



A Study on Climate Change and International Trade Law: Reconciling Environmental Measures with WTO Rules

Darshana Karian¹, Sampa Dutta²

¹ Assistant Professor CMR University, School of Legal Studies, Bangalore, Karnataka

² Co-Author: LL.M. (Commercial Law), 2nd Semester CMR University School of Legal Studies, Bangalore, Karnataka

DOI : <https://doi.org/10.5281/zenodo.15393069>

ABSTRACT:

With every waking day, climate change becomes more increasingly urgent global concern, which in turn propels countries to implementing ambitious environmental measures to reduce greenhouse gas emissions and promote sustainability. However, these policies often intersect with international trade obligations, raising concerns about their compatibility with World Trade Organization (WTO) agreements. This paper explores the legal tensions and potential synergies between climate change initiatives and international trade law. It critically examines key WTO agreements, such as the General Agreement on Tariffs and Trade (GATT) and the Technical Barriers to Trade (TBT) Agreement, along with landmark WTO dispute cases. The study highlights mechanisms such as carbon border adjustments and green subsidies, analyzing their WTO consistency. Ultimately, the focus of this paper is that it argues for a more flexible, integrated approach within WTO frameworks that supports environmental protection while maintaining fair trade practices. The scope of the Paper is however limited.

Keywords: climate change, environmental measures , sustainability, international trade , World Trade Organization, WTO agreements.

1.Introduction:

Climate change is no longer a distant threat but a present and accelerating crisis that demands urgent global action. Governments worldwide are adopting increasingly stringent environmental policies aimed at reducing carbon emissions, promoting renewable energy, and transitioning toward sustainable economies¹. While these climate change measures are critical for environmental protection and public welfare, they often have trade-related implications that bring them into potential conflict with international trade obligations, particularly those governed by the World Trade Organization (WTO). At this juncture , it is of paramount importance to highlight the some of the key purposes of establishing The WTO , to promote free and fair trade by reducing barriers and ensuring non-discrimination among member states. Notwithstanding the aforesaid , it can be ascertained from its core agreements—negotiated in a pre-climate crisis era—were not designed with contemporary environmental challenges in mind² particularly the fall out of climate change, its ever evolving character and its impact on International trade. As a result, measures intended to combat climate change, such as carbon taxes, border adjustments, and eco-labeling, may be viewed as trade-restrictive or discriminatory, under the foundational WTO agreements, leading to legal uncertainty and a blaringly open wound to multiple trade disputes.³ This paper , in light of the aforesaid, therefore, seeks to examine how environmental measures can be reconciled with the WTO's legal framework. It explores the balance between the right of states to pursue legitimate environmental objectives and their obligations to uphold trade liberalization principles⁴. Through a critical analysis of relevant WTO agreements, dispute settlement cases, and recent climate-related trade policies, this study aims to identify pathways for aligning trade rules with climate action in a manner that promotes both economic and environmental sustainability.

2.WTO Agreements and Environmental Measures under International Trade

The WTO, provides the principal legal and institutional framework for international trade. Although primarily aimed at liberalizing trade and preventing protectionism, several WTO agreements contain provisions that relate directly or indirectly to environmental measures.⁵ These provisions seek to balance trade obligations with the sovereign right of states to protect the environment and promote sustainable development.

¹ Shalanda H. Baker, Climate Change and International Economic law, ELQ, Vol. 43, No. 1, (page no. 2)(2016)

² Shalanda H. Baker, Climate Change and International Economic law, ELQ, Vol. 43, No. 1, (page no.,5)(2016)

³ Margaret Rosso Grossman, Climate Change and the Law, Vol. 58, AJCL (page no. 12), (2010)

⁴ Margaret Rosso Grossman, Climate Change and the Law, Vol. 58, AJCL (page no. 15), (2010)

⁵ Shalanda H. Baker, Climate Change and International Economic law, ELQ, Vol. 43, No. 1, (page no. 2)(2016)

