

# Circular Economy and Trade

## Understanding and Promoting Linkages



Leslie Sajous

# Circular Economy and Trade: Understanding and Promoting Linkages

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# Abstract

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This short study aims to help public and private sector stakeholders involved in trade to better understand the concept of circular economy, its linkages with trade, and how they can both be mutually supportive to contribute to sustainable development and the achievement of the Sustainable Development Goals (SDGs). It examines concepts, policies and practices, supported by examples from current national and international trade policies, as well as case studies of circular value chains around the globe. Finally, it presents some key lessons and a possible way forward to make trade more circular.

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# Acronyms

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APEC	Asia Pacific Economic Cooperation
BRI	Belt and Road Initiative
CE	Circular Economy
CEO	Chief Executive Officer
CETA	Comprehensive Economic and Trade Agreement
CSR	Corporate Social Responsibility
EGA	Environmental Goods Agreement
EMF	Ellen MacArthur Foundation
EPR	Extended Producer Responsibility
EU	European Union
FTA	Free Trade Agreement
GATT	General Agreement on Tariffs and Trade
ISO	International Standard Organization
ITACyL	Instituto Tecnológico Agrario de Castilla y León
LDC	Least Developed Country
MFN	Most Favoured Nation
MNC	Multi National Company
MRA	Mutual Recognition Agreement
MoU	Memorandum of Understanding
NGO	Non-Governmental Organization
OECD	Organization for Economic Cooperation and Development
OEF	Organization Environmental Footprint
PEF	Product Environmental Footprint

R&D	Research & Development
SAI	Sustainable Agriculture Initiative
SME	Small and Medium sized Enterprise
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNIDO	United Nations Industrial Development Organization
US	United States of America
SDG	Sustainable Development Goals
SCP	Sustainable Consumption and Production
TBT	Technical Barrier to Trade
TSD	Trade and Sustainable Development
WTO	World Trade Organization



## SECTION 1

# Introduction

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## 1.1 Definition and concept of circular economy

Linear production is a familiar cycle. Resources are extracted and transformed into goods and services, sold and used, after which they are scrapped. This model has underpinned the expansion of the global economy since the industrial revolution. It has linked material prosperity to the extraction of resources, yet has often overlooked the undue pressures placed on the environment and has rarely considered the cost of handling, scrapping and disposing of used materials, some of which are hazardous to human health. As the global population increases, incomes rise and nations strive to eradicate poverty, demand for goods and services will necessarily grow. The aim of achieving Sustainable Development Goal (SDG) 12 on responsible consumption and production requires changing the linear production model.<sup>1</sup> Moreover, current trends in global resource extraction are incompatible with internationally agreed targets in Paris at the UNFCCC 21st Conference of Parties, to limit the rise in global average temperature to below 1.5°C above pre-industrial levels. Diverting to a sustainable growth pathway will require both substantial improvements in the efficient use of primary resources and a significant degree of displacement of primary resources with secondary materials – those

recovered from waste streams and repurposed or remanufactured for further use.<sup>2</sup>

Whilst there is no commonly agreed definition of the concept of “circular economy”, this term is often used when describing an economy in which products and materials are recycled, repaired and reused rather than thrown away, and in which waste from one industrial process becomes a valued input into another.<sup>3</sup> There are some divergences in definitions given in different regions, countries and organizations across the globe. For instance, in Japan it is defined as “a society in which the consumption of natural resources will be conserved and the environmental load will be reduced to the greatest extent possible, by preventing or reducing the generation of wastes and by promoting proper cyclical use and disposal of products” (The Basic Act for Establishing a Sound Material-Cycle Society, Government of Japan 2000). The European Union (EU) defines it as an “economy where the value of products, materials and resources is maintained in the economy for as long as possible, and the generation of waste minimised” (An EU action plan for the Circular Economy, European Commission 2015). These concepts incorporate transition to an economy and society as well as business models (OECD 2018) less dependent on primary material consumption, and quite different from the so-called conventional 3Rs of waste.<sup>4</sup>

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<sup>1</sup> “Circular Economy: The New Normal”. *Unctad.Org*, 2018, [https://unctad.org/en/PublicationsLibrary/presspb2017d10\\_en.pdf](https://unctad.org/en/PublicationsLibrary/presspb2017d10_en.pdf). Accessed 15 Jan 2020.

