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Ensuring that Imported Biofuels Abide by Domestic Environmental Standards: Will the Agreement on Technical Barriers to Trade Tolerate Asymmetrical Compliance Regimes?

DANIELLE SPIEGEL FELD*

I. INTRODUCTION

From an environmental standpoint, not all biofuels are alike. If produced from sustainably harvested feedstocks using energy efficient production processes, biofuels can help to reduce greenhouse gas (GHG) emissions from the transportation sector.1 If, however, biofuels are produced from unsustainably harvested feedstocks using energy intensive production processes, biofuels can have the opposite GHG effect,2 causing significant non-climate related environmental harm as well.3

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1. The Complicated Case of Biofuels, WORLD RES. INST. (Nov. 29, 2006), http://www.wri.org/stories/2006/11/complicated-case-biofuels (explaining how biofuels are a potentially carbon neutral fuel source because the amount of carbon that is released into the atmosphere upon burning a biomass-based fuel corresponds to the amount of carbon that the biomass sequestered during the growing period).

2. As Joseph Fargione et al. explained in their seminal article, “whether biofuels offer carbon savings depends on how they are produced.” Joseph Fargione et al., Land Clearing and the Biofuel Carbon Debt, 319 SCI. 1235, 1235 (2008). So-called first-generation production methods, which convert the edible
portions of corn, soybeans and other food-crops into fuel, are particularly problematic from a GHG emissions perspective. Concerns regarding first-generation fuels relate to a phenomenon known as “indirect land use changes” (ILUC). The theory behind ILUCs derives from the fact that using food crops for biofuel production puts pressure on food prices in commodity markets, which incentivizes farmers around the world to plant more acres of the newly lucrative crops. Some farmers will respond to the increased demand for the biofuels crop by diverting existing croplands to the production of the biofuel crop. This is known as direct land use changes. Others, however, will respond to the global demand increase by clearing virgin forests and grasslands to create additional farm land. The clearing of land in turn causes stored carbon to be released into the atmosphere and decreases the potential for future carbon sequestration. This chain of events is known as indirect-land use changes. See generally Timothy Searchinger et al., Use of U.S. Croplands for Biofuels Increases Greenhouse Gases Through Emissions from Land-Use Change, 319 SCI. 1238 (2008). Fargione et al. estimated that “converting rainforests, peatlands, savannas or grasslands to produce food crop-based biofuels in Brazil, Southeast Asia, and the United States creates a ‘biofuel carbon debt’ by releasing seventeen to 420 times more CO₂ than the annual greenhouse gas (GHG) reductions that these biofuels would provide by displacing fossil fuels.” Fargione, supra, at 1235. Tim Searchinger et al. reached a similar conclusion regarding the scale of GHG emissions reductions caused by land changes. See Searchinger, supra, at 1239.

A number of researchers have criticized the scientific rigor of the Fargione and Searchinger studies. See, e.g., Herbert Halleux et al., Comparative Life Cycle Assessment of Two Biofuels: Ethanol from Sugar Beet and Rapeseed Methyl Ester, 13 INT'L J. OF LIFE CYCLE ASSESSMENT 184, 184 (2008) (noting that neither the Fargione nor Searchinger studies are based on empirical studies and that both papers contain “assumptions that could be critically discussed”). However, as Gregory M. Perry et al. have noted, “the general criticisms regarding both the Fargione and Searchinger studies did not reject claims of negative environmental effects. Instead, the debate seemed to be more of size, scope, and effect.” GREGORY PERRY ET AL., BIOFUELS PRODUCTION AND CONSUMPTION IN THE UNITED STATES: SOME FACTS AND ANSWERS TO COMMON QUESTIONS 14 (2008), available at http://arec.oregonstate.edu/sites/default/files/faculty/perry/qadocument5.pdf.

Unlike first-generation biofuels, so-called advanced biofuels make use of non-food crops, such as biomass waste, as well as the non-edible portion of food crops, such as the corn stover. As a result, the production of advanced does not generally affect commodities markets for food crops and thereby avoids incentivizing the land conversion that first generation fuels cause. See Madhu Khanna, Christine L. Crago & Mairi Black, Can Biofuels Be a Solution to Climate Change? The Implications of Land Use Change-Related Emissions for Policy, 1 INTERFACE FOCUS 233, 236 (2011); See also Lian P. Koh et al., Biofuels: Waste Not Want Not, 320 SCI. 1419 (2008) (touting the GHG-saving benefits of biofuels derived from woody biomass).

After years of undifferentiated support, the United States Congress passed the Energy Independence and Security Act (EISA) in 2007, which sought to selectively promote biofuels that are considered environmentally sustainable. Citing the added difficulty of policing the conditions under which foreign biofuels are produced, the regulations that the Environmental Protection Agency (EPA) drafted to implement the EISA, known as the “Renewable Fuel Standard Program” (RFS2), require foreign producers to follow some more exacting procedures to demonstrate compliance with the EISA's environmental requirements than their domestic counterparts. As described below, EPA's claim that the added difficulty of foreign enforcement calls for additional compliance procedures is plausible. Not surprisingly, though, foreign biofuels producers have cried foul. The harshest criticism has come from the Brazilian Sugarcane Industry Association (UNICA), traditionally the largest ethanol exporter in the world. Specifically, in response to EPA's proposed RFS2 rulemaking, UNICA submitted comments alleging that the imposition of any additional compliance obligations on foreign producers violates the United States' duties under the law of the World Trade Organization, including Article III and XI of the General Agreement on Tariffs and Trade (GATT) as well as Article 2 of the Agreement on farming such as nitrogen runoff and nitrogen-based groundwater pollution and taxes water supplies, including in regions where water is scarce, because first-generation biofuels increase demand for crops, thereby stimulating additional agriculture. Converting virgin habitat to agricultural land also threatens biodiversity. See generally David Tilman et al., Carbon-Negative Biofuels from Law-Input High-Diversity Grassland Biomass, 314 Sci. 1598 (2006).

5. See infra text accompanying notes 27-38.
6. See infra notes 40-42 with accompanying text.
7. Though Brazil had long been the largest ethanol exporter in the world, the United States is on track to be the leading ethanol exporter for 2011. See U.S. DEP'T OF AGRIC., U.S. ON TRACK TO BECOME WORLD’S LARGEST ETHANOL EXPORTER IN 2011 (2011), available at http://www.fas.usda.gov/info/IATR/071011_Ethanol_IATR.asp.
Technical Barriers to Trade (TBT). The European Commission complained to EPA about the asymmetry in the proposed RFS2 compliance procedures as well, albeit less bluntly.

Conventional wisdom suggests that, where it applies, the TBT Agreement imposes more onerous obligations on members of the World Trade Organization (WTO) than does the GATT alone. At least part of the fear that the TBT Agreement inspires derives from the fact that it contains no obvious analogue to Article XX of the GATT, which provides members with an opportunity to maintain otherwise GATT inconsistent measures that serve legitimate non-protectionist goals. Moreover, most commentators believe that GATT Article XX could not be invoked to justify a TBT violation. As such, if one assumes the TBT Agreement covers the sort of environmental criteria that the


12. In pertinent part, Article XX provides:

Subject to the requirement that such measures are not 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 international trade, nothing in this 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; (d) necessary to secure compliance with laws or regulations which are not inconsistent with the provisions of this Agreement . . . (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, supra note 8 at 37-38.

13. See Part III, infra, for more discussion on the relationship between Article XX and the TBT Agreement.
RFS2 sets forth, as a number of scholars have suggested, UNICA’s TBT claims appear quite threatening.

However, upon close examination of the TBT Agreement, it is far from clear that Article 2 of the TBT Agreement covers the compliance measures that UNICA challenges. In fact, there is good reason to question whether the TBT Agreement applies to the dispute at all. If it does not, the hypothetical case would be considered under the rules of the GATT alone, with the resulting possibility of justifying the asymmetry under Article XX.15


15. Notably, in an early WTO case, the Appellate Body (AB) refused to allow the U.S. to use Article XX(g) to justify the asymmetry of an environmental regulation that was found to violate Article III:4. See Appellate Body Report, United States-Standards for Reformulated and Conventional Gasoline, WT/DS22/AB/R (Apr. 29 1996) [hereinafter U.S.-Reformulated Gasoline]. However, unlike the compliance procedures of the RFS2 that UNICA now challenges, the measures at issue in U.S.-Reformulated Gasoline created relatively more stringent substantive obligations on foreign producers by requiring them to use a less advantageous method of calculating the baseline from which the pollutant composition of a fuel would be measured. It is quite possible that the AB would be more sympathetic to asymmetrical regimes that do not alter the substantive standards to which each group is held, as is the case in the RFS2 regime. See infra note 43 (describing the requirements in the RFS2 that UNICA challenges).

Moreover, it is important to recognize that U.S.-Reformulated Gasoline did not hold that asymmetrical regulations could never be justified under Article XX(g). To the contrary, the AB made clear that the fact that the rule treated foreign parties differently did not preclude the U.S. from successfully justifying the measure under Article XX(g). See U.S.-Reformulated Gasoline, supra, at 21 (“[t]here is, of course, no textual basis [in Article XX(g)] for requiring identical
It is important for all WTO members who seek to curb the flow of unsustainable biofuels into their markets to understand the ways in which the TBT Agreement may constrain their efforts to craft effective compliance regimes for the implementation of cross-border environmental objectives. To that end, this article uses UNICA’s challenge to the RFS2 as a case study for examining the extent to which the TBT Agreement prohibits WTO members from imposing asymmetrical compliance burdens on foreign and domestic biofuels producers. The analysis proceeds in four parts. Part II presents background information on the relevant United States biofuels legislation and outlines UNICA’s claims against the U.S. legislation. Part III then presents a brief history of the TBT Agreement and its relationship to the GATT. In Part IV, the examination turns to explore the scope of the TBT Agreement in general and Article 2 in particular. It surmises that if the Agreement applies to this treatment of domestic and imported products. Indeed, where there is identity of treatment — constituting real, not merely formal, equality of treatment — it is difficult to see how inconsistency with Article III:4 would have arisen in the first place.”). While the AB asserted that the U.S. was under a duty to “explore adequately means . . . of mitigating the administrative problems relied on as justification for [the disputed measure]” and to “count the costs” that the differential treatment of foreign entities would entail, it did not state that the U.S. was required to ensure that the measures decided upon imposed equal costs on all parties. See U.S.-Reformulated Gasoline, supra, at 28. And in fact, the modified Rule that EPA drafted in response to the U.S.-Reformulated Gasoline ruling continues to require that foreign refiners follow some additional procedures to ensure adequate monitoring, verification and enforcement. See Regulation of Fuels and Fuel Additives: Baseline Requirements for Gasoline Produced by Foreign Refiners, 62 Fed. Reg. 45,533, 45,533 (Aug. 28, 1997) (to be codified at 40 C.F.R. pt. 80) (“[t]his final action also includes additional requirements that address issues that are unique to refiners and refineries located outside the United States, namely those related to tracking the movement of gasoline from the refinery to the United States border, monitoring compliance with the requirements applicable to foreign refiners, and imposition of appropriate sanctions for violations.”). None of the parties to the original U.S.-Reformulated Gasoline dispute has challenged the WTO consistency of the final rule as amended.

