



# Multilateralism and climate change: can the WTO set a sustainable course?

## Multilateralismo y cambio climático: ¿puede la OMC trazar un rumbo sostenible?

Olga Falgueras de Álamo  
Tatiana Yanguas Acosta\*  
*World Trade Organisation Law*

### Abstract

The United Nations has long served as the primary forum for international environmental governance, particularly on climate change. While international trade and environmental policy were historically treated as separate domains, they have become inextricably linked: trade policy today must take into account climate action and sustainable development objectives. This article examines the World Trade Organization's evolving role at this critical intersection. We argue that the WTO may serve as a powerful ally in the multilateral response to climate change, given its unique institutional strengths: an established platform for negotiating binding international commitments, a comprehensive legal framework grounded in sustainable development principles, and a dispute settlement mechanism to ensure compliance.

### Resumen

Las Naciones Unidas han servido durante mucho tiempo como el foro principal de la gobernanza ambiental internacional, particularmente en materia de cambio climático. Si bien el comercio internacional y la política ambiental fueron tratados históricamente como ámbitos separados, hoy se encuentran indisolublemente vinculados: la política comercial debe tomar en cuenta la acción climática y los objetivos de desarrollo sostenible. Este artículo examina el papel en evolución de la Organización Mundial del Comercio (OMC) en esta intersección crítica. Sostenemos que la OMC puede desempeñarse como un aliado poderoso en la respuesta multilateral frente al cambio climático, dadas sus fortalezas institucionales particulares: una plataforma consolidada para negociar compromisos internacionales vinculantes, un marco jurídico integral basado en principios de desarrollo sostenible y un mecanismo de solución de controversias orientado a garantizar el cumplimiento.

\* The authors of this article are Counsels at the Advisory Centre on World Trade Organisation Law (ACWL), located in Geneva, Switzerland. Ms Falgueras de Álamo is an international lawyer, LL.M., member of the Lucerne Bar Association (Spain), with over ten years' experience in WTO law, and has worked both at the WTO and at the ACWL. Ms. Yanguas Acosta is an international lawyer, LL.M., expert in German and Spanish law, member of the Madrid Bar Association, with nearly a decade of experience in state-to-state arbitration before the WTO, as well as experience in investment arbitration before ICSID and commercial arbitration before the Stockholm Chamber of Commerce.  
Any opinions or errors in this article are the sole responsibility of the authors. Emails: Olga.Falgueras@acwl.ch and Tatiana.Yanguas@acwl.ch

**Keywords**

Climate change - sustainable development - international trade - WTO - international law.

**Palabras Clave**

Cambio climático - desarrollo sostenible - comercio internacional - OMC - derecho internacional.

**1. Introduction**

Climate change represents one of the greatest threats to humanity, with devastating consequences across the globe. Rising global temperatures cause heat waves, droughts, floods and other natural disasters that threaten the lives and well-being of millions of people (United Nations Habitat, n.d.). In addition, melting glaciers and rising sea levels threaten the livelihoods of communities in coastal areas, displacing vulnerable populations and exacerbating the refugee crisis. Ecosystem disruption is also leading to species extinction, biodiversity loss, and reduced food security, exacerbating poverty and social inequalities (Samaniego *et al.*, 2017).

It is predicted that, by 2100, rising sea levels could cause entire countries to disappear (Hutterer, 2023). For this reason, countries at risk of disappearing, such as Kiribati, are acquiring new land to relocate their inhabitants to higher ground, and Tuvalu has decided to develop its own digital clone with photos and satellite images, which, through the use of augmented and virtual reality, would include elements of its language, customs, and culture so that displaced and future generations of Tuvaluans can continue to exist as a nation (Caramel, 2014; Fainu, 2023).

Given the seriousness of the situation, within the framework of the United Nations (UN), 196 countries have signed the Paris Agreement, which came into force on 4 November 2016, and whose main objective is to limit global warming to well below 2°C, preferably to 1.5°C, compared to pre-industrial levels, as established in article 2.1(a).

Achieving this goal is the minimum necessary to prevent irreversible damage to humanity. The

Intergovernmental Panel on Climate Change (IPCC)<sup>1</sup> noted in a 2023 study based on the findings of more than 700 scientists that every fraction of a degree of warming significantly intensifies the effects of climate change and that “even limiting the global temperature increase to 1.5°C would not be a safe state for all people” as “950 million people in arid areas of the world will experience water stress, heat stress and desertification, while the proportion of the global population exposed to flooding will increase by 24%” (Boehm & Schumer, 2023).

Although fossil fuels are the main source of greenhouse gas (GHG) emissions, combating the climate crisis requires drastic reductions in emissions across society. Power generation, buildings, industry and transport are responsible for about 80% of global emissions, while agriculture, forestry and other land uses account for the rest.

The climate emergency has prompted international organizations, including the UN, the World Bank Group, the International Monetary Fund (IMF), and the Organization for Economic Co-operation and Development (OECD), to devote their resources and expertise to supporting the reduction of global warming in line with the Paris Agreement.

Historically, the WTO maintained a clear separation between trade and environment. Today, this distinction is blurring as Members elevate environmental priorities in their trade agendas, as evidenced by the European Green Deal<sup>2</sup> and the U.S. Inflation Reduction Act<sup>3</sup>. Thus, nowadays, trade policy increasingly requires balancing commercial interests with climate commitments and sustainability goals<sup>4</sup>. This article addresses the question of what the WTO’s role should be in this area and whether it has the right tools to chart a sustainable course.

1 The IPCC was established by the UN in 1988 to facilitate comprehensive assessments of the state of scientific, technical and socio-economic knowledge on climate change, its causes, potential impacts and response strategies. Since its inception, the IPCC has prepared six assessment reports, the latest of which was completed in 2023. The various volumes of the report can be consulted at <https://www.ipcc.ch/reports/?rp=ar6>

2 The European Green Deal is “a package of policy initiatives aimed at putting the EU on the path to a green transition, with the ultimate goal of achieving climate neutrality by 2050”. The European Green Deal includes reducing pesticide use by 50% by 2030, banning imports of products from deforested areas, and imposing a carbon border adjustment mechanism, among other measures. See European Council, “European Green Deal”, <https://www.consilium.europa.eu/es/policies/green-deal/>

3 The US Inflation Reduction Act (IRA) allocates nearly \$400 billion over the next ten years to the green transition and constitutes the largest climate investment package in US history. The IRA provides incentives in the form of investment and production tax credits that include local content requirements (Suárez-Cuesta, *et al.*, 2024; United States EPA, n.d.).

4 For example, the last three editions of the WTO Public Forum, the WTO’s most important outreach event examining the latest developments in global trade, have addressed climate issues and sustainable development. In 2024, the theme of the Public Forum

This article is structured as follows. Following the abstract and this introduction, section 2 describes the work of international organizations to reduce global warming and promote sustainable development. Section 3 focuses on the work of the WTO in the same area. Section 4 analyses the WTO's resources and limitations in charting a sustainable course. Finally, section 5 concludes.

## 2. What are international organizations doing to reduce global warming and promote sustainable development?

### 2.1. Introduction

Historically, global warming has been caused by GHG emissions from industrialised countries, particularly the United States and European countries<sup>5</sup>. However, in recent decades, annual GHG emissions have increased significantly in the rest of the world, particularly in Asia, and especially in China<sup>6</sup>. In fact, China alone produces half of these emissions, and India, South Korea, Japan and Indonesia are also among the top ten CO<sub>2</sub> emitters worldwide (Our World in Data, 2025; Hugot & Pagaduan, 2023).

The increase in Asian GHG emissions is proportional to the increase in its gross domestic product, which has undoubtedly brought prosperity and growth to the region (Hugot & Pagaduan, 2023). However, the increase in GHG emissions comes at a crucial time when humanity cannot afford to intensify the already serious climate crisis.

At the same time, some emerging economies and developing countries argue that, first, global environmental problems have been caused largely by industrialised countries, which emitted GHG emissions indiscriminately for their industrial development and therefore have the primary responsibility for reducing GHG emissions. Secondly, these countries defend their right to economic development and highlight the need to receive technology transfers and financing in order to carry out an effective green transition (Ülgen, 2021). To further complicate the picture, the nations most severely affected by climate change typically

contribute minimally to GHG emissions while facing acute economic vulnerability (United Nations, n.d.).

Faced with this tension between economic development and environmental protection, multilateral organizations focused on these fields are attempting to define a roadmap that is acceptable to all nations. Below, we discuss the efforts of the UN, the World Bank Group, the IMF, and the OECD.

### 2.2. UN

The United Nations has provided a forum par excellence for discussing climate change. The 1972 United Nations Conference on the Human Environment in Stockholm was the first to give priority to environmental issues at the global level. At that conference, key principles for managing the environment were adopted, and a dialogue was initiated between industrialised and developing countries on economic growth, pollution, and human well-being (Handl, 2012).

In 1992, twenty years after Stockholm, the United Nations Conference on Environment and Development was held in Rio de Janeiro. This conference adopted the "Rio Principles", which formalised the principle of sustainable development<sup>7</sup>, and the United Nations Framework Convention on Climate Change (UNFCCC), the first international treaty to recognise that human activities contribute to climate change and that climate change is a matter of global concern (Handl, 2012).

