products vis-à-vis like domestic products.’ Article III:4 provides that ‘[t]he products of the territory of any [Member] imported into the territory of any other [Member] shall be accorded treatment no less favourable than that accorded to like products of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use.’ In our analysis under Article III:4, we will thus focus on three main elements: whether the imported and domestic products are like products, whether the measure at issue is a law, regulation or requirement affecting the internal sale, offering for sale, purchase, transportation, distribution or use and whether imported products are accorded less favourable treatment than like domestic products.

As likeness is a central criterion under both non-discrimination standards, we begin our analysis with this criterion before reviewing the specific criteria under each provision.

5.2 | Likeness

The question whether two products—for example, biofuels produced from high ILUC-risk feedstock and biofuels produced from food and feed crops with no or only low ILUC-risk—are like products is of utmost importance to establish whether differences in treatment violate GATT non-discrimination disciplines. However, despite their importance, the terms ‘like’ or ‘like product’ are not explicitly defined in the GATT. Importantly, according to the AB’s famous accordion metaphor, ‘likeliness’ is a relative concept, which ‘stretches and squeezes in different places as different provisions of the WTO Agreement are applied’. However, while a differentiated ‘like product’ analysis is required on a case-by-case basis, the analytical approach to the concept of likeness in the provisions at issue is largely similar.

Likeness is fundamentally about the existence of a competitive relationship between products. In determining likeness, GATT/WTO dispute settlement practice frequently refers to criteria first set out in a 1970 report of the Working Party on Border Tax Adjustments. These criteria are ‘the product’s end-uses in a given market; consumers’ tastes and habits, which change from country to country; the product’s properties, nature and quality.’ Another relevant aspect may be the products’ tariff classifications. However, all these criteria are relatively basic and do not necessarily exhaust the analysis.

A much-debated issue is the relevance of NPR-PPMs in determining whether products are ‘like’. In our opinion, the ‘traditional view’, maintaining that differences in NPR-PPMs categorically can have no effect on the likeness of products has rightly been criticized as ‘hardly defensible.’ Likeness is about competitive relationships and therefore clearly ‘goes beyond the physical characteristics of the product.’ Thus, the relevance of NPR-PPMs requires a more nuanced answer. In particular, NPR PPMs, which have a strong influence on consumers’ tastes and habits, may affect the competitive relationship between products and thus their likeness. Admittedly, however, this is likely to be the exception rather than the rule.

The freeze and phase-out distinguishes between biofuels produced from high ILUC-risk feedstock and biofuels produced from other food and feed crops, which are associated with no or only a low ILUC-risk. The question is therefore whether (some) biofuels produced from such different raw materials as cereals, sugar crops and oil crops are ‘like products’. The properties, nature and quality of the products can serve as a starting point for our analysis.

The AB understands this criterion to cover the physical characteristics and qualities of the products in question. It serves as a useful—although not decisive—indicator of the likeness of products.
Thus, even products with quite different physical properties may be ‘like’, for example, if they are capable of performing similar or identical end-uses.113

First-generation biofuels produced from different food and feed crops include bioethanol and biodiesel. Bioethanol is derived from the alcoholic fermentation of sucrose or simple sugars. Crops used for bioethanol production include wheat, sugar beet, corn, etc.114 Biodiesel, on the other hand, is produced from vegetable oils using transesterification processes.115 The physical properties of these two categories of biofuels differ considerably. Moreover, even the physical properties of biodiesel fuels produced from different feedstock vary to some degree (e.g. with regard to kinetic viscosity, density or flash point).116 However, in our view, these differences do not per se render the different oil crop-based biofuels ‘unlike’.

At least for biofuels produced from different oil crops, neither the products’ end-uses nor consumers’ tastes and habits seem to support a finding of their ‘unlikeness’.117 With regard to end-uses such as blending with petroleum-based fuels or powering internal combustion engines, palm-oil-based biofuels are arguably capable of performing the same, or similar, functions as other biofuels produced from other oil crops. As concerns consumers’ tastes and habits, the crucial question is to what extent biofuels produced from different oil crops are substitutable from a consumer perspective.118

