ASIAN TRADE CENTRE

Policy Brief

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Setting Standards for Environmental Goods

Trade in environmental goods plays a central role in tackling global environmental issues. It facilitates the advancement, adoption, and dissemination of environmental technologies, thereby mitigating environmental risks, reducing pollution, and optimizing resource utilization. Environmental goods encompass a wide range of products and technologies designed to reduce environmental impact, conserve resources, and promote sustainable practices.

As discussed in ATC's previous *Policy Brief (23-02)*, environmental goods often encompass two categories: 1) products that are supportive of environmental protection or yield positive environmental outcomes and 2) products that are comparatively more "environmentally friendly" than similar products serving the same purpose.

It is the second, much larger category of goods that present particular challenges for the trading system. Identifying goods that are more environmentally friendly requires a comparison to products which are less environmentally friendly. That, in turn, requires some clear criteria or standards to assess the relative merits of products.

This is hard to do, especially when evaluating how a product, throughout its lifecycle, measures up against similar items subject to varying production and performance criteria, which is again problematic to define.

Defining interoperable standards and labelling criteria for various environmental goods is crucial for facilitating their trade, fostering consumer trust, and achieving environmental objectives. But establishing these criteria is challenging, as it requires a delicate balance between setting ambitious environmental goals and ensuring feasibility and cost-effectiveness for manufacturers.

While some governments have engaged in multilateral approaches to create lists of environmental goods and potentially provide rules to structure and facilitate trade in such products, such as the World Trade Organization (WTO) work on an Environmental Goods Agreement, these negotiations have largely stalled. Organizations like the WTO and the World Customs Organization (WCO) are not standards-setting bodies.

The absence of universally accepted standards and labels for environmental goods creates variability across countries and regions. Divergent definitions and criteria can lead to confusion and hinder trade, especially for manufacturers aiming to export their products to multiple markets. Additionally, differing standards can create disparities in assessments of environmental performance of products available to consumers worldwide.

Despite challenges in establishing multilateral consensus over a consensus list of environmental goods, institutional and country-level initiatives have gained momentum in developing and setting internationally-recognised standards in areas like the measurement of carbon footprint, energy efficiency, water efficiency, or greenhouse gas emissions. Quantification of such production emissions and performance outputs could provide an increased knowledge base and data to spur international cooperation in the exchange of environmental and trade policy-relevant technical and scientific information, and support work to harmonize product standards and labels relevant to achieving environmental objectives.

Environment-related non-tariff measures (NTMs)

Standards and labels can be broadly classified into two categories – mandatory and voluntary. Mandatory standards and labels are imposed by countries' regulations and can be classified as a non-tariff measure (NTM). Standards can also be categorized as a type of technical barrier to trade (TBT) in UNCTAD's classification of NTMs. To be clear, NTMs and TBT rules are both allowed, as long as the measures or regulations do not have significant trade distorting effects.[1]

As an example, Japan's Energy Conservation Law, which is a regulation to improve energy efficiency and reduce the environmental impact of energy use, requires that automakers achieve a certain average fuel efficiency level across their entire fleet of vehicles sold in Japan. The fuel efficiency targets, measured in kilometres per litre of fuel (km/L), are contingent upon the curb weight of the vehicles and automakers must ensure that the average fuel economy of their vehicles aligns with the prescribed weight-based standards in each financial year.[2]

Another common type of technical regulation is labelling measures. One example is Singapore's Mandatory Energy Labelling Scheme (MELS) which requires suppliers to affix energy labels on certain household appliances and lighting products (e.g., air-conditioners, refrigerators, televisions and lamps) that are regulated under the Energy Conservation Act. The energy labels need to indicate the energy efficiency rating and annual energy consumption of the products.[3]

Voluntary standards and labels, on the other hand, are typically developed by non-governmental entities or corporations and are not regulated by laws. One example is the Forest Stewardship Council (FSC) certification which provides voluntary standard for wood and paper products derived from responsibly managed forests. It promotes sustainable forest management practices, including habitat preservation and biodiversity conservation.[4] FSC certified products can affix the FSC label which indicates that materials used in production are recyclable and sustainably sourced.