The UNFCCC has been in force since 1994 and has been ratified by 198 signatory states or Parties, including the United States and China (UN, n.d.). Article 3.1 of the UNFCCC establishes the principle of common but differentiated responsibilities and respective capabilities. This means that while all countries have an obligation to protect the climate system, this responsibility falls mostly on developed countries because they are the source of most past and present GHG emissions and have the capabilities or means to remedy the consequences<sup>8</sup>.

<sup>1</sup> is "Reglobalisation: Better Trade for a Better World" and focuses on sustainable and inclusive development. In 2023 and 2022, the themes of the Public Forum were "Time to act" and "Towards a sustainable and inclusive recovery: from ambition to action," respectively, both of which focused on the relationship between international trade, the environment, climate change and sustainable development.

<sup>5</sup> From 1900 to 1950, the United States and European countries were responsible for nearly 90% of annual GHG emissions. See Our World in Data, "Cumulative CO<sub>2</sub> emissions," <https://ourworldindata.org/grapher/cumulative-co-emissions>

<sup>6</sup> Currently, annual GHG emissions from the United States and European countries account for just under one-third of total annual global GHG emissions. See Our World in Data, "Annual CO<sub>2</sub> emissions," <https://ourworldindata.org/grapher/annual-co2-emissions-per-country>

<sup>7</sup> Within the United Nations, the term "sustainable development" is understood to mean development that meets the needs of the present without compromising the ability of future generations to meet their own needs. See Brundtland Commission, "Our Common Future" (1987), p. 5, <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>

<sup>8</sup> Mitigation means reducing the severity of climate change impacts by preventing or reducing GHG emissions into the atmosphere. GHG emissions are mitigated by reducing the sources of these gases—for example, by increasing the share of renewable energy or

In practical terms, the UNFCCC does not legally oblige Parties to reduce GHG emissions and does not set targets or deadlines for doing so. Articles 4.2, 4.3 and 4.4 of the UNFCCC only impose a vague obligation on developed countries (Annex I countries)<sup>9</sup> to mitigate greenhouse gas emissions (“take the lead”) and to provide financial resources to developing countries for the implementation of the Convention, technology transfer and adaptation costs<sup>10</sup>. Developing countries are subject to general obligations, such as conducting inventories of their GHG emissions, which also apply to developed countries, as established in Article 4.1(a) of the UNFCCC.

In order to achieve the objectives of the UNFCCC, frequent meetings between the Parties, known as the Conference of the Parties, or COP, are required<sup>11</sup>. The COP meets every year, unless the Parties decide otherwise. COP 1 was held in Berlin in 1995, one year after the UNFCCC came into force. Since then, it has been convened every year, with the exception of 2020 (due to the COVID-19 pandemic)<sup>12</sup>.

COP 3 adopted the Kyoto Protocol, committing industrialised countries and economies in transition to limit and reduce GHG emissions over two periods<sup>13</sup>. The protocol was signed in 1997 and entered into force in 2005. There are currently 192 Parties to the Kyoto Protocol, not including the United States and Canada (United Nations, n.d)<sup>14</sup>. There were several reasons why the Kyoto Protocol was not considered effective in reducing global warming, namely the absence of the United States,

historically the country with the highest GHG emissions, the unambitious reduction targets, and the lack of commitments for the non-industrialised world. Unavoidably, global warming continued to increase after its signing.

Faced with an imminent worsening of climate conditions, COP 21 adopted the Paris Agreement, the most important global climate agreement in history, with 196 signatories, including the United States until January 2026<sup>15</sup>. It entered into force in 2016, once ratified<sup>16</sup>. As mentioned above, the main objective of this agreement is to limit global warming to well below 2°C, preferably to 1.5°C, compared to pre-industrial levels<sup>17</sup>. To achieve this, the Parties aim to reach peak GHG emissions as soon as possible in order to achieve a climate-neutral planet by 2050<sup>18</sup>.

This agreement represents a milestone in international environmental law as it binds all countries, regardless of their level of development, to achieve the common goal of limiting global warming through nationally determined contributions every five years (NDCs)<sup>19</sup>. In addition, the Parties have the power to set their long-term strategies for low greenhouse gas emissions development<sup>20</sup>. While both short- and long-term commitments fall on all Parties, the Paris Agreement recognises that NDCs and long-term strategies will be set on the basis of the principle of common but differentiated responsibilities and respective capabilities, and “in light of different national circumstances”<sup>21</sup>. In principle, this means that

establishing a cleaner mobility system—or by improving the storage of these gases, for example, by increasing the size of forests. In short, mitigation is human intervention that reduces sources of GHG emissions and/or improves sinks (European Environment Agency, n. d.). See also European Environment Agency, ‘What is the difference between adaptation and mitigation?’.

- 9 “Developed countries” or “Annex I countries” are industrialised countries. Most belong to the OECD. Countries “in transition to a market economy” in Central and Eastern Europe are also included.
- 10 Adaptation means anticipating the adverse effects of climate change and taking appropriate measures to prevent or minimise the damage they may cause, or to take advantage of opportunities that may arise. Examples of adaptation measures include large-scale infrastructure changes, such as building dykes to protect against sea level rise, and behavioural changes, such as reducing food waste. In essence, adaptation is the process of adjusting to the current and future effects of climate change (European Environment Agency, n.d).
- 11 Article 7.4 of the UNFCCC.
- 12 Article 7 of the UNFCCC. See also UN, “Conference of the Parties (COP)”, <https://unfccc.int/es/process/bodies/supreme-bodies/conference-of-the-parties-cop>
- 13 The first period, from 2008 to 2012, consisted of an average reduction of 5% in GHG emissions below 1990 levels, and the second period, from 2013 to 2020, consisted of a reduction in GHG emissions of at least 18% below 1990 levels. See UN, “What is the Kyoto Protocol?”, [https://unfccc.int/kyoto\\_protocol](https://unfccc.int/kyoto_protocol)
- 14 See UN, “What is the Kyoto Protocol?”, [https://unfccc.int/kyoto\\_protocol](https://unfccc.int/kyoto_protocol). The United States signed the Kyoto Protocol but never ratified it (Hovi, et al., 2012). Canada did ratify it but withdrew in 2011, just before the end of the first reduction period (Ramos, 2015).
- 15 US Department of State, Office of the Spokesperson, Press Release, Statement by Secretary of State Antony J. Blinken, “United States Officially Rejoins the Paris Agreement”, 19 February 2021, <https://2021-2025.state.gov/the-united-states-officially-rejoins-the-paris-agreement/>. However, on January 20 2025, President Trump signed an executive order to withdraw the United States from the Paris Agreement for the second time. The formal withdrawal has taken effect in January 2026, one year after notification to the UN, as required by the agreement’s terms. See <https://www.whitehouse.gov/presidential-actions/2025/01/putting-america-first-in-international-environmental-agreements/>
- 16 It had to be ratified by at least 55 countries representing 55% of global GHG emissions. See <https://unfccc.int/process-and-meetings/the-paris-agreement>
- 17 Article 2.1(a) of the Paris Agreement.
- 18 Article 4.1 of the Paris Agreement.
- 19 Article 3 of the Paris Agreement. See also UN Climate Change, “The Paris Agreement”, <https://unfccc.int/process-and-meetings/the-paris-agreement>
- 20 Articles 4.3 and 4.19 of the Paris Agreement. See also UN Climate Change, “The Paris Agreement”, <https://unfccc.int/process-and-meetings/the-paris-agreement>
- 21 Articles 4.3 and 4.19 of the Paris Agreement.

developed countries should “continue to take the lead by adopting absolute economy-wide emission reduction targets”<sup>22</sup>.

Another innovative element of the Paris Agreement is the formal recognition that, beyond mitigation and adaptation to global warming, there are *losses and damages* related to the adverse effects of climate change, such as extreme weather events, which particularly affect developing countries<sup>23</sup>.

Conversely, the Paris Agreement does not have a mechanism to compel parties to fulfil their commitments. A transparency and accountability system is used to monitor progress and facilitate performance, including reviews by technical experts, a multilateral peer review process, and the support of a standing committee on implementation and compliance<sup>24</sup>.

### 2.3. World Bank Group

Funding to curb climate change has been the predominant topic of discussion at COPs since the Paris Agreement was established. The commitment to reach *annual* funding of \$100 billion by 2020 (extended to 2025) originated at COP15 in 2009 and only seems to have been met for the first time in 2022<sup>25</sup>. Currently, financing needs are even higher, and funds are insufficient. Thus, the IPCC estimates that between \$140 billion and \$300 billion per year will be needed by 2030, and between \$280 billion and \$500 billion by 2050<sup>26</sup>. Even the Bridgetown initiative to improve financing for sustainability, launched by Barbados at COP27 and updated in 2023 and 2024, calls for £1 trillion in annual financing<sup>27</sup>.

In addition to the shortage of funds, certain studies criticise a tendency for projects aimed at curbing climate change to focus more on mitigation than adaptation (Xie, *et al.*, 2023), and for existing funds to be allocated to environmentally harmful subsidies, which have increased by 55% between 2021 and 2022<sup>28</sup>.

In this context, the World Bank Group has been progressively increasing its commitment to sustainable financing. For example, in 2012, it joined a large group of international development banks to advance a financing methodology for climate change adaptation<sup>29</sup>. Since then, multilateral development banks have issued joint statements at various COPs expressing their commitment to sustainable financing<sup>30</sup>.