In our case, ‘consumers’ are primarily the fuel suppliers in EU Member States. They are the addressees of any Member State measures aimed at ensuring the renewables share in the transport sector. While any assessment of fuel suppliers’ tastes and habits is necessarily highly speculative, it seems plausible that their choice between different biofuels is mainly based on considerations such as availability, price and quality. Moreover, fuel suppliers’ tastes and habits may also be shaped by environmental risks associated with a product, especially where these risks affect the preferences of their customers and the ultimate consumers, which may be influenced by the high ILUC-risk associated with a particular biofuel. However, it seems unlikely that consumer preferences are so strong that palm-oil-based biofuels and other oil-crop-based biofuels with the same end uses would not be in a competitive relationship and, thus, ‘like’ products.119

5.3 | Further criteria under Article I:1 GATT

5.3.1 | Advantage

The term ‘advantage’ has been interpreted broadly in WTO case law.120 The AB has emphasized that Article I:1 refers to ‘any advantage’.121 For example, according to the Panel in Brazil – Taxation, an advantage ‘exists when a measure alters the conditions of competition for certain imported products relative to other like imported products’.122 Such an understanding reflects the underlying purpose of Article I:1, that is, the preservation of ‘equal competitive opportunities’.123 Examples of advantages include internal tax reductions,124 the granting of flexibility in import procedures125 or access to certification procedures.126 By including only certain oil-crop-based biofuels in the calculation of Member States’ minimum share of renewable energy within the transport sector, the freeze and phase-out, in our opinion, clearly confers an advantage on these biofuels (depending on the implementation in Member States, for example, eligibility for support schemes, mandatory blending requirements).

5.3.2 | Immediately and unconditionally

While this phrase is mostly considered en bloc, the debate has focused on the meaning of according an advantage ‘unconditionally’. In EC – Seal Products, the AB explained that Article I:1 does not prohibit a Member from ‘attaching any conditions to the granting of an "advantage" [but only] conditions that have a detrimental impact on the competitive opportunities for like imported products from any Member’.127 Regulatory distinctions between like products are thus compatible with Article I:1 as long as they have no negative impact on such competitive opportunities.128 As the advantage resulting from the freeze and phase-out is likely to negatively impact the competitive opportunities for palm-oil-based biofuels, which are imported from Indonesia and some other WTO Members, we find that the advantage is not accorded ‘immediately and unconditionally’.

113 Ibid paras 111-112. However, the AB also emphasizes that the examination of the different criteria should not be confused.
114 See, for example, A Dembiras, ‘The Importance of Bioethanol and Biodiesel from Biomass’ (2008) 3 Energy Sources, Part B, 177, 179.
115 See, for example, M Canakci and H Sanli, ‘Biodiesel Production from Various Feedstocks and Their Effects on the Fuel Properties’ (2008) 35 Journal of Industrial Microbiology and Biotechnology 431, 432.
116 See, for example, ibid 437.
117 Whether cereal or sugar crop-based biofuels (bioethanol) and oil crop-based biofuels (biodiesel) are in a competitive relationship, and thus ‘like’, seems more doubtful. However, in the present context, we consider it unnecessary to explore this question further.
118 EC – Asbestos (n 50) paras 117, 120.
119 See also Mitchell and Tran (n 55) 37.
120 E.g. EC – Bananas III (n 92) para 206.
123 EC – Seal Products (n 61) para 5.87.
124 Brazil – Taxation (n 122) para 7.1043. The AB has found that the claims raised under Article I:1 were within the Panel’s terms of reference: Brazil – Certain Measures Concerning Taxation and Charges (Appellate Body Report) WT/DS472/AB/R; WT/DS497/AB/R (13 December 2018) para 5.431.
127 EC – Seal Products (n 61) para 5.88.
128 Unlike under Article 2.1 of the TBT Agreement, whether a detrimental impact stems exclusively from a legitimate regulatory distinction is not part of the analysis under Article I:1 GATT; EC – Seal Products (n 68) para 5.93.
5.4 | Further criteria under Article III:4 GATT

5.4.1 | Laws, regulations or requirements affecting imported goods or services

In its 2018 report in *EU – Energy Package*, the Panel found that an EU directive can be challenged under Article III:4 GATT even though Member States have some discretion in transposing the Directive. In our view, the RED II and the Delegated Regulation are beyond the scope of Article III:4 GATT.

According to the AB, the term ‘affecting’ indicates that Article III:4 has a ‘broad scope of application’. It implies that a law or regulation ‘has an effect on’ a product. In our view, the RED II and the Delegated Regulation affect palm-oil-based biofuels as the freeze and phase-out creates an incentive for fuel suppliers not to use these biofuels unless they have been certified as low ILUC-risk.

