Report September 2024

TESS Forum on Trade, Environment, & the SDGs

THE OR FOUNDATION

CHATHAM HOUSE

Tulip TRADE • LAW • POLICY

INFISUM

CIRCULAR INNOVATION LAB

smep | Sustainable Manufacturing and Environmental Pollution Programme

Trade, Circular Economy, and Sustainable Development: Guidance on Approaches and Good Practices for the Design of Trade-Related Circular Economy Policies and Measures

Report of an International Expert Group on Trade, Circular Economy, and Sustainable Development

TESS Forum on Trade, Environment, & the SDGs

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.

Acknowledgements

This report was produced by TESS under the direction and guidance of Carolyn Deere Birkbeck and Christophe Bellmann, based on the discussions of a group of international experts on trade, circular economy, and sustainable development convened by TESS. We thank all international experts involved for their substantive contributions to this report and for their continuous engagement and support. Our appreciation extends to the many individual contributors for their written inputs, feedback, and comments at different stages of discussion and review. At TESS, this project was managed by Vinati Bhola and benefited from the engagement of Eugene James. Fabrice Lehmann edited and produced the report.

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. The international expert group members that contributed to this report participated in their personal capacity and no element of this report should be attributed to the organizations for which they work or to which they are affiliated.

This report reflects a collective, cooperative effort among the international expert group members to contribute their expertise, offer guidance to policymakers and stakeholders, and serve as a conversation starter. Although members may have differences on points of detail, the expert group endorses the general policy thrust and views reflected in this report. They participated in the expert group in their individual, not institutional capacities.

Recommended citation: International Expert Group on Trade, Circular Economy, and Sustainable Development. (2024). *Trade, Circular Economy, and Sustainable Development: Guidance on Approaches and Good Practices for the Design of Trade-Related Circular Economy Policies and Measures.* Report of an International Expert Group. Forum on Trade, Environment, & the SDGs (TESS).

tessforum.org @TESSForum info@tessforum.org

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

TESS is housed at the Geneva Graduate Institute.

Contents

Participating International Experts

The experts who have participated in the International Expert Group on Trade, Circular Economy, and Sustainable Development responsible for this report are the following:

Latifahaida ABDUL LATIF
Adina Renee ADLER
Apporva ARYA
Sandra AVEROUS-MONNERY
Jack BARRIE
Christophe BELLMANN
Arpit BHUTANI
Jocelyn BLÉRIOT
Kimberley BOTWRIGHT
Vito BUONSANTE
Catherine CHEVAUCHÉ
Dominic COPPENS
Hélionor DE ANZIZU
Carolyn DEERE BIRKBECK
Florence Binta DIAO-GUEYE
Bonmwa FWANGKWAL
Gael GROOBY
Kamal GUEYE
Jeet KAR
Michikazu KOJIMA
Rainer LANZ
Aik Hoe LIM
Elisa LUOTONEN
Nanno MULDER
Badri NARAYANAN GOPALKRISHNAN
Henrique PACINI
Maria Teresa PISANI
Patrick SCHROEDER
Branson SKINNER
Colette VAN DER VEN
Shunta YAMAGUCHI

* Several experts from the Secretariat of the Basel, Rotterdam and Stockholm conventions also participated in the expert group.

The affiliations and titles of individual expert group members can be found in the Annex.

Preface

The global economy's reliance on a linear model of extraction, transformation, and disposal of natural resources is increasingly raising concerns among government and stakeholders from a sustainability and human health perspective, but also for economic resilience or supply chain security reasons. In response, the past decade has seen a proliferating array of policies and initiatives from governments, intergovernmental organizations, businesses, and civil society organizations to promote a shift to a more circular economy.

Acknowledging the highly integrated nature of today's global economy, these initiatives and policies are increasingly exploring a wide range of trade and trade-related measures to foster such a transition. Indeed, trade routinely takes place at all stages of the life cycle of a broad array of value chains central to realizing a more circular economy—from trade in raw materials and upstream design services through final consumer products to trade in remanufactured goods, secondary raw materials, and waste. Trade can allow materials and products to stay longer in use and retain their value where it enables them to be safely and cost-effectively sorted, reused, repaired, remanufactured, disassembled, or recycled. However, in the absence of adequate regulatory frameworks, trade can also exacerbate environmental, social, and human health challenges associated with the linear economy.

In this context, cooperation on trade policy measures and practices is central to the shift to a more circular economy. Currently, however, the design and implementation of circular economy laws and policies, and associated trade-related circular economy measures, mostly takes place at the domestic level and, to some extent, at the regional level. As countries advance domestic efforts, the lack of coordination, consultation, and cooperation with trading partners has resulted in important differences across jurisdictions in definitions of key concepts, product classifications, standards and regulations. This, in turn, imposes additional trade costs on exporters and companies key to the transformation of international supply chains, particularly small enterprises in developing countries.

To avoid a patchwork of uncoordinated national policies, there is an urgent need for collective approaches that send the right signals to companies and across international supply chains to shift investment, spur innovation, and generate new economic opportunities that support sustainability objectives. There are also a range of questions about how developing countries can leverage circular economy approaches in ways that support their sustainable development and their returns from trade, while guarding against approaches and practices that may undermine their environmental, social, and economic priorities.

Mindful of these challenges, discussions on different aspects of the trade and circular economy interface, are underway in several international organizations and processes.

At the World Trade Organization (WTO), discussions have arisen in the several fora including the Committee on Trade and Environment and the Committee on Technical Barriers to Trade. In 2021, co-sponsors of the member-led Trade and Environmental Sustainability Structured Discussion initiative issued a ministerial statement calling on members to "identify and compile best practices, as well as explore opportunities for voluntary actions and partnerships to ensure that trade and trade policies are supportive of and contribute to: (i) achieving a more resource-efficient circular economy." Since then discussions on the trade and circular economy interface have been ongoing in a dedicated informal Working Group on Circular Economy – Circularity. Similarly, the co-sponsors of a ministerial statement issued by the member-led WTO Dialogue

on Plastic Pollution and Environmentally Sustainable Plastics Trade agreed to share "experiences of effective approaches to move towards more circular, resource efficient and environmentally sustainable plastics trade" and address trade-related capacity building and technical assistance needs of developing countries to "support their efforts to move towards more circular plastics economies."

The International Expert Group on Trade, Circular Economy, and Sustainable Development

To contribute to ongoing international discussions on the nexus of trade, circular economy, and sustainable development, the Forum on Trade, Environment, & the SDGs (TESS) convened an international group of leading experts from the trade, environment, and sustainable development communities. Members of the group included experts from academia, think tanks, and intergovernmental and stakeholder organizations from a diversity of geographical origin and perspectives, participating in their personal capacities

The group was asked to offer guidance on good practices and approaches to trade-related circular economy policies and measures, with the overarching goal of advancing sustainable development in its environmental, social, and economic dimensions. The report reflects a collective, cooperative effort among the expert group members to contribute their expertise, offer guidance to policymakers and stakeholders, and serve as a conversation starter.

We hope that dialogue around such good practices and approaches will help build a shared understanding among WTO members and could inspire them to consider the development of non-binding guidelines for the design and implementation of trade-related circular economy policies and measures.

Carolyn Deere Birkbeck
Founder and Executive Director, TESS

Christophe Bellmann
Head of Policy Analysis and Strategy, TESS

Executive Summary

This report aims to foster inclusive international cooperation and collective action on trade policies that support a fair transition to a more resource efficient, climate resilient, and safe circular economy. To do so, it offers guidance on good practices and approaches for the design and implementation of trade-related circular economy measures and policies that achieve their environmental and public health objectives, are non-discriminatory, minimize trade costs, promote effectiveness across interconnected markets, and support sustainable development outcomes and fair transitions.

The report covers a wide range of trade-related circular economy policies and measures (TrCEMs), including border measures, regulatory measures, or economic incentives that aim to promote a more circular economy. The report also covers trade-related international support measures, such as technology transfer and trade-related technical assistance, capacity building, and finance to support a circular transition. A diversity of such measures are already widely used among World Trade Organization members to achieve a variety of circular economy objectives.

Overall, the objectives that currently most commonly underpin the development of TrCEMs can be clustered into three categories:

- Eliminating, taking off the market, or phasing out products, materials, and chemicals that are unnecessary, harmful, or problematic from a safe circularity viewpoint, or restricting the trade in such products based on different regulations, standards, and related criteria.
- Ensuring that products on the market are consistent with regulations, standards, and related criteria aimed at contributing to the transition to a more resource-efficient and safe circular economy that supports environmental, health, and wider sustainable development priorities.
- Facilitating the functioning of safe and environmentally sound circular supply chains, including reverse supply chains, and the development, diffusion, accessibility, and uptake of goods, services, and technologies that promote safe circularity and resource efficiency.

In developing guidance for the design and implementation of TrCEMs, the report considers the specific circular economy considerations that may arise in different sectors and at different points along the value chain, taking a full life cycle approach to products.

The report identifies 10 considerations to guide the design and implementation of TrCEMs:

1. Develop consistency and alignment in terminology, definitions, and classification.
2. Follow good regulatory practices in the design and monitoring of TrCEMs.
3. Reduce regulatory heterogeneity through options such as harmonization, equivalences, and mutual recognition.
4. Cooperate on the design and implementation of measures to restrict or eliminate trade flows of materials, products, and wastes that are illegal, such as those addressed in the context of multilateral environmental agreements, or harmful to the environment or human health.

5. Ensure transparency and clarity of circular economy requirements and criteria.

6. Enhance international cooperation on extended producer responsibility systems to reflect the reality of global product value chains and the trade aspects of end-of-life management and reverse supply chains.

7. Foster coherence of TrCEMs with domestic policies and promote responsible practices.

8. Facilitate and promote trade in environmentally sound goods, services, and technologies that support circular economy goals, including through cooperation on tariff, non-tariff, and support measures that support their development, diffusion, affordability, and uptake.

9. Facilitate safe and environmentally sound reverse supply chains in end-of-life products that can support a circular economy transition.

10. Respond to specific challenges faced by developing countries and their private sector, especially impacted MSMEs, by ensuring consultation, impact assessments, capacity building, technical assistance, financing, and affordable access to appropriate technologies to support fair transitions.

The report examines the rationale behind each of these considerations and provides examples of good practices that can serve as guidance or inspiration when designing and implementing TrCEMs.

While many of the good practices listed in this report can be pursued by governments through autonomous policy measures, the report calls for coordinated action at the international level as a way to significantly improve their effectiveness across cross-border supply chains, avoid trade diversion or leakage, create a level playing field for business through increased predictability, and promote fairness. Such cooperation should also contribute to reducing transaction costs, especially for MSMEs and firms active in multiple markets, by preventing a patchwork of disjointed regulations.

The report also identifies specific areas where enhanced international cooperation will be required to pursue these good practices and suggests possible fora where such cooperation could take place.

Abbreviations

ARSO	African Organisation for Standardisation
ASEAN	Association of Southeast Asian Nations
CPTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership
CTE	Committee on Trade and Environment
DPP	Dialogue on Plastic Pollution and Environmentally Sustainable Plastics Trade
EEE	Electrical and Electronic Equipment
EFTA	European Free Trade Association
EPR	Extended Producer Responsibility
EU	European Union
IGO	Intergovernmental Organization
IMPEL	European Union Network for the Implementation and Enforcement of Environmental Law
HS	Harmonized System
ISO	International Organization for Standardization
MEA	Multilateral Environmental Agreement
MRA	Mutual Recognition Agreement
MSMEs	Micro, Small, and Medium-Sized Enterprises
OECD	Organisation for Economic Co-operation and Development
PET	Polyethylene Terephthalate
PIC	Prior Informed Consent
PRO	Producer Responsibility Organization
RTA	Regional Trade Agreement
SMEP	Sustainable Manufacturing and Environmental Pollution
SPS	Sanitary and Phytosanitary Measures
TBT	Technical Barriers to Trade
TESSD	Trade and Environmental Sustainability Structured Discussions
TrCEMs	Trade-Related Circular Economy Policies and Measures
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
USMCA	United States-Mexico-Canada Agreement
WCO	World Customs Organization
WTO	World Trade Organization

1. Introduction

The growing interest of a diversity of governments and stakeholders in the shift to a more circular economy has been spurred by recognition that the global economy's reliance on a linear model of extraction, transformation, and disposal of natural resources and related materials is unsustainable. This linear model generates significant environmental consequences in the form of soil, water, and air pollution, climate impacts, and biodiversity loss as well as a diversity of impacts on human health. Ongoing use of resource materials in industrialized countries and a rapidly growing demand in emerging economies further exacerbate these trends. Alongside, in the face of resource scarcity for key value chains central to the green transition and industrial competitiveness, the linear economy is also raising concerns about economic resilience and security. In response, the past decade has seen a proliferating array of policies and initiatives from governments, intergovernmental organizations (IGOs), businesses, and civil society organizations to promote a more circular economy.

In the absence of a universally agreed definition, the circular economy is an umbrella concept with diverse and occasionally incongruent interpretations.[1] Overall, most circular economy approaches are grounded in the need to improve efficiency in the use of finite natural resources and to decouple material extraction and use from economic outputs while reducing pressures on the environment, fostering the protection of natural resources, and eliminating externalized production costs. There is also growing emphasis on the importance of ensuring that circular economy approaches consider and serve human health goals (for example by reducing or eliminating exposure to chemicals of concern across product life cycles), support the regeneration of nature and ecosystems, and advance social goals such as sustainable livelihoods or economic opportunities for those engaged across value chains (for instance those involved in the collection and sorting of waste).

