

Fostering Enhanced
International Cooperation
on Trade-Related Measures
with Climate Objectives
at the WTO: Coherence,
Transparency, Development,
and Interoperability

Christophe Bellmann Carolyn Deere Birkbeck Yasmin Ismail Brian Kelly Nyaga





About TESS

The Forum on Trade, Environment, & the SDGs (TESS) works to support a global trading system that effectively addresses global environmental crises and advances the sustainable development goals. To foster inclusive international cooperation and action on trade and sustainability, our activities seek to catalyse inclusive, evidence-based, and solutions-oriented dialogue and policymaking, connect the dots between policy communities, provide thought leadership on priorities and policy options, and inspire governments and stakeholders to take meaningful action. TESS is housed at the Geneva Graduate Institute.

Authors

Christophe Bellmann is Head of Policy Analysis and Strategy, TESS. Carolyn Deere Birkbeck is Executive Director and Founder, TESS. Yasmin Ismail is Senior Policy Advisor, TESS. Brian Kelly Nyaga is an independent policy analyst specializing in international trade and carbon markets.

Acknowledgements

TESS gratefully acknowledges the financial support for our work from a range of donors, which have included UNEP, the European Climate Foundation, the Minderoo Foundation, the Quadrature Climate Foundation, and the governments of Australia, France, and Germany.

Disclaimer

The elements presented in this report do not necessarily reflect the views of any of the partner organizations of TESS, including the Geneva Graduate Institute, or of TESS funders.

Recommended citation: Bellmann, C., Deere Birkbeck C., Ismail, Y., & Nyaga, B.K. (2025). Fostering enhanced international cooperation on trade-related measures with climate objectives at the WTO: Coherence, transparency, development, and interoperability. Forum on Trade, Environment, & the SDGs (TESS).

© 2025 Forum on Trade, Environment, & the SDGs (TESS)



This publication is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.











Contents

1. Introduction 3 2. Trade-Climate Measures and Priorities That Different WTO Members Have Identified for International Cooperation 4 3. Different Aspects for International Cooperation on Trade-Climate Measures 7 3.1 Principles of International Law Relevant to Trade-Climate Measures 8 3.2 Processes and Practices for the Development and Implementation of Trade-Climate Measures 9 3.3 Design Features of Trade-Climate Measures 10 3.4 Technical Aspects of Trade-Climate Measures 11 4. Possible Ways Forward 13 References 16

Figures, Tables, and Boxes

Figure 1. Typology of Trade-Related Environmental Measures Used in the WTO's Environmental Database

Figure 2. Different Aspects Raised in Ongoing Discussions on Cooperation on Trade-Climate Measures

7

Table 1. Examples of Issues Raised Internationally in Relevant Processes as Requiring Cooperation and Guidance

14

Box 1. Selected Issues Raised in Recent WTO Submissions Regarding Trade-Climate Measures

6

Box 2. Examples of International Initiatives to Address Technical Aspects of Trade-climate Measures

11

Box 3. Sample of Several Sectoral Initiatives Addressing Carbon Accounting Relevant to Trade-Climate Measures

Abbreviations

ACCTS Agreement on Climate Change, Trade and Sustainability

ACP African, Caribbean and Pacific

CTE Committee on Trade and Environment

ESRS European Sustainability Reporting Standards

EU European Union GHG Greenhouse Gas

IFCMA Inclusive Forum on Carbon Mitigation Approaches

IMF International Monetary Fund

ISSB International Sustainability Standards Board

LDC Least Developed Country

OECD Organisation for Economic Co-operation and Development

TBT Technical Barriers to Trade

TESSD Trade and Environmental Sustainability Structured Discussions

TrCMs Trade-Related Climate Measures

UNCTAD United Nations Trade and Development

WTO World Trade Organization

1. Introduction

Faced with the urgent need to act to reduce the economic, security, social, and environmental threats associated with the climate crisis and to respond to its impacts, many governments are implementing or considering a set of trade-related measures and policies with climate objectives—often referred to in the context of the World Trade Organization (WTO) as trade-related climate measures. In this paper, we use the terminology "trade-climate" measures.¹ Such trade-climate measures range from standards and regulations to subsidies, public procurement policies, and labelling schemes as well as internal taxes and border carbon adjustments.

While these measures have direct impacts on trade, their design and implementation mostly occur at the domestic level, often with limited attention paid to their potential effects on third countries. As a result, differences in approaches and methodologies reflecting distinctive contexts, priorities, and policy goals are increasingly creating a patchwork of uncoordinated national, bilateral, and regional efforts as well as supply chain or sector-specific initiatives and public-private partnerships.

There is a growing concern that the lack of cohesion or transparency and the fragmented nature of trade-climate measures are not only generating competitiveness tensions among major trading partners but also add compliance costs for businesses, create unnecessary barriers to trade, and disadvantage developing countries in ways that marginalize them in the transition to a net zero future. The equity concerns are especially high in developing countries that face significant difficulties in meeting new climate-related requirements, lack affordable

access to relevant technologies and finance, or do not have the fiscal space and resources to support large-scale economic transformation. In other cases, there are concerns that methodologies and approaches adopted in developing countries are not recognized as equivalent in more advanced economies. In this context, a core challenge is how best to harness trade-related action in ways that advance climate ambition, are transparent, and account for different national circumstances and capacities, including levels of development and climate vulnerabilities.

While harmonizing existing trade-climate measures at the global level is widely considered unlikely to occur, there is mounting recognition that international cooperation in this area is needed. At the WTO, members have discussed different aspects of the relationship between trade measures and environmental measures for over 30 years. Indeed, a core part of the mandate of the WTO Committee on Trade and Environment (CTE) is to identify the relationship between trade measures and environmental measures in order to promote sustainable development. Over the past several years, despite the challenging geopolitical and geo-economic context, a broad range of members has expressed readiness to enhance cooperation around trade-climate measures, as illustrated by the high number of countries submitting proposals and engaging in discussions on this topic.