Finally, it is worth noting that there were explicit indications that the measure at issue in US-Reformulated Gasoline had been developed expressly in order to protect U.S. fuel refineries. See e.g., Panel Report, United States-Standards for Reformulated and Conventional Gasoline, ¶ 2.13, WT/DS21/R (Jan. 29, 1999). While the AB did not formally credit this information in its reasoning, it is likely that it nonetheless impacted its analysis of the U.S. compliance with the chapeau of Art. XX.
dispute at all, Article 5, not Article 2, would govern the disposition of UNICA’s claims. Accordingly, Part V analyzes UNICA’s Article 2 claims under the rubric of Article 5. This analysis suggests that Article 5 leaves sufficient regulatory space for policy-makers to design biofuels compliance regimes as they believe is necessary to confidently implement their sustainability objectives, even where doing so requires imposing a greater burden on foreign and domestic producers. Part VI concludes.

A brief disclaimer is needed before continuing further: this article does not attempt to prove that the specific compliance obligations that the RFS2 prescribes comply with the TBT Agreement. Instead, it seeks to sketch the boundaries of what is legally permissible under the TBT Agreement. The compliance regime of the RFS2 merely serves as a vehicle to that end. Consequently, the article will not inquire into whether the compliance obligations that EPA designed for foreign suppliers were motivated by genuine environmental policy concerns as opposed to protectionist aims, or whether EPA explored all possible alternatives to avoid imposing asymmetrical obligations. While these points would be critical if the RFS2 were actually challenged at the WTO, they are inapposite to an examination of the contours of the TBT Agreement itself.

II. BACKGROUND INFORMATION ON THE RENEWABLE FUEL STANDARD AND THE BRAZILIAN SUGAR ASSOCIATION’S (UNICA) CHALLENGES TO IT


Contemporary American biofuels policy is an outgrowth of the energy policy of the mid-1970s. Reeling from the OPEC oil embargo of 1973-1974, federal legislators of the day went searching for a source of homegrown fuel that could help wean the nation off its dependency on imported oil.16 Their gaze soon

fell upon corn, which grows abundantly in the United States and can be readily converted into ethanol. The government has aggressively supported the American biofuels industry, with particular emphasis on the corn ethanol sector, ever since.

Throughout most of this time period, federal biofuels policy consisted of nurturing the corn ethanol industry with a slew of subsidies, tax credits, and import tariffs. Then, in 2005, Congress added another tool to its arsenal: The Energy Policy Act of 2005 [hereinafter EPAct], which mandated that all transportation fuel sold in the United States contain a minimum volume of renewable fuel (i.e., biofuel). This new mandate to use renewable fuels was called the “renewable fuel standard” (RFS).

The RFS required blenders to incorporate at least 4 billion gallons of renewable fuel in 2006 and to steadily increase the proportion of renewable fuel to about 7.5 billion gallons by 2012. To monitor compliance with the RFS mandate, each gallon of renewable fuel was assigned a “Renewable Identification Number” (RIN); regulated parties (i.e. fuel refiners, importers, and blenders) were required to acquire a specified quantity of RINs, either through purchasing the fuel that carried them or by purchasing RINs from other obligated parties who had used more renewable fuel that they were statutorily required to use.

From an environmental perspective, the RFS was fatally flawed in that it generally treated conventional corn ethanol and

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17. Id. at 428.
18. Corn-derived ethanol was also attractive to lawmakers as a substitute to petroleum fuel because it curried favor with the powerful agricultural lobby. See Robert W. Hahn, Ethanol: Law, Economics and Politics, 19 STAN. L. & POL’Y REV. 434, 461-62 (2008) (describing the public choice pathologies that have helped garner legislative support for ethanol).
19. See id. at 438-41.
20. Id.
22. Id. § 1501(a).
23. Id.
more advanced, environmentally benign, biofuels alike. Although the EPAct included some incentives to use advanced biofuels—most notably by allowing cellulosic and waste-derived ethanol to generate 2.5 RIN credits per every one credit that an equivalent volume of conventional fuel generated—these incentives were not powerful enough to overcome the competitive disadvantages of cellulosic ethanol that were needed to make it an attractive substitute to conventional corn ethanol.

Responding to the need to further differentiate between sustainable and unsustainable biofuels, the Energy Independence and Security Act of 2007 (EISA) made significant changes to the RFS. The first improvement in the amended RFS program (RFS2) is that only biofuels which confer meaningful life-cycle GHG savings are eligible to count toward fulfillment of the RFS2 mandate. The baseline GHG savings requirement is that all fuel produced at facilities which “commenced construction” after December 2007 must confer a minimum of 20 percent life-cycle GHG reductions as compared to petroleum-based fuels. In addition, a certain percentage of the total RFS2 mandate must be...
fulfilled with fuels that confer more than 20 percent GHG reductions. Specifically, the general mandate to use “renewable fuel” includes a nested sub-mandate to consume a given quantity of “advanced biofuels,” defined as those biofuels which provide at least 50 percent GHG savings. Within the advance biofuels sub-mandate, there is a further sub-mandate to use an amount of cellulosic biofuel and biomass based diesel, which are each required to confer at least 60 percent GHG emissions savings.

In order to ensure that a particular type of fuel complies with these GHG savings requirements, EPA models the lifecycle GHG emissions associated with biofuel produced from various feedstock and production processes. After analyzing a given feedstock and production pathway combination—for instance, ethanol derived from corn made at a facility that uses natural gas for process energy—EPA decides whether that type of fuel is eligible to count towards fulfillment of one of the nested mandates (conventional, advanced, cellulosic, or biomass based diesel) or is ineligible to generate RINs at all. Notably, EPA may declare that certain types of feedstocks cannot be used to produce RIN-eligible fuel, regardless of the production process used. At the time of this writing, EPA has not yet exercised this option but also has not yet issued final lifecycle analyses for some highly suspect feedstocks such as palm oil diesel.

In addition to the GHG thresholds, the RFS2 also significantly restricts the type of land from which RIN-generating biofuel feedstock can be harvested. More precisely, only feedstocks harvested from certain types of land can be labeled “renewable biomass,” and only biofuels made from “renewable biomass” are eligible to be classified as “renewable fuel” and thereby generate RINs. These land use restrictions serve both to

30. Id. § 202(a)(2).
31. Id. § 201(1)(E)(i).
32. Id. §§ 201(1)(D), 201(1)(E).
33. EPA RFS2 Final Rule Preamble, supra note 25, at 14,677. Importantly, in calculating lifecycle GHG emissions, EPA includes emissions that are the result of Indirect Land Use Changes (ILUCs). Energy Independence and Security Act § 201(1)(H); see supra note 2 for a discussion of ILUCs.
34. EPA RFS2 Final Rule Preamble, supra note 25, at 14,678.
36. Id. § 201(1)(J).
minimize the GHG emissions associated with the production of the fuels, by reducing the amount of land that is cleared to grow biofuel crops, as well as to protect biodiversity, by preventing biologically rich land from being converted for biofuel feedstock production.\footnote{See EPA RFS2 Final Rule Preamble, supra note 25, at 14,692 (explaining its decision to exclude rangeland from the definition of “agricultural land” on the grounds that “the conversion of relatively undisturbed rangeland to the production of annual crops could in some cases lead to large releases of GHGs stored in the soil, as well as a loss of biodiversity, both of which would be contrary to EISA’s stated goals.”).} The most important land use restriction is that planted crops can only be used to create RIN-eligible fuel if they are harvested from existing agricultural land.\footnote{See Energy Independence and Security Act § 201(1)(I)(i) (stating that “renewable biomass” can only be made from “[p]lanted crops and crop residue harvested from agricultural land that was cleared or cultivated at any time prior to the enactment of [the EISA]”).}

The environmental community generally lauded the environmental safeguards of the RFS2 as being critical to the transition towards a sustainable biofuels policy.\footnote{See generally Environmental Protection Agency Oversight: Implementing the Renewable Fuel Standard: Hearing Before the Subcomm. on Clear Air and Nuclear Safety of the S. Comm. on Env. and Pub. Works, 110th Cong. (2008) (statement of Nathaniel Greene, Dir. of Renewable Energy Policy, NRDC), available at http://docs.nrdc.org/air/files/air_08071101a.pdf.} The trouble with these safeguards, however, is that they may be difficult to enforce. As Nathaniel Greene of the Natural Resources Defense Council noted in his testimony to the U.S. Senate, “[m]uch of the information that EPA, or accredited certifiers, will need to determine the lifecycle GHG emissions of different biofuels and compliance with the definition of ‘renewable biomass’ can only be gathered on the farm, in the forest, or at the biofuel refinery.”\footnote{See id. at 39.} In other words, whereas in some contexts EPA can simply examine a product to determine whether it complies with a technical specification, it cannot do so with a batch of biofuel because the specifications it is concerned with in that context, by and large, leave no trace in the final product.
b. The Asymmetrical Compliance Procedures of the RFS2 and UNICA's Challenge to Them

