

Free trade and climate protection: who cares about governance and democratic gaps?¹

Abstract: The impacts of climate change are becoming increasingly evident worldwide, with estimates attributing up to 30 percent of CO₂ emissions to global trade. Measures to change both are urgently needed, but who cares about climate protection measures in trade agreements or about trade regulations in climate protection agreements? For international trade, the World Trade Organization (WTO) sets the rules; for climate protection, the United Nations Framework Convention on Climate Change (UNFCCC) and its Paris Agreement on Climate Change sets the standards. But the WTO has no mandate for climate protection, and in the Paris Agreement the EU Commission made sure that the word trade did not even appear. The countless rounds of discussions and forums obscure the fact that there is not only a governance gap but also no answer to the question of who is responsible for bridging this gap. In the following, two facets of the debate are examined in more detail: the negotiations on an Environmental Goods Agreement (EGA) and the question of what the incorporation of the Paris Agreement into Free Trade Agreements (FTAs) brings. To overcome the governance gap, first and foremost, the Global North must take steps to ensure that the Global South can participate equally in the solutions.

“It’s the governance, stupid!”

The World Trade Organization (WTO) admits that “[a]bout 20-30 per cent of total CO₂ emissions, which account for most GHG emissions, are estimated to be associated with international trade.”² Academics specify that “[t]he amount of CO₂ embedded in trade has substantially increased over the last decades” and warn that without appropriate measures “continued growth in global trade will increase - not decrease - global CO₂ emissions”.³ But appropriate measures are lacking, and therefore one climate-related scientific finding, showing the dramatic situation and warning for further disastrous consequences, follows the next as the antagonism between free trade and climate respective environmental protection persists.

Hugo Cameron’s article on the evolution of the trade and environment debate shows that this debate already started in the 1970s before the “1990s marked the coming age of the trade-environment debate”.⁴ During this time, in addition to individual environmental topics⁵, the focus was on the relationship between trade agreements and *Multilateral Environmental Agreements (MEAs)* and therefore an issue of governance. The WTO and MEAs have different forms of dispute settlement and for the enforceability of arbitration rulings. On the environmental side, the prevailing view was that the WTO dispute settlement procedure, which is backed by sanctions, prevents necessary environmental measures from being taken, or that the mere threat of a dispute chills planned environmental measures and prevents them from coming to fruition. The creation of an UN Environment Organization (UNEO) was seen as a possibility to overcome the antagonism, to create a counterweight to the WTO⁶ and to upgrade the United Nations Environment Programme (UNEP)⁷.

Actual as well as potential environment- or climate-related trade disputes formed a backdrop to the UNEO versus WTO debate. As early as 1994, still under the WTO predecessor *General Agreement on Tariffs and Trade (GATT)*, the EU led a dispute against three US measures to tax large, fuel-consuming cars.⁸ One of the first WTO disputes was a case against the US fuel quality and composition

requirements introduced to reduce air pollution, which also affected imported fuels in 1995 and the two plaintiff countries Brazil and Venezuela.⁹ Moreover, for a long time, climate change and related trade measures were seen as a non-issue for the WTO.

This gradually changed in the first decade of the 21st century, when the climate change related issues¹⁰ emerged and were discussed in the WTO bodies, especially in the Committee on Trade and Environment (CTE), during the yearly public forums (WTO Symposia)¹¹ and in the accession negotiations of new WTO candidates.¹² There were enough discussions, what was missing were concrete decisions to specify or change trading rules - except for two economically conditioned attempts to add new plurilateral agreements relevant to climate and energy issues to the WTO rulebook. Both failed almost simultaneously at the end of 2016, when negotiations on an *Environmental Goods Agreement (EGA)*¹³ and the *Trade in Services Agreement (TiSA)*¹⁴ were suspended or put on hold - in the case of EGA partly but not only due to the imminent start of work by the Trump administration in the US, in the case of TiSA¹⁵ due to Trump's opposition to trade agreements with partners other than immediate neighbours Mexico and Canada.

Wasted time

The first global climate protection agreements have already been adopted in the second part of the 1980s¹⁶ and the World Trade Organization (WTO) agreements, some of them based on the GATT system from 1947, have been regulating global trade since 1995. In addition, there are countless bilateral and regional free trade and investment agreements - with an increasing trend since the 2000s. Thus, around 3,000 *International Investment Agreements (IIAs)*, mostly *Bilateral Investment Treaties (BITs)* and to a much lesser extent *Treaties with Investment provisions (TIPs)*, are protecting corporate investments through the *Investor to State Dispute Settlement (ISDS)* system for more than sixty years.¹⁷ Especially for the last two decades, oil, gas, mining, extractives and energy corporations and investors have brought hundreds of ISDS cases against countries. Nowadays there are more cases that directly challenge climate policy. Joshua Paine and Elizabeth Sheargold point out that even the Working Group III of the Intergovernmental Panel on Climate Change (IPCC) highlighted the risks posed by ISDS cases to climate change mitigation efforts, such as states' phase-outs of fossil fuel energy sources, in its April 2022 report¹⁸ and make a proposal for "A Climate Change Carve-Out for Investment Treaties".¹⁹ More than 400 NGOs "call on governments to commit to remove the threat that ISDS poses to climate goals by getting rid of this unjust and dangerous system" in November 2022.²⁰ Among the TIPs, the *Energy Charter Treaty (ECT)* stands out, once intended to link new states emerging from the crumbling Soviet Union to the EU's trade and investment rules. However, the ECT membership list includes 52 countries²¹ and members beyond the original target groups such as Japan, Jordan and Yemen.²² ECT provides the legal basis for more than 150 energy related disputes between companies and individual ECT members that have come to light so far.²³

This short historical view shows that there was thus enough time to clarify the relationship between climate protection, trade, and investment, but this time was not used. In view of the increasing threats posed by climate change, the question becomes more significant: who is responsible for the trade aspect of global climate protection or for climate protection in trade agreements?