Against this background, this briefing note identifies a set of rationales, priorities, and outcomes for enhanced international cooperation on trade-climate measures that have been raised by various WTO members in formal submissions and in various WTO

^{1.} In WTO discussions and member submissions to date, the term "trade-related climate measures" and the abbreviation TrCMs have been widely used. As discussions advance, however, members express different views on this terminology. For instance, some WTO members advance the view that TrCMs are best understood as domestic climate measures with trade-related aspects while others propose that these should be viewed and described as trade or trade-related measures used for climate purposes. Some recommend the term "hybrid" measures as more suitable, and some question the need for a separate categorization of TrCMs as a subset or new type of trade-related environmental measures. A further formulation is measures pursuing climate objectives that have an impact on trade. Recognizing ongoing discussions at the WTO, we have opted in this paper to use the term "trade-climate" measures (though the term "climate-trade" measures' could equally be used), except when describing a view expressed by a WTO member where they have expressly used the term TrCMs.

settings. Overall, cooperation in this area tends to respond to four main considerations or rationales; namely the need to enhance coherence, foster transparency, reflect development considerations, and support interoperability and equivalences of existing and future measures. Discussions so far have also identified four levels of cooperation that could be explored to achieve those objectives from more general to very specific considerations: (i) general principles of international law relevant to trade-

climate measures; (ii) processes and practices for the development and implementation of such measures; (iii) design features associated with specific measures; and (iv) technical aspects of measures. In each of these areas, the paper provides examples of existing international processes, sector-specific initiatives, and public-private partnerships already taking place. Based on these considerations, it identifies existing gaps and areas where discussions at the WTO could add value.

2. Trade-Climate Measures and Priorities That Different WTO Members Have Identified for International Cooperation

A first enabling step for international cooperation on tradeclimate measures is to identify the type(s) of measures that members wish to consider or prioritize for international cooperation. A possible starting point would be to follow the typology established by the WTO Secretariat in its Environmental Database of trade-related measures with environmental protection as their stated objective that have been notified under different WTO agreements. This typology of trade-related environmental measures distinguishes between a wide range of measures, including regulatory requirements, support measures, price and market-based measures, and other measures (Figure 1).

Those measures are routinely discussed in dedicated committees such as the Committee on Technical Barriers to Trade (TBT) or in the CTE, including through a series of thematic sessions. A subset of members has also explored different aspects of trade-climate measures in the context of the informal working group on TrCMs under the Trade and Environmental Sustainability Structured Discussions (TESSD). Such deliberations have highlighted, among other things, that a range of WTO provisions and good regulatory practice considerations are already relevant for the design and implementation of these measures. These refer among other things to transparency, the need to avoid

arbitrary discrimination, and the importance of fostering harmonization, equivalences, or mutual recognition where appropriate.

More generally, the multilateral trading system provides a forum for policy dialogue to share experiences and good practices or raise specific trade concerns. As such, it allows members to address potential trade frictions in a preemptive, non-litigious, and cooperative manner by seeking clarification on the rationale for, and other aspects of, a particular measure in relevant WTO committees.

In recent months, there has been rising interest in exploring the role that the WTO can play in supporting cooperation on trade-climate measures, building on a range of proposals that have been tabled by members over the past few years. As highlighted above, the rationale or outcomes pursued by members range from the coherence and transparency to the equity and development implications of measures to their interoperability and the need to foster equivalences. Some members are open to a discussion on all of these dimensions while others give greater weight to one or more.

Intensified discussions in this area were prompted by proposals circulated in 2024 by China,² Japan,³ the United States,⁴ and the African, Caribbean and Pacific Group of

^{2.} World Trade Organization, Committee on Trade and Environment, Advancing multilateral discussions on trade-related climate measures, Communication from China dated 7 June 2024, WTO Doc. WT/CTE/W/263 (June 7, 2024).

World Trade Organization, Committee on Trade and Environment, Addressing trade-related climate measures at the WTO, Communication from Japan dated 25 September 2024, WTO Doc. WT/CTE/W/264 (September 25, 2024).

^{4.} World Trade Organization, Committee on Trade and Environment / Council for Trade in Goods, Understanding the opportunities and challenges of the green transition: Coherence and interoperability of trade-related climate measures, Communication from the United States dated 4 April 2024, WTO Doc. WT/CTE/W/260, G/C/W/843 (April 4, 2024).

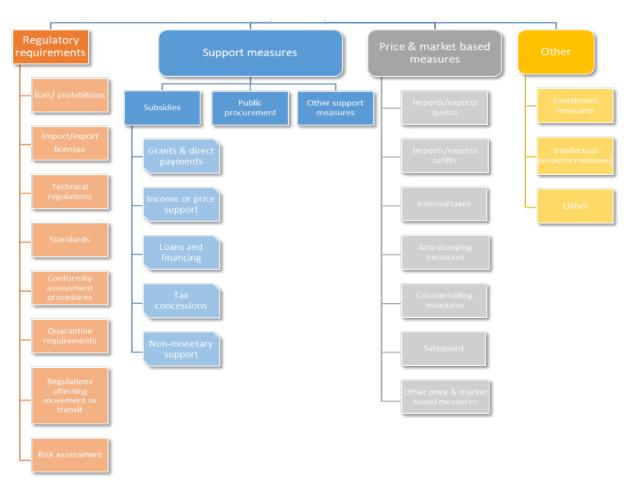


Figure 1. Typology of Trade-Related Environmental Measures Used in the WTO's Environmental Database

Source: Authors' elaboration based on categorization used in WTO (n.d.-a) Environmental Database.

States (ACP),⁵ preceded in 2023 by proposals by Colombia⁶ and the African Group⁷. In 2025, the group of least developed countries (LDCs),8 the Republic of Korea,9 and Australia, Japan, and the Republic of Korea¹⁰ have also contributed to this growing pool of submissions. Box 1 illustrates the diversity and scope of issues that WTO members have raised to date in their various submissions.

Building on these proposals, there are nascent discussions among WTO members on the potential for a concrete outcome on this topic ahead of the 14th WTO Ministerial Conference (MC14) in March 2026, possibly in the form of a soft law instrument encouraging members to follow certain guidance when designing and implementing trade-climate measures.

^{5.} World Trade Organization, Committee on Trade and Environment, A proposal for dedicated multilateral discussions on the trade aspects and implications of certain environmental measures, Communication from Samoa on behalf of the African, Caribbean and Pacific Group of States (ACP) dated 9 February 2024, WTO Doc. WT/ CTE/W/259 (February 9, 2024).