<sup>2</sup> Preston, Felix et al. “An Inclusive Circular Economy: Priorities For Developing Countries”. *Chathamhouse.Org*, 2019,

<https://www.chathamhouse.org/sites/default/files/publications/research/2019-05-22-Circular%20Economy.pdf>. Accessed 15 Jan 2020.

<sup>3</sup> *Ibid*

<sup>4</sup> Hotta, Yasuhiko et al. “Six Proposals For Future Policies Towards Circular Economy And Society”. T20japan, 2019,

In a circular economy, economic activity builds and rebuilds overall system health. The concept recognises the importance of the economy needing to work effectively at all scales – for large and small businesses, for organisations and individuals, globally and locally. Transitioning to a circular economy does not only amount to adjustments aimed at reducing the negative impacts of the linear economy. Rather, it represents a systemic shift that builds long-term resilience, generates business and economic opportunities, and provides environmental and societal benefits.

The model distinguishes between technical and biological cycles. Consumption happens only in biological cycles, where food and biologically-based materials (such as cotton or wood) are designed to feed back into the system through processes like composting and anaerobic digestion. These cycles regenerate living systems, such as soil, which provide renewable resources for the economy. Technical cycles recover and restore products, components, and materials through strategies

like reuse, repair, remanufacture or (in the last resort) recycling.<sup>5</sup> The figure 1 is a system diagram that illustrates the continuous flow of technical and biological materials through the 'value circle'.

The circular economy embeds many familiar concepts, such as low-carbon, energy-, and resource efficiency and goes to the heart of how we produce and consume. There is a spike in services content and jobs through processes such as servicing, reuse, and remanufacturing of goods to extend product life. Many countries, such as China, Finland, France, India, and the Netherlands, have adopted national circular economy roadmaps and implementation plans. However, the circular economy neither starts nor ends at national borders or company walls. This is where trade comes into the picture. They may have national circular economy strategies, but they exist in the context of a global economy and international value chains, as well as within our sole earth with its limited resources and planetary boundaries.<sup>6</sup>

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<https://t20japan.org/wp-content/uploads/2019/05/t20-japan-tf3-2-six-proposals-future-policies-circular-economy-society.pdf>. Accessed 15 Jan 2020.

<sup>5</sup> "What Is A Circular Economy?". *Ellenmacarthurfoundation.Org*,

<https://www.ellenmacarthurfoundation.org/circular-economy/concept>. Accessed 15 Jan 2020.

<sup>6</sup> Sell, Malena, and Nani Pajunen. "The Circular Economy – What'S Trade Got To Do With It?". *Ictsd.Org*, 2018, <https://www.ictsd.org/opinion/the-circular-economy->. Accessed 15 June 2020.