One institution is vocal, the other has been silenced

The United Nations Framework Convention on Climate Change (UNFCCC) is primarily responsible for global climate protection.²⁴ During the UNFCCC negotiations on the *Paris Agreement on Climate*

Change ('Paris Agreement') in 2015, the EU Commission ensured that an explicit mention of trade issues in the agreement's text was avoided, thus preventing any kind of provisions, mechanisms, and work programmes for trade. The Commission's reasoning was that the WTO was, after all, the established international body responsible for trade issues, and any decision on the use of trade measures under the UNFCCC would undermine the role of the World Trade Organization.²⁵ In the run-up to Paris, the Commission was aware that the 2001 decided work programme on trade and environment of the Doha Development Agenda (DDA) - beside the mentioning of environmental goods and services (see below) - did not include climate change. The Commission was also aware that the WTO had not yet successfully concluded a single aspect of this work programme for 14 years.²⁶ Finally, the word trade does not appear once in the Paris outcome document.²⁷ Trade-related targets for nationally determined contributions to achieving the goal of limiting global warming to well below two degrees Celsius, preferably 1.5 degrees compared to pre-industrial levels, are missing from the text, as is a reference to the WTO.

It is questionable what mandate or role the WTO has on climate issues. Depending on the person or institution you ask, either the answer is "yes" and often the preamble to the *Marrakesh Agreement Establishing the World Trade Organization* is referred to. Yet the Marrakesh Agreement of 1994 only contains the single words sustainable development and environment in its preamble.²⁸ Or the answer is "no" and it is claimed that climate issues are outside the mandate of the WTO. Or as WTO Deputy Director-General Angela Ellard said: "The WTO is not the place to establish global climate policy and how goals will be reached".²⁹

However, the WTO, which has been in crisis for 15 years at the latest³⁰, is adept at taking up initiatives or using occasions to present itself generally as a player and especially in the case of environmental and climate protection. One example for that is the *Trade and Environmental Sustainability Structured Discussions (TESSD)*.³¹ Another example is WTO's World Trade Report 2022 on climate change and international trade,³² which was published to coincide with the 27th United Nations Climate Change Conference (COP27) in November 2022. In the foreword to the report, WTO Director-General Dr Ngozi Okonjo-Iweala admits that "trade itself does generate emissions from production and transport", but emphasises "that trade is a force for good for climate and part of the solution for achieving a low-carbon, resilient and just transition... and trade policies can accelerate the dissemination of cutting-edge technologies and best practices, and enhance incentives for further innovation while creating the jobs of tomorrow. Trade is instrumental for investments in clean energy to have the greatest reach and impacts, at lowest cost and where they are needed the most." Her positive view of the role of trade culminates in her statement "We must start to talk about trade not as a threat but as a solution to the climate crisis".³³

Environmental goods and services – a profitable solution to the climate crisis?

For more than twenty years, environmental goods and services have been discussed as measures first to promote environmental protection and later also to combat climate change. Tariffs and non-tariff barriers for the *Environmental Goods and Services Sector (EGSS)*, i.e., for goods and services that serve environmental protection or climate protection, are to be lowered to "make them cheaper for businesses and consumers and, in this way, increase their use".³⁴ In October 2021, WTO Deputy Director-General Angela Ellard formulates the goal of liberalising environmental goods and services as follows: "To transition to a low-carbon economy, countries need affordable access to advanced technologies. And open trade plays a critical role in providing such access. Lowering barriers to trade in environmental goods and services helps facilitate transfer and deployment of climate change mitigation and adaptation technologies."³⁵

The debate focuses on environmental goods and a corresponding *Environmental Goods Agreement (EGA)*. However, environmental services should also be covered, although these are more difficult to define and delimit than environmental goods. The official terminology is *Agreement on Environmental Goods and Services (EGS)*, but in the debate this heading is often used even when actually only environmental goods are being discussed. Then as now, the contentious question is: what are environmental goods? According to general opinion (see also the two quotations above), environmental goods are products that directly contribute to environmental protection and climate change mitigation. But beyond this phrase, there is no internationally agreed methodology for defining environmental goods. The negotiations follow a "list approach" - what is on a list is an environmental good. Negotiating parties could propose products as environmental goods and the other parties must agree to these proposals. Examples of environmental goods are products for cleaning air and water, treating waste, increasing energy efficiency, controlling air pollution or generating renewable energy. Many of the goods that fall into these categories can be used in different ways; a turbine can produce electricity from wind power as well as in a nuclear power plant. In the absence of a definition of the term "environmental good", a list of products is in danger of being expanded in a way that no longer primarily considers environmental interests, but primarily economic interests of the negotiating partners. The fact that there is (or was³⁶) a growing market for EGSS, has accompanied the debate from the beginning.

