

TRADE AND CLIMATE CHANGE

Information brief n° 1



Overview of
trade policies adopted to
address climate change

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OVERVIEW OF TRADE POLICIES ADOPTED TO ADDRESS CLIMATE CHANGE¹

Information brief n° 1

KEY POINTS

- WTO members have increasingly adopted trade-related measures as part of their overall policies to achieve climate objectives. Between 2009 and 2019, 4,355 measures to address climate change were notified to the WTO, an increase from 220 measures in 2010 to 580 measures in 2019.
- Most climate-related measures were submitted under the Agreement on Subsidies and Countervailing Measures and the Agreement on Technical Barriers to Trade, followed by the Agreement on Agriculture and the Agreement on Import Licensing Procedures.
- Data on trade measures adopted for climate-related purposes are submitted due to the different WTO notification requirements, and are captured through the WTO Environmental Database (EDB), which allows for analysis, with some limitations.
- The data presented in this note show that climate change-related trade measures are increasingly being adopted by members. This provides relevant and useful insights on the evolving interaction between trade and climate policies.

1. GROWING CLIMATE AMBITION AND THE ROLE OF TRADE

In 2021, the Intergovernmental Panel on Climate Change (IPCC) released the Working Group I contribution² to the IPCC [Sixth Assessment Report](#), which concluded that human activities have unequivocally warmed the atmosphere, ocean and land, and that widespread and rapid climate change has occurred. It noted that human-induced climate change is already causing weather and climate extremes in every region of the globe, such as heatwaves, heavy precipitation, droughts and tropical cyclones.

In 2015, the United Nations Framework Convention on Climate Change (UNFCCC) held its 21st Conference of the Parties (COP21) in Paris, which saw the conclusion of the [Paris Agreement](#) on climate change, giving rise to an ambitious set of international rules to address climate change and establishing a new framework for the adoption of climate policies based on “Nationally Determined Contributions” (NDCs), i.e., each country proposal of what it can do to reduce national emissions and adapt to the impacts of climate change. Importantly, unlike the previous framework for climate action under the UNFCCC (the Kyoto Protocol), the Paris Agreement requires all parties – whether developed or developing countries – to take action and contribute to climate change mitigation and adaptation.

However, the 2021 IPCC Sixth Assessment Report concluded that the objective of the Paris Agreement to limit global warming to 1.5°C and – at most – to “well below” 2°C – will not be met in the 21st century unless deep reductions in emissions of carbon dioxide (CO₂) and other greenhouse gases (GHGs) occur in the coming decades. In the face of the climate emergency, support for more proactive climate action has grown in recent years.

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Recently, a growing number of governments have announced medium- and long-term climate ambitions to align their pledges to the Paris Agreement goals. To achieve their ambitions, these economies will need to adopt a host of climate-smart policies in support of a “just transition” to a low-carbon economy.³ International, regional and national financing institutions have continued to increase their support for climate action. For example, the African Development Bank, the Asian Development Bank, the European Bank for Reconstruction and Development, the European Investment Bank, the Inter-American Development Bank and the World Bank Group have all demonstrated their commitment to the Paris goals by pledging to shift a significant share of their portfolios toward financing for climate mitigation and adaptation.⁴

International trade is also a key element in these efforts, and trade policy has increasingly been used as an important tool to support climate mitigation and adaptation.

1.1 Trade and related measures are highly relevant for climate ambitions

On several occasions, the international community – including the WTO, the United Nations Environment Programme (UNEP)⁵ and various multilateral environmental agreements⁶ – have highlighted the role that trade can play in the realization of environmental and climate goals.⁷

If trade-opening is merely viewed as an engine for GDP growth, and if proper policies are not put in place to address its consequences, such as increases in international transport, trade liberalization can lead to increased resource use and pollution.⁸ In 2017, for example, the European Commission conducted an assessment of the impact of the Transatlantic Trade and Investment Partnership (an agreement between the European Union and the United States which has been under negotiation since 2013) on climate change, and concluded that the growth in output and trade would lead to a rise in emissions due to the augmentation of the scale of economic activity, increases in emissions from transportation, and changes in the composition of industries and trading partners.⁹

On the other hand, trade-opening can also lead to the construction of value chains that make more efficient use of resources globally, and that can provide access to effective low-carbon technologies. In the presence of sound environmental policies, lower trade barriers (e.g., the removal of tariffs and non-tariffs barriers on climate-friendly products and services) and well-functioning institutions, international trade can be a powerful climate change mitigation and adaptation tool.¹⁰

Trade policy has increasingly been used as an important tool to support climate mitigation and adaptation.