The International Organization for Standardization (ISO) develops standards for a wide range of industries and also supports SDG objectives. For example, a standard published this year is ISO 4484-3 which specifies a method for measuring the fibre mass released from the outlet hose of a standard washing machine through the washing process.[5]

[1] UNESCAP. https://www.unescap.org/publications/APTIR2019
[2] TransportPolicy.net. https://www.transportpolicy.net/standard/japan-light-duty-fuel-economy/
[3] https://sso.agc.gov.sg/SL/ECA2012-S748-2017?DocDate=20180928
[4] Forest Stewardship Council. https://anz.fsc.org/what-is-fsc
[5] https://www.iso.org/standard/81035.html

Other examples of standards that may not appear to be directly linked to environmental protection objectives but holds significant potential for verification and monitoring of product information and environmental standards are QR codes and barcodes standards.[6] Besides contributing to product traceability, QR codes and barcodes also allows a significant amount of information to be stored in machine-readable formats which reduces packaging material and ink for printing product information and contributes to sustainability.

Voluntary and mandatory environmental standards each have their own sets of benefits and drawbacks. Voluntary standards offer flexibility for businesses and industries to choose the best approach to meet environmental goals. This flexibility can allow companies to tailor their environmental practices to their specific circumstances and technical capabilities.[7] Adoption of voluntary environmental standards can also enhance the reputation of businesses and contribute to increase market share through innovation and branding relative to their competitors.[8]

In contrast, mandatory standards and regulations can help ensure a uniform level of environmental protection and compliance across industries and businesses and provide a level playing field within the regulated industry or product category. Mandatory standards and regulations are backed by legal enforcement, which means non-compliance can result in penalties or legal actions. This can be a strong motivator for businesses to comply and can contribute to higher levels of compliance compared to voluntary standards and lead to better overall environmental performance of a sector or product category.

In practice, a combination of both voluntary and mandatory standards and labelling are often used to address environmental challenges. Voluntary standards and labelling can drive innovation and engage willing participants, while mandatory technical regulations provide essential safeguards and ensure that all businesses adhere to a minimum level of environmental protection. The choice between the two depends on the specific objectives and regulatory environment of a given industry or issue.

Trade concerns of environment-related technical regulations

Why are environment-related TBTs important? Technical regulations feature most prominently in all trade-related environmental measures, with government support measures (subsidies and countervailing measures) being the next most prevalent. Additional types of trade-related environmental measures encompass import licensing measures and quantitative restrictions, as well as sanitary and phytosanitary (SPS) measures and trade facilitation measures.[9] These diverse trade measures applied by countries reflect the multifaceted landscape of trade considerations intertwined with environmental objectives and reinforces the relevance of technical regulations as a policy tool to achieve environmental outcomes.

[6] Steven Beck. How Standardized Bar Codes Can Make Supply Chains More Transparent. https://blogs.adb.org/blog/how-standardized-bar-codes-can-make-supply-chains-more-transparent

[7] Delmas, M., & Young, O. (Eds.). (2009). Governance for the Environment: New Perspectives. Cambridge: Cambridge University Press. doi:10.1017/CBO9780511627170

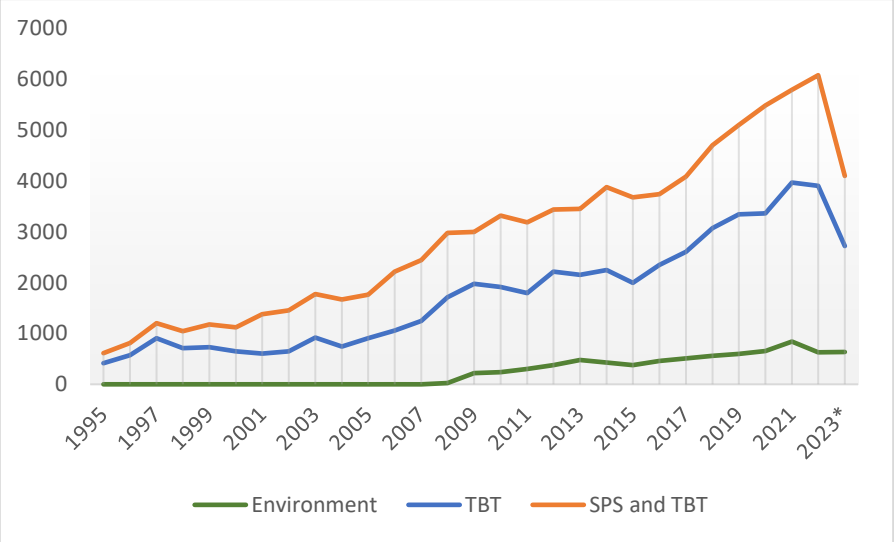
[8] Li, D., Tang, F. & Zhang, L. Differential effects of voluntary environmental programs and mandatory regulations on corporate green innovation. Nat Hazards 103, 3437–3456 (2020). https://doi.org/10.1007/s11069-020-04137-y and UNCTAD. Framework for the Voluntary Sustainability Standards (VSS) Assessment Toolkit (unctad.org)