The EGS story began in the WTO with a decision of the WTO Ministerial Conference in Doha: "The 2001 Doha Ministerial Declaration instructs members to negotiate on the reduction or, as appropriate, elimination of tariff and non-tariff barriers on environmental goods and services. It has been emphasized that these negotiations should aim at achieving sustainable development by creating a triple win situation for trade, the environment and development."³⁷

As with the other detailed issues on trade and environment, however, nothing happened in the next 12 years in the WTO in which "the environmental goods negotiations have become bogged down. WTO members disagree vehemently over core issues such as the scope of what qualifies as an environmental good and how liberalisation should proceed. Meanwhile, the environmental stakes are rising. The costs of global climate change are becoming even more alarming than in 2001."³⁸ As early as 2009, the US company General Electric, one of the leading manufacturers of wind turbines, called for the negotiations on an agreement on environmental goods and services to be decoupled from the WTO.³⁹ In the meantime, the Asia-Pacific Economic Community (APEC), which also includes Australia, Canada and the USA⁴⁰, had taken up the issue and decided in September 2012 to limit the level of tariffs to a maximum of five percent for 54 selected environmental goods by 2015.⁴¹

In January 2014, the World Economic Forum (WEF) in Davos provided the backdrop for a relaunch of the negotiations on an Environmental Goods Agreement (EGA), following the decision of some WTO members to decouple the negotiations from the Doha Development Agenda. Mark Wu describes this process from a multilateral to a plurilateral way as follows: "As has been the case with much of the Doha Round, the schism between developed and developing countries has contributed to the impasse. In January 2014, a group of WTO members proceeded to break the deadlock. With the WTO's blessing, this group, representing only a quarter of the WTO's membership, announced that it would proceed separately from others in trying to reach agreement. Frustrated with the negotiating deadlock, they were giving up on the ideal of reaching a multilateral consensus-based agreement acceptable to the entire WTO membership. Instead, they decided to proceed plurilaterally, while still under the framework of the WTO."⁴²

The WEF context makes it again clear that economic interests were at stake. At this time, trade in environmental goods and services was growing at a high rate, and its volume was expected to more than double within a decade: "The global market for environmental goods and services was

estimated to have reached US\$ 866 billion in 2011 and is expected to rise to US\$ 1.9 trillion by 2020".⁴³ Then, on 8 July 2014, a group of WTO members (including the EU as well as Canada and the USA) launched plurilateral negotiations "for the establishment of the EGA, which seeks to promote trade in a number of key environmental products, such as wind turbines and solar panels."⁴⁴ The number of participating WTO members then rose to 46 (including the EU Commission and the then 28 EU members plus 17 other WTO members). In the following two years, there were 16 rounds of negotiations. The 17th round of negotiations took place in Geneva at the WTO and was supposed to lead to a positive conclusion of the negotiations on 4 December 2016. However, the contradictions between the countries involved, which wanted to protect their domestic products against cheaper imports, could not be bridged. Moreover, it was clear that the new US President Trump would refuse to give his approval to the agreement.⁴⁵ So the then EU Trade Commissioner Malmström and her then US counterpart Froman could only succinctly announce: "Participants will now return to capitals to consider the next steps".⁴⁶ Roberto Azevedo, the then WTO Director-General, on the other hand, found clearer words: "I call on the participants to show whatever flexibility is possible to help conclude the agreement".⁴⁷ In the two years that followed, there were no next steps, no further negotiations, or debates perceptible.

It was not until September 2019 that the next step was taken. In the context of the 2019 UN General Assembly, more precisely "in the margins of the September UN General Assembly Leaders' Week in New York", New Zealand, together with Costa Rica, Fiji, Iceland, and Norway, put forward the idea of an *Agreement on Climate Change, Trade and Sustainability (ACCTS)*.⁴⁸ ACCTS received some attention because, among other things, it proposed a reform (i.e. a reduction) of subsidies for fossil fuels. Less attention was paid to the fact that ACCTS picked up the EGA/EGS issue: "Removal of tariffs on environmental goods and new and binding commitments for environmental services: Liberalisation of environmental goods and services mean they will become cheaper to buy in each of the ACCTS countries - accelerating access and uptake."⁴⁹

ACCTS was thus present as an idea without any sign of other countries joining the agreement. The trade ministers of the ACCTS countries then promoted ACCTS on the margins of the last WTO Ministerial Conference in Geneva. On 15 June 2022, they published a Joint Statement: "As we convene in Geneva, we are reminded of the importance of ACCTS to lead a path forward on important trade and environment issues for multilateral action. While we are a small group now, our ambition is for the ACCTS to be a WTO-consistent pathfinder agreement that will drive momentum and be joined by other WTO Members. We will continue to provide regular updates on our progress at relevant WTO meetings."⁵⁰ However, the statement does not explain how ACCTS relates to the WTO ministerial statement on fossil fuel subsidies adopted in December 2021, which pursues a similar objective to phase out inefficient fossil fuel subsidies.⁵¹ This *Fossil Fuel Subsidy Reform (FFSR)* was adopted together with two other statements: the Trade and Environmental Sustainability Structured Discussions (TESSD), which also has a Working Group on Environmental Goods and Service, and the *Informal Dialogue on Plastics Pollution and Sustainable Plastics Trade (IDP)* on 15 December 2021.⁵² Such initiatives like FFRS, TESSD and IDP could be seen as so-called Joint Statement Initiatives (JSIs), which are only supported by some WTO members as a way of restoring the functionality of the WTO as a body for trade negotiations. Critics such as Jane Kelsey stress that JSIs do not consider the negotiating interests and opportunities of developing countries: "But, far from delivering the 'integrated, more viable and durable multilateral trading system' that was envisaged some 26 years ago, their strategy seeks to restore the absolute dominance of powerful states over the making of global trade rules, as prevailed in the GATT 1947."⁵³ Kelsey's critique refers primarily to the JSIs on "electronic commerce, investment facilitation, and domestic regulation of services" and is certainly applicable to the environment-related JSIs. Apart from the governance