International trade, as such, does not feature in the Paris Agreement. However, parties to the Agreement have discussed numerous trade-related elements as part of their cooperation in several technical bodies, including the Improved Forum on the impacts of the implementation of response measures, the Katowice Committee of Experts on Impacts of implementation of Response Measures (KCI), the Nairobi work programme on impacts, vulnerability, and adaptation to climate change, and the Koronivia Joint Work on Agriculture.

In such discussions, the potential role of trade to support parties to the Paris Agreement in their climate efforts has often been highlighted, including in terms of how to help countries diversify their economies away from reliance on carbon intensive sectors, as well as a just transition of the workforce.¹¹ Trade also has a role to play in the implementation of Article 6 of the Paris Agreement establishing rules for global carbon markets. It has been estimated by the International Emissions Trading Association (IETA)¹² that carbon trading could save US\$ 250 billion per year by 2030 in climate mitigation in the energy sector alone.

In the presence of sound environmental policies, international trade can be a powerful climate change mitigation and adaptation tool.

1.2 Governments resort to various trade measures to address climate change

International trade is also an integral part of the plans of many Paris Agreement parties to achieve their climate mitigation goals. According to a 2017 study commissioned by the United Nations Conference on Trade and Development (UNCTAD)¹³ mapping the initial 163 NDCs submitted by parties to the UNFCCC, international trade measures were “pervasive” in almost all NDCs, indicating the often “overlooked” importance of trade for climate action.

A study¹⁴ by the Klimalog project of the German Development Institute (DIE), and the “[NDC Explorer](#)” developed in the context of this project, confirm this intersection. According to the NDC Explorer, 53 NDCs submitted in the context of COP21 included a direct reference to trade or trade elements, 33 included specific trade elements geared towards fostering mitigation, and 71 did not mention trade specifically. Still, as pointed out by [UNCTAD](#) and others, NDCs – and climate policies more broadly – do not seem to integrate trade strategies and perspectives in a systematic manner, indicating that there is potential for further development and for more coherence across climate policies.

Various other databases on specific countries' climate actions show a significant number of trade-related measures among current climate change mitigation and adaptation policies. The Organisation for Economic Co-operation and Development's (OECD) [Policy Instruments for the Environment \(PINE\)](#) provides information on taxes, fees and charges, tradable permit systems, deposit refund systems, subsidies and voluntary approaches used to address environmental concerns. The International Energy Agency's (IEA) [Policies database](#) provides access to information on past, existing or planned government policies and measures to reduce GHG emissions, and includes information on taxes, regulations, codes and standards, among others.

The information submitted to the WTO by its members as part of their current notification obligations also reflect this trend. As described below, these notifications clearly confirm that governments have increasingly adopted trade-related measures as part of their overall policies to achieve climate objectives. The examination of these measures and trends provides important insights into the interaction between trade and climate policies, and into how trade can support WTO members' climate ambitions.

2. A GROWING NUMBER OF TRADE-RELATED MEASURES IS BEING NOTIFIED TO ADDRESS CLIMATE CHANGE

In response to a recommendation in the 1996 Report of the Committee on Trade and Environment,¹⁵ the WTO Secretariat annually updates and compiles all environment-related notifications made by members to the WTO in the WTO [Environmental Database](#) (EDB). This database, which is freely available to the public, contains all of the environment-related notifications that have been submitted by WTO members, as well as environmental measures and policies mentioned in WTO members' [trade policy reviews](#). It provides a wealth of information that sheds light on how WTO members are using trade policy in pursuit of environmental objectives.

