

Easy-Tracing Environmental Measures under WTO Law

Yohanes Hermanto Sirait¹, Arie Afriansyah², Tran Viet Dung³

¹Universitas Indonesia, Depok, Indonesia, E-mail: yohanessirait1988@gmail.com

²Universitas Indonesia, Depok, Indonesia, E-mail: arie.afriansyah@ui.ac.id

³Ho Chi Minh City University of Law, Vietnam, E-Mail: tydung@hcmulaw.edu.vn

Submitted: August 6, 2025; Reviewed: September 22, 2025; Accepted: October 24, 2025

Article Info	Abstract
<p>Keywords: Environmental measures, general exception, the World Trade Organization.</p> <p>DOI: 10.25041/lajil.v7i1.4456</p>	<p><i>The intersection between trade and environmental issues has become an unavoidable reality in the contemporary global landscape. The WTO, as the foremost global trade body, integrates elements of sustainable development across several of its legal frameworks. This study seeks to explore the presence and evolution of environmental measures within the framework of the WTO. This research further examines the practical recognition of environmental measures within international trade contexts. Through normative research and comparative case studies of state disputes in WTO' Dispute Settlement Body, this study identifies a growing trend in the use of environmental measures within WTO legal frameworks. The findings indicate that environmental measures possess a degree of legitimacy and are generally well-received by the WTO dispute settlement mechanism. Ambitious emission targets set by developed countries have contributed to the development of novel types of environmental measures. This indicates that the interconnection between trade and environmental concerns will continue to strengthen over time. Hence, ensuring a well-calibrated balance between trade obligations and environmental considerations requires the panel or Appellate Body to proceed with heightened prudence..</i></p>

A. Introduction

The World Trade Organization (WTO) is primarily a trade institution, not an environmental one. Its central objective is to facilitate international trade and promote market liberalization among members. Nonetheless, the Preamble to the Marrakesh Agreement Establishing the WTO explicitly underscores the importance of sustainable development, environmental protection, and preservation, recognizing these as fundamental goals alongside trade liberalization. This dual mandate has generated considerable controversy among member states, scholars, and dispute resolution bodies. The tension between trade facilitation and

environmental protection becomes especially pronounced when national government adopt environmental measures that potentially restrict trade.¹

There is a growing view that international trade agreements can serve as effective instruments for promoting environmental sustainability. Most WTO agreements originated from the 1986–94 Uruguay Round negotiations, finalized and signed at the Marrakesh Ministerial Meeting in April 1994. While these agreements primarily regulate trade among members, several also address environmental issues.² The General Agreement on Tariffs and Trade (GATT) 1994, the Agreement on Technical Barriers to Trade (TBT), and the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS) are among the key instruments often cited in disputes involving environmental measures.

Given the multiplicity of WTO agreements intersecting with environmental issues, the Organization faces a significant challenge in reconciling trade objectives with environmental protection. Over 250 multilateral environmental agreements (MEAs) now exist globally, many of which provide a legal framework for national environmental policies that may overlap or conflict with WTO obligations.³ This intersection frequently raises complex regulatory and interpretive issues. When a state invokes environmental justifications to restrict trade, determining whether the measure is genuinely motivated by environmental protection or is a disguised form of protectionism becomes a central question in WTO dispute settlement.⁴

Prior of the WTO's establishment, similar debates emerged regarding the interpretation of international trade rules vis-à-vis environmental concerns. Classic pre-WTO disputes such as *United States- Prohibition of Import of Tuna (L/5198)*, *Thailand- Restrictions on Importation of Cigarettes (DS10/R)*, and *Canada- Measures Affecting Exports of Unprocessed Salmon (L/6268) and Herring (L/6268)* exemplify the difficulties in achieving a shared understanding of environmental exceptions. Even after the creation of the WTO's dispute settlement system and the Appellate Body (AB), interpretive divergence continues, as reflected in subsequent disputes concerning environmental measures.⁵

Scholars have long sought ways to reconcile trade liberalization with environmental protection. Many have attributed the tension to an inherent imbalance within the international trade regime, which historically prioritized market access over environmental safeguards.⁶ Others contend that GATT rules, particularly Article XX, offer a workable compromise by preventing states from unilaterally imposing trade restrictions based on differing domestic environmental standards an approach that could otherwise lead to regulatory fragmentation and retaliatory trade measures.⁷

Charnovitz has been one of the most influential scholars in exploring the trade-environment nexus. His early work traces debates on this issue from the 1970s through the 1990s, advocating for the WTO's proactive engagement in promoting market-based environmental solutions. He

¹ Arifa Tanveer, et.al, "World Trade Organization (WTO) trade policy reviews and green technology adoption: Global evidence", *International Review of Financial Analysis* 96, Part B, (2024): 12. DOI: <https://doi.org/10.1016/j.irfa.2024.103715>; Anh, Ly Van. "The Agreement on Climate Change, Trade, and Sustainability – A New Step in Establishing A WTO Legal Framework for Environmental Trade?" *Vietnamese Journal of Legal Sciences* 13, No. 1, (2025): 54-66. DOI: <https://doi.org/10.2478/vjls-2025-0004>.

² Kathleen Auld, Linda Del Savio and Loretta Feris, "An Environmental Agreement in a Trade Court – Is the WTO's Agreement on Fisheries Subsidies Enforceable?", *World Trade Review* 24, Issue 1, (February 2025): 33-34. DOI: <https://doi.org/10.1017/S1474745624000375>

³ WTO, "The Doha mandate on multilateral environmental agreements (MEAs)", available on https://www.wto.org/english/tratop_e/envir_e/envir_neg_meas_e.htm.

⁴ Hyo Won Lee and Johann Park, "Free Trade and the Environment under the GATT/WTO", *Journal of International and Area Studies* 28, No. 1 (June 2021): 129.

⁵ Timothy Meyer, "Explaining energy disputes at the World Trade Organization", *International Environmental Agreements: Politics, Law and Economics* 17, (2017): 411. DOI: <https://dx.doi.org/10.2139/ssrn.2777739>

⁶ Duncan Brack, "Balancing Trade and the Environment", *International Affairs* 71, No. 3, (July 1995): 513-514. DOI: <https://doi.org/10.2307/2624837>

⁷ Thomas J. Schoenbaum, "Free International Trade and Protection of the Environment: Irreconcilable Conflict?", *The American Journal of International Law* 86, No. 4, (October 1992): 722-723. DOI: <https://doi.org/10.2307/2203788>

further supports the incorporation of environmental impact assessments into trade policymaking.⁸

A decade later, Charnovitz continued his inquiry into the environmental dimensions of WTO law, examining several dispute settlement cases.⁹ Although his research does not attempt to define “environmental measures” explicitly, his analyses along with those of Trachtman critically evaluate the AB’s interpretive approach.¹⁰ Their work highlights the AB’s reliance on good faith interpretation under Article 31 of the Vienna Convention on the Law of Treaties (VCLT), a method recognized under Article 3.2 of the DSU as consistent with customary international law.¹¹ In practice, however, this interpretive discretion remains limited by the constraints of member-state consent.