5.4.2 | Treatment no less favourable

Article III:4 seeks to ensure ‘effective equality of competitive opportunities for imported products’. Thus, less favourable treatment occurs where a measure modifies the conditions of competition in the relevant market to the detriment of imported products. Importantly, it is for the complaining WTO Member to ‘establish that the measure accords to the group of “like” imported products “less favourable treatment” than it accords to the group of “like” domestic products’. A finding of less favourable treatment requires a ‘careful analysis of the contested measure’, but not necessarily ‘actual effects in the marketplace’. However, there has to be ‘a genuine relationship between the measure at issue and the adverse impact on imported versus like domestic products’.

Based on the criteria for determining high ILUC-risk biofuels, only (typically imported) palm-oil-based biofuels are affected by the freeze and phase-out (unless certified as low ILUC-risk). By contrast, biofuels based on oil crops, which are more likely to be produced domestically, such as sunflower or rapeseed, are not subject to the freeze and phase out. Thus, while origin-neutral on its face, the EU measure—de facto—has an adverse impact on the competitive opportunities of imported products vis-à-vis like domestic products.

As a result, we find the freeze and phase-out in its current form likely to be inconsistent with Articles I:1 and III:4 of the GATT, which is why we will now address the question whether the measure can be justified under the general exceptions clause in Article XX.

6 | ARTICLE XX GATT

Article XX is crucial for WTO members’ policy space under the GATT. It involves a two-tier analysis. If a measure can be provisionally justified under one of the subparagraphs (in the concrete case, either subparagraphs (b) or (g)) it must, in a second step, be appraised under the chapeau of Article XX.

6.1 | Article XX(b) GATT

Subparagraph (b) covers measures, which are ‘necessary to protect human, animal or plant life or health’. Whether the freeze and phase-out can be provisionally justified under this provision depends, first, on whether it is designed to protect human, animal or plant life or health. According to the RED II and the Delegated Regulation, the policy objective behind the freeze and phase-out is to reduce GHG emissions in the transport sector which result from ILUC and which have the potential to negate some or all GHG emissions savings otherwise associated with the use of biofuels. As such, the measure is part of EU efforts to comply with its obligations under the Paris Agreement and to mitigate climate change. In our view, the freeze and phase-out can at least potentially contribute to these objectives and thus be considered designed to protect human, animal or plant life or health. The more complex question is then whether the measure is ‘necessary’ to achieve the claimed objectives.

Whether a measure is necessary requires the weighing and balancing of a number of factors, including the relative importance of the interests or values furthered by the measure at issue, the measure’s contribution to achieving its objective, and its trade-restrictiveness. Moreover, the assessment requires a comparison with...
possible alternative measures, which may be less trade restrictive while providing an equivalent contribution to the achievement of the objective.  

According to the AB, assessing the necessity of a measure requires a 'holistic operation that involves putting all the variables of the equation together and evaluating them in relation to each other after having examined them individually.' However, in the following, we limit our analysis to some considerations that seem particularly relevant for the assessment of the measure’s necessity.

First, as regard the relative importance of the interests at stake: the freeze and phase-out aims to reduce GHG emissions resulting from ILUC. In light of global efforts to reduce GHG emissions and mitigate climate change, the interests at stake do appear vital. This is relevant for the overall assessment, as a measure is more likely to be considered necessary if the underlying interests or values are of high importance.

Second, the measure’s contribution to achieving the objectives identified is an important element. Simply put, the larger its contribution, the more likely a measure is to be considered necessary. However, the extent to which the freeze and phase-out contributes to reducing GHG emissions from ILUC and mitigating climate change is an open and complex question. In Brazil – Retreaded Tyres, the AB recognized that in the context of complex environmental problems, such as climate change, isolating the contribution of one specific measure is difficult in the short term. In this case, a measure’s necessity can be established, for example, by showing that it 'is apt to produce a material contribution to the achievement of its objective.'

This aptitude may be demonstrated through ‘quantitative projections in the future, or qualitative reasoning based on a set of hypotheses that are tested and supported by sufficient evidence.'

In the context of the freeze and phase-out, substantiating the measure's contribution to reducing GHG emissions from ILUC poses specific challenges. While the occurrence of ILUC is intuitively plausible, quantifying ILUC is notoriously difficult. According to a recent report by the European Commission, ILUC 'cannot be observed or measured' and any estimation of the potential impacts requires modelling. However, while the Commission concedes that such modelling 'has a number of limitations', it considers it 'robust enough to show the risk of ILUC associated with conventional biofuels.'

