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Policy report

Trade in support of circular economy

A synthesis report



Institute for
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Policy



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List of abbreviations

CAI	Comprehensive Agreement on Investment
CBAM	Carbon Border Adjustment Mechanism
CBD	Convention on Biological Diversity
CEAP	Circular Economy Action Plan
CETA	Comprehensive Economic and Trade Agreement
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CSR	Corporate Social Responsibility
EBA	Everything But Arms
EGA	Environmental Goods Agreement
EPR	Extended Producer Responsibility
EU	European Union
FTA	Free Trade Agreement
GACERE	Global Alliance on Circular Economy and Resource Efficiency
GATT	General Agreement on Tariffs and Trade
GHG	Greenhouse Gas
GPA	Government Procurement Agreement
GPP	Green Public Procurement
GSP	Generalised Scheme of Preferences
HS	Harmonised System
ISO	International Organisation for Standardisation
MEA	Multilateral Environmental Agreement
OECD	The Organisation for Economic Co-operation and Development
REE	Rare Earth Element
SDG	Sustainable Development Goals
SPI	Sustainable Products Initiative
TESSD	Trade and Environmental Sustainability Structured Discussions
TBT	Technical Barriers to Trade
TFA	Trade Facilitation Agreement
TSD	Trade and Sustainable Development
UNFCCC	United Nations Framework Convention on Climate Change
WCEF	World Circular Economy Forum
WTO	World Trade Organisation

EXECUTIVE SUMMARY

The EU is moving ahead on its ambition to develop and implement a European circular economy, as ambitioned by the new Circular Economy Action Plan (CEAP) and its subsequent proposals. However, this objective is inherently intertwined with the rest of the global trading system, in addition to continuous geopolitical developments which risk complicating an already complex transition.

The EU's CEAP puts forward several initiatives to facilitate cooperation with trade partners on the circular economy, for example, by ensuring its free trade agreements (FTAs) reflect the objectives of the circular economy and by addressing knowledge and governance gaps through dialogues in the Global Alliance on Circular Economy and Resource Efficiency (GACERE).

Circular economy is still rarely explicitly mentioned across the EU's bilateral trade frameworks, which govern around 40% of the EU's total trade¹. Notwithstanding, efforts for cooperation on circular economy between the EU and its trade partners is ramping up.

At the multilateral level, the EU supports discussions on the nexus of environmental sustainability and trade, such as at the WTO's Ministerial Conferences and the Trade and Environmental Sustainability Structured Discussions (TESSD).

Undoubtedly, the circular economy is an essential concept to develop future-proof, sustainable and resilient supply chains, as well as to tackle global challenges, including climate change, biodiversity loss, waste, and pollution. However, currently, the extraction of virgin materials remains very much the norm across the globe. For several reasons, the uptake of secondary raw materials for production so far has been limited, mainly due to regulatory barriers, concerns of material quality and a lack of economic incentive for its use.

This policy report puts forward recommendations on how the EU can support the transition to and uptake of the circular economy through its trade frameworks and international cooperation.

Firstly, the EU has several trade frameworks in place, two of which are discussed in this report, namely the Generalised Scheme of Preferences (GSP) Regulation

¹ European Commission. (2019). Annual report in the implementation of EU trade agreements. [Link](#).

and bilateral FTAs. Generally speaking, the EU can pursue progress on the circular economy by:

Reinforcing sustainability and circularity in its trade agreements, which can be achieved by:

- Strengthening the Trade and Sustainable Development (TSD) Chapters for circularity, by including more explicit commitments to cooperation on circularity and securing the Paris Agreement as essential element of all trade agreements going forward².
- Unboxing sustainability from the TSD Chapters and integrating language on circularity, and cooperation on the circular economy, throughout the trade agreement. FTA Chapters that easily lend themselves to such provisions include the Chapters on Technical Barriers to Trade (TBT), Regulatory Cooperation, Investment³, Government Procurement, Bilateral Dialogues for Raw Materials and other relevant products, as well as sector-specific chapters.

Leveraging trade agreements as a tool for cooperation on the circular economy, which can be done by:

- Operationalising existing commitments for cooperation and dialogue on environmental protection to exchange knowledge regarding circular economy legislation, data collection methods, monitoring frameworks and begin to close data gaps on the flow of material and energy resources. This could support trade partner countries' development of comprehensive circular economy strategies, while both the EU and the partners can begin to harmonise on data collection methods and monitoring practices. These dialogues can be used to inform the partner country of the potential impact on their exports of the EU's autonomous measures under development e.g., the Sustainable Products Initiative (SPI), due diligence and Corporate Social Responsibility (CSR), deforestation-free supply chains, and the Carbon Border Adjustment Mechanism (CBAM).
- Empowering stakeholders in the EU and the trade partner country, including government actors, industry representatives, civil society organisations as well as internal (e.g., DG ENV and DG CLIMA) and external experts to allow for

² Though the issue of the enforceability of the TSD remains unclear ahead of the review of the TSD Chapter Action Plan. For more in-depth work on this topic, see "[Enhancing sustainability in EU Free Trade Agreements](#)" (Blot, E., Oger, A. & Harrison, J., 2022) and "[Environmental credentials of EU trade policy](#)" (Blot, E. & Kettunen, M., 2021).

³ Bellmann, C. & Sell, M. (2021). Options to Incorporate Circular Economy Provisions in Regional Trade Agreements. IISD & Sitra. [Link](#).

detailed discussion on the trade implications of the development and implementation circular economy policies by either Party.

- Ensuring the organisers of these dialogue sessions are provided sufficient resources to begin to address the shift to circularity. These resources could be used by the dialogue members to commission research reports and support the organisation of more dialogue sessions on the trade impacts of circular economy.

Secondly, at the international level, the EU must work towards developing a common understanding of circularity, both in a theoretical and practical manner, while supporting a fair and sustainable transition to a global circular economy, by:

Taking forward multilateral dialogues and cooperation on circular economy:

- Championing discussions at the WTO's TESSD and the GACERE in cooperation with other like-minded trade partners on circular economy and environmental sustainability through trade, to build a common understanding of the circular economy and circular goods, and the potential implications for the global trading system. For example, the TESSD could take steps towards further defining what constitutes a circular good and situating this in the HS codes.
- Working together in the development, harmonisation, and recognition of standards for circularity, as well as promoting cooperation for mutual recognition of standards and trade facilitation efforts with the ISO, as well as with the World Customs Organisation and the Basel Convention Secretariat to ensure sustained progress on codifying circular goods such as environmentally hazardous waste in international trade.
- Backing initiatives such as the World Circular Economy Forum, which form an indispensable platform for evidence-based public-private discussion on circularity and its global implications on trade and supply chains. The private sector is a valuable resource in this space that possesses a wealth of expertise and adaptability with a better eye for process efficiencies.

Assisting least developed countries in the transition to a circular economy:

- Embedding circularity in development cooperation schemes such as Aid for Trade, which aim to assist countries facing capacity constraint pertaining to trade regulations and infrastructure. As the EU and like-minded countries pursue new standards for circularity, without proper support, the least developed countries stand to experience these new standards as barrier to trade and their sustainable development.
- Accounting for the unequal accumulation of and spread of circularity benefits, that risk perpetuating the gap between developed and developing countries.

1. BACKGROUND

Despite the post-pandemic recovery^{4,5}, global supply chains continue to face uncertainty with the war in Ukraine, with its shock and subsequent ripple-effect being felt worldwide⁶. In an effort to navigate a tumultuous geopolitical landscape, the EU now faces a new set of challenges that risk stalling necessary actions to address the climate crisis.

Appeals to reduce the EU's reliance on Russian gas and oil come at a particularly precarious time as gas and energy prices were already on the rise prior to Russia's invasion in Ukraine. Taken together, the call to transition to renewable energy sounds louder than before. However, with demand for raw materials increasing⁷, most of which are necessary to produce ICT and military equipment, as well as clean technologies⁸ such as steel, aluminium, and nickel, supply chain disruptions caused by the war led to further price surges⁹.

Furthermore, Russia and Ukraine are substantial contributors to the global supply of grain. With that, the war has affected global food security, immediately hitting households' wallets at a time when inflation rates and costs of living are surging in the EU and beyond.

The war in Ukraine risks stalling the green recovery that was anticipated during the pandemic. At the same time, it highlights the need to reduce the EU's dependence on virgin materials.

A relatively new concept and facet of the green transition is the circular economy, which seeks to alter the present economic paradigm by addressing our current, ever-increasing extraction of the Earth's limited resources.

Accordingly, ramping up efforts to promote resource efficiency and implementing of a new framework for circularity would alleviate the need to continuously extract new resources, while contributing to decarbonisation, as a

⁴ Kettunen, M. & Blot, E. (2021). Trade in support of circular economy, sustainable development, and green recovery. Think2030 policy paper. IEEP, Brussels/London. [Link](#).

⁵ WTO. (4 Oct 2021). Global trade rebound beats expectations but marked by regional divergences. [Link](#).

⁶ WTO. (12 Apr 2022). Russia-Ukraine conflict puts fragile global trade recovery at risk. [Link](#).

⁷ Eurostat. (2022). Extra-EU trade of raw materials tripled since 2002. [Link](#).

⁸ Hund, K., La Porta, D., Fabregas, T., Laing, T. & Drexhage, J. (2020). Minerals for Climate Action: The Mineral Intensity of the Clean Energy Transition. World Bank Group. [Link](#).

⁹ EURACTIV. (12 Apr 2022). Securing its supply of raw materials: the wind industry's next challenge. [Link](#).

considerable amount of our carbon emissions are related to how goods are produced and consumed.

The greatest economies of scale for resource efficiency are unlocked at the global level, therefore it is imperative to create a common understanding of the economic and environmental benefits of the circular economy.

Box 1: What is the circular economy?

Creating a common understanding of what the circular economy is, and what it could mean for the future is essential to progress. The first step in this regard is the foundation of a common language around circularity. In collaboration creation with leading firms, the Ellen MacArthur Foundation created a glossary¹⁰, which defines the circular economy as:

"A systems solution framework that tackles global challenges like climate change, biodiversity loss, waste, and pollution. It is based on three principles, driven by design: eliminate waste and pollution, circulate products and materials (at their highest value), and regenerate nature.

It is underpinned by a transition to renewable energy and materials. Transitioning to a circular economy entails decoupling economic activity from the consumption of finite resources. This represents a systemic shift that builds long-term resilience, generates business and economic opportunities, and provides environmental and societal benefits."

1.1 Circular economy in the EU

In March 2020, the EU took a substantial step forward towards the transition to a European circular economy by adopting the new Circular Economy Action Plan¹¹ (CEAP) under the EU Green Deal. The Action Plan paves a pathway to European circularity by outlining a Sustainable Product Policy framework and plans to target

¹⁰ Ellen MacArthur Foundation. (n.d.). Finding a common language – the circular economy glossary. [Link](#).

¹¹ European Commission. (2020). Circular economy action plan. [Link](#).

key value chains with great potential for circularity including electronics and ICT, batteries and vehicles, packaging, plastics, textiles, construction and buildings, and food, water, and nutrients.

The Commission published the **Sustainable Product Initiative**¹² in March 2022 which puts forward new sustainability requirements for goods sold on the EU. This would involve the legislation of delegated acts aimed at revising and expanding the Ecodesign Directive to target more than energy-related products and impose new performance and information requirements, as well as a ban on the destruction of unsold consumer goods. These requirements seek to improve products' durability, reliability, reusability, upgradability, reparability, ease of maintenance, refurbishment and recyclability, as well as regulate the presence of substances of concern (toxic chemicals), energy use or energy efficiency, percentage of recycled content, possibility of remanufacturing, recycling and recovery of materials, and the expected generation of waste.

Furthermore, the Sustainable Products Initiative proposal puts forward the creation of a digital products passport that will register, process, and share information on a products' environmental and carbon footprint, as well as other information such as material content and recyclability. The digital passport would support supply chain traceability as well as streamline the monitoring and enforcement of the regulation by the EU and its Member States.

The Commission has also put out a number of other initiatives under the CEAP such as the **Circular Electronics Initiative** which aims to address several sustainability issues in the electronics sector, such as durability, circular design, presence of hazardous and harmful substances, recycled content, reparability, access to spare parts, upgradability, obsolescence, e-waste prevention, collection, reuse and recycling.

To this regard, the Commission has put forward a proposal for a **Common Charger Initiative**¹³ and it is expected to implement the 'right to repair' initiative in the second half of 2022. The former aims to streamline electronics by harmonising charging ports and charging technology, while reducing charger production and disposal by unbundling the sale of chargers from a new electronic device. The latter seeks to facilitate the repair of consumer products to extend product lifespans and combat obsolescence.