# Figure 1: Outline of a circular economy by Ellen Mac Arthur Foundation

## OUTLINE OF A CIRCULAR ECONOMY

### PRINCIPLE

1

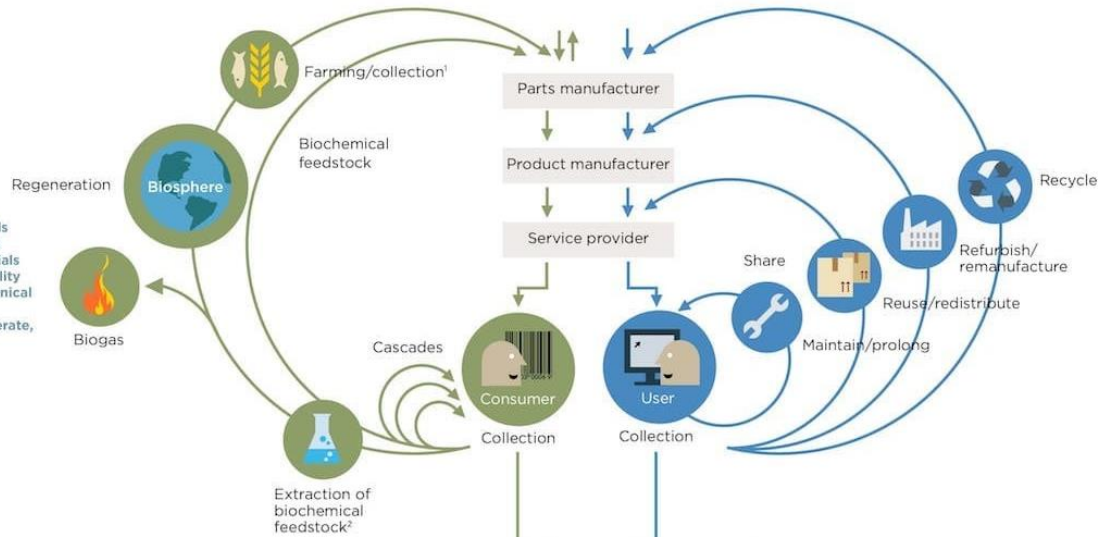
Preserve and enhance natural capital by controlling finite stocks and balancing renewable resource flows  
ReSOLVE levers: regenerate, virtualise, exchange



### PRINCIPLE

2

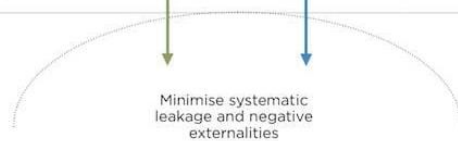
Optimise resource yields by circulating products, components and materials in use at the highest utility at all times in both technical and biological cycles  
ReSOLVE levers: regenerate, share, optimise, loop



### PRINCIPLE

3

Foster system effectiveness by revealing and designing out negative externalities  
All ReSOLVE levers



1. Hunting and fishing  
2. Can take both post-harvest and post-consumer waste as an input  
Source: Ellen MacArthur Foundation, SUN, and McKinsey Center for Business and Environment; Drawing from Braungart & McDonough, Cradle to Cradle (C2C).

Source: Ellen MacArthur Foundation. Infographic Circular Economy System Diagram.

[https://www.ellenmacarthurfoundation.org/assets/images/circular-economy/System\\_diagram\\_cropped.jpg](https://www.ellenmacarthurfoundation.org/assets/images/circular-economy/System_diagram_cropped.jpg). Accessed 15 Jan 2020.

## 1.2 Linkages between circular economy and trade

Circular economy and trade are closely linked in various ways. In fact, the transition towards a more circular economy will have numerous impacts on trade at national and international levels, including at policy level.

The move towards a circular economy entails the utilisation of resources in the economy by:

- Closing material loops<sup>7</sup> through: (i) the promotion of repair, reuse, refurbishment and remanufacturing of end-of-life products; (ii) the recycling of postconsumer material and waste into secondary raw materials, and (iii) promoting product service-systems;

<sup>7</sup> Material loops are flows wherein materials or larger parts are recovered from buildings and reclaimed, recycled or biodegraded through natural or technological processes (Sassi, 2008).