In recital 81 of the RED II, the EU legislator points out that research has shown that the risks arising from ILUC depend on a variety of factors and that the highest risks of ILUC have been identified for biofuels produced from feedstock for which a significant expansion of the production area into land with high-carbon stock is observed. As regards the significance of the land expansion, the Delegated Regulation relies on three factors: (i) the absolute and relative magnitude of the land expansion since a specific reference year compared to the total production area of the relevant crop; (ii) the share of this expansion into land with high-carbon stock and (iii) the type of high-carbon stock land.

According to its 2019 report, the Commission has set these criteria for identifying high ILUC-risk biofuels based on extensive research, including a review of the relevant scientific literature and a global assessment based on GIS (Geographic Information System) data. Thus, assuming that the scientific evidence which supports the choice of criteria and methodology to determine the significance of the expansion is conclusive, the freeze and phase-out appears ‘apt to make a material contribution’ to the reduction of GHG emissions resulting from ILUC. It arguably does so by discouraging the use of high ILUC-risk biofuels with the potential to negate some or all GHG emissions savings otherwise associated with their use.

Third, as regards trade-restrictiveness, it should be noted that the freeze and phase-out does not impose an import ban on palm oil or palm-oil-based biofuels (or any other high ILUC-risk biofuels). It also provides an exemption for certified low ILUC-risk biofuels. However, the measure caps the share of palm-oil-based biofuels for the calculation of Member States’ renewable energy consumption in the transport sector at the level of consumption in 2019 and gradually reduces this share to zero by 2030. The trade-restrictiveness of the EU measure is primarily explained by the fact that the economic viability of biofuels largely depends on financial support or regulatory measures prescribing demand, such as blending requirements imposed on fuel suppliers. Thus, by gradually reducing the share of palm-oil-based biofuels in the calculation of renewable energy targets, they are increasingly less likely to benefit from these
mechanisms. In this way, the freeze and phase-out will have a significant impact on the volume of palm-oil-based biofuel imports into the EU. Therefore, even though the measure does not impose an import ban, its restrictive effects on international trade are quite severe. Harking back to the measure’s contribution to the achievement of its objectives, this finding underlines the importance for the EU to show that the contribution of the freeze and phase-out is ‘material’ and not only ‘marginal’ or ‘insignificant’.155

Finally, the question arises whether less trade-restrictive alternatives to the freeze and phase-out are reasonably available to the EU. Any alternative has to allow the EU to achieve the same level of protection and must not be ‘merely theoretical in nature’ or unduly burdensome, for example, by imposing ‘prohibitive costs or substantial technical difficulties’.156 For example, a voluntary labelling regime may be less trade-restrictive but would arguably not allow for a closer tracking of the ‘association between a given consignment [of biofuel] and ILUC risk’.158 However, Mitchell and Merriman also identify several issues that cast doubt on whether such a mechanism would actually provide a reasonably available and less trade restrictive alternative.159 In our view, the most serious constraint for such a tracing and verification mechanism seems to be that ILUC is a ‘macro-level problem’,160 which cannot be directly observed, measured or attributed to specific producers.161 In the pending dispute, it would be for Indonesia to identify possible alternatives to the freeze and phase-out, which provide an equivalent contribution to the achievement of the objective. In turn, the EU would have to demonstrate that the proposed measures are not genuine alternatives or not reasonably available.

6.2 | Article XX(g) GATT

Subparagraph (g) covers measures ‘relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption’. ‘Natural resources’ is a generic term which the AB considers ‘by definition, evolutionary’.162 It arguably includes the global climate system and the Earth’s atmosphere.163 The term ‘conservation’ means ‘the preservation of the environment, especially of natural resources’.164 A measure relates to conservation if there is ‘a close and genuine relationship of ends and means’.165 In other words, the measure must be reasonably related to the conservation objective.166

Compared to the necessity test under subparagraph (b), the ‘relating to’ requirement is considered less demanding.167 A measure, however, that is ‘merely incidentally or inadvertently’ aimed at a conservation objective would not satisfy this requirement.168 In practical terms, the focus is often on the design and structure of the measure at issue.169 An examination of the measure’s empirical or actual effects is not required.170

The freeze and phase-out is part of the EU’s efforts to promote the use of renewable energy to reduce GHG emissions and comply with its commitments under the Paris Agreement. While the actual effects of the freeze and phase-out are highly uncertain, its design and structure arguably aim to promote the use of biofuels with a lower risk of GHG emissions resulting from ILUC. In our view, this is sufficient to find that the freeze and phase-out ‘relates to’ the conservation of the global atmosphere as an exhaustible natural resource.