¹² European Commission. (2022). Sustainable Products Initiative. [Link](#).

¹³ European Commission. (2021). One common charging solution for all. [Link](#).

Another key dossier of high priority in the realm of circular economy and climate action is the **EU Batteries Directive**¹⁴ and rules on **end-of-life vehicles**. A solid 23% of the EU's total emissions is represented by the transport sector¹⁵ and in an effort to meet its pledge to reduce its GHG emissions by at least 55% by 2030 (compared to 1990 levels), it is estimated that EU transport emissions must be reduced by 90% for the bloc to meet its 2050 climate goals¹⁶. Moreover, the demand for electric vehicles (EVs) is expected to further increase as the EU announced a target to have 13 million passenger zero-emission vehicle stock by 2025¹⁷.

In this light, and as confirmed by the CEAP, a sustainable framework for batteries is of high priority to ensure that the rare earth minerals required for their production are sourced responsibly, in addition to a comprehensive programme for battery recovery and recyclability.

While the CEAP sets out a pathway for a circular EU, the Action Plan refuses to turn a blind eye to a glaring practice of waste shipments abroad. On one hand, the EU recognises its international obligations and proportionality to ensure its waste is processed safely and responsibly. On the other hand, it acknowledges that waste contains valuable secondary raw materials which presents potential positive economic outcomes abroad.

Prior to the publication of the CEAP, EU circular economy policies targeting domestic waste recycling partially relied on exporting waste to be recycled abroad. Although it allowed the EU to achieve its own recycling rate targets, once waste was shipped abroad – usually to developing countries – the EU could not guarantee the quality of the recycling process. Since 2017, many of EU's waste recipients closed their ports for plastic waste shipments, including China, India, Thailand, Vietnam, and Malaysia.

In need of a new approach to dealing with its waste, the EU's CEAP focuses on preventing waste creation in the first place and taking charge of reverse value chains. In the context of waste exports, in January 2021, the EU placed a ban on exporting hazardous and hard to recycle plastic waste to non-OECD countries in

¹⁴ European Commission. (2020). Batteries and accumulators. [Link](#).

¹⁵ Climate Action Tracker. (2021). EU: Policies and Action. [Link](#).

¹⁶ European Commission. (2020). Sustainable batteries in their full life-cycle: A step forward towards circular economy and climate neutrality. [Link](#).

¹⁷ IEA. (2021). Global EV Outlook 2021. [Link](#).

addition to tightening the rules on clean, non-hazardous waste exports to these same countries¹⁸.

Moreover, in November 2021, the EU put forward a proposal for a **new Regulation on waste shipments**¹⁹, which proposes far-reaching changes to the Waste Shipments Regulation through targeted amendments to support modernised and digitalised procedures, develop a new framework to ensure sustainable management of exported waste and strengthened compliance. The proposal must be adopted by the European Parliament and the Council before it is implemented.

Lastly, a key sector that remain inadequately addressed in the CEAP is **circular bioeconomy**. While the CEAP does recognise that “the circular economy can significantly reduce the negative impacts of resource extraction and use on the environment and contribute to restoring biodiversity and natural capital in Europe”, it remains focused on the implementation of the Bioeconomy Strategy and Action Plan²⁰ rather than promoting the application of a circular lens in the bioeconomy.

The main initiatives through which the CEAP aims to make food and water production, consumption, and waste more circular include:

- Tackling food waste reduction under the EU Farm-to-Fork Strategy.
- Addressing sustainability of food distribution and consumption through the replacement of single-use packaging, tableware, and cutlery in food services under the sustainable products initiative.
- Encouraging circular approaches to water reuse in agriculture through a new Water Reuse Regulation.
- Developing an Integrated Nutrient Management Plan to ensure more sustainable application of nutrients and stimulate the markets for recovered nutrients.

The EU would benefit from an overall strategy to address circular bioeconomy issues, integrating the notions of regenerative agriculture and food design

¹⁸ European Commission. (2020). Plastic waste shipments: new EU rules on importing and exporting plastic waste. [Link](#).

¹⁹ European Commission. (2021). Waste shipments. [Link](#).

²⁰ COM(2018)673: A sustainable Bioeconomy for Europe: Strengthening the connection between economy, society and the environment. [Link](#).

(including issues such as proteins consumption) along with initiatives on food waste and loss²¹.

1.2 Global dimension of a circular EU

The EU CEAP recognises the multi-faceted and global dimension of the circular economy and the need to form partnerships to take forward the transition to a circular economy. To that end, the CEAP proposes the establishment of a **Global Alliance on Circular Economy and Resource Efficiency** (GACERE), a more integrated partnership with Africa and the inclusion of new circular economy objectives in its future free trade agreements (FTAs), thereby acknowledging the need to scale up towards a global circular economy. Cooperation on a multilateral level is key to unlocking the benefits of scale tied to a global circular economy but, also, to mitigate unwanted consequences to sustainable development caused by a shift in trade flows caused by an altered demand from primary to secondary resources in the medium to long term.

The GACERE²² gathers all EU Member States and 15 other countries to identify knowledge and governance gaps in advancing a global circular economy. The global alliance also involves international organisations with circular economy expertise and networks, such as the UN Environment Programme, the UN Industrial Development Organisation, the Ellen MacArthur Foundation, the Platform for Accelerating the Circular Economy, and the World Circular Economy Forum (WCEF). The members of the GACERE aim to advocate for initiatives related to the circular economy transition, resource efficiency and sustainable consumption and production at multilateral fora.

Since its conception in 2021, the GACERE has held two High-Level meetings to discuss the circular economy as a means to tackle the climate crisis²³ and global biodiversity loss, the latter of which also resulted in a working paper²⁴.

Indeed, an inherent element of the CEAP is that the effects of its new domestic policies are undoubtedly bound to spill over, affecting trade flows, and consequently, socio-economic development at a global scale. Production and consumption, materials, goods, services, and data are linked through global trade.

²¹ For additional recommendations on EU circular bioeconomy strategies, cf Sitra report “Tackling root causes – Halting biodiversity loss through the circular economy (2022). [Link](#).

²² European Commission. (2021). Global Alliance on Circular Economy and Resource Efficiency (GACERE). [Link](#).

²³ UNIDO. (2021). GACERE High-Level Meeting. [Link](#).

²⁴ UNEP. (2022). Second High-Level Meeting of the Global Alliances on Circular Economy and Resource Efficiency (GACERE). [Link](#).

As key supply chains are targeted by new sustainability standards under the CEAP, the EU must seek partnerships and lead the charge by envisaging a trade policy framework for businesses to innovate and trade with new circular markets across the world while accounting for negative effects to global sustainable development. The EU indeed has the opportunity to inspire, lead and leverage access to its market to reach for improved standardisation with its trading partners.

Other implications of the CEAP on EU trade flows are related to the introduction of new measures on production and the reduction of barriers to trade for secondary resources. The former intends to empower consumers and increase product sustainability by increasing opportunities for product repairability, reusability and durability by introducing new standards and criteria for products sold on the EU market. The latter aims to incentivise the market for secondary raw materials by pushing for better harmonisation of rules applied to waste and spent goods.

When it comes to the EU's FTAs, only one FTA in force references the circular economy in their Trade and Sustainable Development (TSD) Chapters,, i.e., the EU-UK Trade and Cooperation Agreement. Moreover, four other draft agreements still under negotiation mention the circular economy, in particular the agreements with Australia, Chile, Mexico, and New Zealand, in addition to the still to be ratified EU-Mercosur trade agreement.

Although other agreements in force acknowledge the need for sustainable production and consumption of goods, as of yet, the concept of circular economy is far from being a regular feature in FTAs. Although the EU's 2021 Trade Policy Review²⁵ reaffirms the need to seek commitments from its trade partners to further global efforts towards the circular economy transition – the EU must begin to deeply integrate circular economy principles in its trade policy and its implementation.

²⁵ European Commission. (2021). Trade Policy Review - An Open, Sustainable and Assertive Trade Policy. [Link](#).

2. LESSONS LEARNED FROM CASE STUDIES

This section provides an overview of the main findings taken from this project's case studies, focusing on the level of integration of the circular economy principles in existing frameworks and the relevance of key supply chains to the circular economy transition. The case studies for Canada, China, Mercosur, and Nigeria are available on the IEEP website.

2.1 Existing frameworks for cooperation on circularity

The selected case study countries allowed for the assessment of the integration of circularity in several trade frameworks utilised by the EU, namely the multilateral trade rules set at the World Trade Organisation (WTO), and the EU's bilateral FTAs and Generalised Scheme of Preferences (GSP).

2.1.1 World Trade Organisation

Trade partners with which the EU does not have a trade arrangement revert to the trade rules and tariffs determined by the WTO. This applies to trade partners such as China, with whom the EU has not initiated negotiations for a trade agreement.

The WTO allows its members to individually adopt trade-related measures for the protection of the environment, however these measures are subject to specific conditions. These conditions are specified in General Agreement on Tariffs and Trade (GATT) Article XX on General Exceptions²⁶, which states that a member may adopt "measures that are inconsistent with GATT disciplines, but (i) necessary to protect human, animal or plant life or health, or (ii) relating to the conservation of exhaustible natural resources." Additionally, the measures must not be applied in a manner which would constitute "a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail" and is not "a disguised restriction on international trade".

The WTO Appellate Body eventually decides whether a trade-restricting environmental measure is necessary to protect human life, fauna, or flora. Going further, the Appellate Body also weighs whether the proposed policy measure's objective could be achieved through a less trade-restrictive measure. For a measure to be implemented as a means to conserve natural resources, a substantial relationship must be established between the measure and its ends.

²⁶ WTO. (2022). WTO rules and environmental policies: GATT exceptions. [Link](#).

Moreover, any measure affecting imports is expected to be applied “in conjunction with restrictions on domestic production or consumption²⁷.”

Precedent shows that the WTO has allowed trade-related environmental measures to be implemented by countries²⁸. Yet, the WTO does not enforce its members to respect, recognise or ratify any multilateral environmental agreements. Notwithstanding, the WTO does encourage its members to engage in various multilateral dialogues on environment. Alongside the informal dialogues on plastics pollution and environmentally sustainable plastics trade (IDP)²⁹ and efforts on the fossil fuel subsidy reform³⁰, the WTO launched the Trade and Environmental Sustainability Structured Discussions (TESSD)³¹ which aims to support a global trading system that protects and preserves the environment in accordance with sustainable development.

Over 80 countries – representing 85% of global trade – participate in at least one of the initiatives on fossil fuel subsidy reform, plastics pollution and Structured Discussions on Trade and Environmental Sustainability³².

In November 2021, 53 members of the TESSD signed a Ministerial Statement ahead of the WTO’s postponed 12th Ministerial Conference, which recognizes “sustainable development and the protection and preservation of the environment” as “fundamental goals of the WTO.” The Statement also acknowledges the role of international trade and trade policy in supporting environmental and climate objectives and promoting more sustainable consumption and production to support the achievement of the Sustainable Development Goals (SDGs)³³.

In June 2022, the 12th Ministerial Conference took place and saw the EU partner with Ecuador, Kenya, and New Zealand to foster a Coalition of Trade Ministers on

²⁷ WTO. (2022). WTO rules and environmental policies: GATT exceptions. [Link](#).

²⁸ WTO. (2022). Environmental disputes in GATT/WTO. [Link](#).

²⁹ WTO. (2022). Informal dialogue on plastics pollution and environmentally sustainable plastics trade news archives. [Link](#).

³⁰ WTO. (2021). Proposed fossil fuel subsidies Ministerial Statement. [Link](#).

³¹ WTO. (2022). Trade and Environmental Sustainability. [Link](#).

³² WTO. (2022). DG Okonjo-Iweala tells sustainability conference “trade is part of the solution to challenges we face”. [Link](#).

³³ WTO. (2021). Trade and Environmental Sustainability Structured Discussions (TESSD) – Ministerial Statement on Trade and Environmental Sustainability. [Link](#).

Climate with a goal to “enhance ministerial-level dialogue so trade and trade policies can support the Paris climate goals, sustainable development, environmental sustainability and a just transition”³⁴.

2.1.2 EU free trade & investment agreements

The EU has negotiated over 40 FTAs that are either ratified and fully in force or awaiting ratification and applied provisionally³⁵. Trade agreements are negotiated between the EU and the trade partner, and the level of trade liberalisation differs between agreements – some reduce customs duties to zero for nearly all goods and services, while some agreements may incorporate less concessions for certain sectors (usually agri-foods).

Considering the EU must negotiate and seek to compromise with a trade partner, the level of safeguards for the environment in each agreement varies. However, the EU wields great leverage with providing access to its Single Market, and thus, the EU has negotiated some of the most ambitious trade agreements with regards to the inclusion of environmental commitments.