Each WTO notification can refer to one or more specific environment-related measures.¹⁶ From 2009 to 2019, the accumulated 6,660 notifications in the EDB included a total of 14,119 environment-related measures. The database also includes environment-related entries identified in WTO members' trade policy reviews (TPRs). Since 2009, more than 8,700 TPR entries have been included in the database. Since 1997, annual environment-related notifications have more than quadrupled, reaching a total of 672 notifications in 2019. Their importance also seems to be increasing relative to other policies reflected in the notifications: while in 1997 environment-related notifications accounted for 8 per cent of all the notifications, their share has steadily increased to around 15 per cent in recent years.

Since 1997, annual environment-related notifications have more than quadrupled, reaching a total of 672 notifications in 2019. Besides providing a general overview of the type of information contained in these notifications, this note examines in detail different dimensions of the EDB data, such as the types of products covered by the environmental measures, the WTO Agreements under which they were notified, and the type of trade-related measure used by the member.

2.1 Climate-related measures and TPR entries in the EDB

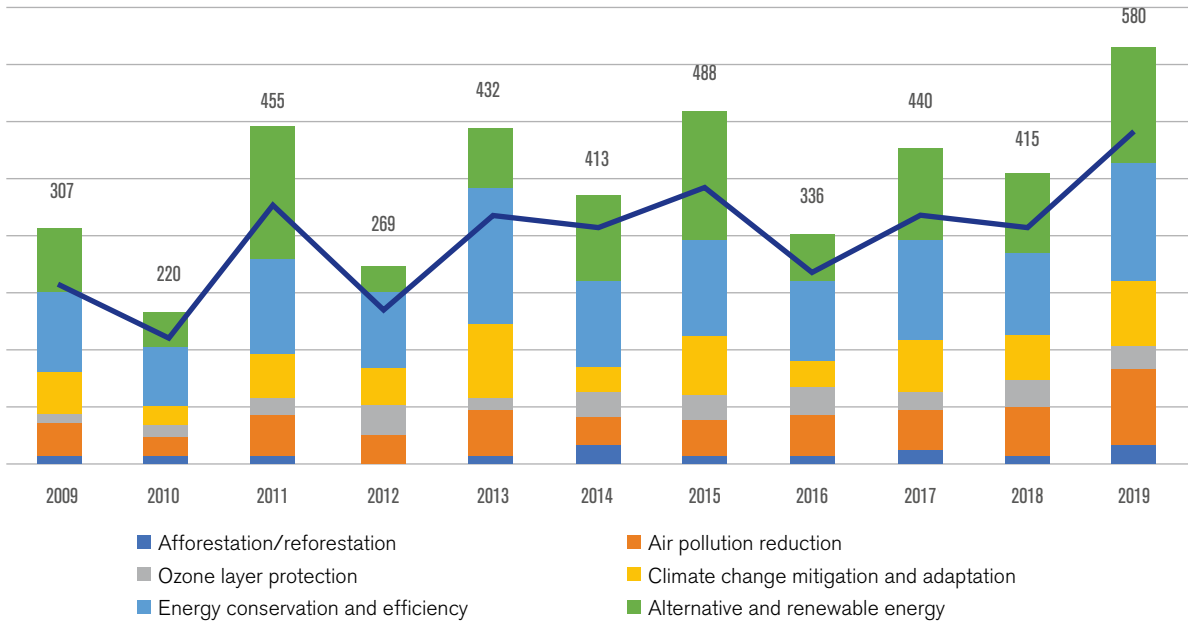
2.1.1 Definition and dataset

The EDB contains information on a number of different environmental objectives, many of which are directly or indirectly linked to climate change, including afforestation/reforestation, air pollution reduction, ozone layer protection, climate change mitigation and adaptation, energy conservation and efficiency, and alternative and renewable energy.

Using the aggregate of these categories as a basis, the EDB currently contains a total of 2,360 notifications, which reflect 4,355 measures to address climate change notified to the WTO between 2009 and 2019 (totalling 32 per cent of all EDB measures).¹⁷ The number of climate-related measures notified has steadily increased in recent years (see Figure 1), increasing from 220 measures in 2010 to 580 measures notified in 2019 (the latest year available).