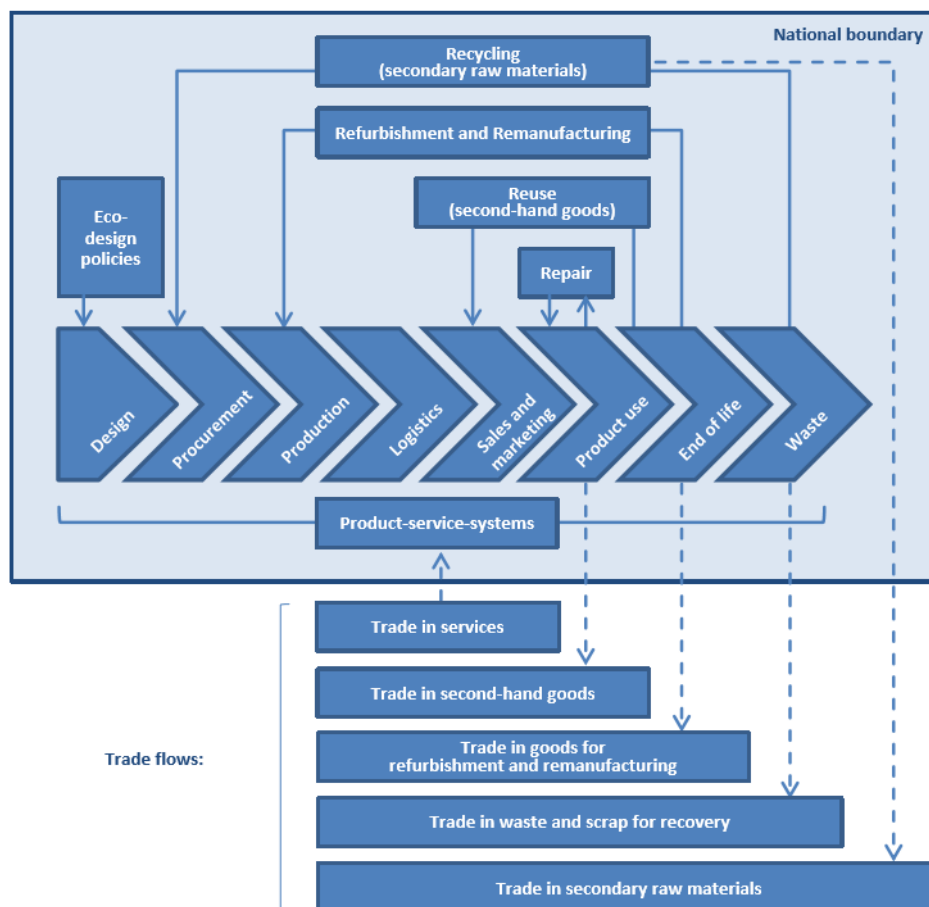
To limit the life cycle burdens of the built environment, including resource depletion and waste disposal, material loops should be as efficient and effective as possible.

- Extending material loops through eco-design;
- Narrowing material loops through resource efficiency initiatives (McCarthy et al., 2018a).

Current policy action largely focuses on achieving material circularity at the domestic level as illustrated in solid arrows in Figure 2. However, international trade occurs at various levels along the product value chain, such as

trade in materials and waste for recycling and energy recovery, trade in secondary raw materials, trade in second-hand goods and trade in goods for refurbishment and remanufacturing, as shown in the dotted arrows in Figure 2. To avoid complexity, exports are mainly shown in this diagram. However, imports can similarly occur in the transition to a circular economy such as secondary raw materials as feedstock or notably services trade to enhance product service systems.<sup>8</sup>

**Figure 2. Linkages between international trade and the circular economy**



Notes: Solid arrows represent domestic flows; dotted arrows represent international trade flows. Source: Author, based on McCarthy et al. (2018b), Lacy and Rutqvist (2015) and Rabobank (2015).

<sup>8</sup> Yamaguchi, Shunta. "International Trade And The Transition To A More Resource Efficient And Circular Economy: A Concept Paper". *Oecd-Ilibrary.Org*, 2018,

<https://doi.org/10.1787/847feb24-en>. Accessed 15 Jan 2020.

As partially showcased in the above figure, the circular economy transition can also have several impacts on trade flows, including:<sup>9</sup>

- lowering of the import demand of primary and secondary materials in a given jurisdiction;
- lowering of exports of materials and waste;
- the emergence of new trading opportunities for services trade, such as waste management, recycling, refurbishment and remanufacturing, reuse, and repair, as well as new business models and product service systems;
- circular procurement by subnational and national governments may also provide additional opportunities for international trade.