2.1. General Agreement on Tariffs and Trade (GATT) 1994⁶

GATT is the cornerstone of the WTO's legal structure. While its primary objective is to eliminate trade barriers, it recognizes the legitimacy of environmental protection through Article XX⁷. This article provides general exceptions that allow members to adopt measures that: (b) are necessary to protect human, animal, or plant life or health; and (g) relate to the conservation of exhaustible natural resources, provided such measures are not applied in a discriminatory or protectionist manner. These exceptions have been central to WTO case law involving environmental disputes. The WTO is not a climate-focused body, but it plays an indirect yet crucial role in supporting global efforts to combat climate change through its influence on international trade. Here's a concise overview: WTO encourages the liberalization of environmental goods (like solar panels, wind turbines) and services (such as environmental consulting). This makes green technologies more affordable and accessible globally. WTO rules aim to ensure that countries don't use climate policies as disguised trade barriers⁸. It helps resolve disputes when environmental regulations are seen as unfair restrictions on trade. WTO frameworks are being discussed for Carbon Border Adjustment Mechanisms (CBAMs), where countries impose tariffs on carbon-intensive imports. The goal is to align such measures with trade rules and avoid discrimination. The WTO monitors trade-related environmental measures through notifications and reviews. It fosters dialogue on the intersection of trade and climate policy, such as at the Trade and Environment Committee. WTO supports global collaboration through initiatives like the Trade and Environmental Sustainability Structured Discussions (TESSD). It encourages members to align trade policies with the Paris Agreement goals. Balancing trade liberalization with environmental protection⁹. Handling disputes over subsidies for green energy vs. Fossil fuels. Ensuring fairness for developing countries in climate-related trade measures.

2.2. Agreement on Technical Barriers to Trade (TBT)¹⁰

The TBT Agreement¹¹ governs the use of technical regulations, standards, and conformity assessment procedures. It permits countries to implement environmental and health standards, but requires that such measures: Are not more trade-restrictive than necessary; Do not create unnecessary obstacles to international trade. Are based on scientific evidence and international standards where possible. This is particularly relevant in the context of climate labeling, emissions standards, and product sustainability criteria. The WTO Agreement on Technical Barriers to Trade (TBT) plays an important role in addressing climate change by setting the rules for how countries can implement environmental regulations without creating unnecessary trade barriers. Here's how it supports climate efforts: It ensures that technical regulations, standards, and conformity assessment procedures do not create unnecessary obstacles to international trade. Allows countries to adopt measures to protect the environment and human health, as long as they are non-discriminatory and based on science. Countries use the TBT framework to introduce climate-related regulations such as: Energy efficiency standards (e.g., for appliances and vehicles).¹² Labeling requirements (e.g., carbon footprint or eco-labels). Emission limits and performance standards, these must comply with TBT principles: Legitimate objective (e.g., climate protection) and Non-discrimination (treating imported and domestic goods equally) & Least trade-restrictive means to achieve the goal. Countries must notify the WTO when they plan new climate-related technical regulations. This allows for international feedback, helping avoid trade disputes and align efforts.¹³ TBT encourages the use of international environmental standards (like ISO standards), making it easier for countries to cooperate on climate measures. The TBT Agreement provides a structure where governments can promote climate-friendly technologies and products, while still respecting trade commitments. For Example, a country setting a mandatory energy label for air conditioners must notify the WTO and ensure it doesn't unfairly block imports¹⁴, it can still require high standards to cut emissions.

2.3. Agreement on Sanitary and Phytosanitary Measures (SPS)¹⁵

The SPS Agreement¹⁶ applies to food safety and animal/plant health regulations. While not specifically focused on climate change, it is relevant where climate policies intersect with biosecurity or agricultural sustainability. Like the TBT Agreement,¹⁷ it requires that measures be scientifically justified and non-discriminatory. The WTO Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) helps countries protect

⁶ Agreement on Tariffs and Trade 1994, Apr.15,1994,Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 187

⁷ Agreement on Tariffs and Trade 1994, Apr.15,1994,Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 187

⁸ Felicity Deane, The WTO, The National Security Exceptions and climate change, Vol. 6, No. 2, (page no 9),(2012)

⁹ Rafael leal Arcas, The WTO and the environment, Vol. 7, No. 4, (page no 2), (2013)