As noted in the introduction, EPA argues that the need for on-site information gathering makes it difficult to ensure that imported biofuels comply with the RFS2's environmental criteria. These concerns are likely exacerbated by the fact that Brazil, again, traditionally the world's largest exporter, has a history of unreliable compliance with and enforcement of its own domestic environmental laws, which may make EPA hesitant to depend on cooperation with the local Brazilian authorities to ensure compliance. To compensate for these added difficulties, EPA obligates foreign biofuel suppliers to follow some additional or more exacting compliance procedures than domestic suppliers must follow. EPA explains that this disparate treatment reflects "the more limited access that EPA enforcement personnel have to foreign entities that are regulated parties under RFS2, and also the fact that foreign-produced biofuel intended for export to the U.S. is often mixed with biofuel that will not be exported to the U.S."42

To provide an idea of the nature of asymmetry at issue here, the following is a list of some additional compliance and enforcement procedures that foreign biofuel producers and importers must abide by to generate RINs. They must: submit third party engineering reports detailing their production process, post a bond that can be used in potential enforcement proceedings against them as a condition to register under the RFS2 process, physically segregate RIN-eligible fuel from all other fuel and keep it separate throughout the distribution network, and satisfy additional record-keeping requirements to document implementation of land use restrictions.43

UNICA claims the additional obligations impose "substantial administrative impediments"44 and "prohibitive costs"45 on

42. EPA RFS2 Final Rule Preamble, supra note 25, at 14,712.
43. Id.
44. UNICA's Comments, supra note 9, at 35.
foreign renewable fuel producers, which have the effect of impeding imports from entering the American market place. They therefore argue that the additional measures violate TBT Article 2.1 and GATT Article III:4 by according "less favorable treatment" to foreign produced biofuels, and GATT Article XI:1 by restricting imports. They further allege that EPA has "less restrictive alternatives" available to ensure the requirements of the RFS2 are met. In consequence, UNICA contends that the current regime creates "unnecessary obstacles to trade," in contravention of Article 2.2 of the TBT Agreement. Critically, UNICA suggests that discriminatory measures need not create any particular degree of "less favorable treatment" or be motivated by any protectionist aim to violate the stated provisions. To the contrary, they argue that "any less favourable treatment of foreign [renewable fuel producers] in connection with documentation requirements concerning land use restrictions and handling of feedstocks . . . is in contravention of TBT Article 2.1 and 2.2, as well as Article III:4 and XI: of the GATT." UNICA appears to believe the relevant provisions of the Agreements categorically ban asymmetrical compliance regimes.

c. Presentation of the Operative Provisions

Because they factor so prominently in the later analysis, it is appropriate to briefly examine the texts of Article III:4 of the GATT, as well as Article 2.1 and 2.2 of the TBT Agreement.

First, expressing one of the foundational principles of WTO law, the national treatment obligation, Article III:4 of the GATT obliges members to ensure that their internal regulations do not discriminate against foreign goods. The core of the provision provides as follows:

45. Id.
46. Id.
47. Id.
48. Id.
49. Id. at 36 (emphasis added).
The products of the territory of any contracting party imported into the territory of any other contracting party 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.\textsuperscript{50}

In language closely resembling that used in Article III:4, Article 2.1 of the TBT Agreement sets forth a complementary “national treatment” obligation for a subset of “laws, regulations and requirements,” namely, technical regulations. It states that:

Members shall ensure that in respect of technical regulations, products imported from the territory of any Member shall be accorded treatment no less favourable than that accorded to like products of national origin and to like products originating in any other country.\textsuperscript{51}

Article 2.2, in turn establishes what is typically referred to as a “least trade restrictive alternative” obligation for technical regulations. In pertinent part it reads:

Members shall ensure that technical regulations are not prepared, adopted or applied with a view to or with the effect of creating unnecessary obstacles to international trade. For this purpose, technical regulations shall not be more trade-restrictive than necessary to fulfill a legitimate objective.\textsuperscript{52}

Parts III and IV of this article will provide a more detailed analysis of these provisions and the complicated interplay between them. First, though, this next section presents some background information on the TBT Agreement and its relationship to the GATT.

\textsuperscript{50} GATT, \textit{supra} note 8, at Art. III:4.

\textsuperscript{51} TBT Agreement, \textit{supra} note 9, at art. 2.1.

\textsuperscript{52} Id. at art. 2.2.
III. THE ORIGINS OF THE TBT AGREEMENT AND ITS RELATIONSHIP TO THE GATT

a. Origins of the TBT Agreement

Throughout the early years of the GATT, parties to the agreement focused on reducing overt barriers to trade.\(^\text{53}\) This is to say that the focus was on reducing tariffs and other measures that operated “at the border” to conspicuously block access to the parties’ national markets.\(^\text{54}\) Over time, as the GATT regime achieved considerable success in reducing these explicit barriers,\(^\text{55}\) the workings of another more invidious form of trade discrimination came into the spotlight—internal domestic regulations that, while purportedly adopted to further important policy objectives such as consumer safety and environmental protection, also have the effect of restricting imports.\(^\text{56}\) These measures, which are referred to as non-tariff trade barriers (NTBs), may be facially non-discriminatory and motivated by genuine concern and yet still meaningfully slow the wheels of international trade. As Michael Trebilcock and Robert Howse have explained, “even when there is no protectionist intent on the part of lawmakers, through a lack of coordination, mere differences in regulatory or standard-setting regimes can function to impede trade.”\(^\text{57}\)


\(^{54}\) Id.

\(^{55}\) Id. at 193.

\(^{56}\) See ROBERT E. BALDWIN, NON-TARIFF DISTORTIONS OF INTERNATIONAL TRADE 1-2 (1970). Baldwin colorfully explained that, “the lowering of tariffs has, in effect, been like draining a swamp . . . [t]he lower water level has revealed all the snags and stumps of non-tariff barriers that still have to be cleared away.” Id. at 2.

\(^{57}\) TREBILCOCK & HOWSE, supra note 53, at 202. Of course, facially neutral product regulations also provide fertile ground for disguising protectionist intentions. On this point, the EC-Asbestos panel observed that, “the purpose of adopting the TBT Agreement was to control the development and application of standards—situations in which protectionist aims can be better disguised [than in import bans] and for which the existing disciplines within the GATT appeared to be inadequate.” Panel Report, European Communities – Measures Affecting Asbestos and Asbestos-Containing Products, ¶ 8.49, WT/DS135/R (Sept. 18, 2000) [hereinafter Panel Report, EC-Asbestos] (emphasis added).
The national treatment obligations of the GATT are phrased in broad enough terms to incorporate many (if not most) product regulations and therefore impose some discipline on such measures. Yet, by the late 1960s it was clear to the parties to the GATT that the existing framework was insufficient to rein in the proliferation of divergent product regulations that were causing unnecessary inefficiencies. The parties therefore agreed to negotiate a new instrument. From the outset, though, they were clear that the putative new instrument should "in no way interfer[e] with the responsibility of governments for safety, health and welfare of their people, or the protection of the environment in which they live." Instead, it would "merely seek . . . to minimize the effect of such actions on international trade."

The first agreement to specifically tackle product regulations was titled the "Agreement on Technical Barriers to Trade" (commonly referred to as the "Standards Code"). Negotiated during the Tokyo Round, the Standards Code entered into force in 1980. The Standards Code supplemented the non-discrimination obligations of the GATT by subjecting product regulations to an additional layer of scrutiny. Gabrielle Marceau and Joel Trachtman have succinctly described the agreement in the following terms:

58. See GATT, supra note 8, at art. III:4 ("The products of the territory of any contracting party imported into the territory of any other contracting party 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") (emphasis added).
59. See MacDonald, supra note 11, at 251; see also Gabrielle Marceau & Joel P. Trachtman, The Technical Barriers to Trade Agreement, the Sanitary and Phytosanitary Measures Agreement, and the General Agreement on Tariffs and Trade, 36 J. WORLD TRADE 811, 814 (2002).
60. Marceau & Trachtman, supra note 56, at 814.
61. Id. (quoting Spec (71) 143 § III, Art. 1(c) (Sept. 30, 1971)).
62. Id.
Its main provisions prohibited discrimination and the protection of domestic production through specifications, technical regulations and standards; it also proscribed the preparation, adoption and application of regulations, specifications and standards in a manner more restrictive than necessary; and it urged signatories to base their national measures on international standards and to collaborate and co-operate towards harmonization of such national norms.65

Regrettably, the Standards Code proved ineffective at curbing disruptions to trade caused by product regulations.66 Several different shortcomings contributed to this failure. First, the Standards Code was ridden with vague or ambiguous rules, which made it difficult for parties to determine its effect ex ante.67 Beyond this, only forty-three of the parties to the GATT ever assented to the agreement.68 The limited membership meant that technical regulations in a large number of GATT member states fell outside of the Standards Code's reach. Finally, the Standards Code only covered measures that "lay down characteristics of a product such as levels of quality, performance, safety or dimension." This phrase was interpreted as excluding process and production methods (PPMs).69

Each of these deficiencies was addressed during the Uruguay Round negotiations. To cure defects resulting from the limited number of signatories, which had undermined other plurilateral GATT-era agreements as well, the negotiating parties established the rule of the "single undertaking." The single undertaking put

65. Marceau & Trachtman, supra note 59, at 814.
67. Id.
68. Marceau & Trachtman, supra note 59, at 814.
69. Barton et al., supra note 66, at 135 (citing Agreement on Technical Barriers to Trade, supra note 63, annex I(1)). (Barton et al. lists a fourth reason for the Standard Code's failure as well: the consensus-based dispute settlement procedure that was in force under the GATT permitted any party to a dispute to veto a panel's report from being adopted; see also Barton et al., supra note 66, at 69-71 (explaining the workings of the consensus-based GATT dispute settlement). As the consensus-based dispute settlement procedure was abandoned when the WTO came into being, this is no longer an impediment to the effective implementation of the TBT Agreement. Barton et al., supra note 66, at 70-71.
an end to the pre-Uruguay Round practice of enabling Members of the GATT to pick and choose which additional trade instruments they wished to join. Under the new arrangement, states would have to assent to all agreements covered by the WTO as a condition of membership. The provisions of the Standards Code were also made more precise and language was inserted to grant jurisdiction over process and production methods (though, as will be discussed in Part III, there is still some ambiguity as to the extent to which PPMs were effectively included). Furthermore, the Standards Code was split into two separate instruments: the Agreement on Sanitary and Phytosanitary Measures (SPS Agreement) and the present-day TBT Agreement. The SPS Agreement was given dominion over measures designed to protect “human, animal, and plant life or health.” The TBT Agreement, by contrast, was made responsible for product regulations and standards that further a broader range of policy objectives, including environmental protection. It was explicitly not, however, to cover any measures that fit within the SPS Agreement’s mandate.