To date, the transition to a more circular economy is usually pursued by governments and businesses through three main mechanisms: (i) narrowing the resource flows, for example through reduced extraction, reducing or eliminating the production and consumption of certain products, or substituting primary materials; (ii) slowing the resource loops through extended use, durability, repair, or remanufacturing of products; and (iii) closing the resource loops through recycling or resource recovery.

In this regard, five main business models targeting different stages of the life cycle have emerged for fostering a circular economy transition:[2] (i) circular supply models that substitute primary materials inputs with renewable or recovered materials; (ii) resource recovery models that collect and sort waste materials to be transformed into secondary materials; (iii) Product life extension models that increase the life of products by improving durability, reuse, repairability, refurbishing, or remanufacturing of products; (iv) sharing models that focus on under-utilized consumer goods and assets (e.g. housing or vehicles) for example through co-ownership or co-access mechanisms; and (v) product service systems that sell services rather than the product itself (e.g. pest control services or lighting services). While some of these models are already well-established, others have only been developed recently due to technological innovations and the digitization of the economy. Their approach and environmental benefits also vary considerably across different sectors or value chains.

1. See for example: Ellen MacArthur Foundation. (2015). *Growth within: A circular economy vision for a competitive Europe.*; Wellesley, L., Preston, F., & Lehne, J. (2019). *An inclusive circular economy: Priorities for developing countries.* Chatham House.; SITRA. (2016). *Leading the cycle: Finnish roadmap to a circular economy 2016–2025.*; CIEL. (2023). *Beyond recycling: Reckoning with plastics in a circular economy.*
2. OECD. (2019). *Business models for the circular economy: Opportunities and challenges for policy.* OECD Publishing.

In today's highly integrated global economy, trade takes place at all stages of the life cycle of a broad array of value chains central to realizing a more circular economy—from trade in raw materials and upstream design services through final consumer products to trade in remanufactured goods, secondary raw materials, and waste. Trade can allow materials and products to stay longer in use and retain their value where it enables them to be safely and cost-effectively sorted, reused, repaired, remanufactured, disassembled, or recycled. However, in the absence of adequate regulatory frameworks, trade can also exacerbate environmental, social, and human health challenges associated with the linear economy.[3] In these cases, advancing circular economy objectives and associated environmental and public health goals may require eliminating or reducing trade in unnecessary, avoidable, illegal, or harmful materials, products, and wastes. In other cases, it may also require support measures for communities impacted by the transition to a circular economy.[4]

In this context, cooperation on trade policy measures and practices is central to the shift to a more circular economy. In particular, it is essential to: (i) reduce, regulate, and manage trade flows that undermine circular economy approaches; (ii) harness and promote trade flows that can catalyse and support circular economy goals and outcomes; (iii) promote efficiency and reduce costs of the circular economy transition by reducing regulatory heterogeneity; and (iv) support fair transitions for developing countries and their businesses in ways that respond to their sustainable development imperatives.

Currently, the design of circular economy laws and policies, and associated trade-related circular economy measures, mostly takes place at the domestic level and, to some extent, at the regional level as illustrated by the Framework for Circular Economy for the Association of Southeast Asian Nations (ASEAN) Economic Community (see Box 4) and the EU's Circular Economy Action Plan.[5] As countries advance domestic efforts, however, a lack of coordination, consultation, and cooperation with trading partners has resulted in important differences across jurisdictions in definitions of key concepts, product classifications, standards, and regulations.[6] This, in turn, imposes additional trade costs on exporters and companies producing for international supply chains, particularly micro, small, and medium-sized enterprises (MSMES) in developing countries. To avoid a patchwork of uncoordinated national policies, there is an urgent need for collective approaches that send the right signals to companies and across international supply chains to shift investment, spur innovation, and generate new economic opportunities that support sustainability objectives. Further, as alluded to above, there is a range of questions about how developing countries can leverage circular economy approaches in ways that support their sustainable development and their returns from trade, while also guarding against approaches and practices that may undermine their environmental, social, and economic priorities. In sum, while each country's circular economy transition end goals and journey may differ, collective, coordinated, and cooperative approaches will be vital to deliver on the environmental goals of the shift to a circular economy in ways that support wider sustainable priorities.

3. For instance, parties to the Basel Convention should not export or import hazardous or other waste if they have a reason to believe that it would not be managed in an environmentally sound manner (Art. 4 para 2(e), (g)). The Basel Convention also underscores the importance of states prioritizing the management of waste generated within their own borders.
4. For instance, the annual waste management cost at the world's largest secondhand clothing site in Accra, Ghana is estimated at $522,600 but only 70% of what leaves the market as waste is properly managed and the remaining ends up in dumpsites that lack environmental protections. There is a clear need to build financial capacity for frontline communities to manage textiles waste and improve their overall wellbeing. See Ricketts, L. & Skinner, B. (2023). *Stop waste colonialism: Leveraging extended producer responsibility to catalyze a justice-led circular textiles economy.* The Or Foundation.
5. European Commission. (2020). *A new Circular Economy Action Plan – For a cleaner and more competitive Europe.* COM(2020) 98 final.
6. This lack of coordination and collaboration across borders is highlighted by a recent global stocktake conducted by Chatham House and supported by UNIDO, covering over 70 national strategies and encompassing more than 2,800 policy actions. See Barrie, J., Salminen, I., Schroder, P. & Stucki, S. (2024). *National circular economy roadmaps: A global stocktake for 2024.* UNIDO and Chatham House.

Mindful of these challenges, discussions on different aspects of the trade and circular economy interface, and in particular how to foster more inclusive and effective international cooperation, are underway in several international organizations and processes. At the World Trade Organization (WTO), discussions have arisen in the Committee on Trade and Environment (CTE), the Committee on Market Access, and the Committee on Technical Barriers to Trade. In 2021, co-sponsors of the Trade and Environmental Sustainability Structured Discussions (TESSD) initiative issued a ministerial statement calling on members to "identify and compile best practices, as well as explore opportunities for voluntary actions and partnerships to ensure that trade and trade policies are supportive of and contribute to: (i) achieving a more resource-efficient circular economy."[7] Since then discussions on the trade and circular economy interface have been ongoing in a dedicated informal Working Group on Circular Economy - Circularity. Similarly, co-sponsors of the ministerial statement under the Dialogue on Plastic Pollution and Environmentally Sustainable Plastics Trade (DPP) agreed to share "experiences of effective approaches to move towards more circular, resource efficient and environmentally sustainable plastics trade" and address trade-related capacity building and technical assistance needs of developing countries to "support their efforts to move towards more circular plastics economies."[8]

7. World Trade Organization, Ministerial Statement on Trade and Environmental Sustainability of 14 December 2021, Trade and Environmental Sustainability Structured Discussions (TESSD), WTO Doc. WT/MIN(21)/6/Rev.2 (2021).
8. World Trade Organization, Ministerial Statement on Plastic Pollution and Environmentally Sustainable Plastics Trade of 10 December 2021, Informal Dialogue on Plastic Pollution and Environmentally Sustainable Plastics Trade (IDP), WTO Doc. WT/MIN(21)/8/Rev.2 (2021).

2. Objective and Scope of the Report

To contribute to ongoing international discussions on the nexus of trade, circular economy, and sustainable development, the Forum on Trade, Environment, & the SDGs (TESS) convened an international group of leading experts from the trade, environment, and sustainable development communities. Members of the group included experts from academia, think tanks, and intergovernmental and stakeholder organizations from a diversity of geographical origin and perspectives, participating in their personal capacities (see Annex for the list of expert group members).

The group was asked to offer guidance on good practices and approaches to trade-related circular economy policies and measures (TrCEMs), with the overarching goal of advancing sustainable development in its environmental, social and economic dimensions. The guidance provided here focuses on the design and implementation of TrCEMs to ensure that these are effective at achieving their environmental objectives, while minimizing trade costs, avoiding discrimination, promoting effectiveness of circular economy efforts across interconnected markets, and addressing challenges facing developing countries to promote fair transitions. The report reflects a collective, cooperative effort among the expert group members to develop such guidance. It is hoped that dialogue around such good practices and approaches could help build a shared understanding among WTO members and inspire them to consider the development of non-binding guidelines for the design and implementation of TrCEMs.

In terms of scope, the report covers a wide range of TrCEMs, including border measures,[9] regulatory measures,[10] or economic incentives[11] that aim to promote a more circular economy. The report also covers trade-related international support measures, such as technology transfer and trade-related technical assistance and capacity building to support a circular transition in third countries. As highlighted in a recent mapping study undertaken by the WTO Secretariat for the TESSD informal Working Group on Circular Economy – Circularity,[12] a diversity of such measures are already widely used among WTO members to achieve a variety of circular economy objectives (see Box 1).

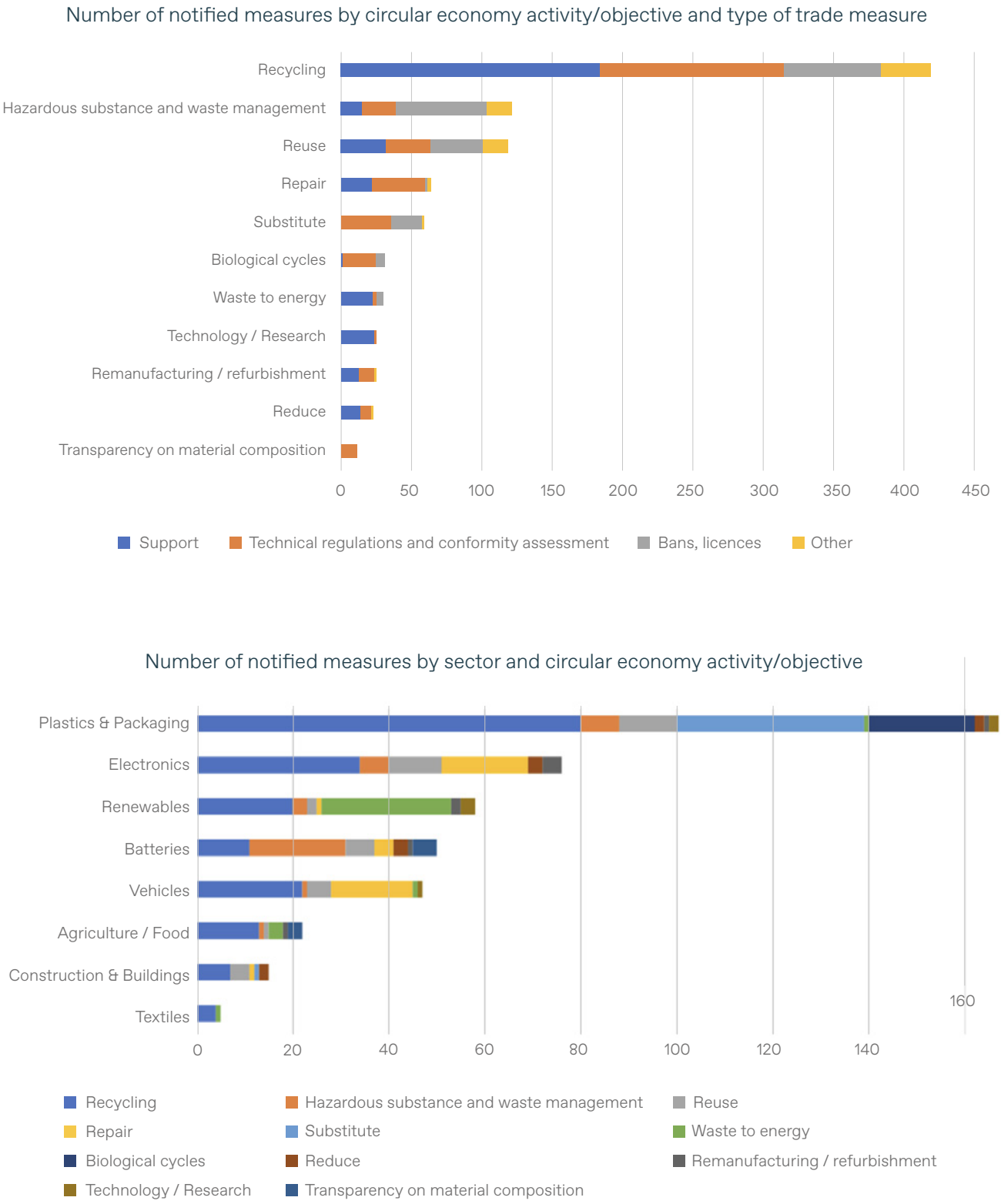
Box 1. The WTO Mapping Exercise of Trade-Related Circular Economy Measures

As a contribution to the TESSD informal Working Group on Circular Economy - Circularity, the WTO Secretariat carried out a mapping of circular economy related measures notified to the WTO with a view to helping members build a broader understanding of the aspects of trade and trade policy at different stages of the product life cycle. Overall, the analysis found a total of 520 measures notified by 85 different members. The mapping organizes them by circular economy activities or objectives, stages of the life cycle, sectors, and type of measures and by WTO agreement under which these measures are notified. Figure 1 provides an overview of the main findings. Overall 20 Members accounted for close to 77% of all notified measures. More than three quarters of the measures were notified under the Agreement on Subsidies and Countervailing Measures (SCM) and the Agreement on Technical Barriers to Trade (TBT). Another 18% were notified as import licensing procedures or quantitative restrictions. In terms of objectives, the majority of measures relate to downstream stages of the life cycle and particularly recycling and management of hazardous substances and waste. Finally, the sectors most frequently addressed are packaging, followed by electronics, renewables, batteries and vehicles.

Source: World Trade Organization, Statement by the TESSD Co-Convenors of 19 February 2024, Trade and Environmental Sustainability Structured Discussions (TESSD), Addendum, Informal Working Group on Circular Economy – Circularity, WTO Doc. WT/MIN(24)/11/Add.4 (2024).