[9] WTO World Trade Report 2023. wto.org/english/res_e/booksp_e/wtr23_e/wtr23_e.pdf

In the WTO context, the TBT Agreement requires WTO member countries to notify proposed technical regulations and conformity assessment procedures that may have a significant impact on trade to the WTO. Climate-related TBTs can include technical regulations, standards and labelling related to environmental performance, energy efficiency, emissions reduction, and other measures designed to address climate change. These measures, while aimed at achieving important environmental objectives, can also affect trade in goods and services should their implementation cause unnecessary burden to traders or are protectionist in nature.

The number of climate-related TBTs i.e., TBTs with environmental protection objectives, notified to the WTO have increased over the years alongside SPS and TBT notifications as shown in Figure 1 below, which makes the discussion of climate related standards and TBTs highly relevant in a multilateral context.[10]

Figure 1: Number of SPS and TBT Notifications to the WTO

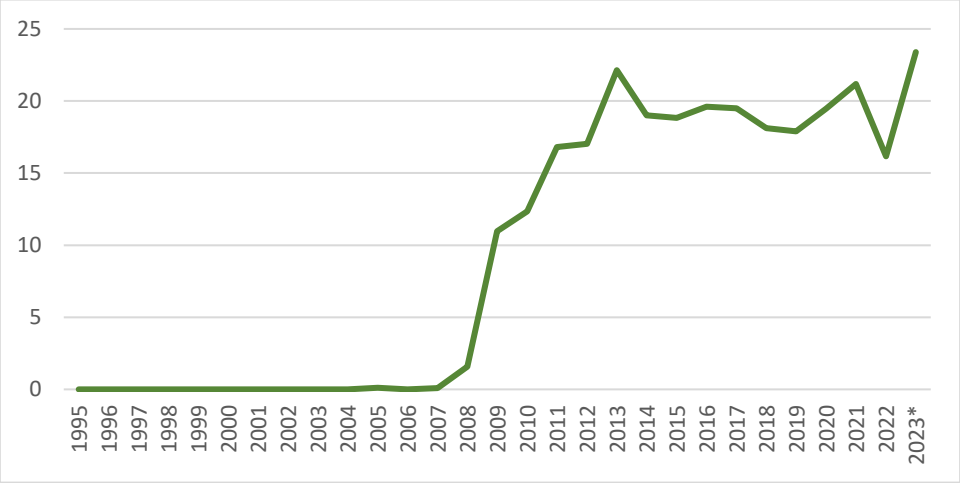


Source: Author's compilation using WTO ePing SPS&TBT Platform
*Note that data for 2023 is only available until June 2023

TBT notifications with environmental protection objectives have made up a sizeable proportion of all TBTs notified in the past decade. The share of TBT notifications with environmental protection objectives that were notified to the WTO have risen sharply after 2008 and averages at 19.2% between 2013 to 2022 (Figure 2). This reflects increasing regulatory priorities by governments and international organisations to tackle environmental challenges, including climate change, pollution, and resource depletion, leading to the development of new environmental regulations and standards.

[10] Note that countries may include one or more environment-related trade measures in a notification to the WTO. Thus, the actual environmental trade measures implemented may far exceed the number of notifications.

Figure 2: Share of TBT Notifications with Environmental Protection Objectives (%)