The Environmental Database currently contains a total of 2,360 notifications, which reflect 4,355 measures to address climate change notified to the WTO between 2009 and 2019.

Figure 1. Climate-related measures by environmental objectives (2009-19)



Source: WTO Secretariat based on the WTO’s Environmental Database (EDB).

2.1.2 Types of environment-related objectives

The environmental objective “Climate change mitigation and adaptation”, per the EDB, was specifically identified in 858 of the climate-related measures notified to the WTO for the overall period 2009-19. These included, for instance, new regulatory requirements notified by Japan to reduce the use of fluorocarbons (a potent GHG and ozone-depleting substance) and to promote alternative chemicals with a lower potential for global warming,¹⁸ or the support notified by Argentina to increase the adaptability and resilience of small agricultural family-owned farms against the impacts of climate change.¹⁹

“Energy conservation and efficiency” and “alternative and renewable energy” are the two main objectives pursued by members, accounting for 76 per cent of all climate-related measures.

However, “energy conservation and efficiency” and “alternative and renewable energy” are the two main objectives pursued by members, accounting for 76 per cent of all climate-related measures. For instance, preferential tax treatment for energy-saving and new energy vehicles and vessels,²⁰ and the use of import licences to regulate lighting with minimum energy performance standards,²¹ are some of the domestic measures implemented by WTO members to promote energy conservation. Annex II provides more details on the harmonized categories used in the EDB.

2.1.3 WTO agreements and provisions under which notifications have been made

At least one climate-related measure has been notified under almost every WTO Agreement since 2009, which suggests that climate change topics are increasingly relevant for trade officials and experts in different areas. Most of these measures were submitted under the WTO Agreement on Subsidies and Countervailing Measures (45 per cent) and the Agreement on Technical Barriers to Trade (36 per cent), potentially highlighting the importance of discussions in the committees responsible for these agreements (see Table 1).

Table 1: Climate-related measures notified per WTO agreement or provision (2009-19)

| WTO Agreement | Number of measures | Share (%) |
|---|--------------------|-----------|
| Subsidies and Countervailing Measures | 1,961 | 45.0% |
| Technical Barriers to Trade | 1,576 | 36.2% |
| Agriculture | 331 | 7.6% |
| Import Licensing Procedures | 266 | 6.1% |
| Quantitative Restrictions (GATT Article XI) | 141 | 3.2% |
| Government Procurement | 34 | 0.8% |
| Trade Facilitation | 10 | 0.23% |
| State trading enterprises (GATT Article XVII) | 9 | 0.21% |
| General Agreement on Trade in Services | 8 | 0.18% |
| Safeguards | 8 | 0.18% |
| Customs Valuation | 3 | 0.07% |
| Trade-Related Aspects of Intellectual Property Rights | 3 | 0.07% |
| Sanitary and Phytosanitary Measures | 2 | 0.05% |
| Regional Trade Agreements | 2 | 0.05% |
| GATT Article XVIII, Section C ²² | 1 | 0.02% |

Source: WTO Secretariat based on the WTO's Environmental Database (EDB).

2.1.4 WTO members that have notified climate-related measures

Since 2009, over 100 WTO members have notified at least one climate-related measure. While developed members were responsible for around 58 per cent of these measures, it is notable that developing (1,588 measures) and least-developed members (81) have also notified a significant number of climate-related measures, with a marked increase over the past few years. For example, while climate-related measures notified yearly by developed members increased by around 60 per cent between 2009 to 2019, those notified by developing members increased about 150 per cent in the same period. However, there is a high concentration in terms of the members that have submitted these notifications, as 10 members account for approximately 70 per cent of all climate-related measures notified: the United States, (1,124), followed by the European Union (779), China (316), Australia (184), Canada (150), Japan (146), Chinese Taipei (89), Chile (79), Thailand (72) and Ecuador (69) are the members which most notified climate-related measures.

While climate-related measures notified yearly by developed members increased by around 60 per cent between 2009 to 2019, those notified by developing members increased about 150 per cent in the same period.

