Leveraging Trade Agreements for an Inclusive Circular Economy Transition:

Options under the World Trade Organization and EU Regional Trade Agreements

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Leveraging Trade Agreements for an Inclusive Circular Economy Transition: Options under the World Trade Organization and EU Regional Trade Agreements

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Abbreviations

Basel Convention	Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal
BIT(s)	Bilateral Investment Treaty(-ies)
CAPs	Conformity Assessment Procedure(s)
CARIFORUM	Caribbean Forum
CEAP	EU Circular Economy Action Plan
CETA	Comprehensive Economic and Trade Agreement between Canada and EU
CIS	Commonwealth of Independent States
CPC	Central Product Classification
CTE	Committee on Trade and Environment
CTS-SS	Council for Trade in Services special session meetings
CPTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership
EFTA-Indonesia CEPA	EFTA-Indonesia Comprehensive Economic Partnership Agreement
EGA	Environmental Goods Agreement
EPA	Economic Partnership Agreement
ESA	Eastern and Southern Africa
EU	European Union
EU-UK TCA	EU-UK Trade and Cooperation Agreement
E-waste	Electronic Waste
FDI	Foreign Direct Investment
FFSR	Fossil Fuel Subsidy Reform
FTA(s)	Free Trade Agreement(s)
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade 1994

GHG	Greenhouse gas
GPA	Agreement on Government Procurement
HS	Harmonized System
ICT	Information and Communications Technology
IDP	Informal Dialogue on Plastics Pollution and Sustainable Plastics Trade
ILO	International Labour Organization
IRP	International Resource Panel
ISIC	International Standard Industrial Classification
ISO	International Standards Organization
JSI	Joint Statement Initiative
LDCs	Least Developed Countries
MEAs	Multilateral Environmental Agreements
Members	WTO Members
MRA(s)	Mutual Recognition Agreement(s)
NPR PPM(s)	Non-Product Related Process and Production Method(s)
OECD	Organization of Economic Cooperation and Development
PIC	Prior Informed Consent
PPM(s)	Process and Production Method(s)
RMC	Raw Material Consumption
RTA(s)	Regional Trade Agreement(s)
SCM Agreement	Agreement on Subsidies and Countervailing Measures
SPS	Sanitary and Phytosanitary Measures
STDF	Standards and Trade Development Facility
TBT Committee	Committee on Technical Barriers to Trade
TESSD	Trade and Environmental Sustainability Structured Discussions
TFA	Trade Facilitation Agreement
TRIPS	Agreement on Trade-Related Aspects of Intellectual Property Rights
TSD	Trade and Sustainable Development

UK	United Kingdom of Great Britain and Northern Ireland
US	United States of America
USD	US Dollar
USMCA	United States-Mexico-Canada Agreement
W/120	GATS Services Sectoral Classification List (document MTN.GNS/W/120)
WCO	World Customs Organization
WEF	World Economic Forum
WTO	World Trade Organization

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List of WTO Dispute Settlement Reports

Brazil – Retreaded Tyres	Appellate Body Report, *Brazil – Measures Affecting Imports of Retreaded Tyres*, WT/DS332/AB/R, adopted 17 December 2007, DSR 2007:IV, p. 1527
Brazil – Retreaded Tyres	Panel Report, *Brazil – Measures Affecting Imports of Retreaded Tyres*, WT/DS332/R, adopted 17 December 2007, as modified by Appellate Body Report WT/DS332/AB/R, DSR 2007:V, p. 1649
Canada – Renewable Energy / Canada – Feed-in Tariff Program	Appellate Body Reports, *Canada – Certain Measures Affecting the Renewable Energy Generation Sector / Canada – Measures Relating to the Feed-in Tariff Program*, WT/DS412/AB/R / WT/DS426/AB/R, adopted 24 May 2013, DSR 2013:I, p. 7
EC – Seal Products	Appellate Body Reports, *European Communities – Measures Prohibiting the Importation and Marketing of Seal Products*, WT/DS400/AB/R / WT/DS401/AB/R, adopted 18 June 2014, DSR 2014:I, p. 7
Japan – Alcoholic Beverages II	Appellate Body Report, *Japan – Taxes on Alcoholic Beverages*, WT/DS8/AB/R, WT/DS10/AB/R, WT/DS11/AB/R, adopted 1 November 1996, DSR 1996:I, p. 97
US – Gasoline	Panel Report, *United States – Standards for Reformulated and Conventional Gasoline*, WT/DS2/R, adopted 20 May 1996, as modified by Appellate Body Report WT/DS2/AB/R, DSR 1996:I, p. 29

Executive Summary

Introduction

The role of trade law and policy in the circular economy transition is receiving increased attention. Most trade-related initiatives and studies focus predominantly on advancing the circular economy transition from the vantage point of developed countries, reflecting the fact that developed countries tend to be better positioned to reap the benefits associated with a circular transition compared to developing and least developed countries (LDCs). To avoid creating a 'circular divide', it is imperative to ensure that the global circular economy transition not only reduces material resource consumption and production, but also reduces inequalities between developed countries and developing countries/LDCs.

Trade and the inclusive circular economy are broad concepts that could have different conceptual linkages. This study anchors its analysis in three specific entry points:

- **The role of trade in facilitating a circular economy transition in developing countries**. This entry point focuses on how a country can, through trade, access goods, services, and technologies that are necessary to bring about a domestic circular economy transition.
- **The role of trade in addressing the implications associated with reverse supply chains**. This entry point focuses on challenges and opportunities associated with trade in secondary products (secondary raw materials, second-hand goods, refurbished goods).
- **The role of trade in helping developing countries navigate market access challenges and opportunities relevant to the circular economy**. This entry point focuses on circular economy regulations and how they could serve as a barrier to impact market access.

For each of these entry points, this study has analysed the role of specific World Trade Organization (WTO) Agreements and the role of Regional Trade Agreements (RTAs). In particular, this study has analysed whether specific provisions in the WTO or RTAs can be considered to promote or rather hinder a circular economy transition, with a focus on developing and least developed countries. With regards to areas where the WTO and/or RTAs were found to be potentially misaligned with the circular economy transition, this study has proposed recommendations on how these obstacles can be overcome. The main findings of the study are summarized below.

For each of the entry points, this study sets out how WTO and RTA rules **can be leveraged to advance an inclusive circular economy transition**. It highlights whether and how WTO provisions impose limits on WTO Member's policy space to adopt circular economy measures; how WTO Members (Members) can proactively use different rules to incentivize a circular

transition, and provides recommendations on how to strengthen the link between WTO provisions and the circular economy with regards to specific WTO Agreements. This study also provides recommendations on how RTAs can be leveraged to advance an inclusive circular economy transition, while restricting provisions that advance the linear economy. While the focus of the RTA section is on developing countries negotiating with the EU, it draws upon examples from non-EU RTAs.

RTAs have been a laboratory for innovation, and cover topics that go beyond the WTO agreements, such as investment, regulatory cooperation, competition, and trade and sustainable development. Innovative approaches adopted as part of RTAs have the potential to influence discussions at the multilateral level.

Entry point 1: The role of trade in facilitating a circular economy transition in developing countries

Findings

The WTO does not include any specific provisions that explicitly mention the circular economy. Thus, the first entry point focuses on identifying **how existing WTO Agreements can be leveraged to facilitate a circular economy transition in developing countries**. In this regard, the General Agreement on Tariffs and Trade 1994 (GATT) and the General Agreement on Trade and Services (GATS) could be relied upon to lower market access barriers on goods and services relevant for the circular economy. Moreover, provisions in the Agreement on Trade-Related Intellectual Property Rights (TRIPS) could be the basis upon which developing countries and/or least-developed countries (LDCs) could access critical circular economy technologies patented in third countries.

While the WTO rulebook could be leveraged to provide access to goods, services and technologies critical for a transition to a domestic circular economy in developing and least-developed countries, there are also certain **limitations that may hamper the effectiveness of WTO rules in advancing an inclusive circular economy transition**. For example, while policy space exists under WTO rules to reduce tariffs based on circular process and production methods (PPMs), the WTO architecture requires that discriminatory measures based on environmental grounds be justified under the general exceptions clauses of GATT Article XX or GATS Article XIV, or both, as the case may be.

Moreover, the Subsidies and Countervailing Measures (SCM) Agreement limits the types of subsidies Members can provide, thus limiting governments' options to advance a circular economy through subsidization. Another limitation that restricts the effectiveness of using WTO rules in advancing a circular economy transition concerns the classification of goods and services. Both the Harmonized System (HS) used by Members for classifying goods, and the GATS Services Sectoral Classification List (W/120) used by Members to classify services, are insufficiently precise to differentiate products and services on the basis of their circularity, whether reflected in process, product characteristics, or end-use.

Options for the WTO

To encourage tariff reduction for circular goods when the circularity of the product stems from a product's process or production methods (PPMs), Members could agree on a **list of circular PPMs**. For measures that impose different tariffs for the circular PPMs included on the list, Members could agree that those **measures are rebuttably presumed to be covered by GATT Article XX**. This would enhance the alignment between measures that seek to promote circular goods and WTO rules. In addition, Members could seek to **revive, and expand the scope of, the EGA negotiations** to actively promote trade in circular goods and services. Enhancing **alignment between circular product processes and characteristics and the HS code** must also be addressed. With respect to services, Members could consider **expanding the W/120 services categories** by adding additional services commitments in sectors related to the circular economy.

Compulsory licensing provisions set out in the TRIPS Agreement could promote developing countries' access to critical circular technologies but would benefit from additional clarification as to how they apply with respect to circular technologies – similar to the clarifications that took place in the context of access to technology and public health. **Technology transfer provisions in TRIPS could also be leveraged to facilitate LDCs' access to critical circular technologies**. However, for these provisions to be more effective, LDCs could identify needs and priorities relevant to the circular economy, to ensure the incentives provided by developed countries are focused on the transfer of these technologies.

With regards to subsidies, **Members may wish to consider inserting a category of non-actionable subsidies into the SCM Agreement**, similar to the expired provisions in SCM Article 8, to provide more flexibility to subsidies related to the circular economy. In addition, they could seek a **textual clarification that "new environmental requirements" under SCM Article 8.2(c) cover circular economy transition policies and rules**. While developing countries originally pushed for the expiry of SCM Article 8, reflecting concerns that developed countries would mostly benefit from this, reactivating that norm might nudge countries to adopt "good" subsidies necessary for the circular economy transition. Moreover, it would be important that **discussions seeking to introduce disciplines on fossil fuel subsidies continue in the framework of the WTO**.

Members might want to consider developing non-binding guidelines to address some of the technical and developmental issues related to advancing an inclusive circular economy transition. A starting point for recommendations addressed to the WTO membership would be the **Trade and Environmental Sustainability Structured Discussions (TESSD)**. Once a recommendation or statement has been suggested by the Members of TESSD, or one of the other relevant dialogues and initiatives, it would be easier for the recommendation to become an agenda item in other relevant WTO Committees, Working Parties, Special Sessions or negotiations where binding rules can be developed. At a later stage, **a non-binding document on the circular economy could also form the basis on which a JSI on the environment/ the inclusive circular economy transition can be developed**, thereby further strengthening the link between trade and the environment.

Options for RTAs

Liberalizing trade in circular goods: To facilitate trade in goods relevant to the circular economy, parties could **create a list of circular goods relevant to specific industry sectors** and agree to reduce/eliminate tariffs on these goods. A handful of RTAs specifically identify environmental or circular goods to be preferentially liberalized. In developing a list of circular goods, countries should consider including products that are circular not only because of their end-use, but also because of the way in which they have been produced. With respect to circular production methods, this can be implemented, for instance, through sustainable certification standards. Countries could also **consider adopting a sector-specific approach when liberalizing trade in circular products**. This would facilitate linking necessary circular goods to developing countries' industry sectors with circular promise.

Liberalizing trade in circular services: Similarly, RTAs can promote trade in circular services by adding more specific classification sectors and subsectors relevant to the circular economy.

Facilitating and promoting investments relevant to advancing the circular economy transition: RTAs could promote circular economy investment by **requiring explicitly that investors comply with rules and regulations relevant to the circular economy**, and/or by **including specific provisions to facilitate and promote investments in goods, services and technologies critical to advancing the circular economy**. Moreover, RTAs could set out **practical guidance for businesses** to comply with international standards relevant to the environment***Enabling access to technologies critical to a circular economy transition:*** With respect to intellectual property and the circular economy, countries could consider **including language on compulsory licensing and its relevance to the environment/the circular economy** and/or **provisions that explicitly encourage the transfer of new technologies critical to the circular economy** transition. Another way to promote technology transfer can be through **including technology transfer-related cooperation provisions** in respective environmental or Trade & Sustainable Development (TSD) chapters.

Subsidizing circular activities / discouraging subsidies for linear activities: Parties to an RTA can introduce rules on **minimizing support to fossil fuel energy production**. At the same time, parties can also leverage RTAs to encourage subsidies dedicated to the circular economy transition.

<u>Entry point 2: The role of trade in addressing the implications of reverse supply chains</u>

Findings

In order to leverage opportunities while minimizing potential negative effects of the global transition to a circular economy, countries should facilitate the import of "wanted" waste products. This refers to sorted and non-contaminated waste that could serve as feedstock for a country's waste recycling facilities. At the same time, countries should restrict trade in "unwanted" contaminated, hazardous, and hard-to-recycle waste which could exacerbate developing

countries' waste problems, especially when the waste is hard to recycle and/or when a country lacks adequate waste-processing facilities.

WTO rules have limited effectiveness in addressing the implications of reverse supply chains, while facilitating differentiations between wanted and unwanted secondary products. **Three key issues emerge** in this context: **first**, WTO rules limit the extent to which Members can discriminate between secondary products based on their toxicity, recyclability, or other non-physical characteristics. **Second**, challenges exist with regards to differentiating between "wanted" and "unwanted" waste. **Third**, misconceptions exist with regards to different types of secondary products, such as second-hand products and refurbished/remanufactured products. This is due to **the absence of widely accepted definitions with respect to different types of secondary products**, and the fact that the HS classifies goods on the basis of their physical characteristics – not product quality. Misalignment between the HS system, and the Basel Convention, which regulates trade in hazardous wastes, adds further complexity.

Options for the WTO

To encourage **tariff differentiation based on the type of waste that is being traded**, or enable **import restrictions on unwanted secondary goods**, Members could consider that doing so in accordance with the Basel Convention would be rebuttably presumed to be justified under GATT Article XX. With respect to difficulties concerning classification, Members could provide input and suggestions to update the HS and enable it to **better differentiate between different types of waste products**. The WCO updates the HS periodically to address technological developments and changes in trade patterns and policy requirements. Moreover, to **enhance alignment between WTO rules and the Basel Convention**, an informal working group could be established under the Market Access Committee, addressing issues relevant to the classification of waste, in cooperation with the WCO, and other matters relevant to aligning the WTO rules and the Basel Convention provisions, such as streamlining criteria used to determine whether a product is hazardous or non-hazardous waste.

It would also be imperative to **strengthen custom officials' capacity to address trade in waste**. This can be done by establishing a **"green list" for companies** that have been importing waste and a record of compliance with customs and other laws and regulations. Green listing could improve longer-term approval validity for Prior Informed Consent (PIC) procedures. Another approach would be to introduce a **special licensing scheme for companies** that import easy-to-recycle waste. This licensing scheme could come with benefits like swifter import approvals, as well as a monitoring scheme to ensure that the waste is shipped to appropriate facilities, as is already required by the PIC. As long as the procedural requirements set out in the WTO Import Licensing Agreement are followed, such a licensing scheme would be aligned with WTO provisions. Various **provisions set out in the Trade Facilitation Agreement (TFA) could also be leveraged** to strengthen customs officials' capacity in handling trade in different types of waste. This includes TFA provisions on **authorized operators, advance rulings, risk management, and capacity building**.

With respect to trade in remanufactured goods, Members could consider developing a commonly accepted definition of a remanufactured good. To this end, a **working group on trade in remanufactured goods** could be set up under the Market Access Committee, including stakeholders from both developed and developing countries. This Working Group could, inter alia, identify existing approaches to trade in remanufactured goods and provide recommendations on how those approaches can be harmonized.

Options for RTAs

Facilitating trade in remanufactured goods and second-hand goods: RTAs could play an important role in helping customs officials differentiate with respect to different end-of-life products that are being traded as part of the circular economy. One way to do so is by establishing definitions of end-of-life goods, such as remanufactured products or second-hand goods.

***Facilitating trade in "wanted" waste products*:** In order to leverage opportunities while minimizing potential negative effects of the global transition to a circular economy, countries should **facilitate the import of "wanted" waste products.** These are sorted and non-contaminated waste that could serve as feedstock for a country's waste recycling facilities. RTAs can also play a role in **strengthening customs officials' capacity to distinguish between different types of waste**, to facilitate customs clearance of circular economy goods and to sort end-of-life products. RTAs could provide for commitments on capacity building and technical assistance to increase the customs officials' capacity to distinguish between different types of waste. Further, it would be important to ensure that RTAs set out provisions **on expedited proceedings and inspections on selected economic operators**. This could be achieved, for example, by establishing authorized operator provisions for "green listed" companies that have a record of compliance with the relevant laws and regulations.

***Restricting trade in "unwanted" waste products*:** At the same time, countries should **restrict trade in "unwanted" contaminated**, hazardous, and hard-to-recycle waste which could exacerbate developing countries' waste problems, especially when the waste is hard to recycle and/or when a country lacks adequate waste-processing facilities. One way is through strengthening the link with the Basel Convention. While EU TSD Chapters reference a list of Multilateral Environmental Agreements (MEAs), they do not include specific reference to the Basel Convention. Developing countries negotiating RTAs with the EU could **seek to insert references to the Basel Convention in the technical assistance provisions** linked to implementing the Prior Informed Consent (PIC) procedure. In addition, in light of the Commissions' announcement to turn the Paris Agreement into an "essential element" of all of its future RTAs, it would also be interesting to **consider the implications of including the Basel Convention as an essential element of future EU RTAs**.

Entry point 3: The role of trade in helping developing countries navigate market access challenges and opportunities relevant to the circular economy

Findings

Over the last few years, there has been a significant increase in the adoption of technical regulations and standards relevant to the circular economy. This has resulted in a heterogeneity of circular economy standards, leading to inefficiencies and increased trade costs for companies operating across multiple jurisdictions, especially SMEs which face disproportionately high implementation costs. **The TBT Agreement**, through provisions **that promote harmonization, equivalence and mutual recognition**, could reduce friction generated by the heterogeneity of standards. The TBT Agreement could also play an important role in incentivizing participation in **the development of international circular economy standards**, and in shaping the development of these rules.

Options for the WTO

One way to strengthen the link between these TBT provisions and the circular economy is by **developing non-binding guidelines that would set out common principles for the establishment of regulations, standards or conformity assessment procedures in areas related to the circular economy**. These principles could guide Members in seeking to achieve their circular economy objectives while minimizing trade friction. This process could be proposed as an agenda item for the TBT Committee.

Other options are to ensure relevant TBT provisions are implemented such that trade friction generated by circular economy regulations and standards is minimized, in particular with regards to developing countries and LDCs. This would include considering to enter into **Mutual Recognition Agreements** (MRAs) with trading partners to recognize results of each other's conformity assessment procedures relating to circular economy standards and regulations; promoting the **participation of developing countries and LDCs in international standardization**; and ensuring that **developing and least-developed countries are participating in the work of the ISO/TC 323** and the development of other relevant international circular economy standards, to make sure that their perspectives are reflected.