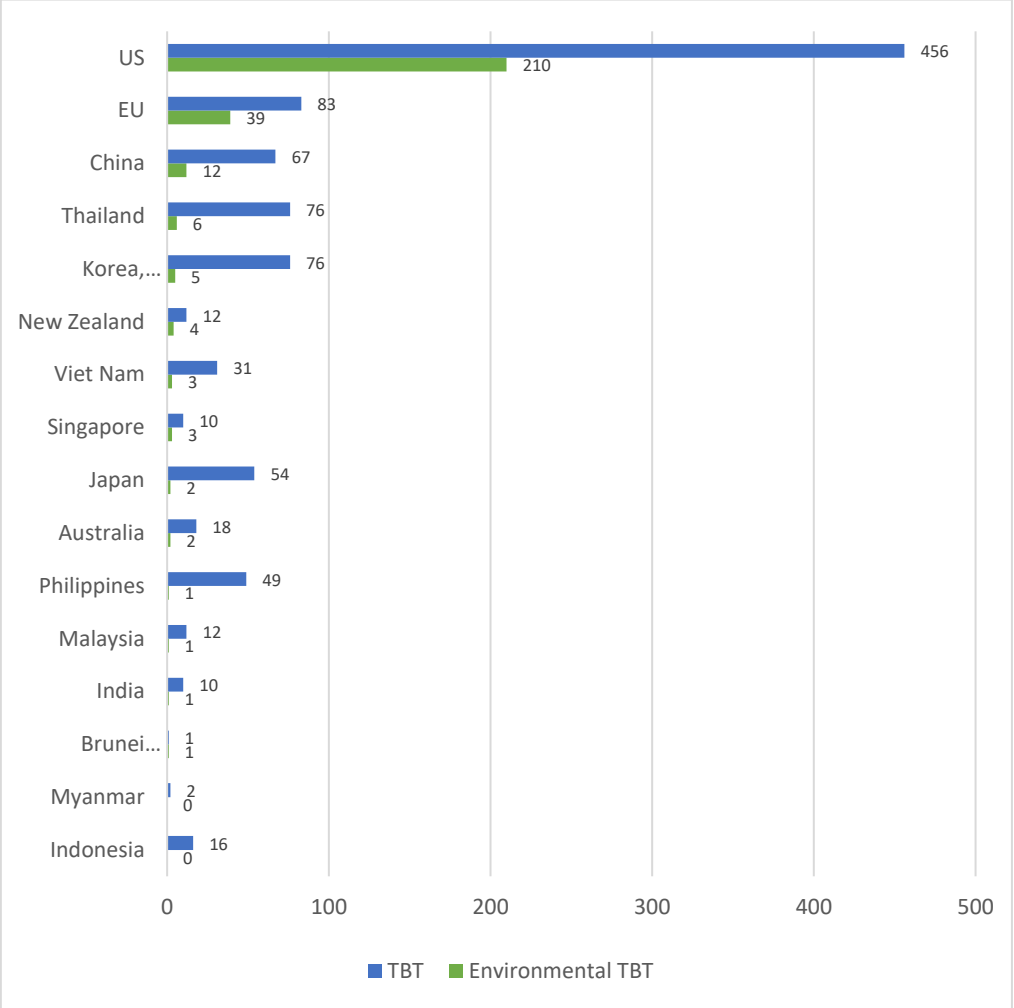


Source: Author's compilation using WTO ePing SPS&TBT Platform

Figure 3 below compares the number of environment-related TBT notifications across selected countries in the Asia Pacific with those of the United States (US) and the European Union (EU) in 2022. It can be observed that Asia-Pacific economies have applied fewer environment-related TBTs relative to the US and the EU, whose share of environment-related TBTs made up 46% and 47% of all TBTs notified to the WTO respectively.[11]

[11] It may also be the case that notifications by some WTO members lag behind the notifications of other WTO members.

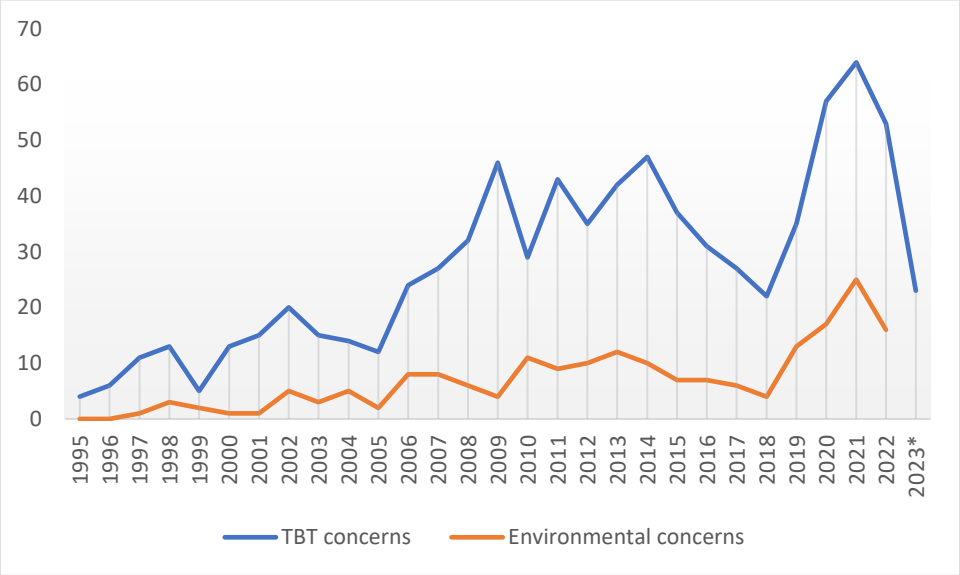
Figure 3: Environment-related TBTs for selected Countries in 2022