Since 2009, EU trade agreements have included a chapter dedicated to trade and sustainable development (i.e., the TSD Chapter), which comprises parties’ commitments to encourage trade in a range of environmental areas and to address global challenges such as illegal wildlife trade or unsustainable trade in natural resources. Parties sometimes also reaffirm their commitments to international conventions (see International Labour Organisation (ILO) conventions) and agreements such as the Convention on Biological Diversity (CBD) or the Paris Agreement.

The TSD Chapters also foresee mechanisms for the monitoring of the implementation and the enforcement of the Chapter commitments by including provisions establishing civil society mechanisms and a dispute settlement process.

In 2021, IEEP assessed eleven recent EU FTAs on the treatment of environment and concluded that none of the assessed agreements provide fully adequate provisions for protecting the environment, neither in terms of mitigating negative impacts of trade, nor in terms of using trade to boost environmental sustainability. Although some agreements appear to be headed in the right

³⁴ European Commission. (2022). The EU teams up with Ecuador, Kenya, New Zealand to forge cooperation on trade and climate. [Link](#).

³⁵ European Commission. (2022). Negotiations and agreements. [Link](#).

direction, no single existing trade agreement can yet be considered a 'gold standard'³⁶.

In recent years, there have been many developments where EU trade and sustainability emerged as a core issue of civil society, including the decision by the EU Ombudsman that the Commission failed to deliver the sustainability impact assessment of the EU-Mercosur agreement before negotiations concluded³⁷, a Panel of Experts ruling that labour provisions of the EU-Korea TSD Chapter are in fact legally binding³⁸, and progress with ambitious trade partners such as New Zealand³⁹. In this light, and following its 2021 Trade Policy Review⁴⁰, the European Commission announced it would review its Action Plan on TSD Chapters, which is expected for end of June 2022.

Although newer agreements contain more comprehensive and detailed provisions on sustainable development and environmental protection, the assessment concluded that circular economy is sparsely referenced across TSD Chapters. Moreover, the capacity in which the circular economy is considered in the TSD Chapters is defined in the context of bilateral and multilateral cooperation between the Parties to promote the circular economy.

The EU-UK Trade and Cooperation Agreement is the first EU FTA in force that explicitly references the circular economy. Specifically, the Parties pledge to cooperate bilaterally and at multilateral fora to promote a circular economy⁴¹. However, this trade agreement has been the first to embed the Paris Agreement as an "essential element" of EU-UK partnership and stipulates that any violation of this essential element by a Party, permits the other Party to terminate or suspend all part of the trade agreement⁴². Considering the UNFCCC, affirms that the circular economy is "crucial to achieving the SDGs and the Paris Climate

³⁶ Blot, E. & Kettunen, M. (2021). Environmental credentials of EU trade policy – A comparative analysis of EU free trade agreements. IEEP, Brussels and London. [Link](#).

³⁷ European Ombudsman. (2021). Decision in case 1026/2020/MAS concerning the failure by the European Commission to finalise an updated 'sustainability impact assessment' before concluding the EU-Mercosur trade negotiations. [Link](#).

³⁸ European Commission. (2021). Panel of experts confirms Republic of Korea is in breach of labour commitments under our trade agreement. [Link](#).

³⁹ Greens/EFA in the European Parliament. (2021). Seeking progress towards climate-supportive trade: the EU-NZ FTA negotiations. [Link](#).

⁴⁰ European Commission. (2021). Trade Policy Review: An Open, Sustainable and Assertive Trade Policy. [Link](#).

⁴¹ EU-UK Trade and Cooperation Agreement. (2021). See Article 400(5.a). [Link](#).

⁴² European Commission. (2020). Questions & Answers: EU-UK Trade and Cooperation Agreement. [Link](#).

Change Agreement"⁴³, one could say that in this regard, the EU and the UK are loosely-bound to pursuing and implementing circularity principles.

Some draft agreements still under negotiation also reference the circular economy, in particular the draft agreements with Australia, Chile, Mexico, and New Zealand, as well as the final but not yet ratified EU-Mercosur FTA.

Although these trade agreements do explicitly mention the circular economy in a cooperative capacity, there are no concrete provisions to support the development of the circular economy. Despite that, most trade agreements, whether they reference the circular economy or not, do incorporate provisions on circular economy principles, such as energy efficiency, water and waste management and the responsible management of natural resources. Moreover, many provide alternative avenues for environmental cooperation in and beyond the TSD Chapter (see Box 2 for an example).

In terms of the extent to which bilateral trade agreements embed sustainability, the report found that the EU seeks more concessions on sustainability from its developed country trade partners, compared to language used in trade agreements with the Global South⁴⁴. However, the European Commission acknowledges the role trade agreements in incentivising trade partners to pursue environmental efforts, especially in a collaborative manner.

Box 1: EU-Canada CETA and the circular economy

The Comprehensive Economic and Trade Agreement (CETA) – which governs the economic relationship between the EU and Canada – refers to certain circular economy principles in the section on cooperation on environmental issues in its TSD Chapter.

Specifically on trade and investment in environmental goods and services the agreement mentions *"environmental and green technologies and practices; renewable energy; energy efficiency; and water use, conservation and treatment;"* and the *"promotion of life-cycle management of goods, including carbon accounting and end-of-life management, extended*

⁴³ UNFCCC. (2021). Shifting to a Circular Economy Essential to Achieving Paris Agreement Goals. [Link](#).

⁴⁴ Blot, E. & Kettunen, M. (2021). Environmental credentials of EU trade policy – A comparative analysis of EU free trade agreements. IEEP, Brussels and London. [Link](#).

producer-responsibility, recycling and reduction of waste, and other best practices;"

However, beyond its TSD Chapter, CETA incorporates a chapter on "Bilateral Dialogues and Cooperation" which establishes the joint objective to ensuring sustained cooperation in four specific areas. These areas include bilateral dialogues on forest products and raw materials, including minerals, metals, and agricultural products with an industrial use.

The objective of these meetings is to cooperate and exchange on the development, adoption and implementation of relevant laws, regulations, policies, standards, as well as testing, certification and accreditation requirements and the potential impacts of these measures on the trade in forest products and raw materials.

Trade dialogues spilling over into tangible initiatives...

The CETA's "Bilateral Dialogues on Critical Materials" has led to the delivery of the Canada-EU Strategic Partnership on Raw Materials⁴⁵ to advance the value, security, and sustainability of trade and investment into the critical minerals and metals needed for the transition to a cleaner and digitized economy. This strategic partnership is the first that the EU has developed with priority countries following the European Commission's announcement to pursue an Action Plan on Critical Raw Materials⁴⁶ that looks to develop resilient supply chains and support innovation and circularity.

Green investment for the circular transition

Although investment flows are less observable than the transport of goods to and from shipping ports, investment agreements also have their part to play in the green transition.

Most trade agreements are inherently investment agreements, as rules surrounding the flow of capital are stipulated in dedicated chapters of the

⁴⁵ Government of Canada. (2021). Joint Statement by Canada's Minister of Natural Resources and the European Commissioner for Internal Market. [Link](#).

⁴⁶ European Commission. (2020). Commission announces actions to make Europe's raw materials supply more secure and sustainable. [Link](#).

agreements. However, the EU has pursued investment agreements on their own, especially in cases where negotiating a trade and investment agreement would prove too cumbersome in the short-term – most notably with China.

In 2013, negotiations on an investment agreement began between the EU and China. The EU-China Comprehensive Agreement on Investment (CAI) was agreed in principle between the two partners in December 2020 but has not yet been ratified due to political tensions and associated sanctions (imposed by the EU on China) and countersanctions (imposed on the EU by China) following suspected human rights violations in China's north-western Xinjiang Province⁴⁷.

While the CAI remains in ratification limbo for the foreseeable future, this investment agreement presents an opportunity to ensure financial flows are incentivised to contribute to the green transition and circularity, especially with a partner such as China which has implemented many circular economy policies to date.

The draft text of the CAI includes a section on "Investment and Sustainable Development" (Section IV)⁴⁸, with the aim of embedding sustainability in the EU-China investment relationship. The CAI requires that investments are underpinned by sustainable development principles, enforced by an independent panel of experts. The CAI clearly outlines that investment should not be encouraged by weakening or reducing environmental protection, or by waiving or derogating from environmental laws. It outlines that the EU and China shall facilitate and encourage investment in environmental goods and services, and exchange experiences and good practices on environmental impact assessments for investments. The CAI, if and when ratified, would represent the first time China would agree to such environmental provisions with a trade partner.

2.1.3 EU's GSP Regulation

The EU's GSP Regulation⁴⁹ grants unilateral tariff preferences to developing countries classified by the World Bank as lower or lower-middle income countries as a means of supporting their economic and social development, as well as promoting human rights, employment standards, sustainable development, and good governance practices. As a unilateral trade arrangement, the EU determines

⁴⁷ EURACTIV. (5 May 2021). EU efforts to ratify China investment deal 'suspended' after sanctions. [Link](#).

⁴⁸ European Commission. (2021). EU-China investment negotiations – Section IV: Investment and sustainable development. [Link](#).

⁴⁹ European Commission. (n.d.). Generalised Scheme of Preferences. [Link](#).

the criteria on its own and the trade partner can decide whether they want to apply for the trade arrangement.

The GSP Regulation is made up of three preferential arrangements, based on the level of development of the trade partner:

- Standard GSP beneficiary countries benefit from partial or full removal of customs duties across approximately 66% of all EU tariff lines. Countries benefitting from the Standard GSP arrangement must *respect* 15 core convention on human and labour rights.
- [GSP+](#) provides full removal of customs duties for the same products as the Standard GSP conditional on the *ratification* of 27 international conventions. This includes 15 conventions on human and labour rights and 12 conventions related to the environment and to governance principles.
- [EBA \(Everything But Arms\)](#) is the special EU arrangement for least developed countries, providing them with duty-free, quota-free access for all products except arms and ammunition.

The current GSP Regulation is set to expire on 31 December 2023. Accordingly, on 22 September 2021, the European Commission unveiled a proposal to renew the GSP Regulation⁵⁰. The new Regulation plans to bolster the conditionalities required to access the preferential tariffs under the GSP+. The proposal updates the existing list of 27 core conventions with the inclusion (as addition or replacement) of six new international treaties, such as the Paris Agreement, to bring the total to 32 conventions to be respected or ratified by beneficiaries.

The update and expansion of these core conventions on human and labour rights, as well as on environment and good governance is more than necessary for the renewed GSP Regulation. In particular, the five environmental conventions in the current GSP Regulation – the CBD, CITES, UNFCCC, the Basel Convention, and the Montreal Protocol – date back to 1990s, at the earliest.

The inclusion of the Paris Agreement in the proposal for a revised GSP – and required ratification for GSP+ benefits – is a step in the right direction. Especially considering, as previously mentioned, the UNFCCC affirms that the circular

⁵⁰ European Commission. (2021). Proposal for a Regulation of the European Parliament and of the Council on applying a generalised scheme of tariff preferences and repealing Regulation (EU) No 978/2012 of the European Parliament and of the Council. [Link](#).

economy is “crucial to achieving the SDGs and the Paris Climate Change Agreement”⁵¹.

Nonetheless, the preferential arrangement neither explicitly nor implicitly references the circular economy. Moreover, the current GSP does not consider a products’ sustainability criteria when granting preferential tariffs, and it is unlikely the renewed GSP Regulation will differentiate between products based on their sustainable sourcing of resources and/or production methods.

Box 3: Concluding remarks on circularity in the EU’s trade frameworks

Existing trade frameworks that are relatively newer – or have had the ability to review their contents – incorporate more language which recognises the role of trade and trade policy in supporting economic and social development, as well as supporting environmental objectives. Moreover, environmental cooperation has become a standard in newer trade frameworks, although the enforceability of these commitments is not solidified within the existing frameworks.

Circular economy is rarely explicitly mentioned across the EU’s trade frameworks. However, that is not to say that efforts for cooperation on circular economy between the EU and its trade partner is non-existent. For example, the “Bilateral Dialogues and Cooperation” Chapter in the CETA helped spur the creation of the EU-Canada Strategic Partnership on Raw Materials which prioritises dialogue to ensure relevant supply chain resilience and circularity.

Although substantial progress has been made at the WTO concerning plastics pollution and dialogues on trade and environmental sustainability, cooperation efforts at the multilateral level remains on a voluntary basis and enforceability at this level is arguably more toothless than in the EU’s FTAs.

Yet, the lack of formalised circular economy principles in the EU’s trade frameworks is not surprising. The circular economy is a relatively new concept, and its economic comprehensiveness and holistic nature were understood years after the EU had negotiated most of its trade

⁵¹ UNFCCC. (2021). Shifting to a Circular Economy Essential to Achieving Paris Agreement Goals. [Link](#).

agreements. Nevertheless, the circular economy is an essential concept to develop future-proof, sustainable and resilient supply chains.