¹⁰ Agreement on technical barriers to trade, Apr.15,1994,Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1868 U.N.T.S. 120

¹¹ Agreement on technical barriers to trade, Apr.15,1994,Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1868 U.N.T.S. 120

¹² Felicity Deane, The WTO, The National Security Exceptions and climate change, Vol. 6, No. 2, (page no 8),(2012)

¹³ C. Christopher Parlin, John H. Jackson and David K. Schorr, The world Trade Organization, Vol. 89, (page no 6), (April 5-8, 1995)

¹⁴ Rafael leal Arcas, The WTO and the environment, Vol. 7, No. 4, (page no 3), (2013)

¹⁵ Agreement on the application of Sanitary and Phytosanitary Measures, Apr.15,1994,Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 493

¹⁶ Agreement on the application of Sanitary and Phytosanitary Measures, Apr.15,1994,Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 493

¹⁷ Margaret Rosso Grossman, Climate Change and the Law, Vol. 58, AJCL (page no. 14), (2010)

human, animal, and plant health — and it plays a growing role in addressing climate change impacts on agriculture, food safety, and ecosystems. Allows countries to set measures to protect life or health from risks related to: Pests and diseases, Food safety hazards, Animal and plant contamination. These measures must be Science-based and Non-discriminatory, not more trade-restrictive than necessary.¹⁸ Climate change increases risks that SPS measures aim to address. Spread of pests and diseases to new regions due to rising temperatures. Food safety concerns from new toxins, pathogens, or spoilage patterns. Changing ecosystems that affect crops and livestock. Countries can adapt SPS measures to deal with new climate-driven threats, e.g.: New import restrictions for plants at risk of invasive species. Updated food safety standards due to higher risk of spoilage or contamination. Measures must still follow SPS rules: scientifically justified and proportionate.¹⁹ SPS encourages reliance on global standards from bodies like: Codex Alimentarius (food safety), OIE (animal health), IPPC (plant protection). Promotes harmonized approaches to climate-driven health risks. Countries must notify changes to SPS measures. Enables global collaboration and helps avoid climate-related trade conflicts. Example, If climate change causes a pest outbreak in one country, others may restrict imports of affected crops but under the SPS Agreement²⁰, those restrictions must be based on scientific risk assessments.

2.4. Agreement on Subsidies and Countervailing Measures (SCM)²¹

Climate policies often involve subsidies for renewable energy, electric vehicles, or green technologies. The SCM Agreement²² disciplines the use of subsidies and allows other members to challenge those that are trade-distorting. However, there is growing debate about whether climate-friendly subsidies should receive more flexibility under WTO rules. The WTO SCM Agreement²³ governs the use of subsidies and how countries can respond to them and it plays a significant role in how governments support climate change action, especially in the green energy and low-carbon technology sectors. Regulates the use of government subsidies that may distort international trade. Allows countervailing measures (like tariffs) if a subsidy harms the domestic industry of another country. Classifies subsidies into, prohibited (e.g. export subsidies), actionable (subject to challenge if they cause harm) & non-actionable (some were allowed but this category expired in 1999)²⁴. Countries often use subsidies to promote renewable energy (solar, wind, etc.). Support electric vehicles, energy efficiency, or clean technology. Fund climate-resilient agriculture or sustainable infrastructure. These subsidies can help meet climate goals under the Paris Agreement. But may also trigger trade disputes under SCM rules if seen as distorting trade. Some green subsidies have been challenged at the WTO, e.g. local content requirements in solar/wind projects tax breaks or grants that favor domestic producers. The lack of a clear safe zone for climate subsidies creates uncertainty. Many WTO members and experts argue for updating SCM rules to: Allow more policy space for climate-friendly subsidies & distinguish between harmful fossil fuel subsidies and beneficial green ones. The SCM Agreement aims to prevent unfair competition, but also needs to support global public goods like climate stability.²⁵ If a country offers subsidies for domestic EV battery production with a “buy local” clause, it may violate SCM rules. But without such support, it may struggle to build green industries.