Options for RTAs

Minimizing trade friction generated by circular regulations: RTAs can serve as a vehicle to minimize friction associated with different circular economy standards, by including provisions that cover transparency, equivalence, mutual recognition or harmonization of standards, regulations and conformity assessments related to the circular economy. Parties to an RTA should consider **including provisions that facilitate regulatory cooperation in order to minimize trade frictions.**

In addition to adopting provisions in the horizontal TBT chapter of an RTA, parties can **adopt a sector-specific chapter on NTBs in the circular economy**. The benefit of adopting a sector specific chapter is not only that it signals the importance of the area for trade between the parties,

but also that it enables higher levels of specificity and detail, highlighting priority areas for collaboration. A circular-economy specific chapter should **require that parties base their technical regulations for the circular economy on relevant international standards**, where they exist and where appropriate. Furthermore, a circular economy chapter can **include cooperation provisions** to address matters of mutual interest related to the transition towards a circular economy, including environmental labelling, extended producer responsibility, and barriers to trade in relation to the circular economy.

<u>Additional observations for developing countries</u>

Concern that liberalization of trade in certain end-of-life goods will turn developing countries and LDCs into a dumping ground of waste and low-quality products has motivated many developing countries to refrain from participating in discussions at the WTO focused on the circular economy. It is, therefore, critical to examine carefully the **implications of different proposed rules and guidelines for developing countries**. Here, an honest discussion is necessary, given that circular economy-motivated trade provisions are not always a win-win for all countries.

To ensure an inclusive circular economy transition, **technical assistance and capacity building will play a critical role, in particular to bridge the circular divide**. Indeed, developed countries are in a better position to benefit from the circular economy transition, which may see them l specializing in high-value-added industries focusing on product design and innovation and remanufacturing, while developing countries will be cementing their expertise on low-value-added industries such as waste management and recycling. To prevent this divide from happening, it is critical that **technical assistance and capacity building focuses also on developing high-value circular industries in developing countries**.

At the same time, it is important that **developing countries are willing to engage in relevant discussions on the circular economy and trade**. A pragmatic approach presupposes that a country has a **clear idea of the economic and social challenges relevant to the circular economy transition**, and has identified the types of goods, services, and technologies it would need to access to achieve a circular economy transition, while identifying the types of goods and services that would be undesirable. This suggests that, to make trade work better for an inclusive circular transition, **developing countries and LDCs must work on developing national circular economy development plans**. In other words, some key actions that are necessary to make WTO rules work for an inclusive circular economy must take place in the domestic framework.

1. Introduction

Current levels of material resource use are putting significant pressures on the environment and climate. The "take-make-use-dispose" pattern that defines our linear economy has led to the inefficient use of scarce resources such as land and water, high levels of greenhouse gas (GHG) emissions, and enormous quantities of hazardous and non-recyclable waste. These environmental stresses, linked to the overexploitation of material resources, are only expected to worsen in the next decades, driven by global population growth and a rapid catching-up of living standards around the world, which will require an ever-increasing material output.[2]

To alter course, **momentum is building across the globe to move away from today's linear patterns of production and consumption, towards a circular economic model**. In a linear economy, virgin materials are extracted for the manufacturing of new products and are disposed as waste once they reach the end of their lifecycle. By contrast, **a circular economy decouples economic growth from material use by closing, slowing, and narrowing material loops**.[3] Research estimates that a complete transition to a circular economy in large economies like China, India, and Europe would reduce global GHG emissions by up to 44% in 2050, in comparison to today's level of resource use.[4] By providing new opportunities for economic growth and job creation, **circularity promises to be a key enabler in countries' pathways towards an inclusive, green economy**.[5] The ILO estimates that 6 million new employment opportunities could be created by 2030, mainly in waste management, recycling and repair, and renting services sectors.[6]

International trade law and policy is important to enable and accelerate the circular economic transition at a global level. When adequately designed, trade policies can help make goods and services, critical to countries' circular transition, such as post-industrial waste management technology or circular design services, more readily available. Moreover, by creating new markets, trade policy can increase economy of scale effects, while accelerating learning and innovation effects. By adjusting economic incentives, **trade policy can furthermore promote the uptake of circular products and services, while disincentivizing goods and services that may hinder the circular transition**, such as trade in single-use plastics and various types of hazardous waste.

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[5] F. Preston, J. Lehne and L. Wellesley, "An Inclusive Circular Economy: Priorities for Developing Countries" (2019).
[6] ILO (ed.), "Greening with Jobs" (2018).

The role of trade law and policy in the circular economy transition is receiving increased attention[7], including at the World Trade Organization (WTO) and within Regional Trade Agreements (RTAs). However, most trade-related initiatives focus predominantly on advancing the circular economy transition from the vantage point of developed countries.[8] This reflects the fact that developed countries tend to be better positioned to reap the benefits associated with a circular transition compared to developing countries and least developed countries (LDCs), due to gaps in trade infrastructure, industrial and innovation capabilities, access to finance, digital trade capabilities, and power relations.[9] **To avoid creating a circular divide, it is imperative to ensure that the global circular economy transition reduces inequalities between developed and developing countries/LDCs**.[10]

Against this backdrop, **this study analyses how trade law and policy can be leveraged to achieve an inclusive transition to a global circular economy**. Specifically, it explores how, from a developing country and LDC perspective, provisions in the WTO and RTAs[11] can facilitate a circular economy transition and/or can have a constraining impact by limiting policy space for circular economy initiatives. This study proceeds as follows:

- *First*, based on an overview of the relevant literature, this paper develops a conceptual framework that highlights three important circular economy and trade-related *entry points* for developing countries and LDCs.
- *Second*, for the three identified entry points, this paper analyses the implications of a select number of WTO covered agreements and makes recommendations on options to leverage trade agreements for the circular economy transition.
- *Third*, with a focus on the EU, this study analyses how RTAs can serve as levers to advance circular economy transitions in developing countries and LDCs. It focuses on best practices in existing RTAs and provides various recommendations to improve the link between RTAs and the circular economy opportunities and challenges in developing countries.

[7] J. Barrie and P. Schröder, "Circular Economy and International Trade: A Systematic Literature Review" (2022), 2 *Circular Economy and Sustainability* 447.
[8] The WTO considers a "developing country" on the basis of self-designation, whereas it recognizes as least developed countries (LDCs) those countries which have been designated as such by the United Nations. All other countries are considered "developed". This paper uses the term "developing country" to encompass both developing countries and LDCs.
[9] J. Barrie et al., "Trade for an Inclusive Circular Economy: A Framework for Collective Action" (2022), Royal Institute of International Affairs 2022, Chatham House, Framework Document 16-17.
[10] Ibid.
[11] This paper uses the term "Regional Trade Agreement" for all preferential, regional, or free trade agreements.

2. A conceptual framework on the circular economy and entry points with global trade

A circular economy transition stands for a fundamental policy paradigm shift and economic systems transformation, in which waste is reduced through product design, and remaining waste is reconceptualised as a resource. In particular, the transition to a circular economy is characterized by: (i) closing material loops, including through the promotion of repair, reuse, refurbishment and remanufacturing of end-of-life goods, the recycling of post-consumer material and waste into secondary raw materials, and the promotion of product service systems; (ii) extending material loops through eco-design; and (iii) narrowing loops through resource efficiency initiatives such as greening manufacturing.[12]

The growing interest in the role of trade in promoting countries' transition to a circular economy has cumulated in the release of a sizable number of studies focused on the interlinkages between the circular economy, on the one hand, and trade and trade policy, on the other.[13] Owing to the breadth of the topic at hand, studies have adopted a number of different conceptual entry points.

A first set of studies explores anticipated shifts in trade flows as resulting from countries' transition from a linear to a circular economy.[14] These studies predict, *inter alia*, that a transition to a circular economy will reduce trade in primary raw materials; increase trade in secondary raw materials; increase trade in materials and waste for recycling; increase trade in secondary products, such as second-hand goods, refurbished or remanufactured goods, and materials and waste for recycling; increase trade in products that meet more stringent circular economy standards; and increase trade in newly emerging services sectors.

[12] Ellen MacArthur Foundation and Arup, "The Circular Economy Opportunity for Urban and Industrial Innovation in China" (2018), cited in S. Yamaguchi, "International Trade and the Transition to a More Resource Efficient and Circular Economy: A Concept Paper" (2018), Vol 2018/03, OECD Trade and Environment Working Papers 2018/03; A. McCarthy et al., "The Macroeconomics of the Circular Economy Transition: A Critical Review of Modelling Approaches" (2018a), OECD Environment Working Papers, No. 130 (OECD Publishing, Paris) http://dx.doi.org/10.1787/af983f9a-en.

[13] Barrie and Schröder (2022).

[14] See e.g. Yamaguchi (2018); C. van der Ven, "The Circular Economy, Trade, and Development: Addressing Spillovers and Leveraging Opportunities" (2020), Study Commissioned by the Permanent Representation of the Netherlands to the WTO; C. Bellmann, "The Circular Economy and International Trade: Options for the World Trade Organization (WTO)" (Nov. 2021), ICC; J. Monkelbaan, "The Circular Economy and Trade: Some Questions and Possible Ways Forward" (2021), Working Paper 1, TESSD Series, QUNO.

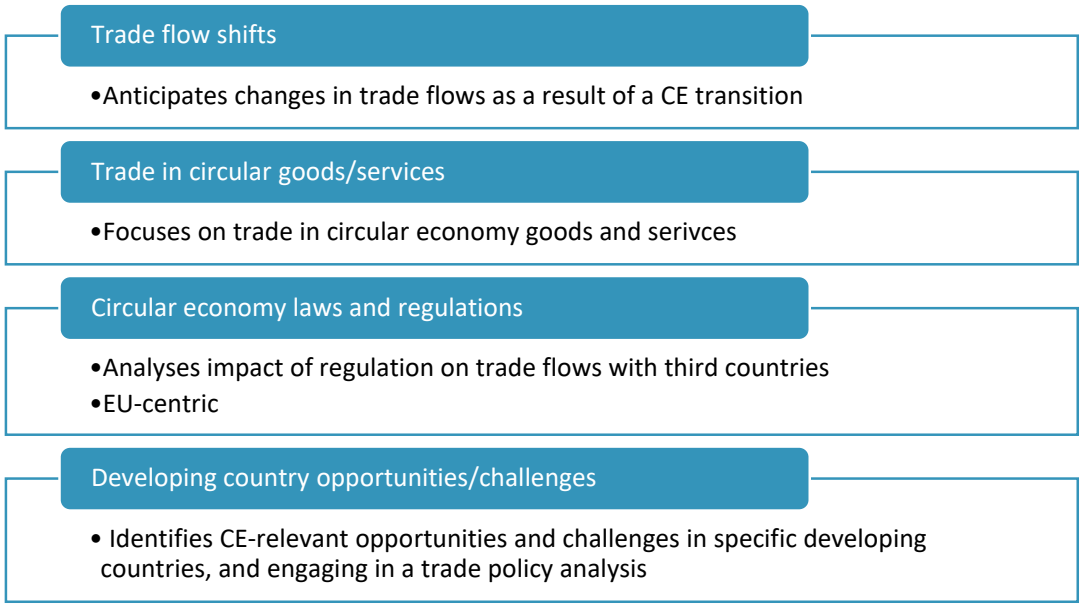
A second set of studies takes a product and services-centric approach, focusing on policy options to promote trade in circular economy goods and/or services.[15] In particular, these studies explore how reducing tariffs and non-tariff barriers on circular goods and market access restrictions on circular services could advance the global circular economy transition. Among others, studies in this area have sought to develop a definition of a 'circular good'/'circular service'. Some studies propose that goods should be defined as being circular if they exhibit circular characteristics (e.g. recycled goods), while others have expanded this definition to also include goods and services that contribute to circularity by way of their end-use (e.g. turbines used for renewable energy generation). Other studies in this category also focus on analysing available trade policy options to discourage trade in linear and non-circular goods, such as single-use plastics or hazardous waste.

A third set of studies focuses on laws and regulations relevant to trade and the circular economy. Studies in this area have, among others, analysed the implications of the EU Circular Economy Action Plan (CEAP) and draft regulations, such as the EU Eco-design Requirements for Sustainable Products (ESPR), on the EU's trade with third countries.[16] An important discussion advanced by studies in this area relates to the issue of non-tariff barriers to trade in circular goods and services, and how trade agreements can be leveraged to minimize such barriers.

While most studies focus on considerations relevant to developed countries, a fourth set of studies has adopted a developing country perspective.[17] Indeed, a number of studies focus on circular economy opportunities and challenges in a specific developing country and develop recommendations for trade negotiations on this basis.[18] Studies in this category focus either on sector-specific considerations; trade flow analysis; or circular economy policy plans, regulations, and strategies. Figure 1 below summarizes the different approaches taken in the existing literature on trade and the circular economy.

[15] See e.g. C. Bellmann and M. Sugathan, "Promoting and Facilitating Trade in Environmental Goods and Services: Lessons From Regional Trade Agreements" (2022); S. Tamminen et al., "Trading Services for a Circular Economy" (IISD 2020).
[16] See e.g. European Commission, Directorate-General for Environment, K. Rademaekers et al., Circular economy in the Africa-EU cooperation: Continental report, Publications Office 2021, https://data.europa.eu/doi/10.2779/008723; N. Ashraf and J. van Seters, "The Role of Low- and Middle-Income Countries in the Circular Economy Transition of the Netherlands and the EU" (2021), Briefing Note 142; C. van der Ven, "Circular Innovation and eco-design in the textiles sector: Towards a sustainable and inclusive transition" (2022), SITRA 219.
[17] Preston et al. (2019).
[18] U. Clem and C. van der Ven, "Trade and the Circular Economy: A deep dive into plastics action in Ghana" (2021), South Africa study, GPAP.

Figure 1: Overview of different frameworks adopted in trade and the circular economy studies



3. Framework of analysis

This study focuses on the role of trade in promoting an inclusive circular economy transition. As highlighted in section 2, there are many ways in which such a study can be approached. Based on these and other approaches adopted in the existing literature, we have identified three different "entry points" for this study on trade, the circular economy, and development. These are:

1. The role of trade in facilitating a circular transition in developing countries.
2. The role of trade in addressing the implications of reverse supply chains for developing countries.
3. The role of trade in helping developing countries navigate market access challenges and opportunities relevant to the circular economy.

The sections below address these three entry points.

3.1. The role of trade in facilitating a circular transition in developing countries

Trade can play an important role in facilitating a circular economy transition in developing countries by enabling access to the goods, services, and technologies necessary to facilitate a transition towards a circular economy. Typically, developing countries will require access to adequate technology and equipment, and relevant services, in order to move towards large-scale circular activities, many of which will have to be imported. For example, developing countries that generate large amounts of post-harvest agri-waste could reduce such waste by making available machines that convert agri-waste into biomass or fertilizer or by investing in cold-storage facilities. Developing countries specializing in textile and apparel production that seek to enhance post-production recycling rates would require access to relevant textile recycling machinery, and the accompanying services.[19]

Trade agreements play an important role in making available relevant goods, services and technologies.[20] Through trade agreements, countries can lower tariffs on goods critical to

[19] A. Oger and E. Blot, "Trade in Support of Circular Economy Opportunities between Nigeria and the EU" (2022), Case Study, IEEP.

[20] The specific goods, services, and technologies necessary to advance the circular economy transition will likely be different for each developing country, depending on the country's comparative advantage and the characteristics of their existing industries. That said, circular goods that will generally be of interest for developing countries include

facilitating a circular transition, and provide market access to foreign service suppliers in relevant services categories. Trade agreements with investment provisions can also incentivize foreign investment in infrastructure and other areas relevant to a country's circular transition, including in waste management and recycling infrastructure, renewable energy production, and pollution control. Moreover, trade agreements can stimulate public procurement, including with respect to public procurement in favour of circular products and processes.

Box 1: Circular Divide considerations

In leveraging trade agreements to access goods, services, and technologies relevant to the circular transition in developing countries, it is important to address the circular divide. Due to existing inequalities between developed and developing countries with regards to access to innovation and technology, financing, digital equipment, as well as industrial skills and research capacity, developed countries will be in a position to develop high-value-added circular goods, services, and technologies, while developing countries will likely focus on low-value-added echelons of the value chain, such as waste management and waste recycling. These considerations must be taken into account when discussing opportunities for developing countries to leverage trade agreements in order to promote a domestic circular transition.

Source: J. Barrie et al. (2022), "The Circularity Divide: What Is It? And How Do We Avoid It?", 180 Resources, Conservation and Recycling.

3.2. The role of trade in addressing the implications of reverse supply chains for developing countries

The circular economy transition is associated with reverse supply chains, defined by the OECD as "a set of activities and actors that are involved collecting end-of-life goods, recovering residual value through reuse, repair, refurbishment, remanufacturing, and recycling, and redistributing products and materials that can be used again in the economy."[21] **Reverse supply chains and the associated trade in end-of-life and secondary products present both opportunities and challenges for developing countries**.

recycling and waste management machines and their parts, and machines and their parts necessary to enhance resource-efficiency in production (e.g. renewable energy or infrastructure that reduces water intake). Services that will be important to facilitating a circular transition in many developing countries include waste and water treatment, recycling services, design, R&D, information technology (IT) services, environmental consulting, engineering, telecommunications services, and digital services. With commonly required technologies critical for the circular economy transition could include product innovation in recycled products and materials, big data and analytics, autonomous robots and vehicles, additive manufacturing, blockchain, horizontal/vertical systems integration, and the Internet of Things (IoT).

[21] S. Yamaguchi, "Securing reverse supply chains for a resource efficient and circular economy" (2022), OECD Trade and Environment Working Papers, No. 2022/02.

On the one hand, **reverse supply chains present an opportunity for developing countries to diversify industrial output and create jobs**. Access to used goods through trade can provide an opportunity to develop new circular industries for the domestic use market or export, thereby creating a source of employment. Second-hand goods can also enable consumers to buy products they would otherwise not be able to afford, for example, in the automotive and electronic sectors.[22] Trade in remanufactured goods could provide opportunities to developing countries to use high-capital goods that incorporate advanced technology at reduced prices, and for local firms to engage in remanufacturing.[23] It can further expand consumer choice and increase access to products at lower costs.[24] Moreover, **reverse supply chains create opportunities to create new industries**. For example, imports of waste and scrap material for recovery played an important role in the development of India's secondary steel production.[25] In sum, reverse supply chains can have various benefits for developing countries, including with regards to employment, access to technology, consumer choice and prices, and the opportunity to develop competitiveness in new sectors.