9. For example tariffs, licenses, quantitative restrictions on imports or exports.
10. For example standards, labeling schemes, regulations, conformity assessment procedures, government procurement.
11. For example internal taxes, fees and charges, subsidies, intellectual property rights.
12. World Trade Organization, Statement by the TESSD Co-Convenors of 19 February 2024, Trade and Environmental Sustainability Structured Discussions (TESSD), Addendum, Informal Working Group on Circular Economy – Circularity, WTO Doc. WT/MIN(24)/11/Add.4 (2024).

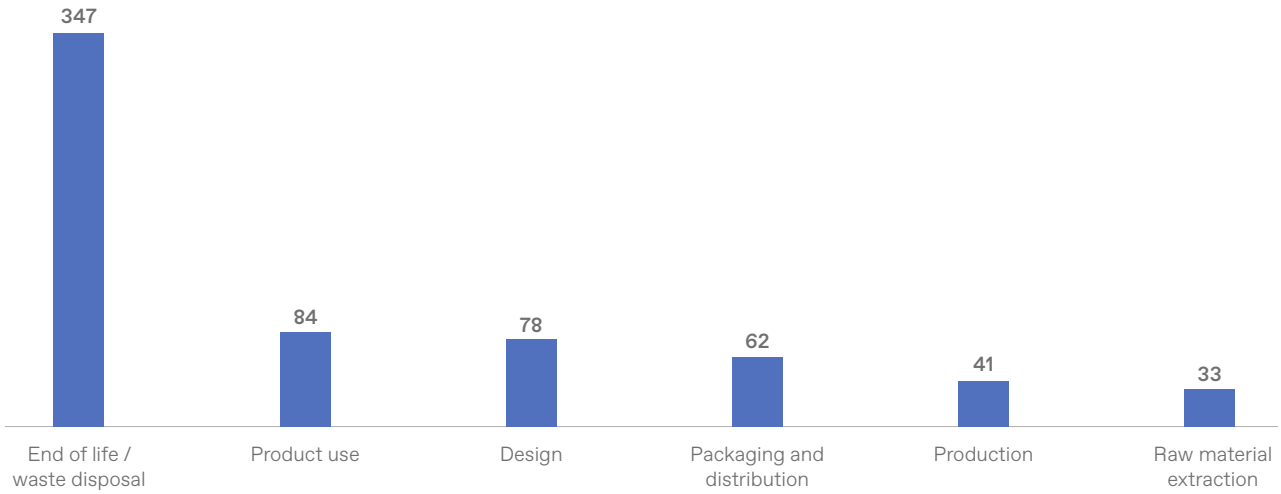
Figure 1. Main Findings of the WTO Mapping Exercise of Trade-Related Circular Economy Measures



Source: WTO Doc. WT/MIN(24)/11/Add.4.

Figure 1. (Continued)

Number of notified measures by lifecycle stage



Number of notified measures by notifying member and agreement

Member	SCM	TBT	IL	QR	SPS	GP	Other	Total
United States	103	12	0	0	0	0	0	**115**
China	30	17	1	0	0	0	0	**48**
Korea, Republic of	9	9	11	0	2	0	0	**31**
European Union	0	21	0	0	1	0	1	**23**
Hong Kong, China	3	1	11	7	1	0	0	**23**
Philippines	0	1	17	0	0	0	5	**23**
Australia	14	1	2	3	0	0	1	**21**
France	0	17	0	0	0	0	0	**17**
Japan	0	4	0	0	0	7	1	**12**
Mauritius	0	2	5	4	0	0	0	**11**
Finland	9	0	0	0	0	0	0	**9**
Romania	9	0	0	0	0	0	0	**9**
Thailand	2	7	0	0	0	0	0	**9**
Seychelles	0	1	2	5	0	0	0	**8**
United Kingdom	5	3	0	0	0	0	0	**8**
Canada	3	3	0	1	0	0	0	**7**
Uganda	0	7	0	0	0	0	0	**7**
Estonia	6	0	0	0	0	0	0	**6**
Tűrkiye	0	3	0	0	1	0	2	**6**
Viet Nam	3	3	0	0	0	0	0	**6**
Other Members	18	68	13	10	9	0	3	**121**
Total	**214**	**180**	**62**	**30**	**14**	**7**	**13**	**520**

Note: SCM = subsidies and countervailing measures; TBT = technical barriers to trade; IL = import licensing; QR = quantitative restrictions; SPS = sanitary and phytosanitary measures; GP = government procurement.

Source: WTO Doc. WT/MIN(24)/11/Add.4.

Overall, the objectives that currently most commonly underpin the development of TrCEMs can be clustered in three categories:

- Eliminating, taking off the market, or phasing out products, materials, and chemicals that are unnecessary, harmful, or problematic from a safe circularity viewpoint, or restricting the trade in such products based on different regulations, standards, and related criteria.
- Ensuring that products on the market are consistent with regulations, standards, and related criteria aimed at contributing to the transition to a more resource-efficient and safe circular economy that supports environmental, health, and wider sustainable development priorities.
- Facilitating the functioning of safe and environmentally sound circular supply chains, including reverse supply chains, and the development, diffusion, accessibility, and uptake of goods, services, and technologies that promote safe circularity and resource efficiency.

In developing guidance for the design and implementation of TrCEMs, the report considers the specific circular economy considerations that may arise in different sectors and at different points along the value chain, taking a full life cycle approach to products.

The report identifies the following 10 considerations to guide the design and implementation of TrCEMs:

1. Develop consistency and alignment in terminology, definitions, and classification.
2. Follow good regulatory practices in the design and monitoring of TrCEMs.
3. Reduce regulatory heterogeneity through options such as harmonization, equivalences, and mutual recognition.
4. Cooperate on the design and implementation of measures to restrict or eliminate trade flows of materials, products, and wastes that are illegal, such as those addressed in the context of multilateral environmental agreements, or harmful to the environment or human health.
5. Ensure transparency and clarity of circular economy requirements and criteria.
6. Enhance international cooperation on extended producer responsibility systems to reflect the reality of global product value chains and the trade aspects of end-of-life management and reverse supply chains.
7. Foster coherence of TrCEMs with domestic policies and promote responsible regulatory practices.
8. Facilitate and promote trade in environmentally sound goods, services, and technologies that support circular economy goals, including through cooperation on tariff, non-tariff, and support measures that support their development, diffusion, affordability, and uptake.
9. Facilitate safe and environmentally sound reverse supply chains in end-of-life products that can support a circular economy transition.
10. Respond to specific challenges faced by developing countries and their private sector, especially impacted MSMEs, by ensuring consultation, impact assessments, capacity building, technical assistance, financing, and affordable access to appropriate technologies to support fair transitions.

The following sections examine the rationale behind each of these considerations and provide examples of good practices that can serve as guidance or inspiration when designing and implementing TrCEMs. Finally, section 4 highlights the importance of international cooperation in the design and implementation of TrCEMs, identifying areas where enhanced international cooperation will be required to pursue these good practices, and suggests possible fora where such cooperation could take place.

3. Ten Considerations to Guide the Design and Implementation of Trade-Related Circular Economy Policies and Measures

1. Develop consistency and alignment in terminology, definitions, and classification

One of the main challenges affecting trade-related cooperation in support of the circular economy is the lack of consistency and alignment in the definitions and classification of products. Common understandings regarding such definitions and classifications would contribute to greater clarity regarding different types of products and their relation to circular activities. In addition to definitional issues around the concept of circular economy itself, the existing international system for classifying products traded across borders— commonly known as the Harmonized System (HS)—was not designed to distinguish goods based on their intended use or impact on the environment, which limits the ability of countries to cooperate effectively on circular economy objectives.[13] There are also differences among jurisdictions, for instance between what is considered waste and scrap, secondary raw materials, second-hand goods, or goods for refurbishment or remanufacturing. In the same vein, there are many country-level divergences in definitions and classifications of hazardous and non-hazardous waste. A lack of clear, uniform criteria on the capacity of countries to manage such material in an environmentally sound manner also adds to confusion and misalignment in policy details, even when intentions are shared. In key sectors, divergences also exist between jurisdictions in the definition of specific terms, such as "single-use", "biodegradable", or "recyclable" for plastics.

The lack of common definitions and insufficiently granular product classifications lead to missing and inconsistent trade data, which, in turn, affects the ability of countries to craft, implement, and cooperate on trade-related circular economy policies. A first good practice would therefore be to map out divergences in definitions and classifications relevant to sectors central to the shift to a circular economy and to seek alignment at different life cycle stages with those used in relevant international standards where they exist or with definitions and terms used in multilateral environmental agreements (MEAs) and other international cooperative arrangements.

In terms of circular economy definitions, at the broadest level, resolution 11 of the 2022 UN Environment Assembly 5 (UNEA 5.2) refers to the circular economy as "innovative approaches to achieve sustainable production and consumption, in which products and materials are designed in such a way that they can be reused, remanufactured, recycled or recovered and thus maintained in the economy for as long as possible, along with the resources of which they are made, and the generation of waste, especially hazardous waste, is avoided or minimized, and greenhouse gas emissions are prevented or reduced."[14] The International Organization for Standardization (ISO) has further developed a series of definitions related to the circular economy (see Box 2). With respect to specific terms such as different types of hazardous or non-hazardous wastes, as well as recycling, recovery, reuse, repair, and refurbishment, a 2016 Basel Convention glossary of terms provides detailed definitions that can serve as models.[15] Similarly, the United Nations Framework Classification for Resources (UNFC) provides a universally acceptable and internationally applicable scheme for the sustainable management of all energy and mineral resources.[16] In certain

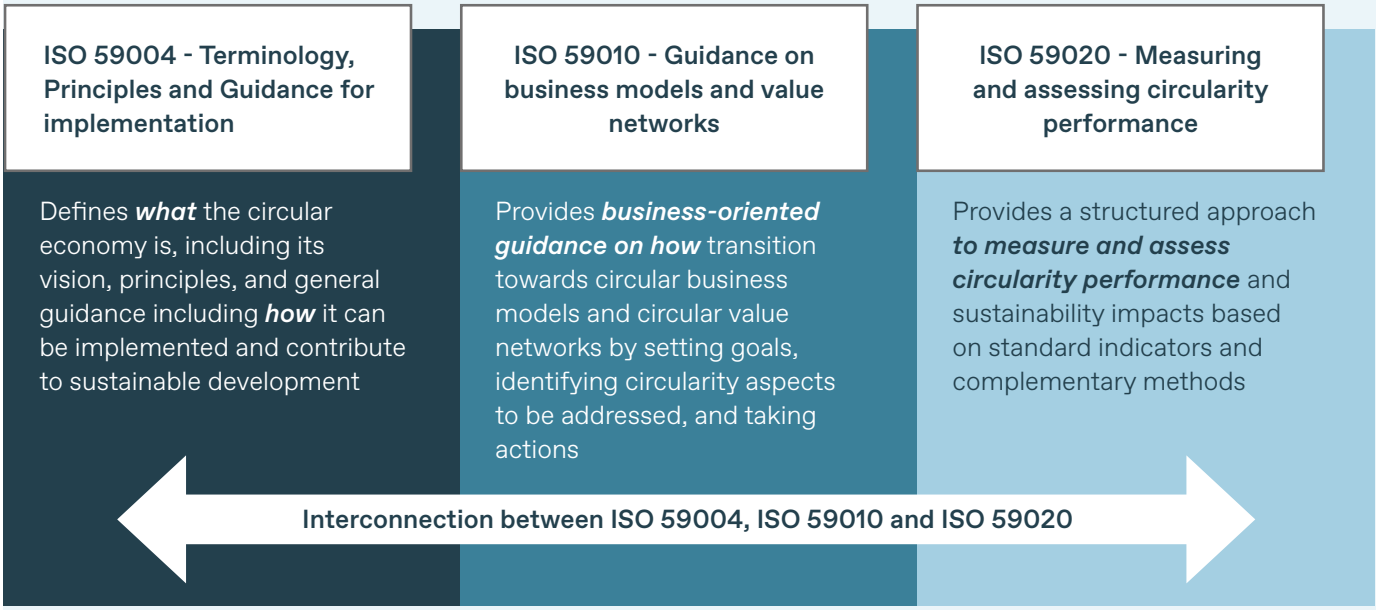
13. Barrie, J. & Grooby, G. (2023). *Going circular - How the Harmonized System codes can/not support a circular economy and what else could be done.* World Customs Organization and Freidrich Ebert Stiftung..
14. United Nations Environment Programme, Resolution adopted by the United Nations Environment Assembly on 2 March 2022, Enhancing circular economy as a contribution to achieving sustainable consumption and production, U.N. Doc. UNEP/EA.5/Res.11, (March 7, 2022).
15. UNEP Open-ended Working Group of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention), Revised Glossary of Terms, U.N. Doc. UNEP/CHW/OEWG.10/INF/10 (March 18, 2016). This glossary of term reflects the outcome of the third meeting of the small intersessional working group on legal clarity
16. UNECE. (n.d.). *Sustainable resource management.*

sectors, definitions are also provided by non-state actors such as the Ellen MacArthur Foundation who produced jointly with the United Nations Environment Programme (UNEP) a set of definitions related to the plastic sector.[17]

Fostering alignment in terminology, definitions, and classification will require enhanced international cooperation among governments with the input of stakeholders, including through a range of international processes, such as the ISO and other standard-setting bodies as well as the World Customs Organization (WCO). In specific sectors, such as plastics, ongoing negotiations for an internationally binding legal instrument on plastic pollution may also provide an avenue to develop such alignment.