2.1.5 Types of measures

The EDB data also shows that members use a wide variety of trade policy instruments to address climate-related issues.²³ “Technical regulation or specifications”, followed by “grants and direct payments”, were the most common types of measures or instruments notified by members, followed by conformity assessment procedures and tax concessions (see Table 2).

Table 2: Top 10 types of climate-related measures notified by WTO members (2009-19)

| EDB harmonized types of measures | Number of measures | Share (%) |
|--|--------------------|-----------|
| Technical regulation or specifications | 1,463 | 33.6% |
| Grants and direct payments | 1,170 | 26.9% |
| Conformity assessment procedures | 607 | 13.9% |
| Tax concessions | 585 | 13.4% |
| Import licences | 295 | 6.8% |
| Loans and financing | 278 | 6.4% |
| Countervailing measure / investigation | 201 | 4.6% |
| Ban/Prohibition | 173 | 4.0% |
| Non-monetary support | 143 | 3.3% |
| Export licences | 77 | 1.8% |

Source: WTO Secretariat based on the WTO's Environmental Database (EDB).

A deeper look at these measures provides interesting examples on the use of these different trade policies. For instance, Iceland notified that public tenders might include the “cost of releasing greenhouse gases [...] and other costs involved in reducing climate change” in the calculation of “life-cycle costs”.²⁴ Other WTO members have notified various conformity assessment procedures to certify energy efficiency and emission standards.²⁵ By providing a systematized way to identify and compare trade policies adopted for similar climate-related objectives, it is possible not only to promote peer-learning and best practices, but also to facilitate the identification of potentially unnecessary or counterproductive regulatory divergences.

When grouped and analysed based on the 2019 International Classification of NTMs (i.e., non-tariff measures),²⁶ which is commonly used by international organizations to study trade-related measures, the data show that 53 per cent of the notified climate-related measures fell under the category “Subsidies and other forms of support” (Chapter L), followed by 36 per cent of measures that fell under the category “Technical Barriers to Trade” (under Chapter B), and 9 per cent that fell under the category “Non-automatic import licensing, quotas, prohibitions, quantity-control measures and other restrictions [...]” (Chapter E). Annex I provides a more detailed analysis of these categories.

2.1.6 Types of sectors and products covered

In terms of the types of sectors affected by these notifications, all of the harmonized sectors covered by the EDB were affected by at least a few dozen climate-related measures. Most measures contained actions to address climate-related objectives within the manufacturing (48 per cent) and energy (32 per cent) sectors, followed by chemicals (10 per cent) and agriculture (9 per cent).²⁷ The least affected sectors were mining (2 per cent) and fisheries (1 per cent). In terms of the types of products covered by these measures,²⁸ Harmonized System (HS) chapters relevant to affected sectors were identified; around 2,000 measures covered manufacturing goods under chapters 84 and 85 of the HS, which include nuclear reactors, boilers, machinery, mechanical appliances, and electrical machinery and equipment. Several other measures are associated with HS chapters 73, 87 and 90 (see Table 3).

Table 3: Top five HS chapters linked to climate-related measures that have been notified between (2009-19)

| HS chapter | Measures | Description HS chapter | Share |
|------------|----------|---|-------|
| 84 | 2,019 | Nuclear reactors, boilers, machinery, and mechanical appliances | 23% |
| 85 | 1,868 | Electrical machinery and equipment | 21% |
| 73 | 967 | Articles of iron or steel | 11% |
| 87 | 574 | Vehicles other than railway or tramway rolling stock | 6% |
| 90 | 464 | Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus | 5% |
| 38 | 215 | Miscellaneous chemical products | 2% |

Source: WTO Secretariat based on the WTO's Environmental Database (EDB).