On the other hand, reverse supply chains can create significant challenges, especially for developing countries. For instance, **increased trade in second-hand/end-of-life products can undermine the development of a country's local industry or lock the country into using inefficient and polluting technologies**. In many countries, these concerns have led to the adoption of import restrictions on second-hand goods.[26] Relatedly, some countries have imposed import restrictions on refurbished and remanufactured goods, reflecting the fact that **many developing countries view remanufactured goods as second-hand goods, and therefore, inferior to new goods**.[27]

With respect to trade in waste and scrap, which constitute an important part of the reverse value chains, **there exists a risk of 'waste dumping'**, whereby the imported waste ends up in landfills or is disposed in the environment.[28] In many cases, **less stringent environmental policies, and inadequate enforcement have encouraged illicit waste trade and subsequent dumping of waste from developed to developing countries**. In response, a number of developing countries have adopted import bans on certain types of waste streams. Most notably, in 2018, China adopted an import ban on certain types of scrap plastic and unsorted wastepaper, which created political

[22] van der Ven (2020).
[23] Communication from the United States, "Market Access for Non-Agricultural Products: Negotiating NTBs Related to Remanufacturing and Refurbishing" (2005), TN/MA/W/18/Add.11.
[24] Ibid.
[25] OECD, "International Trade and the Transition to a Circular Economy" (2018), Policy Highlights.
[26] For instance, in 2017, some East African countries tried to impose a ban on the import of second-hand clothing in 2017. Eventually, only Rwanda went ahead with the ban. (K. de Freytas-Tamura, "For Dignity and Development, East Africa Curbs Used Clothes Imports", *The New York Times* (10 Dec. 2017), available at: https://www.nytimes.com/2017/10/12/world/africa/east-africa-rwanda-used-clothing.html, accessed 2 August 2022; C. van der Ven.
[27] Barrie et al. (2022); M. Kojima, "Remanufacturing and Trade Regulation" (2017), 61 Procedia CIRP 641.
[28] van der Ven (2020); Kettunen et al. (2019).

momentum among the international trade community to critically re-evaluate the international trade of waste.

Thus, reverse value chains present both opportunities and challenges to developing countries, and it is imperative for countries to differentiate between the end-of-life/secondary products that generate economic opportunities and those that will aggravate environmental problems and/or undermine local industrial development.

3.3. The role of trade in helping developing countries navigate market access challenges and opportunities relevant to the circular economy

Over the last few years, **there has been a significant increase in the adoption of technical regulations (which are mandatory) and standards (which are voluntary) relevant to the circular economy**. These regulations and standards can target both upstream value chain requirements (such as eco-design or reparability) and downstream value chains for end-of-life products (such as quality standards for secondary raw material).[29] Moreover, they regulate production processes, focus on consumer information, or establish criteria for circular products.

Many circular economy related standards and regulations tend to be adopted unilaterally. This has resulted in a heterogeneity of circular economy standards, leading to inefficiencies and increased trade costs for companies operating across multiple jurisdictions, especially SMEs who face disproportionately high implementation costs.[30] Moreover, circular economy standards that will be far reaching, such as the EU's ESPR, will have a significant impact on non-EU producers exporting to the EU market if they are unable to comply with the regulation.[31] **The risk that circular economy standards and regulations turn into non-tariff barriers is particularly strong for developing countries and LDCs**, which often have no, or less, advanced regulatory frameworks relevant to circularity; thus creating a large gap compared to more stringent circular economy standards applied in major export markets.

Trade agreements, especially **provisions that seek to harmonize or recognize as equivalent circular economy standards, could minimize the trade distortive effects associated with circular economy product standards**. Moreover, targeted investment by Investment Promotion Agencies in companies that have the capabilities to comply with these standards could be considered to build the necessary skills and capacity to comply with circular economy standards in exporting countries.[32]

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[29] S. Yamaguchi, "International Trade and Circular Economy – Policy Alignment" (2021), Vol 2021/02, OECD Trade and Environment Working Papers 2021/02.
[30] K. Steinfatt, "Trade Policies for a Circular Economy: What Can We Learn from WTO Experience?" (2020), WTO Staff Working Papers No. ERSD-2020-10.
[31] Barrie et al. (2022).
[32] van der Ven (2020).

At the same time, circular economy standards adopted in developed countries also present an opportunity for developing countries. For instance, the adoption of circular economy standards in developed countries can reduce the influx of low-value second-hand goods and improve the quality of exported waste/secondary products. Enhanced information about a product through product standards can also reduce the health safety risk associated with waste processing in developing countries. Circular economy product standards adopted in large markets like the EU could incentivize developing countries to also adopt circular economy regulations. **Through tailored capacity building, sharing of best practices and regulatory cooperation, among others, trade policy can support developing countries in their ability to meet circular economy-related product standards**.

4. Making the WTO work for an inclusive circular transition

Having established the three entry points for an inclusive circular economy transition, this section turns to the WTO. Specifically, for each of the entry points, this section examines whether relevant WTO agreements and initiatives either hinder or promote an inclusive circular economy transition. This section also provides recommendations on how to further strengthen the role of the WTO in advancing an inclusive circular economy.

4.1. The role of the WTO in facilitating a circular transition in developing countries

This section explores how WTO rules either impede or advance the ability of developing countries to take advantage of trade to transition towards a circular economy. To do so, we first identify the types of policies governments can adopt to facilitate a circular transition, and which WTO rules are implicated by these policies. For purposes of this study, we focus on the policies set out in in Table 1 below.

Table 1. Linking measures to advance a circular transition to relevant WTO instruments

Trade-related measures to be considered	***WTO instruments***
Liberalizing trade in circular goods	General Agreement on Tariffs and Trade 1994 (GATT)/Agreement on Technical Barriers to Trade (TBT Agreement)[33]
Liberalizing trade in circular services	General Agreement on Trade in Services (GATS)
Facilitating and promoting investment relevant to advancing the circular economy	Joint Initiative on Investment Facilitation for Development (JSI on Investment Facilitation)/ GATS Mode 3, Reference Paper on on Services Domestic Regulation

[33] It is an unsettled matter whether PPMs that are not product-related (NPR PPMs), i.e., PPMs that do not alter a product physically (e.g. non-deforestation requirements for cocoa production) are subject to the provisions of the TBT Agreement. Indeed, the question is whether, to constitute a "technical regulation" under the TBT Agreement, the measure must have a physical connection to the product. While the conventional view is that NPR PPMs are not covered by the TBT Agreement, this is a question that has not been conclusively settled. Therefore, this study focuses only on GATT in the context of analysing discrimination.

Enabling access to technologies critical to the circular economy transition	Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement)
Subsidizing circular activities/discouraging subsidies for linear activities	Agreement on Subsidies and Countervailing Measures (SCM Agreement)/ Fossil Fuel Subsidy Reform (FFSR)
Reflecting circular principles in government procurement	Agreement on Government Procurement (GPA)

4.1.1. Liberalizing trade in circular goods

High tariffs on circular products constitute a hindrance to the dissemination of circular products. While the relevant literature on circular economy tariffs is rather limited, in part because of the absence of a definition of a circular good, an interesting study by Steinfatt looks at tariff protection applied by Members on a select group of circular products.[34] He finds that, with respect to these products, the most-favoured nation (MFN) tariffs applied by Members have an average of 5.4.%[35], while average MFN tariffs applied on these goods by individual Members ranged from 0 to 20%, and up to 50%.[36] These numbers suggest that **reducing or eliminating tariffs on circular products would facilitate trade in these products, thereby enabling a circular transition**.

Lowering tariffs on goods, including circular goods, is allowed under the WTO, provided that the tariff reductions do not discriminate between different trading partners. The MFN principle requires that a WTO Member extends the same advantages and privileges to "like" products from different trading partners. To find that products are "like" under GATT Article I, panels have traditionally looked at four factors: customs classification, physical properties and qualities, end-uses, and consumer tastes and habits.[37] Specifically, the differentiation between products based on the physical presence of toxic residue has been found relevant for the analysis of physical characteristics. With respect to consumer preferences, panels have looked at substitutability between the two products at issue – with low degrees of substitutability to be used as factors to establish that products are non-"like". If products are not considered "like", it ends the discrimination analysis. If products are considered "like" then discrimination will be present if the measure "modifies the conditions of competition between like imported products to the detriment of the third-country imported product at issue".[38]

[34] Steinfatt (2020).
[35] This does not include lower tariffs typically set out in an RTA. (Steinfatt (2020), *ibid.*)
[36] Steinfatt (2020).
[37] See e.g. Appellate Body Report, *Japan – Alcoholic Beverages II*. See also Panel Report, *US – Gasoline*, para. 6.8.
[38] Appellate Body Reports, *EC – Seal Products*, para. 5.90.

An important consideration in the discrimination analysis is whether the measure concerns a process and production method (PPM). In situations where there is no physical difference between circular and non-circular products, it will be more difficult to establish that products are "not like" compared to a situation where the PPM changes the physical product. For example, applying a lower tariff on woven fabrics that are produced with water inputs below a specified threshold level than to woven fabrics that were produced with regular amounts of water inputs tends not to have any physical effects on a product, which would make it difficult to establish that these products are "not like". If these different techniques are mostly associated with imports from different trading partners, and circular and non-circular products are considered "like", it is likely that tariff reductions on products will constitute discrimination under GATT Article I.

If discrimination exists, it can still be justified if compliance with the general exceptions clause in GATT Article XX can be demonstrated. This will require demonstrating, in a first step, that the measure was adopted to pursue a legitimate regulatory objective (*inter alia*, demonstrating that the measure was "necessary to protect human, animal or plant life or health", or "relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with the restrictions on domestic production and consumption". In a second step, it will require demonstrating, under the so-called chapeau, that the measure was "not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on trade".[39]

Depending on the specific facts, discriminatory treatment based on circular PPMs – like water usage in woolen products – could be considered necessary to protect human, animal or plant life or health and/or related to the conservation of natural resources. Whether it was applied in compliance with the chapeau will depend on the specific circumstances of the situation. This suggests that under GATT Article XX, **policy space exists for countries to reduce tariffs on circular products, when the circularity stems exclusively from PPMs**.

Nevertheless, the WTO architecture as applied to discrimination based on environmental grounds requires a justification of the measure concerned under the general exceptions clause. As a result, in the context of dispute settlement, responding parties have the burden of proof to show that a discriminatory measure is justified under GATT Article XX. **To encourage tariff reduction for circular goods when the circularity of the product stems from a product's PPMs, Members could consider agreeing that these measures are rebuttably presumed to be justified under GATT Article XX**. This would shift the burden to demonstrate that the discriminatory measure is *not* justified to the complaining parties, thereby enhancing alignment between measures that seek to promote circular goods and the WTO.

Tariff reductions for products that are produced in accordance with circular PPMs could further be facilitated by Members by agreeing on circularity PPMs for specific product categories. This could be done in collaboration with industry, technical experts, and experts from

[39] GATT Article XX.

the World Customs Organization (WCO). Members could also agree that products produced in line with the agreed-upon circularity PPMs should be distinguished from linear products, for purposes of the "likeness" analysis under GATT.

Beyond these legal considerations, reducing tariffs on circular goods also raises practical, technical, and political issues. In 2014, a group of 46 Members began negotiations on an Environmental Goods Agreement (EGA) with a view to liberalizing trade in environmental goods. However, these negotiations were suspended in 2016, in part due to failure to agree on a definition of an "environmental good".[40] By and large, developing countries did not participate in these negotiations. **Seeking to revive, and potentially expand, the EGA negotiations could be one way for the WTO to actively promote trade in circular goods.** Reviving the EGA negotiations and including a subcategory for circular goods will require agreement on the definition of a circular good.[41]

Alternatively – or in parallel – Members can decide to pursue developing non-binding guidelines to address some of the technical and developmental issues that must be resolved in the context of liberalizing trade in circular goods. Developing such guidelines would provide an opportunity to guide Members to think through the various technical issues associated with liberalizing trade in circular goods. Given their non-binding nature, they would enable progress on circular goods to be made, even if Members continue to disagree on certain issues.

For an inclusive circular economy, it is critical that developing countries benefit from the recommendations proposed. Unlike the suspended EGA negotiations, **a process to adopt non-binding guidelines would enable developing countries to think through how they can derive developmental benefits from liberalizing trade in circular goods**.

4.1.2. Liberalizing trade in circular services[42]

For developing countries, removing restrictions on trade in services relevant to the circular economy (such as market access restrictions or measures that restrict foreign businesses from obtaining licenses) **will be critical to their circular economy transition**.[43] Indeed, developing countries could derive benefit from foreign companies specializedin for example sorting and waste processes. At the same time, developed countries could benefit from for example developing countries' repair services.[44]

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[40] C. van der Ven and L. Signé, "Greening the AfCFTA: It Is Not Too Late" (2021), Brookings Institute Policy Brief.
[41] A good can be circular because: (i) it is produced in a manner that uses fewer resources (e.g. cotton t-shirts produced with less water inputs); (ii) it has a circular end-use (e.g. recycling technology); and/or (iii) it exhibits product characteristics that render it circular (e.g. it is easy to recycle/repair).
[42] Discussing the role of services in the context of the WTO also touches on investment. This is because mode 3, further explained in Box 1 below, covers FDI in services. For purposes of this paper, this section on services seeks to focus on services generally, whereas section 4.1.3 below covers FDI more specifically.
[43] Chatham House, "An Inclusive Circular Economy: Priorities for Developing Countries" (2019). Available at : https://www.chathamhouse.org/2019/05/inclusive-circular-economy/4-investing-fundamentals.
[44] Ibid.

Box 1. Modes of GATS commitments as applied to the circular economy

Market access commitments in services are scheduled per service "mode". Specifically, Members can use four different services modes in their schedules:

- **Mode 1: Cross border supply**. This would involve an engineering firm situated in country A preparing a plan to install an industrial recycling process in country B. The work is carried out from country A, and the designs are shared over email or mail.
- **Mode 2: Consumption abroad**. This would involve a consumer from country A travelling to country B where he repairs his broken smartphone by using repair services.
- **Mode 3: Commercial presence/FDI**. This would involve a situation where an engineering company from country A opens a branch office in country B to install the industrial recycling services plans.
- **Mode 4: Presence of natural persons**. This would cover a situation where the industrial services engineer travels to country B in order to install the industrial recycling services plan.

Under the GATS, countries can open their markets to foreign service suppliers by making commitments in different services sectors, including with regards to services relevant to the circular economy. **Additional market access for circular economy-relevant service suppliers could facilitate a circular economy transition**. Four challenges can be identified, however, that could potentially hinder trade in circular services for developing countries under GATS: the lack of services commitments made by developing countries generally; the outdated services classification used to make market access commitments; inadequate domestic regulation relevant to circular services, especially in developing countries; and the heterogeneity of services domestic regulations across different trading partners.

First, developing countries have made fewer services commitments compared to developed countries, reflecting the flexibility provided to developing countries under the GATS, as well as a reluctance to provide foreign service suppliers market access based on competition-related concerns. As a result, only few developing countries currently allow foreign service suppliers into their markets and, where they do, it is limited to a few services categories.

Second, when making services commitments, **Members use the Services Sectoral Classification List W/120 as a basis for their services commitments**. The W/120 is, however, insufficiently precise to capture services relevant to the circular economy. For instance, the W/120 does not contain subcategories for waste recycling, or product design services.

Third, **market access for foreign services may be hampered by a lack of adequate domestic regulation of services**, which includes authorization procedures for services providers. Moreover,

in many developing countries, regulatory frameworks for circular services such as repair, recycling, and refurbishing are not well developed.

Fourth, **the existence of different regulatory frameworks applicable to circular services across different trading partners constitutes a market access barrier for circular services suppliers**. Understanding different regulatory requirements while ensuring compliance with these requirements is both costly and time-consuming.

To ensure developing countries have adequate access to relevant circular services it would be important for them to make additional commitments in services related to the circular economy. At the same time, **to ensure that companies in developing countries providing circular services can enter foreign markets, it is critical that developed countries also make market access commitments in services relevant to the circular economy**. Members can agree to making additional market access commitments in their services schedules, including through a revised – and expanded – EGA. Similar to the discussion for circular goods, doing so will likely generate various political difficulties, and it will be difficult to gain traction from developing countries for reasons discussed previously. However, **exploratory discussions on environmental services have gained some traction in the Council for Trade in Services special session meetings** (CTS-SS), with some Members identifying specific services that could be relevant to the environment.[45] This suggests that there might be increased willingness to discuss additional market access commitments relevant to the circular economy.

In parallel, Members could consider **expanding the W/120 services categories by adding additional services in sectors related to the circular economy,** as set out in Table 2 below. This expanded W/120 list could be based on the latest version of Central Product Classification (CPC), which includes a more extensive list of circular services compared to the current version of W/120.[46] Circular services should encompass not only services classified as "environmental services", i.e. services that are intrinsically environmental, but also services that are environmental/circular by virtue of their end-use, such as design services or consulting services, which are essential inputs for the circular economy transition. Many of these additional services would fit under existing sectors in W/120. To maximize buy-in, it would be important for the revised W/120 services classification list to be non-binding without imposing obligations on Members.

[45] See e.g. Exploratory discussion on market access: environmental services, 21 July 2022, JOB/SEV/299/Rev.4.
[46] See also Guide to reading the GATS schedules of specific commitments and the list of Article II (MFN) exemptions on the WTO website: https://www.wto.org/english/tratop_e/serv_e/guide1_e.htm.

Table 2. Examples of circular services listed in the CPC 2.1

Circular service set out in the CPC	Corresponding GATS Sector or subsector
CPC 83326 – Engineering services for waste management projects (hazardous and non-hazardous)	Professional services (engineering service)
CPC 871 – Maintenance and repair services of fabricated metal products, machinery and equipment	Other business services (maintenance and repair of equipment)
CPC 872 – Repair services of other goods **CPC 8721 – Repair services of footwear and leather** **CPC 87230 – Repair services of garments and household textile**	Other business services (maintenance and repair equipment)
CPC 894 – Materials recovery (recycling) services, on a fee contract basis (subcategories for non-metal waste and metal waste)	Other business services
CPC 9422 – Collection services of non-hazardous recyclable materials	Environmental services
CPC 94312 – Shipbreaking and other dismantling of wreck services	Environmental services

One way to tackle the third challenge, i.e. the lack of adequate regulatory principles for circular services, would be by developing non-binding guidelines relevant to the domestic regulation of circular services. For example, within the context of the Working Party on Domestic Regulation, Members could discuss best regulatory practices associated with regulating circular services. **At the same time, it would be important for countries to implement the Reference Paper on Services Domestic Regulation (Reference Paper),** concluded in December 2021, which includes disciplines on transparency, predictability, and the effectiveness of authorization procedures for service providers.[47] Once a Member has inscribed these disciplines as additional commitments into its schedule of specific commitments, these disciplines will also apply to any new market access commitments on services relevant to the circular economy and could facilitate their entry on the market.

[47] https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/INF/SDR/1.pdf&Open=True.

4.1.3. Promoting and facilitating Investment relevant to advancing the circular transition

Attracting investment in resource-efficient industries, digital solutions, and circular economy infrastructure will be critical to advance a circular transition in developing countries. **Governments must engage in a proactive strategy that demonstrates the potential of investments in the circular economy.**[48]

While the WTO does not have an agreement on investment, the GATS is relevant, especially mode 3 (cross-border supply), which corresponds to Foreign Direct Investment (FDI) as further explained in Box 1 above.

One way in which Members can facilitate investment in circular economy-relevant services sectors is by making commitments for mode 3 in the relevant services sectors. This will require addressing classification issues, as set out in section 4.1.2 above. **Another way would be for Members to join the plurilateral JSI on Investment Facilitation where negotiations on an IFD Agreement are currently ongoing at the WTO.**

Indeed, should it be agreed, adopted and integrated into the WTO legal framework, the IFD Agreement would improve regulatory transparency and predictability, streamline and speed up administrative processes and enhance regulatory coherence and international regulatory cooperation. By implementing these principles in their domestic legal frameworks, developing countries would become more attractive investment destinations, including for investors in the circular economy.

Moreover, the current draft IFD Agreement makes references to provisions on responsible business conduct, such as the voluntary principles set out in the UN Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises (OECD Guidelines), and the ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy. The IFD Agreement could be leveraged to encourage businesses to adopt circular principles in their business practices and policies.