Overall, circular models could help countries grow with resources already available in their territories, through a change in traditional trade patterns. This may imply a reduction in

international trade, yet the 140 million people joining the middle class each year guarantee growth in overall trade. Such growth may occur not in goods but in services such as access-over-ownership models. In addition, increased circularity can change production patterns, improving asset utilization rates and producing value chains based on recycling and remanufacturing centres close to where products are used. This could lead to fewer transport-related losses, quicker turnarounds between orders and deliveries, lower levels of carbon dioxide emissions and the creation of jobs that cannot be offshored. Some countries have trade surpluses in physical goods and others in immaterial services. Trade therefore results in a net transfer of materials from one region to another as seen, for example, in trade patterns between China and the United States. The United States imports many goods from China but does not export nearly as many finished goods in return. However, nearly 3,700 containers of recyclables per day are exported to China; in 2016, such exports amounted to 16.2 million tons of scrap metal, paper and plastics worth \$5.2 billion.<sup>10</sup>

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<sup>9</sup> "International Trade and The Transition To A Circular Economy: Policy Highlights". *Oecd.Org*, 2018, <https://www.oecd.org/environment/waste/policy-highlights-international-trade-and-the-transition-to-a-circular-economy.pdf>. Accessed 15 Jan 2020.

<sup>10</sup> "Circular Economy: The New Normal". *Unctad.Org*, 2018, [https://unctad.org/en/PublicationsLibrary/presspb2017d10\\_en.pdf](https://unctad.org/en/PublicationsLibrary/presspb2017d10_en.pdf). Accessed 15 Jan 2020.

## SECTION 2

# Circular economy in trade policy frameworks: State of play from national to international

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In order to realise the full economic, social and environmental benefits of a circular economy, policy frameworks will need to evolve to create the conditions for wider uptake of circular business models. Ultimately, achieving a genuine transition to a more circular economy will be unlikely if circular business models continue to occupy small economic niches. Policy can play an important role by addressing the market failures, policy misalignments and status quo biases that currently hinder the competitiveness of these business models, including:<sup>11</sup>

- ensuring that the full environmental costs of production and consumption activities are reflected in market prices;
- improving collaboration within and across sectoral value chains;
- ensuring that existing regulatory frameworks are coherent and fit for purpose, and not serving to preserve an existing status quo;
- improving existing educational and information programs to provide individuals with a better understanding of

the unintended consequences of their consumption choices;

- promoting the supply of circular products or demand for them. For the former this includes eco-design standards, strengthened extended producer responsibility (EPR) schemes, and the provision of targeted R&D funding.

## 2.1 Circular economy in national and regional trade policies

Domestic trade policies potentially provide an important means through which national governments can encourage and incentivize a transition to more circular approaches among domestic actors while creating an attractive investment environment for foreign financiers. Energy-efficiency requirements for imported second-hand vehicles; minimum percentage requirements for recyclable content in plastic waste; health and safety standards for recycled or recyclable products and materials; and quality, health and safety standards for remanufactured products – all could, depending on how they are designed, either

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<sup>11</sup> “Business Models for the Circular Economy: Opportunities and Challenges for Policy”, OECD

(2019), OECD Publishing, Paris, <https://doi.org/10.1787/g2q9dd62-en>.

expand or restrict international trade in various categories of desirable and undesirable secondary materials. India has banned the import of refurbished Apple iPhones in order to prevent the dumping of e-waste, and Pakistan is considering banning all second-hand mobile phones.<sup>12</sup>

Import duties can have a substantial impact on access to affordable inputs for circular economy (CE) activities in developing countries. India, despite limited supplies of domestic scrap steel, has taken a 13 per cent share of global secondary steel production through importing waste and scrap for material recovery; were scrap metal imports available at a lower cost, other countries might be in a position to do the same. The reduction or removal of import duties on primary goods used for pollution management and resource management – such as equipment used in recycling plants – or on secondary raw materials can lower the capital costs of CE infrastructure and feedstock in import-dependent countries and boost the competitiveness of downstream CE activities.<sup>13</sup>

**Table 1: Economic instruments of a circular economy policy toolkit**

Policy	Example
Landfill taxation	Landfill tax in Denmark, the Netherlands and the UK
Carbon tax	Carbon tax in the Netherlands, Norway and Sweden
Container deposit legislation	AB Svenska Returpak in Sweden
Infrastructure investment	UK recycling and waste LP fund for smaller-scale recycling and waste infrastructure
Differentiated VAT rate	Reduced VAT rates in China for secondary raw materials

Source: Preston, Felix et al. "An Inclusive Circular Economy: Priorities For Developing Countries". *Chathamhouse.Org*, 2019, <https://www.chathamhouse.org/sites/default/files/publications/research/2019-05-22-Circular%20Economy.pdf>. Accessed 15 Jan 2020.