Gentile’s research offers a broader taxonomy of environmental measures, including standards, prohibitions, and subsidies.¹² Barta and Bafna focus specifically on local content requirements (LCR)¹³. While Englisch and Falcao analyze the Carbon Border Adjustment Mechanism (CBAM)¹⁴ as a form of environmental measure. Although their studies primarily address the evolution of the WTO’s stance on trade-environment relations rather than the historical development of such measures, their contributions illuminate the increasing sophistication of environmental regulation under WTO scrutiny.

In the context of climate change, Voon identifies environmental measures embedded within multilateral environmental agreements (MEAs),¹⁵ while Neumayer explores potential conflicts and avenues for harmonization between MEA and WTO law.¹⁶ Assel extends this discussion by predicting an escalation of climate -related disputes.¹⁷ Similarly, Viera emphasizes the mandate of the WTO Committee on Trade and Environment to monitor the effects of environmental measures on market access, noting its growing significance in shaping the scope of permissible environmental action.¹⁸ Dupuy and Vinuales observe that the primary interpretive difficulty lies in the chapeau of GATT Article XX, rather than in its substantive subparagraphs (b) or (g)¹⁹.

Other studies, including those by Chinmi,²⁰ Ghei,²¹ and Thomas,²² have addressed more specific aspects of environmental measures. However, much of this scholarship is limited in scope either focusing on a small number of disputes or analyzing a single WTO agreement,

⁸ Steve Charnovitz, “The World Trade Organization and the Environment”, *Yearbook of International Environmental Law* 8, Issue 1, (1997): 99, 113. DOI: <https://doi.org/10.1093/yiel/8.1.98>

⁹ Steve Charnovitz, “A New WTO Paradigm for Trade and the Environment”, *Singapore Yearbook of International Law* 15, (2007): 15-40.

¹⁰ Joel P. Trachtman, “WTO Trade and Environment Jurisprudence: Avoiding Environmental Catastrophe”, *Harvard International Law Journal* 58, No. 2, (2017): 305-309.

¹¹ Isabelle Van Damme, “Treaty Interpretation by the WTO Appellate Body”, *The European Journal of International Law* 21, No. 3, (2010): 607-608. DOI: <https://doi.org/10.1093/ejil/chq049>

¹² Dominic Gentile, “International Trade and the Environment: What is the Role of the WTO?”, *Fordham Environmental Law Review* 20, No.1, (2009): 202.

¹³ Mukta Batra and Namit Bafna. “Renewable Energy: The WTO’s Position on Local Content Requirements”, *Energy Law Journal* 39, No. 2, (2018): 401-426

¹⁴ Joachim Englisch and Tatiana Falcao, “EU Carbon Border Adjustment and WTO Law, Part Two”, *Environmental Law Reporter* 51, No. 11, (November 2021): 10935-10946

¹⁵ Tania Voon, “Sizing Up the WTO: Trade-Environment Conflict and the Kyoto Protocol”, *Journal of Transnational Law & Policy* 10, No. 1, (2000): 76.

¹⁶ Eric Neumayer, “Trade measures in multilateral environmental agreements and WTO rules: Potential for conflict, scope for reconciliation”, *Aussenwirtschaft* 55, No. 3, (2000): 1-24.

¹⁷ Harro van Asselt, “Trade and Climate Disputes before the WTO: Blocking or Driving Climate Action?”, in Ivano Alogna, Christine Bakker and Jean Pierre Gauci, *Climate Change Litigation: Global Perspectives*, (Leiden: Brill, 2021): 433-461. DOI: https://doi.org/10.1163/9789004447615_020

¹⁸ Andréia Costa Vieira, “The WTO and the Paris Agreement: A Dialogue on Climate Change Mitigation”, *Beijing Law Review* 11 No.2, (June 2020): 411-412.

¹⁹ Pierre-Marie Dupuy and Jorge E. Vinuales, *International Environmental Law*, Second Edition, (Cambridge: Cambridge University Press, 2018): 487.

²⁰ B. S. Chimni, “WTO and Environment: Shrimp-Turtle and EC-Hormones Cases”, *Economic and Political Weekly* 35, No. 20 (May 13-19, 2000): 1752-1761.

²¹ Nita Ghei, “Evaluating the WTO’s Two Step Test for Environmental Measures Under Article XX”, *Colorado Environmental Law Journal* 18, No. 1, (2006): 148-150.

²² Sébastien Thomas, “Trade and environment under WTO rules after the Appellate Body report in Brazil-retreated tyres”, *Journal of International Commercial Law and Technology* 4 Issue 1, (2009): 42-49.

thereby offering an incomplete picture of recent developments. This study seeks to address that gap. By analyzing a broader range of disputes and multiple WTO agreements, it aims to construct a comprehensive understanding of what constitutes an “environmental measure” under WTO law. The novelty of this research lies in its potential to enhance predictive and evaluative frameworks for assessing future environmental measures within the WTO legal order.

This study adopts a doctrinal legal research approach, which systematically explains existing legal rules within specific categories, examines their interaction, clarifies interpretative ambiguities, and, where relevant, predicts potential developments in the law.²³ Through this approach, the study seeks to elucidate the legal principles governing environmental measures under the WTO framework.²⁴

Given the inherently cross-border nature of environmental regulation, the research includes a comparative analysis of how national laws apply extraterritorially and how similar measures are implemented across jurisdiction. Environmental measures frequently raise questions of extraterritorial application, particularly when domestic environmental policies impose obligations affecting foreign producers or markets. Accordingly, comparative examination assists in identifying legal convergence and divergence in the interpretation of such measures.

This study adopts a narrower normative framework than those typically employed in broader theoretical inquiries. The selected framework emphasizes evaluative standards, providing a more pragmatic analytical basis for assessing the consistency of national environmental measures with WTO obligations.

The analysis proceeds by identifying and examining challenges in interpreting and implementing environmental measures under WTO law. To this end, the study compiles and systematizes legitimate categories of existing and anticipated environmental measures, with a view to establishing a coherent taxonomy. By comparing the environmental measures adopted by various WTO members, the research identifies patterns that elucidate their evolution within the broader trade regime and contribute to anticipating how future WTO jurisprudence might interpret and accommodate such measures.