Specifically, the OECD Guidelines encourage enterprises to "establish and maintain a system of environmental management", and "continually seek to improve corporate environmental performance", including by: (i) developing products or services that are efficient in their consumption of energy and natural resources, and can be reused, recycled, or disposed safely, (ii) providing accurate information to consumers about their products, including with regards to resource efficiency, GHG emissions and biodiversity, and (iii) exploring ways to improve environmental performance over the long run, including by developing strategies for emission reduction, efficient resource utilization and recycling, substitution or reduction of use of toxic substances, or strategies relevant to biodiversity preservation.

[48] https://www.chathamhouse.org/2019/05/inclusive-circular-economy/4-investing-fundamentals.

In sum, GATS mode 3 commitments and the IFD Agreement could be leveraged to remove obstacles to investment. In addition, provisions on responsible business conduct in the IFD Agreement, including their references to the OECD Guidelines, could be used to encourage the uptake of circularity principles by domestic and foreign investors.

4.1.4. Enabling access to technologies relevant to the circular economy transition

An inclusive circular economy transition presupposes access to relevant technologies, including technologies that enhance product design, render the production process more efficient, state-of-the art recycling technology, and technology relevant to render supply chains more transparent by product tracking. Yet a Chatham House-UNIDO survey found that **one of the greatest obstacles to implementing a circular economy transition in developing countries is a lack of access to the requisite technologies**.[49]

In this regard, **investing in a well-functioning IP system in developing countries could have potential positive effects in the creation and diffusion of circular economy technologies in developing countries**. For example, patents can serve as accelerators of technology diffusion, help potential investors identify inventors, and could open the door to financial resources.[50] This could have significant benefits, in particular for smaller-scale innovations in developing countries.[51]

At the same time, **the TRIPS Agreement also recognizes the special needs of LDCs**, to ensure they receive "maximum flexibility in the domestic implementation of laws and regulations in order to enable them to create a sound and viable technological base".[52] The TRIPS Agreement contains flexibilities that allow developing countries and/or LDCs to relax some basic obligations on intellectual property protection. These flexibilities could be utilized to facilitate greater access to critical circular technologies for developing countries**.**

This section focuses on the role of compulsory licence provisions and technology transfer provisions in TRIPS, and analyses how they might hinder or promote the transfer of technology to developing countries. It also highlights relevant initiatives introduced by the World Intellectual Property Organization (WIPO) that could play an important in role in stimulating the diffusion of circular-economy relevant technologies in developing countries and LDCs.

4.1.4.1 Compulsory licensing

Compulsory licensing provisions set out in the TRIPS Agreement could promote developing countries' access to critical circular technologies but might benefit from additional

[49] https://www.chathamhouse.org/sites/default/files/publications/research/2019-05-22-Circular%20Economy.pdf.
[50] TRIPS Council, "Intellectual Property and Innovation: Making MSMEs Competitive in Green Tech". 26 February 2021. IP/W/675.
[51]
[52] TRIPS Agreement, Preamble.

clarification as to how they apply with respect to circular technologies. The TRIPS Agreement enshrines exclusive rights of patent holders to use, offer for sale, sell, or import the patented good, as well as to assign, transfer, and license the patent. However, to ensure that a balance between intellectual property rights and obligations is reached, the TRIPS Agreement incorporates flexibilities for developing countries.[53] For instance, Article 31 of the TRIPS Agreement allows Members (or a third party authorized by a Member) to use a patent without the authorization of the patent owner under certain circumstances – also known as "compulsory licensing" – subject to compliance with various conditions and requirements.

Specifically, to issue a compulsory licence: (i) the applicant must have tried to negotiate a voluntary licence; (ii) the scope and duration must be limited to the purpose for which it was authorized; (iii) the use should not be exclusive; (iv) the use should be predominantly for the supply of the domestic market; (v) the patent owner must be paid an adequate remuneration; (vi) it should be subject to legal review. The requirement that efforts to obtain consent from the right owner have been made can be waived in a situation involving a "national emergency or other circumstances of extreme urgency, or in the cases of public non-commercial use."[54]

Countries could use these compulsory licensing provisions to ensure access to critical circular economy technologies. However, developing countries might consider seeking a clarification and/or review of how compulsory licensing can be applied in the context of the circular economy, similar to the discussions that took place in the context of access to technology and public health. Establishing that climate change/unsustainable resource use fulfils the requirements of a "national emergency" under TRIPS Article 31, would further enable governments to issue compulsory licenses without first making efforts to seek prior consent from the patent right owner.

Developing countries can make a request to seek a clarification and/or review of the applicability of compulsory licensing to the circular economy through the TRIPS Council. It must be noted, however, as evidenced by the recent Ministerial Declaration on the WTO Response to the COVID-19 Pandemic and Preparedness for Future Pandemics and the Ministerial Decision on the TRIPS Agreement, that, politically, pursuing clarifications as to how compulsory licensing applies with respect to an inclusive circular economy transition will likely be challenging.

It is also important to point to another important potential limitation of compulsory licensing: while compulsory licensing addresses patent barriers and thus facilitates access to patented technologies, it does not automatically mean a developing country/LDC will be able to produce the technology. Rather, doing so would require adequate technological capacity and specific know-how of the production process. The extent to which this could hinder the uptake of patented circular technologies in developing countries and LDCs will depend on whether circular technologies are easy to copy once patented barriers are removed (e.g., simple circular economy technologies) or whether it would be difficult to imitate the technology (e.g., complex

[53] LDCs are exempted from most TRIPS obligations until 2034.
[54] TRIPS Agreement, Article 31.

circular economy technologies). This must be further explored in the context of circular economy technologies.

4.1.4.2 Technology transfer

TRIPS Article 66.2 requires developed countries to provide incentives to enterprises and institutions in their territory to transfer technology to LDCs to enable them to establish a viable and sound technological base, which would cover technologies relevant to the circular economy transition. However, various shortcomings stand in the way for this provision to result in the transfer of critical circular technologies to LDCs. This includes the fact that Article 66.2 does not require developed countries to transfer technology to LDCs; instead, it merely focuses on providing incentives to enterprises to do so. Relatedly, the provision is silent on what constitutes "incentives" or "technology transfer". As a result, technical transfer provisions under TRIPS have generally been ineffective.

This could be addressed, in part, with proactive engagement from LDCs. Specifically, LDCs could identify needs and priorities relevant to the circular economy, to ensure the incentives provided by developed countries are focused on the transfer of these technologies. This list should be put together in collaboration with industry and environmental experts. Moreover, **LDCs could request developed countries to consistently submit annual reports detailing the incentives they have provided for technology transfer in the context of the circular economy.**

These discussions could take place within the TRIPS Council. In addition, **various technical assistance initiatives both within and outside the WTO could further strengthen developing countries and LDCs' ability to access critical circular technologies**. In this regard, the "Aid for Trade" programme of the WTO would be important, as well as initiatives adopted by WIPO and the United Nations Framework Convention on Climate Change Technology Mechanism.

Box 2. Overview of different roles of Aid for Trade to advance the circular transition in developing countries

Aid for Trade, which seeks to strengthen developing countries' skills, supply capacity and trade-related infrastructure to increase their benefits from WTO agreements, will be critical in supporting developing countries' circular economy transitions. Indeed, the WTO Aid for Trade work programme for 2020-2022 identifies the circular economy as a focus area, highlighting the opportunities that the circular economy offers for economic and export diversification in developing countries. It further notes that Aid for Trade "can support the necessary changes in technology, product design and trade policy necessary to make production and consumption more sustainable while opening new trade opportunities".

At a policy level, Aid for Trade can promote and help developing countries integrate trade principles in their circular economy plans. Another area would be support to developing sectoral circular approaches, based on key industries in developing countries/circularity hotspots such as textiles, agrifood, electronics, and services.[1] Relatedly, improving the evidence base will be critical. Indeed, access to trade-related data, as well as industry-specific figures is the basis for informed and fact-based policy making, including in the context of the circular transition. For many developing countries, data on trade-related aspects of circularity is practically non-existent. This means that measuring and monitoring circularity and its trade-related aspects should be a priority area of Aid for Trade programmes.

Aid for Trade can also play an important role to build capacity and infrastructure in developing countries to meet more stringent circular economy standards. Assistance programmes could mirror the Standards and Trade Development Facility (STDF) activities but then focus on training businesses, governments, and other relevant stakeholders to change production to meet circular economy standards. Aid for Trade funds must also be directed to developing and strengthening the customs infrastructure and capacity, including by digitalizing and automating PIC procedures and providing training to customs officials on how to differentiate between different types of end-of-life products.

Moreover, Aid for Trade funds could be used to help develop capacity in circular industries in developing countries. For example, funded by the Enhanced Integrated Framework (EIF), the WTO, the United Nations Conference on Trade and Development (UNCTAD) and the International Trade Centre (ITC) are developing a pilot in eight African LDCs that produce cotton, focusing on how re-using cotton waste can achieve value-added and deliver benefits to smallholder farmers while minimizing waste. To optimize benefits of Aid for Trade, it is critical that developing countries identify priorities, opportunities, and challenges related to aid for sustainable trade and develop concrete proposals for the next steps. This can be done as part of the meetings of the WTO Committees on Trade and Development (CTD) and Trade and Environment (CTE).

Box 3. Overview initiatives relevant to Environmentally Sound Technologies (EST)

Outside the WTO, important initiatives exist that could play an important role in the dissemination of circular technologies. For example, the World Intellectual Property Organization (WIPO) has set up WIPO GREEN, a marketplace designed to connect providers and seeks of EST technologies, including circular technologies. All the technologies listed in the database are available for licensing, collaboration, joint venture and sale.

Another relevant initiative is the United Nations Framework Convention on Climate Change Technology Mechanism ("The Mechanism) which seeks to promote and facilitate collaboration between climate technology stakeholders of developing and developed countries. This Mechanism, inter alia, provides technical assistance and training to strengthen countries' capacity to identify and adapt EST technologies.

Source: TRIPS Council, Intellectual Property and Innovation: Making MSMEs Competitive in Green Tech". 26 February 2021. IP/C/W/675.

4.1.5. Subsidizing circular activities/discourage subsidies for linear activities

There are two types of subsidies that play an important role in the circular transition: first, subsidies that seek to support the circular economy, including subsidies for relevant circular infrastructure, or the take-off of infant industry that produces secondary raw materials; and, second, subsidies that support resource intensive and environmentally unsustainable industries and may undermine the effectiveness of subsidies given to renewables. The subsections below analyse in more detail ways in which existing WTO rules promote or constrain Members' ability to grant circular and non-circular subsidies.

4.1.5.1. Policy space for circular economy related- activities under the SCM Agreement

Whether a subsidy is or is not allowed under the SCM Agreement is contingent upon its market-distorting effect, not its environmental implications. Specifically, under the SCM Agreement, Members are allowed to provide subsidies provided that they are not contingent upon: (i) export performance; or (ii) the use of domestic over imported goods.[55] Further, subsidies that are "specific" – by targeting particular recipients – may be actionable if they are found to cause adverse effects to the interests of other Members.[56] For subsidies granted in the context of the circular economy transition, it means that developing countries and LDCs should, generally, stay away from making these subsidies contingent upon local input and/or export. For example, if a country were to subsidize businesses that use post-industrial waste recycling, but only if these businesses produce for the export market, the subsidy will run afoul of the SCM Agreement.

[55] SCM Agreement, Article 3.1.
[56] SCM Agreement, Article 5.

However, as set out in Article 27 of the SCM Agreement, the prohibition on export subsidies does not apply to LDCs and countries with per capita annual income of less than USD 1,000 – but those countries will likely not be in a position to provide large amounts of subsidies.

Where subsidies are not contingent on export performance or the use of domestic goods over imported - for example subsidies to R&D design granted to all businesses seeking to transition towards a circular economy - ample policy space exists under the WTO. Indeed, for non-contingent subsidies, the heavy evidentiary burden associated with demonstrating adverse effects of actionable subsidies renders it less likely that cases associated with such subsidies would be filed under the WTO. Moreover, the jurisprudence has recognized some flexibility in the context of renewable energy, finding that where a WTO Member "creates" a new market for renewable energy like solar panels and wind turbines as part of a feed-in-tariff scheme, this process is not necessarily considered a "subsidy" within the meaning of the SCM Agreement.[57] This interpretation could guide a panel's thinking in the context of subsidies for circular products, especially in instances of market failures.

Nonetheless, **a case could also be made to introduce a category of non-actionable subsidies, similar to the expired provisions in SCM Article 8, to provide more flexibility to subsidies related to the environment/circular economy**. In particular, this could exempt R&D subsidies for research related to the circular economy, or include exemptions for subsidies that offset adjustment costs of "new environmental requirements" relevant to the circular economy/environment. For example, when a law is adopted that establishes new environmental requirements, such as Extended Producer Responsibility (EPR), time-bound subsidies provided to companies to adopt this new requirement could be exempted under the SCM Agreement. **It could also be of interest for countries to re-establish SCM Article 8 and seek a textual clarification that "new environmental requirements" under SCM Article 8.2(c) cover circular economy transition policies and rules.** While developing countries pushed for the expiry of SCM Article 8, reflecting worries that developed countries would mostly benefit from this, reactivating it might nudge countries to adopt "good" subsidies necessary for the circular economy transition.

4.1.5.2 Disciplines for non-linear subsidies

The flipside of ensuring sufficient policy space for circular subsidies is restricting policy space for fossil fuel subsidies, which underlie the linear economy. To this end, a number of Members launched the FFSR discussion, which seeks to phase out inefficient fossil fuel subsidies that contribute to wasteful consumption.[58] The goal is to increase dialogue and sharing of information and exchanges at the WTO to develop momentum to phase out fossil fuel

[57] See Appellate Body Reports, *Canada – Renewable Energy / Canada – Feed-in Tariff Program*.
[58] https://wtoplurilaterals.info/plural_initiative/fossil-fuel-subsidy-reform-ffsr/

subsidies.[59] **It would be important for discussions that seek to introduce disciplines on fossil fuel subsidies to continue in the framework of the WTO.**

While fossil fuels subsidies are considered to have an inhibiting effect on the circular economy transition, **the discussions at the WTO should reflect the concept of "Common but Differentiated Responsibilities"** and take into account the fact that developing countries, , should not be penalized for a problem they did not create.[60]

4.1.6. Reflecting circular principles in government procurement

Developing countries can also stimulate a domestic economy transition by levering public procurement in favour of circular products and processes. Attraction of investment in public procurement may be stimulated by joining the revised Agreement on Government Procurement (GPA). However, except for two developing countries, no developing country has yet signed on to the GPA, which is a plurilateral agreement and thus optional.

The GPA regulates government procurement for the 48 Members that have signed on to the Agreement. GPA parties must ensure that procurement procedures conducted by covered procuring entities are transparent, subject to due process, and do not discriminate against goods, services, and suppliers of any other GPA party. The GPA allows covered procuring entities to adopt standards and requirements containing performance-based or functional specifications, which may include sustainability and circular economy considerations, since technical specifications may seek to protect the environment or promote the conservation of natural resources.[61] Hence, GPA Members are allowed to introduce circular economy and related specifications in their procurement procedures as long as they satisfy the appropriate procedural guarantees. At the same time, GPA Members are encouraged to base their specification on international standards or, where those do not exist, on national technical regulations, standards, or building codes.[62]

Accession to the GPA might be in developing countries' interest as it demonstrates a commitment to good governance and adopting best practices in government procurement. This, in turn, can attract foreign investment and thereby bring in new technologies and know-how to the domestic market. The GPA provides for additional flexibilities to developing countries and LDCs by allowing transitional periods, temporary price preference programmes, and offsets, when negotiating their accession to the GPA. It also constitutes a primary avenue for technical cooperation and capacity building in favour of developing countries.[63]

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[59] Ibid.
[60] R. Wood et al., "Growth in Environmental Footprints and Environmental Impacts Embodied in Trade: Resource Efficiency Indicators from EXIOBASE3: Growth in Environmental Impacts Embodied in Trade" (2018), 22 *Journal of Industrial Ecology* 553.
[61] Ibid; GPA, Article X.6.
[62] GPA, Article X.2(b); e.g. ISO 10845-1:2020, Construction procurement.
[63] WTO Secretariat, "Key Take-Aways from the Committee's Symposium on Sustainable Procurement" (2017), Report GPA/W/341.

The GPA could also create a platform to support a dialogue on sustainable procurement practices relevant to the circular economy. Specifically, such a dialogue could be pursued as part of the GPA Work Programme on Sustainable Government Procurement.[64] This could include technical assistance programmes with regards to sustainable government procurement systems.

4.1.7. Overview of findings and options

Table 3 below summarizes the main elements looked at in this section, highlighting the technical and legal challenges to be addressed, and various options on how the WTO can address those. It also sets out specific considerations for developing countries and LDCs.

[64] Yamaguchi (2018).

Table 3: Summary table of the role of the WTO in facilitating an inclusive circular transition

Policy	Technical and/or legal Impediments	Options	Implications for developing countries
Liberalizing trade in circular goods	The continued application of high tariffs on circular products constitutes a barrier to trade in such products.	Incentivizing tariff reductions on circular goods through revitalizing and expanding the stalled EGA negotiations.	• Based on the EGA negotiations, developing countries might be reluctant to participate in a revived EGA negotiations, due to perceptions that developed countries are seeking to pursue a market access agenda disguised as an environmental agenda. • Developing countries could consider identifying the circular/environmental products that have benefits for them, and those that do not, and adopt a negotiation strategy accordingly.
		Developing non-binding guidelines to address technical and developmental issues that must be resolved in the context of liberalizing trade in circular goods.	• Developing countries will likely favor this approach over participating in the revived EGA negotiations as it does not solely focus on market access.
	Applying different tariffs to circular and non-circular products based on their PPMs may amount to	Considering to agree that different tariffs for circular products based on environmental grounds are rebuttably	Concerns might be raised that changing the burden of proof under GATT Article XX would mostly benefit developed countries, at the expense of developing countries and LDCs.

	discrimination under GATT Article I.	presumed to be covered by GATT Article XX.	
Liberalizing trade in circular services	A number of Members, especially developing countries and LDCs, have not made significant services liberalization commitments, including in areas relevant to the circular economy.	Reviving and expanding the EGA negotiations, to ensure services (relevant to the circular economy) are also included.	Developing countries might want to consider identifying services that would be beneficial to advance a circular economy transition and seek to liberalize their delivery.
	Outdated services classifications GATS services classification list in W/120, do not comprehensively reflect circular services.	Update the W/120 by including circular services, based on existing circular services categories set out in the CPC 2.1.	
	Inadequate, untransparent or cumbersome domestic regulation relevant to circular services.	Develop non-binding guidelines relevant to the domestic regulation of circular services, within the context ofthe Working Party on Domestic Regulation . Members should also consider signing onto the Reference Paper on Services Domestic Regulation.	Developing countries might want to consider participating in developing non-binding guidelines relevant to circular services regulation and consider the benefits of the Reference Paper on Services Domestic Regulation.
Facilitating and promoting investment relevant to advancing the	Absence of comprehensive rules on investment in the WTO, apart from TRIMs and GATS mode 3.	• Adopting market access commitments in services sectors relevant to the circular economy, with an emphasis on Mode 3.	Developing countries might want to consider joining the JSI on Investment Facilitation, and make relevant Mode 3 commitments, where this is aligned with their development objectives.

circular economy transition		• Concluding the JSI negotiations on Investment Facilitation.	
Enabling access to technologies critical to a circular economy transition	While compulsory licensing and technical transfer provisions in the TRIPS Agreement can be leveraged to facilitate access to critical circular technologies for developing countries, the flexibilities build into the agreement may not be sufficient to do so.	• Developing a list of critical circular technologies for which countries might want to engage in compulsory licensing. • Facilitating technology transfer for the circular economy under TRIPS Article 66.2 by introducing priorities on technologies that will be critical for a circular economy transition, and/or technologies that will be relevant for specific sectors.	Developing countries and LDCs might want to consider determining priority areas for developing a viable and sound base that best fits their technological needs to identify how to best leverage the TRIPS Agreement to access pivotal circular technologies.
Subsidizing circular activities/ discouraging subsidies for linear activities	The SCM Agreement limits countries' policy space to provide certain types of circular economy subsidies	• Re-introducing a category of non-actionable subsidies, similar to the expired provisions in SCM Article 8, to provide more flexibility to subsidies related to the environment/circular economy. • Seeking a textual clarification that "new environmental requirements" under SCM Article 8.2(c) covers circular economy transition policies and rules.	Developing countries might want to explore how introducing a provision on non-actionable subsidies critical for a transition to a circular economy can benefit them.