This commitment has resulted in a new institutional strategy that includes more financing, more objectives and additional resources, issued in 2023<sup>31</sup>. Thus, to its main objective of eradicating extreme poverty, the World Bank Group has added eight new challenges, including adaptation to and mitigation of the effects of climate change<sup>32</sup>. It also aims to improve the spread of its investments and collaboration between countries, and an extra \$50 billion has been added to the G20 Capital Adequacy Framework<sup>33</sup>. Its goal is for 45 % of annual funding to be dedicated to climate change by 2025<sup>34</sup>.

This new roadmap responds to the need for greater financing and the more prominent role given to global banks at COP27<sup>35</sup>. Another achievement of this policy change has been the creation of “temporary debt suspension clauses following a climate crisis”, which allow for the suspension

22 Articles 4.4 and 4.19 of the Paris Agreement.

23 Article 8 of the Paris Agreement.

24 Article 13 of the Paris Agreement.

25 Various studies by the OECD, Oxford Committee for Famine Relief (OXFAM), UNFCCC, and the Government of India indicate annual funding of between \$40 million and \$60 million between 2016 and 2020. See “Delivering on the \$100 billion climate finance commitment and transforming climate finance”, Independent Report commissioned by the UN (2020). The most recent OECD study indicates that the \$100 billion target will only be reached in 2022. See OECD, “Climate Finance Provided and Mobilised by Developed Countries in 2013-2022” (2024).

26 The IPCC’s sixth climate change report indicates that developing countries alone will need £127 billion annually between now and 2030 and £295 billion between now and 2050 to adapt to climate change (IPCC, n.d; UNEP, 2021).

27 “Urgent and Decisive Action Required for an Unprecedented Combination of Crises The 2022 Bridgetown Initiative for the Reform of the Global Financial Architecture”, distributed on 23 September 2022 and updated in June 2023 and May 2024.

28 The study found that during the period analysed, subsidies for fossil fuels had been higher than those for renewable energies (UNEP, 2023).

29 The methodology was expanded in 2015 with the introduction of common principles and reformed in 2022 (Multilateral Development Banks, 2022).

30 The group comprises the African Development Bank, the Asian Development Bank, the Asian Infrastructure Investment Bank, the Council of Europe Development Bank, the European Bank for Reconstruction and Development, the European Investment Bank, the Inter-American Development Bank Group, the Islamic Development Bank, the New Development Bank, and the World Bank Group. The latest joint statement was at COP28.

31 World Bank Group, “Evolving the World Bank Group’s Mission, Operations, and Resources: A Roadmap,” (18 December 2022).

32 The eight challenges are adaptation to climate change and mitigation of its effects, fragility and conflict, pandemic prevention and preparedness, access to energy, food and nutrition security, water security and access, digitalisation, and protection of biodiversity and nature. See World Bank, “Evolving the World Bank Group’s Mission, Operations, and Resources: A Roadmap,” (18 December 2022).

33 World Bank Group, “Evolving the World Bank Group’s Mission, Operations, and Resources: A Roadmap” (18 December 2022).

34 World Bank Group, “World Bank Group and IMF Deepen Joint Effort to Scale Up Climate Action,” press release (31 May 2024).

35 World Bank Group, “Evolving the World Bank Group’s Mission, Operations, and Resources: A Roadmap,” (18 December 2022).

of principal and interest payments on loans<sup>36</sup>. What is more, there is international interest in further extending the suspension conditions of these clauses, as currently the suspension is only enforceable in crises caused by cyclones, hurricanes, and earthquakes<sup>37</sup>. During COP28, some countries such as France and the United Kingdom, together with other development banks, affirmed their intention to include such temporary suspension clauses in their financing policies<sup>38</sup>.

Similarly, the World Bank Group has been actively involved in establishing and supporting a fund created at COP28 to cover the losses and damages caused by climate change described in the previous section<sup>39</sup>. It has been part of the fund's Transition Committee, will serve as its provisional headquarters and secretariat for a period of four years, and provides financial support to the fund<sup>40</sup>. The World Bank Group's mandate to act as the fund's headquarters is provisional, due to conditions imposed by some countries during COP28, including: (1) that the fund finance countries that are not members of the World Bank Group, (2) that it be accessible to both regional and national governments, and (3) that it commit to investing in capital markets<sup>41</sup>. Compliance with these conditions will be reviewed in four years, after which a decision will be made on whether the World Bank Group will continue in its role. This trial period will undoubtedly serve to assess whether the World Bank Group's paradigm shift has been effective.

## 2.4. IMF

The IMF has three main functions: lender, guardian of good regulatory practices, and provider of technical assistance. Regarding its objectives, Article I of its Founding Agreement states that the IMF's general resources may only be used to address temporary balance of payments problems and ensure global monetary stability. This would seem to rule out the possibility of addressing climate change issues. However, current IMF guidelines

offer some flexibility to include climate-related objectives in lending programmes.

The IMF's efforts to make recommendations based on resource efficiency arose in preparation for the 1992 Rio Conference, although these were recommendations rather than active assistance, which was considered outside its mandate. Since then, the IMF has vacillated between demands to extend its lending system to address specific environmental problems<sup>42</sup>, and a focus on outreach and advisory work, in line with its original mandate. For the IMF, climate change has evolved from being an issue with certain negative macroeconomic consequences that therefore needed to be taken into account, to one of the most serious macroeconomic problems facing the world today.

The IMF's most recent projects seem to reflect a shift towards lending services. The new Resilience and Sustainability Trust, administered by the IMF and established with effect from 1 May 2022, enables IMF members to address the long-term challenges posed by climate change. The and higher credit tranche (HCT)<sup>43</sup> programmes associated with this resilience fund are intended to cover all aspects of addressing short-term and medium-term balance of payments needs, including those related to climate change, while structural challenges requiring a long-term horizon will be covered by the Resilience and Sustainability Trust<sup>44</sup>.

Additionally, the IMF has close institutional ties with the World Bank Group, which has resulted in many joint projects. Since its inception with the 1989 Concordat<sup>45</sup>, collaboration with the World Bank Group has progressively focused on issues arising from climate change. Its most recent achievement is the Climate Macroeconomic Assessment Programme (CMAP), which builds on its predecessor, the Climate Change Policy Assessment (CCPA), and focuses on the macroeconomic implications of climate change. The CMAP has an

36 The terms of these suspensions were broadened and extended to more scenarios following COP28. See World Bank Group, "World Bank Provides Crucial New Support to Countries Affected by Natural Disasters" (1 December 2023).

37 Walsh, T., "COP28 Embraces Debt Pause Clauses," *International Finance Review*, (6 December 2023). It is noteworthy that some countries are attempting to redefine the conditions that determine a state's vulnerability, based on composite criteria to more accurately reflect their actual GDP. See Economic Policy and Small States Section, "GDP+: A Vulnerability Inclusive Measure" (2022).

38 The Inter-American Development Bank, the European Investment Bank, the European Bank for Reconstruction and Development, and the African Development Bank. See African Development Bank, "COP28: African Development Bank, international partners commit to Climate Resilient Debt Clauses" (Press release, 2023).

39 Current levels of funding fall far short of existing needs (between \$20 billion and \$580 billion per decade by 2030) (United Nations, n.d.; Wenger et al., 2023).

40 World Bank Group, "World Bank Board Authorises Bank to Serve as Headquarters and Depository for Loss and Damage Response Fund" (10 June 2024).

41 IPI, "Can the World Bank Deliver on Climate Change? Testing the Evolution Roadmap through Loss and Damage" (2024).

42 For example, the Bridgetown proposal that emerged at COP27 and has been updated since then calls for the IMF to provide most of the funding. See "Urgent and Decisive Action Required for an Unprecedented Combination of Crises The 2022 Bridgetown Initiative for the Reform of the Global Financial Architecture", distributed on 23 September 2022 and updated in June 2023 and May 2024.

43 The IMF disburses its loans in a series of tranches, subject to specific conditions. See "Credit Tranche: What It Is, How It Works, Examples", <https://www.investopedia.com/terms/c/credit-tranche.asp>

44 IMF, "IMF Managing Director Welcomes Creation of Resilience and Sustainability Trust to Help Vulnerable Countries Address Longer-Term Challenges," Press Release No. 22/115 (13 April 2022).

45 IMF-World Bank Concordat, SM/89/54, Rev. 1 (31 March 1989).

expanded mitigation section, which includes carbon pricing design and its associated distributional implications<sup>46</sup>.

In 2023, the two institutions agreed to intensify their collaboration in order to provide joint assistance to countries and other global banks on climate change issues<sup>47</sup>. The IMF also contributes to the G20 Capital Adequacy Framework together with the World Bank Group and leads the Climate Change Indicator Dashboard, an international statistical initiative to compile climate-related data used in macroeconomic and financial stability analysis. This dashboard has been designed in cooperation with various international organizations, including the UN, the World Bank Group, and the OECD<sup>48</sup>.

## 2.5. OECD

The OECD has been monitoring the adoption of financing commitments arising from the COPs since 2015 (OECD, 2024) and issues recommendations on sustainable trade practices at both the governmental and private levels. Its involvement in environmental objectives has been increasing.