Box 2. ISO Standards and Definitions Related to Circular Economy

The 59000 family of standards developed by the ISO under its Technical Committee 323 on Circular Economy provides definitions of what constitutes the circular economy, as well as terms related to resources (e.g. recovered resource, renewable resource, secondary material), and terms related to business models (e.g. value creation model, value network, design for circularity, reuse, repair, refurbish). It defines the circular economy as an "economic system that uses a systemic approach to maintain a circular flow of resources, by recovering, retaining or adding to their value, while contributing to sustainable development." It further elaborates that a circular economy is where "the inflow of virgin resources is kept as low as possible, and the circular flow of resources is kept as closed as possible to minimize waste, losses and releases from the economic system." The standards provide an explanation of six circular economy principles, namely: systems thinking, value creation, value sharing, resource stewardship, resource traceability, and ecosystem resilience. Finally, it proposes possible actions that contribute to a circular economy, including circular sourcing and procurement, performance based-approaches, reuse, repair, repurpose, sharing to intensify use, remanufacturing, reverse logistic, etc. Finally, resource management guidance is provided to prioritize actions to increase circularity performance in the following order: refuse, rethink, source, reduce, repair, re-use, refurbish, remanufacture, repurpose, cascade, recycle, recover energy, re-mine.



Source: ISO 59020:2024 - Circular Economy – Measuring and assessing circularity performance.

17. See for example Ellen MacArthur Foundation. (2022). The Global Commitment 2022.

2. Follow good regulatory practices in the design and monitoring of TrCEMs

Good regulatory practices contribute to ensuring that TrCEMs are non-discriminatory and minimize trade costs while achieving their environmental and social objectives, promoting effectiveness across interconnected markets, and supporting sustainable development outcomes. Several of these good regulatory practices apply generally to all trade-related regulatory activities. They are already enshrined in international agreements such as the WTO Agreement on Technical Barriers to Trade (TBT) or the Agreement on Sanitary and Phytosanitary Measures (SPS) or have been extensively discussed among governments.[18] Other precedents can be found in dedicated chapters on good regulatory practices or regulatory coherence and cooperation in regional trade agreements.[19] When applied more specifically to TrCEMs such practices include:

- Specifying product and service requirements regarding circularity performance wherever appropriate rather than design or descriptive characteristics.[20]
- Basing measures on relevant international standards where available (see Box 3).
- Basing measures on the best scientific evidence and information available to a country.
- Ensuring that the measure is origin neutral, (i.e. that it applies equally to domestically produced goods, imported, and exported goods), does not create unnecessary trade barriers, and is not de facto or in effect discriminatory between countries where the same conditions prevail.
- Fostering transparency and consultation before, during, and after the regulatory development process, including wherever possible consultation with impacted trading partners. Providing notice of proposed rules and opportunities for comments when amendments can still be introduced, and comments are taken into account.
- Involving external stakeholders, the private sector (including MSMEs), civil society, and academia, and promoting the exchange of information and knowledge with third-country governments.
- Conducting a risk assessment to identify potential areas of vulnerability during implementation and propose measures to mitigate them.
- Undertaking ex-ante and ex-post regulatory assessments of economic, social, health and environmental impacts of proposed regulatory measures based on key performance indicator targets, including consideration of impacts for trading partners, especially developing countries and their businesses, as well as more broadly for the sectors and along the relevant supply chains where circular economy outcomes are sought.[21]
- Ensuring regular and consistent reporting and notification to the WTO.

18. See for example WTO Doc. G/TBT/26 (November 12, 2009) or G/TBT/32 (November 29, 2012).
19. See for example dedicated chapters under the EU-Canada Comprehensive Economic and Trade Agreement (CETA), Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), United States-Mexico-Canada Agreement (USMCA), New Zealand-Singapore Closer Economic Partnership, Pacific Alliance, EU-Japan Economic Partnership Agreement, and EU-Singapore Free Trade Agreement.
20. See Article 2.8 of the WTO Agreement on Technical Barriers to Trade.
21. See for example ISO 59020:2024 - Circular Economy – Measuring and assessing circularity performance.

Box 3. Circular Economy Standards

To meet growing legislative demand for coherent and robust circularity metrics as well as transparent reporting, several circularity frameworks, metrics, standards, and tools have emerged in recent years. Circular economy standards can be broadly divided into two categories: (i) those standardizing circular organizational and management approaches, such as implementing product-service systems, procurement, reporting, and ecodesign (examples include the UK's BS8001, France's Pr XP X30-901, ISO/TC 323, and the European Sustainability Reporting Standards - E5 standard); and (ii) those standardizing product circularity, such as phasing out hazardous material content and toxics and increasing material quality, recyclability, repairability, and performance of second-hand or remanufactured goods, as well as sustainable production requirements.

From a trade perspective, product standards are particularly relevant. They can be grouped into two broad categories along the product value chain. The first group targets upstream value chains for product design and production, such as material content standards, recycled content standards, hazardous content standards, recyclability standards, reparability standards, and sustainable production standards. The second group targets downstream value chains, including material quality standards for secondary raw materials and product quality standards for refurbished, remanufactured, and second-hand goods. Examples include standards for recycling and waste-handling (e-stewards, R2 Standards, WEEELABEX) and refurbishment and remanufacturing (FIRA/REMAN001: 2019, IEC TC 111, ANSI RIC001.1-2016 and BS 8887–220: 2010), as well as product-specific standards (such as the BSI PAS 141:2011 for used electrical and electronic goods).

In parallel with the development of circular standards, other standards for supply chain traceability and transparency have been produced or are under development. Examples include the GS1 Global Traceability Standard (GTS2), PR3's standard for reusable packaging, United Nations Economic Commission for Europe (UNECE) traceability standards for sustainable garments and footwear, or the circularity.ID Open Data Standard for fashion. The combination of the evolving policy landscape requiring greater levels of supply chain traceability—alongside the metric, protocols and standards developments outlined above—will play an important role in helping to address the key traceability and transparency challenges facing circular trade. If transparency and traceability are to be realized across whole value chains, they must therefore also be accompanied by an extensive capacity building programme to provide dedicated support to those who may incur disproportionate burdens and costs to adapt and comply (such as MSMEs in low-income countries) and to ensure the transition is inclusive.

Source: Barrie J., Schröder P., Schneider-Petsinger M., King R., & Benton T. (2022). *The role of international trade in realizing an inclusive circular economy*. Chatham House.; Yamaguchi, S. (2021). International trade and circular economy - Policy alignment. *OECD Trade and Environment Working Papers, No. 2021/02, OECD Publishing, Paris.*

3. Reduce regulatory heterogeneity through options such as harmonization, equivalences, and mutual recognition

Differences across jurisdictions in circular economy requirements, such as on fees to be paid under extended producer responsibility (EPR) schemes,[22] reporting requirements, and on clean production regulations, can generate additional costs and administrative burden for exporters, particularly MSMEs in developing countries. Such costs can reduce incentives to invest in circular economy approaches and negatively impact the functioning of circular global value chains that require economies of scale to be economically viable. As highlighted above, a first step in reducing regulatory heterogeneity is to base TrCEMs on relevant international standard guides or recommendations where they exist. When elaborated, these international standards, guides, or recommendations should follow the good practices developed in the WTO TBT Committee to ensure transparency, openness, impartiality and consensus, effectiveness and relevance, and coherence and to address the concerns of developing countries.[23]

Where no harmonized standards or definitions exist globally, countries should:

- Consider the compatibility of regulatory approaches with trading partners including developing countries and explore options for greater coordination with each other and with international processes, including through regulatory cooperation.
- Pursue options for harmonization, equivalences, and mutual recognition of conformity assessment procedures globally or regionally, for example through regional trade agreements (RTAs) and environmental cooperation.

Several RTAs already encourage harmonization of standards and regulations or mutual recognition of technical regulations and conformity assessment procedures (such as in regard to specific clean technology products like wind turbines and photovoltaic cells).[24] In practice, however, harmonizing regulations between parties presupposes a high level of economic integration and trust among regulators. Mutual recognition and equivalence of regulations and the more targeted option of mutual recognition agreements (MRAs), represent another, slightly less ambitious, form of regulatory cooperation.[25] Other RTAs also promote cooperation on aspects related to the circular economy, including exchange of information and experiences.[26] Importantly, efforts towards harmonization or regulatory cooperation should not result in the lowest common denominator or be at the expense of environmental protection but should aim at achieving enhanced sustainability across the full life cycle.

In the circular economy area, several initiatives to reduce regulatory heterogeneity are already underway. For instance, in the ASEAN region, there are efforts to support regional supply chains through the harmonization

22. See Circular Innovation Lab, European Environmental Bureau (EEB), & ACEN Foundation. (2023). *Study on items shipped for reuse and Extended Producer Responsibility fees - A case for extending EU EPR fees to cover end-of-life activities of products shipped outside the EU.* For example, in the EU, the vehicle disposal fee ranges from €0 in Germany, €3 4 in Austria, €46 in the Netherlands, and up to €66 per vehicle in Slovakia. In Finland, the fees vary between €3–19 per vehicle. In Greece, fees are collected in the form of vehicle taxes for the owners and range from €0–1000. In Ireland, fees also come in the form of a tax on the vehicle owner and depend on the type of vehicle and horsepower, ranging from €120–2350 per vehicle. For electrical and electronic equipment products in the EU, examples of the EPR fee are €1.4 in Ireland and €33 in Denmark, while in Germany the fee is based on the market share of Germany's internal market.
23. See WTO. (n.d.). *Principles for the development of international standards, guides and recommendations.*
24. For example, the EU-Canada Comprehensive Economic and Trade Agreement (CETA) Annex on Motor Vehicle Regulation notes that the parties aim to develop harmonized standards in the context of new technologies.
25. Under the USMCA Annex on Energy Performance Standards, for example, the parties "endeavor to harmonize" test procedures and energy performance standards, by giving "due consideration" to the other party's energy performance and test procedures, as well as industry standards developed by a standards organization accredited in the territory of another. A footnote specifies that such harmonization should not diminish consumer welfare, consumer protection, or energy efficiency objectives.
26. For example, the USMCA tackles food waste through efforts to promote reduction of food loss and food waste within a framework of cooperation under an Intergovernmental Commission. Cooperation involves a number of activities ranging from development and technology diffusion to exchange of information on environment policies, laws, standards, etc.

of standards and MRAs pursued under the Framework for Circular Economy for the ASEAN Economic Community (see Box 4). In the Africa region, there is an African Organisation for Standardisation (ARSO) initiative to develop a continental standard for recycled polyethylene terephthalate (PET) (see Box 5).

Box 4. Regional Supply Chain for Circular Economy in ASEAN

The creation of regional circular economy supply chains is expected to enable $4.9 trillion of value addition creation in the ASEAN economy by 2050. Nevertheless, regulatory divergences across the 10 ASEAN member states prove to be a significant challenge to allow transboundary movement of circular products across the region.

One of the strategic priorities identified by the Framework for Circular Economy for the ASEAN Economic Community (Framework) is the harmonization of standards and MRAs for circular products and services to facilitate circularity of trade across the region. Harmonized standards and MRAs would help to ensure mutual understanding and promote greater transparency and facilitate integration between value chains to create demand and economies of scale that will accelerate the region's transition to circular economy. The implementation plan for the Framework identifies 28 initiatives between 2023–2030 to achieve harmonization of standards and MRAs, including conducting capacity building programmes and establishing a regional dialogue platform for standards regulators. ASEAN has also formed a technical working group consisting of multistakeholders, including, cross-sectoral experts involved in the implementation of the Framework, to ensure timely and effective implementation of the initiative.

Source: ASEAN Strategy for Carbon Neutrality (2023); Framework for Circular Economy for the ASEAN Economic Community (2021).

Box 5. Harmonized rPET Standard for Africa

Global commitments to tackle plastic pollution have encouraged governments and policymakers across Africa to advance a number of policy initiatives to promote a circular plastics economy. However activities advanced at the national level have resulted in considerable heterogeneity of approaches. Trade restrictions between countries, for instance, can disincentivize investments in regional infrastructure in Africa for recycling. Such restrictions can also mean that secondary materials are collected, sorted, and shipped outside the continent to be recycled. Yet, for the recycling of plastics to achieve economies of scale, there needs to be a higher input of secondary feedstock, which would need to be sourced at the regional level in Africa. This calls for the adoption and harmonization of acceptable standards and certifications across countries for environmentally sound and safe recycling in general and specifically for environmentally sound and safe recycled plastic for food grade packaging.

The African Circular Economy Alliance, a coalition of African governments created to spur a transition to a circular economy on the African continent, has begun engaging with relevant stakeholders on this issue. One such stakeholder is ARSO, founded with the mandate to harmonize African standards, reduce technical barriers to trade, and promote intra-African trade and industrialization. At the time of publication, ARSO had convened a committee to work on a continental rPET standard. In addition, the recently established African Continental Free Trade Area could be a suitable framework to be leveraged to support cooperation on the trade aspects of ending plastic pollution and a more circular plastics economy.

Source: Schröder, P., Oyinlola, M., Barrie, J., Fwangkwal, B., & Abolfathi, S. (2022). *Making policy work for Africa's circular plastics economy.*

4. Cooperate on the design and implementation of measures to restrict or eliminate trade flows of materials, products, and wastes that are illegal, such as those addressed in the context of multilateral environmental agreements, or harmful to the environment or human health

A transition to a more circular economy may require taking off the market, eliminating, restricting, or phasing out products, materials, or chemicals that are problematic from a circularity viewpoint, which may in turn require related trade measures to eliminate or restrict trade as well. A particular challenge in this area is to properly regulate trade flows of materials, products, wastes, losses, and releases that are illegal, that cannot be managed in a safe and environmentally sound manner in recipient countries, or that undermine domestic social and economic goals in those countries. This includes uncontrolled trade in hazardous wastes under the guise of second-hand goods trade, false declaration of traded goods, co-mingling of legal and illegal goods, or concealment of origin and destination.