	WTO rules do not restrict the provision of fossil fuels subsidies.	Continuing discussions towards developing disciplines on fossil fuel subsidies.	Developing countries should ensure that initiatives on fossil fuel subsidies reflect the concept of "Common but Differentiated Responsibilities" and take into account the fact that developing countries still heavily rely on fossil fuel subsidies.
Reflecting circular principles in government procurement	• The GPA includes provisions relevant to sustainable procurement • Only two developing countries are parties to the GPA.	Developing non-binding guidelines for best practices in sustainable government procurement, as part of the GPA Work Programme on Sustainable Government Procurement.	Developing countries might want to consider the benefits of joining the GPA with respect to accessing goods, services, and technology relevant to the circular economy. In this context, developing countries should identify the type of technical assistance relevant to developing countries in setting up a sustainable government procurement system.

4.2. The role of the WTO in addressing the implications of reverse supply chains for developing countries

This section explores how the rules of the WTO either impede or advance the ability of developing to address the implications associated with trade in reverse value chains. Table 4 below sets out relevant WTO instruments to be explored in this section.

Table 4. Linking policies that address implications of reverse value chains to WTO agreements

Trade-related policies to be considered	WTO instruments
Facilitating trade in "wanted" waste	GATT/TBT/Trade Facilitation Agreements
Restricting trade in "unwanted" waste	GATT
Facilitating trade in remanufactured goods	GATT

4.2.1. Facilitating trade in "wanted" waste

In order to leverage opportunities while minimizing potential negative effects of the global transition to a circular economy, countries should facilitate the import of "wanted" waste products. This is the sorted and non-contaminated waste that could serve as feedstock for a country's waste recycling facilities. At the same time, they should restrict trade in "unwanted" contaminated, hazardous, and hard-to-recycle waste which could exacerbate developing countries' waste problems, especially when the waste is hard to recycle and/or when a country lacks adequate waste-processing facilities.

Two key issues emerge in this context: (i) the extent to which the WTO rules allow Members to treat waste differently based on toxicity, recyclability, or other non-physical characteristics; (ii) difficulties in differentiating between "wanted" and "unwanted" waste, related to the misalignment between the Basel Convention and the HS code.

First, while reducing tariffs for non-toxic waste, but not for other types of waste, could be considered discriminatory under GATT Article I (see section 4.1.1 above), such discrimination could be justified, provided the conditions of GATT Article XX are met. Similar to the recommendation set out in section 4.1.1, **to encourage tariff differentiation based on the type of waste that is being traded, Members could agree that such differential treatment is rebuttably presumed to be covered by GATT Article XX if in compliance with the Basel Convention**.

Second**, a key challenge in facilitating trade in so-called "wanted" waste is the difficulty customs officials encounter to differentiate between different types of waste**. The HS establishes categories for waste on the basis of physical characteristics – not toxicity levels or ease of recycling. This does not enable customs officials to identify whether the waste that is being

imported is toxic or not, and relatedly, whether it is controlled by the Basel Convention. For trade in controlled waste, the Basel Convention requires that Prior Informed Consent (PIC) be obtained from the importing and transiting countries.[65] Yet PIC is not required, for example, for controlled waste, i.e., non-hazardous waste that is easy to recycle.

To enhance the differentiation between different types of waste, Members could provide input and suggestions to the WCO, which updates the HS periodically to address technology developments and changes in trade patterns and policy requirements.[66] Recent updates have included new and updated codes for secondary goods, such as electronic waste. Similarly, the Basel Convention Secretariat and WCO released a draft in 2020 containing proposed amendments to the HS with respect to plastic waste.[67] However, this is a relatively lengthy process: it took almost two decades to develop the electronic waste (e-waste) updates.[68] This calls for intermediate solutions.[69]

To enhance alignment between product classification and the Basel Convention, an informal working group could be established under the CTE, addressing issues relevant to classification of waste and other matters relevant to aligning the WTO and the Basel Convention provisions. Specifically, through the working group, Members could agree on similar criteria to determine whether waste is hazardous or non-hazardous, a determination that is currently made at national level.[70]

In addition, it is imperative to strengthen customs procedures to distinguish between different types of waste. At the national level, o**ne approach could be to establish a "green listing" for companies that have been importing plastic waste and have a record of compliance with customs and other laws and regulations.** Green listing could improve longer-term approval validity for PIC procedures.[71] The green listing approach can be based on the Trade Facilitation Agreement (TFA), which has developed a special category for "Authorized Operators", i.e., operators that meet specific criteria such as appropriate record of compliance with customs and other regulations, financial solvency, supply chain security, and a system of management records for necessary internal control**.** This could be used as a basis for countries' national customs authorities to facilitate market access for green listed companies.

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[65] The PIC procedure sets out strict requirements for transboundary movements of waste and involves four different steps: (i) notification by the state of export or by the exporter to the appropriate authorities of export, import, and transit; (ii) written consent by transport/importing states; (iii) the use of transboundary movement document from point of export to disposal; and (iv) the confirmation of disposal.
[66] C. Deere Birkbeck, "Greening International Trade: Pathways Forward" (2021).
[67] Secretariat of the Basel Convention, "Report on the Status of the Work of the World Customs Organization on the Harmonized Commodity Description and Coding System in Relation to the Basel Convention. Open-Ended Working Group of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal Twelfth Meeting. Annex III" (2020), UNEP/CHW/OEWG.12/INF/10.
[68] http://www.basel.int/Implementation/Ewaste/Overview/tabid/4063/Default.aspx.
[69] Barrie et al. (2022).
[70] Ibid.
[71] U. Clem and C. van der Ven, "Trade and the Circular Economy: A deep dive into plastics action in Ghana" (2021).

The TFA's advanced ruling provisions could likewise be leveraged to address some of the challenges encountered in the context of trade in waste. For example, companies trading plastic waste products that are easy to recycle could seek to obtain an advance ruling by relevant customs authorities on the relevant HS code, applicable to the waste products. This would be particularly beneficial if a country has created additional subcategories in its national HS code to further differentiate between hard- and easy-to-recycle waste. An advance ruling that the goods, in fact, correspond to the easy-to-recycle waste category, would provide certainty to the exporter with respect to the category in which the goods are classified, which would be valid for a reasonable period of time.

In addition, Members should leverage capacity building initiatives under the TFA to provide support to customs authorities in developing countries that lack the resources to adequately participate in the PIC system. In particular, digitalizing and automating the PIC procedure could be explored. This initiative could begin by focusing on the most problematic waste trade areas, such as plastics and electronics.[72]

Developing countries can further strengthen the infrastructure to increase participation in global markets for the circular economy by adopting a risk-based customs control and release process, building upon the risk management provisions set out in the TFA. Doing so could minimize the risk that "unwanted" waste enters the country, while facilitating imports of "wanted" waste and other secondary products. Risk-based customs processes also play a key role in cross-border e-commerce, which is rapidly becoming an important channel for trade in goods related to secondary products.[73]

4.2.2. Restricting trade in "unwanted" waste

To restrict "unwanted" waste, developing countries have often resorted to imposing import restrictions – whether on different types of second-hand products or on "unwanted" waste – to prevent exacerbating environmental problems or creating unsustainable economic situations. These import restrictions can come in the shape of an import ban or can be a set of minimum standards that the imported products must comply with.

GATT Article XI prohibits import prohibitions or restrictions other than duties, taxes or other charges. This means that restrictions on the import of certain types of hazardous wastes or second-hand products would likely violate GATT Article XI. However, as discussed earlier, these violations can be justified, provided that the conditions set out in GATT Article XX are met. Most likely, such an import restriction would fall within one or more subcategories of Article XX. Whether or not it will benefit from the general exceptions clause would thus depend on whether it meets the requirements under the chapeau, i.e., whether the discrimination is not arbitrary or unjustifiable, and whether it does not impose a disguised restriction on trade. Indeed, in *Brazil – Retreaded Tyres*, a ban on the import of retreaded tyres, motivated by environmental

[72] Barrie et al. (2022).
[73] Steinfatt (2020).

objectives, was considered to fall within a subparagraph of GATT Article XX, but ultimately did not benefit from the exceptions clause as the import ban was considered to not meet the requirements of the chapeau. **This means that policy space exists under the WTO to restrict "unwanted" waste or secondary products, provided it complies with the conditions set out in GATT Article XX.**

That said, and similar to earlier suggestions, to facilitate further alignment between circular measures and WTO rules, **Members could consider agreeing on a list of "unwanted" waste that is controlled by the Basel Convention. The import restrictions linked to this list would be rebuttably presumed to fall within the scope of GATT Article XX**. This would provide a signal to Members that restrictions on certain "unwanted" waste products are aligned with WTO rules, provided that certain conditions are met. This could be further explored.

Box 4. Import restrictions under GATT Article XI

In 2005, the European Union challenged Brazil's import ban on retreaded tyres. Retreading tyres involves a process that recycles tyres, thereby extending their lifespan by 30-100%. While this process advances "re-use", importing retreaded tyres can also lead to negative environmental outcomes. Because the lifespan of a retreaded tyre is considerably shorter compared to the lifespan of a new tyre, they result in higher levels of waste. In tropical countries like Brazil, tyres disposed in landfills can fill with water and become breeding grounds for mosquitos and vectors for disease, such as malaria and yellow fever.

Seeking to minimize challenges related to tyre waste, Brazil imposed an import ban on retreaded tyres. The European Union argued that the ban was discriminatory and constituted a WTO inconsistent quantitative restriction. Brazil argued that these violations were justified under the general exceptions clause set out in GATT Article XX, which authorizes trade law violations, *inter alia*, if the measures applied are necessary to protect human, animal or plant life or health. The panel found, and the Appellate Body confirmed, that Brazil's import ban on retreaded tyres was necessary to protect human life or health under Article XX(b). However, it was not applied in accordance with the chapeau of Article XX, given that MERCOSUR countries were exempted from the ban. Thus, the ban was considered discriminatory and a disused restriction on trade.

4.2.3. Facilitating trade in remanufactured goods

Remanufactured goods are often subject to various types of trade barriers, including higher tariffs, import licencing, and import prohibitions[74], thereby hindering the uptake of circular products. Partially, this is caused by the lack of widely accepted definitions that would facilitate differentiation between different types of secondary products and end-of-life goods:

[74] Kojima (2017).

remanufactured goods, second-hand goods, and waste. Moreover, the HS does not tend to have specific tariff headings for remanufactured goods.

To facilitate trade in remanufactured goods, Members could consider developing a commonly accepted definition of a remanufactured good. Indeed, an attempt to do so was made in July 2010, when a subset of developed countries submitted a negotiating text on the liberalization of trade in remanufactured goods.[75] This text was not approved, however, reflecting concerns raised by developing countries and LDCs that eliminating trade barriers to remanufactured goods could create adverse effects of imports on domestic producers of new goods, and hamper the transfer of more modern technologies to developing countries.[76]

To ensure that the WTO advances an inclusive circular economy transition that benefits developing countries and LDCs, a working group on trade in remanufactured goods could be set up under the Committee on Market Access, including stakeholders from both developed and developing countries.[77] This working group could provide an impetus to engage in additional research on implications that remanufactured goods flows will have on developing countries, focusing on specific industry sectors prone to remanufacturing. Such technical studies can provide an analytical basis upon which developing countries can adopt their WTO positions on liberalizing trade in remanufactured goods.

The working group could also address technical issues relevant to trade in remanufactured goods, such as misconceptions about differences between second-hand products and remanufactured goods, as well as the inadequacy of the HS to differentiate between waste and broken products for remanufacturing, given the fact that it contains HS codes for new and used goods, but mostly not for remanufactured goods.[78] **Specifically, the working group could collaborate with WCO stakeholders to identify how to best reflect remanufactured goods in the HS.**

Moreover, the working group could identify existing approaches to trade in remanufactured goods and provide recommendations on how those approaches can be harmonized. For example, some countries require a 'refurbishment certificate' for trade in refurbished products, in accordance with national standards such as the Remanufactured Industries Council (RIC) ANSI Standard (RIC001.1-2016)[79] or the British Standard for manufacture, assembly,

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[75] Communication: Market Access for non-agricultural products: Compendium, prepared by Japan, Switzerland, and the United States, containing the most recent NTBs text on a Ministerial Decision on Trade in Remanufactured Goods as well as the history of questions and answers related to this proposal 4 December 2009 (Negotiating Group on Market Access).

[76] Steinfatt (2020). Others have pointed to the benefits that developing countries could reap from the liberalization of trade in remanufactured goods, including opportunities to use capital goods that incorporate advanced technology at reduced prices, and the potential for local firms to engage in remanufacturing.

[77] Establishing a working group on trade and remanufactured goods was proposed by several Members, as part of a Ministerial Decision on Trade in Remanufactured Goods. (Communication: Market Access for non-agricultural products: Negotiating Text on Liberalizing Trade in Remanufactured Goods, prepared by Japan, Switzerland, and the United States (Negotiating Group on Market Access, 2010).

[78] OECD, "OECD Workshop on International Trade and the Circular Economy" (2020), Summary Report COM/TAD/ENV/JWPTE(2020)10/FINAL, 20.

[79] https://remanstandard.us/.

disassembly, and end-of-life processing.[80] To avoid trade friction, it would be important to develop international standards for refurbishing, applicable to different industry sectors. Some RTAs include a definition of refurbished or remanufactured goods, as is further explained in the RTA analysis below.

4.2.4. Summary of findings

Table 5 sets out a summary of the findings and options in this section, with regards to the role of the WTO in addressing reverse supply chains.

[80] Barrie et al. (2022).

Table 5: Summary table of the role of the WTO in addressing reverse supply chains

Policy	Technical and/or legal Impediments	Options	Implications for developing countries
Facilitating trade in "wanted" end-of-life products	Applying different tariffs (or import restrictions) to wanted and unwanted waste may amount to discrimination under GATT Article I.	Considering to agree that differentiating between different types of waste, in line with the Basel Convention, is rebuttably presumed to be justified by GATT Article XX.	Concerns might be raised that changing the burden of proof under GATT Article XX would mostly benefit developed countries, at the expense of developing countries and LDCs.
	Waste is categorized at national level. There is no internationally agreed-upon definition with respect to different types of waste.	Providing input and suggestions to the WCO to update the HS and enable it to better differentiate between different types of waste products.	Developing countries might want to consider participating in these discussions, to ensure their needs are addressed – especially in the context of waste dumping.
	There is misalignment between the HS, which classifies goods on the basis of their physical characteristics, and the Basel Convention, which controls trade in waste on the basis of whether waste is hazardous or not, and its recyclability.	An informal working group could be established under CTE, addressing issues relevant to the classification of waste.	

	Customs officials are not adequately equipped to differentiate between different types of waste products	Building upon principles set out in the TFA such as Authorized Operators and considering to facilitate trade in "wanted" waste by "green listing" companies with compliance records.	Identifying customs capacity building needs to enhance differentiation between "wanted" and "unwanted" products.
Restricting trade in "unwanted" end-of-life products	The importation of "unwanted" end-of-life products may be restricted, provided it complies with GATT Article XX.	Considering to agree on a list of "unwanted" end-of-life products that are controlled by the Basel Convention whose restriction on importation would be rebuttably presumed to be justified by GATT Article XX.	A proposal could be welcomed since it increases regulatory space. There might be concerns though that this would mostly benefit developed countries.
Facilitating trade in remanufactured goods	High tariffs on remanufactured goods resulting from misconceptions of the difference between remanufactured goods and second-hand goods.	Creating a working group on trade in remanufactured goods/Basel Convention to enhance differentiation between "wanted" and "unwanted" end-of-life goods (HS codes, definitions) in the Market Access Committee.	Developing countries might want to consider participating in discussions to develop guidance on a commonly accepted definition of remanufactured goods.

4.3. The role of the WTO in helping developing countries navigate market access challenges and opportunities relevant to the circular economy

This section explores how the rules of the WTO either impede or advance the ability of developing countries to navigate market access challenges and opportunities relevant to the circular economy. **This mostly relates to trading partners' regulatory frameworks relevant to the circular economy, and the way these regulations, risk becoming non-tariff barriers for developing countries**. Specifically, this section focuses on the role of the TBT Agreement in minimizing trade friction and ensuring that the increase in circular economy regulations does not become a non-tariff barrier.

4.3.1. Minimizing trade friction generated by circular economy regulations

Over the last few years, there has been a significant increase in the adoption of (mandatory) technical regulations and standards (voluntary) relevant to the circular economy. Reflecting, in part, the dearth in relevant international standards relevant to the circular economy and the fact that circular economy regulatory frameworks are a relatively novel phenomenon, most standards and regulations are adopted unilaterally. This has resulted in **a heterogeneity of circular economy (private or public) standards, leading to inefficiencies and increased trade costs for companies operating across multiple jurisdictions, especially SMEs which face disproportionately high implementation costs**.[81] There are various ways in which the **TBT Agreement limits the risk that circular economy standards become non-tariff barriers and reduces market access barriers** which developing countries and LDCs might face as a result of the rise in circular economy technical regulations.

First, while the **TBT Agreement** allows Members to adopt technical regulations, including for environmental purposes, **it requires that regulations are "not more trade-restrictive than necessary to fulfil a legitimate objective"**.[82] While measures advanced for the protection of human health or safety, animal or plant life or health, or the environment – and thus, the circular economy –are considered legitimate regulatory objectives, the TBT Agreement requires that Members adopt the least-trade restrictive measure to achieve such legitimate objective. This limits the risk that circular economy regulations become non-tariff barriers.

Second, to reduce trade friction generated by a heterogeneity of standards adopted by different Members, **the TBT Agreement promotes the harmonization, equivalence and mutual recognition of standards, technical regulations, and conformity assessment procedures (CAPs)**. As explained below, each of these provisions could be leveraged to reduce the risk that the heterogeneity of circular economy-related standards becomes a non-tariff barrier. However,

[81] Steinfatt (2020).
[82] TBT Agreement, Article 2.2.

the benefits of some of the provisions as applied to developing countries and circular economy regulations might be limited, mostly due to the fact that the development of many circular economy standards is still in its infancy.