2.5. Trade and Environment Committee

The WTO established the Committee on Trade and Environment (CTE) to study the relationship between trade and environmental policies and to ensure that environmental considerations are integrated into the WTO's work. Although it has no binding power, it plays an important role in dialogue and cooperation. WTO agreements provide a legal framework that allows for environmental measures, but such measures must meet strict conditions to be WTO-compliant. This creates legal and policy tension, especially as climate action becomes more urgent and expansive. The evolving jurisprudence and negotiations will determine how flexibly WTO rules can accommodate the growing need for climate-resilient trade policies. The trade and environmental communities, historically separate, are increasingly working together to address the global challenge of climate change.²⁶ Their collaboration is essential to ensure that climate policies and trade rules are mutually supportive rather than conflicting. Both communities aim to promote sustainable development, ensure access to green technology, reduce carbon emissions foster resilient supply chains and fair transitions. Liberalizing Environmental Goods and Services (EGS) is one of the key areas. Reducing tariffs on solar panels, wind turbines, clean water tech, etc. Facilitates global access to climate-friendly technologies. Trade experts and climate policymakers work together to design Carbon Border Adjustment Mechanisms (CBAMs) that are WTO-compliant. Ensures climate protection without unfair trade discrimination. Aligning climate-related standards (like energy efficiency or carbon labeling) to avoid creating trade barriers. Involves both environmental scientists and trade lawyers. Tensions over subsidies and local content requirements²⁷. Different priorities: trade emphasizes non-discrimination, environment emphasizes precaution and

¹⁸ C. Christopher Parlin, John H. Jackson and David K. Schorr, *The world Trade Organization*, Vol. 89, (page no 4), (April 5-8, 1995)

¹⁹ Rafael leal Arcas, *The WTO and the environment*, Vol. 7, No. 4, (page no 3), (2013)

²⁰ Felicity Deane, *The WTO, The National Security Exceptions and climate change*, Vol. 6, No. 2, (page no 7), (2012)

²¹ Agreement on Subsidies and Countervailing Measures, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1869 U.N.T.S. 14

²² Agreement on Subsidies and Countervailing Measures, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1869 U.N.T.S. 14

²³ Agreement on Subsidies and Countervailing Measures, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1869 U.N.T.S. 14

²⁴ Felicity Deane, *The WTO, The National Security Exceptions and climate change*, Vol. 6, No. 2, (page no 6), (2012)

²⁵ C. Christopher Parlin, John H. Jackson and David K. Schorr, *The world Trade Organization*, Vol. 89, (page no 4), (April 5-8, 1995)

²⁶ Shalanda H. Baker, *Climate Change and International Economic law*, ELQ, Vol. 43, No. 1, (page no. 3) (2016)

²⁷ Margaret Rosso Grossman, *Climate Change and the Law*, Vol. 58, AJCL (page no. 11), (2010)

protection Uneven capacities among countries to implement green measures without harming development. Promote inclusive dialogue between trade negotiators and environmental scientists. Reform trade rules to better support climate action and increase technical and financial assistance to developing countries.

3. Dispute Settlement and Environmental Exceptions under the WTO

The WTO's Dispute Settlement Body (DSB) serves as the primary mechanism for resolving trade disputes between member states. Through its panels and Appellate Body, the DSB has clarified the interpretation of WTO rules, including how environmental measures interact with trade obligations. Several landmark cases illustrate how the WTO legal system has addressed environmental exceptions, particularly under Article XX of GATT 1994²⁸.

3.1. International Court of Justice (ICJ) Advisory Opinion on State Climate Obligations

The International Court of Justice is expected to issue a landmark advisory opinion in 2025 regarding the obligations of states under international law to combat climate change. Requested by the UN General Assembly, this opinion aims to clarify how international legal frameworks—such as human rights treaties and environmental conventions—mandate state actions to address climate change. The forthcoming opinion could significantly influence global climate governance by establishing clearer legal responsibilities for nations.