70. Barton et al., supra note 66, at 47.
71. Id. at 136.
73. Id. at annex A. ¶ 1. To date, the SPS Agreement has been applied almost exclusively to regulations that concern risks posed by the importation of food and agricultural products. Robert Howse, Petrus van Bork & Charlotte Haberbrand, WTO Disciplines and Biofuels: Opportunities and Constraints in the Creation of a Global Marketplace 23 (2006).
74. TBT Agreement, supra note 9, at annex 1, ¶ 1.
75. Id. at art. 1.5 (“[t]he provisions of this Agreement do not apply to sanitary and phytosanitary measures as defined in Annex A of the Agreement on the Application of Sanitary and Phytosanitary Measures.”).

As an aside, delineating the precise relationship between the jurisdiction of the SPS and TBT Agreements poses, as Jacqueline Peel has put it, “a number of thorny questions.” Jacqueline Peel, A GMO by Any Other Name . . . Might be an SPS Risk: Implications of Expanding the Scope of the WTO Sanitary and Phytosanitary Measures Agreement, 17 Eur. J. Int’l L. 1009, 1014 (2006). These issues became even more complex after the release of the EC-Biotechs panel report in the fall of 2006, which seemed to expand the scope of the SPS Agreement into a domain that was once believed to be reserved for the TBT Agreement. Panel Report, European Communities-Measures Affecting the Approval and Marketing of Biotech Products, WT/DS291/R, WT/DS292/R, WT/DS293/R (Sept. 29, 2006) [hereinafter EC-Biotechs]. The unappealed EC-
Residual non-tariff regulations that fell outside the scope of either the SPS or the TBT Agreement were assigned to the GATT alone.\textsuperscript{76} This division of labor between the agreements remains in place today.

b. \textit{Raising the stakes: increasing fears of interference with national regulatory prerogative}

The shift in focus from border measures to internal measures that the TBT Agreement heralded carried important political implications as it increased the probability that WTO law would encroach upon Member states' right to pursue national policy objectives as they saw fit.\textsuperscript{77} As previously noted, the parties to the GATT foresaw the potential for this sort of conflict to arise before even commencing negotiations on the Standards Code and indicated a desire to avoid intruding upon legitimate expressions of regulatory autonomy.\textsuperscript{78} The final text of the TBT Agreement demonstrates sensitivity to this issue as well. Perhaps most significantly, it allows parties to maintain trade-distorting technical regulations that are necessary to fulfill a “legitimate

\textit{Biotechs} decision also suggested that a single measure with multiple distinct purposes could be considered both an SPS and TBT measure. \textit{Id.} \textsuperscript{7.164-65.}

This article will not delve into the nuance of the SPS-TBT interplay, nor will it evaluate the feasibility of bringing an SPS claim against the RFS2. The reason for this is that UNICA, like most academic commentators, focused exclusively on the potential friction with the TBT Agreement, which still appears the far more likely avenue of attack. \textit{See, e.g., Mitchell} \& \textit{Tan, supra note 14 (acknowledging that there may be a conflict between EU Sustainability Criteria for biofuels and the TBT Agreement or the GATT while omitting any discussion of a potential conflict with the SPS Agreement).}

\textsuperscript{76}. \textit{Peel, supra note 75, at 1014.}

\textsuperscript{77}. The possibility of the WTO meddling with national regulatory prerogative in this way has sparked fierce controversy over the years and made many concerned citizens, particularly environmentalists, skeptical of the free trade agenda. \textit{See Robert Howse \& Elizabeth Turek, \textit{The WTO Impact on Internal Regulations: A Case Study of the Canada-EC Asbestos Dispute} 283-84 (Gráinne de Burca \& Joanne Scott, eds., 2001). For an excellent examination of the tension between free trade and regulatory autonomy in the TBT Agreement, \textit{see generally} Michael Ming Du, \textit{Domestic Regulatory Autonomy Under the TBT Agreement: From Non-Discrimination to Harmonization, 6 Chinese J. of Int'l L. 269} (2007).}

\textsuperscript{78}. \textit{See supra text accompanying notes 61-62.}
objective."79 Paragraph 6 of the preamble reinforces this prerogative by stipulating that "no country should be prevented from taking measures necessary to ensure the quality of its exports, or for the protection of human, animal or plant life or health, of the environment, or for the prevention of deceptive practices, at the levels it considers appropriate."80 Unfortunately, it is not always clear how to apply this preambulatory statement when interpreting the articles in the body of the Agreement. As will become evident in Part IV, to a certain extent, the weight that one assigns to this preambulatory statement will determine one's understanding of the overall balance that the TBT Agreement strikes between trade facilitation and the preservation of domestic regulatory autonomy.

c. Applying the GATT and TBT agreements in tandem: overlapping jurisdiction but disparate outcomes

As UNICA's challenge to the RFS2 indicates, it is often the case that both the GATT and the TBT Agreement apply to a single dispute or measure.81 Concurrent application of the TBT Agreement and the GATT makes sense in light of the similar goals that the two agreements advance.82 At the same time, the rules that each agreement prescribes are of course not identical. Rather, as the Appellate Body explained in EC-Asbestos,83 the TBT Agreement "imposes obligations on Members that seem to be different from, and additional to, the obligations imposed on Members under the GATT 1994."84 The overlapping jurisdiction of the GATT and TBT Agreement, combined with disparate obligations that each imposes, creates a possibility that two agreements would prescribe conflicting outcomes in a given

79. TBT Agreement, supra note 9, at art. 2.2.
80. Id. at pmbl. ¶ 6.
82. See supra text accompanying notes 59-65.
84. Id. ¶ 80 (emphasis in original).
dispute. The most obvious source of potential conflict concerns the application of GATT Article XX.

The Dispute Settlement Body has yet to formally determine whether Article XX can excuse a violation of the TBT Agreement.85 Granting it is conceivable that Article XX could be used to such effect, scholars who have examined the issue have traditionally dismissed this possibility.86 The recent case law on the subject, while not entirely conclusive, has also generally supported the notion that Article XX cannot be used to this effect.87

85. Panels have been confronted with this issue on at least two prior occasions. In both instances, however, it declined to address the issue for reasons of judicial economy. See Panel Report, European Communities- Protection of Trademarks and Geographical Indications for Agricultural Product and Foodstuffs, ¶¶ 7.440—7.476, WT/DS290/R (Mar. 15, 2005) [hereinafter EC-Trademark]; Panel Report, EC-Biotechs, supra note 75, ¶¶ 4.385, 7.2524-5, WT/DS291/R, WT/DS292/R, WT/DS293 (Sept. 29, 2006).

86. See, e.g., Marceau & Trachtman, supra note 59, at 874 (stating that it would take a “heroic approach to interpretation” to find that Article XX could be invoked to justify a violation under another agreement in annex 1A); id. at 823 (stating that “[i]t is doubtful whether Article XX (or XXI) was expected to be available to be invoked as a defence to a claim of violation of [TBT] Article 2.2”).

87. For a brief while, following the release of the China- Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products Appellate Body report in 2009, the idea that Article XX could be applied to the TBT Agreement seemed fairly plausible. Appellate Body Report, China- Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products, ¶¶ 205-33, WT/DS363/AB/R (Dec. 21, 2009) [hereinafter China-Audiovisuals]. In that case, the Appellate Body held that GATT Article XX could be used as a defense against an alleged breach of the Chinese Accession Protocol, despite the fact that the Accession protocol did not explicitly refer to Article XX. See id.

The China-Audiovisuals holding was based on the interpretation of the phrase, “[w]ithout prejudice to China’s right to regulate trade in a manner consistent with the WTO Agreement,” which appeared in the introductory sentence of Article 5.1 of China’s Accession Protocol. The Appellate Body read this phrase as incorporating into Article 5.1 a reserved right for China to regulate the trade of goods in a manner that is provided by GATT Article XX. See id. Because this holding is grounded in the language of one particular clause of China’s Accession Protocol, it is not applicable to other agreements or even other provisions of the Accession Protocol. In fact, in a subsequent dispute, China-Measures Relating to the Exportation of Various Raw Materials (China-Raw Materials), a panel refused to permit China to invoke Article XX as a defense against a breach of a different provision of its Accession Protocol. See Panel Report, China-Measures Relating to the Exportation of Various Raw
Assuming Article XX is in fact unavailable to TBT litigants as a defense, there is a real possibility that a measure that comports with the GATT would nonetheless violate the TBT Agreement. In cases of conflict such as this, the General Interpretative Note to Annex 1A of the Agreement Establishing the World Trade Organization explains that the rule set forth in latter agreement should prevail, which in this case is the TBT Agreement. As the TBT Agreement does not offer any further guidance on how to resolve conflicts with the GATT, the General Interpretive Note provides the fallback position. Accordingly, if a measure were to comply with the GATT, due to Article XX, but were inconsistent with the TBT Agreement, the measure would have to be struck down.

IV. THE SCOPE OF THE TBT AGREEMENT: DOES THE TBT AGREEMENT APPLY, AND IF SO, WHICH PROVISIONS WOULD GOVERN THE DISPUTE?

a. "Technical Regulations" and "Standards"

The TBT Agreement only covers three categories of measures: "technical regulations," "standards," and 

Materials, ¶¶ 7.118-29, WT/DS394/R, WT/DS395/R, WT/DS398/R (July 5, 2011). Furthermore, in the most recent case to present this issue, United States-Clove Cigarettes, the U.S. decided to not even raise the possibility of using Article XX to defend its ban on clove cigarettes from attack under Article 2 of the TBT Agreement. See Panel Report, United States-Measures Affecting the Production and Sale of Clove Cigarettes, ¶ 7.296, WT/DS406/R (Sept. 2, 2011) [hereinafter U.S.-Clove Cigarettes]. Taken together, the evidence suggests that Article XX could not be invoked to defend against alleged violations of the TBT Agreement.