World Trade Organization, Committee on Trade and Environment, Los principios y parámetros que deben orientar y respaldar las políticas y medidas sobre comercio

y medio ambiente, Communication from Colombia dated 9 March 2023, WTO Doc. RD/CTE/221 (March 9, 2023).
World Trade Organization, General Council / Committee on Trade and Environment / Council for Trade in Goods / Council for Trade-Related Aspects of Intellectual Property Rights / Committee on Agriculture, Principles guiding the development and implementation of trade-related environmental measures, Communication from the African Group dated 13 July 2023, WTO Doc. WT/GC/W/894, WT/CTE/W/255, G/C/W/830, IP/C/W/703, G/AG/W/239 (July 13, 2023).

World Trade Organization, Committee on Trade and Environment, Perspectives on LDC environment - friendly trade and trade-related climate challenges, Communication from Djibouti on behalf of Least Developed Countries (LDCs) dated 4 February 2025, WTO Doc. WT/CTE/W/266 (February 4, 2025)

World Trade Organization, Committee on Trade and Environment, Key considerations for trade-related climate measures: suggested approaches toward a sustainable future, Communication from the Republic of South Korea dated 21 March 2025, WTO Doc. WT/CTE/W/267 (March 21, 2025).

10. World Trade Organization, Committee on Trade and Environment, Non-binding guidance on methodologies for measuring embedded emissions, Communication

from Australia, Japan and the Republic of South Korea dated 18 June 2025, WTO doc. WT/CTE/W/269/Rev.1 (27 June 2025).

Box 1. Selected Issues Raised in Recent WTO Submissions Regarding Trade-Climate Measures

To illustrate the diversity and scope of issues that WTO members have raised, this box seeks to highlight key issues highlighted in various proposals members have submitted to date. It does not aim to summarize all of the elements in each proposal, but to focus on some key points that are distinctive or show the diversity of issues on the table.

In 2023, **Colombia** tabled a submission highlighting the hybrid nature of TrCMs as both climate and trade measures, emphasizing the need for them to comply with recognized principles of international law relevant to both trade and the environment. In a similar vein, the submission by the **African Group** in July that year notes the link between trade and environment and the potential implications on developing countries of unilateral environmental measures adopted by WTO members. It argues in favour of a principles-based approach to the design of TrCMs that incorporates developing countries' interests to ensure that the measures are geared towards contributing to an inclusive sustainable development framework.

Early in 2024, the **ACP Group** tabled a submission calling for dedicated multilateral discussions on the trade aspects of certain environmental measures, emphasizing the need for better mainstreaming of development considerations in discussions on trade and environment. Among other issues, the group's communication highlights the need for enhanced cooperation to promote harmonization and mutual recognition of technical regulations.

A submission from **China** in June 2024 emphasizes the importance of enhanced transparency and the need to share national experiences and practices in designing TrCMs, with a view to developing guidance for policy design. In this respect, the communication points to the compilation of member practices in the development of TrCMs developed under the TESSD initiative, presented at the 13th WTO Ministerial Conference (MC13) in late 2024 as a reference paper for discussion.¹¹

With a similar focus on issues of coherence and interoperability, a submission in April 2024 by the **United States** called for elevating WTO discussions on trade and climate and identifying practical policy options and tools. The submission reviews aspects related to policy design and implementation of TrCMs and, on a more technical note, issues of data and methodology for calculating embodied greenhouse gas (GHG) emissions at the product, facility, or sectoral level. **Japan**'s communication in September builds on the submissions by the United States and China and calls for technical discussions on TrCMs that could lead to guidance on methodologies for embedded emissions.

In February 2025, the **LDC Group** tabled a submission calling for discussions in the CTE to enable members to develop guidelines and standards that take into account the limited resources and specific vulnerabilities of LDCs, ensuring that TrCMs respect the principle of common but differentiated responsibilities and avoid becoming disguised barriers to trade. Tabled in March 2025, the **Republic of Korea**'s submission underscores the importance of minimizing the potential negative consequences on trade arising from fragmented climate measures and calls for establishing a set of shared considerations that promote consistency, interoperability, flexibility, and transparency in the design and implementation of TrCMs.

Finally, **Australia**, **Japan**, and the **Republic of Korea** made a submission in June 2025 proposing non-binding, non-exhaustive and non-prescriptive practical guidance on methodologies for measuring embedded emissions, providing key guiding frameworks and good practices, to which members may wish to refer. The proposed guidance encourages members to consider good practices, cooperation, and enhanced transparency when putting in place requirements for measuring emissions embedded in goods traded across borders.

^{11.} World Trade Organization, Trade and Environmental Sustainability Structured Discussions (TESSD), Statement by the TESSD Co-convenors dated 19 February 2024, Addendum, Informal working group on trade-related climate measures, Member practices in the development of TrCMS, WTO Doc. WT/MIN(24)/11/Add.2 (February 19, 2024).

3. Different Aspects for International Cooperation on Trade-Climate Measures

As highlighted above, discussions so far on enhancing international cooperation in the design and implementation of trade-climate measures have largely focused on the concepts of coherence, transparency, development, and interoperability. Coherence often refers to higher levels of policy design in a generic manner with an eye to reducing regulatory fragmentation and differences, as well as in regard to coherence of different sustainable development objectives—environmental, economic, and social—reflected in various global governance arrangements. Transparency generally relates to the availability of information about new measures, including through WTO notifications, but is also used in relation to calls for transparency during the design of measures. Interoperability usually refers to the ability of different systems, such as climaterelated standards and policies, to work together effectively and efficiently, for example through the use of common carbon accounting methodologies

or by aligning reporting requirements. It can also refer to the opportunity to recognize as equivalent measures that fulfil adequately the same objective even if their design differs. Finally, concepts of equity and development are invoked primarily by developing countries due to concerns about the development impacts of trade-climate measures and in light of principles reflected in different areas of international law.

Regardless of the goal pursued, discussions on cooperation around trade-climate measures at the international level have mainly focused on the four following aspects: (i) principles of international law relevant to such measures; (ii) processes and practices for the development and implementation of measures (often referred to as "good regulatory practices"); (iii) design features of measures; and (iv) technical aspects of measures (Figure 2).

Figure 2. Different Aspects Raised in Ongoing Discussions on Cooperation on Trade-Climate Measures



Source: Authors' elaboration.