Drawing on state practice and WTO jurisprudence, the study further explores opportunities for reconciliation between trade and environmental objectives. Although such reconciliations may not fully resolve normative tensions, they represent incremental progress toward harmonizing trade liberalization with environmental protection and contribute to the ongoing refinement of the international trade-environment discourse.

B. Discussion

1. Understanding “Measures” under WTO Law

Most WTO agreements originated from the 1986–1994 Uruguay Round negotiations, which culminated in the Marrakesh Ministerial Meeting of April 1994. In total, these negotiations produced approximately sixty agreements and decisions, forming the core of the modern multilateral trading system. Subsequent rounds have generated additional legal instruments and decisions that complement this body of law.

The WTO’s legal framework is often described as fundamentally pluralist, acknowledging and accommodating the diverse political systems, economic models, governance structures, and industrial policies of its member states.²⁵ At the center of this framework lies the Agreement Establishing the WTO (Marrakesh Agreement), which functions as an umbrella treaty

²³ Terry Hutchinson, *Researching and Writing in Law*, Fourth Edition, (Pyrmont, NSW: Thomson Reuters, 2018): 7.

²⁴ Sanne Taekema, “Theoretical and normative frameworks for legal research: putting theory into practice”, *Law and Method Journal*, Issue 2, (2018): 1-2.

²⁵ Robert Howse and Joanna Langille, “Continuity and Change in the World Trade Organization: Pluralism Past, Present, and Future”, *American Journal of International Law* 117, Issue 1, (January 2023) : 3.

encompassing the agreements on trade in goods, services, and intellectual property.²⁶ It also incorporates the Understanding on Rules and Procedures Governing the DSU, the TPRM, and plurilateral agreements.

Under Article XVI:4 of the Marrakesh Agreement, members are obliged to ensure that their domestic laws, regulations, and administrative practices conform to their obligations under the annexed agreements. Accordingly, each member's trade regime must be progressively liberalized in line with the individual schedules and commitments specified in those agreements. This obligation extends to both de jure and de facto measures adopted or maintained by members.

As a trade-focused institution, the WTO uses the term, "measure" primarily in relation to trade-related instruments. The term appears across several key agreements, including the Agreement on Agriculture, the Agreement on Technical Barriers to Trade (TBT), the SPS, the TRIMs, the General Agreement on Trade in Services (GATS), and the Trade-Related Aspects of Intellectual Property Rights. Despite its frequent use, the WTO legal corpus does not provide a uniform definition of the term "measure." DSU also repeatedly employs the term without defining it, allowing its meaning to evolve contextually within specific disputes.²⁷

Within the WTO framework, "measure" has been interpreted broadly to encompass any governmental action or inaction that affects international trade. This includes both tariff and nontariff measures, sanitary and phytosanitary measures, subsidies and countervailing measures, safeguard measures, and a wide range of regulatory actions influencing trade flow among members. Export restrictions have also become increasingly prevalent as instruments of trade regulation, particularly in areas linked to food security and environmental protection.²⁸

The origin of the term "measure" in WTO law can be traced to Article XXIII:1(b) of GATT 1947, now incorporated into the GATT 1994. However, neither the GATT nor subsequent WTO agreements provide a single authoritative definition. Article XXVIII of the GATS offers partial clarification, defining "measure" as any measure by a Member, further enumerating examples such as laws, regulations, rules, procedures, decisions, administrative actions, or other forms. Nevertheless, this definition remains open-ended and circular. Consequently, the scope and content of the term must be inferred from the interpretative practice of WTO panels and the AB, which continue to refine its meaning through case law.²⁹

2. Scope and Limitation of Measures under the WTO Agreement

In *United States–Corrosion-Resistant Steel (Sunset Review)*, the AB determined that a "measure" may constitute a specific action, or a general act, or even an instrument containing rules or norms adopted by a WTO Member.³⁰ The AB further held that any act or failure to act attributable to a Member can be considered a measure for the purposes of dispute settlement proceedings. This conceptualization parallels the International Law Commission's definition of internationally wrongful acts under Article 2 of the Articles on State Responsibility (ARSIWA), which defines an internationally wrongful act as an act or omission attributable to a State. Accordingly, two essential elements underpin the concept of measure: action or omission, and attributability.

²⁶ Meaza Haddis Gebeyehu, "The Impact Of Political Decisions Within The WTO Dispute Settlement System: Political Negotiations Within Adjudication", *Indonesian Journal of International Law* 17, No. 1, (2019): 47-48, DOI: 10.17304/ijil.vol17.1.781

²⁷ Report of the Appellate Body, *Japan – Taxes on Alcoholic Beverages*, WT/DS8/AB/R, WT/DS10/AB/R, WT/DS11/AB/R, adopted 1 November 1996, para 114–120. See also Peter Van den Bossche and Werner Zdouc, supra note 27; Mitsuo Matsushita, Thomas J. Schoenbaum and Petros C. Mavroidis, *The World Trade Organization: Law, Practice and Policy*, (3rd edn), (Oxford University Press, 2015): 243–245.

²⁸ Ngurah Parikesit Widiatedja, "Export Restrictions on COVID-19 Vaccines: What Developing Countries Can Do Under the WTO Law?," *Indonesian Journal of International Law* 19: No. 2, Article 4, (2022): 264. DOI: 10.17304/ijil.vol19.2.4.

²⁹ Alan Yanovich and Tania Voon, "What is the Measure at Issue?," in Andrew D. Mitchell, *Challenges and Prospects for the WTO*, London: Cameron May, (2005), p. 119.

³⁰ Report of the Appellate Body, *United States – Sunset Review of Anti-Dumping Duties on Corrosion-Resistant Carbon Steel Flat Products from Japan*, WT/DS244/AB/R, 15 December 2003, para 20, p. 29.

The doctrine of acts and omissions is well-established across multiple legal domains, distinguishing between positive conduct and failures to act.³¹ In criminal law, for instance, the distinction manifests between killing (act) and letting die (omission), though liability may extend to attempts or incomplete actions.³² Omissions also pose conceptual challenges for theories of causation: while legal and lay perspectives generally recognize that failures such as neglecting to water a plant or exercise reasonable care while driving may cause harm, some philosophical approaches question whether an absence can be causal.³³

Within the WTO framework, the Handbook on WTO Dispute Settlement similarly acknowledges acts and omissions as actionable measures.³⁴ Thus, a WTO measure may consist of either an action, such as imposing prohibitions, levying taxes, requiring import or export licenses, or other regulatory interventions, or an omission, such as failure to enact laws, or ensure that existing laws meet required standards.³⁵ Article 1.1(ii) of the Agreement and Subsidies Countervailing Measures exemplifies the application of this principle.