Source: Author's compilation using WTO ePing SPS&TBT Platform

WTO members can raise trade concerns about measures which may affect their trade to the respective committees and seek discussions and clarifications on these regulations imposed. Figure 4 shows the number of environment-related TBT concerns relative to all TBT concerns raised by WTO members. Environment-related concerns made up a significant share of all TBT concerns. Between 2020 to 2022, environment-related concerns constituted 33% of all TBT concerns raised by WTO members. Such environment-related trade concerns included energy and water efficiency standards and maximum residue level for products. (Figure 5)

Figure 4: Environment-related TBT concerns raised by WTO members[12]



Source: Author's compilation using WTO Trade Concerns database

Figure 5: Environment-related TBT concerns raised by WTO members in 2022

Member(s) Responding to Trade Concern	Member(s) raising Trade Concern	Title
Australia	China	Australia - Water Efficiency Standard AS/NZS 6400:2016 (ID 767)
Canada	China; Japan; Republic of Korea	Canada - Proposed Prohibition of Certain Toxic Substances Regulations, 2022 (ID 753)
European Union	Australia; Canada; China; Colombia; Costa Rica; Ecuador; India; Indonesia; Kenya; Paraguay; Peru; United States	European Union - Draft Commission Regulation amending Annexes II and V to Regulation (EC) No 396/2005 of the European Parliament and of the Council as regards maximum residue levels for clothianidin and thiamethoxam in or on certain products (ID 763)
	China; Republic of Korea	European Union - Draft Commission Regulation laying down ecodesign requirements for mobile phones, cordless phones and slate tablets pursuant to Directive 2009/125/EC of the European Parliament and of the Council (ID 768)
	United States	European Union - Proposal for a Directive of the European Parliament and of the Council amending Directive 2014/53/EU on the harmonization of the laws of the Member States relating to the making available on the market of radio equipment (COM/2021/547 final) (ID 750)
European Union; France	China; Republic of Korea; United States	France - Order specifying the substances contained in mineral oils the use of which is prohibited in packaging and in printed matter distributed to the public (ID 756)
	Mexico; United States	France - Decree on the minimum proportion of re-used packaging to be placed on the market annually (ID 758)
India	Thailand	India - Import Policy of Air Conditioners with Refrigerants (ID 748)
Indonesia	India	Indonesia - Draft decree regarding Minimum Energy Performance (SKEM) and Energy Saving Label for various products (ID 778)

[12] Environment-related TBTs are identified through their environmental protection and energy efficiency objectives.

Kingdom of Saudi Arabia	China	Kingdom of Saudi Arabia - Corporate average fuel economy standard (SAUDI CAFE) for all light duty vehicles (ID 732)
Malaysia	Republic of Korea	Malaysia - Guideline for Approval of Electrical Equipment (Electricity Regulation 1994) Information Booklet 2018 Edition (GP/ST/N0.14/2017) (ID 729)
United States	China	United States - Energy Conservation Program: Energy Conservation Standards for Ceiling Fans (ID 771)
		United States - Energy conservation program: energy conservation standards for room air conditioners (ID 755)
		United States - Energy conservation program: test procedure for circulator pumps (ID 731)
		United States - Energy Conservation Program: Test Procedure for Television Sets (ID 775)
		United States - Protection of Stratospheric Ozone: Listing of Substitutes Under the Significant New Alternatives Policy Program in Refrigeration, Air Conditioning, and Fire Suppression (ID 764)

Source: Author's compilation using WTO *Trade Concerns* database

The recent *2023 WTO Trade Report* also sheds light on significant trade-related concerns, with particular attention to unilateral environmental measures adopted by various countries. Examples include Indonesia's imposition of export restrictions on raw minerals, China's limitations on the export of gallium and germanium, the European Union's introduction of the Carbon Border Adjustment Mechanism (CBAM) and other measures aligned with the EU Green Deal, and the United States' enactment of the Inflation Reduction Act (IRA).