issue, however, a second aspect leads to the Global South's rejection of the liberalisation of the EGSS, as Mark Wu already pointed out in 2014: "most developing countries have little to gain - contrary to the conventional belief that many have interests at stake".⁵⁴

The intention of the highest decision-making bodies of the WTO in Doha in 2001, "we agree to negotiations, without prejudging their outcome, on... the reduction or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services", has ultimately been replaced by the invitation of five countries to start these negotiations in the framework of a JSI a good twenty years later. What began as part of the comprehensive and unanimously agreed negotiating round of the Doha Development Agenda, and later also led to no result in a plurilateral round with more than a quarter of the WTO members, is now being actively propagated by just five countries. However, this does not prevent the G7 members from proclaiming in May 2023: "We will continue our collaboration at the WTO including to facilitate and promote trade in environmental goods and services, and technologies."⁵⁵

The role of the Paris Agreement as a silver bullet in free trade agreements

The unresolved governance issues between trade rules and climate agreements on the one hand, and within the undemocratic WTO on the other, give scope to bilateral and regional free trade and investment agreements.⁵⁶ In the *Free Trade Agreements (FTAs)* concluded by the EU after the Paris Agreement or which are currently still in the negotiation process, the climate issue is covered in the respective chapters on trade and sustainable development (TSD) - but only there and not in the basic chapters on trade in goods or services or on technical barriers to trade, where it would make more sense. Post Paris EU FTAs – which the exemption of the *EU-Canada Comprehensive Economic and Trade Agreement (CETA)*⁵⁷ – include statement like the following taking from *Agreement between the European Union and Japan for an Economic Partnership*: "The Parties recognise the importance of achieving the ultimate objective of the United Nations framework Convention on Climate Change, done at New York on 9 May 1992 (hereinafter referred to as 'UNFCCC'), in order to address the urgent threat of climate change, and the role of trade to that end. The Parties reaffirm their commitments to effectively implement the UNFCCC and the Paris Agreement, done at Paris on 12 December 2015 by the Conference of the Parties to the UNFCCC at its 21st session. The Parties shall cooperate to promote the positive contribution of trade to the transition to low greenhouse gas emissions and climate-resilient development. The Parties commit to working together to take actions to address climate change towards achieving the ultimate objective of the UNFCCC and the purpose of the Paris Agreement."⁵⁸

The reference to the Paris Agreement is practically of limited use for two reasons. First, almost all chapters on trade and sustainable development of EU Free Trade Agreements in force are so far excluded from state-to-state dispute settlement, consequently there is no actual enforcement mechanism for them should one of the parties fail to comply with the agreed measures. The only exception is the Post Brexit *EU-UK Trade and Cooperation Agreement*, which was signed on 30 December 2020, and entered into force on 1 May 2021.⁵⁹ However, the EU Commission has announced that new free trade agreements might contain effective TSD chapters with the possibility of sanctions⁶⁰, but leaves it open whether the agreements currently being negotiated are new agreements. Secondly and more importantly, the Paris Agreement does not require its members to consider the role of trade in climate change in their national implementation plans and even more importantly, the Paris Agreement is not binding. Astrid Malm's recent analysis and answer to the questions "Did the 2015 Paris Climate Change Agreement Change the Trajectory of the Global Response to the Build-Up of Greenhouse Gas Emissions?" is anything but optimistic. Her conclusion

reached is that “although it is too soon to make any firm predictions, such an effect cannot yet be ascertained. For the Agreement to be successful, it needs to be legally binding, it must demand more ambitious contributions from parties, and subnational leaders and companies have to be given the opportunity to formally commit to the Agreement. Seeing to the difficulties associated with international climate change Agreements, alternative approaches, like climate clubs and influencing the general public, should also be explored.”⁶¹ So, referring to Paris is no guarantee that the urgently needed reductions in Greenhouse Gas (GHG) emissions will actually be achieved. The combination of two weak because incomplete and, above all, non-binding instruments will not be any better in total.

In the field of investment, too, there is no internationally binding definition of which environmental obligations apply to investors operating abroad. On the other hand, numerous bilateral and the few plurilateral investment protection agreements offer companies the right to sue a state via the investor-state dispute settlement mechanism (ISDS) and to claim damages for lost profits from investments, an option which is increasingly used for cases in the mining and energy sector.⁶²