Each WTO agreement stipulates specific measures that members are required to implement. Annex 1A of the WTO Agreement contains 13 multilateral agreements on trade in goods, while Annex 1B and 1C include agreements on trade in services and intellectual property, respectively. Among these, only three agreements, explicitly mention “measure” in their title: the Agreement on the Application of SPS, the Agreement on TRIMs, and the Agreement on Subsidies and Countervailing Measures.

The Marrakesh Agreement, as the umbrella treaty, does not define the term “measure” or specify its scope. GATT, its predecessor and annexed part, employs the term extensively. For instance, Article XI: I on the general elimination of quantitative restrictions identifies prohibitions and restrictions as forms of measures. Actions undertaken to regulations or decisions, whether formal or informal, fulfill the element of a measure, as GATT binds both conduct and instruments within the WTO framework.

Article XX of GATT, (*General Exceptions*) further delineates the types of measures recognized under international trade law, including those aimed at protection and conservation. Efforts to protect or conserve resources remain connected to actionable measures as prohibitions or restrictions, establishing the foundational link between traditional trade measures and emerging environmental measures, which will be examined in greater detail later.

Another critical aspect concerns the author of the measure. WTO law recognizes measures adopted by central governments, as well as those enacted by subnational authorities, including regional and local administrations.³⁶ This principle aligns with Article 4.1 of ARSIWA, which attributes acts of state organs including legislative, executive, and judicial bodies to the state itself. A more complex issue arises when measures are implemented by private entities within a member state, raising questions of attribution and WTO liability.

The legal basis for most environmental measures derives from MEAs, whose implementation often implicates questions of extraterritorial application. MEAs may extend beyond territorial borders even when their language is neutral and does not expressly reference cross-border impacts.³⁷ For example, the United States has historically adopted environmental

³¹ Ingmar Persson, “The Act-Omission Doctrine and Negative Rights”, *The Journal of Value Inquiry* 41, No. 1, (2007): 15.

³² John C. Hall, “Acts and Omissions”, *The Philosophical Quarterly* 39, No. 157, (October 1989): 404-405.

³³ Richard W. Wright, “Acts and Omissions as Positive and Negative Causes”, in JW Neyers, E Chamberlain and SGA Pitel (eds), *Emerging Issues in Tort law*, (Hart Publishing, 2007), p. 288.

³⁴ WTO Secretariat, *A Handbook on the WTO Dispute Settlement System*, Second Edition, (Cambridge University Press, 2017), p. 41.

³⁵ *Ibid.*

³⁶ Eca Steinberger, “The WTO Treaty as a Mixed Agreement: Problems with the EC’s and the EC Member States’ Membership of the WTO”, *The European Journal of International Law* 17, No.4, (2006): 851.

³⁷ Markus Vordermayer, “The Extraterritorial Application of Multilateral Environmental Agreements”, *Harvard International Law Journal* 59, No. 1, (2018): 63-64. DOI:

measures with extraterritorial effect under Section 1385³⁸ and Section 609,³⁹ while contemporary mechanisms initiatives such as Reducing Emissions from Deforestation and Forest Degradation (REDD and REDD+), which incentivize developing countries to reduce emissions from deforestation and forest degradation.

3. The Ongoing Journey of Environmental Measures

Article XX of GATT has become the primary provision accommodating environmental issues, including climate change, under the WTO.⁴⁰ Paragraphs (b) and (g) provide specific exceptions that permit Members to adopt environmental and health safety measures that may otherwise contravene trade liberalization obligations, by granting exemptions from the requirement of non-discriminatory treatment. However, environmental and health measures are not confined solely to the GATT framework. Similar regulatory objectives are also embedded in the TBT and SPS Agreements,⁴¹ which further clarify the conditions under which Members may legitimately pursue environmental and public health goals while remaining consistent with WTO disciplines.

Article XX(b) of the GATT, along with the TBT, and SPS Agreements, addresses measures designed to protect human, animal, or plant life or health. Notably, only the TBT explicitly refers to technical regulations or standards for environmental protection. Conversely, Article XX (g) GATT uniquely focuses on the conservation of exhaustible natural resources.

A central question arises: which environmental measures can be clearly classified as protecting human, animal, or plant life or health, and conserving non-renewable natural resources? To address this, a closer examination of interpretative disputes within the WTO Dispute Settlement Body (DSB) is essential. Since Article XX of the GATT 1947 and the GATT 1994 contain identical provisions, reviewing pre-WTO dispute cases remains relevant for understanding the initial recognition of environmental measures in international trade.

During the GATT era (1948–1994), six panel proceedings examined environmental and health-related measures under Article XX. The first dispute to consider is *US-Tuna (Mexico)*. On November 5, 1990, Mexico requested consultations with the United States regarding restrictions on tuna imports. After consultations failed, the case proceeded to the panel stage.

The contested measure involved the United States' imposition of restrictions, bans, or embargoes, either directly or indirectly. The United States justified its actions under Article XX(b) of the GATT as a measure to protect dolphin life and health, and under Article XX(g) as a measure to conserve dolphin populations. The panel was tasked with determining whether these actions constituted legitimate environmental measures.

Ultimately, the panel found that the United States' measures could not be justified under either Article XX(b) or Article XX(g). However, the panel did not explicitly address whether the measures should be regarded as an environmental measure. Instead, it concluded that the measures were not necessary and that the United States had failed to demonstrate the exhaustion of alternative measures.⁴² The panel's focus was on preventing misuse of Article XX rather than on the nature of the measures themselves.

A contrasting approach emerged in *US-Tuna (EEC)*. On March 11, 1992, the European Economic Community (EEC) requested consultations with the United States regarding restrictions on tuna imports. When consultations failed, the EEC requested the establishment of

³⁸ Gregory Shaffer, "United States—Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products", *American Journal of International Law* 107, Issue 1, (January 2013): 198

³⁹ Bret Puls, "The Murky Waters of International Environmental Jurisprudence: A Critique of Recent WTO Holdings in the Shrimp/Turtle Controversy", *Minnesota Journal of International Law* 177, (1999): 347-350.

⁴⁰ Katharine Heyl, et al., "Free Trade, Environment, Agriculture, and Plurilateral Treaties: The Ambivalent Example of Mercosur, CETA, and the EU-Vietnam Free Trade Agreement", *Sustainability* 13, Issue 6 (2021): 4-5.