3.1 Principles of International Law Relevant to Trade-Climate Measures

At the broadest level, achieving international cooperation could be advanced by establishing high-level guidance for the formulation of trade-climate measures. A broad range of governments has acknowledged the need to break down silos between trade and climate processes and have a coherent framework for approaching the challenges of international cooperation on tradeclimate measures. Such a framework should reflect the range of relevant international commitments that countries have in regard to trade, climate, and sustainable development. More specifically, a number of WTO members have emphasized the importance of identifying and reaffirming principles of international law deemed relevant to the design and implementation of trade-climate measures, which could act as a common reference point.12

This principles-based approach starts from the assumption that trade-climate measures are legal hybrids. As such, the argument is that the rationale, design, and debates about these measures should draw from different international law regimes, including those relating to the environment generally, climate change specifically, and international trade, along with the rules and principles of general international law as well as international commitments to sustainable development. The approach emphasizes the presumption present in international law, generally, and WTO law, specifically, that different parts of international law should, as far as possible, be interpreted and applied simultaneously, in a mutually supportive and coherent manner, giving full effect to all relevant parts of international law, insofar as possible.13 Principles that have been raised as relevant

for consideration by experts or WTO members include principles such as sovereignty; the right to regulation; prevention; prohibition of arbitrary and unjustifiable discrimination; cooperation; sustainable development, equity, and common but differentiated responsibilities and respective capacities; and transparency and consultation.

An example of this approach is the "voluntary, non-binding and non-exhaustive list of guiding principles for consideration in the design and implementation of measures related to trade and sustainable development" agreed at the G20 Trade and Investment Ministerial Meeting in October 2024 (G20, 2024). Consensus at the G20 level on such principles provides a meaningful precedent and positive touchstone for future efforts to foster enhanced cooperation specific to the design and implementation of trade-climate measures.

Similarly, an approach focused on principles has also been taken up by the BRICS (Brazil, Russia, India, China, South Africa) group of countries, notably in their Principles for Fair, Inclusive and Transparent Carbon Accounting in Product and Facility Footprints, issued in May 2025. This work identifies five "voluntary, non-binding, non-prejudicial and non-exhaustive principles to guide the design of carbon accounting-based systems, standards and methodologies," namely fairness, inclusivity, transparency, equity, and collaboration (BRICS, 2025). These principles are voluntary in nature and oriented towards product and facility-level carbon accounting, with the aim of contributing to the balanced development of international standards and methodologies for tracking emissions linked to specific goods and industries (TV BRICS, 2025).

^{12.} See for instance, CTE submissions by Colombia and the African Group, noted in Box 1, which both call for a principles-based approach to the design and implementation of TrCMs.

^{13.} For a more detailed analysis of principles of international law relevant for consideration in the design and implementation of trade-climate measures, see International Legal Expert Group on Trade-Related Climate Measures and Policies (2023).

3.2 Processes and Practices for the Development and Implementation of Trade-Climate Measures

A number of governments have also expressed interest in the establishment of high-level voluntary guidance for the regulatory processes and practices related to the development and implementation of trade-climate measures.

This approach goes further than the identification of general principles of international law and aims to develop shared understandings of good regulatory practices (as commonly referred to in the WTO context) to be followed in the design and implementation of trade-climate measures. An example is the list of common practices based on the elements of regulatory processes linked to TrCMs compiled by the co-convenors of TESSD, sponsored by a subset of WTO members.¹⁴ The practices cover the whole policy life cycle of the measures, starting from stakeholder consultations prior to implementation followed by pre-implementation impact assessment of the measures through to assessment of the effectiveness of the measures once implemented and, finally, considerations on recalibration based on the performance of the implemented measures.

A critical element of processes and practices for the development and implementation of tradeclimate measures, highlighted by a wide range of governments, relates in particular to transparency, including notifications, advanced notice, and consultation with potentially affected WTO members, both to avoid unnecessary trade barriers as well as to support early consideration of, and attention to, challenges facing developing countries. Such

transparency and consultation can also promote good communication between different regulatory systems and regulatory bodies. Some WTO members have also drawn attention to the value of processrelated guidance on approaches to methodologies for determining embedded GHG emissions. One submission at the WTO in this regard raised the idea of horizontal guidelines encouraging members to base the methodologies on recognized international standards and to apply these measures in a nondiscriminatory manner.15 This was followed by a further submission proposing non-binding guidance, encouraging members to consider good practices, cooperation, and enhanced transparency when putting in place requirements for measuring emissions embedded in goods traded across borders.¹⁶ (Some aspects of this latter submission relate to the design of measures and are noted in section 3.3.). In the context of discussions on process-related guidance, some WTO members have also highlighted the importance of processes through which governments consider whether they can accept as equivalent domestic measures that adequately fulfil the same environmental objectives.

In the context of regional trade agreements, Article 5.1 of the Agreement on Climate Change, Trade and Sustainability (ACCTS) establishes a set of guidelines to inform the development and implementation of voluntary ecolabelling programmes, including those focused on climate.¹⁷ With a view to enhancing coherence, the ACCTS sets out 13 non-binding guidelines to inform the use of eco-labels. Key among these guidelines is the proposal to ensure that the voluntary eco-labels are aligned with international standards or guidelines, support harmonization of best practices, and avoid duplication with international standards and instruments (Swiss Government, n.d.).

^{14.} Op. cit. (WT/MIN(24)/11/Add.2). It should be noted that this document does not constitute an endorsement of any particular member practice contained in the compilation. Rather, the aim is to provide information and possible inspiration for the WTO membership and does not affect the regulatory rules and practices of each member.

^{15.} Op. cit. (WT/CTE/W/264).

^{16.} World Trade Organization, Committee on Trade and Environment, Non-binding guidance on methodologies for measuring embedded emissions, Communication

from Australia, Japan and the Republic of South Korea dated 18 June 2025, WTO doc. WT/CTE/W/269/Rev.1 (27 June 2025).

17. The ACCTS is a plurilateral agreement signed by Costa Rica, Iceland, New Zealand, and Switzerland. It contains legally binding trade disciplines that are geared towards achieving environmental policy objectives. See Swiss Government (n.d.).