Today, most TrCEMs to prohibit, restrict, or control such trade flows, for example, through the implementation of bans, prior informed consent, licensing procedures, or permit requirements are essentially designed and implemented at the domestic level. Besides the need to follow good regulatory practices in the design and monitoring of such measures and to align them with international standards or MEA obligations as highlighted above, enhanced international cooperation, including better border cooperation, consultation, and intelligence sharing, would significantly improve their effectiveness across global supply chains. It would also avoid trade diversion or leakage, and create a level playing field for business through increased predictability. It would also contribute to reducing transaction costs, especially for MSMEs and firms active in multiple markets, by preventing a patchwork of disjointed regulations. International support measures will also be vital to support the implementation of import-related TRCEMs, including for border control measures or inspections and to address adjustment costs for developing countries to comply with trade-related measures taken in export markets (see also consideration 10 below). To provide such support, a range of intergovernmental cooperative arrangements or product or supply chain specific partnerships involving relevant stakeholders from business and civil society are already emerging. Examples of such cooperation include the Plastic Waste Partnership established under the Basel Convention (see Box 6)

Box 6. Plastic Wast Partnership

A Partnership on Plastic Waste that was established under the Basel Convention by the Conference of the Parties at its fourteenth meeting (COP-14) in 2019, is a multi-stakeholder platform with more than 140 member entities. The partnership mobilizes business, government, academic, and civil society resources, interests, and expertise with the goal of improving and promoting the environmentally sound management of plastic waste at the global, regional, and national levels and preventing and minimizing its generation so as to address the discharge of plastic waste and microplastics into the environment. The Plastic Waste Partnership is carrying out work in four areas, namely: prevention and minimization; plastic waste collection, recycling, and other recovery, including financing and related markets; transboundary movements of plastic waste; and outreach and awareness raising. At the time of writing, there were 40 pilot projects that were being planned or implemented under the partnership at national and regional level to improve and promote the environmentally sound management of plastic waste and to prevent and minimize its generation.

Source: Basel Convention. (n.d.). *Overview.* Plastic Waste Partnership.; Basel Convention Partnership on Plastic Waste, Decision BC-14/13 (May 11, 2019).

5. Ensure transparency and clarity of circular economy criteria and requirements

While several countries have reflected guiding criteria in their legislative action and regulations to ban or restrict trade in specific products for circular economy reasons, in other cases the rationale or guiding criteria for the inclusion or exclusion of specific products is not always clear. A further challenge relates to the fact that different jurisdictions tend to apply different selection criteria for the same products.[27] A possible approach to clarify such criteria or requirements would be to use as references product lists that have been established under MEAs, such as the persistent organic pollutants listed under the Stockholm Convention or the pesticides and industrial chemicals listed under the Rotterdam Convention. As some of the guiding criteria for inclusion or exclusion may be context specific and dependent on national and local needs, priorities, and circumstances, the inclusion of guiding criteria could be one overarching good practice for consideration regarding the development and adoption of TrCEMs. This could also include tools to facilitate the implementation of proposed measures, such as guidelines for implementation or cooperative platforms to exchange information, raise awareness, and share good practices. The EU Network for the Implementation and Enforcement of Environmental Law (IMPEL) provides an interesting model in this area (See Box 7).

Box 7. IMPEL Network

IMPEL is a network of environmental authorities of the EU member states, acceding and candidate countries of the EU, and European Economic Area (EEA) and European Free Trade Association (EFTA) countries. The network is registered as an international non-profit association.

IMPEL aims to improve the implementation of EU environmental legislation. Its core activities concern awareness raising, capacity building, peer review, exchange of information and experiences on implementation, and international enforcement collaboration as well as promoting and supporting the practicability and enforceability of European environmental legislation. IMPEL has over 50 members from more than 35 countries in Europe. Participants range from inspectors, law enforcement officers, permit writers, and policymakers to managers.

Source: IMPEL. (n.d.). Welcome to IMPEL.

27. An analysis by the International Institute for Sustainable Development (IISD) focusing on plastic-related trade prohibitions notified to the WTO shows that countries define targeted products using a variety of criteria based on material composition, physical properties, use-related criteria, or end-of-life considerations, even when targeting similar products. See Baršauskaitė, I. & Irschlinger, T. (2023). *Trade-related policy measures to reduce plastic pollution: Building on the state of play.*

6. Enhance international cooperation on extended producer responsibility systems to reflect the reality of global product value chains and the trade aspects of end-of-life management and reverse supply chains

Extended producer responsibility schemes differ significantly across jurisdictions, as do the capacities of countries to implement them effectively. At present, their respective fees remain mainly focused on actors and collection within domestic territories. While the collection and recycling requirements of EPR systems generally target products that reach end of life in the domestic setting, they usually do not extend to products that are exported as second-hand goods or end-of-life products for repair. In today's world economy, however, value chains are globally interconnected, and products are frequently exported to other markets for repair, reuse, or recycling. In other words, products that are purchased in one market can become waste in another market. This is the case of a substantial volume of used vehicles, used textiles, and electrical and electronic equipment (EEE), which are routinely exported to developing and emerging economies for repair, refurbishment, or further use.[28] This raises concerns about how products are managed when they reach end of life in foreign markets and whether financial responsibility should follow these trade flows. These concerns are especially significant for developing and least developed countries as recipients of second-hand textiles, used electronics, or used vehicles (see Box 8). Another issue is that of online sales which occur abroad and escape domestic EPR systems.

Proponents of an extension of the geographic scope of EPR argue that producers should bear the ultimate responsibility for their products, also when exported, and that funding could be collected by the EPR scheme in the domestic market to finance collection and end-of-life management in the destination country.[29] In this context, a suggestion consists of linking producer responsibility organizations (PROs) of exporting and importing countries so that the fees from EPR schemes are transferred to the importing country PRO that will bear the waste management costs of the products once they reach end of life. Where the importing country does not have a PRO system, the collaboration could be done with the local organization responsible for waste management of these product streams. A common set of standards and/or best practices for PROs could be established to ensure transparency and fairness in the system and eliminate the risk of abuse. In practice, data limitations about the pathways of products exported for reuse raises challenges for the design and implementation of advanced disposal fees which would travel with products across borders.

Other possibilities include setting up a global accountability fund for end-of-life managers, internalizing management costs through eco-modulated fees, and encouraging production disclosures across every eco-modulation tranche.[30] Besides EPR schemes set up by governments, some voluntary EPR programmes demonstrate how producers could fulfil physical responsibility for products in developing countries (see Box 9).

Beyond the specific case of goods that are purchased in one market and become waste in another market, there have been calls for enhanced international cooperation on the implementation of EPR schemes. Developing countries interested in implementing EPR schemes often highlight the national circumstances and capacity constraints they face for effectively implementing EPR schemes where this relates to imported products produced through complex international supply chains and where the producers are not located in their domestic jurisdiction.

28. Brown, A., Laubinger, F., & Börkey, P. (2023). *New aspects of EPR: Extending producer responsibility to additional product groups and challenges throughout the product life cycle.* OECD Environment Working Papers, No. 225, OECD Publishing, Paris.
29. Ibid.
30. Ricketts, L. & Skinner, B. (2023). *Leveraging extended producer responsibility to catalyze a justice-led circular textiles economy.* The Or Foundation.

Box 8. Extending EU EPR Fees – A Study on Electrical and Electronic Equipment Shipped from the EU to Africa

The 2023 study produced by Circular Innovation Lab investigates the trade and EPR fee flows of EEE and vehicles shipped from the EU to Africa. Despite the EU's established EPR policies, national approaches lack harmonization and compatibility and none of the policies ensure EPR fee transfers beyond the EU's borders. On the importing side, only 17 out of 54 African countries currently have EPR policies in place, most of which do not cover imported (second-hand) goods. This imposes significant challenges for end-of-life management activities in Africa given the limited local infrastructure and financial leverages to refurbish or recycle imported goods, often leading to their landfilling and incineration. Seeking to inform the case for revised global EPR policies, the study offers recommendations including the increased harmonization among EU EPR schemes, implementing eco-modulation fees for goods with high value retention potential (e.g. vehicles), introducing ultimate producer responsibility schemes, connecting international EPR systems through PROs to cover the transfer of fees and reflect the costs of used EEE and end-of-life vehicle management, and integrating EPR fees into digital product passports.

Source: Circular Innovation Lab, European Environmental Bureau, & ACEN Foundation. (2023). *Study on items shipped for reuse and Extended Producer Responsibility fees - A case for extending EU EPR fees to cover end-of-life activities of products shipped outside the EU.*

Box 9. Private Sector Examples

Closing the Loop (CTL), a Netherlands-based company created in 2014, charges a small fee to business customers that buy new IT hardware such as phones or comparable devices. This "waste-compensation" fee is used to pay partners in Africa for the collection of end-of-life scrap phones that are no longer relevant for normal use. CTL then ships them to certified recycling facilities in Europe to be safely and cleanly turned into reusable materials—mostly gold, silver, and copper. This process is known as "urban mining." This "One for One" model contributes to resource recovery and waste reduction. It also arguably creates jobs and income in emerging markets, where people are paid to collect and store the waste in a safe and environmentally friendly way.

Source: Closing the Loop. (n.d.). *Greener procurement safe, solid and engaging | Closing the Loop.*

These emerging issues on how to cooperate internationally on EPR schemes that apply to new, second-hand, and used products, and that are relevant to a growing range of supply chains, sectors, and trade flows, largely remain unaddressed questions calling for dialogue and international cooperation. An interesting initiative in this respect is the Global Action Partnership for Extended Producer Responsibility ("GAP for EPR"), an international partnerships established between GIZ, OECD, UNEP, and WWF with support from the Ellen MacArthur Foundation.[31] The initiative aims to support governments and PROs by striving to create a common understanding of EPR, build an international community to share knowledge and expertise, and offer technical support on EPR development worldwide.

31. Global Action Partnership for EPR. (n.d.). *Global Action Partnership for EPR.*

7. Foster coherence of TrCEMs with domestic policies and promote responsible regulatory practices

To foster coherence, trade-related circular economy requirements applicable to exported goods should be underpinned by the same domestic circular economy-related requirements applicable to goods imported or consumed domestically. For instance, if a country bans a particular product (such as plastics containing harmful additives or chemicals banned under MEAs) from domestic consumption or importation, the government would also ban the export of such products or chemicals. Some countries already pursue comprehensive approaches in this regard. In 2022, for instance, Colombia enacted a prohibition on single-use plastics which bans the manufacturing, import, export, marketing, and distribution of products containing single-use plastics within the country. Similarly, Canada's Single-use Plastics Prohibition Regulations prohibit the manufacture, import, and sale (including for the purpose of export) of six categories of single-use plastics (i.e. checkout bags, cutlery, foodservice ware made from or containing problematic plastics, ring carriers, stir sticks, and straws). A responsible approach would also guarantee that exported goods, such as secondary raw materials and remanufactured or second-hand goods, comply with quality standards comparable to those required domestically.

The situation and relevant considerations may be slightly different in the case of hazardous waste. As envisaged under the Basel Convention, a party may export hazardous waste when it does not have appropriate facilities to manage it safely while at the same time prohibiting the import of such waste for the same reason. In these cases, however, the Basel Convention requires that exports are only allowed to be shipped to destinations with the domestic capacity to manage those wastes in an environmentally sound manner.[32] Some countries also require exporters to demonstrate that the quality of waste treatment in the export country is at least equivalent to that required domestically. For example, the EU Batteries Regulation 2023 imposes targets on recycling efficiency and recovery of materials. Exported waste batteries count towards the fulfilment of these obligations only if the exporter provides evidence that the waste treatment in the third country took place in conditions equivalent to those required by the EU Batteries Regulation and in accordance with other EU laws on health and environmental protection. In this context, a good practice for consideration would consist in taking into account the principles of self-sufficiency and proximity as defined under existing international legal instruments, such as the Basel Convention (see Box 10), or in some jurisdictions.[33]

A second aspect for consideration is to foster cooperation with governments and business in export destinations, including through prior consultations and considerations of the impacts on importing countries. More particularly, practices are needed to ensure that low-income importing countries have the appropriate sorting and recycling facilities, enabling them to manage waste imports without environmental or human health impacts.

32. See Article 4.8 and 6.3 (b) of the Basel Convention. The Basel Convention also provides guidelines on environmentally sound waste management.
33. Under EU law, for example, the principle of proximity suggests that "the network [of waste disposal and recovery] shall enable waste to be disposed of or [...] to be recovered in one of the nearest appropriate installations, by means of the most appropriate methods and technologies, in order to ensure a high level of protection for the environment and public health." The principle of self-sufficiency suggests that "the network [of waste disposal and recovery] shall be designed to enable the [European] Community as a whole to become self-sufficient in waste disposal as well as in the recovery of waste [...], and to enable Member States to move towards that aim individually, taking into account geographical circumstances or the need for specialized installations for certain types of waste." Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on Waste and Repealing Certain Directives (Text with EEA Relevance) 2008 (312) (Waste Framework Directive), Art. 16. The principles are widely implemented by the European Court of Justice. See Vasilevskaia, D. (2022. The application of the principles of proximity and self-sufficiency to trade and transport of plastic waste. *Confluence des droits_La revue.*

Box 10. Principles of Self-Sufficiency and Proximity in the Basel Convention

The preamble of the Basel Convention states that "hazardous wastes and other wastes should, as far as is compatible with environmentally sound and efficient management, be disposed of in the State where they were generated." The preamble also underlines a need for "stringent control of transboundary movement of hazardous wastes and other wastes, and [a] need as far as possible to reduce such movement to a minimum." As for the main text of the Convention, de facto several paragraphs of Article 4 address these principles. Under this article, transboundary movements of wastes are allowed if the importing state has the necessary facilities for management or disposal of the waste. Parties should not export or import waste if there is a reason to believe that it will not be managed in an environmentally sound manner. Moreover, the transboundary movement of wastes shall only be allowed if the state of export does not have the technical capacity/facilities or disposal sites to dispose of the wastes in an environmentally sound manner or if the wastes in question are required as a raw material in the state of import or the transboundary movement in question is in accordance with other criteria to be decided by the parties.