⁴¹ Wen-chen Shih, "Trade and Environment Linkages and Challenges Facing East Asian WTO Members", *Asian Journal of WTO & International Health Law and Policy* 1, No. 1, (2006): 164.

⁴² Report of the Panel, *United States – Restriction on Imports of Tuna*, DS21/R - 39S/155, 3 September 1991, para 5.27, p. 36.

a panel. Despite similarities to *US-Tuna II (Mexico)*, this case provides valuable insight into defining environmental measures.⁴³

To assess whether the United States' actions were justified under Article XX(g), the panel applied a three-step analytical framework:

- a. Determined whether the measures fell within the range of policies to conserve exhaustible natural resources.
- b. Determined whether the measures "related to" the conservation of exhaustible natural resources.
- c. Determined whether the measure was applied in conformity with the requirement set out in the preamble to Article XX (the chapeau).⁴⁴

The panel similarly applied a three-stage approach under Article XX(b):

- a. Determined whether the measures fell within the range of policies to protect human, animal or plant life or health:
- b. Determined whether the measure was "necessary" to protect human, animal or plant life or health:
- c. Determined whether the measure was applied in conformity with the requirement set out in the preamble to Article XX (chapeau).⁴⁵

In these disputes, particular attention is given to the first step - evaluating whether the scope of the State's action aligns with the objectives of Article XX(b) or XX (g). This step is critical, as it addresses whether a state's action qualifies as an environmental measure. The subsequent steps on whether the recognized environmental measure satisfies the criteria established by GATT or WTO disciplines.

From the two tuna disputes, it can be concluded that measures restricting or banning fishing-related products that threaten specific species may be classified as environmental measures. The question of whether a measure is arbitrary, unjustifiable, or constitutes a disguised restriction is a separate issue.

Lessons from these cases have enabled panels in subsequent disputes to more readily identify whether a measure constitutes an environmental measure. For instance, in *the US-Taxes on Automobiles* dispute between the United States and the European Community (EC), the EC requested a ruling that the United States' implementation of the Gas Guzzler Tax and the Corporate Average Fuel Economy (CAFE) regulation was unjustified. The Gas Guzzler Tax targets manufacturers and importers who sell, lease, or use vehicle that fail to meet specified fuel economy standards. Simultaneously, the CAFE regulation establishes fuel efficiency requirements for vehicles sold in the United States, aiming to reduce fuel consumption and enhance energy security.

4. Expansion and Recognition of Environmental Measures in WTO Jurisprudence

The United States claimed that the CAFE regulation and the Gas Guzzler Tax constituted an environmental strategy aimed at conserving fuel within the transportation sector. Enhancing fleet fuel efficiency was considered a key element of a comprehensive energy conservation strategy. Accordingly, the United States argued that these measures were intended to conserve natural resources, specifically fossil fuel.⁴⁶

⁴³ Tran Viet Dung and Nguyen Thi Lan Huong, "Environmental Protection Issues and the TBT Agreement within the WTO Framework through the United States – Tuna II Dispute," [Vấn đề bảo vệ môi trường và Hiệp định TBT trong khuôn khổ WTO qua vụ tranh chấp Hoa Kỳ – cá ngừ II], *Vietnamese Journal of Legal Sciences*, 76, No. 03, (2013): 63–72.

⁴⁴ Report of the Panel, *United States – Restriction on Imports of Tuna*, DS29/R, 16 June 1994, para 5.12, p. 50.

⁴⁵ Report of the Panel, *United States – Restriction on Imports of Tuna*, DS29/R, 16 June 1994, para 5.29, p. 54-55.

⁴⁶ Report of the Panel, *United States – Taxes on Automobiles*, DS31/R, 11 October 1994, para 3.320, p. 88.

After reviewing the parties' submissions, the panel determined that the EC had not challenged the Gas Guzzler Tax in accordance with GATT's non-discrimination rules. Consequently, the panel did not assess whether the measure met the criteria of an environmental measure under Article XX(g). However, with respect to the CAFE regulation, the panel applied the three-stage analytical framework outlined above.

As in *the US-Tuna (EEC)* dispute, the initial question was whether the CAFE regulation fell within the scope of policies aimed at conserving exhaustible natural resources under Article XX(g) of the GATT. The panel noted that gasoline, derived from petroleum, constitutes an exhaustible natural resource; thus, measures to conserve it fall within the ambit of Article XX(g). Whether the measure is solely for conservation purposes without being arbitrary, unjustifiable, or a disguised restriction remains a separate legal matter.

The three pre-WTO disputes provide a foundation for anticipating how environmental measures would be defined and interpreted in subsequent WTO jurisprudence. Preliminary evaluation of environmental measures has become more predictable, aligning with the WTO's objective of promoting stable and transparent international trade.⁴⁷

With the formation of the WTO, the application of Article XX, particularly clauses (b) and (g), has increasingly facilitated broader environmental objectives.⁴⁸ WTO Members invoke these provisions to justify measures that may otherwise contravene the principle of non-discrimination. Notable cases include *US-Shrimp*, *US-Gasoline*, *EC-Asbestos*, *US-Clove Cigarettes*, *Thailand-Cigarettes*, and *China-Rare Earths*, among others.

The US-Tuna II (Mexico) and *US-Tuna (EEC)* disputes demonstrate that trade restrictions or import prohibitions can be recognized as legitimate environmental measures under GATT or WTO rule when aimed at protecting specific species, even if those species are not the direct subject of the import. This principle was reaffirmed in the *US-Shrimp* dispute, which upheld trade restrictions on shrimp imports harvested using shrimp trawl nets, aimed at protecting endangered sea turtles.⁴⁹

Protection of human life has also been increasingly recognized as an integral component of environmental measures. In *the US-Gasoline*, the panel acknowledged that air pollution posed risks to living organisms, particularly human health. Similarly, in *EC-Asbestos*, asbestos was identified as containing hazardous fibers associated with serious illnesses, including mesothelioma, lung cancer, and asbestosis. In both cases, parties submitted evidence supporting the existence of these risks.

The United States successfully demonstrated the health risks posed by air pollution, leading the panel to conclude that the Gasoline Rule, designed to control such pollution, was justified under Article XX(b) of the GATT.⁵⁰ Both *US-Gasoline* and *EC-Asbestos* affirmed that trade or sales restrictions on products posing health risks may be justified under Article XX(b). Although the United States could not demonstrate that the gasoline regulations satisfied the "necessity" requirement, the dispute contributed to a broader interpretation of environmental measures.