As already mentioned earlier, the WTO, with its agreement on the settlement of disputes between WTO members, is also a place of energy- and climate-related disputes. Among other things, the case in which the USA successfully sued against the expansion of solar technology sought by the Indian state to achieve the Paris goals became known. The Indian Jawaharlal Nehru National Solar Mission had included a requirement to use solar cells and modules produced in India. This requirement was found by a WTO dispute settlement panel and the Appellate Body to be discriminatory as it discriminates against potential US exporters in 2016, hence it needs to be changed.⁶³ Recently, however, the US has adopted a similar policy with its *Inflation Reduction Act (IRA)* passed in August 2022.⁶⁴ This sweeping package that includes historic investments to boost manufacturing in the clean energy economy is seen by some trading partners as a violation of WTO rules because it mainly supports national producers and suppliers. Ironically, the practice of his two predecessors, continued by the US President Biden, of preventing the WTO from reconstituting the Appellate Body⁶⁵ for disputes so that it can no longer fit since 11 December 2019, deprives other WTO members of the possibility of taking final action against the IRA.⁶⁶

The US academic James Bacchus has made proposals on how the trade taboo can be broken by a joint UNFCCC and WTO work to craft a definition of a climate response measure supported through a WTO climate waiver.⁶⁷ However, in the view of "Our World Is Not For Sale" (OWINFS), a global network of over 200 civil society organisations from more than 50 countries, the “WTO is not the venue to establish climate change policy”. And then there is the second problem, which is either to make the WTO a democratic institution in which developing countries members' demands in the negotiations are fully respected, or to create another multilateral organisation for trade and climate issues. So, while no concrete and short-term solutions are emerging for either problem, climate change continues to advance on a massive scale.

“We are on a highway to climate hell with our foot still on the accelerator”⁶⁸

As everyone knows, solutions to stop climate change are needed yesterday rather than today. To arrive at these solutions, the following sub-steps are necessary.

First, the schism between the Global South and the Global North in international organisations such as the WTO must be overcome. As long as the Global North neither shed its historical guilt and superiority nor accept and live the principles laid down in the 1992 Rio Declaration On Environment and Development⁶⁹, in particular the recognition of common but differentiated responsibilities (principle 7), inconclusive discussion loops will continue.

Second, the existence of a trade and climate governance gap should be acknowledged. It can also be broadened to include the Global Energy Governance Gap, and in addition to the climate crisis, the aspect of ensuring energy security and decarbonisation as well as elimination of energy poverty.⁷⁰

Third, there should be an acknowledgement that both institutions WTO and UNFCCC in their current state are not capable of bridging the governance gap, at least in the short term. In view of the current weakness of multilateralism, it is also not very successful to establish a new institution responsible for trade and climate, which at best could only become effective in two decades. Proposals to broaden the mandate of the United Nations Conference On Trade and Development (UNCTAD), which are occasionally put forward, also fail because of the resistance of the Global North to give UNCTAD real power. For finding a solution, the important countries are also members of WTO, UNFCCC or UNCTAD, so a new framework alone does not promise that countries will act differently than before.

Fourth, trade stands between production and consumption, so changes are also needed in upstream production and downstream consumption. And not only that, the connections between work, jobs and income must also be considered.

Fifthly, detailed proposals for solutions are numerous⁷¹, as are the forums in which they are discussed. What is lacking is the political will to introduce relevant changes and to face the need to implement them. The question that remains unanswered here, too, is how this political will can be achieved.

Endnotes (URL checking was done on 6 June 2023)

¹ This article only poses the question of the connection between free trade and climate protection. The second major threat posed by the loss of biodiversity, alongside climate change, is not mentioned below, nor is the interaction between climate change and the loss of species, habitats, and ecosystems. A description of the connection between free trade and biodiversity would be identical in many parts to the following one only relating to climate change.

² World Trade Organization. 2021. [The carbon content of international trade](#). *Trade and Climate Change Information Brief* No. 4. World Trade Organization, Geneva.

³ Weber, S., Gerlagh, R., Mathys, N.A. & Moran, D. 2019. [CO2 embedded in trade: trends and fossil fuel drivers](#). *CESifo Working Paper* No. 7562. CESifo, Munich.

⁴ Cameron, H. 2007. The Evolution of the Trade and Environment Debate at the WTO. In [Trade and Environment: A Resource Book](#) (eds. A. Najam, M. Halle, R. Meléndez-Ortiz), pp. 3-15. International Institute for Sustainable Development (IISD), Winnipeg, Manitoba, Canada.

⁵ Such as labelling, trade of genetically modified organisms (GMOs), trade-related aspects of intellectual property rights (TRIPS) or a possible preferential treatment of environmentally friendly goods.

⁶ See, among others, the two anthologies published in 2005: Rechkemmer, A. (ed.). 2005. *UNEO: Towards an International Environment Organization: Approaches to a Sustainable Reform of Global Environmental Governance*. Nomos, Baden Baden. ISBN 3-8329-1120-0. Biermann, F. & and Bauer, S. (eds). 2005. *A world environmental organization: solutions or threat for effective international environmental governance?* Ashgate, Aldershot. ISBN: 0-7546-3765.

⁷ "The [1972 United Nations Conference on the Human Environment](#), widely seen as the first international meeting on the environment... led to the formation of the United Nations Environment Programme ([UNEP](#))." See <https://www.unep.org/50-years/about-unep50>.

⁸ See [EU versus US: car taxes](#).

⁹ See [Venezuela, Brazil versus US: gasoline](#).

¹⁰ Like the implementation of the Kyoto Protocol, possible tariff reductions for environmental goods and services, measures to reduce subsidies for fossil fuels and to introduce tax reductions for more climate-friendly products, border tax adjustments, trade preferences for agricultural practices to increase carbon sequestration or the cultivation of feedstock for biofuels, exceptions from patent protection for climate protection measures or the abandonment of dual pricing policies for fossil fuels.