In particular, the OECD Guidelines for Multinational Enterprises on Responsible Business Conduct began to include recommendations for reducing GHG emissions in 2011, without explicitly mentioning climate change. The 2023 version of the guidelines not only adds climate change to the list of environmental impacts to be taken into account, but also adds more emphatic language based on scientific risk assessments in line with international rulings (OECD, 2023). For example, these guidelines state that Companies should ensure that their GHG emissions and impact on carbon sinks are consistent with internationally agreed global temperature targets based on the best available science<sup>49</sup> (OECD, 2023), which implies adopting mitigation and adaptation strategies for their own emissions. The guidelines also indicate that these strategies include supply chains, and that the elimination or reduction of emissions should be prioritised over compensation measures. (OECD, 2023) The importance of these recommendations is notable, as many multinationals prefer compensatory

measures (which do not reduce GHG emissions) rather than focusing their efforts on climate change mitigation<sup>49</sup>.

As for the public sector, the OECD not only monitors its financing and projects, but also issues recommendations through the International Programme for Climate Action (IPAC). In 2023, the OECD published two special reports<sup>50</sup>, which encourage increased funding for projects dedicated to climate change adaptation and improved private financing, with better collaboration tools and new financial products.

## 3. What is the WTO doing to reduce global warming and promote sustainable development?

### 3.1. The WTO and sustainable development

The WTO was created in 1995, in a very different context from that of previous organizations. The Rio Conference had already taken place and the debate on collective contribution at the multilateral level was much more present than in previous decades. As discussed in more detail in section 4.4, the Preamble to the Marrakesh Agreement establishing the WTO states that development and environmental protection are objectives of the WTO. Thus, to some extent, these objectives have informed WTO negotiations<sup>51</sup>.

Efforts to reduce global warming and promote sustainable development intensified from 2012 onwards with the launch of the United Nations Sustainable Development Goals (SDGs), under the initiative to end poverty, protect the planet and ensure that by 2030 all people enjoy peace and prosperity. Since 2016, the WTO has reported to the United Nations High-Level Political Forum on its efforts to achieve the trade-related SDGs. In addition, at COP 28, trade was addressed as a specific topic for the first time.

This paradigm shift has greatly accelerated the green transition at the WTO. Sustainable development has gone from being a WTO objective to becoming a “founding principle” for some Members<sup>52</sup>. WTO Director-General Ngozi Okonjo-

46 IMF, “Strengthening infrastructure governance for climate-responsive public investment” (3 December 2021).

47 World Bank Group, Joint Statement by the Managing Director of the IMF and the President of the World Bank, (7 September 2023).

48 The others are the European Commission, the European Statistical Office (Eurostat), the Food and Agriculture Organisation of the United Nations (FAO), the International Energy Agency (IEA) and the National Oceanic and Atmospheric Administration (NOAA).

49 Directive (EU) 2024/1760, in force since July 2024, follows this same line of advocating mitigation over compensation. See Directive (EU) 2024/1760 of the European Parliament and of the Council of 13 June 2024 on corporate sustainability due diligence and amending Directive (EU) 2019/1937 and Regulation (EU) 2023/2859.

50 The “Scaling Up the Mobilisation of Private Finance for Climate Action in Developing Countries: Challenges and Opportunities for International Providers” and the “Scaling Up Adaptation Finance in Developing Countries: Challenges and Opportunities for International Providers”.

51 For example, negotiations on the liberalisation of environmental goods and services began in the 2001 Doha Round (and are still ongoing, as we shall see later). See WTO, “WTO Activities and the Challenge of Climate Change”, [https://www.wto.org/english/tratop\\_e/envir\\_e/climate\\_challenge\\_e.htm?vm=r](https://www.wto.org/english/tratop_e/envir_e/climate_challenge_e.htm?vm=r)

52 “WTO Structured Debates on Trade and Environmental Sustainability, High-Level Review, 2 December 2022: Informal Summary by the Co-Chairs”, INF/TE/SSD/R/15 (15 March 2023).

Iweala has emphasised the urgency of climate action and defined trade as an essential tool for mitigation, adaptation and the promotion of a just green transition<sup>53</sup>.

### 3.2. Main exchanges in the WTO Committees

The WTO has a Committee on Trade and Environment, whose mandate has changed over time. Current negotiations focus on the relationship between the WTO and multilateral environmental agreements, with an emphasis on coordination with other organizations, regional trade agreements, and the removal of tariff and non-tariff barriers to environmental goods and services. Other areas of interest include fiscal policy, intellectual property, and market access (in response to measures that some Members criticise as “green protectionism”). Recently, several Members have proposed holding specific Committee sessions to evaluate other Members’ environmental measures<sup>54</sup>.

Along with the Environment Committee, other WTO committees hold special sessions on environmental issues, such as the Council for Trade in Services, the Committee on Agriculture, the Committee on Subsidies, and the Committee on Technical Barriers to Trade. At these sessions, specific environmental problems and their possible solutions are discussed, as well as issues of standardisation and transparency.

### 3.3. Main negotiation projects at the WTO

The liberalisation of environmental goods and services has been one of the main objectives of the WTO negotiations, together with the harmonisation of the numerous multilateral trade agreements that contain clauses for environmental purposes<sup>55</sup>.

Thus, after a failed attempt to negotiate an Agreement on Environmental Goods to reduce tariffs in 2014, a product of the Doha Mandate, another agreement with environmental objectives was partially approved in 2022: the Agreement on Fisheries Subsidies, with some aspects still under negotiation. The part that has already been ratified aims to eliminate subsidies that contribute to illegal, unreported and unregulated fishing<sup>56</sup>. It is the second agreement that the WTO has formalised

since its inception (after the Trade Facilitation Agreement) and the first to comply with one of the SDGs.

The WTO also promotes other initiatives related to the environment. In 2020, the WTO Trade and Environmental Sustainability Structured Discussions (TESSD) were launched, along with the Informal Dialogue on Plastic Pollution and Sustainable Trade in Plastics. In 2021, the Fossil Fuel Subsidy Reform initiative was launched.

The TESSD aims to complement the work of the WTO Committee on Trade and Environment and advance discussions at the intersection of trade and environmental sustainability, with a view to identifying concrete measures that Members could take individually or collectively. They enjoy broad participation<sup>57</sup> and are currently divided into four informal working groups covering environmental goods and services (thus reviving the unsuccessful negotiations on the failed Agreement on Environmental Goods to reduce tariffs), subsidies, the circular economy and trade-related climate measures. The aim of the TESSD is to translate their discussions into recommendations or roadmaps that can be useful to WTO Members.

For its part, the Informal Dialogue on Plastic Pollution and Sustainable Trade in Plastics seeks concrete solutions to promote trade while addressing plastic pollution (WTO, 2021). Its main objective is to promote multilateral cooperation, transparency and technical assistance, as well as to disseminate a possible list of harmful products. Despite its broad participation and significant activity<sup>58</sup>, the role of this WTO initiative in coordination with a similar project coordinated by the United Nations Intergovernmental Negotiating Committee (INC) remains undefined<sup>59</sup>.

Finally, the Fossil Fuel Subsidy Reform initiative, together with the ancillary negotiations of the Agreement on Fisheries Subsidies, is the only one of the above-mentioned initiatives with regulatory ambition. The objective of the initiative, promoted by New Zealand and involving 48 WTO Member participants, is to “*rationalise, phase out or eliminate*” inefficient or harmful fossil fuel subsidies, while providing assistance to the most vulnerable

53 “WTO Structured Discussions on Trade and Environmental Sustainability, High-Level Review Meeting, 2 December 2022: Informal Summary by the Co-Chairs,” INF/TE/SSD/R/15 (15 March 2023).

54 For example, the United States and China. See WTO, Environment Committee, “Report of the meeting held on 24 and 25 April 2024,” WT/CTE/M/80 (19 June 2024).

55 Goods such as solar panels and solar water heaters, hydroelectric turbines and biogas production equipment, and services such as environmental consulting or soil conservation and nature and landscape protection services (WTO, 2011).

56 WTO, document WT/MIN(22)/33, WT/L/1144.

57 77 WTO Members as of July 2024. See WTO, Trade and Environmental Sustainability, [https://www.wto.org/english/news\\_e/news24\\_e/tesd\\_02jul24\\_e.htm](https://www.wto.org/english/news_e/news24_e/tesd_02jul24_e.htm)

58 83 WTO Members as of February 2025. See WTO, Plastic Pollution and Environmentally Sustainable Trade in Plastics, [https://www.wto.org/english/tratop\\_e/ppesp\\_e/ppesp\\_e.htm#participation](https://www.wto.org/english/tratop_e/ppesp_e/ppesp_e.htm#participation)

59 WTO, “Plastics Dialogue coordinators identify priority areas for future work,” Press release (24 July 2024).

countries<sup>60</sup>. The current work plan focuses on identifying the characteristics of fossil fuel subsidies that are most harmful to the environment and trade, and on determining ways to gradually reduce these most harmful types of subsidies<sup>61</sup>. This initiative is part of a broader debate promoted by various international organizations, many of which are participating in the discussions<sup>62</sup>.