In essence, the Basel Convention underscores the importance of states prioritizing the management of waste generated within their own borders. This aligns with the broader principles of self-sufficiency and proximity, emphasizing responsible waste management practices, the minimization of waste generation, and the domestic handling of generated waste. These principles can serve as a decision-making tool, emphasizing priority areas such as local infrastructure improvement, self-recovery, and the minimization of the transboundary movement of waste and waste generation.

Source: Vasilevskaia, D. (2022. The application of the principles of proximity and self-sufficiency to trade and transport of plastic waste. *Confluence des droits_La revue.*

8. Facilitate and promote trade in environmentally sound goods, services, and technologies that support circular economy goals, including through cooperation on tariff, non-tariff, and support measures that support their development, diffusion, affordability, and uptake

An important contribution of TrCEMs could be to facilitate and promote trade, investment, and innovation in goods, services, and technologies that support circular economy goals. Policymakers could think about these goods, services, and technologies in regard to different aspects of the circular economy, namely goods, services, and technologies that: (i) create added value like design for circularity, circular sourcing, circular procurement, process optimisation; (ii) contribute to value retention through reduce, reuse, repurpose, maintain, and repair, performance-based approaches, sharing to intensify use, refurbishing, remanufacturing; or (iii) contribute to value recovery through reverse logistics, cascading of resources, recycling, waste management, material or energy recovery.

Within these categories there are products and services that enable the circular function, like remanufacturing or recycling equipment, supply chain traceability sensors, or remote condition monitoring technologies. Another category includes goods and services that perform circular functions, such as remanufactured goods, recycling services, or environmentally sound plastic alternatives or substitutes (see Box 11). In regard to substitutes, a number of studies have identified the potential for developing countries

to valorize agricultural waste, especially residues from vegetable oil extraction, which can be converted into inputs for new industrial processes in the food and pharmaceutical industries[34] and environmentally sound and effective substitutes for plastics.[35]

Precedents in fostering trade in such goods and services are already found in the context of RTAs. For example, the New Zealand-United Kingdom Free Trade Agreement, USMCA, EU-Japan Free Trade Agreement, and CPTPP each incorporate specific provisions that seek to promote trade in remanufactured goods by spelling out the scope, definition, and conditions under which remanufactured goods would receive preferential treatment. Similarly, the EU-Korea Free Trade Agreement, EU-Singapore Free Trade Agreement, and the EU-Vietnam Free Trade Agreement include specific market access commitments for recycling services.

Box 11. Fostering Trade in Goods That Perform Circular Economy Functions

Fibres extracted from pineapple leaves is an example of a substitute for plastics used in textiles with trade potential. UN Trade and Development's Sustainable Manufacturing and Environmental Pollution (SMEP) programme, for instance, is supporting the work of Mananasi Fibres Ltd in Kenya to harness the waste product from pineapple production (i.e. pineapple leaves normally burnt in the field) to extract natural fibres for several product applications. Similar work is ongoing with banana fibres, with the aim of contributing to circularity and value addition to agriculture. A barrier to the uptake of these fibres is the lack of specific HS codes for such waste-based products. The existence of codes would facilitate decision-making to lower relevant tariffs and increase their competitiveness when exported.

Looking to alternatives, another SMEP-supported initiative is Catchgreen, which is field-testing a novel biodegradable fishing/ocean gear in several geographical locations for lobster cages, seaweed farming, gillnets, and coral restoration. A significant barrier to the development and wider adoption of this fishing/marine gear is the lack of standards for biodegradability in the ocean. When moving the materials across borders, there are again no specific HS code for such materials, making it difficult for governments to provide specific incentives for these environmentally preferable materials.

Source: SMEP. (n.d.). *Complete pineapple waste solutions including decortication for textile production.*; SMEP. (n.d.). *GAIA Biomaterials AB: Biodolomer®Ocean for fishing nets.*

A particular challenge as noted in Box 11 associated with the identification and promotion of substitutes relates to the Harmonized System. For example, ambiguity often arises with respect to the classification of environmentally sound plastic alternatives or substitutes using HS codes. The result is that different countries and exports assign a range of different HS codes to the same product, especially new ones. To address this in the case of plastic substitutes, a 2023 UN Trade and Development report identified 282 HS

34. Economic Commission for Latin America and the Caribbean (ECLAC). (2021). *International Trade Outlook for Latin America and the Caribbean, 2021.* (LC/PUB.2021/14-P/Rev.1), Santiago.
35. UN Trade and Development (UNCTAD) & Sustainable Manufacturing and Environmental Pollution (SMEP) Programme. (2024). *Beyond plastics – A review of trade-related policy measures on non-plastic substitutes.*

codes covering a variety of plastics substitutes, describing which products would best fit under which codes as well as proposals on where new codes could be considered.[36]

A third category involves products that cannot be distinguished under the HS system but that may be preferable from a circularity perspective compared to more "linear" like products. For example, textiles that comply with specific durability, reparability, or recyclability requirements may not be distinguishable under the HS system from other textiles that do not comply with such requirements, but may be incentivized under different regulatory requirements or promoted through international standards, labeling, traceability, and transparency schemes, including digital product passports. To avoid fragmentation of approaches or the need to comply with different product, transparency, or traceability requirements across jurisdictions, efforts should be made to follow international tools or standards where they exist (see Box 12).

Box 12. UNECE Traceability System (Garment and Footwear Sectors)

To enhance the traceability and transparency of the garment and footwear sectors, Recommendation No. 46, 2022 of UNECE establishes a mechanism that enables governments, industries, consumers, and other relevant stakeholders to make risk-informed decisions, overcome information asymmetry, communicate, and achieve accountability for sustainability claims (including those for regulatory compliance) and anchor business models to responsible business conduct.

It does so by providing industry actors with a set of internationally agreed practices for the harmonized collection and transmission of data for tracking and tracing materials, products, and processes across an entire value chain, including all involved facilities and intermediaries, and includes related information about the sustainability performance of these value chain participants. The recommendation includes implementation guidelines to assist policymakers and decision-makers to better understand tracking and tracing, and provides an implementation framework for all stakeholders in garment and footwear value chains. While specifically developed for the garment and footwear industry, such internationally agreed practices for advancing traceability and transparency have applications in cross-industry value chains.

Source: UNECE. (2022). *Enhancing traceability and transparency of sustainable value chains in the garment and footwear sector.* Recommendation No. 46. United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT).

36. A particular challenge associated with the identification of this category of goods relates to the Harmonized System. For example, ambiguity often arises with respect to the classification of environmentally sound plastic alternatives or substitutes using HS codes. The result is that different countries and exports assign a range of different HS codes to the same product, especially new ones. To address this in the case of plastic substitutes, UN Trade and Development in a 2023 report identified 282 HS codes covering a variety of plastics substitutes, describing which products would best fit under which codes as well as proposals on where new codes could be considered.

9. Facilitate safe and environmentally sound reverse supply chains in end-of-life products that can support a circular economy transition

There is growing interest from governments and a range of private sector actors in scaling up reverse supply chains across borders to support economies of scale vital to circular business models. This is particularly the case for end-of-life items in the electronics sector which contain valuable and scarce raw materials but for which full recycling chains are not available within all countries and regions. Many end-of-life electronics are classified as hazardous or as other waste requiring special consideration, meaning that they are subject to trade controls to ensure no waste dumping occurs. In such sectors, fostering environmentally sound and safe reverse supply chains entails ensuring efficient implementation of prior informed consent (PIC) procedures for controlled waste as required under the Basel Convention and the OECD Decision on the Transboundary Movements of Wastes Destined for Recovery Operations. In practice, the process of implementing trade controls, such as PIC procedures, can be cumbersome and add significant costs for reverse supply chains that can serve circular economy purposes.[37] These challenges are currently playing out in the electronics industry but will soon emerge in products like batteries, wind turbines, and solar panels, among others, as these begin to reach end-of-life in growing numbers. As governments work to promote safe and environmentally sound reverse supply chains in end-of-life products while ensuring proper control of hazardous products, there have been calls to refine PIC procedures. In this regard, a process was established by the Conference of the Parties to the Basel Convention to identify challenges and best practices in the implementation of the PIC procedure and develop recommendations for improving it.

Another ongoing stand-alone, yet closely related, process under the Basel Convention is how best to digitalize the PIC procedure to boost the long-term effectiveness and practicality of the procedure. In this regard, the Conference of the Parties requested a report with further recommendations on electronic approaches to the notification and movement of waste, as digitalization could be a crucial tool to improve effective communication among customs and enforcement authorities that are engaged in the transboundary movement of hazardous wastes.

A further way to support reverse supply chains could be through targeted trade facilitation of end-of-life products that require trade controls but must also be moved efficiently (see Box 13). This could include cooperation related to transparency, the opportunity to comment on proposed regulation changes, the possibility of advanced rulings on customs issues like HS classification and rules of origin, or customs cooperation. Another way to facilitate trade across different jurisdictions for circular economy purposes would be to promote common international definitions or standards for non-hazardous waste, secondary materials, second-hand goods, and goods for repair, refurbishment, and remanufacturing. Several RTAs have commitments to clarify the status of remanufactured goods to ensure that they can be traded under regular commercial controls.

37. World Economic Forum. (2020). *Facilitating trade along circular electronics value chains.*

Box 13. Recycling Trade and Trusted Traders

There may be bilateral or regional trade corridors where end-of-life trade for recycling could be optimized. In those cases, countries could develop a Trusted Circular Trader system to streamline trade controls, while maintaining strong environmental safeguards. Inspiration could be drawn from WCO Authorized Economic Operator systems. However, such an arrangement needs to be given careful thought, since it would need to be agile enough to incentivize participation from responsible actors while still maintaining sufficient controls and monitoring. Once an end-of-life product has been irresponsibly dumped, it can be difficult to remediate, so a trusted trader system needs to enable a high degree of confidence in the users by the regulator. The World Economic Forum has previously proposed assembling a group that could provide guidance on striking this balance.

Such bilateral arrangements could be pursued as an Article 11 arrangement under the Basel Convention. An example already exists to some extent under the OECD Control System for waste recovery that creates an expedited system of trade controls for wastes presenting a low risk. It is important to note that any bilateral arrangement would still need to respect the Basel Convention Ban Amendment that prohibits the movement of hazardous waste from developed to developing countries. Trusted Circular Trader systems could also eventually be considered for other trade needing certification, like remanufactured goods, where regulators want to be confident of the quality of the product.

10. Respond to specific challenges faced by developing countries and their private sector, especially impacted MSMEs, by ensuring consultation, impact assessments, capacity building, technical assistance, financing, and affordable access to appropriate technologies to support fair transitions

As new circular economy-related policies and requirements enter into force across the world, many developing countries that rely on manufacturing and export in traditionally "linear" sectors such as mining or textiles and clothing may be affected.[38] These impacts will differ across countries depending on their production and export structure, and will be very sector-specific (see Box 14).

In the face of an increasingly fragmented and complex set of circular economy requirements and initiatives across the global marketplace and affecting multiple sectors and supply chains, developing countries have highlighted the need to ensure an inclusive circular economy transition and to avoid a "circular divide." Alongside, many developing countries recognize that with the right enabling conditions, a transition to a more circular economy can provide new opportunities for economic diversification, value creation, and skills development. Notably, a number of developing countries emphasize that their informal sectors have long practiced "circular" activities—e.g. in areas such as electronic waste and phone repairs—and could engage in higher-value circular economy supply chains.[39] In either case, however, fostering a transition to a

38. Chatham House. (2022). T*rade for an inclusive circular economy – A framework for collective action.* Recommendations from a global expert working group.
39. Wellesley, L., Preston, F., & Lehne, J. (2019). *An inclusive circular economy: Priorities for developing countries.* Chatham House.

more circular economy will imply potentially significant adjustment costs. A report released by the Circular Economy Foundation identifies possible priorities in a circular economy transition depending on the level of development.[40] Barriers for companies transitioning or scaling circular activities are particularly pronounced for MSMEs, which also need assistance when it comes to fulfilling reporting requirements. A recent study showed that only 7.7% of global SMEs are reporting on sustainability requirements, mainly due to the high complexity and upfront costs in implementing reporting mechanisms.[41]

Box 14. Circular Innovation and Ecodesign in the Textiles Sector

An important consideration in the design of circular economy policies is their possible impacts on exports of developing countries. A good example of such an assessment is a study commissioned by Sitra in Finland reviewing the possible impacts of the EU Ecodesign for Sustainable Products Regulation on textiles exports of selected developing countries. As part of its Circular Economy Action Plan, the European Commission adopted a Strategy for Sustainable and Circular Textiles in March 2022 to ensure that by 2030 textile products placed on the EU market are durable and recyclable, made as much as possible of recycled fibres, and free of hazardous substances. The strategy will include a range of instruments including mandatory ecodesign requirements based on product parameters and performances such as composition, durability, ease of repair or recycling.