89. Cf. SPS Agreement, supra note 72, at art. 2.4 (stating that "[s]anitary or phytosanitary measures which conform to the relevant provisions of this Agreement shall be presumed to be in accordance with the obligations of Members under the provisions of GATT 1994 which relate to the use of sanitary or phytosanitary measures, in particular the provisions of article XX(b)").

90. See TBT Agreement, supra note 9, at arts. 2-3 (governing Technical Regulations).

91. See id. at art. 4 (governing "Preparation, Adoption and Application of Standards").
“conformity assessment procedures.” If a non-tariff barrier does not fit within the ambit of one of these three terms it will not be subject to the rules that the TBT Agreement sets forth. Therefore, a threshold question in any TBT analysis is whether the measure at issue satisfies the definition of either “technical regulation,” “standard,” or “conformity assessment procedure.”

The term “conformity assessment procedures” is a derivative term that incorporates the terms “technical regulations” and “standards” into its definition. As a result, even if one were to ultimately conclude that the challenged compliance measures are “conformity assessment procedures,” for them to be covered by the TBT Agreement, the requirements they seek to enforce would have to count as either “technical regulations” or “standards.” For this reason, we must begin by examining whether the environmental objectives contained in the challenged portion of the RFS fit within either of these two categories.

Looking first at “Technical Regulations,” Annex 1.1 of the Agreement defines the term to mean:

[A] [d]ocument, which lays down product characteristic or their related processes and production methods, including applicable administrative provisions, with which compliance is mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labeling requirements as they apply to a product, process or production method.

The term “Standards” is defined quite similarly to “Technical Regulations,” with the primary difference being that compliance

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92. See id. at arts. 5-8 (governing “Conformity with Technical Regulations and Standards”).
93. See id. at annex 1.3 (stating that “[a]ny procedure used, directly or indirectly, to determine that relevant requirements in technical regulations or standards are fulfilled.”).
94. See US-Reformulated Gasoline, supra note 15, at 14 (indicating that the Dispute Settlement Body should evaluate the character of the challenged portion of a regulation, and not the regulation as a whole, when evaluating its WTO consistency).
95. TBT Agreement, supra note 9, at Annex 1.1 (emphasis added).
with the former is voluntary, whereas compliance with the latter is mandatory.96

Because "mandatory" is not defined in the TBT Agreement, a question arises as to whether a regulation which makes compliance a precondition for receiving a certain privilege, but not for selling one’s goods in the national market without such privilege, should be considered “mandatory.” This distinction is relevant to the classification of the RFS2 because, as mentioned in Part II, the RFS2 does not require biofuels to be sustainable to be sold in the US; instead, biofuels must only be produced sustainably to generate RINs.97

For better or worse, the relevant WTO precedent strongly indicates that measures that must be complied with in order to receive privileged market access will be treated as mandatory under the TBT Agreement. Specifically, in prior cases where non-compliance with the conditions set forth in a regulation created appreciable trade disadvantages for that party, the Dispute Settlement Body has deemed the relevant regulation to be de facto mandatory, even where compliance was not necessary to market the good.98 As the ability to generate RINs confers significant market advantages upon renewable fuel producers/importers, the RFS2 rule would therefore probably be

96. “Standard” is defined as a “(d)ocument approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for products or related processes and production methods, with which compliance is not mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labeling requirements as they apply to a product, process or production method.” TBT Agreement, supra note 4, at annex I.2. See also Du, supra note 77, ¶ 34 (noting that the primary difference between technical regulations and standards is that compliance with technical regulations is mandatory whereas compliance with standards is optional).

97. EPA RFS2 Final Rule Preamble, supra note 25, at 14,713.

98. See Appellate Body Report, European Communities-Trade Descriptions of Sardines, ¶ 194, WT/DS291/AB/R (Sept. 26, 2002) (finding that a regulation which set down restrictions on which species of fish that could be marketed as “Sardines” in the EU counted as “mandatory” although species of fish that were not eligible to be labeled “Sardines” could still being marketed in the EU under another name); see also EC-Trademark, supra note 85, ¶¶ 7.453-56 (finding that a regulation with which compliance was necessary in order to receive the benefits of registration was “mandatory” as that term is used in the definition of “technical regulation”).
considered mandatory. If it is either, then, the relevant portion of the RFS2 would likely be classified as a regulation and not a standard.

### i. The controversy over “unincorporated PPMs”

And yet, there is still a distinct possibility that a panel would find that the RFS2 falls outside the definition of “technical regulation.” The reason for caution on this matter harkens back to a controversy that seems omnipresent in the trade-and-environment discourse—namely, the debate over so-called “unincorporated process and production methods” (unincorporated PPMs).

Many WTO commentators advocate dividing the universe of PPMs into two discrete categories: incorporated PPMs and unincorporated PPMs. Broadly speaking, incorporated PPMs seek to ensure the functionality or safety of goods in order to protect the consumer who purchases them. An example of a product-related PPM would be a regulation that forbids the importation of shrimp that have been processed at facilities that do not treat the shrimp with a certain anti-microbial solution. Unincorporated PPMs, by contrast, seek to achieve some social objective and do not tangibly impact the final good. An example of an unincorporated PPM would be a regulation that forbids the importation of shrimp that have been harvested in a way which may harm local marine life.

Those arguing in favor of applying this distinction to the TBT Agreement typically point to the phrase “product characteristics or their related processes and production methods” in the definition of “technical regulation.” As the argument goes, the fact that PPMs must be “related to” a product characteristic to

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99. See, e.g., McDonald, supra note 11, at 255; Mitchell & Tan, supra note 14, ¶ 39-41; Du, supra note 77, ¶ 40. See also Steve Charnovitz, The Law of Environmental PPMs in the WTO: Debunking the Myth of Illegality, 27 YALE J. INT’L L. 59, 65-66 (2002) (noting that while the related/unrelated distinction is overly simplistic there is support for the distinction in the text and negotiating history of the TBT Agreement and it is pervasive in the relevant scholarly discourse).
count as a technical regulation suggests that only incorporated PPMs are covered by the TBT Agreement.\textsuperscript{100}

Even though the argument is not without controversy,\textsuperscript{101} it finds considerable support in the Appellate Body report from \textit{EC-Asbestos}. In \textit{EC-Asbestos} the Appellate Body gave the following interpretation of “product characteristics”:

Thus, the “characteristics” of a product include, in our view, any objectively definable “features”, “qualities”, “attributes”, or other “distinguishing mark” of a product. Such “characteristics” might relate, \textit{inter alia}, to a product’s composition, size, shape, colour, texture, hardness, tensile strength, flammability, conductivity, density, or viscosity. In the definition of “technical regulation” in Annex 1.1, the \textit{TBT Agreement} itself gives certain examples of “product characteristics” – “terminology, symbols, packaging, marking or labeling requirements”. These examples indicate that “product characteristics” include, not only features and qualities intrinsic to the product itself, but also related “characteristics,” such as the means of indication, the presentation and the appearance of a product.\textsuperscript{102}

\textsuperscript{100} See, e.g., Du, \textit{supra} note 77, ¶ 40.

\textsuperscript{101} Notably, the incorporated/unincorporated related distinction is normatively somewhat problematic. The concerns stem from the fact that, if unincorporated PPMs are excluded from the TBT Agreement the effect is not to find them WTO inconsistent, but instead to evaluate them under the rules of the GATT alone. It is difficult to understand why the parties would have wanted to subject only incorporated PPMs to the TBT Agreement’s disciplines. This is particularly curious since one would imagine that incorporated PPMs are typically more transparent with respect to regulatory purpose than are unincorporated PPMs.

The Appellate Body might try to avoid this result by moving away from the path that the \textit{Asbestos} report set it upon, as that report did not directly consider the issue of unincorporated PPMs; the Appellate Body still has ample room to maneuver in this way. Whatever the merits of changing course might be, however, the WTO’s historically strong resort to textual literalism and respect for prior decisions makes it seem somewhat unlikely—though certainly not inconceivable—that it would abandon the incorporate/unincorporated distinction on normative grounds anytime soon. On the Dispute Settlement Body’s historical bias in favor of textual arguments, see Henrik Horn & Joseph H. H. Weiler, \textit{European Communities – Trade Description of Sardines: Textualism and its Discontent} (2005).

\textsuperscript{102} \textit{EC-Asbestos}, \textit{supra} note 83, ¶ 67.
While the above list of potential “product characteristics” is non-exhaustive, the fact that all of the listed “characteristics” are detectible in the final good or some element of its packaging suggests that the Appellate Body considered the term to be limited as such. And, if “product characteristics” includes only those features that are detectible in the finished good itself, it would seem to follow that only those PPMs that leave a trace in the finished good could reasonably be considered “related” to “product characteristics.” The negotiating history seems to support this interpretation and this is the approach advocated by many WTO members. If a panel or the Appellate Body itself were to adopt this stance, and also characterize the environmentally-geared PPMs in the RFS2 as unincorporated PPMs, the regulation would fall outside of the TBT Agreement’s scope. In this case, biofuel policy-makers would be free from the constraints the TBT Agreements impose.

It is plausible, but not certain, that the PPMs of the RFS2 would be deemed unincorporated. To understand why this is so, it is important to keep in mind that the RFS2 implements two separate environmentally-geared PPMs, each of which factors differently in the PPM paradigm. First, the regulation sets forth strict controls on the type of land from which biofuels feedstock can be harvested. These land-use restrictions bear no discernible connection to the physical good. Therefore, we can easily characterize land-use restrictions as unincorporated. The second type of PPM in the RFS2—the threshold lifecycle GHG emissions reductions—is more challenging to classify. Still, as described

103. See WTO Secretariat, Negotiating History of the Coverage of the Agreement on Technical Barriers to Trade with regard to Labeling Requirements, Voluntary Standards, and Processes and Production Methods Unrelated to Product Characteristics, ¶¶ 131, 146, G/TBT/W/11 (Aug. 29, 1995).
105. As an aside, it is more likely that the term “standards” would be interpreted as covering non-product related PPMs. See Sanford E. Gaines, Process and Production Methods: How to Produce Sound Policy for Environmental-PPM Based Trade Measures? 27 COLUM. J. ENVTL. L. 384, 396-97 (2002).
below, there are strong grounds to believe that this PPM should also be considered unincorporated.