Third, **the TBT Agreement requires Members to base their technical regulations on relevant international standards, where these exist**. Given that there is a dearth of comprehensive international standards relevant to the circular economy, the usefulness of this provisions to reduce non-tariff barriers relevant to circular economy regulation is currently limited. This might change, however, once standards have been developed. Indeed, seeking to address the gap in international circular economy standards, in 2018, the **International Standards Organization (ISO) has set up a technical committee (ISO/TC 323) to standardize the field of circular economy internationally**.[83]

Fourth, the TBT Agreement could also reduce trade friction caused by the proliferation of different eco-design standards through equivalence, i.e. acknowledging that regulatory goals are fulfilled by another country's measures. However, equivalence presupposes the existence of technical regulations or standards that can be considered to reach an equal or similar level of protection. This means that, for developing countries and LDCs with limited or no circular economy frameworks in place, there will be limitations to the usefulness of the equivalence concept in the context of the circular economy.

Fifth, the **TBT Agreement encourages Members to enter into negotiations to conclude mutual recognition agreements (MRAs) to recognize the results of each other's CAPs**.[84] In essence, MRAs seek to avoid duplication of testing procedures, by recognizing the technical competence of a specific conformity assessment body to perform conformity assessment at the expected level of the import country; and the knowledge of these bodies about the technical requirements and conformity assessment bodies in the import country.[85] Developing countries and LDCs could conclude MRAs with trading partners to recognize results of each other's CAPs relating to circular economy standards and regulations.[86] This, in turn, could reduce costs linked to demonstrating compliance.

One way to strengthen the link between these TBT provisions and the circular economy would be **by developing non-binding guidelines that would set out common principles for the establishment of regulations, standards or CAPs in areas related to the circular economy.**[87]

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[83] https://www.nist.gov/el/systems-integration-division-73400/circular-economy-manufacturing/isotc-323-circular-economy. This technical committee has established five working groups that focus on identifying CE-related terms and providing technical definitions; developing an implementation guide for businesses; identifying metrics to measure and quantify circularity; developing a performance-based approach for the CE; and developing standards to enable the digital exchange of data related to circularity characteristics across supply chains.

[84] See TBT Agreement, Article 6.3.

[85] C. Bellmann and C. van der Ven, "Greening Regional Trade Agreements on Non-Tariff Measures through Technical Barriers to Trade and Regulatory Co-Operation" (OECD 2020), Working Paper 2020/04.

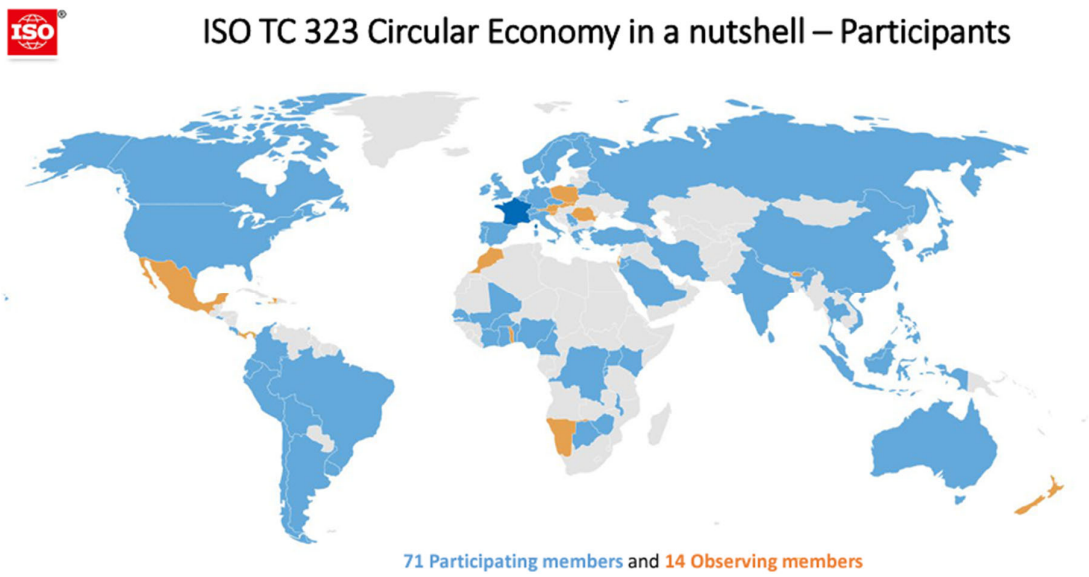
[86] It presupposed here that such standards and regulations are in place. The capacity though for regulatory cooperation constitutes a further incentive to adopt circular economy standards and regulations since trade frictions can be minimized.

[87] https://icc.se/wp-content/uploads/2021/12/20211214_Circular-Economy.pdf.

These principles could guide Members in seeking to achieve their circular economy objectives while minimizing trade friction. This process could be proposed as an agenda item for the TBT Committee.

In addition to leveraging these TBT provisions, it would **be critical for developing countries and LDCs to participate in the work of the ISO/TC 323 and the development of other relevant international circular economy standards, to ensure that their perspectives are reflected.**[88] Indeed, the TBT Agreement promotes the participation of developing countries and LDCs in international standardization. Under the special and differential treatment obligations of the TBT Agreement, Members ought to take measures to ensure that "international standardizing bodies and international systems for conformity assessment are organized and operated in a way which facilitates active and representative participation of relevant bodies in all Members, taking into account the special problems of developing country Members."[89] With respect to the circular economy, however a large number of African countries and various Asian countries are currently not participating in the work of the ISO/TC 323.

Figure 2. Participating countries in ISO TC 323[90]



In addition, the **TBT Committee could serve as a platform where Members identify challenges and opportunities relevant to circular economy standards and regulations and enhance transparency.** Likewise, the notification procedures contained in the TBT Agreement encourage transparency and coordination with respect to circular economy measures.[91] To better identify

[88] Ashraf and van Seters (2021).
[89] TBT Agreement, Article 12.5.
[90] ISO, "ISO Technical Committee 323 CIRCULAR ECONOMY" (2021).
[91] Barrie et al. (2022).

circular economy measures, a subcategory could be created for types of regulatory measures and standards related to the circular economy in the "e-ping" notification system.

Finally, some special and differential treatment provisions could be leveraged to reduce market access barriers which developing countries and LDCs might face as a result of the increase in circular economy standards. Article 12.3 TBT Agreement provides that in the preparation and application of technical regulations, standards and CAPs, Members shall "take account of the special development, financial and trade needs of developing country Members, with a view to ensuring that such technical regulations, standards and conformity assessment procedures do not create unnecessary obstacles to exports from developing country Members." In other words, the TBT Agreement creates an impetus to ensure that, when developing eco-design standards such as the EU ESPR, needs of developing countries and LDCs are taken into account. **To operationalize this, it would be imperative for developing countries to identify and communicate their needs.**

4.3.2. Summary of findings

Table 6 sets out a summary of the findings and recommendations in this section, with regards to the role of the WTO in addressing reverse supply chains.

Table 6: Summary Table of the role of the WTO in helping countries navigate non-tariff barriers related to the circular economy

Measure	Technical and/or legal Impediments	Options	Implications for developing countries
Minimizing trade frictions generated by circular economy regulations	There is a risk that circular economy standards and regulations become non-tariff barriers to trade.	Leveraging existing TBT principles such as equivalence and mutual recognition agreements and applying these provisions with regards to circular economy standards, regulations and CAPs.	Identifying priority areas/standards and regulatory frameworks relevant to the circular economy conducive to mutual recognition.
	Absence of international standards relevant to the circular economy – both upstream and downstream.	Developing non-binding guidelines with common principles for the establishment of regulations related to the circular economy. These guidelines could guide Members in seeking to achieve their circular economy objectives while minimizing trade friction.	• Ensuring active participation in the development of standards and regulations relevant to the circular economy in key export markets/international organizations. • Encouraging developing country participation in the work of the ISO/TC 323 and the development of other relevant international circular economy standards, to ensure that their perspectives are reflected. • Implementing special and differential treatment provisions in

			the TBT Agreement. To do so, it would be imperative for developing countries to identify and communicate their needs.

4.4. Summary of WTO findings

With respect to entry point 1, and the role of the WTO in facilitating a circular transition for developing countries, a number of existing WTO rules can be leveraged to promote a circular transition. This includes the WTO's emphasis on the liberalization of goods and services, which could lower trade barriers on circular goods and services. Moreover, technology transfer provisions and provisions on compulsory licensing could be the basis upon which developing countries and/or LDCs could access critical circular technologies that are patented in developed countries. With respect to facilitating and promoting investment relevant to advancing the circular economy, however, the WTO provisions are somewhat less relevant given that, apart from the JSI on Investment Facilitation and GATS mode 3, the WTO does not cover investment. Likewise, the impact of the GPA on promoting a circular transition in developing countries is limited so far, given the scope of the agreement and the fact that only one developing country has signed on.

While many WTO rules could thus be used as a basis to advance a circular economy transition, they also present limitations. For example, engaging in tariff differentiation on the basis of PPMs, which is an important part of promoting trade in circular products, will likely be considered discriminatory, unless such discrimination can be justified under GATT Article XX. Moreover, the WTO rules on subsidies set parameters with regards to how countries can subsidize. While countries have policy space to subsidize circular activities, they cannot currently benefit from a non-actionable category for circular subsidies. Moreover, a key challenge concerns the fact that both the Harmonized System and the W/120 used by Members to classify trade in goods and services, respectively, are insufficiently precise to differentiate products based on circularity.

With respect to entry point 2, and the role of the WTO in addressing the implications of reverse supply chains, this section has identified how Members may impose import restrictions with regards to "unwanted" products, such as hazardous waste, provided that these restrictions are justified under GATT Article XX. At the same time, to facilitate "wanted" end-of-life products, product classification challenges present an important obstacle, given that, as highlighted earlier, the HS makes it difficult to distinguish products based on non-physical characteristics, such as toxicity, which is critical in knowing whether an end-of-life product is or is not "wanted". In addition, the lack of widely accepted definitions for different types of end-of-life products, such as second-hand goods or remanufactured goods, significantly complicates trade in such products. Finally, various concepts set out in the Trade Facilitation Agreement can serve as a basis to expedite and streamline import procedures for "wanted" waste.

Turning to entry point 3, which focuses on the role of the WTO in helping developing countries navigate non-tariff barriers relevant to the circular economy, this section has demonstrated that various provisions relevant to technical regulations and standards in trade agreements could be applied to reduce friction generated by the heterogeneity of different regulatory standards relevant to the circular economy, especially provisions on harmonization, equivalence, and mutual recognition. However, a major challenge is the current absence of relevant international

standards for the circular economy – including upstream and downstream, standards that are relevant to define end-of-life goods, and standards that would set parameters for when a good can be considered circular.

Throughout this section, various recommendations have been provided to address these issues. While these recommendations are different for the different issues discussed, some overarching points stand out. In particular, this section has identified the importance of developing a non-binding guiding document, developed as part of the TESSD Working Group on Circular Economy – Circularity, which could serve as a reference for countries seeking to leverage the WTO to advance a circular economy transition. While it would also be important to seek to revitalize and expand the currently dormant EGA negotiations, more benefits could likely be obtained in the short term by engaging in a process that seeks to develop non-binding guidelines.

The benefit of engaging in discussions that centre on a non-binding outcome is that it will be easier to see results, and it allows Members to focus on the numerous technical issues relevant to the circular economy that are critical to address. Moreover, the guidelines do not need to be limited to circular goods and services liberalization but can include guidance and best practices on related elements, such as integrating circular principles in government procurement, investment facilitation, subsidies and standards. In particular, non-binding guidelines on the circular economy can set out common principles for standards, regulations and CAPs, but could also include ideas to identify and liberalize tariffs on circular products relevant to nomenclature or include a list of technologies considered to be critical for a circular economy transition.

A starting point for the option for addressing the gaps at the WTO would be TESSD, which was launched in 2020 to intensify work at the intersection of trade and the environment. Once a recommendation or statement has been suggested by the Members of TESSD, or one of the other relevant dialogues and initiatives, it would be easier for the recommendation to become an agenda item in other relevant WTO Committees, Working Parties, Special Sessions or negotiations where binding rules can be developed.[92] A non-binding guiding document on the circular economy could also form the basis on which a JSI on the environment/inclusive circular economy transition can be developed, to further strengthen links between trade and the environment.

Moreover, a working group must be developed to better align the tariff classification and the Basel Convention. In collaboration with both the ISO and the WCO, this working group would focus on addressing technical issues relevant to HS codes, as well as the PIC procedure and how developing countries can develop capacity to implement this. Moreover, enhancing customs capacity will be critical to ensure developing countries participate in global circular trade. As part of the TFA, the Committee on Trade Facilitation can seek to identify interlinkages between the

[92] C. Bellmann et al., "Trade and Environment at the World Trade Organization: State of Play and Entry Points" (2022), Policy Brief 4.

TFA and the circular economy, with a focus on issues such as risk management, advanced rulings, and authorized operators.

To strengthen the link between the WTO and an inclusive circular transition, it is critical for developing countries to actively participate in ongoing discussions at the WTO, including TESSD. Indeed, failure to do so presents a missed opportunity to share challenges and engage in opportunities that could be critical to advancing a circular economy. Developing countries' resource constraints, which are often pointed to as a reason for a lack of participation – could potentially be addressed by appointing a focal point for different groups of developing countries and LDCs – e.g. the African, Caribbean and Pacific Group of States (ACP Group), the African Group, or LDCs. These focal points could represent different groups of developing countries, and share what has been discussed in the committee, as well as various points that developing countries want to make.

Moreover, to make the WTO work for an inclusive transition, it is imperative that developing countries adopt a pragmatic approach to circular economy-relevant initiatives and negotiations that seeks to understand how the country can benefit from these initiatives. A pragmatic approach presupposes that the developing country has a clear idea of the economic and social challenges relevant to the circular economy transition, and has identified the types of goods, services, and technologies it would need to develop a more circular economy. This could be done as part of a circular economy roadmap or other overarching national circular economy strategy, which would underpin a clear vision for trade policy. In other words, some key action items that are necessary to make the WTO work for an inclusive circular economy must take place outside the WTO framework.

5. RTAs and an inclusive circular economy transition

5.1. RTAs and an inclusive circular economy transition

Following a detailed analysis on the role of the WTO in promoting an inclusive circular economy transition, this section will turn to the role of RTAs, with a focus on EU RTAs. A key advantage of RTAs compared to the WTO is that they allow for a deeper integration between trading partners. When fewer parties are involved, talks can be more substantial compared to discussing issues – and reaching agreement – than in a forum of 164 Members with varying interests.[93] As a result, RTAs have been a laboratory for innovation, and cover topics that go beyond the WTO agreements, such as investment, regulatory cooperation, competition, and trade and sustainable development. Innovative approaches adopted as part of RTAs have the potential to influence discussions at the multilateral level.

Most of the circular economy references in EU RTAs are set out within RTA's Trade and Sustainable Development (TSD) or Environment chapter. This suggests that **the circular economy is still approached as an environmental safeguard rather than being considered as a paradigm shift that can be expected to fundamentally affect the entire economy**.[94] As countries are looking to mainstream circular economy efforts, this trend will need to be better reflected in RTAs going forward. In addition to highlighting circular economy provisions in TSD/Environment chapters where relevant, **this section, therefore, focuses on how to integrate circularity in RTAs more holistically, including as part of non-TSD Chapters, and through the creation of a circular economy-specific chapter**.[95] This is also in line with the June 2022 Action Plan on TSD Chapters in RTAs, which has identified mainstreaming sustainability beyond the TSD chapter of the agreements as a priority issue.

Specifically, this section analyses how **EU RTA provisions can be leveraged to advance the three entry points for developing countries and trade** identified earlier in this paper, i.e. (i) the role of EU RTAs in facilitating a circular transition in key sectors in developing countries; (ii) the role of EU RTAs in addressing the implications associated with reverse value chains for developing countries; and (iii) the role of EU RTAs in helping developing countries navigate market access barriers relevant to the circular economy. In doing so, this section identifies best practices in existing RTAs, both from EU and non-EU RTAs, and highlights how to further strengthen RTAs as a way to advance an inclusive circular economy transition.

[94] Kettunen et al. (2019).
[95] Ibid.

5.2. The role of RTAs in facilitating a circular transition in developing countries

This section analyses the role of RTAs in advancing an inclusive circular economy transition. This section follows a similar structure to the WTO analysis set out in section 4.1, focusing on the following measures:

- Liberalizing trade in circular goods.
- Liberalizing trade in circular services.
- Facilitating and promoting access to technologies relevant to advancing the circular transition.
- Enabling access to services relevant to advancing the circular economy.
- Subsidizing circular activities/discouraging subsidies for linear activities.

5.2.1. Liberalizing trade in circular goods

This study already explained the importance of strategically linking tariff liberalization to goods that can enable a circular economy transition in developing countries (see section 4.1.1 above). Within RTAs, countries have more flexibility and opportunities to promote and facilitate trade in circular economy goods compared to the WTO. To facilitate trade in goods relevant to the circular economy, parties could create a list of circular goods relevant to specific industry sectors and agree to reduce/eliminate tariffs on these goods. **The benefit of pursuing this within the context of an RTA is that the list can be adapted to countries' specific interests.**

Presently, a handful of RTAs specifically identify environmental or circular goods to be preferentially liberalized. Some generally liberalize environmental goods while other identify products that are liberalized preferentially if they satisfy environmental production requirements. For example, **the EU-New Zealand FTA, the New-Zealand-United Kingdom (UK) FTA, and the Asia-Pacific Economic Cooperation (APEC) Agreement all contain a list of environmental goods** for which they agree to liberalize tariffs, albeit adopting different approaches and focusing on different products. The EU-New Zealand FTA focuses on energy efficiency products[96] (building insulation materials, electronic generators for other renewable energy sources) and geothermal, hydro, solar, and wind energy[97], whereas APEC's environmental goods list focuses on environmental remediation/pollution prevention, and clean technologies.[98] The New Zealand-UK FTA removes import tariffs on a total of 293 environmental goods, including not only energy efficiency products and clean technologies, but also secondary materials such as waste

[96] 8418.61 - Geothermal heat pumps; 8410.11 - Hydro turbines, small; 8410.12 - Hydro turbines, medium; 8410.13 - Hydro turbines, large; 8410.90 - Parts of hydro turbines; 2804.61 - Polisylicon - raw material for production of solar panels; 2933.39 - Semiconductor additive material for production of solar panels; 8537.10 - Solar tracking controllers; 8541.40 - Photovoltaic cells.

[97] EU-New Zealand Free Trade Agreement (2022), text available at: https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/new-zealand/eu-new-zealand-agreement/text-agreement_en.

[98] Asia-Pacific Economic Cooperation Representatives Declaration, Annex C (9 Sept. 2012), text available at: https://www.apec.org/meeting-papers/leaders-declarations/2012/2012_aelm.

and scrap for recycling as set in Table 7 below. It also includes an explanation as to why the product is considered an environmental product. These explanations are reproduced – and slightly edited – in Table below.