The US-Gasoline case illustrates that environmental measures extend beyond import restrictions or bans. Under the Clean Air Act, the US Environmental Protection Agency required the use of emissions-control devices and cleaner-burning engines. The Clean Air Act

⁴⁷ Wolfgang Weiss, "Security and predictability under WTO law", *World Trade Review* 2, Issue 2, (2003): 183.

⁴⁸ Niall Moran, The first twenty cases under GATT Article XX: tuna or shrimp dear?, in *International Economic Law: contemporary issues*, ed. Adinolfi, Giovanna, Baetens, Freya, Caiado, José, Lupone, Angela and Micara, Anna G., eds. (Springer International Publishing, Switzerland, 2017), p. 20-21.

⁴⁹ Gregory Shaffer, "United States-Import Prohibition of Certain Shrimp and Shrimp Products?", *The American Journal of International Law* 93, No. 2 (1999): 507.

⁵⁰ Report of the Panel, *United States - Standards for Reformulated and Conventional Gasoline*, WT/DS2/R, 29 January 1996, para 6.21, p. 38-39.

Amendments of 1990 further mandated reformulated gasoline to reduce air pollution in metropolitan areas with significant ground-level ozone pollution.⁵¹

Article XX (g) GATT, while also part of environmental measures, differs with Article XX (b). Article XX (g) focuses on conservation of exhaustible natural resources. Due to the risk of depletion, these measures often intersect with restrictions on domestic production or consumption.⁵²

US-Gasoline and *US-Shrimp* disputes also addressed the potential application of Article XX(g). The Panel and the AB recognized that clean air, like sea turtles, can constitute an exhaustible natural resource. The classification of sea turtles as an exhaustible, despite their status as living and theoretically renewable resource, illustrates the progressive development of environmental jurisprudence. In *US-Shrimp*, the panel acknowledged that sea turtles are susceptible to depletion, thereby qualifying them as exhaustible resources under trade law⁵³ aligning with the objectives of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

A debate arose in *US-Gasoline* over whether clean air qualifies as a natural resource. Venezuela argued that clean air constitutes a renewable as atmospheric condition should not be treated as an exhaustible natural resource, emphasizing its inherent value and susceptibility to depletion. It even drew a parallel with salmon, highlighting that both can be depleted over time.⁵⁴

The concept of “exhaustible natural resources” has thus broadened, making it easier to classify products with depletion potential under this category. *The China–Rare Earth* dispute addressed 17 metallic elements essential for advanced technological applications. While the panel primarily focused on other legal considerations, it implicitly affirmed that rare earth elements (REEs) are exhaustible natural resources. The environmental measure in question concerned China’s temporary export duties on several REEs aimed at conserving natural resources.

5. Contemporary Environmental Measures in International Trade

China’s export duties on rare earth elements reflects environmental concerns. China argued that export restrictions were necessary to mitigate pollution from mining and processing activities and to discourage excessive production and consumption by raising export tariffs. The panel upheld China’s position, noting that Article XX(g) of the GATT does not preclude the use of export duties including export quotas as part of legitimate conservation measures.⁵⁵ Whether such measures constitute arbitrary or unjustifiable discrimination or disguised trade restrictions remains a separate legal question.

Currently, debates surrounding the Carbon Border Adjustment Mechanism (CBAM), highlight the evolving nature of environmental measures. CBAM is perceived as similar to export duties, particularly in imposing additional costs such as tariffs or taxes. On May 12, 2025, the Russian Federation initiated consultations with the EU and its Member States regarding the EU’s CBAM Package. The EU rejected the request stating that consultations would likely be unproductive. This increases the likelihood that the dispute will proceed to the panel stage.

⁵¹ United States Environmental Protection Agency, “Federal Gasoline Regulation”, 19 September 2024, <https://www.epa.gov/gasoline-standards/federal-gasoline-regulations>.

⁵² Trachtman, “WTO Trade and Environment Jurisprudence: Avoiding Environmental Catastrophe”, 294-295.

⁵³ Report of the Appellate Body, *United States – Import Prohibition of Certain Shrimp and Shrimp Products*, WT/DS58/AB/R, 12 October 1998, para 128, 134, p. 47, 51.

⁵⁴ Victoria H. Imperiale, “Characterizing Air as An Exhaustible Natural Resource”, in Edith Brown Weiss, John H. Jackson, and Nathalie Bernasconi-Osterwalder, *Reconciling Environment and Trade*, (Brill: Nijhoff, 2008), p. 248.

⁵⁵ Report of the Panel, *China – Measures Related to the Exportation of Rare Earth, Tungsten, and Molybdenum*, WT/DS431/R, WT/DS432/R, WT/DS433/R, 26 March 2014, para 7.293, p. 101.

Several CBAM measures have raised concerns, including:⁵⁶

- a. Rules and requirements for obtaining authorization to import the covered goods;
- b. Rules for monitoring, collecting, calculating, and reporting emissions;
- c. Rules concerning verification of embedded emissions and accreditation of verifiers;
- d. Rules and requirements related to CBAM certification.

Multiple disputes are also ongoing regarding the EU's Deforestation Regulation, which includes due diligence procedures, regulatory requirements, and risk assessments.⁵⁷ Similarly, in the US—IRA (China) dispute, China requested the establishment of a panel after consultations with the United States failed to resolve concerns over subsidy measures under the US Inflation Reduction Act (IRA). China claims these measures favor domestic products over imports, including Chinese goods.⁵⁸ The scope of the challenged measures extends to provisions, amendments, modifications, and implementing instruments. These cases illustrate the evolving nature of environment-related trade measures, expanding beyond traditional approaches.

Traditional environmental measures generally fall into three categories:

1. Import restrictions on products and services.
2. Regulatory requirements applicable to both domestic and imported goods.
3. Export restrictions aimed at conserving natural resources.⁵⁹

Newer measures, such as CBAM, the Deforestation Regulation, and the IRA, signal a potential expansion of this understanding. Determining whether these measures qualify as environmental measures under Article XX(b) and XX (g) remains a significant challenge. Panels or AB must carefully assess their consistency with GATT's environmental exceptions. The reluctance to establish a definitive interpretation of some clause in Article XX reflects awareness of evolving environmental practices. WTO-DSB has increasingly demonstrated sensitivity to sustainability considerations, progressively applying the principle of proportionality to reconcile trade and environmental interests. This ensures that trade-restrictive measures adopted for environmental purposes are both necessary and proportionate to their stated objectives.