Overall, suggestions related to proposed guidance on practices and processes are not focused on the details, design, or formulation of specific measures but rather on creating a shared framework to guide the regulatory processes of WTO members in relation to the design of trade-climate measures. Many of the good regulatory practices are not necessarily specific to trade-climate measures and apply equally to other types of policy measures, including on the need to ensure transparency and consultations at different stages of the regulatory process. Many suggestions on good practices also reflect discussions in the TBT Committee, including principles and guidelines produced by that TBT Committee to support the efficient and effective implementation of the TBT Agreement.¹⁸

3.3 Design Features of Trade-Climate Measures

Options for cooperation at a more detailed design-level can be promoted through the identification of specific policy design features. While full harmonization of climate policies is rare and difficult to achieve due to the need to accommodate a variety of policy objectives, a few specific design features tend to be common among a wide range of measures (Porterfield at al., 2024).

Design choices are typically associated with specific policy instruments such as border carbon adjustments or carbon standards and climate-related labels. They may include approaches to define product or geographical coverage, exemptions, the use of default values, procedures for accepting equivalences or crediting for third country policies, the protection of confidential business information, and aspects such a transition periods and implementation timelines. They may also include approaches to issues such as the use of revenues generated by a measure, including the scale and scope of technical cooperation and support for implementation in developing country trading partners.

These and further design choices were for example reviewed in a recent report by the International Chamber

of Commerce (ICC, 2024). Underling the proliferation of border carbon adjustments, the report highlights the risk of unilateral measures creating trade barriers due to fragmentation in policy design. It proposes a set of practical principles that can guide governments in selecting design and implementation features for border carbon adjustments, as one prominent form of tradeclimate measures. Specifically, these design principles include the recognition of equivalence of measures, the use of neutral default values, the promotion of interoperability, and a coordinated approach to determining sector, product, and emission scopes based on real leakage risks (ICC, 2024). In a similar vein, work by the International Institute for Sustainable Development proposes a set of guidance on border carbon adjustment created by a multistakeholder group of experts to balance trade, climate, and development goals (IISD, 2025). Such guidance cover issues such as measuring GHG emissions embodied in goods, the coverage and scope of goods and emissions, the use of revenue, crediting for carbon prices paid in foreign countries, and special treatment and exemptions.

At the WTO, several recent submissions have advanced suggestions for guidance on the design of measures. A number of submissions from different groupings of developing countries have called for greater attention to addressing potential impacts on developing countries in the design of measures, recognizing that members at different levels of development face different challenges, have different needs and capacities, and that varying geographies and climatic conditions call for approaches to design that recognize different local circumstances. Moreover, while the importance of increased technical cooperation and aid for trade often arises in discussions of trade-climate measures, a number of submissions and statements from developing countries in relation to trade-climate measures also highlight the importance of financing and technology transfer.

Examples of suggestions for voluntary guidance in recent WTO submissions are that members could: consider de

^{18.} World Trade Organization, Committee on Technical Barriers to Trade, Sixth triennial review of the operation and implementation of the Agreement on Technical Barriers to Trade under article 15.4 (para. 4), WTO Doc. G/TBT/32 (29 November 2012).

minimis thresholds to exempt small-volume transactions; allow the use of default values as an alternative to the use of actual measured emissions (e.g., where obtaining granular emissions data is impractical or excessively burdensome); ensure protection of confidential business information of exporters; and establish mechanisms to report and verify embedded emissions.¹⁹

3.4 Technical Aspects of Trade-Climate Measures

At a more technical level, a critical factor driving calls for cooperation relates to concerns about fragmentation and costs for business related to differences in carbon measurement and reporting.

Here, interoperability is seen as a bottom-up process to align methodologies and processes while allowing countries to pursue distinct policy goals and designs (Elkerbout & Nehrkorn, 2024). Such alignment may relate to aspects such as emissions equivalency, sectoral definitions, carbon pricing metrics, or methodologies for measuring or accounting for embedded carbon emissions as well as for reporting and verification.²⁰ For example, calculating the carbon intensity of products through carbon accounting procedures is a foundation stone for many trade-climate measures. Divergences in carbon accounting procedures adopted in such measures risk creating costly administrative burdens for compliance

purposes, which could also translate into barriers to trade (Elkerbout & Nehrkorn, 2024).

A further issue for attention in regard to the interoperability of the technical aspects of trade-climate measures relates to the alignment or coordination of reporting procedures.

Box 2 illustrates some of the ongoing technical efforts at the international level to bolster coordination and alignment, to the extent possible, among different approaches to carbon accounting, including initiatives that involve governments, intergovernmental organizations, businesses, and/or civil society organizations. Given the importance of accounting for sectoral specificity, several initiatives also take a sectoral approach (Box 3).

The technical details of interoperability at this level require substantial technical expertise, which is often found in non-trade ministries domestically as well as standard-setting bodies and other institutions outside the immediate radius of the WTO. Nonetheless, as noted in Section 3.2 on regulatory processes and practices, a number of WTO members are exploring proposals to develop non-binding guidance at the WTO, encouraging members to consider good practices, cooperation, and enhanced transparency when putting in place requirements for measuring emissions embedded in goods traded across borders.

Box 2. Examples of International Initiatives to Address Technical Aspects of Trade-Climate Measures

- Joint Taskforce on Climate Action, Carbon Pricing and Policy Spillovers: The report of this joint taskforce of the Organisation for Economic Co-operation and Development (OECD), WTO, International Monetary Fund (IMF), UN Trade and Development (UNCTAD), and World Bank Group proposes practical steps to move towards a common carbon pricing metric (OECD et al. 2024). Among other aspects, the report suggests creating an enhanced reporting and transparency platform drawing on existing sources such as the United Nations Framework Convention on Climate Change's Enhanced Transparency Framework as well as ongoing work of the World Bank, OECD, IMF, and UNCTAD.
- Inclusive Forum on Carbon Mitigation Approaches (IFCMA). With over 60 country members, this initiative housed at the OECD aims to optimize the global impact of emissions reduction efforts, including by supporting international cooperation on the alignment of carbon intensity metrics and coordination of mitigation approaches. Its work includes taking stock of different carbon mitigation approaches, mapping the

^{19.} Op. cit. (WT/CTE/W/264) and WT/CTE/W/269/Rev. 1.

^{20.} For a detailed review of the different dimensions of interoperability at this technical level see Vaughan (2025).