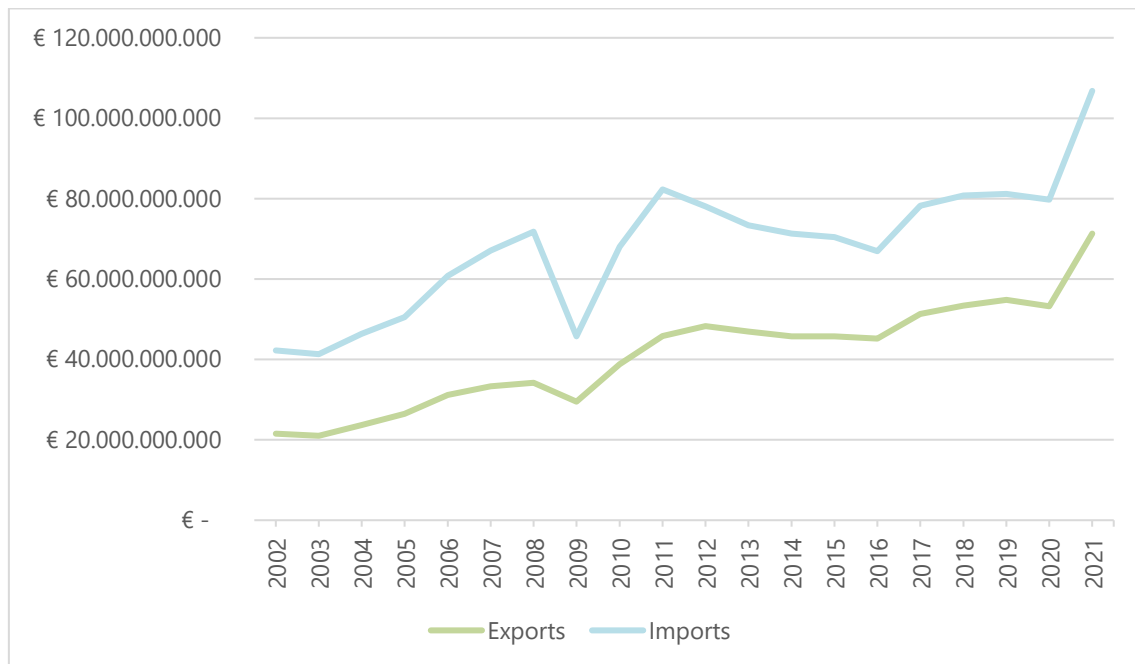
2.2 Circular supply chains in EU bilateral trade

A multitude of product supply chains are expected to face new requirements from the EU's CEAP which announced the establishment of sustainability principles including improving product durability, reusability, reparability; increasing the recycled content in products; and incentivising product-as-a-service models.

The case studies underpinning this policy report sought out the most relevant sector and supply chains – both in terms of economic importance and its potential for circularity – represented in the EU's bilateral trade relations. This section aims to highlight some of these key supply chains, namely looking at trade in raw materials (metals and minerals mining, and the bioeconomy), as well as plastics.

2.2.1 Raw materials

The Russian invasion of Ukraine has consequences for the EU considering the relevance of these two countries in exporting raw materials to the EU. The circular economy has the potential to act as a buffer to external shocks to the supply of primary raw materials, by increasing resource efficiency of key raw materials, as highlighted in the CEAP.

Figure 1: EU trade in raw materials, 2002-2021

Source: Eurostat (2022) (online data code: DS-018995). Extra-EU trade of raw materials tripled since 2002. [Link](#).

However, the EU saw its trade in raw materials – including metals, minerals and rubber, wood, paper and textiles, and animal and vegetable raw materials – triple over the period 2002 to 2021, see Figure 1. The some of the case study countries are already key trade partners of the EU, for example, China is a large export destination for EU raw materials, while the EU mostly imports raw materials from Brazil, the US, Ukraine, Russia, and Canada⁵².

On one hand, the OECD projects a doubling of global primary raw materials use, from 79 gigatonnes to 167 gigatonnes over the period 2011 to 2060, with the strongest growth in demand coming from emerging and developing economies. Moreover, the 2022 Circularity Gap Report projects materials extraction to total between 170 to 184 gigatonnes in 2050⁵³.

On the other hand, materials intensity use is expected to decrease as technologies see efficiency gains and services become a more significant share of the global economy. The OECD expects that recycling is to become more competitive, however, due to the relatively higher labour costs of secondary production

⁵² Eurostat. (2022). Extra-EU trade of raw materials tripled since 2002. [Link](#).

⁵³ Circular Economy. (2022). The Circularity Gap Report 2022. [Link](#).

technologies compared to primary resource extraction, it is not expected to overtake primary resource extraction⁵⁴.

Though the prevalence of secondary materials on the global market is on the uptake, it is estimated that only 8.6% of resources extracted globally are cycled back into the economy⁵⁵. Furthermore, studies show that despite policies aimed at increasing domestic supply of raw materials via recycling, the substitution of primary for secondary raw materials is imperfect, highly dependent on the commodity in question and the cost-effectiveness of the recycling process⁵⁶.

Another issue is the demand for raw materials, which is estimated to be double to triple the supply of secondary raw materials⁵⁷. The need for continued primary resource extraction to meet global demand is therefore a reality that should be factored into the policy landscape.

Metals and minerals

The EU has seen its trade in raw materials triple over the past 20 years, and in 2021, the import of metals and minerals, including scraps made up more than half of those imports, totalled around 50 billion euros⁵⁸. This is particularly relevant for the sourcing of metals and minerals, which are necessary to produce clean technological products⁵⁹ such as solar panels, wind turbines, electric vehicles, and energy efficient lighting⁶⁰, in addition to ICT and military equipment. These metals and minerals are often referred to as critical/strategic raw materials and rare earth elements (REEs). The need for resilience in the supply of these raw materials is not only vital to meet society's basic needs and meet the demands of the digital transition, but also to address the climate crisis.

As mentioned above, there are barriers to the substitution of primary raw materials by secondary raw materials. This is also the case for metals and minerals, where we see a disparity between recovery/recycling rates between commodities.

⁵⁴ OECD. (2019). Global Materials Resources Outlook to 2060: Economic Drivers and Environmental Consequences, OECD Publishing, Paris. [Link](#).

⁵⁵ Circular Economy. (2022). The Circularity Gap Report 2022. [Link](#).

⁵⁶ Yamaguchi, S. (2021). International trade and circular economy – Policy alignment. OECD Trade and Environment Working Papers 2021/02. [Link](#).

⁵⁷ Circular Economy. (2022). The Circularity Gap Report 2022. [Link](#).

⁵⁸ Eurostat (2022). Extra-EU trade of raw materials tripled since 2002. [Link](#).

⁵⁹ Gregoir, L. & van Acker, K. (2022). Metals for Clean Energy: Pathways to solving Europe's raw materials challenge. KU Leuven. [Link](#).

⁶⁰ European Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, Bobba, S., Claudiu, P. & Huygens, D. (2018). Report on critical raw materials and the circular economy, Publications Office. [Link](#).

For example, the secondary market for scrap metals is much more developed due to the value retention of metals, such as steel, aluminium, and copper⁶¹, compared to that of REEs where the recovery rate remains considerably low, around 2%, despite their increasing demand⁶².

Value retention of these materials is essential to providing economic incentive to recover and recycle these products. In the case of REEs, recovery for recycling efforts is challenging due to their low concentrations in end-of-life products, such as electronics and other energy-related equipment, which are often difficult to retrieve from consumers⁶³.

The European Commission has taken steps to begin to secure a sustainable supply of raw materials by publishing an Action Plan on Critical Raw Materials⁶⁴. This Action Plan's objective is twofold, to reduce reliance on primary raw materials and strengthen the sourcing of secondary raw materials. These objectives are two sides of the same coin as the implementation of circularity across the supply chain aims to reduce the need for primary raw materials through innovative circular product design, while downstream, the mapping and recovery of raw materials for recycling aims to strengthen the domestic sourcing of secondary raw materials.

The Action Plan for Critical Raw Materials also formalises international avenues for cooperation, leading to the creation of the European Raw Materials Alliance (ERMA)⁶⁵, with a broad international network of companies involved in the mining, processing, and recycling of raw materials, to support the delivery of the Action Plan objectives.

Going further, the Action Plan seeks out strategic partnerships with resource-rich countries, such as Canada, Australia, Norway, Ukraine, as well as several countries in Africa and South America, so secure a supply of critical raw materials not found in Europe⁶⁶. An example of how the EU's trade framework can support these

⁶¹ OECD & Re-Circle. (2018). Government Support for Primary & Secondary Metal Production. [Link](#).

⁶² Patil, A.B., Paetzl, V., Struis, R.P.W.J. & Ludwig, C. (2022). Separation and Recycling Potential of Rare Earth Elements from Energy Systems: Feed and Economic Viability Review. *Separations* 2022, 9, 56. [Link](#).

⁶³ Circular Economy, EEB & FTAO. (2020). Avoiding blind spots: Promoting circular & fair business models. [Link](#).

⁶⁴ European Commission. (2020). Commission announces actions to make Europe's raw materials supply more secure and sustainable. [Link](#).

⁶⁵ European Raw Materials Alliance – ERMA. (2022). About us. [Link](#).

⁶⁶ European Commission. (2020). Critical Raw Materials Resilience: Charting a Path towards greater Security and Sustainability. [Link](#).

partnerships is the CETA, which provided a mandate for the creation of the EU-Canada Strategic Partnership on Raw Materials (see Box 2).

Securing strategic partnerships is critical for the EU, as it does occupy a nearly enough REE natural reserves. Worldwide, it is estimated that the largest reserves of REEs are found in China (37%), Vietnam (18%), Brazil and Russia (17.5% each)⁶⁷.

Circular bioeconomy

The current rhythm of biodiversity loss poses an existential threat to our societies and yet is often considered as a secondary objective in many policy developments, including in the EU. As previously mentioned, the EU trade policy is often quite permissive in terms of the source, or the production methods of the products imported in the EU market. This has a significant impact on the supply regions of the world, and especially in fragile regions already subject to massive biodiversity losses due to deforestation for instance.

For example, in 2021, the EU imported over 30 billion euros in oilseeds, and animal and vegetable-based materials, as well as over 10 billion euros worth of cork, wood, pulp and paper waste. Brazil, Russia, Ukraine, and Indonesia are among the top exporters to the EU in these products⁶⁸.

Yet, it has been demonstrated that this biodiversity loss can be halted, and even reversed, by 2035 through a transition to circular economy⁶⁹ in the sectors of food and agriculture, buildings and construction, fibres and textiles, and forest (i.e., forestry and the forest industry), namely through the **circular bioeconomy**.

The bioeconomy is understood as the production, processing, retailing and consumption of biomass, i.e., the whole range of bio-based products ranging from food and feed to fuels and a variety of raw materials. These include agricultural and forest products, crops, and animal residues and/or waste. Biomass is a functionally renewable resource in that it can be regrown after use, assuming land, water and nutrients are available to do so.

Moreover, the bioeconomy is connected to key environmental cycles including the carbon cycle (through the sequestration and emission of carbon), nutrient cycles including the nitrogen cycle and the hydrological cycle. Therefore, land management choices linked to biomass production also interact with the delivery

⁶⁷ U.S. Geological Survey. (2022). Mineral Commodity Summaries – Rare Earths. [Link](#).

⁶⁸ Eurostat (2022). Extra-EU trade of raw materials tripled since 2002. [Link](#).

⁶⁹ Forslund, T., Gorst, A., Briggs, C., Azevedo, D. & Smale, R. (2022). Tackling root causes: Halting biodiversity loss through the circular economy. Sitra & Vivid Economics. [Link](#).

of associated ecosystem services including biodiversity and soil protection and the emission and sequestration of greenhouse gases.

Consequently, the 'circular bioeconomy' must encompass two parallel concepts of circularity. On one hand, it must reference the key concepts of the mainstream circular economy including resource efficiency, an emphasis on waste minimisation, reuse, and recycling. However, the tendency here is to focus on the processing stages of biomass use as a raw material.

On the other hand, the raw material use must be integrated with the wider biomass cycles, implying different system boundaries that incorporate biomass production, use and regrowth and the associated use of land. This also implies that any step change in demand for biomass must consider the consequences for land use and land management associated with the scaling up of production and use of biomass. Biomass is functionally renewable but only environmentally sustainable at certain levels of production and use given that land and associated soil and water resources are finite, or functionally renewable within set timeframes.