However, whether a measure can be justified under Article XX(g) requires a ‘holistic assessment of its component elements’.171 In addition to the requirement that a measure relates to the conservation of an exhaustible natural resource, subparagraph (g) also requires that such conservation measures are ‘made effective in conjunction with restrictions on domestic production or consumption’.

In light of the AB’s case law, the clause ‘made in conjunction with’ stipulates a requirement of ‘even-handedness’, ensuring that restrictions are not solely imposed on international trade but also on domestic production or consumption.172 In other words, ‘when GATT-inconsistent measures are in place, effective restrictions must

155Brazil – Retreaded Tyres (n 141) para 150.
156ibid para 156; Colombia – Textiles (n 143) para 5.74.
157Importantly, WTO members have the right to determine the level of protection of health or the environment that they consider appropriate. Other WTO members can argue that the measure is not necessary to achieve this level of protection, but cannot challenge the level of protection as such. See EC – Asbestos (n 54) para 168. See also DH Regan, ‘The Meaning of “Necessary”’ in GATT Article XX and GATS Article XIV: The Myth of Cost-Benefit Balancing’ (2007) 6 World Trade Review 347, 348.
158Mitchell and Merriman (n 55) 35–36.
159ibid 36–37.
160Lydgate (n 27) 168.
161See Commission (EU), Food and Feed Crops Report (n 17) 4; Jansson and Kalimo (n 19) 133.
162US – Shrimp (n 137) para 130. See also Charnovitz (n 141) 700.
165Van den Bossche and Zdeouc (n 50) 576.
166China – Rare Earths (n 165) para 5.87. See also PC Mavroidis and J de Melo, ‘Climate Change Policies and the WTO: Greening the GATT, Revisited’ in S Barrett, C Carraro and J de Melo (eds), Towards a Workable and Effective Climate Regime (CEPR Press and Ferdi 2015) 225, 230.
167China – Rare Earths (n 165) para 5.112.
168ibid para 5.114.
169ibid para 5.113.
170ibid para 5.94.
171US – Gasoline, AB Report (n 138) 21; China – Rare Earths (n 165) para 5.93.
also be imposed on domestic production or consumption.

While the burden of conservation must not be distributed evenly between foreign producers and domestic producers or consumers, the AB has emphasized that a measure imposing a ‘significantly more onerous burden’ on foreign producers is unlikely to qualify for justification under subparagraph (g).

Whether the freeze and phase-out can be considered as even-handed arguably depends on whether it imposes effective restrictions on domestic production or consumption. In our view, restrictions on the domestic consumption of high ILUC-risk biofuels result (indirectly) from the combination of the fuel suppliers’ obligation to ensure a minimum share of renewable energy and the detailed rules on calculating this minimum share within the final consumption. Despite these restrictions, the burden of conservation is largely put on foreign producers of palm oil and palm-oil-based biofuels. However, in light of the AB’s decision in China – Rare Earths, it is not entirely clear whether this disparate impact is enough to rule out the even-handedness of the measure at issue.

In this case, the AB observed that interpreting subparagraph (g) as requiring an analysis of whether the burden of conservation is evenly distributed ‘could entail a duplication of the analysis to be conducted under the chapeau, in particular in cases involving discriminatory measures. This would not comport with the principle of effective treaty interpretation’. In our view, assessing the discriminatory features of the measure under the subparagraph would not only risk duplicating but also undermining the analysis under the chapeau. As Bartels has pointed out, the chapeau ‘contains a discrimination condition, which ... is subject to two independent justifications’. If the issue of discrimination is considered under the subparagraph rather than the chapeau, these justifications would be rendered virtually ineffective.

In short, the provisional justification of the freeze and phase-out under subparagraphs (b) and (g) raises a host of complex questions. Based on the above analysis, we find that a provisional justification of the freeze and phase-out appears not to be precluded under either subparagraph (b) or (g). Against this background, we now turn to the chapeau of Article XX.