Such unilateral actions, while driven by environmental objectives, have raised three key concerns on fragmentation of environmental policies and their impact on trade and environmental sustainability. First, such uncoordinated policies tend to be costlier and less effective in achieving their intended environmental goals. Second, they can lead to unintended adverse consequences for trading partners, disrupting global trade dynamics. Third, the adoption of unilateral measures without international coordination can provoke retaliation from affected countries, potentially escalating trade tensions. Thus, findings from the report underscore the need for greater international cooperation and coordination to address environmental challenges in a manner that is both effective and conducive to global trade stability.[13]

Environmental regulations that have trade implications should be underpinned by WTO rules such as the Agreement on Technical Barriers to Trade which ensures that technical regulations, standards and conformity assessment procedures on environmental goods do not create unnecessary obstacles to trade. Many bilateral and regional trade agreements replicate this language and, in some instances, strengthen the commitments for participating members.

Development of environmental standards and labels should reflect available international standards and frameworks to avoid fragmentation of standards as this can be a barrier to international trade, impeding the free flow of environmental goods and technologies needed to combat climate change and promote sustainability.

[13] WTO World Trade Report 2023. wto.org/english/res_e/booksp_e/wtr23_e/wtr23_e.pdf

Example: Carbon footprint product regulations standards (CPRS) and labelling

To see how standards relate to trade, consider the efforts to create carbon footprint standards and labels. Greenhouse gases, including carbon dioxide (CO_2), are the main contributors to climate change and are primarily generated from the burning of fossil fuels like coal, oil, and natural gas for electricity and in manufacturing processes, particularly in heavy industries such as cement, steel, and chemicals as well as the combustion of gasoline and diesel fuels in the transportation sector. Global CO_2 emissions from energy combustion and industrial processes have seen an upward trend since the 20th century and the International Energy Agency (IEA) 2022 report noted that global energy-related CO_2 emissions grew by 0.9% or 321 Mt in 2022, reaching a new peak of 36.8 Gt in 2022 (after a small decline in 2020 as a result of reduced industrial activities at the height of the Covid-19 pandemic).[14]

The emergence of carbon footprint product regulations and standards (CPRS) could help to reduce carbon emissions by encouraging companies to develop and adopt cleaner technologies and more efficient production processes to optimise energy use and reduce waste in manufacturing and distribution processes.[15] This can lead to improved energy efficiency, reduction in operational costs for businesses and decrease greenhouse gas emissions, contributing to climate change mitigation and environmental sustainability. Mandatory carbon labelling or disclosure requirements can promote consumer awareness about a product's environmental impact. This empowers consumers to make more informed choices, favouring environmentally friendly products and pushing companies to adopt sustainable practices.

Standard setting bodies such as the International Organization for Standardization (ISO) contribute to the development of international standards with representation from 169 national standards bodies.[16] The ISO also develops standards that contribute to environment and sustainability such as the ISO 14001 - environmental management systems that provides requirements and guidance for use to cover overall frameworks, audits, communications, labelling, life-cycle analysis and methods to mitigate and adapt to climate change. Relevant ISO standards in the same series, such as the ISO 14064, gives specifications for the quantification, monitoring and validation/verification of greenhouse gas emissions.[17]

Multiple standards have been developed for the assessment or measurement of product carbon footprint and are increasingly applied in the regulation of goods, such as:[18]

i. The **PAS 2050** which was developed by the British Standards Institute (BSI) was the first consensus-based and internationally applicable standard on product carbon footprinting that has been used as the basis for the development of other standards internationally.
ii. **ISO 14067** standard specifies the requirements and guidelines for quantification of carbon footprint of products throughout its life cycle in alignment with the Greenhouse Gas (GHG) Protocol and is consistent with life cycle assessment (LCA) Standards (ISO 14040 and ISO 14044)

[14] IEA (2023), CO2 Emissions in 2022, IEA, Paris https://www.iea.org/reports/co2-emissions-in-2022, License: CC BY 4.0
[15] Shi X (2013). Spillover effects of carbon footprint labelling on less developed countries: example of the East Asia Summit region. Dev. Policy Rev.31,239–254
[16] ISO. https://www.iso.org/about-us.html
[17] ISO. https://www.iso.org/sdg/SDG13.html
[18] https://pre-sustainability.com/articles/product-carbon-footprint-standards-which-standard-to-choose/

iii. The **GHG Protocol Product Standard** was created by the WRI/WBCSD and released in 2011. It was developed to be consistent with the first version of PAS 2050 but also includes requirements for public reporting.[19]

iv. **Carbon Trust** offers a certification scheme for organizations that want to verify and communicate the carbon footprint of their products. It uses a comprehensive methodology to assess emissions across the product life cycle and follows the ISO or GHG Protocol standard.[20]

v. The European **Product Environmental Footprint (PEF)** is a method developed by the European Commission to assess the environmental performance of products. It considers a range of environment indicators including carbon footprint calculations as part of their broader environmental assessments.