In the existing thinking on circularity in the bioeconomy some have conceived the concept in a relatively constrained way, including focusing primarily on the downstream aspects of circularity involving primarily resource efficient processing of biomass-based residues and wastes, introduction of principles of cascading

use⁷⁰, and re-circulation of organic material and nutrients to land. Others perceive a circular, sustainable bioeconomy more broadly and with focus also on the upstream production; complementing the emphasis on resource efficiency and biomass utilisation with actions to promote environmentally and socially responsible biomass production. Recent work by the Ellen MacArthur Foundation has focused more on emphasising 'regenerative agriculture' in the context of a circular bioeconomy⁷¹, i.e., perceiving a circular bioeconomy as about producing food (in the context of their work, but this could apply equally to other biomass) in a healthy way that protects water, soil, biodiversity, ecosystem services and so on.

Box 4: An overview on the regenerative principle

The Ellen MacArthur Foundation defines the circular economy based on three pillars⁷²:

1. Eliminate waste and pollution⁷³.
2. Circulate products and materials⁷⁴ (at their highest value).
3. Regenerate nature⁷⁵.

The third pillar on nature regeneration states that by moving from a take-make-waste linear economy to a circular economy, natural processes are better supported, thereby leaving more room for nature to thrive. The concept of nature regeneration is based on several key concepts:

From extraction to regeneration

This is obtained by shifting our economy from linear to circular processes, thus focusing on regeneration rather than extraction and building natural capital rather than depleting it. This concept is based on a gradual decoupling of economic activity from material extraction by keeping materials in circulation after use. Sustainable land use and farming

⁷⁰ Cascading refers to maximising resource effectiveness by using biomass in products that create the most economic value over multiple lifetimes. The concept is often associated with the forestry sector, see [WBCSD](#) (2018).

⁷¹ Ellen MacArthur Foundation. (n.d.) Regenerative agriculture. [Link](#).

⁷² Ellen MacArthur Foundation. Circular Economy Introduction. [Link](#).

⁷³ Ellen MacArthur Foundation. Eliminate waste and pollution. [Link](#).

⁷⁴ Ellen MacArthur Foundation. Circulate products and materials. [Link](#).

⁷⁵ Ellen MacArthur Foundation. Regenerate nature. [Link](#).

practises are key in that context to allow nature to rebuild soils and increase biodiversity.

The food industry

As an obvious key actor in our linear economy, the food industry should be incentivised to shift from current production methods relying heavily on increasing quantities of synthetic fertilisers, pesticides, fossil fuels, water, and other finite resources. This production method is source of pollution and has a detrimental impact on human health, in addition to driving biodiversity loss.

Regenerative food production practises such as agroecology, conservation agriculture, and agroforestry improve soil health (which has a positive impact on the carbon cycle but also increase resilience against droughts and floods) and reduce greenhouse gas emissions from food production.

More space for nature

Decreasing material use and intensity in the agri-food sector also means less land is required for sourcing virgin raw materials. This has a direct benefit for biodiversity as more space is available for rewilding while land still dedicated to sourcing can also be dedicated to sustainable production of renewable resources.

Tackling climate change

While transitioning to renewable energy is a key component to tackling climate change, agri-food production methods and land management are still among the leading sectors in GHG emissions. Transitioning to circular economy in the sector would bring significant economic, health, and environmental benefits but would also support the mitigation efforts of the economy against climate change.

When developing the thinking and defining concrete standards for sustainable circular bioeconomy, both aspects of circularity identified above need to be taken into consideration. A limited definition of the circular bioeconomy, focusing on waste minimisation, reuse, and recycling only, limits the opportunities to recognise the importance of land and sustainable land use in determining a sustainable basis for the bioeconomy and limits the opportunities for promoting

opportunities for rural actors, rural development globally and ultimately SDG delivery.

The integration of these two parallel concepts requires an increase in the extent to which biomass production and the role of the biomass producers (i.e., farmers or foresters) are emphasised within the bioeconomy. In so doing, the right links need to be made between trade in biomass that supports an emerging circular bioeconomy and sustainable rural development, appropriate rural land use and delivery of environmental standards in supply regions across the globe.

2.2.2 Plastics and plastic waste

The most well-known environmental consequence of plastic use is the issue of plastics waste treatment. In 2019, just 9% of global plastic waste was recycled, while half of global plastic waste ended up in landfills, another 19% being incinerated and the last 22% either leaked into the environment or was disposed of in uncontrolled sites or burn pits⁷⁶. In addition to marine and land pollution resulting from plastics waste, the production of plastics remains a significant contributor to global GHG emissions as plastics remain reliant on fossil fuels as raw materials. To be precise, plastics production accounts for 90% of the total GHG emissions over its life-cycle, which totals 3.4% of global GHG emissions⁷⁷.

At the global level, plastics production has doubled from 234 million tonnes (Mt) in 2000 to 460 Mt in 2019. Over the same period, plastic waste has more than doubled from 156 Mt to 353 Mt⁷⁸. It is projected that by 2060, in the absence of ambitious policies tackling plastics use and recycling, plastics waste will triple totalling over 1,000 Mt⁷⁹.

A recent study indicated that global trade in plastics is worth more than US\$ 1 trillion per year, accounting for 5% of total trade in merchandise⁸⁰. Fifty-six percent of the trade volume is comprised of primary forms of plastics, final manufactured products 21%, intermediate forms 11%, intermediate manufactured goods 5%, and plastic waste 2%⁸¹.

⁷⁶ OECD. (2022). Global Plastics Outlook: Economic Drivers, Environmental Impacts and Policy Options, OECD Publishing, Paris. [Link](#).

⁷⁷ Ibid.

⁷⁸ Ibid.

⁷⁹ OECD. (2022). Global Plastics Outlook: Policy Scenarios to 2060, OECD Publishing, Paris. [Link](#).

⁸⁰ UNCTAD. (2021). Global plastic trade 40% bigger than previously thought, study finds. [Link](#).

⁸¹ Ibid.

One pillar of the EU CEAP is how it aims to encourage the EU to deal with its own waste at home in lieu of exporting it to other countries, by improving the value retention of end-of-life products and looking at waste as a resource⁸². Accordingly, the Action Plan has a dedicated section for plastics and packaging, highlighting several initiatives it pledges to take forward. These include mandatory requirements for recycled content and waste reduction measures, tackling the presence of microplastics in the environment, the timely implementation of the Directive on Single Use Plastic Products⁸³, as well as the development of a policy framework around bio-based, biodegradable and compostable plastics.

Plastics Europe projected that in 2020, 34.6% of all collected EU plastic waste was recycled, while 42% was sent to energy recovery operations and 23% ended up in a landfill⁸⁴. It is estimated that around half of the collected EU plastic waste was shipped outside the EU to be processed⁸⁵.

The EU (along with Saudi Arabia and South Korea) is one of the largest global exporters of primary plastics, whilst China is the leading global importer of plastic feedstocks and primary plastics, and the leading global exporter of both intermediate and final manufactured plastic products⁸⁶. China (together with the US) is by far the EU's largest trading partner for plastics and plastic items, including plastic packaging materials ("Plastics and articles thereof", HS category 39⁸⁷).

For many years, China has been a major destination for shipments of the world's waste, including processed plastic waste, which provided a convenient option for preventing the disposal (landfilling or incineration) of plastic waste in many countries⁸⁸.

⁸² Schröder, P. (2020). What does the EU circular economy plan mean for China? China Dialogue. [Link](#).

⁸³ Directive (EU) 2019/904 of the European Parliament and of the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the environment, OJ L 155, 12.6.2019, p. 1.

⁸⁴ Plastics Europe. (2021). Plastics – the Facts 2021: An analysis of European plastics production, demand and waste data. [Link](#).

⁸⁵ European Parliament. (2021). Plastic waste and recycling in the EU: facts and figures. [Link](#).

⁸⁶ UNCTAD. (2020). Global trade in plastics: insights from the first life-cycle trade database. UNCTAD Research Paper No. 53. [Link](#).

⁸⁷ Harmonized System (HS) tariff nomenclature is an internationally standardised system of names and numbers to classify traded products.

⁸⁸ Brooks, A.L., Wang, S. & Jambeck, J. R. (2018). The Chinese import ban and its impact on global plastic waste trade. *Sci. Adv.* 4, eaat0131. [Link](#).

In recent years, however, China has implemented policies to increasingly restrict waste imports. In 2013, China introduced a requirement for lower levels of contamination of imported plastic waste (the so-called “Green Fence”) to improve the quality of plastic waste imports and tackle illegal shipments⁸⁹. In its first six months, this operation led to 800,000 tonnes of imported recyclable waste or scrap being rejected on grounds of quality^{90,91}. Then from 2018, the country introduced a new “National Sword” policy, permanently banning the import of non-industrial plastic waste⁹² and many other recyclable waste materials. Prior to the 2018 ban, 95% of the plastics collected for recycling in the EU were sold and shipped to Chinese processors; in the year after the ban, China’s plastics imports fell by 99%⁹³.

Since 1 January 2021, China has implemented an import ban on all materials that it classifies as “solid waste”⁹⁴. Although these bans are in place, it is worth noting that this is not an indication that no raw material or feedstock imports are needed; rather it is a sign that low quality materials are no longer welcome. According to the Chinese Recycling Association, legitimate trade in (quality) waste and scrap materials can promote a resource efficient circular economy, with the challenges being to create effective international import and export controls for both importing and exporting countries, to discuss new international trade modes, and to promote cooperation between businesses and industrial organisations in importing and exporting countries⁹⁵.

⁸⁹ Ibid.

⁹⁰ Earley, K. (27 August 2013). Could China’s ‘green fence’ prompt a global recycling innovation? The Guardian. [Link](#).

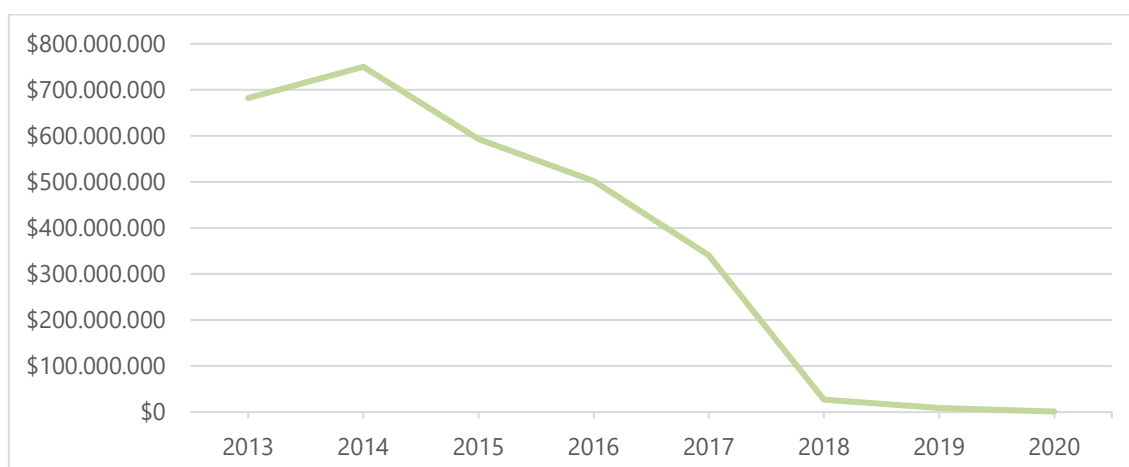
⁹¹ Flower, W. (11 02 2016). What Operation Green Fence has Meant for Recycling. Waste 360. [Link](#).

⁹² Brooks, A.L., Wang, S. & Jambeck, J. R. (2018). The Chinese import ban and its impact on global plastic waste trade. Sci. Adv. 4, eaat0131. [Link](#).

⁹³ Katz, C. (2019). Piling Up: How China’s Ban on Importing Waste Has Stalled Global Recycling. Yale Environment 360. [Link](#).

⁹⁴ China: Ministry of Ecology and Environment issues “Announcement on Matters concerning the Completely Ban on Import of Solid Waste” (2020). [Link](#).

⁹⁵ OECD workshop on international trade & circular economy – summary report, p.16. (2020) [Link](#).