6.3 | Article XX chapeau

The second step of the two-tier analysis under Article XX consists of an appraisal of the measure under the chapeau, whose function is to prevent the abuse or misuse of the exceptions specified in the subparagraphs. Such abuse or misuse occurs when measures provisionally justified are ‘applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on trade’. In view of its express terms, the chapeau is concerned with the application of a measure provisionally justified under one of the subparagraphs. However, in the absence of any empirical evidence on its application—as is the case with the freeze and phase-out—a measure’s ‘actual or expected application’ can also be assessed based on its ‘design, architecture, and revealing structure’.

With regard to the first alternative addressed in the chapeau, the AB has identified three analytical elements: (i) the application of the measure results in discrimination; (ii) the discrimination occurs between countries where the same conditions prevail and (iii) the discrimination is arbitrary or unjustifiable. As regards the first element, the Delegated Regulation effectively singles out palm-oil-based biofuels as the only oil-crop-based biofuels which are subject to the freeze and phase-out. Since palm-oil-based biofuels are predominantly imported from Indonesia, Malaysia and some other WTO members, the application of the measure will have disparate economic impacts on some producer countries of oil-crop-based biofuels, thus resulting in discrimination. As regards the second element, we consider the relevant condition to be the occurrence of GHG emissions resulting from ILUC. ILUC does not necessarily occur in the same countries that produce specific oil-crop-based biofuels. Rather, it is a global phenomenon which cannot be directly observed or measured and which is driven by changes in demand for agricultural commodities in global markets. Thus, in our view, the same conditions potentially prevail in any country.

The measure’s justification seems to depend on the third element, that is, whether the discrimination is ‘arbitrary or unjustifiable’. According to the AB, the focus of the multifaceted analysis lies ‘on the cause of the discrimination, or the rationale put forward to explain its existence’. Discrimination is deemed arbitrary or unifiable if it ‘bear[s] no rational connection to the [policy] objective’ or ‘would go against that objective’. Thus, with regard to the freeze and phase-out it is crucial whether the discrimination between different food and feed crops based on the associated (higher or lower) ILUC-risk ‘can be reconciled with, or is rationally related to’ the policy objective relied on, that is, the reduction of GHG emissions resulting from ILUC.

The difficulty in deciding this question is that palm oil is singled out vis-à-vis soy and other oil-crop-based biofuels, which may also

173China – Rare Earths (n 165) para 5.136.
174ibid para 5.134.
175ibid para 5.135.
177US – Gasoline, AB Report (n 138) 22; US – Shrimp (n 137) paras 157–159; Brazil – Retreaded Tyres (n 141) para 227.
178E.g., EC – Seal Products (n 61) para 5.302; see, e.g., Bartels (n 176) 101.
179US – Shrimp (n 137) paras 150.
180According to the AB, the relevant ‘conditions’ should be understood ‘by reference to the applicable subparagraph of Article XX under which the measure was provisionally justified and the substantive obligations under the GATT 1994 with which a violation has been found’; EC – Seal Products (n 61) para 5.301.
181It should also be noted that a respondent that claims that the conditions are not the ‘same’ but relevantly different, bears the burden of proof; ibid para 5.301.
182Brazil – Retreaded Tyres (n 141) para 226.
183ibid para 227.
184EC – Seal Products (n 61) para 5.306; US – Tuna II (Mexico) (Article 21.5 – Mexico) (n 100) para 7.316.
lead to GHG emissions resulting from ILUC. It should be recalled that the freeze and phase-out is based on the premise that the highest ILUC-risks have been identified for biofuels produced from feedstock for which a significant expansion of the production area into land with high-carbon stock is observed. As mentioned above, according to its 2019 report, the European Commission has set the criteria for identifying high ILUC-risk biofuels based on extensive research, including a review of the relevant scientific literature and a global assessment based on GIS data.\(^{185}\) Thus, in the absence of scientific evidence undermining the choice of criteria and the methodology applied, the resulting discrimination, in our view, would appear ‘rationally related’ to the objective of reducing GHG emissions resulting from ILUC.