Biofuels’ lifecycle GHG emissions are predominantly generated via derivative activities, such as the manufacturing process, transportation of the fuels, or land use changes that result from increased demand for feedstock. As none of these derivative sources of emissions are detectable in the finished product itself, they should be considered unincorporated. The only GHG emissions that are intrinsic to the final product, and therefore “detectable,” are tailpipe emissions, which comprise just a tiny fraction of the fuel’s lifecycle emissions. To illustrate, tailpipe emissions account for approximately one percent of emissions from corn ethanol produced at plants using natural gas for process energy\textsuperscript{106} and approximately two percent of emissions from rapeseed biodiesel produced at plants using natural gas.\textsuperscript{107} As such, if a tribunal were to assess the gestalt of the lifecycle emissions-criteria to determine whether they “relate” to “product characteristics” it would likely find that they do not satisfy the definition of the term as laid down in the Asbestos ruling. Under this scenario, the RFS2 would be considered to fall outside of the TBT Agreement’s scope.

A tribunal may reach a different conclusion though if instead of focusing on the general character of the emissions requirements it chose to disaggregate a fuel’s lifecycle GHG emissions into its component inputs—land use changes, process energy, tailpipe emission, etc. Under this fragmented approach, one may conclude that because a single variable in the equation, tailpipe emissions, contributes to a fuel’s lifecycle emissions, lifecycle GHG emissions “relate” to a “product characteristic.” Andrew Mitchell and Christopher Tan adopted this approach in a paper analyzing the WTO consistency of the EU sustainability criteria.\textsuperscript{108}

\textsuperscript{106} U.S. EPA, RENEWABLE FUEL STANDARD PROGRAM (RFS2) REGULATORY IMPACT ANALYSIS 470 fig. 2.6-2 (2010).


\textsuperscript{108} Mitchell and Tan, supra note 14, ¶ 6.
However, the disaggregated approach to characterizing lifecycle emissions is problematic because it is impossible to isolate those measures that regulate tailpipe emissions from those that regulate all other "unincorporated" sources of lifecycle emissions. As a result, the disaggregated approach has the effect of bringing a huge portion of the RFS2 regulation within the TBT Agreement's jurisdiction based on only a fairly inconsequential part of the regulation. This seems excessively formalistic and calls into question the basis for maintaining the incorporated/unincorporated distinction. After all, it is hardly any easier to determine a fuel's lifecycle GHG emissions from examining the one-to-two percent of emissions released by the finished product than it is to determine the type of land on which its feedstock was grown.

To date, neither the Appellate Body nor a panel has considered a case in which it has needed to disaggregate a PPM in the manner described above in order to find grounds for applying one of the WTO Agreements. It thus remains unclear how the Appellate Body would respond if presented with the question in the context of biofuels regulations. Accordingly, for the sake of completeness, the remainder of the analysis proceeds on the perhaps dubious assumption that the environmental provisions of the RFS2 would in fact be classified as "technical regulations" and the TBT Agreement would therefore apply.

b. "Conformity Assessment Procedures"

Assuming, *arguendo*, that the environmentally-geared provisions of the RFS2 rule are "technical regulations," for the reasons described below, the compliance mechanisms challenged by UNICA appear to fit much more naturally within the definition of a "conformity assessment procedures" than "technical regulations." They should be analyzed accordingly.

Annex I.3 defines "conformity assessment procedures" as "[a]ny procedure used, directly or indirectly, to determine that relevant requirements in a technical regulation or standards are fulfilled." The related explanatory note further specifies that

109. TBT Agreement, *supra* note 9, at annex I.3.
“[c]onformity assessment procedures include, *inter alia*, procedures for sampling, testing and inspection; evaluation, *verification and assurance of conformity*; registration, accreditation and approval as well as their combinations.” 110 There is no case law directly interpreting this definition.111 Nonetheless, a plain language reading of the provision strongly suggests that the challenged compliance measures, which include obligations such as the requirement to complete additional attest engagements and to provide third-party engineering reports, fall within its reach. This conclusion gains support from the *EC-Trademarks* decision. In that case, the panel found a series of inspection procedures fell outside of the scope of “technical regulation”112 and indicated that they should be classified as conformity assessment procedures instead.113

Notably, the *EC-Trademarks* Panel report asserted that while a given regulatory measure may contain both a “technical regulation” and a “conformity assessment procedure” the two terms are distinct and mutually exclusive.114 Although this report was not appealed, denying the Appellate Body a chance to confirm or refute the Panel’s view of the interplay between the two terms, it suggests that each component-part of a measure should be classified as either one or the other, but not both. As the specific compliance procedures challenged by UNICA fit more naturally within the definition of “conformity assessment procedure,” if the TBT Agreement applies, the measures should first and foremost be evaluated under Article 5.

So, why might UNICA have treated the compliance mechanisms as technical regulations? Perhaps it was simply due to the fact that Article 2 received far more attention in the

110. *Id.* (emphasis added).
111. The Panel report in *United States-Measures Concerning the Importation, Marketing and Sale of Tuna II*, DS381, which was due to be released in the summer of 2011, may provide further clarification on this matter.
112. *See EC-Trademarks, supra* note 85, ¶ 7.515.
113. *See id.* ¶ 7.513 (stating, “we note that the explanatory note refers to ‘procedures for . . . inspection’ as an example of conformity assessment procedures. This suggests that a procedure for inspection is not a technical regulation.”).
114. *Id.* ¶ 7.512.
previous disputes than Article 5, making Article 2 more salient to UNICA commenters. It is also possible that the commenters anticipated certain strategic advantages to challenging the additional compliance mechanisms under Article 2 as opposed to Article 5. These strategic advantages are explored below.

V. THE REGULATION OF “CONFORMITY ASSESSMENT PROCEDURES” UNDER ARTICLE 5.1.1 AND 5.1.2

Mimicking the design of TBT Article 2, TBT Article 5 begins with two provisions which establish that: (1) conformity assessment procedures must comply with the national treatment and most-favored nation principles (Article 5.1.1); and (2) conformity assessment procedures must not create unnecessary obstacles to trade (Article 5.1.2). As the analogues of Articles 2.1 and 2.2, if UNICA were to have correctly identified the compliance measures as “conformity assessment procedures,” they would have attacked the measures under Articles 5.1.1 and 5.1.2 (either in place of their Article 2 claims or as alternative claims). The interaction between each of these Article 5 provisions and the compliance regime that the RFS2 prescribes will be discussed in turn below.

a. TBT Article 5.1.1

In its entirety, Article 5.1.1 reads:

[Members shall ensure that] conformity assessment procedures are prepared, adopted and applied so as to grant access for suppliers of like products originating in the territories of other Members under conditions no less favourable than those accorded to suppliers of like products of national origin or originating in any other country in a comparable situation; access entails suppliers’ right to an assessment of conformity under the rules of the procedure, including when foreseen by this

115. Article 2 has been the subject of several high profile WTO disputes, including EC-Asbestos, EC-Sardines, EC-Trademark, and most recently, U.S.-Clove Cigarettes. By contrast, neither the Panel nor the Appellate Body has issued a holding that applies or interprets Article 5.
procedure, the possibility to have conformity assessment activities undertaken at the site of facilities and to receive the mark of the system.116

When analyzing the similar national treatment obligation contained in Article 2.1 of the TBT Agreement, both the U.S.-Cloves Cigarettes Panel117 and the EC-Trademark Panel

116. TBT Agreement, supra note 9, at art. 5.1.1.
117. See Panel Report, U.S.-Clove Cigarettes, ¶ 7.296, WT/DS406/R (Sept. 2, 2011). In September 2011, shortly before this article entered into production, a panel released its report in the U.S.-Cloves Cigarette dispute. In this report, the panel considered a number of matters of first impression concerning Articles 2.1 and 2.2 of the TBT Agreement. At issue in U.S.-Clove Cigarettes was a U.S. ban on the importation of flavored cigarettes, which studies have shown are particularly appealing to youths. See id. ¶¶ 7.337-38. The U.S. measure banned all flavored cigarettes except for menthol cigarettes, large quantities of which are produced in the United States. Id. ¶ 2.4. The stated purpose of the ban was to reduce youth smoking. Id. ¶ 2.7. Indonesia, which is the primary producer of clove cigarettes, complained that, among other problems, the U.S. ban violated Articles 2.1 and 2.2 of the TBT Agreement. Id. ¶ 3.1.

Although the panel ultimately concluded that the U.S. measure violated Art. 2.1, it seems to have collapsed some elements of a typical GATT XX claim into its Art. 2.1 analysis. In so doing, it interpreted the provision in a manner that affords a degree of deference to regulatory prerogative. Specifically, the panel acknowledged that preventing youth smoking was a legitimate objective and that this legitimate objective must be taken into account in evaluating a 2.1 claim. Id. ¶ 7.286. It further specified that a discriminatory measure that serves a legitimate objective could pass muster under TBT art. 2.1, "provided it respects the boundaries set forth in Article 2.2 of the TBT Agreement such as not being a measure more trade restrictive than necessary to fulfill a legitimate objective." Id. ¶ 7.290. The reason the panel ended up invalidating the U.S. measure is because it rejected the U.S. claim that differential treatment of clove and menthol cigarettes furthered the stated aim of reducing youth smoking. Id. ¶ 7.287. In the panel’s words, its finding was based on the fact that “the United States is not banning menthol cigarettes because it is not a type of cigarette with a characterizing flavour that appeals to youths, but rather because of the costs that might be incurred as a result of such a ban.” Id. ¶ 7.288. One could imagine the panel using a similar rationale to strike down the measure under the chapeau of GATT XX, if it had considered the GATT XX defense.