Within the *General Exceptions* clause of Article XX of the GATT, together with the provisions of the TBT and SPS Agreements, WTO Members are authorized to adopt trade-restrictive measures for environmental protection. A contemporary example is the EU's CBAM, which demonstrates the intersection of trade policy and environmental objectives.⁶⁰ How the EU—CBAM (Russia) dispute unfolds will have significant implications for the interpretation of environmental measures under WTO law.⁶¹ In general, classifying an action as an environmental measure is straightforward if it pursues environmental protection in a broad sense. Whether the measure is arbitrary, unjustifiable, or a disguised restriction under the chapeau of Article XX is a separate inquiry.

C. Conclusion

⁵⁶ Request for Consultation by Russian Federation, *European Union and Its Member States – Carbon Border Adjustment Mechanism*, WT/DS639/1, G/L/1573, G/SCM/D142/1, G/LIC/D/55, 19 May 2025

⁵⁷ Bruno Capuzzi, "Is the European Union Deforestation Regulation WTO-Proof?", *Policy Brief*—No. 18/2024, European Centre for International Political Economy, (2024): 4.

⁵⁸ Request for Consultation by China, *United States – Certain Tax Credit under the Inflation Reduction Act*, WT/DS623/1, G/L/1526, G/TRIMS/D/47, G/SCM/D137/1, 28 March 2024.

⁵⁹ Yanti Ahmad Shafiee and Asmah Laili Yeon, "Trade-Related Environmental Measures under the World Trade Organization (WTO) in Malaysia: The Analysis of its' Application", *Journal of International Studies* 12, (2016): 97.

⁶⁰ Nguyen Thi Kim Anh, [Nguyen Hoang Thai Hy](#) and [Nguyen Xuan My Hien](#), "Carbon Border Adjustment Mechanism: from a green vision to fading alignment with the WTO and EVFTA: bridging divergences between the EU and developing countries", *TalTech Journal of European Studies*, 15, no. 2, (2025): 174-192. <https://doi.org/10.2478/bjes-2025-0027>.

⁶¹ WTO, "DS639: European Union and its Member States — Carbon Border Adjustment Mechanism", available on https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds639_e.htm, accessed on 24 September 2025.

With the international community's growing focus on sustainable development, as reflected in the United Nations' Sustainable Development Goals (SDGs),⁶² environmental measures have gained increasing importance in international trade. The WTO recognizes the right of states to adopt measures for the protection of human, animal, or plant life or health, as well as for the conservation of exhaustible natural resources. As climate change continues to evolve, so too does the concept of environmental measures, increasingly encompassing climate-related initiatives.

Environmental measures broadly include policies and actions aimed at mitigating environmental harm and promoting sustainable development. However, no universally accepted definition exists, including within the WTO framework. Panels or the AB are often tasked with determining whether trade-restrictive measures justified on environmental grounds qualify as environmental measures under WTO law.

Past DSB disputes provide insight into which actions constitute environmental measures. The US-Shrimp, US-Tuna, and EC–Asbestos disputes demonstrate that import bans on products posing risks to human or environmental health are among the most frequently invoked measures. Tariffs, taxes, or specific fees, as seen in the China–Rare Earths dispute, can also constitute environmental measures. Additionally, regulatory requirements mandating or prohibiting the use of certain tools or devices represent another form of environmental measure.

The scope and application of environmental measures remain dynamic. Emerging policies, such as the EU's CBAM, the Deforestation Regulation, and the US Inflation Reduction Act, indicate a broadening definition of environmental measures. Consequently, panel or the AB must carefully balance trade objectives with environmental protection interests, ensuring that environmental measures are justified, proportionate, and consistent with WTO law.

REFERENCES

Book

- Dupuy, Pierre-Marie and Jorge E. Vinuales. *International Environmental Law*, Second Edition, (Cambridge: Cambridge University Press, 2018)
- Hutchinson, Terry. *Researching and Writing in Law*, Fourth Edition, (Pyrmont, NSW: Thomson Reuters, 2018)
- Imperiale, Victoria H. "Characterizing Air as An Exhaustible Natural Resource". In Edith Brown Weiss, John H. Jackson, and Nathalie Bernasconi-Osterwalder. *Reconciling Environment and Trade*, (Brill: Nijhoff, 2008).
- Moran, Niall. "The first twenty cases under GATT Article XX; tuna or shrimp dear?". In *International Economic Law: contemporary issues*, ed. Adinolfi, Giovanna, Baetens, Freya, Caiado, José, Lupone, Angela and Micara, Anna G., eds. (Springer International Publishing, Switzerland, 2017): 20-21.
- Van Asselt, Harro. "Trade and Climate Disputes before the WTO: Blocking or Driving Climate Action?". In Ivano Alogna, Christine Bakker and Jean Pierre Gauci, *Climate Change Litigation: Global Perspectives*, (Leiden: Brill, 2021): 433–461.
- Van den Bossche, Peter and Werner Zdouc. *The Law and Policy of the World Trade Organization: Text, Cases, and Materials*. Fifth Edition, (Cambridge: Cambridge University Press, 2022): 356.
- Wright, Richard W. "Acts and Omissions as Positive and Negative Causes". In JW Neyers, E Chamberlain and SGA Pitel (eds). *Emerging Issues in Tort law*, (Hart Publishing, 2007).

⁶² United Nations, *Transforming Our World: The 2030 Agenda for Sustainable Development*, A/RES/70/1, 25 September 2015. Available on <https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf?ref>, Accessed on 29 September 2025.

- WTO Secretariat. *A Handbook on the WTO Dispute Settlement System*, Second Edition, (Cambridge University Press, 2017).
- Yanovich, Alan and Tania Voon. "What is the Measure at Issue?". In Andrew D. Mitchell, *Challenges and Prospects for the WTO*. (London: Cameron May. 2005).