Aligning with these new requirements will imply a range of adjustments. These are likely to vary across countries depending the industry characteristics, including the extent to which they produce and export clothing made of natural fibres like cotton or synthetic fibres which are more difficult to recycle, but also on their ability to manage post-industrial waste and input used or to establish effective recycling facilities. A second challenge relates to the fact that circular economy initiatives adopted in developing countries often focus on enhancing circularity in the production process itself (e.g. reducing post industrial waste or resource inputs in the production process) to reduce the environmental footprint of the product. They do not, however, focus on making the product itself more circular through enhancing reusability and recyclability in the way the product is designed. Third, product traceability remains challenging, especially with regard to post-industrial waste tracking given that this is often managed by the informal sector.

Source: van der Ven, C. (2022). *Circular innovation and ecodesign in the textiles sector – Towards a sustainable and inclusive transition.* Sitra studies 219.

In support of this transition, TrCEMs should give special consideration to and address the specific challenges faced by developing countries, including their exporters. These challenges include lack of standard infrastructure, lack of technical capacity and expertise, including for monitoring and traceability, and regulatory, financial, and resource constraints. This highlights the need to ensure that TRCEMs are fair, non-discriminatory, not more trade restrictive than necessary, and flexible so that they can be implemented in ways appropriate to national circumstances. Giving special attention to these concerns could include:

40. Circular Economy Foundation. (2024). *The Circularity Gap Report 2024.* The report recommends for example that low-income countries should leverage circular practices that have long been present in their communities, as well as knowledge rooted in indigenous groups while investing in new technologies and practices that allow for sustainable human development, particularly in material-intensive industries like food, energy, and construction. Priorities for middle-income countries consist in continuing to improve their people's quality of life, but in a way that is more sensitive to planetary boundaries. While many of them are and will likely remain key manufacturing and industrial hubs, there is a necessity to shift to make their growth sustainable as well as supportive and safe for workers focusing on key systems such as manufacturing and food system. Finally high-income countries should drastically cut material consumption to alleviate their environmental impact.
41. Sage. (2023). *Path for growth: Making sustainability reporting work for SMEs.*

- Allowing developing country based exporters more time to adjust to and phase in the new TrCEMs.
- Recognizing equivalences of similar regulations, standards, or conformity assessment procedures, provided they reasonably fulfil the objectives of their regulations or that the procedures offer an assurance of conformity with applicable technical regulations or standards.[42]
- Working with trading partners, particularly in developing countries that face challenges (skills, capacity, infrastructure, finance, politics, etc.) to meet proposed criteria and requirements.
- Strengthening national and regional standards infrastructures—including the capacity for conducting internationally recognized monitoring and traceability, inspection, testing, and certification as well as border inspections and controls (see Box.15).
- Supporting digitalization of the Basel Convention's PIC procedure and improvement of its effectiveness.[43]
- Cooperating to support the development, diffusion, affordability, and uptake of environmentally sound and safe circular economy-related goods, services, and technologies that are appropriate for national circumstances, such as through market access provisions free trade agreements, and trade preference schemes,[44] and by facilitating access to relevant technologies, including through public-private partnerships, flexible, non-exclusive, and affordable licensing arrangements, and other technology transfer options.

More generally, support for developing countries in the transition to a circular economy should be included as a core theme of trade-related financing, capacity building, and technical assistance initiatives such as the Aid for Trade initiative and backed by additional funding and efforts to catalyse private sector investment in the transition, including to support the particular needs of MSMEs in developing countries.[45]

Box 15. The Asia-Pacific Plastic Waste Project

The Asia-Pacific Plastic Waste Project, implemented by the WCO from April 2020 to June 2023, aimed to empower customs administrations across the Asia-Pacific region to mitigate and appropriately respond to environmental threats, particularly in managing plastic waste in accordance with the Basel Convention. Operated in two phases, it targeted customs in Vietnam, Indonesia, Philippines, and Sri Lanka and later expanded to include Thailand, Lao PDR, Cambodia, and Malaysia, with Australia as an observer. The project focused on enhancing capacities of customs administrations to deal with illegal plastic waste, fostering customs cooperation and advocating for a regional approach for the cross-border trade in plastic waste and recyclables. Activities included diagnostic missions, national implementation plans, developing capacity building materials, national workshops, and devising a regional action plan.

Source: World Customs Organization (n.d.). *The Asia-Pacific Plastic Waste Project.*

42. A good example of mutual recognition is found in the EU–Singapore Free Trade Agreement, which provides for the mutual acceptance of declarations of conformity for a set of environmental goods. The EU-Canada Comprehensive Economic and Trade Agreement (CETA) also contains a protocol on mutual acceptance of conformity results for a number of specific energy-related products.
43. Such an initiative could specifically focus support on border and environmental agencies in developing countries that do not have the resources, digital infrastructure, or skills base to participate in an e-PIC system, focusing initially on sectors known to present particular challenges from a circular economy viewpoint, such as plastics, used electronics, and e-waste. See Chatham House. (2022). *Trade for an inclusive circular economy – A framework for collective action.* Recommendations from a global expert working group.
44. For example, under the Comprehensive Economic Partnership Agreement between the Republic of Indonesia and EFTA States, Switzerland granted a limited tariff rate quota for palm oil from Indonesia for importers that can provide valid proof of sustainable and traceable palm oil production. A similar approach could be envisaged for goods meeting certain circular economy requirements (e.g. in terms of design, recyclability, or reparability).
45. Key circular economy-related needs that aid for trade could focus on include: investing in infrastructure to enable domestic circular activities such as repairing, remanufacturing, and recycling; trade infrastructure; customs systems and enforcement measures to counter illegal waste shipments; skills development and training related to circular economy manufacturing approaches; and policy development. See Chatham House. (2022). *Trade for an inclusive circular economy – A framework for collective action.* Recommendations from a global expert working group.

4. International Cooperation: A Cross-Cutting Priority for Advancing Good Practices in the Design and Implementation of Trade-Related Circular Economy Policies and Measures

This section highlights the critical importance of international cooperation to advance the 10 considerations described in this report. Table 1 provides a snapshot of which considerations can be pursued domestically or require cooperative arrangements, and lists a sample of possible international processes or fora through which international cooperation could be fostered.

Almost all of the good practices listed in this report can be pursued by governments through domestic policies or measures. This is particularly the case for good regulatory practices, such as the importance of basing domestic measures on relevant international standards and best scientific evidence; ensuring that TrCEMs do not create unnecessary trade barriers; fostering transparency and consultation; conducting ex ante and ex post regulatory assessments; and involving external stakeholders. Similarly, ensuring clarity and transparency of product characteristics and circular economy criteria and requirements, fostering coherence of TrCEMs with domestic environmental policies, and promoting responsible practices are not dependent on other countries acting in the same way.

In other cases, while certain measures may be taken autonomously, coordinated action at the international level would significantly contribute to improving their effectiveness across global supply chains, avoiding trade diversion or leakage, creating a level playing field for business through increased predictability, and promoting fairness. It would also contribute to reducing transaction costs, especially for MSMEs and firms active in multiple markets, by preventing a patchwork of disjointed regulations. This is for example the case of measures aimed at promoting trade in goods, services, and technologies that support circular economy goals or restricting trade flows of materials, products, and wastes that are illegal or harmful to the environment or public health. Similarly, responding to the specific challenges faced by developing countries through technical assistance, capacity building, finance, incentives for technology transfer, public-private partnerships, or flexible licensing arrangements would be much more effective if undertaken in a coordinated manner at the international level.

Finally, certain good practices will inevitably require international cooperation to address existing gaps and foster a fair transition to a more circular economy. These include efforts at aligning terminology, definitions, or classifications, and reducing regulatory heterogeneity through the pursuit of harmonization, equivalences, and mutual recognition, as well as designing and coordinating EPR schemes in ways that reflect trade aspects throughout global value chains and align with the reality of how a product flows across borders along the life cycle. These clearly constitute priority areas for collaborative action at the international level.

Pursuing such cooperation will require the involvement of a wide range of stakeholders and could be pursued in a variety of fora. The ISO and other standards-setting bodies at the global or regional level have a critical role to play in defining common standards, definitions, guidance, or recommendations. Multilateral environmental agreements provide a key venue to forge consensus around standards and definitions—including for specific sectors as illustrated by ongoing discussions under the Basel Convention on the PIC procedures in regard to trade in waste—as well as in relation to ongoing negotiations for a new international treaty to tackle plastic pollution, which include negotiations on criteria and restrictions on problematic plastics and chemicals in plastic products.

Similarly, other international organizations focused on economic cooperation provide relevant fora to ensure transparency, consistency, and alignment in the design and implementation of TrCEMs, such as the OECD's work on the transboundary movements of wastes destined for recovery operations or the UNECE through its work on traceability standards to promote safe and environmentally sound reverse supply chains. In addition, the WCO is a forum for cooperation, including to consider how the HS nomenclature can be further refined to reflect and support circular economy considerations and policies.

The WTO provides a key forum for transparency and policy dialogue on circular economy, trade, and sustainable development. It provides a multilateral space for raising specific trade concerns and sharing experiences in relevant WTO committees. This allows members to address potential trade frictions in a pre-emptive, non-litigious, and cooperative manner.[46] The WTO agreements also require members to notify environmental measures with potential trade effects, which includes circular economy measures, and thus provide a key mechanism for enhancing transparency. In addition, ongoing discussions in the SPS and TBT committees on a range of trade-related environmental measures play a key role in fostering good regulatory practices. Finally, member-led initiatives such as TESSD and the DPP provide a unique space for members to incubate new ideas and explore possible cooperative action on the design and implementation of TrCEMs. These discussions could include restrictions or elimination of problematic trade flows from a circularity perspective, approaches promoting and facilitating trade in goods, services, and technologies that support circular economy goals, or cooperation on the design and coordination of EPR schemes so that their reach extends beyond national borders to promote producer responsibility across international supply chains.

At the regional level, RTAs have served as laboratories and incubators of innovation in numerous areas relevant to the circular economy, such as good regulatory practices and regulatory cooperation, including by fostering harmonization, equivalences, or mutual recognition of regulations, standards, and conformity assessment procedures, or more generally by promoting cooperation on environmental issues including the circular economy. RTAs also play a critical role in facilitating and promoting trade in goods, services, and technologies that support circular economy goals, including through market access commitments for circular economy-related goods and services or clarifying the scope, definition, and conditions under which remanufactured goods would receive preferential treatment.

Finally, cooperative approaches will require the participation of a broader set of stakeholders beyond traditional cooperative arrangements focused primarily on governments and international organizations.

46. Steinfatt, K. (2020). Trade policies for a circular economy: What can we learn from WTO experience? Staff Working Paper ERSD-2020-10. World Trade Organization, Geneva.

Table 1. Advancing International Cooperation and Good Practices for the Design and Implementations of TrCEMS

Considerations to guide the design of TrCEMs	How to advance them?		Relevant international fora / processes
	Domestic action	International cooperation	
1. Develop consistency and alignment in terminology, definitions, and classification	X	X	• International/regional standard setting bodies • WCO • MEAs • IGOs including regional commissions
2. Follow good regulatory practices in the design and monitoring of TrCEMs	X	X	• WTO TBT/SPS Committees • IGOs including regional commissions • Bilateral or regional trade agreements
3. Reduce regulatory heterogeneity through options such as harmonization, equivalences, and mutual recognition		X	• International/regional standard setting bodies • Bilateral or regional trade agreements • Bilateral regulatory cooperation processes
4. Cooperate on the design and implementation of measures to restrict or eliminate trade flows of materials, products, and wastes that are illegal, such as those addressed in the context of multilateral environmental agreements, or harmful to the environment or human health		X	• WTO including member-led initiatives (DPP, TESSD) • MEAs • Multi-stakeholder initiatives
5. Ensure transparency and clarity of circular economy requirements and criteria	X		• International/regional standard setting bodies • IGOs including regional commissions
6. Enhance international cooperation on extended producer responsibility systems to reflect the reality of global product value chains and the trade aspects of end-of-life management and reverse supply chains		X	• WTO including member-led initiatives (DPP, TESSD) • IGOs including regional commissions • Multi-stakeholder initiatives (e.g. involving PROs)
7. Foster coherence of TrCEMs with domestic policies and promote responsible regulatory practices	X	X	• MEAs (e.g. Basel, Rotterdam, and Stockholm conventions) • WTO including member-led initiatives (DPP, TESSD)
8. Facilitate and promote trade in environmentally sound goods, services, and technologies that support circular economy goals, including through cooperation on tariff, non-tariff, and support measures that support their development, diffusion, affordability, and uptake	X	X	• WTO including member-led initiatives (DPP, TESSD) • IGOs including regional commissions • Bilateral, regional or preferential trade agreements • International/regional standard setting bodies • WCO
9. Facilitate safe and environmentally sound reverse supply chains in end-of-life products that can support a circular economy transition	X	X	• MEAs • WCO • IGOs including regional commissions • Multi-stakeholder initiatives
10. Respond to specific challenges faced by developing countries and their private sector, especially impacted MSMEs, by ensuring consultation, impact assessments, capacity building, technical assistance, financing, and affordable access to appropriate technologies to support fair transitions	X	X	• MEAs • IGOs including regional commissions • Aid For Trade initiative

Source: Authors' elaboration.