Box 2. (continued)

policies that these approaches are linked to, and estimating the comparative impact in relation to emissions reductions (OECD, n.d.). The forum's stocktake of mitigation approaches includes production and installation level carbon intensity metrics used to assess pollution permits and emissions caps in emissions trading schemes, among other metrics (OECD, 2024).

■ Greenhouse Gas Protocol: Jointly convened by the World Business Council for Sustainable Development and the World Resources Institute, the GHG Protocol provides a set of standards and guidance on the accounting and reporting of emissions, covering a majority of the requirements in corporate GHG reporting programmes globally (Greenhouse Gas Protocol, n.d.). Drawing on expertise from a diverse group of non-governmental organizations, governments, businesses, and accounting associations, the GHG Protocol aims to support a coherent approach to the preparation of a corporate GHG inventory and has become the standard GHG metrics measurement system referenced in the International Sustainability Standards Board (ISSB) climate risk disclosure standard as well as in numerous mandatory climate risk reporting rules, including those of the European Union (EU), Australia, California, Canada, China, Hong Kong, New Zealand, and Singapore, among others. The GHG Protocol has been described as the single most important international standard to measure firm-level GHG metrics and measurement, including scope 3 supply chain emissions (Vaughan, 2025)

Box 3. Sample of Several Sectoral Initiatives Addressing Carbon Accounting Relevant to Trade-Climate Measures

- Steel Standards Principles initiative. The initiative was launched at the 2023 United Nations Climate Change Conference (COP28) in Dubai by a consortium of 50 standard-setting bodies, international organizations, steel producers, and industry associations (WTO, n.d.-c). Through the initiative, iron and steel sector stakeholders identified and have endorsed principles to guide the design of common standards and methodologies on measuring the sector's GHG emissions. Interoperability is either expressly mentioned or alluded to in four of the initiative's seven principles. Specifically, the principles propose that new measurement and data collection methodologies should achieve interoperability between existing standards, methodologies, and frameworks, including those under development (WTO, n.d.-c). While this example is more directly applicable to the technical aspects of trade-climate measures, it is also relevant to the three other aspects of interoperability discussed above.
- The United States and EU **Global Arrangement on Sustainable Steel and Aluminium**. This agreement intends to restrict market access for high carbon intensity steel and aluminium in these jurisdictions. The parties agreed to engage in negotiations to determine the applicable carbon intensity metrics and reporting frameworks in relation to carbon embedded in steel and aluminium (European Commission, 2021).
- EU Corporate Sustainability Reporting Directive and IFRS Sustainability Disclosure Standards (ISSB Standards). The directive, which entered into force on 5 January 2023, aims to enhance the rules on corporate sustainability reporting for EU companies and non-EU companies. The covered companies are required to report on environmental, social, and governance issues using the European Sustainability Reporting Standards (ESRS) (European Commission, n.d.). ISSB Standards, developed by the International Financial Reporting Standards Foundation and applied globally, has similar objectives. Both sets of standards aim to ensure transparent and comprehensive sustainability reporting. Recognizing potential overlap in reporting obligations, ISSB and the European Commission collaborated with the European Financial Reporting Advisory Group (EFRAG) towards aligning the respective standards. The resulting joint ESRS-ISSB Standards Interoperability Guidance sets out approaches for the alignment of disclosure requirements and information (EFRAG & IFRS Foundation, 2024), covering both general reporting requirements and more specific climate-related disclosures.

4. Possible Ways Forward

The role of international trade as a catalyst for climate action is evidenced by the increased adoption of trade-climate measures. However, stakeholders have raised concerns over present approaches to their design and implementation, ranging from the risk of regulatory fragmentation to the exclusion of developing countries' interests in the design of such measures. Against this backdrop, the concepts of coherence, transparency, development, and interoperability have emerged as possible tools to achieve enhanced convergence across different levels of policy design and implementation.

As a contribution to this discussion, this briefing note has highlighted different levels of cooperation as they relate to trade-climate measures, noting the range of approaches being pursued to different degrees in a wide range of international processes and initiatives. The scope of actors and fora involved goes beyond national authorities or international organizations to include sector-specific and public-private partnerships as well as private actors and standard-setting bodies more attuned to the technical aspects of interoperability.

At the WTO, notwithstanding current geopolitical tensions, there is readiness to engage and build cooperation on trade-climate measures as illustrated by the growing number of members submitting proposals and engaging in discussions on this matter. At the broadest level, the multilateral trading system already provides a forum for transparency and policy dialogue where members notify their environmental measures with potential trade effects. Here, there is an opportunity to seek ways to enhance transparency of trade-climate measures. It also provides a multilateral space to raise specific trade concerns and share

experiences and good practices regarding such measures, for example in the TBT Committee. These discussions can be extended to officials from line ministries other than trade with responsibility for the environment.

Beyond transparency and policy dialogue, more advanced cooperative approaches could include developing non-binding voluntary guidance for the design and implementation of trade-climate measures to minimize unintended trade consequences while achieving legitimate public policy objectives. This guidance could reflect shared understandings among members of good practices and respond to the need for coherence, transparency, development, and interoperability highlighted in this briefing note. Precedent for the establishment of such guidance exists in the WTO.²¹

Table 1 provides illustrative examples of the possible issues that could be subject to guidance under each of the different levels of international cooperation discussed in this briefing note.

A focus on broad principles and good regulatory practices may be more suited for addressing a large range of measures, whereas discussions on specific design features could potentially be better suited to particular types of measures. Members could also consider sequencing, starting with high-level political guidance as a first step, followed by attention to more specific aspects of policy design addressing particular measures or specific sectors. An alternative would be to start by focusing on guidance regarding a specific cross-cutting challenge common to different tradeclimate measures such as measuring embedded emissions.

^{21.} For example, in the TBT Committee where members produced in 2000 a set of Six Principles for the Development of International Standards, Guides and Recommendations to support further implementation of the TBT Agreement's Code of Good Practice for the preparation, adoption, and application of standards (WTO, n.d.-b). Further, in 2024, the TBT Committee adopted new guidelines on conformity assessment procedures, namely non-prescriptive practical guidelines to support regulators in the choice and design of appropriate and proportionate conformity assessment procedures.