Journal

- Auld, Kathleen, Linda Del Savio and Loretta Feris. "An Environmental Agreement in a Trade Court – Is the WTO's Agreement on Fisheries Subsidies Enforceable?". *World Trade Review* 24, Issue 1, (February 2025) : 33-34.
- Batra, Mukta and Namit Bafna. "Renewable Energy: The WTO's Position on Local Content Requirements". *Energy Law Journal* 39, No. 2, (2018): 401-42.
- Brack, Duncan. "Balancing Trade and the Environment". *International Affairs* 71, No. 3, (July 1995): 513-514
- Capuzzi, Bruno. "Is the European Union Deforestation Regulation WTO-Proof?", *Policy Brief – No. 18/2024*. European Centre for International Political Economy, (2024): 4.
- Charnovitz, Steve. "The World Trade Organization and the Environment". *Yearbook of International Environmental Law* 8, Issue 1, (1997): 99, 113
- _____. "A New WTO Paradigm for Trade and the Environment". *Singapore Yearbook of International Law* 15, (2007): 15-40.
- Chimni, B. S. "WTO and Environment: Shrimp-Turtle and EC-Hormones Cases". *Economic and Political Weekly* 35, No. 20 (May 13-19, 2000): 1752-1761.
- Englisch, Joachim and Tatiana Falco. "EU Carbon Border Adjustment and WTO Law, Part Two". *Environmental Law Reporter* 51, No. 11, (November 2021): 10935-1094
- Gentile, Dominic. "International Trade and the Environment: What is the Role of the WTO?". *Fordham Environmental Law Review* 20, No.1, (2009): 202
- Ghei, Nita. "Evaluating the WTO's Two Step Test for Environmental Measures Under Article XX". *Colorado Environmental Law Journal* 18, No. 1, (2006): 148-150.
- Hall, John C. "Acts and Omissions". *The Philosophical Quarterly* 39, No. 157, (October 1989): 404-405.
- Heyl, Katharine. *Et.al.* "Free Trade, Environment, Agriculture, and Plurilateral Treaties: The Ambivalent Example of Mercosur, CETA, and the EU–Vietnam Free Trade Agreement". *Sustainability* 13, Issue 6 (2021): 4-5.
- Howse, Robert and Joanna Langille. "Continuity and Change in the World Trade Organization: Pluralism Past, Present, and Future". *American Journal of International Law* 117, Issue 1, (January 2023) : 3.
- Lee, Hyo Won and Johann Park. "Free Trade and the Environment under the GATT/WTO". *Journal of International and Area Studies* 28, No. 1 (June 2021): 129
- Meyer, Timothy. "Explaining energy disputes at the World Trade Organization". *International Environmental Agreements: Politics, Law and Economics* 17, (2017): 411.
- Neumayer, Eric. "Trade measures in multilateral environmental agreements and WTO rules: Potential for conflict, scope for reconciliation". *Aussenwirtschaft* 55, No. 3, (2000): 1-24.
- Persson, Ingmar. "The Act-Omission Doctrine and Negative Rights". *The Journal of Value Inquiry* 41, No. 1, (2007): 15.
- Thomas, Sébastien. "Trade and environment under WTO rules after the Appellate Body report in Brazil-retreated tyres". *Journal of International Commercial Law and Technology* 4 Issue 1, (2009): 42-49.
- Trachtman, Joel P. "WTO Trade and Environment Jurisprudence: Avoiding Environmental Catastrophe". *Harvard International Law Journal* 58, No. 2, (2017): 305-309

- Schoenbaum, Thomas J. “Free International Trade and Protection of the Environment: Irreconcilable Conflict?”. *The American Journal of International Law* 86, No. 4, (October 1992): 722-723
- Shaffer, Gregory. “United States-Import Prohibition of Certain Shrimp and Shrimp Products?”. *The American Journal of International Law* 93, No. 2 (1999): 507.
- Shafiee, Yanti Ahmad and Asmah Laili Yeon. “Trade-Related Environmental Measures under the World Trade Organization (WTO) in Malaysia: The Analysis of its’ Application”. *Journal of International Studies* 12, (2016): 97.
- Shih, Wen-chen. “Trade and Environment Linkages and Challenges Facing East Asian WTO Members”. *Asian Journal of WTO & International Health Law and Policy* 1, No. 1, (2006): 164.
- Steinberger, Eca. “The WTO Treaty as a Mixed Agreement: Problems with the EC’s and the EC Member States’ Membership of the WTO”. *The European Journal of International Law* 17, No.4, (2006): 851.
- Taekema, Sanne. “Theoretical and normative frameworks for legal research: putting theory into practice”, *Law and Method Journal*, Issue 2, (2018): 1-2.
- Tanveer, Arifa *et.al.* “World Trade Organization (WTO) trade policy reviews and green technology adoption: Global evidence”. *International Review of Financial Analysis* 96. Part B (2024): 12
- Van Damme, Isabelle. “Treaty Interpretation by the WTO Appellate Body”. *The European Journal of International Law* 21, No. 3, (2010): 607-608.
- Vieira, Andréia Costa. “The WTO and the Paris Agreement: A Dialogue on Climate Change Mitigation”. *Beijing Law Review* 11 No.2, (June 2020): 411-412.
- Voon, Tania “Sizing Up the WTO: Trade-Environment Conflict and the Kyoto Protocol”. *Journal of Transnational Law & Policy* 10, No. 1, (2000): 76.
- Weiss, Wolfgang “Security and predictability under WTO law”. *World Trade Review* 2, Issue 2, (2003): 183.

Internet

- WTO. “The Doha mandate on multilateral environmental agreements (MEAs)”. Available on https://www.wto.org/english/tratop_e/envir_e/envir_neg_mea_e.htm.
- United States Environmental Protection Agency, “Federal Gasoline Regulation”. 19 September 2024. Available on <https://www.epa.gov/gasoline-standards/federal-gasoline-regulations>.
- WTO, “DS639: European Union and its Member States — Carbon Border Adjustment Mechanism”. Available on https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds639_e.htm. Accessed on 24 September 2025.
- WTO Analytical Index, “Relationship of the SPS Agreement with other WTO agreement”. Available on https://www.wto.org/english/res_e/publications_e/ai17_e/sps_general_jur.pdf. Accessed on 24 September 2025.

Report

- Report of the Appellate Body, *United States – Sunset Review of Anti-Dumping Duties on Corrosion-Resistant Carbon Steel Flat Products from Japan*, WT/DS244/AB/R, 15 December 2003. Para 20, p. 29.
- Report of the Panel, *United States – Restriction on Imports of Tuna*, DS21/R - 39S/155, 3 September 1991. Para 5.27, p. 36.

- Report of the Panel, *United States – Restriction on Imports of Tuna*, DS29/R, 16 June 1994. Para 5.12, p. 50.
- Report of the Panel, *United States – Restriction on Imports of Tuna*, DS29/R, 16 June 1994. Para 5.29, p. 54-55.
- Report of the Panel, *United States – Taxes on Automobiles*, DS31/R, 11 October 1994. Para 3.320, p. 88.
- Report of the Panel, *United States - Standards for Reformulated and Conventional Gasoline*, WT/DS2/R, 29 January 1996. Para 6.21, p. 38-39.
- Report of the Appellate Body, *United States – Import Prohibition of Certain Shrimp and Shrimp Products*, WT/DS58/AB/R, 12 October 1998. Para 128, 134, p. 47, 51.
- Report of the Panel, *China – Measures Related to the Exportation of Rare Earth, Tungsten, and Molybdenum*, WT/DS431/R, WT/DS432/R, WT/DS433/R, 26 March 2014. Para 7.293, p. 101.