3.2. *Lluya v. RWE AG – Holding Corporations Accountable for Climate Damage*

In a groundbreaking case, Peruvian farmer Saúl Luciano Lliuya is suing German energy company RWE, alleging that its greenhouse gas emissions have contributed to glacial melting above his hometown of Huaraz, Peru. This melting has increased the risk of catastrophic flooding from Lake Palcacocha. Lliuya seeks €17,000 from RWE, corresponding to its estimated 0.47% contribution to global emissions. The case, currently in evidentiary hearings at the Higher Regional Court in Hamm, Germany, could set a precedent for holding corporations legally responsible for their share of climate-related damages.

3.3. *UK Citizens Challenge Government's Climate Adaptation Policies at ECHR*

Two British citizens, Doug Paulley and Kevin Jordan, have brought a case against the UK government to the European Court of Human Rights. They argue that the government's inadequate climate adaptation policies violate their human rights. Paulley, who has disabilities exacerbated by rising temperatures, and Jordan, whose coastal home was destroyed by severe storms, contend that the UK's third National Adaptation Programme fails to protect vulnerable populations. Supported by Friends of the Earth, this case could influence how human rights law is applied to national climate policies.

3.4. *Legal Scholars Warn EU's Sustainability Law Changes May Increase Litigation*

A group of 31 legal scholars has expressed concern that proposed changes to the European Union's sustainability reporting regulations could heighten the risk of lawsuits against companies over climate-related issues. The European Commission's proposal to remove binding requirements for companies to implement transition plans aligned with EU greenhouse gas reduction targets may lead to greater legal exposure. Scholars argue that this adjustment could result in increased litigation citing environmental and public health risks.

3.5. *US – Shrimp (1998)*²⁹

This landmark case involved a U.S. ban on imports of shrimp harvested in a manner harmful to sea turtles. The WTO Appellate Body ruled that while the U.S. measure could be justified under Article XX(g)³⁰ (relating to the conservation of exhaustible natural resources), its application was found discriminatory and inconsistent with the chapeau (introductory clause) of Article XX.³¹ The ruling emphasized that environmental measures must not be applied in a manner that constitutes arbitrary or unjustifiable discrimination. The case³² affirmed that WTO law permits environmental protection, but such measures must be transparent, fair, and applied consistently.

²⁸ Agreement on Tariffs and Trade 1994, Apr.15,1994,Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 187

²⁹ Appellate Body Report, United States- import prohibition of certain shrimp and shrimp products, WTO Doc.WT/DS58/AB/R(adopted Oct. 12, 1998)

³⁰ Agreement on Tariffs and Trade 1994, Apr.15,1994,Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 187

³¹ Agreement on Tariffs and Trade 1994, Apr.15,1994,Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 187

³² Appellate Body Report, United States- import prohibition of certain shrimp and shrimp products, WTO Doc.WT/DS58/AB/R(adopted Oct. 12, 1998)

3.6. *EC – Asbestos (2001)*³³

In this dispute, Canada challenged a French ban on asbestos products, arguing it was a disguised restriction on trade. The WTO Appellate Body upheld the ban, recognizing the protection of human health as a legitimate objective under Article XX(b)³⁴. The ruling emphasized that WTO members have the right to set their own levels of protection for public health. This case³⁵ underscored the WTO's deference to national regulatory autonomy in the context of public health and safety.

3.8. *Brazil – Retreaded Tyres (2007)*³⁶

Brazil banned the importation of retreaded tyres to address environmental and public health concerns. The measure was challenged by the European Union. The WTO panel found that while the measure violated WTO rules, it could be provisionally justified under Article XX(b)³⁷, though Brazil's inconsistent enforcement undermined the legitimacy of the measure under the chapeau. This case³⁸ highlighted the importance of coherence and non-discrimination in implementing environmental regulations.

4. Key Principles Emerging from WTO Jurisprudence:

Environmental exceptions are allowed under GATT Article XX³⁹, but must meet both the substantive requirements (e.g., necessity or conservation) and procedural conditions (non-discrimination, non-protectionism). National autonomy is respected, but measures must not be applied in a disguised or arbitrary manner. Burden of proof rests on the country invoking Article XX⁴⁰ to justify its measure. Proportionality and necessity play critical roles in determining the WTO compatibility of environmental measures. While the WTO dispute settlement system has shown some flexibility toward environmental objectives, it still places significant constraints on how such measures can be designed and implemented. Future reform may be needed to provide clearer guidance on how to balance trade liberalization with urgent climate and environmental imperatives.