Table 1. Examples of Issues Raised Internationally in Relevant Processes as Requiring Cooperation and Guidance

Principles of International Law Relevant to Trade-Climate Measures	Processes and Practices for the Development and Implementation of Trade- Climate Measures (Good Regulatory Practices)	Design Features of Trade- Climate Measures	Technical Aspects of Trade- Climate Measures
International cooperation Principle of prevention of environmental harm Right to regulate and sovereignty Prohibition of arbitrary or unjustifiable discrimination Coherence/mutual supportiveness Development/equity (S&DT – CBDR-RC) Transparency and consultation Just and inclusive transition	Use of relevant international standards where available Accept as equivalent measures that adequately fulfil the same environmental objectives Grounding measures in the best scientific evidence available Not more trade restrictive than necessary to fulfil legitimate objectives Avoid excessive regulatory burdens and costs Consultation of relevant ministries, external stakeholders as well as trading partners before and during development & implementation Transparency and notification of measures Consider regulatory approaches followed by other governments Conduct ex-ante and ex-poste impact assessments (including on trading partners)	Product and geographical coverage Procedures for accepting equivalences, mutual recognition, crediting for third countries policies, consideration of local circumstances Exemptions (e.g. de minimis thresholds to exempt small transactions, geographical conditions) Allowing for the use of default values Coordination on approaches to methodologies for measuring embedded emissions Data, reporting & disclosure requirements, and protection of confidential business information Use of revenues potentially raised Reflection of equity/ development considerations in design Technical assistance, capacity building, technology cooperation Transition periods and implementation timelines Reflection of equity/ development considerations in design Technical assistance, respectively development considerations in design Transition periods and implementation timelines Reflection of equity/ development considerations in design Transition periods and implementation timelines Transition periods and implementation timelines	Taxonomy of emissions Sector definition and boundaries Emission equivalency Carbon pricing equivalency Carbon accounting methodologies Reporting templates and standards Verification procedures

Note: S&DT stands for special and differential treatment; CDBR-RC stands for common but differentiated responsibilities and respective capabilities.

Source: Authors' elaboration.

Another consideration relates to the intended purpose and target audience. As highlighted above, many aspects related to good regulatory practices are fairly generic and not necessarily specific to trade-climate measures. They are routinely discussed in the WTO and include elements already reflected in several WTO provisions. However, developing guidance on a common set of good regulatory practices for trade-climate measures, even if largely, based on existing WTO provisions would nonetheless add value as it would help inform domestic processes, which tend to involve different ministries and a range of stakeholders and non-state actors who may not necessarily be familiar with those aspects. If the purpose is to foster ongoing cooperation among WTO members, then an outcome that reflects different perspectives, and provides direction on issues for cooperation at the nexus of trade, climate, and sustainable development would be more appropriate. If the target audience is external, a more political outcome may also be useful for WTO members

to signal their recognition of the multiple facets of the trade-climate nexus and the importance of cooperation on climate, trade, and sustainable development to the organization's relevance to the 21st century global economy.

Recognizing the broad interest among a great range of WTO members, and the various needs they have expressed for greater cooperation on this topic, developing shared understandings at the multilateral level on trade-climate measures has emerged as a concrete and useful step that could be advanced at the WTO. An outcome, or outcomes, at the multilateral level could go a long way towards alleviating trade tensions, reducing fragmentation, and facilitating a fair and equitable transition to a net zero future and climate-resilient development. In so doing, it would also constitute a concrete outcome and critical contribution of the multilateral trading system towards addressing the global climate crisis.

References

BRICS. (2025). Principles for Fair, Inclusive and Transparent Carbon Accounting in Product and Facility Footprints. BRICS Climate Leadership Agenda. https://brics.br/en/documents/environment-climate-energy-and-disaster-risk-reduction/250528_brics_climate-leadership-agenda_principles-fair-inclusive-transparent-carbon-accounting. pdf/@@download/file

Elkerbout, M. & Nehrkorn, K. (2024). *Trade-friendly climate policies: The promise of "interoperability"*. Resources for the Future. https://www.rff.org/publications/working-papers/trade-friendly-climate-policies-the-promise-of-interoperability/

European Commission. (n.d.). Corporate sustainability reporting. https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en?form=MG0AV3

European Commission. (2021). *Joint EU-US Statement on a Global Arrangement on Sustainable Steel and Aluminium*. https://ec.europa.eu/commission/presscorner/detail/en/ip_21_5724

European Financial Reporting Advisory Group (EFRAG) & IFRS Foundation. (2024). ESRS-IISB Standards Interoperability Guidance. https://www.ifrs.org/content/dam/ifrs/supporting-implementation/issb-standards/esrs-issb-standards-interoperability-guidance.pdf

G20. (2024). G20 Principles on Trade and Sustainable Development 2024. G20 Trade Meetings, Brasília (October 24, 2024). https://www.g20.utoronto.ca/2024/241024-principles-on-trade-and-sustainable-development.html

Greenhouse Gas protocol. (n.d.). Corporate Standard. https://ghgprotocol.org/corporate-standard

International Chamber of Commerce. (2024). *ICC global principles for effective border adjustments*. https://iccwbo.org/news-publications/policies-reports/global-principles-for-effective-border-adjustments/

International Institute for Sustainable Development. (2025) *Guidance on border carbon adjustment: Results of the global stakeholder dialogues*. https://www.iisd.org/publications/report/border-carbon-adjustment-guidance

International Legal Expert Group on Trade-Related Climate Measures and Policies. (2023). *Principles of international law relevant for consideration in the design and implementation of trade-related climate measures and policies*. Report of an International Legal Expert Group. Forum on Trade, Environment, & the SDGs (TESS). https://tessforum.org/latest/principles-of-international-law-relevant-for-consideration-in-the-design-and-implementation-of-trade-related-climate-measures-and-policies

Organisation for Economic Co-operation and Development. (n.d.). *Inclusive Forum on Carbon Mitigation Approaches*. https://www.oecd.org/en/about/programmes/inclusive-forum-on-carbon-mitigation-approaches.html

Organisation for Economic Co-operation and Development. (2024). Towards more accurate, timely, and granular product-level carbon intensity metrics: A scoping note. *Inclusive Forum on Carbon Mitigation Approaches Papers*, No. 1. Paris: OECD Publishing. https://doi.org/10.1787/4de3422f-en