References

ASEAN (2021). *Framework for Circular Economy for the ASEAN Economic Community.* https://asean.org/wp-content/uploads/2021/10/Framework-for-Circular-Economy-for-the-AEC_Final.pdf

ASEAN. (2023). *Strategy for Carbon Neutrality.* https://asean.org/wp-content/uploads/2023/08/Brochure-ASEAN-Strategy-for-Carbon-Neutrality-Public-Summary-1.pdf

Barrie, J. & Grooby, G. (2023). *Going circular - How the Harmonized System codes can/not support a circular economy and what else could be done.* World Customs Organization and Friedrich Ebert Stiftung. https://library.fes.de/pdf-files/international/20579.pdf

Barrie, J., Salminen, I., Schroder, P. & Stucki, S. (2024). *National circular economy roadmaps: A global stocktake for 2024. UNIDO and Chatham House.* https://www.unido.org/sites/default/files/unido-publications/2024-05/UNIDO_National%20circular%20economy%20roadmaps_v07.pdf

Barrie J., Schröder P., Schneider-Petsinger M., King R., & Benton T. (2022). *The role of international trade in realizing an inclusive circular economy.* Chatham House. https://www.chathamhouse.org/2022/10/role-international-trade-realizing-inclusive-circular-economy

Baršauskaitė, I. & Irschlinger, T. (2023). *Trade-related policy measures to reduce plastic pollution: Building on the state of play.* https://www.iisd.org/publications/report/trade-policy-reduce-plastic-pollution

Basel Convention. (n.d.). *Overview.* Plastic Waste Partnership.; Basel Convention Partnership on Plastic Waste, Decision BC-14/13 (May 11, 2019). https://www.basel.int/Implementation/Plasticwaste/PlasticWastePartnership/tabid/8096/Default.aspx

Brown, A., Laubinger, F., & Börkey, P. (2023). New aspects of EPR: Extending producer responsibility to additional product groups and challenges throughout the product life cycle. *OECD Environment Working Papers*, No. 225, OECD Publishing, Paris. https://www.oecd.org/en/publications/new-aspects-of-epr-extending-producer-responsibility-to-additional-product-groups-and-challenges-throughout-the-product-lifecycle_cfdc1bdc-en.html

Chatham House. (2022). *Trade for an inclusive circular economy – A framework for collective action.* Recommendations from a global expert working group. https://www.chathamhouse.org/2022/06/trade-inclusive-circular-economy

Center for International Environmental Law (CIEL). (2023). *Beyond recycling: Reckoning with plastics in a circular economy.* https://www.ciel.org/reports/circular-economy-analysis/

Circular Economy Foundation. (2024). *The Circularity Gap Report 2024.* https://www.circularity-gap.world/2024

Circular Innovation Lab, European Environmental Bureau (EEB), & ACEN Foundation. (2023). *Study on items shipped for reuse and Extended Producer Responsibility fees - A case for extending EU EPR fees to cover end-of-life activities of products shipped outside the EU.* https://www.circularinnovationlab.com/post/study-on-items-shipped-for-reuse-and-extended-producer-responsibility-fees

Closing the Loop. (n.d.). *Greener procurement safe, solid and engaging | Closing the Loop* https://www.closingtheloop.eu/

Economic Commission for Latin America and the Caribbean (ECLAC). (2021). *International Trade Outlook for Latin America and the Caribbean*, 2021. (LC/PUB.2021/14-P/Rev.1), Santiago. https://www.cepal.org/en/publications/47536-international-trade-outlook-latin-america-and-caribbean-2021-pursuing-resilient

Ellen MacArthur Foundation. (2015). *Growth within: A circular economy vision for a competitive Europe*. https://www.ellenmacarthurfoundation.org/growth-within-a-circular-economy-vision-for-a-competitive-europe

Ellen MacArthur Foundation. (2022). *The Global Commitment 2022.* https://www.ellenmacarthurfoundation.org/global-commitment-2022/overview

European Commission. (2020). *A new Circular Economy Action Plan – For a cleaner and more competitive Europe.* COM(2020) 98 final.

European Union, Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on Waste and Repealing Certain Directives (Text with EEA Relevance) 2008 (312) (Waste Framework Directive), Art. 16. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32008L0098

Global Action Partnership for EPR. (n.d.). *Global Action Partnership for EPR.* https://gap-epr.prevent-waste.net/

IMPEL. (n.d.). *Welcome to IMPEL.* https://www.impel.eu/en

International Organization for Standardization (ISO). (n.d.). ISO 59020:2024 - Circular Economy – Measuring and assessing circularity performance. https://www.iso.org/standard/80650.html

OECD. (2019). *Business models for the circular economy: Opportunities and challenges for policy.* OECD Publishing. https://www.oecd.org/en/publications/business-models-for-the-circular-economy_g2g9dd62-en.html

Ricketts, L. & Skinner, B. (2023). *Stop waste colonialism: Leveraging extended producer responsibility to catalyze a justice-led circular textiles economy.* The Or Foundation. https://policycommons.net/artifacts/4065083/untitled/4872391/

Sage. (2023). *Path for growth: Making sustainability reporting work for SMEs.* https://www.edie.net/partner-content/path-for-growth-making-sustainability-reporting-work-for-smes/

Schröder, P., Oyinlola, M., Barrie, J., Fwangkwal, B., & Abolfathi, S. (2022). *Making policy work for Africa's circular plastics economy.* https://www.researchgate.net/publication/367001754_Making_policy_work_for_Africa%27s_circular_plastics_economy

SITRA. (2016). *Leading the cycle: Finnish roadmap to a circular economy 2016–2025.* https://www.sitra.fi/en/projects/leading-the-cycle-finnish-road-map-to-a-circular-economy-2016-2025/

SMEP. (n.d.). *Complete pineapple waste solutions including decortication for textile production.* https://smepprogramme.org/project/the-chequered-flag/

SMEP. (n.d.). *GAIA Biomaterials AB: Biodolomer®Ocean for fishing nets*. https://smepprogramme.org/project/gaia-biomaterials-ab/

Steinfatt, K. (2020). Trade policies for a circular economy: What can we learn from WTO experience? *Staff Working Paper* ERSD-2020-10. World Trade Organization, Geneva. https://www.wto.org/english/res_e/reser_e/ersd202010_e.htm

United Nations Economic Commission for Europe (UNECE). (n.d.). *Sustainable resource management.* https://unece.org/sustainable-energy/sustainable-resource-management

UNECE. (2022). *Enhancing traceability and transparency of sustainable value chains in the garment and footwear sector.* Recommendation No. 46. United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT). https://unece.org/trade/publications/recommendation-no46-enhancing-traceability-and-transparency-sustainable-value

UNEP Open-ended Working Group of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention), Revised Glossary of Terms, U.N. Doc. UNEP/CHW/OEWG.10/INF/10 (March 18, 2016). https://www.basel.int/TheConvention/OpenendedWorkingGroup(OEWG)/Meetings/OEWG10/MeetingDocuments/tabid/4783/Default.aspx

United Nations Environment Programme, Resolution adopted by the United Nations Environment Assembly on 2 March 2022, Enhancing circular economy as a contribution to achieving sustainable consumption and production, U.N. Doc. UNEP/EA.5/Res.11, (March 7, 2022). https://www.unep.org/resources/resolutions-treaties-and-decisions/UN-Environment-Assembly-5-2

UN Trade and Development (UNCTAD). (2023). *Plastic pollution: The pressing case for natural and environmentally friendly substitutes to plastics.* https://unctad.org/publication/plastic-pollution-pressing-case-natural-and-environmentally-friendly-substitutes

UN Trade and Development (UNCTAD) & Sustainable Manufacturing and Environmental Pollution (SMEP) Programme. (2024). *Beyond plastics – A review of trade-related policy measures on non-plastic substitutes.* https://unctad.org/publication/beyond-plastics-review-trade-related-policy-measures-non-plastic-substitutes

van der Ven, C. (2022). *Circular innovation and ecodesign in the textiles sector – Towards a sustainable and inclusive transition.* Sitra studies 219. https://www.sitra.fi/app/uploads/2022/09/sitra-circular-innovation-and-ecodesign-in-the-textiles-sector.pdf

Vasilevskaia, D. (2022. The application of the principles of proximity and self-sufficiency to trade and transport of plastic waste. *Confluence des droits_La revue.* https://confluencedesdroits-larevue.com/?p=2234

Wellesley, L., Preston, F., & Lehne, J. (2019). *An inclusive circular economy: Priorities for developing countries.* Chatham House. https://www.chathamhouse.org/2019/05/inclusive-circular-economy

World Customs Organization (n.d.). The Asia-Pacific Plastic Waste Project. https://www.wcoomd.org/en/appw.aspx

World Economic Forum. (2020). *Facilitating trade along circular electronics value chains.* https://www.weforum.org/publications/facilitating-trade-along-circular-electronics-value-chains/

World Trade Organization. (n.d.). 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, Committee on Technical Barriers to Trade, Fifth triennial review of the operation and implementation of the agreement on technical barriers to trade under article 15.4, WTO Doc. G/TBT/26 (November 12, 2009). https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=Q:/G/TBT/26.pdf&Open=True

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, WTO Doc. G/TBT/32 (November 29, 2012). https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=Q:/G/TBT/32.pdf&Open=True

World Trade Organization, Ministerial Statement on Plastic Pollution and Environmentally Sustainable Plastics Trade of 10 December 2021, Informal Dialogue on Plastic Pollution and Environmentally Sustainable Plastics Trade (IDP), WTO Doc. WT/MIN(21)/8/Rev.2 (2021). https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/MIN21/8R2.pdf&Open=True

World Trade Organization, Ministerial Statement on Trade and Environmental Sustainability of 14 December 2021, Trade and Environmental Sustainability Structured Discussions (TESSD), WTO Doc. WT/MIN(21)/6/Rev.2 (2021). https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/MIN21/6R2.pdf&Open=True

World Trade Organization, Statement by the TESSD Co-Convenors of 19 February 2024, Trade and Environmental Sustainability Structured Discussions (TESSD), Addendum, Informal Working Group on Circular Economy – Circularity, WTO Doc. WT/MIN(24)/11/Add.4 (2024). https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/MIN24/11A4.pdf&Open=True

Yamaguchi, S. (2021). International trade and circular economy - Policy alignment. OECD *Trade and Environment Working Papers*, No. 2021/02, OECD Publishing, Paris. https://www.oecd-ilibrary.org/environment/international-trade-and-circular-economy-policy-alignment_ae4a2176-en

Annex. International Expert Group Members

Latifahaida ABDUL LATIF, Assistant Director, Association of Southeast Asian Nations (ASEAN) Secretariat

Adina Renee ADLER

Apporva ARYA, Founder and CEO, Circular Innovation Lab

Sandra AVEROUS-MONNERY, Economic Officer, World Trade Organization

Jack BARRIE, Senior Research Fellow at the Environment & Society Centre Chatham House

Christophe BELLMANN, Head of Policy Analysis and Strategy, Forum on Trade, Environment, & the SDGs (TESS)

Arpit BHUTANI, Chief Operating Officer, Circular Innovation Lab

Jocelyn BLÉRIOT, Executive Lead, Policy & Institutions, Ellen MacArthur Foundation (EMF)

Kimberley BOTWRIGHT, Head, Sustainable Trade, World Economic Forum (WEF)

Vito BUONSANTE, Policy and Technical Advisor, International Pollutants Elimination Network (IPEN)

Catherine CHEVAUCHÉ, Chair of ISO/TC 323 Circular Economy

Dominic COPPENS, Professor of International Economic Law, Maastricht University

Hélionor DE ANZIZU, Staff Attorney, Centre for International Environmental Law (CIEL)

Carolyn DEERE BIRKBECK, Executive Director and Founder, Forum on Trade, Environment, & the SDGs (TESS)

Florence Binta DIAO-GUEYE, Global Policy Lead, Trade & Customs, International Chamber of Commerce (ICC)

Bonmwa FWANGKWAL, Program Manager, African Circular Economy Alliance (ACEA) Secretariat

Gael GROOBY, Ag. Director Tariff and Trade Affairs Directorate, World Customs Organization (WCO)

Kamal GUEYE, Global Coordinator, Green Jobs Programme, International Labour Organization (ILO)

Jeet KAR, Lead, Sustainable Trade and Global Policy (Plastics), World Economic Forum (WEF)

Michikazu KOJIMA, Senior Research Fellow on Environmental Issues, Economic Research Institute for ASEAN and East Asia (ERIA)

Rainer LANZ, Policy Analyst, World Trade Organization (WTO)

Aik Hoe LIM, Director of the Trade and Environment Division, World Trade Organization (WTO)

Elisa LUOTONEN, Coordinator of Africa Circular Economy Facility, Climate Change and Green Growth Department, African Development Bank (AfDB)

Nanno MULDER, Chief, International Trade Unit, International Trade and Integration Division, Economic Commission for Latin America and the Caribbean (ECLAC)

Badri NARAYANAN GOPALKRISHNAN, Founder and Director, Infinite Sum Modelling LLC, and Fellow, Niti Aayog, Government of India

Henrique PACINI, Economic Affairs Officer, UN Trade and Development (UNCTAD)

Maria Teresa PISANI, Economic Policy Officer, United Nations Economic Commission for Europe (UNECE)

Patrick SCHROEDER, Senior Research Fellow, Chatham House, the Royal Institute of International Affairs

Branson SKINNER, Co-Founder and Executive Producer, The Or Foundation

Colette VAN DER VEN, Founder and Director, Tulip consulting

Shunta YAMAGUCHI, Policy Analyst, Organisation for Economic Co-operation and Development (OECD)

* Several experts from the Secretariat of the Basel, Rotterdam and Stockholm conventions also participated in the expert group.

TESS Forum on Trade, Environment, & the SDGs

tessforum.org

@TESSForum

info@tessforum.org

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

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

GENEVA GRADUATE INSTITUTE

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

TESS is housed at the Geneva Graduate Institute.