With the ink on this decision still barely dry, it is difficult to predict what its impact will be. At the time of this writing, neither party had indicated that it intended to appeal the decision but there was ample time left in the sixty-day window to do so. Particularly seeing as the panel report ruled on several issues of first impression, it is quite unclear how the Appellate Body would treat these issues on appeal. Furthermore, even if the decision were to stand, it is unclear how exactly it would prejudice a later tribunal’s interpretation of the scope of Art. 5.1.1, which, as discussed in the text accompanying notes 139-141 infra, contains some notable textual differences from TBT 2.1. For these reasons, the
concluded that the basic elements of a violation of Article 2.1 were: “that the measure at issue is a ‘technical regulation’; that the imported and domestic products at issue are ‘like products’ within the meaning of that provision; and that the imported products are accorded ‘less favourable’ treatment than that accorded to like domestic products.” 118 This three-prong test, which closely resembles that used to evaluate national treatment claims brought under GATT Article III:4119 is essentially just a recitation of the definitional elements contained in Article 2.1. As Article 5.1.1 shares these elements with Article 2.1, future tribunals would probably use a similar framework as a starting point for their analysis of Article 5.1.1. However, there would be two important alterations.

The first alteration is obviously that a measure would have to satisfy the definition of “conformity assessment procedure” rather than “technical regulation.” The difference between these two terms has already been discussed at length above.120 The second alteration is that “likeness,” which has played such a prominent role in the GATT III:4 jurisprudence, is unlikely to receive much attention here. Since the very goal of conformity assessment procedures is to ensure uniformity in a category of products, it seems the defending party would generally find it difficult to claim the foreign products are “unlike.”

The element likely to occupy much more of the litigants’ attention in a potential 5.1.1 analysis, and be most controversial,

remainder of this article takes somewhat of a detached approach to the legal conclusions reached in the U.S.-Clove Cigarettes panel report. The panel’s statements on relevant issues will be diligently noted throughout, however; no attempt has been made to ensure that the discussion about Arts. 5.1.1 and 5.1.2 precisely tracks the Panel’s assessment of Arts. 2.1 and 2.2.

118. EC-Trademark, supra note 85, ¶ 7.444. See U.S-Clove Cigarettes, supra note 87, ¶ 7.76-78.

119. See Appellate Body Report, Korea-Measures Affecting Imports of Fresh, Chilled and Frozen Beef, ¶ 133, WT/DS161/AB/R, WT/DS169/AB/R (Dec. 11, 2000) [hereinafter Korea-Beef] (stating that “[f]or a violation of Article III:4 to be established, three elements must be satisfied: that the imported and domestic products at issue are ‘like products’; that the measure at issue is a ‘law, regulation, or requirement affecting the internal sale, offering for sale, purchase, transportation, distribution, or use’; and that the imported products are accorded ‘less favourable’ treatment than that accorded to like domestic products.”).

120. See supra text accompanying notes 90-96 and 109-114.
is that of “less favourable treatment.” With no case law directly on point, there remains considerable uncertainty about how to interpret this prohibition. Perhaps the most fundamental question facing any tribunal interpreting the less favorable treatment prohibition is, how much weight should be accorded to the jurisprudence that has developed under Article III:4 of the GATT? One option is to simply equate the prohibition contained in Article III:4 with that of Article 5.1.1 and directly apply the jurisprudence that has developed under Article III:4 to the TBT Agreement. In the alternative, a tribunal could perform a more context-specific analysis of the term as used in Article 5.1.1, acknowledging the jurisprudence that has developed under the GATT, while also tailoring its interpretation to reflect the particularized goals of the TBT Agreement and the specific text that Article 5.1.1 provides. The doctrinal pros and cons of each of these options, as well as the consequences for the RFS2, will be elaborated upon below. As will be explained, the first route carries several hazards—even more so with respect to Article 5.1.1 than Article 2.1—and should be avoided. The second option side-steps these hazards and is therefore preferable.

i. Interpretative option #1: Equivalence to GATT III:4

If a tribunal were to take the first route and directly apply the Article III:4 jurisprudence to Article 5.1.1, it would in all likelihood prove fatal to the RFS2. The reasoning behind this stark assessment is as follows:

Although the precise formulation of the test has ebbed and flowed over the years, the central question posed by a GATT III:4 less favorable treatment inquiry has traditionally been whether the measure “modifies the conditions of competition to the detriment of importers.” In an early WTO-era dispute,

121. See supra note 115, with accompanying text.
122. U.S.-Clove Cigarettes, supra note 18, ¶ 7.91.
124. See Korea-Beef, supra note 119, ¶ 144.
Korea-Beef, the Appellate Body explained that while Article III:4 does not per se prohibit measures that treat foreign and domestic goods differently, it does prohibit measures distinguishing between foreign and domestic goods to the disadvantage of the foreign goods. In the years since Korea-Beef, the Appellate Body has refined and seemingly relaxed the rigor of the competition-based standard with respect to facially origin neutral measures. However, as the RFS2 explicitly discriminates between biofuel producers on the basis of their nationality, it could not be considered origin neutral and would most likely be evaluated under the cruder competition standard that Korea-Beef set forth. Under this standard, presuming Brazil could demonstrate that the additional compliance obligations imposed on foreign producers materially alter the conditions of competition to the detriment of imported products, the measures would be found to violate GATT III:4. Consequently, they would violate Article 5.1.1 as well.

125. See id. ¶ 144. See also EC-Asbestos, supra note 83, ¶ 100.
126. See Appellate Body Report, Dominican Republic-Measures Affecting the Import and Internal Sale of Cigarettes, ¶ 96, WT/DS302/AB/R (Apr. 25, 2005) [hereinafter Dominican Republic-Cigarettes] (stating that claims of “less favourable treatment” will not be sustained “if the detrimental effect is explained by factors or circumstances unrelated to the foreign origin of the product.”).
127. Only WTO Members have standing to bring cases before the Dispute Settlement Body of the WTO. See generally Understanding on Rules and Procedures Governing the Settlement of Disputes, Apr. 15, 1994; Marrakesh Agreement Establishing the World Trade Organization, Annex 2, 33 I.L.M. 1125, 1869 U.N.T.S. 401 (considering only the rights of member states to bring cases before the dispute settlement system). For this reason, Brazil, rather than UNICA, would have to be the party to argue this hypothetical case against the United States.
128. Regarding facially discriminatory measures, Robert Howse et al., have written: “Based on the case law on Article III of the GATT, there is little question but that it mandates that explicitly or facially discriminate in favor of domestic products over imports, for instance through requiring that the mandate be fulfilled in whole or in part using domestically-sourced biofuels would violate Article III:4 of the GATT.” HOWSE ET AL., supra note Error! Bookmark not defined., at 25 (emphasis added).
ii. Interpretative option #2: Something narrower than GATT III:4

The good news for the United States in this hypothetical dispute is that there is good reason to believe the interpretation of the "less favourable treatment" prohibition of Article 5.1.1 should deviate from that of GATT III:4. In fact, the recent U.S.-Clove Cigarettes Panel appeared aware of the pitfalls that direct application of the GATT jurisprudence poses, repeatedly stressing the need to employ a context-specific approach for interpreting Article 2.1. As will be described, the arguments against direct transposition are even stronger with respect to Article 5.1.1 than Article 2.1.

The first argument against the direct equivalence approach derives from the language of the TBT Agreement preamble. Specifically, the second recital of the TBT Agreement states that the Agreement "[desires] to further the objectives of the GATT." This language implies that where possible, the TBT Agreement should be interpreted in a manner consistent with the rights and obligations to which the parties committed themselves under the GATT. Paragraph 6 of the preamble, which was modeled after GATT Article XX, reiterates the need for

129. See e.g., U.S.-Clove Cigarettes, supra note 87, ¶ 7.117 ("we conclude that our approach to interpreting Article 2.1 of the TBT Agreement must ensure that the TBT Agreement is addressed first as immediate context of Article 2.1 of the TBT Agreement. The jurisprudence under Article III: 4 of the GATT 1994, which provision also serves as context albeit not immediate, may also be considered."). See also U.S.-Clove Cigarettes, supra note 87, ¶ 254 ("while we agree with the parties that the similarity in wording [between TBT 2.1 and GATT III:4] must be given weight, we do so cautiously because, as noted by the Appellate Body in EC-Asbestos, even to the extent that the terms used are identical, they 'must be interpreted in light of the context and of the object and purpose, of the provision at issue, and of the object and purpose of the covered agreement in which the provision appears.'").

130. TBT Agreement, supra note 9, ¶ 2. Notably, both the EC-Trademarks and U.S.-Clove Cigarettes panel reports acknowledged that the second preamble recital provided relevant context for interpreting TBT 2.1. See EC-Trademarks, supra note 85, ¶ 7.464 and U.S.-Clove Cigarettes, supra note 87, ¶ 7.116 (jointly referring to the second and sixth preambular recitals).

131. See U.S.-Clove Cigarettes, supra note 87, ¶ 7.360. See also EC-Asbestos, supra note 83, ¶ 855 n.41 ("the preparatory work on the Agreement to Technical Barriers to Trade in the Tokyo Round show that the TBT Agreement that
symbiotic interpretation of the two agreements by recalling member states’ right to maintain policies of the sort that are protected by Article XX. 132 Without a general exception provision in the TBT Agreement which approximates that found in the GATT, equating the scope and stringency of the less favorable treatment prohibition in the TBT Agreement with that in Article III:4 could produce awkwardly incongruent outcomes between the two agreements, with the TBT Agreement denying Members the right to maintain regulations which Article XX of the GATT expressly permits. 133 Such a result would seem to flout the directives given in the two aforementioned recitals of the preamble.

The most natural way in which tribunals interpreting Article 5.1.1 can circumvent this sort of conflict is to narrow the scope of the less favorable treatment inquiry under Article 5.1.1 as compared with Article III:4. Fortunately, the text of Article 5.1.1 provides clear guidance on how it should be constrained: whereas GATT III:4, 134 like TBT Article 2.1,135 blanketly prohibits technical regulations from according “less favorable” treatment, Article 5.1.1 confines itself to ensuring that conformity should have emerged from the Tokyo Round was already seen as being a development of the existing rules of the GATT, notably Article XX.”).