However, while ‘one of the most important factors’,\(^ {186}\) this rational relation is by no means the only relevant factor in the assessment of arbitrary and unjustifiable discrimination. In our view, at least two more factors identified in the AB’s case law cast doubt on the justifiability of the discrimination. In US – Shrimp, the AB criticized the failure of the US to make serious good faith efforts to negotiate and conclude a multilateral agreement before resorting to unilateral measures.\(^ {187}\) The AB specifically pointed out the importance of such efforts where the policy objective of the measure concerns trans-boundary or global environmental problems that call for ‘concerted and cooperative efforts’ of a large number of countries. The reduction of GHG emissions resulting from ILUC clearly concerns a global environmental problem. Whether the EU has engaged sufficiently in efforts to find a multilateral solution prior to imposing the freeze and phase-out seems at least doubtful.

The second, arguably even more problematic, aspect concerns the seemingly deliberate nature of the discrimination. In US – Gasoline, the AB criticized that the discrimination resulting from the measure at issue ‘must have been foreseen, and was not merely inadvertent or unavoidable’ and was therefore ‘unjustifiable’.\(^ {188}\) In our view, this factor has to be assessed in light of the legislative process that led to the adoption of the RED II.

In its initial proposal for the RED II, the Commission had proposed a maximum share of crop-based biofuels, which would have counted towards a Member State’s renewable energy target in the transport sector and would have decreased from 7% to 3.8% in 2030. While biofuels not fulfilling the sustainability and GHG emissions saving criteria would not have been taken into account in the calculation, the cap would have applied to any biofuels produced from food or feed crops.\(^ {189}\) However, as explained above, the European Parliament vehemently opposed the Commission’s approach. An amendment to the Commission’s initial proposal adopted by the plenary of the Parliament provided for a general 7% ceiling for biofuels produced from food and feed crops (without any reduction targets) but stated that ‘[t]he contribution from biofuels … produced from palm oil shall be 0 % from 2021’.\(^ {190}\) While the EP’s proposal was seen as ‘rais[ing] substantial concerns, in terms both of compatibility with the EU’s obligations in the [WTO] and of trade relations with palm oil producing countries’,\(^ {191}\) the treatment of first-generation biofuels, including palm oil, remained a thorny issue in the subsequent trilogue phase of the legislative process.\(^ {192}\)

Against this background, the freeze and phase-out appears as an attempt to square the circle and reconcile the political demands channelled through the Parliament with the obligations of the EU under WTO law. However, in light of the legislative history, the fact that the freeze and phase-out only affects palm-oil-based biofuels gives the impression that the measure was specifically designed to target these particular biofuels. If this were the case, the resulting discrimination would arguably not be ‘merely inadvertent or unavoidable’ but rather ‘foreseen’ and deliberate in nature, and thus ‘unjustifiable’. As a result, the freeze and phase-out in its current form could not be justified under Article XX.

### 7 | CONCLUSION

The EU freeze and phase-out of certain crop-based biofuels seems carefully crafted to avoid potential WTO pitfalls, such as the applicability of the TBT Agreement. However, we find the measure likely to be inconsistent with Articles I:1 and III:4 of the GATT and are sceptical whether it can be justified under Article XX. In light of the legislative history, the fact that the freeze and phase-out only affects palm-oil-based biofuels suggests that the resulting discrimination was not ‘merely inadvertent or unavoidable’. Such deliberate discrimination appears ‘unjustifiable’ under the chapeau of Article XX.

As a result, the freeze and phase-out established by the RED II could—in its current form—not be justified under Article XX. At the same time, we find that—assuming the scientific evidence on ILUC is reliable—a measure like the freeze and phase-out of biofuels because of their negative climate effects is ‘apt to make a material contribution’ to climate change mitigation. Thus, in the absence of any deliberate discrimination, it seems principally justifiable under Article XX.

However, even if designed in a WTO-consistent manner, curbing the use of some crop-based biofuels will not suffice to bring about a substantial decarbonization and a fundamental transformation of the transport sector, which is much needed to tackle the climate crisis. Instead, the dispute over the RED II highlights the limitations of a ‘market-based’ climate policy instrument, and the need to address climate policy as a challenge requiring profound policy change.

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\(^{185}\)Commission (EU), Food and Feed Crops Report (n 17) 6.

\(^{186}\)EC – Seal Products (n 61) para 5.306.


\(^{189}\)Commission (EU) (n 34) 71 (art 7).

\(^{190}\)European Parliament (n 38).

\(^{191}\)Letter from EC Director-General for Trade, Jean-Luc Demarty (n40).

\(^{192}\)See Council (EU) (n 39) and (n 40).
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