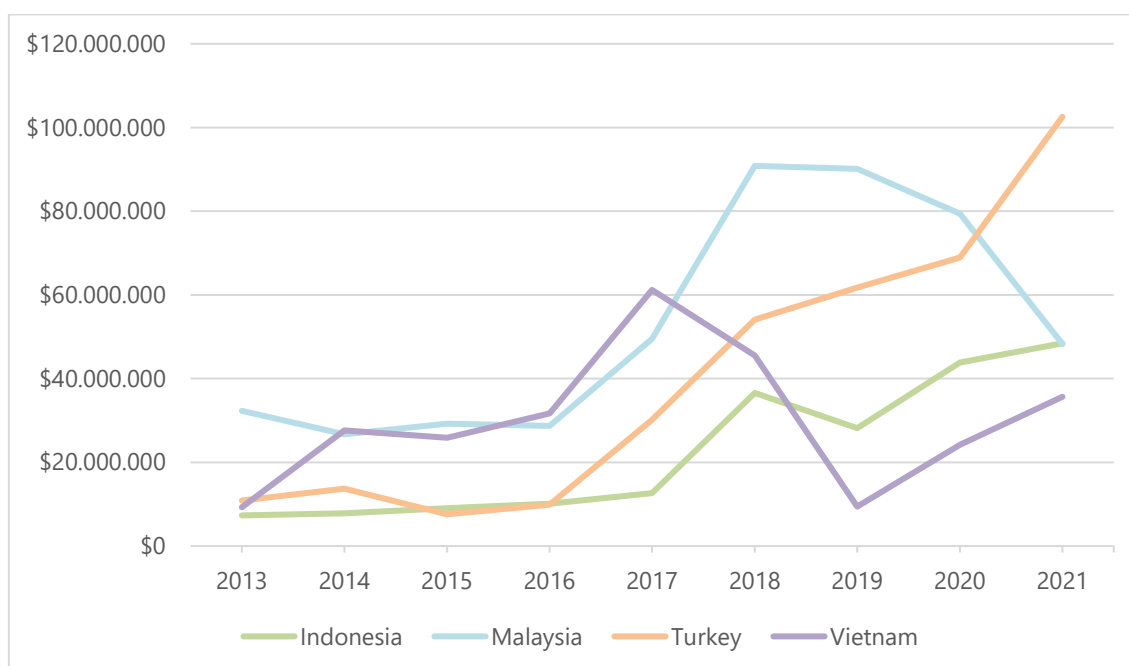
Figure 2: Annual plastic waste exports from EU to China, 2013-2020

Source: UN Comtrade database, graph by authors

Figure 2 shows the rapid decline in EU exports of plastic waste to China resulting from China's waste import restrictions. EU plastic waste exports to China peaked at around 750 million USD in 2014, falling to just under 27 million USD in 2018 and continuing to decline to just over 1 million USD in 2020.

The EU's plastic waste exports to other Southeast Asian countries and Turkey were on the decline in 2019 prior to the pandemic, as some countries including China stopped accepting imports of EU plastic waste (see below). The EU temporarily increased export of these materials to Turkey, Malaysia, and Indonesia, until a very significant fall in waste exports in January 2021, after new EU rules on the export of hazardous hard to recycle plastic waste came into force, paired with a total ban on exports to non-OECD countries and stricter controls on plastic waste sent to OECD countries⁹⁶.

⁹⁶ European Commission. (2020). Plastic waste shipments: new EU rules on importing and exporting plastic waste. [Link](#).

Figure 3: EU exports of plastic waste to destination countries, 2013-2021

Source: UN Comtrade database, graph by authors

Figure 3 presents the EU's exports of plastic waste to Indonesia, Malaysia, Turkey, and Vietnam over the period 2013-2021. In 2013, China was the main destination for the EU's plastic waste (totalling almost 700 million USD), while other countries only imported a fraction of China's imports (each under 40 million USD). Then as China began to implement its waste import restrictions, the exports of EU plastic waste to Indonesia, Malaysia, Turkey, and Vietnam start to increase. Even with the implementation of the EU's ban on exports of hazardous waste to non-OECD nations in January 2021, exports to Indonesia, Turkey and Vietnam increased by the end of the year compared to 2020. The plastics waste problem also plagues many developing countries such as Nigeria and Kenya, who receive these imports from other developed nations.

The rerouting of plastic waste exports from China to other countries that lack the infrastructure capacity to safely process this waste stream has become a significant problem. A recent EIA report states that illegal trade in plastic waste among criminal groups has increased, exploiting this gap between waste coming into the country and facilities' capacity to recycle the waste. This increase in illegal

plastic waste trade is made possible by the sector's characteristic lack of transparency and accountability⁹⁷.

The expansion of illicit activity in the plastic waste market, alongside inadequate environmental regulation and working environments in recycling facilities, exacerbates the negative impact that plastic waste has on human and labour rights, as well as environmental quality of the destination country⁹⁸.

The export hazardous waste, often times undocumented, remains a global issue. Therefore, continuous efforts to update and implement the Basel Convention must be supported. The Basel Convention, adopted in 1989, regulates the transboundary movement of hazardous waste and their disposal and requires notification by exporting and consent by importing countries. In 2019, the Basel Convention adopted amendments to expand the scope of the regulation to cover hazardous plastic waste trade as well as define what kind of plastic waste is or is not hazardous⁹⁹. Recently, additional amendments were adopted to ensure trade in e-waste, both hazardous and not, must also comply with the notification and consent between export and importer country¹⁰⁰.

In a recent case study produced by the Global Plastic Action Partnership and the World Economic Forum, Ghana – a country with a significant plastics pollution problem – is put under a magnifying glass. On one hand, Ghana faces capacity constraints to effectively recycle plastic waste, with an estimated recycling rate of 10%. On the other hand, plastics recovery is also constrained due to underfunded and poorly equipped collectors, in addition to the absence of extended producer responsibility (EPR) and sorting bin schemes. To address these issues, the government of Ghana has undertaken initiatives to support circular solutions to the plastic waste problem by adopting the National Plastic Action Partnership (NPAP) model, creating a national plastic action roadmap and a National Plastics Management Policy¹⁰¹.

⁹⁷ Environmental Investigation Agency. (2021). The Truth Behind Trash: The scale and impact of the international trade in plastic waste. [Link](#).

⁹⁸ Qu, S., Guo, Y., Ma, Z., Chen, W.Q., Liu, J., Liu, G., Wang, Y. & Xu, M. (2019). Implication of China's foreign waste ban on the global circular economy. *Resources, Conservation and Recycling*, vol.144. [Link](#).

⁹⁹ UNEP. (2019). Basel Convention Plastic Waste Amendments. [Link](#).

¹⁰⁰ UNEP. (2022). BRS COPs conclude with major decisions on e-waste movement and ban of harmful chemicals affecting firefighters. [Link](#).

¹⁰¹ Global Plastics Action Partnership. (2021). Trade and the Circular Economy: A deep dive into plastics action in Ghana. [Link](#).

The case study recommends a market-oriented approach to create value in plastics waste, such as mandating minimum recycled content in goods and alternative uses for plastic waste such as bricks and pipes in the construction sector¹⁰². Moreover, supporting the uptake of innovative circular technologies produced by companies seeking value in plastic waste provides another solution to the plastics waste problem. For example, plastics upcycling firm Clariter, located in South Africa, Poland, Israel, and Luxembourg, creates new products such as oils, waxes, solvents, and paint from recycled plastic waste¹⁰³. These kinds of technologies could be licensed, and facilities opened in plastic waste hotspots to create economic opportunity, or at the source of plastics waste production to avoid international shipping of plastics waste to be processed elsewhere.

The EU is moving ahead on its ambition to develop and promote a European circular economy, as demonstrated with the publishing of the Circular Economy Action Plan (CEAP) and its subsequent proposals. Yet, its objective to foster circularity globally is intertwined with its trading system. Undoubtedly, the circular economy is an essential concept to develop future-proof, sustainable and resilient supply chains, as well as to tackle global challenges like climate change, biodiversity loss, waste, and pollution.

This policy report looks specifically at the trade relations between Nigeria and the EU and puts forward some recommendations on how their trade relations can support the transition to and uptake of the circular economy for both partners. It covers in particular at the following sectors:

Circular economy national policy framework: The Nigerian national policy framework on circular economy is currently largely limited to sectoral EPR Programmes. The ongoing work of the Nigeria Circular Economy Working Group (NCEWG), and notably the adoption of the Nigeria Circular Economy Programme (NCEP) and Nigeria Circular Economy Road Map (NCERM), will be instrumental to drive Nigeria's path to sustainable and inclusive green growth in the medium and long-term including help to underpin a clear vision for trade related needs and opportunities.

Initiatives at the multilateral level: Nigeria could explore participating in the many ongoing initiatives at the multilateral level such as the ongoing discussion at UNEA for a global plastic treaty, or the plurilateral discussions at the World Trade Organization (WTO) such as those on plastics pollution, fossil fuel subsidies

¹⁰² Ibid.

¹⁰³ See Clariter [website](#) and discussion with a representative during an IEEP panel: Advancing circular trade (31 May 2022). [Link](#).

or the transversal Trade and environmental sustainability structured discussions (TESSD).

Trade regime with the EU: The current Generalised Scheme of Preferences (GSP) governing EU and Nigeria trade relations is not offering many options to support the circular economy in the country and more broadly the diversification of the economy. This report explores several avenues forward such as the access to GSP+ or the ratification of the EU-Economic Community of West African States (ECOWAS) Economic Partnership Agreement (EPA), thus unlocking its entry into force while meaningfully engage in ongoing African Continental Free Trade Area (AfCFTA) negotiations.

Sector-specific trade policy measures: Under the current GSP regime, EU and Nigeria have the possibility to identify specific barriers to trade in circular economy relevant sectors and cooperation to overcome these barriers (differences in definitions and standards, capacity barriers, transparency, and information flow) will be key. The report looks into more details at three sectors: agriculture, plastics and waste and e-waste.

Technical cooperation and raising awareness: Circular economy is listed under the first priority on Green and Digital Economy in the new EU-Nigeria National Indicative Programme for 2021-2027. The EU and Nigeria must now make good to this programming agreement and design projects and actions that tackle resource efficiency and sustainable production and consumption in productive (non-oil) sectors. These programmes should be designed and implemented in close coordination with the NCEWG and aligned to the and the NCERM to be published.

Product standards and design for circular economy: the strengthening of EU internal standards may become a major barrier to trade in the short to medium term as many stakeholders and in particular exporters face capacity constraints and challenges to meet these new requirements, including in Nigeria. There is a need to establish early dialogue between the EU and its partners to identify willingness to match the future standards, including any barriers to doing so.

Synergies between multiple policy objectives: In the context of the above, it is important to explore opportunities to create maximum synergies for simultaneously delivering both circular, low-carbon and conservation policy through trade, particularly through cooperation on circular, low-carbon and biodiversity-friendly product(ion) standards. At the moment, the discussion on product standards is very much focused on circularity only, however the recently published EU initiative on deforestation-free only products entering the EU market in the future as well as the implementation of carbon border adjustment

mechanism call for further work needed to establish best synergies between circularity and low-carbon standards, going beyond simply concluding that circular products are by default less carbon intensive.

3. FUTURE OF THE GLOBAL CIRCULAR ECONOMY

This section provides an overview of avenues to facilitate the transition to a global circular economy, parallel and beyond the EU's trade policy. Firstly, looking at what efforts support a global market for circular products, then highlighting the need to reduce waste by promoting better product design and circular services. Finally, special focus is given to the implications the shift to circularity has for developing countries and how to bridge the circular divide.

3.1 Current efforts to support a global circular economy

As previously mentioned, the EU supported the creation of the GACERE¹⁰⁴, gathering all EU Member States and 15 other countries to identify knowledge and governance gaps in advancing a global circular economy, alongside international organisations with circular economy expertise and networks, such as the UNEP, the UNIDO, the Ellen MacArthur Foundation, PACE, and the WCEF. Intergovernmental dialogue on circularity, supported by international organisations and experts is a crucial step towards developing a common understanding of what the shift to circularity means, from a global level to a local level.

These dialogues and cooperation are particularly important since despite circular trade being a key enabler of a global circular economy, it faces a range of regulatory and technical challenges which start with the **lack of mutually recognised definitions, classifications, standards and regulations** for circular economic goods or services. Any reused, recycled or even simply recyclable product for instance can potentially be considered as "circular" which makes reaching a common understanding on what constitute circular goods or services very challenging. For example, remanufactured goods are often considered equivalent to used goods or goods destined to be remanufactured are usually considered as waste. These secondary goods are consequently facing more stringent trade barriers such as higher import tariffs, or even import restrictions than primary (considered higher value) goods¹⁰⁵.

The World Customs Organisation's Harmonized System (HS), which six-digit level code is used across the globe, usually does not distinguish between primary and secondary material or between used, recycled or new products. This is notably

¹⁰⁴ European Commission. (2021). Global Alliance on Circular Economy and Resource Efficiency (GACERE). [Link](#).

¹⁰⁵ Kojima, M. (2017). Remanufacturing and Trade Regulation. *Procedia CIRP*. Volume 61, Pages 641-644. [Link](#).

due to its approach based on a products' physical characteristics rather than their production methods or intended use.