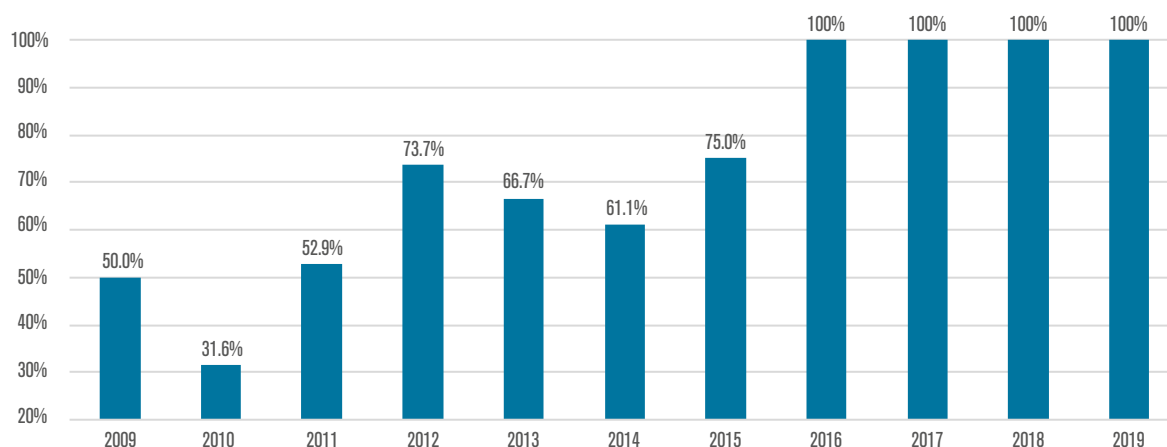
2.1.7 Trade policy reviews

The WTO [TPRs](#) periodically analyse the trade policies and practices of all WTO members. The reviews are undertaken by WTO members and are based on two documents: an independent factual report by the WTO Secretariat, and a report, or policy statement, by the government under review. The Chair of the WTO Trade Policy Review Body reads concluding remarks at the end of the review meeting which summarize the main points and areas raised by members.

There were 190 TPRs between 2009 and 2019. Based on a keyword search analysis, on average 70 per cent of these TPRs included references to climate change-related policies.²⁹ However, in this context too, there is clearly a growing trend toward including at least one reference to climate change, as since 2016, 100 per cent of WTO TPRs have included at least one climate-related entry (see Figure 2).

There were 190 Trade policy reviews between 2009 and 2019; on average 70 per cent of these TPRs included references to climate change-related policies.

Figure 2: Share of TPRs that have included climate-related entries (2009-19)



Source: WTO Secretariat based on the WTO's Environmental Database.

For example, the Secretariat report in the 2019 TPR of Bangladesh³⁰ notes that: “Bangladesh’s climate-sensitive agricultural sector continues to make a significant, albeit steadily declining, contribution to the economy (13.7% of GDP in 2017/18), and accounts for a large portion of employment and rural income, and the expansion of exports”, while the government report of the 2017 TPR of Mexico³¹ noted that a “tax was introduced on fossil fuel consumption in line with the carbon content of the fuel”. This suggests that the trade policy community increasingly sees climate change mitigation and adaptation issues as an integral part of its work.

ANNEX I

EDB MEASURES CATEGORIZED UNDER INTERNATIONAL CLASSIFICATION OF NON-TARIFF MEASURES

| Harmonized chapter UNCTAD (non-tariff measures) | Number of measures |
|---|--------------------|
| L: Subsidies and other forms of support | 2,296 |
| B: Technical Barriers to Trade | 1,576 |
| E: Non-automatic import licensing, quotas, prohibitions, quantity-control.... | 412 |
| M: Government procurement restrictions | 34 |
| D: Contingent trade-protective measures | 8 |
| H: Measures affecting competition | 8 |
| B: Technical Barriers to Trade | 4 |
| N: Intellectual property | 3 |
| J: Distribution restrictions | 3 |
| A: Sanitary and phytosanitary measures | 2 |
| C: Pre-shipment inspection and other formalities | 2 |
| F: Price-control measures, including additional taxes and charges | 2 |
| I: Trade-related investment measures | 1 |