### 3.4. WTO rules

The Preamble to the Marrakesh Agreement recognises that economic growth should aim at “sustainable development... seeking to protect and preserve the environment and to enhance the means to do so, in a manner consistent with their respective needs and interests at different levels of economic development”<sup>63</sup>. Therefore, the founding charter of the WTO also includes the concept of sustainable development, as well as consideration of “needs and interests according to different levels of economic development,” which evokes, to some extent, the principle of common but differentiated responsibilities and respective capabilities, “in light of different national circumstances”, present in the Paris Agreement and discussed above in section 3.2.

Beyond this reference to “sustainable development” in the Marrakesh Agreement, the WTO Agreements do not establish specific rules for environmental measures<sup>64</sup>. This does not mean that WTO disciplines do not apply to environmental measures or that such measures are *a priori* incompatible with WTO rules. Rather, WTO Agreements apply to all trade-affecting measures taken by Members. The concept of “measure” has been interpreted broadly<sup>65</sup>, covering any “act or omission attributable to a WTO Member”<sup>66</sup>. Therefore, all measures taken by WTO Members, including environmental measures, are subject to compliance with WTO agreements and, consequently, to possible scrutiny by panels and the Appellate Body. At the same time, as will be explained below, the WTO Agreements protect Members’ space to pursue public policies, including environmental policies, for example, under the general exceptions in Article XX of GATT 1994.

In general, trade-affecting environmental measures can take many forms<sup>67</sup>. For example,

subsidies may be granted to companies or agricultural producers that use clean energy, or restrictions may be imposed on the use of certain pesticides to protect human health. Higher tariffs may also be imposed on products whose manufacture or transport results in higher GHG emissions, or labelling may be used to inform consumers about such emissions.

The applicability of WTO agreements to these measures will depend on their nature. For example, the Agreement on Agriculture or the Agreement on Subsidies and Countervailing Measures are likely to apply to subsidies depending on whether they are agricultural or industrial, respectively; and the Agreement on Sanitary and Phytosanitary Measures is likely to apply to restrictions on the use of certain pesticides to protect human health. Similarly, the GATT 1994 would be expected to apply to tariffs and the Agreement on Technical Barriers to Trade would be expected to apply to labelling. Also, depending on the nature of the measure, more than one agreement could be applicable, and in any case, the general disciplines of the GATT 1994 could be relevant.

With regard to the general disciplines of GATT 1994, the applicable provisions will also depend on the nature of the measures. In principle, if the measure in question applies only to imported products (also known as “border measures”), the relevant provisions could be Article I (Most-Favoured-Nation or MFN obligation), Article II (tariff concessions), Article XI (general elimination of prohibitions and quantitative restrictions) and Article X (publication and administration of trade regulations). Conversely, if the measure applies to both imported and domestic products, the relevant provisions could be Article I (MFN obligation), Article III (National Treatment obligation), and Article X (publication and administration of trade regulations). Similarly, if the measure in question only applied to exported products, the relevant provisions could be Article I (MFN obligation) and Article X (publication and administration of trade regulations).

In the event of a potential violation of these provisions, the measure in question could be justified under Article XX, presumably under

60 “Ministerial Communication on Fossil Fuel Subsidies,” WT/MIN(24)/19 (26 February 2024).

61 “Ministerial Communication on Fossil Fuel Subsidies,” WT/MIN(24)/19 (26 February 2024).

62 The G20, G7, Asia-Pacific Economic Cooperation Forum, Agreement on Climate Change, Trade and Sustainability, V20 Group of Finance Ministers from Climate-Vulnerable Economies, Paris Agreement on Climate Change, and Addis Ababa Action Agenda on Financing for Development. See WTO, Reform of Fossil Fuel Subsidies, [https://www.wto.org/english/tratop\\_e/envir\\_e/fossil\\_fuel\\_e.htm](https://www.wto.org/english/tratop_e/envir_e/fossil_fuel_e.htm)

63 First recital of the Preamble to the Marrakesh Agreement establishing the World Trade Organization.

64 Meaning measures aimed at reducing global warming, protecting the environment or contributing to sustainable development.

65 Appellate Body Report, *United States – Anti-Dumping Methods (China)*, paragraph 5.125. In accordance with Article XXIII:1 of GATT 1994, a WTO Member may lodge a complaint if it considers that “an advantage resulting directly or indirectly from this Agreement is being nullified or impaired...”. Similarly, Articles 3.3, 4.4 and 6.2 refer generally to “measures”.

66 Appellate Body Report, *United States – Sunset Review: Corrosion-Resistant Steel*.

67 This article does not address the compatibility of specific measures with WTO rules. Other contributions have already carried out this theoretical exercise (Espa *et al.*, 2022).

subparagraphs (b) or (g). Article XX(b) concerns measures “necessary to protect human, animal or plant life or health”. Article XX(g) covers measures “relating to the conservation of exhaustible natural resources, provided that such measures are applied in conjunction with restrictions on domestic production or consumption”. In interpreting this latter provision, the Appellate Body found that WTO Members have the right to take measures to conserve “depletable natural resources” and interpreted those terms in light of United Nations conventions, including the Convention on International Trade in Endangered Species of Wild Fauna and Flora<sup>68</sup>.

More recently, in *the EU and certain Member States – Palm Oil (Malaysia)*, a WTO panel addressed the compatibility of certain environmental measures with WTO rules. The panel considered that some elements of the EU measure violated the Agreement on Technical Barriers to Trade and the GATT 1994, in particular the provisions on discrimination because they excluded palm oil biofuels produced by Malaysia (while allowing similar biofuels produced by the EU) from the EU biofuel regime<sup>69</sup>.

Notwithstanding the above, the panel concluded that the violations in question would appear to pursue the public policy objectives of Articles XX(b) and XX(g). However, due to flaws in the *application* of the measures (failure to review data on the environmental impact of palm oil), the requirements of *the chapeau* of Article XX were not met, which requires that measures not be applied in a manner that constitutes “a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail” and that they not be “a disguised restriction on international trade”<sup>70</sup>.

Notably, one of the members of the panel issued a separate opinion, i.e. a dissenting vote, regarding the panel’s findings under Article XX of GATT 1994. According to this panelist, the defects of the EU measures are not limited to their application, but to the measures themselves, as Malaysia had provided sufficient evidence to show that the EU measures had been adopted with certain elements of “protectionism”; and, since protectionism exists, it cannot be considered a measure with a “legitimate objective” that could be justified under the Agreement on Technical Barriers to Trade or under Article XX of GATT 1994<sup>71</sup>.

In light of the above, and considering that this report was not appealed, it is not entirely clear to what extent such measures (when suspicions of protectionism arise) could be justified under Article XX.

In short, there is a possibility that environmental measures could contravene the provisions of the WTO Agreements, particularly in their application. At the same time, in principle, such violations could be justified under Articles XX(b) and (g) of the GATT 1994 when they are necessary to protect human, animal or plant life or health, or to conserve exhaustible natural resources, if the conditions of the relevant subparagraphs and the *chapeau* are met.

#### 4. Analysis: The WTO’s resources and limitations in charting a sustainable course

The early years of the WTO were marked by anti-globalisation sentiment, which sparked public debate and led to the 1999 protests in Seattle, where the WTO was accused of being responsible for anti-environmental policies. This, coupled with the fact that trade has not traditionally been seen as a tool for environmental protection, called into question the WTO’s role in setting a sustainable course.

Although trade was not mentioned in the Paris Agreement or in negotiation proposals such as the Bridgetown initiative, its role as a promoter of a sustainable economy has been highlighted in SDG 17 to revitalise the global partnership for sustainable development<sup>72</sup>. More recently, doubts seem to have been dispelled: numerous international organizations have highlighted the importance of trade in the environmental discourse,<sup>73</sup> and COP28 has dedicated a day to the work of trade and the need to harmonise the numerous multilateral trade agreements with environmental protection measures.

The WTO is the only multilateral organization that coordinates international trade on a large scale; it has 166 members and its functions include coordinating the environmental protection clauses of numerous regional trade agreements<sup>74</sup>. It is therefore in a privileged institutional position to address the debate on trade and sustainability.

68 Appellate Body Report, *United States – Shrimp*, paragraphs 127–134.

69 Panel Report, *EU and certain Member States – Palm Oil (Malaysia)*, paragraphs 7.996–7.999.

70 Panel report, *EU and certain Member States – Palm oil (Malaysia)*, paragraphs 7.1074–7.1082, 7.1083–7.1088, and 7.1092–7.1098.

71 See Panel Report, *EU and certain Member States – Palm Oil (Malaysia)*, paragraph 7.1459.

72 UN, Sustainable Development Goal 17. See <https://sdgs.un.org/goals/goal17>

73 WTO/UNEP, “Trade and Climate Change” (2009); UNFCCC, “The concept of economic diversification in the context of response measures”; and UNFCCC, “Just Transition of the Workforce, and the Creation of Decent Work and Quality Jobs”.

74 As we saw in section 4.2, this is one of the objectives of the WTO Environment Committee. See WTO, “Items on the CCMA Work Programme”, [https://www.wto.org/english/tratop\\_e/envir\\_e/cte00\\_e.htm](https://www.wto.org/english/tratop_e/envir_e/cte00_e.htm)

While the WTO has recognised that international trade is responsible for 20-30% of global GHG emissions and creates industrial association incentives that can be disruptive<sup>75</sup>, the WTO maintains that with the right policies, trade can be a good ally for sustainable development<sup>76</sup>. For example, the WTO believes that promoting more sustainable transport can offset the most harmful effects of international trade<sup>77</sup>.