5. Climate Change Policies and International Trade Tensions

As nations step up efforts to address climate change, they are increasingly adopting policies that have direct or indirect implications for international trade. These include carbon pricing mechanisms, green subsidies, renewable energy mandates, and climate-related import regulations⁴¹. While such measures are essential for environmental sustainability, they often provoke tensions within the global trading system governed by the WTO.

5.1. *Carbon Pricing and Border Adjustments*

Carbon pricing, through taxes or emissions trading schemes, is a cornerstone of climate policy in many countries. However, it can create a competitive disadvantage for domestic industries, especially in sectors exposed to international competition. To address this, some countries are introducing Carbon Border Adjustment Mechanisms (CBAMs), which impose a carbon price on imported goods to equalize the cost of carbon compliance. The European Union's CBAM is the most prominent example, targeting imports in high-emission sectors such as cement, steel, and aluminum⁴². Trade tension arises when exporting countries perceive CBAMs as disguised protectionism or inconsistent with WTO rules, particularly the principles of non-discrimination (MFN and National Treatment).

5.2. *Green Subsidies and Renewable Energy Support*

Governments frequently support the development of green technologies and renewable energy through subsidies, tax credits, and state aid. While these incentives promote climate goals, they can distort trade and lead to WTO disputes under the Agreement on Subsidies and Countervailing Measures

³³ Appellate Body Report, European communities – measures affecting asbestos and asbestos containing products, WTO Doc.WT/DS135/AB/R(adopted March 12, 2001)

³⁴ Agreement on Tariffs and Trade 1994, Apr.15,1994,Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 187

³⁵ Appellate Body Report, European communities – measures affecting asbestos and asbestos containing products, WTO Doc.WT/DS135/AB/R(adopted March 12, 2001)

³⁶ Appellate Body Report, Brazil – measures affecting imports of retreaded tyre, WTO Doc.WT/DS332/AB/R(adopted Dec. 17, 2007)

³⁷ Agreement on Tariffs and Trade 1994, Apr.15,1994,Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 187

³⁸ Appellate Body Report, Brazil – measures affecting imports of retreaded tyre, WTO Doc.WT/DS332/AB/R(adopted Dec. 17, 2007)

³⁹ Agreement on Tariffs and Trade 1994, Apr.15,1994,Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 187

⁴⁰ Agreement on Tariffs and Trade 1994, Apr.15,1994,Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 187

⁴¹ Shalanda H. Baker, Climate Change and International Economic law, ELQ, Vol. 43, No. 1, (page no. 2)(2016)

⁴² Shalanda H. Baker, Climate Change and International Economic law, ELQ, Vol. 43, No. 1, (page no. 2)(2016)

(SCM)⁴³. For example, disputes have arisen over domestic content requirements in solar and wind energy programs, as seen in the Canada – Renewable Energy case. These measures can violate WTO rules if they provide an unfair advantage to domestic producers.

5.3. Trade Measures for Environmental Protection

Countries also employ trade-related measures to restrict the import or export of environmentally harmful products—such as bans on single-use plastics, restrictions on tropical timber, or eco-labeling for sustainable products. While often motivated by legitimate environmental concerns, such measures may conflict with WTO obligations if they are overly trade-restrictive or discriminatory⁴⁴.

5.4. Diverging Standards and Regulatory Fragmentation

As climate regulations evolve, a lack of harmonized standards across countries can create non-tariff barriers to trade. This regulatory fragmentation complicates market access, especially for developing countries lacking the capacity to comply with multiple environmental standards.

5.5. Developing Country Concerns

Developing nations often argue that stringent environmental trade measures—especially those imposed unilaterally by developed countries—may undermine their economic growth and violate the principle of common but differentiated responsibilities (CBDR) recognized in international climate agreements.⁴⁵

While climate change policies are essential for global sustainability, they pose significant challenges for the international trade regime. Balancing environmental objectives with WTO disciplines requires careful legal design, transparent implementation, and greater international cooperation to avoid fragmentation and promote equitable trade-environment outcomes.