¹¹ "The Public Forum was previously known as the Public Symposium, which was first held in 2001." See https://www.wto.org/english/forums_e/public_forum_e/public_forum_e.htm.

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- ¹² Compare Sell, M. 2007. Climate Change and Energy. In *Trade and Environment: A Resource Book* (eds. A. Najam, M. Halle, R. Meléndez-Ortiz), pp. 59-66. International Institute for Sustainable Development (IISD), Winnipeg, Manitoba, Canada.
- ¹³ The WTO homepage provides only limited information on the Environmental Goods Agreement (EGA), see https://www.wto.org/english/tratop_e/envir_e/ega_e.htm.
- ¹⁴ Greenpeace Netherlands. 2016. *TiSA: Another Secret Free Trade Agreement putting the Paris Agreement in a straight jacket*. Stichting Greenpeace Nederland, Amsterdam.
- ¹⁵ European Parliament. 2017. State of play of TiSA negotiations. [Question for written answer E-006013-17 to the Commission](#): 27.9.2017 by MEP Inmaculada Rodríguez-Piñero Fernández (S&D).
- ¹⁶ See [Vienna Convention for the Protection of the Ozone Layer](#), Vienna, 1985, including the [Montreal Protocol on Substances that Deplete the Ozone Layer](#), Montreal, 1987.
- ¹⁷ The [Germany - Pakistan BIT \(1959\)](#) started the system of Bilateral Investment Treaties (BITs). As of 2 June 2023 the [UNCTAD International Investment Agreements Navigator](#) lists 2829 BITS, of which 2219 are in force. In addition, there are 435 Treaties with Investment Provisions of which 364 are in force.
- ¹⁸ See Intergovernmental Panel on Climate Change (IPCC). 2022. *Climate Change 2022: Mitigation of Climate Change*, Working Group III Contribution to the IPCC Sixth Assessment Report (AR6), Ch. 14, at 81.
- ¹⁹ Paine, J. & Sheargold, E. 2023. [A Climate Change Carve-Out for Investment Treaties](#). *Journal of International Economic Law*, Volume 26, Issue 2: 285–304.
- ²⁰ See [Global Statement on IDSD and the Climate Crisis](#).
- ²¹ See <https://investmentpolicy.unctad.org/international-investment-agreements/groupings/8/energy-charter-treaty-members>.
- ²² See [“Contracting Parties and Signatories of the Energy Charter Treaty”](#).
- ²³ As ECT members are not obliged to disclose ECT disputes to the ECT Secretariat, the ECT only maintains a list of disclosed cases, which as of 1 June 2022 amounted to 150 disputes (sometimes invoked together with a bilateral investment treaty). For more information (including the list of 150 cases) see <https://www.energychartertreaty.org/cases/list-of-cases/>
- ²⁴ See https://treaties.un.org/pages/ViewDetailsIII.aspx?src=IND&mtdsg_no=XXVII-7&chapter=27&Temp=mtdsg3&clang=en.
- ²⁵ See EU Trade Policy Committee (TPC): [UNFCCC and Trade-related issues and intellectual property](#). TPC, Brussels, 20 November 2015. The [role](#) of the Trade Policy Committee (TPC) is to advise and assist the Commission in negotiating agreements on behalf of the EU with third countries or in international organisations in the area of trade the common commercial policy. TPC’s responsibility is also preparing the signature and conclusion of trade and investment agreements by the Council.
- ²⁶ The timeline for the DDA was unrealistic from the start, giving WTO members only three years to complete the extensive work programme: “The negotiations to be pursued under the terms of this declaration shall be concluded not later than 1 January 2005.” [Doha Ministerial declaration](#), adopted on 14 November 2001, article 45.
- ²⁷ [Paris Agreement](#), decided on 12 December 2015.
- ²⁸ “The Parties to this Agreement, Recognizing that their relations in the field of trade and economic endeavour should be conducted with a view to raising standards of living, ensuring full employment and a large and steadily growing volume of real income and effective demand, and expanding the production of and trade in goods and services, **while allowing for the optimal use of the world's resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment and to enhance the means for doing so in a manner consistent with their respective needs and concerns at different levels of economic development,**...” (emphasis added). Source: [AGREEMENT ESTABLISHING THE WORLD TRADE ORGANIZATION](#) (1994).
- ²⁹ WTO Deputy Director-General Angela Ellard in a [speech](#) about the role of international trade and the WTO in helping combat climate change at the “Global Leaders for Climate Action” on 21 October 2021.
- ³⁰ By 2008 at the latest, it became obvious that the WTO would never be able to fully implement the work programme agreed in 2001 with the Doha Development Agenda, as required by the single undertaking principle (“Virtually every item of the negotiation is part of a whole and indivisible package and cannot be agreed separately. ‘Nothing is agreed until everything is agreed’”). See https://www.wto.org/english/tratop_e/dda_e/work_organ_e.htm). “Doha in effect died when a ministerial meeting failed in 2008. While it continued for another seven years on life support, governments, particularly the US, have pushed ahead with bilateral or regional deals. These agreements, the most prominent of which is the Trans-Pacific Partnership, are a weak substitute for multilateral deals, not least because they are often one-sided agreements written by the strongest signatory.” Source: Financial Times. [The Doha round finally dies a merciful death | Financial Times \(ft.com\)](#). 21 December, 2015.
- ³¹ Launched in November 2020, [TESSD](#) is currently co-sponsored by 74 WTO members and seeks to advance members' discussions at the intersection of trade and environment and complement the work of the WTO Committee on Trade and Environment. TESSD covers four working groups (Environmental Goods and Services, Trade-related Climate Measures, Circular Economy – Circularity and Subsidies). The [latest TSSD meeting](#) took place on 16-17 March 2023.
- ³² World Trade Organization. 2022. [World Trade Report 2022 - Climate change and international trade](#). World Trade Organization, Geneva.