ANNEX II

EDB HARMONIZED CATEGORIES

EDB Harmonized categories of environment-related objectives (25)

| |
|---|
| Afforestation/reforestation |
| Air pollution reduction |
| Alternative and renewable energy |
| Animal protection |
| Biodiversity and ecosystem |
| Chemical, toxic and hazardous substances management |
| Climate change mitigation and adaptation |
| Energy conservation and efficiency |
| Environmental goods and services promotion |
| Environmental protection from pests and diseases |
| Environmentally friendly consumption |
| General environmental protection |
| MEAs implementation and compliance |
| Natural resources conservation |
| Other environmental risks mitigation |
| Ozone layer protection |
| Plant protection |
| Soil management and conservation |
| Sustainable agriculture management |
| Sustainable and environmentally friendly production |
| Sustainable fisheries management |
| Sustainable forestry management |
| Sustainable mining management |
| Waste management and recycling |
| Water management and conservation |

EDB Harmonized categories of type of measures (31)

| |
|---|
| Anti-dumping measure / investigation |
| Ban/Prohibition |
| Conformity assessment procedures |
| Countervailing measure / investigation |
| Environmental provisions in trade agreements |
| Export licences |
| Export quotas |
| Export tariffs |
| General environmental reference ³² |
| Grants and direct payments |
| Import licences |
| Import quotas |

| |
|--|
| Import tariffs |
| Income or price support |
| Intellectual property measures |
| Internal taxes |
| Investment measures |
| Loans and financing |
| Non-monetary support |
| Not specified |
| Other environmental requirements |
| Other measures |
| Other price and market based measures |
| Other support measures |
| Public procurement |
| Quarantine requirements |
| Regulation affecting movement or transit |
| Risk assessment |
| Safeguard measure / investigation |
| Tax concessions |
| Technical regulation or specifications |

EDB Harmonized categories of sectors subject to the measure (11)

| |
|----------------------------------|
| Agriculture |
| All products/economic activities |
| Chemicals |
| Energy |
| Fisheries |
| Forestry |
| Manufacturing |
| Mining |
| Not specified |
| Other |
| Services |

ENDNOTES

- 1 This is an information note which represents research in progress. The opinions expressed in this paper are those of its authors. They are not intended to represent the positions or opinions of the WTO or its members, and are without prejudice to members' rights and obligations under the WTO. Any errors are attributable to the authors. The note was written by Daniel Ramos, Marisol Dar Ali, Michael Kolie and Roy Santana.
- 2 The Working Group I contribution to the Sixth Assessment Report addresses the most up-to-date physical understanding of the climate system and climate change, bringing together the latest advances in climate science, and combining multiple lines of evidence from paleoclimate observations, process understanding, and global and regional climate simulations.
- 3 "Just transition of the workforce" refers to the fact that the transition to low-carbon economies must support those most impacted not only by climate change itself but also by actions taken to decarbonize the global economy (e.g., workforces in carbon-intensive industries). See UNFCCC, "Just Transition of the Workforce, and the Creation of Decent Work and Quality Jobs", UNFCCC Technical Paper, available at <https://unfccc.int/sites/default/files/resource/Just%20transition.pdf>.
- 4 The European Investment Bank, Delivering Climate Change Action at Scale: Our Commitment to Implementation at https://www.eib.org/attachments/press/joint-mdb-statement-climate_nov-28_final.pdf
- 5 See WTO-UNEP, Trade and Climate Change at https://www.wto.org/english/res_e/booksp_e/trade_climate_change_e.pdf
- 6 The WTO MEA Matrix compiles a number of multilateral environmental agreements that include trade provisions as part of their tools to reach their objectives. See https://www.wto.org/english/tratop_e/envir_e/envir_matrix_e.htm.
- 7 It is worth noting that Goal 17 of the Sustainable Development Goals (SDGs) highlights trade as one of the "means of implementation" of all SDGs, including Goal 13 on climate action. See <https://sdgs.un.org/goals/goal17>.
- 8 See WTO, "The impact of trade opening on climate change" at https://www.wto.org/english/tratop_e/envir_e/climate_impact_e.htm.
- 9 EC, SIA in support of the negotiations on a Transatlantic Trade and Investment Partnership (TTIP), at https://trade.ec.europa.eu/doclib/docs/2017/april/tradoc_155464.pdf.
- 10 WTO-UNEP, Making trade work for the environment, prosperity and resilience at https://www.wto.org/english/res_e/publications_e/unereport2018_e.htm. See also WTO-UNEP, Trade and Climate Change at <https://www.unep.org/resources/report/trade-and-climate-change>; and WTO, "Short Answers to Big Questions on the WTO and the Environment" at https://www.wto.org/english/res_e/publications_e/envirqapublication_e.htm.
- 11 See UNFCCC, "The concept of economic diversification in the context of response measures", UNFCCC Technical Paper, at https://unfccc.int/files/cooperation_support/response_measures/application/pdf/technical_paper_economic_diversification.pdf, and UNFCCC, "Just Transition of the Workforce, and the Creation of Decent Work and Quality Jobs", UNFCCC Technical Paper, at <https://unfccc.int/sites/default/files/resource/Just%20transition.pdf>.
- 12 See IETA, "The Economic Potential of Article 6 of the Paris Agreement and Implementation Challenges" at https://www.ieta.org/resources/International_WG/Article6/CLPC_A6%20report_no%20crops.pdf.
- 13 See "UNFCCC Nationally Determined Contributions: Climate Change and Trade", submitted by Rana Elkahwagy, Vandana Gyanchandani and Dario Piselli to Alexey Vikhlyayev, UNCTAD, at <https://unctad.org/system/files/official-document/ditc-ted-03102017-Trade-Measures-UNFCC-NatDet.pdf>.
- 14 See "Trade Elements in Countries' Climate Contributions under the Paris Agreement", submitted by Clara Brandi, International Centre for Trade and Sustainable Development (ICTSD), at <https://euagenda.eu/upload/publications/untitled-81229-ea.pdf>.
- 15 See WTO official document number WT/CTE/1, available at <https://docs.wto.org/>.
- 16 For example, WTO official document [G/MA/QR/N/SGP/4](#), a "Notification pursuant to the Decision on Notification Procedures for Quantitative Restrictions" from 2019, included a total of 4 climate-related measures.