6.Reconciling Trade and Climate Goals under International Trade

The increasing urgency of addressing climate change has led to the adoption of ambitious environmental policies by countries worldwide. However, as these policies often intersect with international trade laws and regulations, they can create significant tensions between the goals of liberalizing trade and protecting the environment⁴⁶. Reconciling these two objectives—economic growth and environmental sustainability—is not only necessary but also increasingly possible with the right legal frameworks and international cooperation.

6.1. Clarifying WTO Rules to Accommodate Climate Measures

One of the most effective ways to reconcile trade and climate goals is by clarifying and adapting existing WTO rules to better support environmental measures. While the WTO's General Agreement on Tariffs and Trade (GATT)⁴⁷ does include exceptions under Article XX⁴⁸ for measures related to environmental protection, these exceptions have been applied inconsistently, creating legal uncertainty. More explicit provisions within WTO agreements could help resolve conflicts between trade obligations and environmental policies. Proposed reforms might include clearer definitions of “necessary” environmental measures, particularly in relation to carbon border adjustments and green subsidies. Updating GATT⁴⁹ Article XX⁵⁰ to reflect contemporary climate goals and allow for broader exemptions for climate measures could provide more legal certainty to WTO members.

6.2. Promoting Plurilateral Agreements and Cooperation

Given the challenges of achieving consensus among all WTO members on climate-related trade rules, plurilateral agreements offer a promising way forward. Plurilateral initiatives allow a smaller group of countries to negotiate and implement climate-related trade rules that could eventually be

⁴³ Agreement on Subsidies and Countervailing Measures, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1869 U.N.T.S. 14

⁴⁴ Margaret Rosso Grossman, Climate Change and the Law, Vol. 58, AJCL (page no. 12), (2010)

⁴⁵ Margaret Rosso Grossman, Climate Change and the Law, Vol. 58, AJCL (page no. 12), (2010)

⁴⁶ Shalanda H. Baker, Climate Change and International Economic law, ELQ, Vol. 43, No. 1, (page no. 2) (2016)

⁴⁷ Agreement on Tariffs and Trade 1994, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 187

⁴⁸ Agreement on Tariffs and Trade 1994, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 187

⁴⁹ Agreement on Tariffs and Trade 1994, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 187

⁵⁰ Agreement on Tariffs and Trade 1994, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 187

extended to other members. The Agreement on Climate Change, Trade, and Sustainability (ACCTS)⁵¹, for example, is an initiative that aims to create binding multilateral trade rules related to environmental protection, clean energy, and climate-friendly technologies.

Plurilateral agreements can act as a testing ground for innovative trade-environment solutions, encouraging the WTO to adopt similar rules globally. Furthermore, cooperative frameworks between the WTO and other international organizations, such as the United Nations Framework Convention on Climate Change (UNFCCC)⁵², are crucial in promoting consistent and effective global policies on trade and the environment.

6.3. Building Flexibility for Developing Countries

Developing countries often argue that stringent environmental measures, especially those imposed by developed nations, may hinder their economic development and exacerbate inequalities. This concern is rooted in the principle of common but differentiated responsibilities (CBDR), which acknowledges that developed countries have historically contributed more to global emissions and have greater capacity to address climate change. The WTO must consider the differentiated needs of developing countries by providing special and differential treatment (SDT) in climate-related trade policies. This could include extended timelines for compliance, financial assistance, and the flexibility to adopt climate measures that do not unduly impact their economic development⁵³. Such flexibility can also allow developing countries to implement climate policies that are consistent with both their economic goals and their trade obligations.

6.4. Encouraging Green Innovation and Trade in Environmental Goods

Another pathway for reconciling trade and climate goals is through promoting green innovation and the trade of environmental goods and services. The WTO's Environmental Goods Agreement (EGA)⁵⁴, although not yet concluded, seeks to reduce tariffs on products that contribute to environmental protection, such as renewable energy technologies, energy-efficient products, and pollution control equipment. Lowering tariffs and removing non-tariff barriers to the trade of green technologies would encourage the diffusion of sustainable technologies globally, helping countries achieve their climate targets while fostering economic growth⁵⁵. Encouraging green subsidies for innovation in renewable energy, clean technologies, and climate mitigation could be made more compatible with WTO rules by ensuring that these subsidies are not trade-distorting and are focused on global environmental goals.