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- ³³ See https://www.wto.org/english/res_e/booksp_e/wtr22_e/wtr22_ch0d_e.pdf.
- ³⁴ United Nations Environment Programme. Without a year. Trade in Environmental Goods at a Glance. [Trade in Environmental Goods | UNEP - UN Environment Programme](#).
- ³⁵ “[Trade plays an important role in climate change adaptation and mitigation](#)” — DDG Ellard. Speech of Deputy Director-General Angela Ellard on the role of international trade and the WTO in helping combat climate change. Speaking at the “Global Leaders for Climate Action” event hosted by the International Chamber of Commerce UK on 26 October 2021.
- ³⁶ “Employment and value added in the environmental goods and services sector have been growing faster than in the rest of the economy between 2003 and 2015, although since 2012 growth in the sector’s value added slowed and employment remained more or less stable. The 2020 prospects for continued higher growth and employment creation in the sector compared with the rest of the economy are uncertain.” See <https://www.eea.europa.eu/airs/2018/resource-efficiency-and-low-carbon-economy/environmental-goods-and-services-sector>.
- ³⁷ See https://www.wto.org/english/tratop_e/envir_e/envir_neg_serv_e.htm and https://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.htm#tradeenvironment.
- ³⁸ Wu, M. 2014. [Why Developing Countries Won’t Negotiate: The Case of the WTO Environmental Goods Agreement](#). *Trade, Law & Development*, Vol 6, No 1 (Special Issue: Trade & Climate Change), pp: 93 – 176.
- ³⁹ See Lynn, J. 2009. GE calls for trade deal in environmental goods. *Reuters*, 22 October 2009. See <https://www.reuters.com/article/idUSLM648150>.
- ⁴⁰ APEC’s 21 member economies are Australia; Brunei Darussalam; Canada; Chile; People’s Republic of China; Hong Kong, China; Indonesia; Japan; Republic of Korea; Malaysia; Mexico; New Zealand; Papua New Guinea; Peru; The Philippines; The Russian Federation; Singapore; Chinese Taipei; Thailand; United States of America; Viet Nam. See <https://www.apec.org/About-Us/About-APEC/>.
- ⁴¹ See http://www.apec.org/Home/Meeting-Papers/Leaders-Declarations/2012/2012_aelm/2012_aelm_annexC.aspx.
- ⁴² Wu 2014. op.cit.
- ⁴³ International Trade Centre (ITC). 2014. [Trade in Environmental Goods and Services: Opportunities and Challenges](#). ITC, Geneva.
- ⁴⁴ See https://www.wto.org/english/tratop_e/envir_e/ega_e.htm.
- ⁴⁵ See Knirsch, J. 2018. Umweltgüter: Zustand tiefgefroren, Auftaudatum unbestimmt. In *Trade for all – Handel für alle? Probleme und Reformbedarf der aktuellen EU-Handelspolitik*. [Environmental Goods: Frozen state, thawing date undetermined. In *Trade for all? Problems and need for reform of the current EU trade policy*], Pp 14-17. Forum Umwelt & Entwicklung [Forum Environment & Development], Berlin. E. Pp 14-17., Berlin. https://www.forumue.de/wp-content/uploads/2018/02/Trade-for-all--FUE_AGHandel_2018.pdf.
- ⁴⁶ See <http://trade.ec.europa.eu/doclib/press/index.cfm?id=1595>.
- ⁴⁷ See https://www.wto.org/english/news_e/news16_e/ega_04dec16_e.htm.
- ⁴⁸ See <https://www.iisd.org/articles/insight/time-accts-five-countries-announce-new-initiative-trade-and-climate-change>.
- ⁴⁹ See <https://www.mfat.govt.nz/en/trade/free-trade-agreements/trade-and-climate/agreement-on-climate-change-trade-and-sustainability-accts-negotiations/>.
- ⁵⁰ See <https://www.beehive.govt.nz/release/joint-statement-agreement-climate-change-trade-and-sustainability-accts-mc12>.
- ⁵¹ “We have accordingly reached the following shared understandings: We seek the rationalization and phase out of inefficient fossil fuel subsidies that encourage wasteful consumption along a clear timeline and encourage the remaining WTO Members to join us in those efforts, recognizing the substantial financial resource this could unlock globally to support the transition;...” [MINISTERIAL STATEMENT ON FOSSIL FUEL SUBSIDIES – Revision](#): WT/MIN(21)/9/Rev.1, 14 December 2021.
- ⁵² See https://www.wto.org/english/news_e/news21_e/envir_15dec21_e.htm.
- ⁵³ Kelsey, J. 2022. [The Illegitimacy of Joint Statement Initiatives and Their Systemic Implications for the WTO](#). *Journal of International Economic Law*, Volume 25, Issue 1: 2–24, <https://doi.org/10.1093/jiel/jgac004>.
- ⁵⁴ Wu 2014. op. cit.
- ⁵⁵ [G7 Hiroshima Leaders’ Communiqué](#), May 20, 2023.
- ⁵⁶ Many NGOs also paid less attention to the WTO and focused more on bilateral agreements, ISDS cases and the Energy Charter Treaty. Some of these activities are documented on the two platforms [Trade Leaks](#) and [bilaterals.org](#).
- ⁵⁷ CETA was signed on 30 October 2016, ten months after the signing of the Paris Agreement but one week before the climate agreement entered into force on 4 November 2016.
- ⁵⁸ See Article 16.4 *Multilateral environmental agreements* of Chapter 16 Trade and Sustainable Development of the [Agreement between the European Union and Japan for an Economic Partnership](#). The agreement entered into force on 1 February 2019.
- ⁵⁹ See [The EU-UK Trade and Cooperation Agreement - Protecting the European Union's interests, ensuring fair competition, and continued cooperation in areas of mutual interest](#).