Furthermore, in its 2024 annual report, the WTO argues that developing countries will be much more affected by climate change<sup>78</sup>, and although it indicates that more sustainable trade will be the engine of development for the most vulnerable economies, it warns that excessively protectionist sustainable measures could have a very negative impact on developing countries<sup>79</sup>.

As we can see, the WTO faces a number of dilemmas. On the one hand, policies that promote the use of green energy or production systems can be detrimental to developing countries, which do not have the resources to adapt their systems so quickly. On the other hand, as we indicated above, trade itself is currently responsible for a large part of global GHG emissions. It seems that too many green policies upset the economic balance, and too much trade upsets the ecological balance.

The first problem is common to most of the multilateral organizations we have studied in this article. The World Bank Group and the IMF also face situations where financing renewable energy or environmentally friendly production processes is not viable in emerging or underdeveloped industries, or where the countries most in need of such financing are already heavily indebted and cannot qualify for such projects<sup>80</sup>. However, the WTO has a certain advantage in this debate: trade itself is good for development, and trading in environmental goods will bring both economic and ecological benefits. This is why the WTO promotes trade in environmental goods from an economic point of view as well, in line with its mandate to liberalise international trade.

The second problem is the responsibility of international trade as the source of 20-30% of global GHGs. How can WTO Members complement their primary mandate, to liberalise and promote international trade, with the obligation to reduce

GHG emissions? This debate is not new and has been present since the organisation's creation, often associated with anti-globalisation positions. The solution proposed by the WTO is, as we have seen, pragmatic: to work on production and transport systems and production chains. Using econometric models, it argues that, in almost all aspects related to trade, the contribution to more sustainable energy use and production models can offset the GHG emissions associated with trade. The only exception is transport, where efforts must be made to make it more sustainable<sup>81</sup>, which is also recommended by the IPCC.

Thus, if we accept that international trade can promote sustainable energy and practices, and that, with good regulatory practices, the harmful effects of international trade could be offset, two questions arise: (a) what is the role of the WTO in the multilateral context in addressing the issue of sustainability? And, (b) is the WTO setting a sustainable course?

To answer the first question, we need to analyse the role of the WTO in the context of the other international organizations studied. All of them share a multilateral scope and close collaboration with the obligations of the Paris Agreement. They also share the fact that, in some way, they have extended their objectives or mandate to comply with the objectives of the Paris Agreement. The major difference between them and the WTO is at the regulatory level: as we have seen, the WTO has a solid set of rules, over which WTO panels have exclusive, binding and contentious jurisdiction, backed by a dispute settlement system that has so far recorded a 90% compliance rate, and which, in any case, provides for retaliatory measures in the event of non-compliance. No other organization studied can offer a similar compliance system.

Equally noteworthy are the efforts to promote transparency, such as the platform for notifications of measures that could constitute a technical barrier to trade<sup>82</sup>.

However, the WTO regulatory system has its limitations. We have already indicated that the current system has one main defence instrument for promoting environmental measures: the general exceptions in Article XX of GATT 1994. The fact that the main defence for justifying

75 WTO, "The impact of trade openness on climate change", *Trade Issues*; and WTO, "The carbon content of international trade", *Trade Policy Report* No. 4 (2022). The WTO recognises that between 20-30% of global carbon emissions are associated with international trade, and that emissions from developing countries increased dramatically following the rise of globalisation in the 1980s.

76 WTO, "Overview of trade policies adopted to address climate change", *Trade Policy Report* No. 1 (2022).

77 WTO, "The carbon content of international trade", *Trade Policy Report* No. 4 (2022).

78 WTO, *World Trade Report*, (2024).

79 WTO, *World Trade Report*, (2024).

80 IPI, *Can the World Bank Deliver on Climate Change? Testing the Evolution Roadmap through Loss and Damage* (2024).

81 WTO, "The carbon content of international trade", *Trade Policy Report* No. 4 (2022).

82 WTO, e-PING platform, <https://www.epingalert.org/>

environmental measures is through a general exception has important legal consequences. It means that an environmental measure must be justified through the dispute settlement system, and places the burden of proof on the defendant who is the author of the measure. In other words, an environmental measure is potentially incompatible with WTO agreements until the author proves otherwise. This implies a “judicialisation” of the control of environmental measures, which entails procedural costs and is not viable in the long term. Therefore, the negotiation of new agreements on environmental measures could be favourable.

This leads us to the second question: what specific actions should the WTO take in response to the shortcomings identified? The WTO has a unique opportunity to create binding rules for its members on such important issues as green subsidies, tariff liberalisation of environmental goods, and transparency of environmental measures. Currently, there are two agreements with environmental objectives under negotiation and partial ratification within the WTO: the Agreement on Fisheries Subsidies and the Reform of Fossil Fuel Subsidies. While the second round of negotiations on fisheries subsidies appears to be active and determined to reach an agreement in the short term, the reform of fossil fuel subsidies is at a very preliminary stage, with no confirmation of its scope, purpose, or binding nature.

However, negotiations at the WTO must be based on consensus among its 166 members<sup>83</sup>. This decision-making practice often results in delays and, in some cases, deadlocks. Furthermore, there are no specific negotiations on other fundamental issues such as environmental goods and services, production systems, trade externalities, and the circular economy, beyond discussions in committees or structured debates. Moreover, the Environment Committee is still working on appropriate solutions to harmonise the numerous environmental regulations in regional trade agreements and to coordinate with parallel initiatives in other international organizations. Everything therefore remains in limbo.

## 5. Conclusion

This article describes the work of international organizations to reduce global warming and promote sustainable development in line with the historic Paris Agreement. The United Nations has provided a forum par excellence for discussing the environment, and climate change in particular. Traditionally, international trade and the environment were considered separate and independent issues. However, today it seems

impossible to address trade policy without incorporating the fight against climate change and the promotion of sustainable development into the equation. This article therefore addressed the question of what the WTO's role should be in this area and whether the WTO has the appropriate tools to chart a sustainable course.

Our analysis concludes that the WTO could become a strong ally of the multilateral system in the fight against global warming. It stands out from other international organizations because it has a solid set of rules based on sustainability and respect for the environment, which is also backed by a dispute settlement system. Similarly, the WTO is the first organisation to have begun negotiating and approving multilateral trade agreements whose main objective is sustainable development: the Agreement on Fisheries Subsidies and the Reform of Fossil Fuel Subsidies.

However, the effectiveness of the WTO is undermined by the lack of substantive negotiations on fundamental issues such as trade in environmental goods and services or subsidies for sustainable means of production. The WTO has the institutional capacity and resources for its Members to discuss these issues, which places it in a unique position on the international stage that should not be wasted.

## Reference list

- African Development Bank. (2023, December 12). *COP28: African Development Bank, international partners commit to Climate Resilient Debt Clauses*. <https://www.afdb.org/en/news-and-events/press-releases/cop28-african-development-bank-international-partners-commit-climate-resilient-debt-clauses-67000>
- Hugot, J. & Pagaduan, J. (2023, December 15). *Strategies for Rapidly Decoupling Carbon Dioxide Emissions from GDP in Asia and the Pacific*. *Asian Development Blog*. <https://blogs.adb.org/blog/strategies-rapidly-decoupling-carbon-dioxide-emissions-gdp-asia-and-pacific>
- Brundtland Commission. (1987). *Our Common Future*. <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>
- Caramel, L. (2014, July 1). *Besieged by the rising tides of climate change, Kiribati buys land in Fiji*. *The Guardian*. <https://www.theguardian.com/environment/2014/jul/01/kiribati-climate-change-fiji-vanua-levu>
- Chen, J. (2026, January 28). *Understanding Credit Tranches: IMF Loan Process Explained*. Investopedia.

83 Article IX:1 of the Marrakesh Agreement.

<https://www.investopedia.com/terms/c/credit-tranche.asp>

Samaniego, J., Galindo, L., M., Mostacedo, J., Ferrer, J., Alatorre, J.E. & Reyes, O. (2017). *El cambio climático y sus efectos en la biodiversidad de América Latina*. Comisión Económica para América Latina y el Caribe (CEPAL). [https://www.cepal.org/sites/default/files/news/files/sintesis\\_pp\\_cc\\_cc\\_y\\_sus\\_efectos\\_en\\_la\\_biodiversidad.pdf](https://www.cepal.org/sites/default/files/news/files/sintesis_pp_cc_cc_y_sus_efectos_en_la_biodiversidad.pdf)

Economic Policy and Small States Section. (2022). *GDP+: A Vulnerability Inclusive Measure*. [https://production-new-commonwealth-files.s3.eu-west-2.amazonaws.com/s3fs-public/2022-06/ANNEX%205A%20GDP%20plus%20An%20Inclusive%20Vulnerability%20Measure.pdf?VersionId=otyo1vfhXffXBh3LZxuaQR\\_PNyQJUtkb](https://production-new-commonwealth-files.s3.eu-west-2.amazonaws.com/s3fs-public/2022-06/ANNEX%205A%20GDP%20plus%20An%20Inclusive%20Vulnerability%20Measure.pdf?VersionId=otyo1vfhXffXBh3LZxuaQR_PNyQJUtkb)