- 17 The EDB classifies measures based on 25 different “harmonized objectives”. The same measure can be assigned more than one harmonized objective. See Annex II for details on the EDB harmonized categories.
- 18 See WTO official document G/TBT/N/JPN/628.
- 19 See WTO official document G/AG/N/ARG/43.
- 20 See WTO official document G/SCM/N/343/CHN.
- 21 See WTO official document G/LIC/N/3/AUS/12.
- 22 See https://www.wto.org/english/docs_e/legal_e/gatt47_02_e.htm.
- 23 The EDB classifies measures based on 30 different “harmonized types of measures”. The same measure can be assigned more than one type of harmonized measure. For instance, a conditional ban can be assigned the categories of both “Ban/Prohibition” and “Technical regulation or specification”.
- 24 See WTO official document GPA/144.
- 25 See, e.g., WTO official documents G/TBT/N/CAN/551, G/TBT/N/EGY/178 and G/TBT/N/NZL/79
- 26 For this analysis, the authors used the United Nations Conference on Trade and Development (UNCTAD) [International Classification of Non-tariff Measures \(NTMs\)- 2019 version](#), which provides a taxonomy of all measures considered relevant in today’s international trade.
- 27 The EDB classifies measures are based on 11 different “harmonized types of sectors” affected. The same measure can “affect” more than one sector and/or HS chapter.
- 28 The analysis of the types of products is based on the Harmonized Commodity Description and Coding System (HS), which is a standard nomenclature used by WTO members to identify covered products in most of these notifications and to implement the measures in practice. Each measure in the EDB data was linked to relevant chapters of the HS, including an assumption for those measures that did not clearly indicate a specific product coverage.
- 29 The keywords used to filter climate-related TPRs were: greenhouse, climate, GHG, emission, carbon, renewable.
- 30 See WTO official document WT/TPR/S/385/Rev.1.
- 31 See WTO official document WT/TPR/G/352/Rev.1.
- 32 “General environmental reference” is a harmonized category that was introduced for EDB TPR entries from 2016 onwards.



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