vi. The **Environmental Product Declaration (EPD)** provides a comprehensive and standardised way of communicating the environmental performance of a product over its life cycle. EPDs are standardised by ensuring they follow a specific set of Product Category Rules (PCR). It conforms to ISO 14025 and includes many more environmental performance indicators (e.g., ozone depletion, water footprint and acidification) than just carbon footprint.[21]

It is important to note that different standards may yield slightly different results due to variations in methodologies and system parameters. Non-compatible or variable standards can create challenges for compliance by businesses, especially micro, small and medium enterprises (MSMEs) for they often lack the resources and expertise to navigate complex and frequently changing environmental standards, and the financial resources to invest in testing and certification to meet different product standards in different markets. Therefore, transparency in reporting and adherence to recognized standards are essential for ensuring credibility and comparability of product carbon footprint assessments and ensure that environmental standards do not become market access barriers for smaller businesses or put them at a disadvantage compared to larger firms.

Many countries around the world have implemented carbon footprint product regulations and initiatives to varying degrees. These initiatives are often part of broader efforts to combat climate change and promote sustainability. In the Asia Pacific region, several countries including Australia, China, Japan, New Zealand, South Korea and Thailand have launched CFP programmes.

Japan's Carbon Footprint of Products (CFP) Communication Programme

Japan's CFP Communication Programme seeks to address climate change challenges through promoting consumer awareness and sustainable consumption. It started as a 3-year national pilot programme in 2009 and operates as a voluntary certification and labelling programme where businesses can provide consumers with clear information about the environmental impact of their product. The CFP declaration is based on ISO type III environmental declaration, ISO14025 and conforms to ISO14040, ISO 14044 and ISO/TS 14067 to quantitatively measure the carbon footprint of six types of GHG covered by the Kyoto Protocol in the product throughout its life cycle stages. The program is currently administered by the Sustainable Management Promotion Organization (SuMPO) where it is responsible for the development, approval and publication of product category rules (PCR) for each product categories and for performing CFP-PCR reviews and audits.[22]

[19] https://ghgprotocol.org/sites/default/files/2022-12/GHG%20Protocol%20PAS%202050%20Factsheet.pdf
[20] Carbon Trust. https://www.carbontrust.com/what-we-do/strategy-delivery-and-reporting/footprinting-and-reporting
[21] https://epd-australasia.com/2023/03/whats-the-difference-epds-vs-iso-14067-carbon-footprint/
[22] https://www.cfp-japan.jp/english/rules/

While standards developed for the assessment or measurement of product carbon footprint are voluntary, they can be embedded in regulations such as the EU's Carbon Border Adjustment Mechanism (CBAM). The EU CBAM is a pioneering policy initiative designed to address carbon leakage and ensure a level playing field for EU industries. The transition phase of the regulation will run from 1 October 2023 until 31 December 2025 and it currently covers a limited set of products, including steel, cement, aluminium, electricity, and some chemicals.[23] The regulation stipulates the methods that can be used to monitor and calculate the embedded emissions of imported products and could be highly complicated.

Defining standards and labelling criteria for environmental goods is a complex and multifaceted challenge that requires international cooperation and thoughtful consideration. Making carbon footprint calculations and labels compatible on an international level will incentivize participation by businesses and avoids additional costs and resources in having to deal with different standards in different markets e.g., costs of application and certification, and ensure technical capacity to conform to different calculation methodologies.

Towards consistency in environmental standards and labelling

Innovative approaches have emerged to improve consistency across environmental standards and labelling programmes regionwide. For example, the ISO/TS 14029 (2022) specifies requirements for mutual recognition arrangements (MRAs) and gives guidance on how to initiate developments on MRAs between environmental product declaration (EPD) and footprint communication programme operators.[24]

In support of recognition between CFP initiatives, Italy promulgated the Carbon Footprint International initiative in 2018 to provide background information for each programme operator and the existing programmes with the end goal of facilitating mutual recognition of CFP programmes based on international standard adopted for Carbon Footprint quantification and verification. [25] The initiative later expanded into a network of 11 national Carbon Footprint Communication Programme Operators.[26]

Digital tools and platforms can also provide avenues to access and exchange data on environmental initiatives worldwide. For instance, the Ecolabel Index tracks 456 ecolabels in 199 countries.[27] The potential of digital technologies can be better harnessed to promote information exchange between businesses and authorities responsible to approve or audit business applications to meet certain product environment standards of the programme or regulations and even allow businesses to share such information with their trade partners that require supporting documents. For example, it can