6.5. Building Transparency and Avoiding Protectionism

Transparency in the design and implementation of climate-related trade measures is essential to ensure that they do not inadvertently become protectionist. The WTO provides a forum for member states to discuss and monitor environmental policies, ensuring they comply with global trade rules. By engaging in regular dialogues, countries can address concerns and resolve disputes related to trade-restrictive environmental measures before they escalate into full-blown trade conflicts. Clear and transparent reporting mechanisms, both within the WTO and other international institutions, can ensure that environmental measures are applied consistently and that their environmental and trade impacts are effectively assessed. The reconciliation of trade and climate goals under international law requires a nuanced, flexible, and cooperative approach. By modernizing WTO rules, encouraging plurilateral agreements, providing flexibility for developing countries, and fostering innovation in environmental goods and services, the global community can achieve a balance between promoting sustainable trade and addressing the pressing challenges of climate change⁵⁶. Moving forward, the success of this reconciliation will depend on the willingness of WTO members to prioritize long-term global sustainability alongside short-term economic interests.

7. Conclusion:

The intersection of climate change and international trade law represents one of the most pressing challenges in the modern global economy. While climate policies are essential for ensuring environmental sustainability and addressing the urgency of climate change, their implementation often creates tensions with existing WTO agreements⁵⁷ designed to liberalize trade. However, these tensions are not insurmountable. The WTO's framework, particularly through provisions like Article XX⁵⁸ of GATT⁵⁹, provides a pathway for balancing environmental protection with trade liberalization. Key

⁵¹ Agreement on Climate Change, Trade, and Sustainability (negotiations launched Sept. 25, 2019)

⁵² United Nations Framework Convention on Climate Change, May 9, 1992, 1771 U.N. T.S. 107

⁵³ Margaret Rosso Grossman, Climate Change and the Law, Vol. 58, AJCL (page no. 12), (2010)

⁵⁴ Environmental Goods Agreement, negotiations launched July 2014,

⁵⁶ Shalanda H. Baker, Climate Change and International Economic law, ELQ, Vol. 43, No. 1, (page no. 2) (2016)

⁵⁷ Agreement on Tariffs and Trade 1994, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 187

⁵⁸ Agreement on Tariffs and Trade 1994, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 187

⁵⁹ Agreement on Tariffs and Trade 1994, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 187

to reconciling trade and climate goals is the development of clear, flexible legal frameworks that allow for effective climate action without undermining the principles of the WTO. This includes clarifying and adapting the WTO's existing provisions to accommodate modern climate measures, such as carbon border adjustments, green subsidies, and renewable energy incentives. Furthermore, plurilateral agreements and enhanced cooperation between the WTO and other international bodies, such as the UNFCCC⁶⁰, are critical to ensuring that climate goals are pursued within a consistent and fair global trading system. The principle of common but differentiated responsibilities must be respected, particularly for developing countries, which require the flexibility and support to implement climate measures that align with their economic development goals. Additionally, fostering innovation in green technologies and encouraging the trade of environmental goods can create mutually beneficial outcomes for both trade and climate objectives. In conclusion, while challenges remain, the reconciliation of trade and climate goals is achievable. By modernizing WTO agreements⁶¹, promoting cooperation, and ensuring transparency, the international community can forge a path forward that supports both economic growth and environmental sustainability. This balance is essential not only for the current generation but also for ensuring a livable planet for future generations. Ultimately, the success of this reconciliation will depend on the collective willingness of nations to adopt a more integrated and long-term approach to international trade and environmental policy.

8. REFERENCES

1. <https://heinonline.org>
2. <https://www.jstore.com>
3. <https://www.scconline.com>
4. <https://www.wto.org>
5. <https://www.britannica.com>
6. <https://www.nextias.com>

⁶¹ Agreement on Tariffs and Trade 1994 , Apr.15,1994,Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 187