For example, in an effort to clarify both what constitutes a (hazardous) waste product and how it must be identified, in 2013, the Basel Convention began cooperating with the World Customs Organisation on the identification in the HS codes of waste regulated under the Basel Convention¹⁰⁶.

Progress on defining waste categories continues, such as the seventh amendment to the HS, that entered into force in January 2022. The amendment integrates new product classifications related to e-waste, wood waste and scrap (440149) or oils based on organic waste. Similar innovations must begin to be transcribed in relevant legislations while maintaining in relevant international or multilateral fora to further develop the HS toward circular economy-relevant goods and service (although that point remains extremely challenging, as explained below), as well as to identify practical solutions on how to better capture circular economy-relevant aspects of goods at the borders in a HS compatible way.

Such clarification efforts would eventually support the **liberalisation of circular economy-relevant goods and services** in trade agreements as another avenue to facilitate circular trade. In 2014, the WTO had taken steps to promote trade in environmental products, with the launch of negotiations of the Environmental Goods Agreement¹⁰⁷ (EGA). However, the difficulties to reach a consensus on what constitute environmental goods and how to target these products in the Harmonised System (HS) proved too difficult and talks eventually collapsed¹⁰⁸. Despite the failure to come to an accord on the EGA, some negotiating members have continued to pursue dialogues on environmental sustainability at the WTO, most notably the TESSD and IDP.

In bilateral trade agreements, priority tariff liberalisation for environmental goods and services also remains largely absent, due to similar issues arising from the EGA negotiations. Therefore, it is key that trade partners continue to seek cooperative dialogues on environmental sustainability and trade, as well as abide by their commitments to Multilateral Environmental Agreements (MEAs), the basis of which is largely found in the agreement's TSD Chapter.

On a more technical level, the **International Organisation for Standardisation (ISO)** is taking steps to create a common understanding of circularity in the

¹⁰⁶ UNEP. (n.d.). Harmonized System Codes for Wastes. [Link](#).

¹⁰⁷ WTO. (n.d.). Environmental Goods Agreement (EGA). [Link](#).

¹⁰⁸ Reinsch, W. & Benson, E. (2021). Environmental Goods Agreement: A New Frontier or an Old Stalemate? [Link](#).

trading system. The ISO launched a dedicated technical committee for circular economy (ISO/TC 323)¹⁰⁹ in 2018 aimed at standardising the circular economy to maximise contribution to sustainable development. This involves developing frameworks, guidance, supporting tools and requirements for implementation of activities. The Technical Committee collaborates with other ISO technical committees covering aspects related to the circular economy and counts 72 participating countries and 18 observing member countries¹¹⁰.

To date, the TC 323 has published 3 standards, with 3 more under development. The standards aim to cover a framework and principles for implementation, a guidance on business models and value networks, a framework to measure and assess circularity, a datasheet to assess the circularity of products, in addition to feedback to circular economy implementation supported by performance-based approaches and reviews of business model implementation¹¹¹.

Standardisation efforts alongside defining a common understanding of circular practices are necessary to support a market for secondary and circular goods and services. However, new standards risk elevating barriers to trade and disproportionately hindering developing countries with less technical capacity to overcome these barriers.

To reduce barriers to trade brought on by regulations and procedures, WTO members negotiated a **Trade Facilitation Agreement**¹¹² (TFA), which entered into force in 2017 after two-thirds¹¹³ of WTO members ratified it. The Agreement aims to simplify, modernise, and harmonise trade rules and procedures, facilitating international trade, while also providing technical assistance and capacity building for developing countries in this area¹¹⁴. Already established and having undergone a first review¹¹⁵, the TFA can be operationalised to support the global implementation, monitoring and clearance of goods subject to new standards on circularity.

¹⁰⁹ ISO. (n.d.). ISO/TC 323 – Circular economy. [Link](#).

¹¹⁰ ISO. (n.d.). ISO/TC 323 – Circular economy. [Link](#).

¹¹¹ ISO. (n.d.). Standards by TC 323 – Circular economy. [Link](#).

¹¹² WTO. (2022). Trade facilitation. [Link](#).

¹¹³ WTO. (n.d.) Members accepting the Protocol of Amendment to insert the WTO Trade Facilitation Agreement into Annex 1A of the WTO Agreement. [Link](#).

¹¹⁴ Global Alliance for Trade Facilitation. (n.d.). The Trade Facilitation Agreement, A simple guide. [Link](#).

¹¹⁵ WTO. (2022). Members reinvalidate Trade Facilitation Agreement monitoring following last year's review. [Link](#).

Another pathway towards developing a market for circular goods and services and increase demand, is through the mobilisation of Public Procurement. Public procurement accounts for about 14% of the EU's GDP¹¹⁶, while the OECD average totals 12% of GDP¹¹⁷, demonstrating the economic significance of public procurement contracts.

The WTO also has a plurilateral Agreement on Government Procurement¹¹⁸ (GPA) which aims to ensure open, fair and transparent conditions of competition in public procurement markets. Currently, 48 WTO members implement the GPA, while another 35 members participate in the Committee on Government Procurement as observers, eleven of which are in the process of acceding to the GPA.

In the context of the circular economy transition, national governments can take the lead to prioritise the purchase of environmentally sustainable or circular goods and services for public and governmental use, also known as **Green Public Procurement** (GPP). The EU CEAP sets out the goal to update minimum mandatory GPP criteria and targets to embed circularity as a cornerstone of GPP, as well as compulsory reporting to monitor the uptake of GPP¹¹⁹.

The EU's bilateral FTAs liberalises public procurement and sets out conditions for the contracting parties. Chapters on Government Procurement in the EU-Mercosur FTA and the EU-Canada CETA do not provide parties the right to exclude a supplier on the basis of environmental criteria, but still cater for the introduction of some degree of sustainability in public procurement processes, notably through their general exception clauses that stipulate that "parties have the liberty to adopt or maintain procurement measures necessary to protect human, animal, or plant life or health, including environmental measures, providing that the measure does not discriminate between the parties or constitutes a disguised restriction of trade"¹²⁰.

Yet, sustainability in general and circular economy does not feature as a criterion neither for participation nor in the technical specifications of the tender process. Furthermore, it is specified that product characteristics should when possible be

¹¹⁶ European Commission. (n.d.). Single market scoreboard – Public Procurement. [Link](#).

¹¹⁷ OECD. (n.d.). Public Procurement. [Link](#).

¹¹⁸ WTO. (n.d.). Agreement on Government Procurement. [Link](#).

¹¹⁹ European Commission. (2020). Circular economy action plan. [Link](#).

¹²⁰ From the Government Procurement Chapter of the EU-Mercosur FTA. [Link](#). Identical in EU-Canada CETA. [Link](#).

based on international standards, particularly relevant to the future of the global circular economy.

Looking ahead, embedding sustainability criteria into Government Procurement Chapters could take for form of, for example, stipulating that a potential supplier can be excluded from a public procurement bid if there is evidence of human and labour rights violations or failures to protect the environment across their supply chain, in accordance with the EU's corporate sustainability due diligence legislation¹²¹. Another example could be the introduction of circular economy relevant standards, as put forward by the ISO, in the tender specifications.

3.2 Beyond waste management, towards upstream design

As part of the CEAP, the Commission presented on 30 March 2022 its proposal for a **Regulation on Ecodesign for Sustainable Products**¹²² – also referred to as the Sustainable Products Initiative (SPI) – with the objective to improve the environmental sustainability of products sold on the EU market, by setting new criteria aimed at reducing a products environmental impact and increasing its resource efficiency through its life cycle. The Regulation also prioritises improving access to sustainability information along the supply chain to empower businesses and consumers into making sustainable choices.

Minimising the environmental footprint of a product can be done most effectively at the design phase of a product, which determines up to 80% of its lifecycle environmental impact¹²³. Therefore, one of the main objectives of this new regulation is to establish product requirements such as its **durability, reusability, reparability, recyclability, or resource efficiency**.

The proposal also includes the creation of a digital product passport to electronically register, process and share product-related information amongst supply chain businesses, authorities, and consumers. This is expected to increase transparency, for all actors of the value chain and facilitate monitoring operations throughout the product life cycle.

¹²¹ European Commission. (2022). Corporate sustainability due diligence. [Link](#).

¹²² European Commission. (2022). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions On making sustainable products the norm. [Link](#).

¹²³ The 80% figures has been debated for more than a decade but is still widely used in the scientific literature (See for instance [Ramani et al. \(2010\)](#)) and was used by the European Commission in its presentation of the Sustainable Product Initiative.

The European Commission notes that new risks may arise as a consequence of the implementation of the SPI, and the resulting stream of new standards, for EU market access. These changes will affect, directly or indirectly, supply chains outside the EU.

In particular, it is ambitioned that the SPI will make it more economically attractive to reuse, repair and recycle them in the EU, thereby incentivising more sustainable products and business models to improve value retention. Indeed, producers that use more sustainable production and transparent supply chains are expected to gain EU market share and increase their competitiveness over producers that use less sustainable methods. However, this may result in reducing access to affordable second-hand goods in secondary markets¹²⁴, or the difficulty for extra-EU exporters with little capacity to adapt to struggle meeting the new product requirements brought forth by the legislation. Such changes in trade flows would have impacts for citizens and workers in low and lower-income countries.

As the first step in moving from a linear economic model to a circular one is largest focused on waste management, then progressing towards tackling upstream design elements, the full transition to a circular economy could bring forth its own issues that clash with the basic principles of circularity.

A policy report by Circular Economy, EEB and FTAO¹²⁵ lays out potential weaknesses of circular economy models that are underexplored due to the focus on first shifting from a linear to a circular economic paradigm. For example, more ambitious targets for recycled content, take-back schemes and regulatory obstacles could lead to an over-prioritisation of recycling as opposed to repair and reuse. As consumers are stimulated to recycle their old products and buy new ones at discounted rates, the acceleration in consumption patterns risks increasing overall material use.

Therefore, it is necessary to be aware of gaps in the implementation of circular policies that risk corrupting the very nature of circularity. Without the proper incentives and regulations in place, companies could seek to further benefit from increased resource efficiency, while still adhering to the linear economic

¹²⁴ Barrie, J. & Schröder, P. (2021). Circular Economy and International Trade: a Systematic Literature Review. Circular Economy and Sustainability. [Link](#).

¹²⁵ Circular Economy, EEB & FTAO. (2020). Avoiding blind spots: Promoting circular & fair business models. [Link](#).

paradigm, if that increase does not make use of secondary materials and by-products with market value¹²⁶.

3.3 Bridging the divide: Inclusive circular development

The report and supporting case studies have highlighted some considerations and implications in the global transition to a circular economy. Management issues of hazardous and hard to recycle waste, potential barriers to trade brought on by new standards for circularity, and knowledge and capacity constraints surrounding circular practices come to mind.

A successful circular economy is one that not only one that tackles global challenges like climate change, biodiversity loss, waste, and pollution, but one that also delivers sustainable development opportunities for countries worldwide.

Coined by Barrie et al. (2022)¹²⁷, the 'circularity divide' is a phenomenon that risks taking place and exacerbating global inequities, caused by countries' unilateral and fragmented pursuit of the circular economy. A growing circularity divide is reinforced by the unequal development and subsequent widening gap between the Global North and the Global South in five 'divides', i.e., the digital, innovation, trade, finance, and development divides. For example, the circularity divide in trade is discernible with around 45% of the total value of trade in secondary materials occurring within the Global North. Contrarily, it is estimated that the total value of this trade between the Global South to the Global North equals only around 1%¹²⁸.

If the circular economy is to be truly successful, then it must be developed and implemented in an inclusive manner, recognising global inequities. In the context of this report, clear priorities to ensure inclusivity include cooperation on trade in circular economy-relevant commodities, particularly on the harmonisation of

¹²⁶ Farmer, A. (2022). Industry, the Circular Economy, improving regulation and going further. IEEP. [Link](#).

¹²⁷ Barrie, J., Anantharaman, M., Oyinlola, M. & Schröder, P. (2022). The circularity divide: What is it? And how do we avoid it? Resources, Conservation & Recycling 180. [Link](#).

¹²⁸ Barrie, J., Abdul Latif, L., Albaladejo, M., Baršauskaitė, I., Kravchenko, A., Kuch, A., Mulder, N., Murara, M., Oger, A. & Schröder, P. (2022). Trade for an inclusive circular economy: A framework for collective action, Recommendations from a global expert working group, London: Royal Institute of International Affairs. [Link](#).

standards for circularity, and on facilitating innovation to create circular business opportunities through cooperation and trade frameworks.

On one hand, the uptake of the global circular economy would see more countries implementing policies and requirements for goods sold on their markets to be circular, as the EU is pursuing with its CEAP. Moreover, as the circular economy seeks to see waste as a resource, the circulation of secondary materials is expected to increase, although they still cannot act as perfect substitutes for primary materials.