Table 7. List of circular goods set out in New Zealand-UK FTA[99] (excerpt from FTA)

HS code	HS Description	Remarks
631010	Rags; used or new, scrap twine, cordage, rope and cables and worn-out articles of twine, cordage, rope or cables, of textile materials; sorted	Conservation of resources by reuse and recycling existing material in line with a circular economy.
720410	Ferrous waste and scrap; of cast iron	Recycling precious metals and compounds results in major energy savings, reduces GHG emissions, diminishes pressures on disposal facilities, and preserves landfill capacity. Recycled goods are key to moving towards a circular economy (i.e. retaining resources within the economy when a product has reached its end-of-life, so resources can be reused and create further value), as opposed to a linear economy model where resources are extracted, turned into a product, and disposed after use. Recycling extends the life of natural resources, reduces the generation of mining waste, reduces GHG emissions, diminishes pressures on disposal facilities, and preserves landfill capacity.
847751	Machinery; for moulding or retreading pneumatic tyres or for moulding or otherwise forming inner tubes	This equipment is used for recycling waste tyres. Recycled goods are key to moving towards a circular economy (i.e. retaining resources within the economy when a product has reached its end-of-life, so resources can be reused and create further value), as opposed to a linear economy model where resources are extracted, turned into a product, and disposed after use. Recycling extends the life of natural resources, reduces the generation of mining waste, reduces GHG emissions, diminishes

[99] Annex 22A, New Zealand-United Kingdom of Great Britain and Northern Ireland Free Trade Agreement, Annex 22A (28 Feb. 2022), text available at: https://www.mfat.govt.nz/assets/Trade-agreements/UK-NZ-FTA/Chapters/Annex-22A-Environmental-Goods-List.pdf.

		pressures on disposal facilities, and preserves landfill capacity.
470620	Pulp; of fibres derived from recovered (waste and scrap) paper or paperboard	Products under this subheading are derived from recovered materials. Recycled goods are key to moving towards a circular economy (i.e. retaining resources within the economy when a product has reached its end-of-life, so resources can be reused and create further value), as opposed to a linear economy model where resources are extracted, turned into a product, and disposed after use. Recycling extends the life of natural resources, reduces the generation of mining waste, reduces GHG emissions, diminishes pressures on disposal facilities, and preserves landfill capacity.
400400	Waste, parings and scrap of soft rubber and powders and granules obtained therefrom	Waste material that can be further utilized or recycled.

The lists set out in these RTAs could form the basis for a circular goods list to be developed in RTA negotiations with a developing country and the EU. In developing a list of circular goods, it would also be important to include products that are circular because of the PPMs applied. This could include, for example, a pair of jeans produced with limited water usage, or a product that contains a minimum percentage of recycled material. A product that is circular because of the PPM could be differentiated from otherwise "like" products by adding a subheading in the HS code corresponding to the circular product. An example of what this could look like is set out in Table 8 below.

Table 8. Adding subheadings focused on production externalities to the HS Code[100]

HS (proposed changes in red)

52.09		Woven fabrics of cotton, containing 85 % or more by weight of cotton, weighing more than 200 g/m^2
		- produced using less than … m^3 water/kg of fabric
	5209.00	-- unbleached
	5209.10	--bleached

[100] Recreated based on: A. Willems, D. Coppens, M. Kamau, and I. Willems (2021), "Helping Sustainable Trade: Ways to "Green" the Harmonised System" | LinkedIn'.

	5209.20	~ dyed
	5209.30	~ of yarns of different colors
	5209.40	~printed
		~ produced using less than … m^3 water/kg of fabric
	5209.50	~ unbleached
	5209.60	~bleached
	5209.70	~ dyed
	5209.80	~ of yarns of different colors
	5209.90	~printed

Implementation of such distinctions can be based on relevant sustainable certification standards that products should comply with. The European Free Trade Association (EFTA)-Indonesia Comprehensive Economic Partnership Agreement (EFTA-Indonesia CEPA) provides an example of tariff differentiation on the basis of PPMs: palm oil imported from Indonesia can receive the preferential tariff under the CEPA if "it complies with the laws, policies and practices aiming at protecting primary forests, peatlands, and related ecosystems, halting deforestation, peat drainage and fire clearing in land preparation, reducing air and water pollution, and respecting rights of local and indigenous communities and workers."[101] To address implementation under the EFTA-Indonesia CEPA, Switzerland required as proof of sustainable production that the palm oil is certified with a select number of voluntary sustainability standards.[102]

For developing countries, it would be important to identify circular goods that are critical to their circular economy transition. Relevant circular goods could include components of environmental goods manufactured in the developing country, scrap for recycling in materials where the country has capacity to receive and recycle such materials, or machinery that would be required to advance the circular transition in different sectors.[103] **Another option would be to adopt sector-specific approaches relevant to key industry products** traded between the countries, without identifying a generally applied definition of environmental goods. **This would**

[101] Comprehensive Economic Partnership Agreement between the Republic of Indonesia and the EFTA States, Articles 8.10(2):a; and 8.10(2):e (1 Nov. 2021) text available at: https://www.efta.int/sites/default/files/documents/legal-texts/free-trade-relations/indonesia/efta-indonesia-main-agreement.pdf

[102] Specifically, Switzerland commissioned a study to assess different certification schemes for palm oil and ultimately settled on four: the RSPO Identity Protected, the RSPO Segregated, the ISCC Plus Segregated, and the Palm Oil Innovation Group (POIG) with RSPO Identity Protected and Segregated.

[103] Given rapid technological developments, it would also be important to include procedures for review and to allow for adding or excluding additional tariff lines.

facilitate linking necessary circular goods to developing countries' industry sectors with circular promise.

In terms of the structure of the RTA, commitments to recognize the importance of facilitating trade in goods that contribute to addressing climate change and the circular transition can be included as part of the TSD/Environment chapter but can also be part of a stand-alone chapter on the circular economy. This will be further explored in the context of reducing non-tariff barriers on trade in circular economy goods as set out in section 5.4 below.

5.2.2. Liberalizing trade in circular services

Access to services relevant to the circular economy transition will also be critical. Among the constraints identified in the context of the WTO were: (i) a lack of services commitments made by developing countries generally; and (ii) outdated services classifications that are insufficiently precise to capture services relevant to the circular economy. RTAs constitute an important vehicle to deepening services liberalization relevant to circular economy sectors, given that commitments on market access and national treatment for environmental services in RTAs are generally deeper and broader in scope than in the GATS.[104]

RTAs also present an opportunity to add more specific classification sectors and subsectors relevant to the circular economy. For example, in the EU-New Zealand FTA, the parties recognize the importance of facilitating trade and investment in environmental services and manufacturing activities and agree to make commitments including in "circular economy related services", which includes services from the CPC that go beyond the services classifications of the W/120, which forms the basis of most WTO Members' GATS schedules. The circular economy related services listed include leasing or rental services concerning private cars without operators, repair services incidental to metal products, machinery and equipment, wholesale trade services of waste and scrap and materials for recycling. A different model is the EU-Korea and EU-Singapore RTAs which sets out market liberalization commitments with respect to recycling services, using the International Standard Industrial Classification (ISIC) as the basis for services classifications.[105]

In making commitments with regards to circular services, it is important not to limit commitments to Mode 1 or Mode 3, but also to focus on Mode 4 which relates to the presence of natural persons given the importance of the supply of some circular economy-relevant services. For example, the Agreement between New Zealand and the Separate Customs Territory of Taiwan, Penghu, Kinmen, and Matsu on Economic Cooperation (ANZTEC) facilitates "the

[104] Bellmann (2021).
[105] Annexes 8-A-2 and 8-B-1 for EU's and Singapore commitments (without restrictions) on recycling, FTA between the European Union and the Republic of Singapore (14 Nov. 2019) (OJ L 294) 3; Annexes 7-A-2 and 7-A 4 correspondingly for FTA between the European Union and its Member States, of the one part, and the Republic of Korea, of the other part (14 May 2011) (OJ L 127) 6.

movement of business persons involved in the sale, delivery or installation of environmental goods or the supply of environmental services."[106]

Similar to the liberalization of trade in circular goods, liberalization commitments with respect to circular services could be included as an obligation as part of the TSD/Environment chapter but can also be part of a stand-alone chapter on the circular economy. This will be further explored in the context of reducing non-tariff barriers on trade in circular economy goods as set out in section 5.4 below.

5.2.3. Facilitating and promoting investment relevant to advancing the circular economy transition

Attracting the right type of FDI will be critical for an inclusive circular transition. In this regard, investment provisions in RTAs could seek to promote and facilitate investments in products, services and technologies that are relevant to the circular transition.[107]

RTAs can include specific commitments to facilitate and promote investments in goods, services and technologies critical to advancing the circular economy. For example, the EU-China Comprehensive Agreement on Investment states that the parties shall "promote and facilitate investment of relevance for climate change mitigation and adaptation including investment concerning climate-friendly goods and services, such as renewable energy, low-carbon technologies and energy efficient products and services, and by adopting policy frameworks conducive to the deployment of climate-friendly technologies".[108] Similar – or stronger - language could be used with regards to investment relevant to the circular economy.

Moreover, RTAs could set out practical guidance for businesses to comply with international standards relevant to the environment. For example, the South Africa Model BIT notes that investments shall "maintain an environmental management system consistent with recognized international environmental management standards and good business standards".[109] Similarly, the Canada-Korea FTA requires that each party "should encourage enterprises operating within its territory or subject to its jurisdiction to voluntarily incorporate internationally recognized standards of corporate social responsibility [...]. These principles address issues such as labour, environment, human rights, community relations, and anticorruption."[110] Similar language could be added referencing the circular economy, as well as international supply chain due diligence standards that contain environmental references, such as the OECD Due Diligence Guidance for Sustainable Business Conduct and the OECD Guidelines for Multinational

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[106] Agreement between New Zealand and the Separate Customs Territory of Taiwan, Penghu, Kinmen, and Matsu on Economic Cooperation (ANZTEC), Chapter 17, Article 3.2(b) (1 Dec. 2013) (B2013-12).
[107] C. Bellmann and M. Sell, "Options to Incorporate Circular Economy Provisions in Regional Trade Agreements" (2021), IISD Report.
[108] EU-China CAI, Article 6(b), Sub-section 2, Section IV.
[109] South Africa Model BIT, Article 14(1).
[110] Canada-Korea FTA, Chapter 8, Article 8.16 (1 Jan. 2015), text available at: https://www.international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/korea-coree/fta-ale/index.aspx?lang=eng&_ga=2.105678080.2020937819.1663716759-2040776180.1662376096.

Enterprises. Finally, investor obligations can be added for carrying out an environmental impact assessment that includes circular economy considerations.

5.2.4. Enabling access to technologies critical to a circular economy transition

RTAs can be leveraged as a vehicle to access technologies relevant to the circular economy transition. At present, however, most EU RTAs are heavily focused on the protection of intellectual property rights and are less focused on establishing flexibilities to such protection. This can be changed by including language on compulsory licensing and technology transfer, as set out below.

First, when negotiating an RTA between a developed and a developing country, it would be important to **include language on compulsory licensing and its relevance to the environment/the circular economy.** This can be done by referencing TRIPS Article 31 that allows for the use of patents without authorization through compulsory licensing when certain conditions are met. An example of a reference to the TRIPS Agreement, albeit with respect to public health, is found in the EU-Vietnam FTA, which notes that the Parties "recognize the importance of the Declaration on the TRIPS Agreement and Public Health...[and that] in interpreting and implementing the rights and obligations under this Chapter, the Parties are entitled to rely upon that Declaration."[111]

Second, to advance an inclusive circular economy transition, RTAs should include **provisions that explicitly encourage the transfer of new technologies critical to the circular economy transition.** This language can echo the TRIPS technology transfer provisions. Moreover, it should identify ways in which the developed country can provide incentives for technology transfer, as well as identify a list of critical circular economy technologies for which technology transfer would be important. Another way to promote technology transfer can **be through including technology transfer-related cooperation provisions in respective environmental or TSD chapters**. For example, the parties to the Nicaragua-Taiwan FTA committed to enhance environmental cooperation, including with respect to facilitation of technology development and transfer as well as training in relation to clean production technologies, water protection, conservation and preservation, hazardous and non-hazardous waste management, and the monitoring and management of biodiversity and endangered species.[112] Similarly, the environmental chapter in the China-Switzerland FTA provides for technology transfer and cooperation in environmentally friendly technologies, including through capacity building, the exchange of information, and seminars and workshops.[113]

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[111] EU-Vietnam FTA, Article 12.39 (12 June 2020) (OJ L 186) 3.

[112] Nicaragua-Republic of China (Taiwan) FTA (1 Jan. 2018), text available at: http://www.sice.oas.org/trade/nic_twn/nic_twn_e/index_e.asp.

[113] China-Switzerland FTA, Article 12.5 (5 July 2013), text available at: https://www.seco.admin.ch/seco/en/home/Aussenwirtschaftspolitik_Wirtschaftliche_Zusammenarbeit/Wirtschaftsbeziehungen/Freihandelsabkommen/partner_fha/partner_weltweit/china/Abkommenstexte.html

The EU-Caribbean Forum (CARIFORUM) Economic Partnership Agreement (EPA) contains more explicit provisions on the transfer of technology, with the parties "agreeing to exchange views and information on their practices and policies affecting transfer of technology".[114] It further provides that the parties shall "create an adequate enabling environment for technology transfer in the host countries" and "prevent or control licensing practices or conditions pertaining to intellectual property rights which may adversely affect international transfer of technology [...]". Echoing the technology transfer provisions in the TRIPS Agreement, the EU-CARIFORUM EPA also provides that the EU "shall facilitate and promote the use of incentives granted to institutions and enterprises in its territory for the transfer of technology to institutions and enterprises of the CARIFORUM States [...]."[115] Another example is the EU-Central America FTA, which explicitly promotes technology transfer between both regions for the creation of a viable technological base in the Central America Party. In addition, it establishes a Sub-Committee on Intellectual Property Rights to, *inter alia*, define priority areas for technology transfer.[116]

5.2.5. Subsidizing circular activities/discouraging subsidies for linear activities

Developing countries should adopt a position on subsides in RTAs in line with their development priorities. They can leverage RTAs to reduce policy space to subsidize fossil fuels and other activities associated with the linear economy, as well as encourage subsidies for circular activities.[117]

Parties to an RTA can introduce rules on minimizing support to fossil fuel energy production. For example, the EU-Singapore FTA contains provisions stating that the parties recognize the need to reduce GHG emissions and limit distortions to trade as much as possible when developing public support systems to fossil fuels.[118] The EU-New Zealand FTA encourages parties to minimize, and phase out, inefficient fossil fuel subsidies that lead to wasteful consumption. Further, it reaffirms the commitments of the parties to cooperate on meeting the objective of phasing out such subsidies and makes a link to the FFSR discussions in the WTO.[119] The UK-

[114] Other interesting provisions relevant to technology transfer can be found in Article 8 of the proposed India-EU FTA and Article 321 of the Agreement establishing an Association between the European Union and its Member States, on the one hand, and Central America on the other (15 Dec. 2012) (OJ L 346) 3.
[115] Economic Partnership Agreement between the CARIFORUM States, of the one part, and the European Community and its Member States, of the other part, Article 142 (30 Oct. 2008) (OJ L 289/I/5).
[116] EU-Central America FTA, Article 274.1.
[117] I. Espa and G. Marín Durán, "Renewable Energy Subsidies and WTO Law: Time to Rethink the Case for Reform Beyond Canada – Renewable Energy/Fit Program" (2018) 21 *Journal of International Economic Law* 621; A. Cosbey and P.C. Mavroidis, "A Turquoise Mess: Green Subsidies, Blue Industrial Policy and Renewable Energy: The Case for Redrafting the Subsidies Agreement of the WTO" (2014) 17 *Journal of International Economic Law* 11.
[118] EU-Singapore FTA, Article 12.13.
[119] EU-New Zealand FTA, TSD Chapter, Article X.7.

New Zealand FTA contains far reaching provisions, requiring that the parties end all new financial support for fossil fuel energy, with some exceptions.[120]

At the same time, parties can also leverage RTAs to encourage subsidies dedicated to the circular economy transition. For instance, parties can agree to prevent remedial action, such as countervailing measures, for environmental/circular subsidies provided certain conditions are met. An example of this is the Caribbean Community and Common Market (CARICOM) Agreement, which provides that subsidies granted to assist entities in the adaptation of existing facilities to new environmental requirements, provided they meet certain conditions, are not actionable.[121] Similarly, the EU-UK TCA allows conditionally the introduction of subsidies "aimed at [...] delivering a secure, affordable and sustainable energy system and a well-functioning and competitive energy market or increasing the level of environmental protection".[122]

Developing countries should seek to negotiate relevant provisions, depending on their specific domestic situation as well as the situation of the negotiation partner. For example, providing for non-remedial action with respect to circular subsidies could take away a country's ability to respond adequately to another country's subsidies. Likewise, phasing out fossil fuel subsidies, while critically important, could be difficult for countries that are heavily dependent on fossil fuel subsidies. Finally, it must be noted that the provisions of the WTO would still be applicable, even if the RTA creates a carve-out or adds flexibility for the imposition of subsidies related to the circular economy. This means that the "safe haven" introduced under the RTA would not apply to possible challenges of a subsidy provided under the SCM Agreement. For this reason, irrespective of the provisions set out in an RTA, parties should still ensure to be compliant with SCM Agreement rules.

5.3. The role of RTAs in addressing the implications of reverse supply chains for developing countries

There are three main ways in which RTAs can be leveraged to enable controlling imports of end-of-life goods and allowing countries to differentiate between "wanted" and "unwanted" products**:** (i) by establishing definitions of end-of-life goods; (ii) by strengthening the link with the Basel Convention; and (iii) by strengthening customs capacity.

5.3.1 Facilitating trade in remanufactured goods and second-hand goods

First, RTAs could play an important role in helping customs officials differentiate with respect to different end-of-life products that are being traded as part of the circular economy. One

[120] UK-New Zealand FTA, Article 228.
[121] S. Yamaguchi, "Greening Regional Trade Agreements: Subsidies Related to Energy and Environmental Goods" (2020), Vol 2020/01, OECD Trade and Environment Working Papers.
[122] Article 367.14, subject to the principles of Article 366 such as proportionality or existence of market failure, Trade and Cooperation Agreement between the European Union and the European Atomic Energy Community, of the one part, and the United Kingdom of Great Britain and Northern Ireland, of the other part (31 Dec. 2020) (OJ L 444/14).

way to do so is by establishing definitions of end-of-life goods. This has already been done with respect to remanufactured goods in some RTAs. For example, the EU-Vietnam FTA contains a definition for a "remanufactured good", noting that it means a good classified in HS Chapters 84, 85, 87, 90 or heading 94.02 – subject to a list of exceptions – which is: (i) entirely or partially comprised of parts obtained from goods that have been used beforehand; and (ii) has similar performance and working conditions as well as life expectancy compared to the original new good and is given the same warranty as the original new good.[123] A similar definition can be found in the Comprehensive and Progressive Trans-Pacific Partnership Agreement (CPTPP).[124] To enable trade in remanufactured goods and facilitating differentiating them from second-hand goods, developing countries could consider adding a similar definition in their RTAs.

Additional clarity could also be added for trade in second-hand goods. For example, HS code 6309 on 'worn clothing and other worn articles' covers very diverse products including all sorts of worn clothing, footwear, blankets and articles for interior furnishing.[125] Non-reusable textiles (e.g. textile waste for recycling) tends to also be traded under HS code 6309.[126] RTAs could address this by adding a clear definition of what constitutes reusable worn clothing and what qualifies as waste. One way would be by requiring that second-hand clothing is certified to be fit for such purpose, in accordance with the ISO/PC 245 on cross-border trade of second-hand goods which specifies how to evaluate and classify products on a ranking based on their condition: A (very good); B (good); C (fair); and D (poor).[127] For example, the RTA could specify that second-hand goods clothing must, at a minimum, be classified as being in 'fair' condition. This could apply to all HS categories on second-hand goods covered by ISO/PC 245.