132. TBT Agreement, supra note 9, at pmbl. ¶ 6.
133. Marceau & Trachtman made a similar observation regarding the relationship between Article 2.1 of the TBT Agreement and the GATT:

Problems may occur if the scope of the term ‘like products’ is the same as that under Article III:4, which the justifications under Article XX are not available to violations of Article 2.1 TBT. It is conceivable that the ‘accordion’ of like products may allow a distinction between ‘like’ products of GATT Article III (or I) and that of 2.1 TBT. The emphasis of the Appellate Body on the ‘no less favourable’ language may serve as a less strained defence for non-protectionist domestic regulation and therefore reduce the need to invoke Article XX to justify measures based on listed non-protectionist policy goal. Otherwise we would be faced with an incongruous situation where for instance many of the environment-based technical regulations could be inconsistent with Article 2.1 while the same regulations would be authorized by Article XX (after a prior determination that it was prima facie inconsistent with Article III:4 of GATT). Marceau & Trachtman, supra note 59, at 822-23 (internal citation omitted).

134. See supra note 50 with accompanying text.
135. See supra note 52 with accompanying text.
assessment procedures grant foreign suppliers “access” that is “no less favorable” than that granted to domestic suppliers. The second sentence of Article 5.1.1 gives color to the meaning of “access” as used in this context by explaining it “entails a suppliers’ right to an assessment of conformity under the rules of the procedure.” This specification strongly indicates that the primary aim of Article 5.1.1 is to discipline states who resist applying published conformity assessment procedures to a foreign product in order to block entry into the national market place. The list of requirements in Article 5.2, which are designed to “implement the provisions of Paragraph 1,” supports this process-oriented interpretation by focusing on matters such as ensuring that states publish how they will carry out a conformity assessment procedure. Moreover, the fact that the drafters elected not to use the word “include” or “inter alia” before the specification provided by the second sentence of Article 5.1.1, as they did in the second sentence of Article 5.1.2, suggests they may have intended 5.1.1 to be limited to this purpose.

Stated differently, Article 5.1.1 could reasonably be read as requiring Members to faithfully implement their published conformity assessment procedures to evaluate foreign goods in a fair manner, but not to ensure that the assessment procedures devised impose equal burdens on all parties. Under this reading, the latter investigation would be reserved for Article III:4, which, covering all “laws, regulations and requirements,” would almost certainly govern conformity assessment procedures as well. If this interpretation were adopted, the challenged RFS2

136. TBT Agreement, supra note 9, at art. 5.1.1 (emphasis added).
137. Id. at art. 5.2.
139. Notably, Robert Howse and Elizabeth Türk envisioned a similar division of responsibility between TBT 2.1 and GATT III:4. See Howse & Türk, supra note 77, at 309. In their scheme, TBT 2.1 is read as calling for a due process-type inquiry into the regulatory process that was used to generate conformity assessment procedures and how they are currently applied. See Howse & Türk, supra note 77, at 309. GATT III:4, by contrast, provides an opportunity to investigate whether the conformity assessment procedures as designed accord “less favourable treatment.” Howse & Türk, supra note 77, at 309; see also Du, supra note 77, ¶ 30 (describing the procedural nature of the obligations imposed by the TBT Agreement as compared to the GATT).
provisions might very well be consistent with Article 5.1.1, so long as they were applied in practice as promised on paper.

Some might suspect this reading gives Article 5.1.1 a more limited scope than is credible. But guaranteeing that members have the right to have their products fairly assessed under the published procedure is far from a trivial concern. In fact, the EC’s foot-dragging in assessing whether genetically modified organisms should be approved for sale in the EU was the focus of the EC-Biotechs dispute. Although EC-Biotechs was primarily an SPS case, rather than a TBT case, it illustrates the havoc that a failure to apply a given conformity assessment procedure can reap on international trade.

b. Article 5.1.2

Like Article 5.1.1, the prohibition against “unnecessary obstacles to trade” in Article 5.1.2 closely resembles its Article 2 analogue. In fact, save for the substitution of the phrase “technical regulation” for “conformity assessment procedure,” the first sentences of the two provisions are identical. Article 5.1.2 provides:

[Member shall ensure that] conformity assessment procedures are not prepared, adopted or applied with a view to or with the effect of creating unnecessary obstacles to international trade. This means, inter alia, that conformity assessment procedures shall not be more strict or be applied more strictly than is necessary to give the importing Member adequate confidence that products conform with the applicable technical regulations or standards, taking account of the risks non-conformity would create.

The text of this provision is inherently open-ended and prior to the U.S.-Clove Cigarettes dispute, neither Article 5.1.2 nor the analogous Article 2.2 had been rigorously analyzed by a WTO

140. See EC-Biotechs, supra note 75. The EC-Biotech Panel report determined that the EC had implemented a de facto moratorium on approving GMOs, which caused “undue delay” in the processing of GMO product applications in violation of Article 8 and Annex C of the SPS Agreement. See EC-Biotechs, supra note 75, ¶ 8.6.7.

141. TBT Agreement, supra note 9, at art. 5.1.2.
panel or the Appellate Body. However, it is notable that Article 5.1.2 closely resembles Article XX(b)-(d) of the GATT. Furthermore, as the *US-Clove Cigarettes* panel observed in analyzing Article 2.2, the sixth recital of the preamble to the TBT Agreement, which provides context for interpreting Article 5.1.2, “essentially reproduces the language contained in Article XX of the GATT 1994.” Accordingly, in contrast to Article 5.1.1, interpreting Article 5.1.2 in a manner which tracks the jurisprudence that has developed under the complementary article of the GATT, supports the goals expressed in the preamble of the TBT Agreement. For these reasons, and as the panel found in *U.S.-Clove Cigarettes* with respect to Article 2.2, the prohibition against unnecessary obstacles to trade in Article 5.1.2 should be interpreted in a manner which accords with the tribunals’ understanding of the word “necessity” as the word is used in the Article XX(b)-(d) of the GATT. In consequence, this section examines current jurisprudence on the meaning of “necessity” under GATT Article XX.

142. See *U.S.-Clove Cigarettes*, supra note 87, ¶ 7.329 n.614 (noting the lack of prior case law concerning Article 2.2).
143. See id. ¶ 7.358 (describing the similarity between GATT Article XX and TBT 2.2). Together with its *chapeau*, Article XX reads: “Subject to the requirement that such measures are not 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 international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures: . . . (b) necessary to protect human, animal or plant life or health.” GATT, supra note 8, Art. XX.
144. *U.S.-Clove Cigarettes*, supra note 87, ¶ 7.368.
145. See supra notes 141-144 with accompanying text.
146. See *U.S.-Clove Cigarettes*, supra note 87, ¶ 7.368.
147. Notably, as Indonesia asserted in the *U.S.-Clove Cigarettes* dispute, all third parties who addressed the issue in their submissions and oral arguments supported the notion that the jurisprudence on Article XX(b) of the GATT could be applied to Article 2.2 of the TBT Agreement. *U.S.-Clove Cigarettes*, supra note 87, ¶ 7.314. The United States alone took issue with this approach, arguing that the panel should instead apply the test that had been developed to analyze claims brought under Article 5.6 of the SPS Agreement. See *U.S.-Clove Cigarettes*, supra note 87, ¶ 7.353.
i. The concept of necessity under the GATT and Article 5.1.2

In its Brazil-Tyres report, the Appellate Body articulated a two-step inquiry to the question of "necessity" under Article XX(b).148 In the first step, a panel must "assess all the relevant factors, particularly the extent of the contribution to the achievement of a measure's objective and its trade restrictiveness, in light of the importance of the interests or values at stake."149 If the balancing test performed in the first stage of analysis "yields a preliminary conclusion that the measure is necessary, this result must be confirmed by comparing the measure with its possible alternatives."150 A measure will not be deemed "necessary" if there is a reasonably available alternative that is less trade-restrictive and affords an equivalent degree of protection.151

In explaining how to operationalize this "least restrictive alternative" test—which is included in the text of 5.1.2 almost verbatim—the Appellate Body emphasized that, "in order to qualify as an alternative, a measure proposed by the complaining Member must not only [be] less trade restrictive than the measure at issue, but should also 'preserve for the responding Member its right to achieve its desired level of protection with respect to the objective pursued.'"152 It continued to explain that: "if the complaining Member has put forward a possible alternative measure, the responding Member may seek to show that the proposed measure does not allow it to achieve the level of

149. Id. ¶ 156. See also Korea-Beef, supra note 119, ¶ 164 (stating that an assessment of necessity under GATT Art. XX(d) involves "a process of weighing and balancing a series of factors which prominently include the contribution made by the compliance measure to the enforcement of the law or regulation at issue, the importance of the common interests or values protected by that law or regulation, and the accompanying impact of the law or regulation on imports or exports.").
150. Brazil-Tyres, supra note 148, ¶ 156.
151. Brazil-Tyres, supra note 148, ¶ 156.
152. Id. (quoting Appellate Body Report, United States-Measures Affecting the Cross-Border Supply of Gambling and Betting Services, ¶ 308, WT/DS285/AB/R (Apr. 7 2005)).
protection it has chosen and, therefore, is not a genuine alternative.” Thus, the Appellate Body will not allow one Member to undermine another’s chosen level of protectiveness by forcing the defending Member to choose an alternative that affords any lesser degree of protection than it has chosen for itself.

As applied to the RFS2, whether or not the asymmetrical compliance procedures should be considered “unnecessary” under 5.1.2 depends on a factual assessment of the equivalence of any measure that Brazil or another complainant put forward. The case law makes clear, however, that the trade-restrictive U.S. regime does not in any way pre-judge a violation of 5.1.2.

VI. CONCLUSION

Asymmetrical compliance procedures of the sort the RFS2 prescribes should not be considered per se prohibited by the TBT Agreement. In order to find that the TBT Agreement even applies to the matter at hand, a tribunal would have to either bring unincorporated PPMs within the ambit of the Agreement or endorse what has been termed the disaggregated approach to evaluating whether a PPM is unincorporated. Both moves would set it in unchartered waters. Moreover, if the TBT Agreement were found to apply, there is still room in the letter of Articles 5.1.1 or 5.1.2 for a tribunal to permit a state to impose disparate burdens on foreign and domestic suppliers where doing so is genuinely necessary to advance a legitimate objective.

To be sure, cavernous lacunae remain in the TBT jurisprudence and it is difficult to predict how future tribunals will interpret the restrictions of either Article 2 or Article 5. Yet should they wish to take a restrained approach and protect the careful balance between regulatory autonomy and trade facilitation that is enshrined in the GATT, they will find ample room to do so.