Espa, I., Francois, J. & van Asselt, H. (2022, January 2). *The EU Proposal for a Carbon Border Adjustment Mechanism (CBAM): An Analysis under WTO and Climate Change*. WTI Working Paper No. 06/2022. <https://www.wti.org/research/publications/1375/the-eu-proposal-for-a-carbon-border-adjustment-mechanism-cbam-an-analysis-under-wto-and-climate-change-law/>

Consejo Europeo. (2025, February 21). *Pacto Verde Europeo*. <https://www.consilium.europa.eu/es/policies/green-deal/>

European Environment Agency. (n.d.). What is the difference between adaptation and mitigation?. <https://www.eea.europa.eu/help/faq/what-is-the-difference-between>

Fainu, K. (2023, June 27). Facing extinction, Tuvalu considers the digital clone of a country. *The Guardian*. <https://www.theguardian.com/world/2023/jun/27/tuvalu-climate-crisis-rising-sea-levels-pacific-island-nation-country-digital-clone>

Handl, G. (2012). Declaration of the United Nations Conference on the Human Environment (Stockholm Declaration), 1972, and Rio Declaration on Environment and Development, 1992. *United Nations Audiovisual Library of International Law*, [https://legal.un.org/avl/pdf/ha/dunche/dunche\\_s.pdf?\\_gl=1\\*6n4yjm\\*\\_ga\\*MTI2MTQ3NzcuMTcyMDYxNzcyOA..\\*\\_ga\\_TK9BQL5X7Z\\*MTcyNjIzNDgyMi44LjAuMTcyNjIzNDgyNi4wLjAuMA](https://legal.un.org/avl/pdf/ha/dunche/dunche_s.pdf?_gl=1*6n4yjm*_ga*MTI2MTQ3NzcuMTcyMDYxNzcyOA..*_ga_TK9BQL5X7Z*MTcyNjIzNDgyMi44LjAuMTcyNjIzNDgyNi4wLjAuMA)

Helm, D. (2012, November 28), The Kyoto approach has failed. *Nature* 491. <https://www.nature.com/articles/491663a>

Hovi, J., Sprinz, D. F. & Bang, G. (2012), Why the United States did not become a party to the Kyoto Protocol: German, Norwegian, and US

perspectives. *European Journal of International Relations*, 18(1). <https://www.pik-potsdam.de/members/dsprinz/publications/Hovi.2012.WhytheUnitedStatesDidNotBecomeaPartytotheKyotoProtocol.EJIR.pdf>

Hutterer, M. (2023). When States Sink. [https://www.mpg.de/20792612/W004\\_Environment-Climate\\_062-067.pdf](https://www.mpg.de/20792612/W004_Environment-Climate_062-067.pdf)

International Monetary Fund. (1989, March 31). IMF–World Bank concordat (SM/89/54 Rev. 1).

International Monetary Fund. (2022, April 13). IMF Managing Director Welcomes Creation of Resilience and Sustainability Trust to Help Vulnerable Countries Overcome Longer-Term Challenges. Press Release No. 22/115. <https://www.imf.org/en/news/articles/2022/04/13/pr22115-imf-md-welcomes-the-creation-of-the-rst-to-help-vulnerable-countries>

International Monetary Fund. (2021, December 3). Strengthening infrastructure governance for climate-responsive public investment <https://www.imf.org/en/publications/policy-papers/issues/2021/12/22/strengthening-infrastructure-governance-for-climate-responsive-public-investment-511258>

International Monetary Fund. (28 July 1998). *The IMF and the Environment*. <https://www.imf.org/external/pubs/ft/exrp/enviro/>

Ahmed, M. (2024, June). The IMF's climate change debate. *Financial and Development Magazine*. <https://www.imf.org/en/publications/fandd/issues/2024/06/the-imfs-climate-change-debate-masood-ahmed>

International Monetary Fund. (2020). Articles of Agreement. <https://www.imf.org/external/pubs/ft/aa/pdf/aa.pdf>

OECD. (n. d.). International Programme for Action on Climate. <https://www.oecd.org/en/about/programmes/international-programme-for-action-on-climate.html>

Intergovernmental Panel on Climate Change (IPCC). (2023). *Climate Change 2023, Synthesis Report, Summary for Policymakers*. [https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC\\_AR6\\_SYR\\_SPM.pdf](https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_SPM.pdf)

Intergovernmental Panel on Climate Change (IPCC). (n. d.)Chapter 15: Investment and Finance. IPCC Sixth Assessment. <https://www.ipcc.ch/report/ar6/wg3/chapter/chapter-15>

Intergovernmental Panel on Climate Change (IPCC). (n. d.) Reports. <https://www.ipcc.ch/reports/?rp=ar6>

- Franczak, M. (2024, April 15). *Can the World Bank Deliver on Climate Change? Testing the Evolution Roadmap through Loss and Damage*. IPI. <https://www.ipinst.org/2024/04/can-the-world-bank-deliver-on-climate-change-testing-the-evolution-roadmap-through-loss-and-damage>
- European Investment Bank. (2022). *Joint Methodology for Tracking Climate Change Adaptation Finance*. <https://thedocs.worldbank.org/en/doc/20cd787e947dbf44598741469538a4ab-0020012022/original/20220242-mdbs-joint-methodology-climate-change-adaptation-finance-en.pdf>
- Organization for Economic Co-operation and Development. (2024, May 29). *Climate Finance Provided and Mobilised by Developed Countries in 2013-2022*. <https://doi.org/10.1787/19150727-en>
- Organization for Economic Co-operation and Development. (2023). *OECD Guidelines for Multinational Enterprises on Responsible Business Conduct*. <https://doi.org/10.1787/7abea681-en>
- Organization for Economic Co-operation and Development. (2023, November 16). *Scaling Up Adaptation Finance in Developing Countries: Challenges and Opportunities for International Providers*. OECD. <https://doi.org/10.1787/b0878862-en>
- Organization for Economic Co-operation and Development. (2023, November 16). *Scaling Up the Mobilisation of Private Finance for Climate Action in Developing Countries: Challenges and Opportunities for International Providers*. OECD. <https://doi.org/10.1787/17a88681-en>
- Organization for Economic Co-operation and Development. *Climate Action Dashboard*. <https://www.oecd.org/en/data/dashboards/climate-action-dashboard.html>
- Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States. (n. d.) *On the Frontline of Climate Crisis, Worlds Most Vulnerable Nations Suffer Disproportionately*. United Nations. <https://www.un.org/ohrls/es/news/frontline-climate-crisis-worlds-most-vulnerable-nations-suffer-disproportionately>
- Our World in Data. (2025). *Cumulative CO<sub>2</sub> emissions*. <https://ourworldindata.org/grapher/cumulative-co-emissions>
- Ramos, C. (2015), *Why did Canada withdraw from the Kyoto Protocol? A case study*. Fridtjof Nansen Institute. <https://www.fni.no/publications/why-did-canada-withdraw-from-the-kyoto-protocol-a-case-study>
- Rosen, A. M. (2015, February 15). *The Wrong Solution at the Right Time: The Failure of the Kyoto Protocol on Climate Change*. *Politics & Policy*, 43(1). <https://onlinelibrary.wiley.com/doi/epdf/10.1111/polp.12105>
- Seattle Municipal Archives. (n. d.). *World Trade Organisation Protests In Seattle*. <https://www.seattle.gov/cityarchives/exhibits-and-education/digital-document-libraries/world-trade-organization-protests-in-seattle>
- Suárez-Cuesta, D., Latorre, M. C. & Rodríguez, D. (2024, April). *La Ley de Reducción de la Inflación y la respuesta europea: una nota*. Foundation for Applied Economic Studies. <https://documentos.fedea.net/pubs/ap/2024/ap2024-13.pdf>
- Ülgen, S. (2021, October 6). *How Deep Is the North-South Divide on Climate Negotiations?*. Carnegie Europe. <https://carnegieendowment.org/research/2021/10/how-deep-is-the-north-south-divide-on-climate-negotiations?lang=en&center=europe>
- United Nations. (2015). *Paris Agreement*. [https://unfccc.int/sites/default/files/english\\_paris\\_agreement.pdf](https://unfccc.int/sites/default/files/english_paris_agreement.pdf)
- Naciones Unidas. (2024, May 28). *El cambio climático amenaza a 41 millones de personas en zonas costeras de América Latina y el Caribe*. <https://news.un.org/es/story/2024/05/1530116>
- United Nations Climate Change. (n. d.). *Conferencia de las Partes (COP)*. <https://unfccc.int/es/process/bodies/supreme-bodies/conference-of-the-parties-cop>
- Bhattacharya, A., Calland, R., Averchenkova, A., Gonzalez, L., Martinez-Diaz, L. & Van Rooij, J. (2020, December). *Delivering on the \$100 billion climate finance commitment and transforming climate finance*. [https://www.un.org/sites/un2.un.org/files/2020/12/100\\_billion\\_climate\\_finance\\_report.pdf](https://www.un.org/sites/un2.un.org/files/2020/12/100_billion_climate_finance_report.pdf)
- United Nations Climate Change. (n. d.). *Fund for responding to Loss and Damage*. <https://unfccc.int/loss-and-damage-fund-joint-interim-secretariat>
- United Nations Climate Change. (n. d.). *What is the Kyoto Protocol?*. [https://unfccc.int/kyoto\\_protocol](https://unfccc.int/kyoto_protocol)
- United Nations Climate Change. (n. d.). *What is the United Nations Framework Convention on Climate Change?*. <https://unfccc.int/process-and-meetings/united-nations-framework-convention-on-climate-change>
- United Nations. (n. d.). *Sustainable Development Goal 17*. <https://sdgs.un.org/goals/goal17>