Organisation for Economic Co-operation and Development, World Trade Organization, International Monetary Fund, United Nations Trade and Development, & World Bank Group. (2024). Working together for better climate action: Carbon pricing, policy spillovers, and global climate goals. Paris: OECD Publishing. https://doi.org/10.1787/2b90fa2c-en

Portefield, M.C., Hoenig, D., & Rooper, H. (2024). *An approach to interoperability of U.S. and EU systems for determining GHG emissions intensity of steel*. Climate Leadership Council Center for Climate & Trade. https://clcouncil.org/report/interoperability-carbon-accounting/

Swiss Government (n.d.). ACCTS: Agreement on Climate Change, Trade and Sustainability. State Secretariat for Economic Affairs (SECO). https://www.seco.admin.ch/seco/en/home/Aussenwirtschaftspolitik_Wirtschaftliche_Zusammenarbeit/internationale_organisationen/WTO/ACCTS.html

TV BRICS. (2025). BRICS presents updated emissions targets and native vegetation restoration strategy. *TV BRICS*. https://tvbrics.com/en/news/brics-presents-updated-emissions-targets-and-native-vegetation-restoration-strategy/

Vaughan, S. (2025). Climate mitigation measures and some interoperability approaches. Forum on Trade, Environment, & the SDGs (TESS). https://tessforum.org/latest/climate-mitigation-measures-and-some-policy-interoperability-approaches

World Trade Organization. (n.d.-a). Environmental Database [Database]. https://edb.wto.org/

World Trade Organization. (n.d.-b). *Principles for the development of international standards, guides and recommendations.* https://www.wto.org/english/tratop_e/tbt_e/principles_standards_tbt_e.htm

World Trade Organization. (n.d.-c). Steel Standards Principle. https://www.wto.org/english/tratop_e/envir_e/steel_standards_principles_e.htm

World Trade Organization, Committee on Technical Barriers to Trade, *Sixth triennial review of the operation and implementation of the Agreement on Technical Barriers to Trade under article 15.4* (para. 4), WTO Doc. G/TBT/32 (29 November 2012). https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=Q:/G/TBT/32.pdf&Open=True

World Trade Organization, Committee on Trade and Environment, *Key considerations for trade-related climate measures: suggested approaches toward a sustainable future*, Communication from the Republic of South Korea dated 21 March 2025, WTO Doc. WT/CTE/W/267 (March 21, 2025). https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=Q:/WT/CTE/W267.pdf&Open=True

World Trade Organization, Committee on Trade and Environment, *Non-binding guidance on methodologies for measuring embedded emissions*, Communication from Australia, Japan and the Republic of South Korea dated 27 June 2025, WTO doc. WT/CTE/W/269/Rev. 1 (27 June 2025). https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=Q:/WT/CTE/W269.pdf&Open=True

World Trade Organization, Committee on Trade and Environment, *Perspectives on LDC environment – friendly trade and trade-related climate challenges*, Communication from Djibouti on behalf of Least Developed Countries (LDCs) dated 4 February 2025, WTO Doc. WT/CTE/W/266 (February 4, 2025). https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=Q:/WT/CTE/W266.pdf&Open=True

World Trade Organization, Committee on Trade and Environment, *Addressing trade-related climate measures at the WTO*, Communication from Japan dated 25 September 2024, WTO Doc. WT/CTE/W/264 (September 25, 2024). https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/CTE/W264.pdf&Open=True

World Trade Organization, Committee on Trade and Environment, *Advancing multilateral discussions on trade-* related climate measures, Communication from China dated 7 June 2024, WTO Doc. WT/CTE/W/263 (June 7, 2024). https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/CTE/W/263.pdf&Open=True

World Trade Organization, Committee on Trade and Environment, *A proposal for dedicated multilateral discussions on the trade aspects and implications of certain environmental measures*, Communication from Samoa on behalf of the African, Caribbean and Pacific Group of States (ACP) dated 9 February 2024, WTO Doc. WT/CTE/W/259 (February 9, 2024). https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/CTE/W259.pdf&Open=True

World Trade Organization, Committee on Trade and Environment, Los principios y parámetros que deben orientar y respaldar las políticas y medidas sobre comercio y medio ambiente, Communication from Colombia dated 9 March 2023, WTO Doc. RD/CTE/221 (March 9, 2023). https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S006.aspx?DataSource=Cat&query=@Symbol=%22RD/CTE/221%22%20OR%20@Symbol=%22RD/CTE/221/*%22&Language=English&Context=ScriptedSearches&languageUIChanged=true

World Trade Organization, Committee on Trade and Environment / Council for Trade in Goods, *Understanding the opportunities and challenges of the green transition: Coherence and interoperability of trade-related climate measures*, Communication from the United States dated 4 April 2024, WTO Doc. WT/CTE/W/260, G/C/W/843 (April 4, 2024). https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/CTE/W260.pdf&Open=True

World Trade Organization, General Council / Committee on Trade and Environment / Council for Trade in Goods / Council for Trade-Related Aspects of Intellectual Property Rights / Committee on Agriculture, *Principles guiding the development and implementation of trade-related environmental measures*, Communication from the African Group dated 13 July 2023, WTO Doc. WT/GC/W/894, WT/CTE/W/255, G/C/W/830, IP/C/W/703, G/AG/W/239 (July 13, 2023). https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/GC/W894.pdf&Open=True

World Trade Organization, Trade and Environmental Sustainability Structured Discussions (TESSD), Statement by the TESSD Co-convenors dated 19 February 2024, Addendum, Informal working group on trade-related climate measures, *Member practices in the development* of TrCMS, WTO Doc. WT/MIN(24)/11/Add.2 (February 19, 2024). https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/MIN24/11A2.pdf&Open=True

TESS Forum on Trade, Environment, & the SDGs



tessforum.org



@TESSForum



info@tessforum.org



@tessforum.bsky.social

© 2025 Forum on Trade, Environment, & the SDGs (TESS) Published by the Forum on Trade, Environment, & the SDGs (TESS)

Geneva Graduate Institute Chemin Eugène-Rigot 2 CH-1202 Genève Switzerland



INSTITUT DE HAUTES ÉTUDES INTERNATIONALES ET DU DÉVELOPPEMENT GRADUATE INSTITUTE OF INTERNATIONAL AND DEVELOPMENT STUDIES

TESS is housed at the Geneva Graduate Institute.