5.3.2 Restricting trade in "unwanted" waste

A second way to leverage RTAs in the context of controlling end-of-life imports is by strengthening the link with the Basel Convention. While EU TSD chapters reference a list of Multilateral Environmental Agreements (MEAs), they do not include specific reference to the Basel Convention. Developing countries negotiating RTAs with the EU could seek to insert references to the Basel Convention in the technical assistance provisions linked to implementing the PIC procedure. Similarly, the RTA could clarify how waste classification under the Basel Convention aligns with the HS codes. RTAs could also make specific references to strengthening countries' ability to implement the PIC procedure, to ensure the management of trade in waste products. In addition, in light of the European Commissions' announcement to turn the Paris Agreement into an "essential element" of all of its future RTAs, **it would also be interesting to**

[123] EU-Vietnam FTA, Article 2.3(k) and Annex 2-A-5.
[124] Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), Annex 2-B (8 March 2018), text available at: https://www.dfat.gov.au/trade/agreements/in-force/cptpp/official-documents.
[125] https://www.tariffnumber.com/2022/6309.
[126] Watson et al., "Exports of Nordic Used Textiles: Fate, Benefits and Impacts" (2016), Nordic Council of Ministers (Nordisk Ministerråd) Policy Brief 2016).
[127] https://www.iso.org/news/ref2253.html.

consider the implications of including the Basel Convention as an essential element of future EU RTAs.

5.3.3 Facilitating trade in "wanted" goods

Third, RTAs could also play a role in strengthening customs officials' capacity to distinguish between different types of waste, to facilitate customs clearance of circular economy goods and to sort end-of-life products. RTAs could provide for commitments on capacity building and technical assistance to increase the customs officials' capacity to distinguish between different types of waste. For example, the EU-CARIFORUM RTA includes multiple commitments for training of import personnel, personnel related to the enforcement of IP rights, personnel related to trade in services and personnel working in the digital sector.[128] Similarly, the EU-Mexico Agreement in principle dedicates a whole chapter with 17 provisions to trade and customs facilitation, including technical assistance and cooperation schemes.[129] Article 66 of the EU-Andean Community RTA provides for exchange of information regarding customs procedures and techniques with a view to simplifying and modernising customs processes. Similar commitments are in place in the EU-Vietnam RTA.[130]

Further, it would be important to ensure that RTAs set out provisions on expedited proceedings and inspections on selected economic operators. This could be achieved, for example, by establishing authorized operator provisions for "green listed" companies that have a record of compliance with the relevant laws and regulations. For example, this could be EU companies that have been importing refurbished electronic products or second-hand electronic products for a certain amount of time and have been found to trade the type of secondary products they claim to be trading. Examples of such an approach, albeit in the context of sanitary and phytosanitary measures (SPS), can be found in the EU-Vietnam FTA, which sets out a procedure for listing establishments considered to comply with the importing party's SPS requirements.[131]

5.4. The role of RTAs in helping developing countries navigate market access challenges and opportunities relevant to the circular economy

Stringent circular economy regulatory standards that are being developed in the EU can become a non-tariff barrier for developing countries seeking to export to the EU. For example, the draft ESPR proposal submitted by the Commission will have significant impact on non-EU producers exporting to the EU market if they are unable to comply. Parties to an **RTA should consider including either provisions that facilitate regulatory cooperation in order to minimize trade**

[128] EU-CARIFOUM EPA, Articles 135-138.
[129] Draft EU-Mexico Agreement-Agreement in principle (21 Apr. 2018), text available at: https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/mexico/eu-mexico-agreement/agreement-principle_en.
[130] EU-Vietnam FTA, Article 4.2.
[131] EU-Vietnam FTA, Article 6.8.

frictions, or even a specific chapter on circular economy that disciplines use and adoption of international standards by the parties, regulatory cooperation and technical assistance.

Minimizing trade friction generated by circular economy regulations: **First, RTAs can serve as a vehicle to minimize friction associated with different circular economy standards, by including provisions that cover transparency, equivalence, mutual recognition or harmonization of standards, regulations and conformity assessments related to the circular economy.** As already explained in the WTO chapter, these provisions can minimize the risk that different circular economy standards become non-tariff barriers. TBT chapters in RTAs tend to go beyond the WTO, thus creating an additional impetus to the parties to address non-tariff barriers.

Second, in addition to adopting these provisions in the horizontal TBT chapter of an RTA, parties can adopt sector-specific chapters on non-tariff barriers to Trade and Investment in the circular economy. These can mirror the energy-specific chapters adopted in the EU-Vietnam and EU-Singapore FTAs, entitled "Non-tariff barriers to Trade and Investment in Renewable Energy Generation", or the sector-specific annex in the US-Mexico-Canada FTA (USMCA) Sectoral Annex on Energy Performance Standards. The benefit of adopting a sector-specific annex is not only that it signals the importance of the area for trade between the parties, but also that it enables higher levels of specificity and detail, highlighting priority areas for collaboration. As such, this might be an attractive option to consider for developing countries and LDCs negotiating RTAs with the EU.

A circular economy specific chapter should require that parties base their technical regulations for the circular economy on relevant international standards, where they exist and where appropriate.[132] Moreover, it should encourage the parties to participate in the development of circular economy standards at international level, such as in the ISO. The sector-specific approach should include provisions through which the parties shall "endeavour to recognize as equivalent" relevant standards, such as standards related to eco-design or EPR.

Furthermore, a circular economy chapter can include cooperation provisions to address matters of mutual interest related to the transition towards a circular economy, including environmental labelling, ERP, barriers to trade in relation to the circular economy, etc. Such a provision is set out in the Draft UK-Australia FTA.[133] The sector-specific chapter can furthermore establish that the parties agree to accept declarations of conformity with respect to the list of circular products for which the parties have agreed to liberalize trade. Finally, it could identify specific areas for technical assistance and establish a subcommittee to monitor implementation.

5.5. Summary of RTA findings

[132] Bellmann and van der Ven (2020).
[133] Draft Australia-UK FTA, Article 22.7, text available at: https://www.dfat.gov.au/trade/agreements/not-yet-in-force/aukfta/official-text/australia-uk-fta-chapter-22-environment#article-22-7-circular-economy.

The section has set out various ways in which developing countries that are negotiating an RTA with the EU can advance an inclusive circular economy transition. Compared to the WTO, developing countries negotiating an RTA have the advantage of adopting deeper, and broader commitments, which can accelerate the circular economy transition. While most circular economy references in existing RTAs are expressed in cooperation provisions or best endeavour clauses in TSD/environment chapters of an RTA, this section has predominantly focused on how circular economy provisions can be mainstreamed across RTAs, in line with the Commission's Action Plan on TSD Chapters.[134]

Table 9 below summarizes the main recommendations. While the recommendations provided in this section could be incorporated into specific vertical chapters in RTAs, a key recommendation set out in this section is to also consider including a chapter specific to circular economy, similar to the renewable energy chapters in EU-Vietnam and EU-Singapore. Developing sector-specific chapters for the circular economy would not only increase awareness of the role of trade in advancing the circular economy transition; it would also enable adopting a more comprehensive and, at the same time, more granular, approach with respect to the circular economy.

Underlying the analysis is the importance of pursuing a tailored approach in line with developing countries' sustainability and development priorities. Indeed, the starting point must be an analysis of a developing country's circular economy challenges and opportunities, and how these are linked to specific industries. There is no one-size-fits all in RTA negotiations, and the recommendations formulated in this chapter will apply differently for different developing countries. This realization is shared by the Commission, which highlights the importance of developing a country-specific approach in its Action Plan on TSD Chapters in RTAs.

[134] European Commission, "Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: The Power of Trade Partnerships: Together for Green and Just Economic Growth" (22 June 2022) COM (2022) 409 final.

Table 9. Options s to make RTAs work for an inclusive circular transition

Policy	Technical and/or legal Impediments	Options	Examples in existing RTAs
Entry Point 1: The role of RTAs in facilitating a circular transition for developing countries			
Liberalizing trade in circular goods	High tariffs on circular products constitute a hindrance to trade in circular products.	• Liberalize trade for a select number of circular goods important to advance the circular transition in key sectors in developing countries (components, machinery, waste and scrap, PPMs); also consider sector-specific approach • Liberalization commitments for circular products can be set out as part of the TSD/environment chapter.	• Annex on Green Goods EU-New Zealand FTA. • Annex on Environmental Goods UK- New Zealand FTA. • Annex 2-b CPTPP. • APEC.
	HS code differentiates products only based on physical characteristics.	• Explore different HS-related options. when adding specifications linked to PPMs or end-use, could be linked to voluntary sustainability standards to facilitate implementation.	• EFTA-Indonesia, tariffs on sustainable and non-sustainable produced palm oil differ. • Swiss government has further linked it to a set of voluntary sustainability standards on palm oil.

Liberalizing trade in circular services	Lack of services commitments generally, including in the circular economy, made by developing countries.	• Liberalize trade in circular services important to advance the circular transition in key sectors in developing countries, using relevant CPC circular services categories, ISIC, which go beyond the W/120.	• Annex on Green Goods (and services) EU-New Zealand FTA. • Annex on Environmental Goods (and services) UK-New Zealand FTA.
Facilitating and promoting investment relevant to advancing the circular economy transition	• Difficult to make investment in the circular economy appear like an attractive business proposition. •	• Include language promoting and facilitating investment in key circular economy sectors. • Make reference to relevant international standards concerning sustainable supply chains, e.g. OECD Due Diligence Guidelines for Responsible Business Conduct, OECD Guidelines on Multinational Enterprises. • Include investor obligation to carry out environmental impact assessment, with focus on the circular economy.	• Section IV, EU-China Comprehensive Agreement on Investment. • Article 14 South Africa Model BIT.
Enabling access to technologies critical to a circular economy transition	• Stringent IP protection provisions in EU RTAs. • Lack of effective cooperation on promoting access to circular technologies.	• Include language that reflects TRIPS Article 31 on compulsory licensing. • Include provisions that explicitly encourage the transfer of technology to help in the adoption of new technologies critical to the circular economy transition. This can be done by referencing TRIPS technology transfer provisions and by providing more	• Article 12.13, EU-Singapore FTA. • Article 367.14, EU-UK TCA. • Article X.7, TSD Chapter, EU-New Zealand FTA.

		detail on how to operationalize this between the parties in the context of the circular economy. It can also be done through cooperation provisions, although these tend to be weaker.	• Article 22.8, UK-New Zealand FTA.
Subsidizing circular activities/ discouraging subsidies for linear activities	• RTAs limit the policy space countries have to engage in circular economy subsidies contingent upon local input and/or export, or subsidies that have adverse effects. • Most RTA provisions do not discipline fossil fuel subsidies.	• Identify national priorities relevant to fossil fuel/circular economy subsidies and develop negotiation position accordingly • Considering carve-outs for circular economy subsidies • Note: Irrespective of any additional circular economy carve-outs agreed upon in the RTA, WTO provisions would still apply.	• Article 12.13, EU-Singapore FTA. • Article 367.14, EU-UK TCA. • Article X.7, TSD Chapter, EU-New Zealand FTA. • Article 22.8, UK-New Zealand FTA.
<u>Entry Point 2</u>: The Role of RTAs in addressing the implications of reverse supply chains for developing countries			

Facilitating trade in remanufactured goods and second-hand goods **Facilitating trade in "wanted" end-of-life products** **Discouraging trade in "unwanted" end-of-life products**	• Difficulties with regards to differentiating between "wanted" and "unwanted" waste, due to the absence of international agreed upon definitions with respect to different types of waste and the fact that the HS classifies goods on the basis of their physical characteristics – not product quality.	• Add definitions for end-of-life products (e.g. remanufactured products, second-hand goods) to enable trade in these products and enhance differentiation between "wanted" and "unwanted" end-of-life products. • Link HS categories for second-hand products to ISO/PC 245 on cross-border trade of second-hand goods. • Identify specific capacity building procedures that the parties can undertake to strengthen their capacity to implement the PIC procedure. • Include specific customs-related capacity building provisions, including by establishing procedures to green list companies. • Seek to insert references to the Basel Convention in the technical assistance provisions linked to implementing the PIC procedure. • Clarify how waste classification under the Basel Convention aligns with the HS codes. • Make specific references to strengthening countries' ability to implement the PIC procedure, to ensure the management of trade in waste products.	• Article 2.3(k) and Annex 2-A-5, EU- Vietnam FTA. • Annex 2-B CPTPP. • Articles 135-138, EU-CARIFOUM EPA. • Article 4.2, EU-Vietnam FTA. • Article 66, EU-Andean Community FTA.

		• Consider the implications of including the Basel Convention as an essential element of future EU RTAs.	
Entry Point 3: The role of RTAs in helping developing countries navigate non-tariff barriers relevant to the circular economy			
Minimizing trade frictions generated by circular economy regulations	Due to the heterogeneity of standards, there is a risk that circular economy standards and regulations become non-tariff barriers to trade.	• Include sector-specific chapter on "non-tariff barriers to Trade and Investment in the circular economy", mirroring similar chapters on Renewable Energy in EU RTAs. • Encourage participation in development of international circular economy standards. • Use relevant international standards as basis for circular economy technical regulations. • Encourage recognizing declarations of conformity for a subset of circular economy products. • Include capacity building provisions • Establish cooperation in areas such as labelling and extended producer responsibility. • Establish a committee that monitors implementation of the chapter.	• Non-tariff barriers to Trade and Investment in Renewable Energy Generation Chapters in EU-Vietnam and EU-Singapore FTAs. • Sectoral Annex on Energy Performance Standards, USMCA. • Article 22.7, Draft Australia-UK FTA.

6. Conclusion

This study analyses how WTO rules and trade agreements can be leveraged to achieve an inclusive transition to a global circular economy, with a focus on the perspective of developing countries and LDCs. It looks at the role of WTO agreements and RTAs in promoting the circular transition. The following ten high-level observations can be made.

First, while the WTO has an important role to play as a convening platform and can create guidance and agreements at a multilateral level, RTAs have more flexibility to develop innovative approaches relevant to the circular economy. Therefore, both are important in strengthening the link between the circular economy and trade regimes and have a different, yet complementary, role to play.

Second, in addressing the role of trade to advance an inclusive circular transition, it is critical to define a clear conceptual framework. Indeed, trade and the circular economy for developing countries can be approached from a variety of different angles: including increasing trade in end-of-life products; leveraging trade to facilitate a circular transition in a developing country; or focusing on anticipated shifts in trade flows as a result of a circular transition. **This study has focused on three carefully chosen entry points, focusing on both the major challenges and opportunities trade and the circular economy presents for developing countries and LDCs.**

Third, in analysing the role of trade agreements – both the WTO and RTAs – as an instrument to advance an inclusive circular economy, this study has found that **a tension exists between trade agreements, which generally allow or prohibit a measure based on their trade distortion, and trade-related measures to advance an inclusive circular economy**, which predominantly focus on the distinction between circular and linear products or "wanted" and "unwanted" end-of-life products. This conceptual misalignment finds expression, *inter alia*, in the fact that discrimination in favour of circular products, or import bans on "unwanted" secondary products, which is required under the Basel Convention, is WTO-compatible only when these measures meet the conditions in the exceptions clause, such as GATT Article XX. **While policy space exists for countries to adopt circular measures, this intrinsic misalignment warrants looking more fundamentally at ways in which the trade regime and the circular economy objectives can be better aligned**.

Fourth, this study has found that different provisions in the WTO and/or RTAs, including on TBT, intellectual property, trade facilitation, and government cooperation can be leveraged to promote and inclusive circular transition. However, the existence of these provisions in and of themselves will have little impact if they are not proactively linked to circular economy objectives. This calls for proactive engagement by the WTO membership and RTA parties to find ways to ensure that relevant trade provisions are actually having an impact on promoting an inclusive circular transition.

Fifth, one critical problem concerns the lack of relevant international standards for the circular economy. As a result, most standards and regulations on circularity are adopted at the national level, which can become a non-tariff barrier. **It is therefore critical that, as countries develop their national regulatory approaches to the circular economy, they also participate in ongoing international efforts to develop commonly agreed upon circular economy standards that could significantly facilitate trade**. At the same time, the WTO membership has a role to play in finding agreement on commonly accepted definitions on end-of-life products that can be used to facilitate trade.

Sixth, a fundamental change that would need to happen to better align trade agreements with the circular economy concerns **improving customs officials' ability to distinguish between different types of circular goods**. Indeed, for trade to have a positive effect on an inclusive circular economy transition, it is critical that customs officials have the ability to differentiate between different types of end-of-life products. While contaminated, hard-to-recycle waste is "unwanted" and should not come into a country, easy-to-recycle waste might be desirable if a country seeks feedstock to develop a recycling plant. **A large amount of technical work must be done to ensure that the HS enables product differentiation based on their circular characteristics**.

Seventh, to strengthen the link between the WTO and an inclusive circular economy transition, it would be **important to develop a non-binding guiding document**, which could serve as a reference for countries seeking to leverage the WTO to advance a circular economy transition. The benefit of engaging in discussions that centre on a non-binding outcome is that it will be easier to see results and allow Members to focus on technical issues relevant to the circular economy. In particular, non-binding guidelines on the circular economy **can set out common principles for standards, regulations and CAPs, but could also include ideas to identify and liberalize tariffs on circular products or include a list of technologies considered to be critical for a circular economy transition**. A non-binding guiding document on the circular economy could also form the basis on which a JSI on the environment/inclusive circular economy transition can be developed, to further strengthen links between trade and the environment.

Eight, strengthen the link between the WTO and an inclusive circular economy transition, **it is critical for developing countries to actively participate in ongoing discussions at the WTO, including TESSD**. Indeed, failure to do so presents a missed opportunity to identify challenges and engage in opportunities that could be critical to advancing a circular economy. Developing countries' resource constraints, which are often pointed to as a reason for a lack of participation, could potentially be addressed by appointing a focal point for different groups of developing countries and LDCs, e.g. the African, Caribbean and Pacific Group of States (ACP Group), the African Group, or LDCs. These focal points could represent different groups of developing countries, and share what has been discussed in the committee, as well as various points that developing countries want to make.

Ninth, to make the WTO work for an inclusive transition, **it is imperative that developing countries adopt a pragmatic approach to circular economy-relevant initiatives and**

negotiations that seeks to understand how the country can benefit from these initiatives. A pragmatic approach presupposes that the developing country has a clear idea of the economic and social challenges relevant to the circular economy transition, and has identified the types of goods, services, and technologies it would need to develop a more circular economy. This could be done as part of a circular economy roadmap or other overarching national circular economy strategy, which would underpin a clear vision for trade policy. In other words, **some key actions that are necessary to make the WTO work for an inclusive circular economy must take place outside the WTO framework**.

Tenth, while most circular economy references in existing RTAs are expressed in cooperation provisions or best endeavour clauses in TSD/environment chapters of an RTA**, it will be important to mainstream circular economy.** In this regard, a key recommendation is to also consider including **a chapter specific to circular economy, focused on both tariff and non-tariff barriers, similar to renewable energy chapters in EU RTAs.** This would not only increase awareness of the role of trade in advancing the circular economy transition; it would also enable adopting a more comprehensive and, at the same time, more granular, approach with respect to the circular economy. Especially in RTAs between developed and developing countries, cooperation provisions will also be critical.

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