- United Nations Environment Programme. (2023, December). State of Nature Finance. <https://www.unep.org/resources/state-finance-nature-2023>
- United Nations Framework Convention on Climate Change. (n. d.). Just Transition of the Workforce, and the Creation of Decent Work and Quality Jobs. <https://unfccc.int/sites/default/files/resource/Just%20transition.pdf>
- United Nations Framework Convention on Climate Change (n.d.). The concept of economic diversification in the context of response measures. [https://unfccc.int/files/cooperation\\_support/response\\_measures/application/pdf/technical\\_paper\\_economic\\_diversification.pdf](https://unfccc.int/files/cooperation_support/response_measures/application/pdf/technical_paper_economic_diversification.pdf)
- United Nations Framework Convention on Climate Change. (2006). UNFCCC Handbook. <https://unfccc.int/resource/docs/publications/handbook.pdf>
- United Nations Habitat. (n.d.). *Climate Change and Water-Related Disasters*. <https://www.unep.org/topics/fresh-water/disasters-and-climate-change/climate-change-and-water-related-disasters>
- United Nations High Commissioner for Refugees. (2024, May 22). *Climate crisis fuels flooding and deepens displacement*. <https://www.unhcr.org/news/stories/climate-crisis-fuels-flooding-and-deepens-displacement>
- United States Environmental Protection Agency. (2025, July 29). *Summary of Inflation Reduction Act provisions related to renewable energy*. <https://www.epa.gov/green-power-markets/summary-inflation-reduction-act-provisions-related-renewable-energy>
- Blinken, A. (2021, February 19). The United States Officially Rejoins the Paris Agreement. U.S. Department of State. <https://2021-2025.state.gov/the-united-states-officially-rejoins-the-paris-agreement/>
- Walsh, T. (2023, December 6). COP28 Embraces Debt Pause Clauses. *International Finance Review*.
- Wenger, C. & Johnson, C. (2023, June). A Gap Analysis of Finance Flows for Addressing Loss and Damage Technical Paper. *Centre for Climate and Energy Solutions*. <https://www.c2es.org/wp-content/uploads/2023/06/LD-Funding-Arrangements-Gap-Analysis.pdf>
- World Bank Group. (2022, December 18). Evolving the World Bank Group's Mission, Operations, and Resources: A Roadmap. <https://documents1.worldbank.org/curated/en/099845101112322078/pdf/SECBO5f51975e0e809b7605d7b690ebd20.pdf>
- World Bank Group. (2023, December 7). *Joint Statement by the Managing Director of the IMF and the President of the World Bank*. <https://www.imf.org/en/news/articles/2023/09/06/pr23305-joint-statement-imf-managing-director-world-bank-president>
- Grupo Banco Mundial. (2022, October 17). *Lo que debe saber sobre la seguridad alimentario y el cambio climático*. <https://www.bancomundial.org/es/news/feature/2022/10/17/what-you-need-to-know-about-food-security-and-climate-change>
- World Bank Group. (2024, June 10). World Bank Board Authorises Bank to Serve as Host and Depository for Loss and Damage Response Fund.
- World Bank Group. (2024, May 31). World Bank Group and IMF Deepen Joint Effort to Scale Up Climate Action. <https://www.worldbank.org/en/news/press-release/2024/05/31/world-bank-group-and-imf-deepen-joint-effort-to-scale-up-climate-action>
- World Bank Group. (2023, December 1). World Bank Provides Crucial New Support to Countries Affected by Natural Disasters.
- Boehm, S. & Schumer, C. (2023, March 20). *10 big findings from the 2023 IPCC report on climate change*. World Resources Institute. <https://www.wri.org/insights/2023-ipcc-ar6-synthesis-report-climate-change-findings>
- World Trade Organization. (n.d.). Environmental Goods Agreement (EGA). [https://www.wto.org/english/tratop\\_e/envir\\_e/ega\\_e.htm](https://www.wto.org/english/tratop_e/envir_e/ega_e.htm)
- World Trade Organization. (n.d.). Decision on Trade and Environment. [https://www.wto.org/english/docs\\_e/legal\\_e/56-dtENV\\_e.htm](https://www.wto.org/english/docs_e/legal_e/56-dtENV_e.htm)
- World Trade Organization. (2011). Harnessing Trade for Sustainable Development and a Green Economy. [https://www.wto.org/english/res\\_e/publications\\_e/rio20\\_e.htm](https://www.wto.org/english/res_e/publications_e/rio20_e.htm)
- World Trade Organization. (n.d.). Items on the CCMA work programme. [https://www.wto.org/english/tratop\\_e/envir\\_e/cte00\\_e.htm](https://www.wto.org/english/tratop_e/envir_e/cte00_e.htm)
- World Trade Organization. (2024, June 18). Members advance work on trade and environmental sustainability after MC13. [https://www.wto.org/english/news\\_e/news24\\_e/tessd\\_02jul24\\_e.htm](https://www.wto.org/english/news_e/news24_e/tessd_02jul24_e.htm)
- World Trade Organization. (2024, February 26). Ministerial Communication on Fossil Fuel Subsidies. WT/MIN(24)/19.

World Trade Organization. (2021, December 10). Ministerial Communication on Plastic Pollution and Environmentally Sustainable Trade in Plastics. WT/MIN(21)/8/Rev.2.

World Trade Organization. (2022). Overview of trade policies adopted to address climate change. *Trade Policy Report* No. 1.

World Trade Organization. (2024, July 24). Plastics Dialogue coordinators identify priority areas for future work. *Press release*. [https://www.wto.org/english/tratop\\_e/ppesp\\_e/ppesp\\_e.htm#participation](https://www.wto.org/english/tratop_e/ppesp_e/ppesp_e.htm#participation)

Xu, A., Tresa, E., Bacchetta, M., Bellelli, F. & Monteiro, J. A. (2022). The carbon content of international trade. [https://www.wto.org/english/tratop\\_e/envir\\_e/carbon\\_content\\_of\\_trade.pdf](https://www.wto.org/english/tratop_e/envir_e/carbon_content_of_trade.pdf)

World Trade Organization. (n.d.). *The Impact of Trade Liberalisation on Climate Change*. [https://www.wto.org/english/tratop\\_e/envir\\_e/climate\\_impact\\_e.htm](https://www.wto.org/english/tratop_e/envir_e/climate_impact_e.htm)

World Trade Organization. (2024). *World Trade Report*. [https://www.wto.org/english/res\\_e/reser\\_e/wtr\\_e.htm](https://www.wto.org/english/res_e/reser_e/wtr_e.htm)

World Trade Organization. (n.d.). *Activities of the WTO and the Challenge of Climate Change*. [https://www.wto.org/english/tratop\\_e/envir\\_e/climate\\_challenge\\_e.htm?vm=r](https://www.wto.org/english/tratop_e/envir_e/climate_challenge_e.htm?vm=r)

World Trade Organization. (2023, March 15). WTO Structured Discussions on Trade and Environmental Sustainability, High-Level Assessment, 2 December 2022: Informal Summary by the Co-Chairs. INF/TE/SSD/R/15

World Trade Organization. (n.d.). *Dispute Settlement*. [https://www.wto.org/english/thewto\\_e/minist\\_e/mc11\\_e/briefing\\_notes\\_e/bfdispu\\_e.htm](https://www.wto.org/english/thewto_e/minist_e/mc11_e/briefing_notes_e/bfdispu_e.htm)

WTO. document WT/MIN(22)/33, WT/L/1144.

World Trade Organization. (2024, June 19). Report of the meeting held on 24 and 25 April 2024. WT/CTE/M/80.

World Trade Organization. (n.d.). *Track and manage information on product requirements*. Eping platform. <https://www.epingalert.org/>

World Trade Organization. (n.d.). *Plastic Pollution and Environmentally Sustainable Trade in Plastics*. [https://www.wto.org/english/tratop\\_e/ppesp\\_e/ppesp\\_e.htm](https://www.wto.org/english/tratop_e/ppesp_e/ppesp_e.htm) World Trade Organization. (n.d.). *Reform of Fossil Fuel Subsidies*. [https://www.wto.org/english/tratop\\_e/envir\\_e/fossil\\_fuel\\_e.htm](https://www.wto.org/english/tratop_e/envir_e/fossil_fuel_e.htm)

World Trade Organization. (n.d.). *Trade and Environmental Sustainability*. [https://www.wto.org/english/tratop\\_e/tessd\\_e/tessd\\_e.htm](https://www.wto.org/english/tratop_e/tessd_e/tessd_e.htm)

World Trade Organization & United Nations Environment Programme. (2009). Trade and Climate Change. [https://www.wto.org/english/tratop\\_e/envir\\_e/climate\\_intro\\_e.htm](https://www.wto.org/english/tratop_e/envir_e/climate_intro_e.htm)

Xie, L., Scholtens, B. & Homroy, S.. (July 2023). Rebalancing climate finance: Analysing multilateral development banks' allocation practices. *Energy Research and Social Science*, 101. <https://www.sciencedirect.com/science/article/pii/S2214629623001871>