As the EU moves forward to implement circular economy policies domestically, and seeks partnerships with strategic countries, it is possible that a deviation in trade flows of primary goods occurs. This deviation could result in the loss of the EU as an export market for some countries, with subsequent ramifications for their economies and sustainable development prospective. Trends on resource extraction¹²⁹ do not show that this is currently a problem, however, it is essential to take the above consideration into account when discussing global circularity.

To reduce the risk of the circularity divide widening, in the context of trade, the EU should continue to pursue cooperative dialogues with trade partners on circularity, on the bilateral and multilateral level, as well as in cooperation with the ISO. At the forefront of these efforts should be finding a common understanding and harmonisation of circularity standards, and thus avoiding excessive barriers to trade brought on by new circular requirements for products and market fragmentation.

Moreover, development cooperation schemes such as the EU's Aid for Trade – aimed at building capacity in developing countries to overcome trade barriers and benefit from the global trading system – could support the shift to circularity. The EU's Aid for Trade scheme acknowledges the interlinkages between trade, investment, and the progress to achieve the SDGs, and could be further utilised to support the development of circular infrastructure and knowledge in developing countries¹³⁰.

¹²⁹ Circular Economy. (2022). The Circularity Gap Report 2022. [Link](#).

¹³⁰ Barrie, J., Abdul Latif, L., Albaladejo, M., Baršauskaitė, I., Kravchenko, A., Kuch, A., Mulder, N., Murara, M., Oger, A. & Schröder, P. (2022). Trade for an inclusive circular economy: A framework for collective action, Recommendations from a global expert working group, London: Royal Institute of International Affairs. [Link](#).

4. CONCLUSIONS AND RECOMMENDATIONS

The EU is moving ahead on its ambition to develop and implement a European circular economy. Yet, the EU is aware that this transition will not take place in a vacuum, and that its objective to become circular is intertwined with the rest of the global trading system. Moreover, geopolitical developments risk to complicate and already complex transition.

The EU's CEAP puts forward several initiatives to facilitate cooperation with trade partners on the circular economy, for example, by ensuring its FTAs reflect the objectives of the circular economy and by addressing knowledge and governance gaps through dialogues in the GACERE.

As it currently stands, circular economy is rarely explicitly mentioned across the EU's trade frameworks, which govern around 40% of the EU's total trade¹³¹. However, that is not to say that efforts for cooperation on circular economy between the EU and its trade partners is non-existent. Indeed, existing trade frameworks that are relatively newer – or have had the ability to review their contents – incorporate more language which recognises the role of trade and trade policy in supporting economic and social development, as well as supporting environmental objectives. Moreover, environmental cooperation has become a standard in newer trade frameworks, such as the EU's GSP and FTAs, as well as at the WTO.

At the multilateral level, discussions on the nexus of environmental sustainability and trade have picked up again, largely concerning plastics pollution, fisheries subsidies and dialogues on trade and environmental sustainability (i.e., at the TESSD, IDP and the WTO Ministerial Conferences). On one hand, these cooperation efforts remain on a voluntary basis and enforceability at this level is arguably more toothless than in the EU's FTAs. On the other hand, these initiatives have found common among WTO members, representing 85% of global trade, and promote inclusive participation on trade and environmental sustainability.

Nonetheless, the lack of formalised circular economy principles in the EU's trade frameworks is not surprising. The circular economy is a relatively new concept, and its economic comprehensiveness and holistic nature were understood years after the EU had negotiated most of its trade agreements. Still, the circular

¹³¹ European Commission. (2019). Annual report in the implementation of EU trade agreements.

[Link](#).

economy is an essential concept to develop future-proof, sustainable and resilient supply chains.

The need to secure a sustainable source of raw materials necessary to tackle the climate crisis, is an undeniable priority. However, at this time, the extraction of virgin materials remains very much the norm across the globe. For several reasons, the uptake of secondary raw materials for production so far has been limited, mainly due to regulatory barriers, concerns of material quality and a lack of economic incentive for its use.

Measures for the development of a market for secondary goods are imperative to a successful global circular economy. This involves among other things, the development of clear, harmonised standards for secondary materials (supported by the ISO), government measures to encourage a market for circular goods and services (e.g., via GPP), and ensuring scraps and by-products retain their value for recirculation (see Section 3.1).

Finally, to incentivise international collaboration for the development and transition of a circular economy, one must ensure this transition happens in a just manner. The circularity divide risks further disadvantaging developing countries, as developed countries transition to a circular economy at a more rapid pace, with consequences for those countries to develop sustainably (see Section 3.3).

4.1 Policy recommendations

Based on this policy report and the supporting case studies, the following recommendations have been developed on how the EU can support the transition to and uptake of the circular economy through its trade frameworks and through international cooperation.

The EU has several trade frameworks in place, two of which have been discussed in this report, namely the GSP Regulation and bilateral FTAs. Generally speaking, the EU can pursue progress on the circular economy by:

Reinforcing sustainability and circularity in its trade agreements, which can be achieved by:

- Strengthening the TSD Chapters for circularity, by including more explicit commitments to cooperation on circularity and securing the Paris Agreement as essential element of all trade agreements going forward¹³².
- Unboxing the TSD Chapters and integrating language on circularity, and cooperation on the circular economy, along the trade agreement. Trade agreement Chapters that easily lend themselves to such provisions include the Chapters on Technical Barriers to Trade (TBT), Regulatory Cooperation, Investment¹³³, Government Procurement (see Section 3.1), Bilateral Dialogues for Raw Materials and other relevant products, as well as sector-specific chapters.

Leveraging trade agreements as a tool for cooperation on the circular economy, which can be done by:

- Operationalising existing commitments for cooperation and dialogue on environmental protection to exchange knowledge regarding circular economy legislation, data collection methods, monitoring frameworks and begin to close data gaps on the flow of material and energy resources. This could support trade partner countries' development of comprehensive circular economy strategies, while both the EU and the partners can begin to harmonise on data collection methods and monitoring practices. Moreover, these dialogues can be used to inform the partner country of the potential impact on their exports of the EU's autonomous measures under development (e.g., SPI (see Section 3.2), due diligence and CSR, deforestation-free supply chains, CBAM), as well as facilitate setting up common standards for circularity or the mutual recognition of standards.
- Empowering stakeholders in the EU and the trade partner country, including government actors, industry representatives, as well as internal (e.g., DG ENV and DG CLIMA) and external experts to allow for detailed discussion on the trade implications of the development and implementation circular economy policies by either Party.
- Ensuring the organisers of these dialogue sessions are provided sufficient resources to begin to address the shift to circularity. These resources could

¹³² Though the issue of the enforceability of the TSD remains unclear ahead of the review of the TSD Chapter Action Plan. For more in-depth work on this topic, see "[Enhancing sustainability in EU Free Trade Agreements](#)" (Blot, E., Oger, A. & Harrison, J., 2022) and "[Environmental credentials of EU trade policy](#)" (Blot, E. & Kettunen, M., 2021).

¹³³ Bellmann, C. & Sell, M. (2021). Options to Incorporate Circular Economy Provisions in Regional Trade Agreements. IISD & Sitra. [Link](#).

be used by the dialogue members to commission research reports and support the organisation of more dialogue sessions on the trade impacts of circular economy.

At the international level, the EU must work towards developing a common understanding of circularity, both in a theoretical and practical manner, while supporting a fair and sustainable transition to a global circular economy, by:

Taking forward multilateral dialogues and cooperation on circular economy, by:

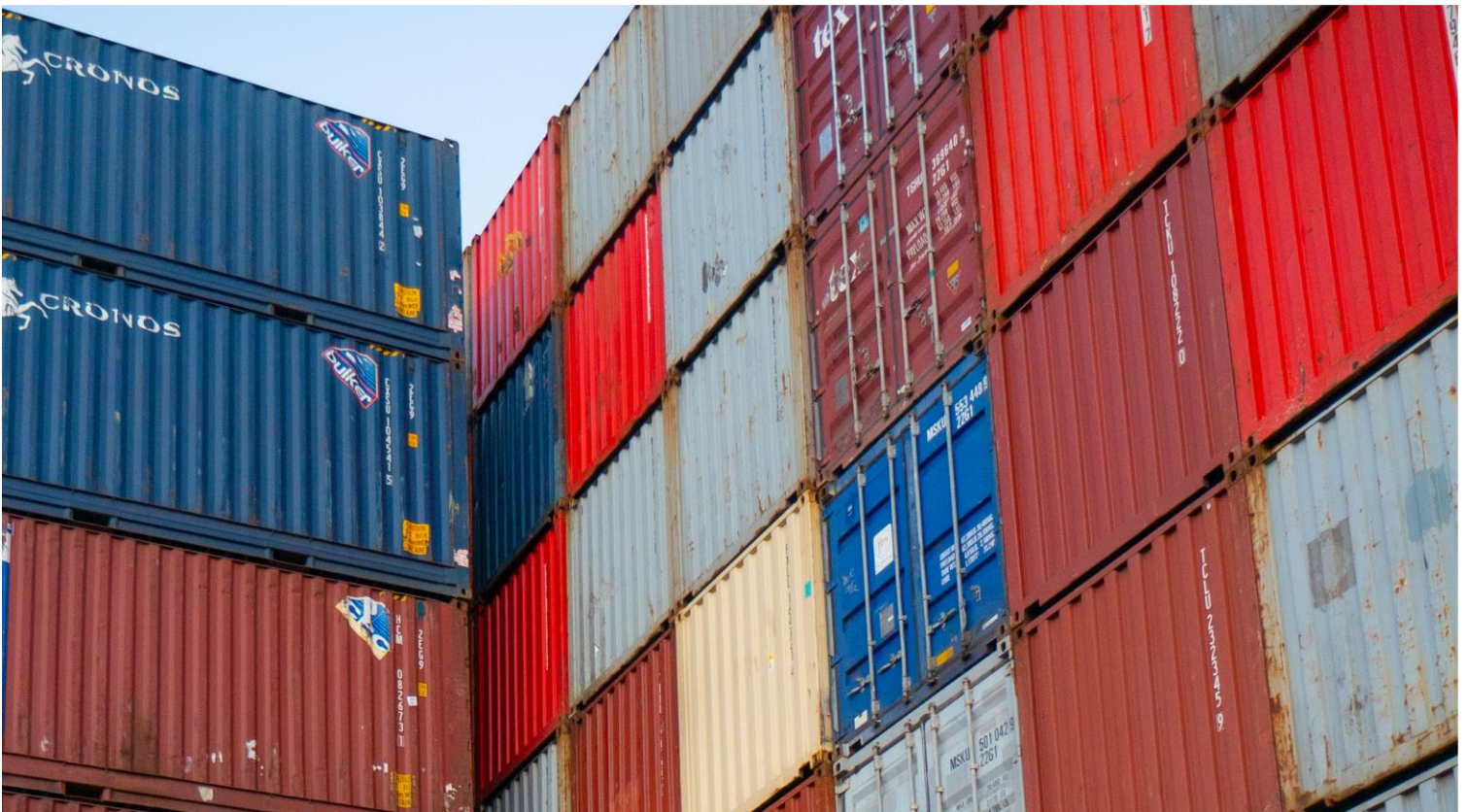
- Championing discussions at the WTO's TESSD and the GACERE in cooperation with other like-minded trade partners on circular economy and environmental sustainability through trade, to build a common understanding of the circular economy and circular goods, and the potential implications for the global trading system. For example, the TESSD could take steps towards defining what constitutes a circular good and attempt to situate this in the HS codes.
- Working together in the development, harmonisation and recognition of standards for circularity, as well as promoting cooperation for mutual recognition of standards and trade facilitation efforts with the ISO (see Section 3.1), as well as with the World Customs Organisation and the Basel Convention Secretariat to ensure sustained progress on codifying environmentally hazardous waste in international trade.
- Backing initiatives such as the WCEF, which form an indispensable platform for evidence-based public-private discussion on circularity and its global implications on trade and supply chains. The private sector is a valuable resource in this space that possesses a wealth of expertise and adaptability with a better eye for process efficiencies.

Assisting the least developed countries in the transition to a circular economy by:

- Making full use of the WTO trade Facilitation Agreement which include significant provisions on capacity-building in low and middle-income countries to upgrade their border operations.
- Embedding circularity in EU and international development cooperation schemes such as Aid for Trade, which aim to assist countries facing capacity constraint pertaining to trade regulations and infrastructure. As the EU and like-minded countries pursue new standards for circularity, without proper support, the least developed countries stand to experience these new

standards as barrier to trade and their sustainable development (see Section 3.3).

- Accounting for the unequal accumulation of and spread of circularity benefits, that risk perpetuating the gap between developed and developing countries (see Section 3.3).



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