[23] https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism_en
[24] ISO. https://www.iso.org/obp/ui/#iso:std:iso:ts:14029:ed-1:v1:en
[25] Daniele Pernigotti (2022). The Role of Carbon Footprint Programme Operators for a Credible Communication: From the Italian Experience to the Carbon Footprint International Alliance. Journal of Environmental Science and Engineering B11 (2022) 83-89. doi:10.17265/2162-5263/2022.03.003 and Carbon Footprint International. https://carbonfootprintinternational.com/
[26] The 11 members are Costa Rica's National Carbon Neutrality Program, Ecuador's Zero Carbon Program, France platform Bilans GES, Carbon Footprint Italy, Japan's CFP communication program, New Zealand's Toitū Envirocare, Peru's Huella de Carbono, Korea's CFP Labeling system, Taiwan EPA Product Carbon Footprint Reducing Labeling program, Thailand's Carbon Footprint of Products Project and the US's Climate Registry.
[27] Ecolabel Index. https://www.ecolabelindex.com/

forge development of digital material passports for products that shows all material composition and origins and even information on their environmental performance. The creation of such databases where supporting data and documentation can be exchanged and retrieved could ensure greater interoperability to fit the needs of different environmental standards and labelling programmes.

Besides standards setting bodies and national programme operators, it is also important for governments to co-operate and participate in the development of standard-setting processes. This can take place in the form of bilateral cooperation such as the Singapore-Australia Green Economy Agreement which contains provisions on standards and conformance to foster adoption and development of common rules and standards that promote trade and investment in green goods, services and technologies and promote collaborations to facilitate the acceptance of conformity assessment results.[28]

A plurilateral initiative launched by New Zealand with Costa Rica, Fiji, Iceland, Norway and Switzerland – the Agreement on Climate Change, Trade and Sustainability (ACCTS) – also includes a chapter on eco-labelling where guidelines are to be developed to inform implementation of voluntary eco-labelling programmes and associated mechanisms to encourage their promotion and application. These guidelines serve to ensure that eco-labels are able to best achieve their environmental purposes and deliver information meaningful to the market, while avoiding the inadvertent creation of barriers to trade.[29] The ACCTS negotiations seek to conclude by the end of this year and to be promulgated at WTO's 13th Ministerial Conference (MC13) as an initiative open for WTO members' participation.

The Need for Coordination

While the challenges of harmonizing standards and promoting interoperability and recognition at an international level are significant, addressing them is essential to facilitate the trade of environmentally friendly products, foster consumer trust, and achieve global sustainability goals. Failure to establish clear and universally accepted standards may hinder progress in addressing climate change and environmental degradation, underscoring the urgency of finding collaborative solutions to these challenges.

In addition to bilateral and plurilateral efforts, there is potential for more systematic collaboration between multilateral institutions for climate change and trade such as the United Nations Framework Convention on Climate Change (UNFCCC), Intergovernmental Panel on Climate Change (IPCC) and the WTO to provide for effective participation of developing countries in climate-related scientific knowledge exchange forums and international standard-setting processes in the area of trade and climate change.[30] Climate change is a global challenge, and its impacts are felt by all countries, especially those that are less developed and requires collective and scaled up action. Thus, it is

[28] Singapore-Australia Green Economy Agreement Official Text. https://www.dfat.gov.au/geo/singapore/singapore-australia-green-economy-agreement/singapore-australia-green-economy-agreement-text

[29] The negotiations launched in 2019 has yet to conclude as of September 2023. Members completed 13 rounds of negotiations and concluded the chapter on eco-labelling.

[30] Aik Hoe Lim, Kateryna Holzer, Trading in the era of carbon standards: how can trade, standard setting, and climate regimes cooperate?, Oxford Review of Economic Policy, Volume 39, Issue 1, Spring 2023, Pages 110–122, https://doi.org/10.1093/oxrep/grac039

imperative to provide an inclusive multilateral platform which allows developing countries to have a say in shaping rules and standards that affect them directly in a more equitable process.

Many countries are part of the global value chains (GVCs) and emergence of environment-related standards and regulations such as quantification of embedded carbon emissions in traded products are likely to affect all producers in the value chains, particularly high-emissions sectors and goods. Moreover, developing countries often lack the technical expertise and certification mechanism to assess carbon footprint of manufactured products with complex supply chains and will require substantial support and opportunities to learn from countries with more established environmental regulations and standards. Participating in multilateral standard-setting processes or discussions can facilitate capacity building and help developing countries better understand and implement climate-friendly trade policies.