⁶⁰ “The Commission will: 19. Further strengthen the enforcement of TSD commitments in future agreements by proposing to EU trading partners to: a. Extend the general state-to-state dispute settlement compliance stage to the TSD chapter. b. Involve the DAGs [Domestic Advisory Groups] in monitoring the compliance stage. c. Extend the possibility to apply trade sanctions in cases of failure to comply with obligations that materially defeats the object and purpose of the Paris Agreement on Climate Change or in serious instances of non-compliance with the ILO fundamental principles and rights at work.” Source: Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: [The power of trade partnerships: together for green and just economic growth](#). Brussels, 16.8.2022, COM(2022) 409 final/2.

⁶¹ Malm, A. 2023. [Did the 2015 Paris Climate Change Agreement Change the Trajectory of the Global Response to the Build-Up of Greenhouse Gas Emissions?](#) In *Climate and Energy Governance for a Sustainable Future* (ed. R. Leal-Arcas), Ch. 1, pp. 3–14. Springer Nature, Singapore.

⁶² According to the 1257 known ISDS cases listed in the UNCTAD database [Investment Dispute Settlement Navigator](#), 26 per cent fall into the following economic sectors or subsectors “mining of coal and lignite” (15 cases = 1,19%), “extraction of crude petroleum and natural gas” (80 cases = 6,36%) and “electricity, gas, steam and air conditioning supply” (230 cases = 18,29%). Data as of 3 July 2023.

⁶³ See WTO [DISPUTE SETTLEMENT DS456: India — Certain Measures Relating to Solar Cells and Solar Modules](#).

⁶⁴ See <https://www.whitehouse.gov/cleanenergy/inflation-reduction-act-guidebook/>.

⁶⁵ See https://www.wto.org/english/tratop_e/dispu_e/ab_members_descrp_e.htm.

⁶⁶ Congressional Research Service (CRS). 2021. [The World Trade Organization’s \(WTO’s\) Appellate Body: Key Disputes and Controversies](#). CRS, Washington.

⁶⁷ “The best approach to reframing climate work on response measures would be for the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) to work in concert with the members of the WTO in crafting a definition of a response measure that could be agreed by the COP. The WTO could then recognize and use that definition in the trade regime through reliance in dispute settlement, adoption of an amendment to the trade rules, a legal interpretation of trade rules or, or, ideally, incorporation of the definition in a WTO climate waiver.” Source: Bacchus, J. 2019. [What Is a Climate Response Measure? Breaking the Trade Taboo in Confronting Climate Change](#). Centre for International Governance Innovation (CIGI), Waterloo, Ontario, Canada.

The idea of a climate waiver is elaborated in two other papers by the author: Bacchus, J. 2017. [The Case for a WTO Climate Waiver](#). Centre for International Governance Innovation (CIGI), Waterloo, Ontario, Canada. Bacchus, J. 2018. [The Content of a WTO Climate Waiver](#). Centre for International Governance Innovation (CIGI), Waterloo, Ontario, Canada.

⁶⁸ UN Secretary-General António Guterres’ remarks to High-Level opening of COP27 climate summit in Egypt on 7 November 2022, see <https://www.un.org/sg/en/content/sg/speeches/2022-11-07/secretary-generals-remarks-high-level-opening-of-cop27>

⁶⁹ See REPORT OF THE UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT (Rio de Janeiro, 3-14 June 1992), Annex I [RIO DECLARATION ON ENVIRONMENT AND DEVELOPMENT](#)

⁷⁰ Regarding global energy governance, the last four chapters in the book “[Climate and Energy Governance for a Sustainable Future](#)” (ed. R. Leal-Arcas. 2023. Springer Nature, Singapore) provide valuable information and guidance: [Why Are Energy Security and Decarbonisation Important?](#) (Mohamed Beck, N.I.B., Ch. 16, pp-217-228), [Reducing the Fragmentation of Global Energy Governance in a Post-pandemic World](#) (Bryan Tan, B., Ch. 17, pp. 229-240), [Global Energy Governance](#) (Reda, I.A., Ch. 18, pp. 241-253) and [Is It Possible to Have Energy Governance at the Global Level?](#) (Ho, W.V., Ch. 19, pp. 255-265).

⁷¹ From the NGO side see the 2016 [Discussion Paper: A New, Climate-friendly Approach to Trade](#) from the American environmental organisation Sierra Club.