However, it often appears that the notion of “circular economy” is not clearly reflected as part of the national trade policies themselves worldwide. Some countries, including a few developing countries, do have specific sustainable consumption and production (SCP)<sup>14</sup> strategies, embedding trade-related actions; as briefly presented in the table below.

<sup>12</sup> Preston, Felix et al. "An Inclusive Circular Economy: Priorities For Developing Countries". *Chathamhouse.Org*, 2019, <https://www.chathamhouse.org/sites/default/files/publications/research/2019-05-22-Circular%20Economy.pdf>. Accessed 15 Jan 2020.

<sup>13</sup> Ibid

<sup>14</sup> According to a working definition of the United Nations Environment Programme (UNEP), the SCP concept encompasses “the use of services and related products, which respond to basic needs and bring a better quality of life while minimising the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardise the needs of future generations”.

**Table 2: SCP strategies, action plans and programmes in some European and Asian countries<sup>15</sup>**

Country	SCP Strategies, action plans and programmes
Austria	RESET2020 initiative (2015)
Belgium	Federal roadmap containing 21 measures to support a circular economy (2016) Flemish Materials Programme (2016) Brussels Region Circular Economy programme (2016-2020)
Cyprus	National Action Plan for a Green Economy (2017)
Czech Republic	The framework of Programmes on Sustainable Consumption and Production (2008)
Finland	The Finnish Roadmap to achieve a Circular Economy 2016-2025 (2016)
France	Roadmap for circular economy (2018) 50 concrete measures towards a circular economy (2018)
Germany	National Programme for Sustainable Consumption (2016) German Resource Efficiency Programme ProgRess (2012) ProgRess II (2016-2019)
Greece	Action plan for circular economy (2018)
Italy	Towards a Model of Circular Economy for Italy – Overview and Strategic Framework (2017)
Luxembourg	Third Industrial Revolution (2017)
Malta	Green Economy Action Plan (2015)
Netherlands	SCP Roadmap 2050 From waste to resource' (VANG-programme) (ongoing since 2015)
Norway	Green Competitiveness Strategy (2015)
Poland	The Roadmap for the transition to circular economy (2019)
Portugal	National Action Plan for a circular economy (2017)
Romania	National Action Plan on sustainable consumption and production (2020-2030)
Slovenia	Roadmap Towards Circular Economy in Slovenia (2016)
Sweden	Strategy for sustainable consumption (2017)
Switzerland	Green Economy Action Plan 2016-2019 (adopted in 2013)
China	Circular Economy Development Strategies and Action Plan (2013) Circular Economy Promotion Plan (2015)
Malaysia	Malaysia SCP Blueprint (2016)

<sup>15</sup> "Closing The Loop: ASEM'S Transition Towards Achieving A Circular Economy". Asef.Org, 2019, [https://www.asef.org/images/docs/SDG12%20ASEM%20Publication\\_Digital.pdf](https://www.asef.org/images/docs/SDG12%20ASEM%20Publication_Digital.pdf). Accessed 15 Jan 2020.



Mongolia	Action Plan for the National Green Development Policy (2014)
Pakistan	National Action Plan on Sustainable Consumption and Production (2017)
Thailand	Sustainable Consumption and Production Roadmap 2017 – 2036
Viet Nam	National Action Plan on Sustainable Production and Consumption until 2020 and Vision to 2030 (2016)

These SCP strategies were developed or updated in recent years (generally after 2015) and offer a comprehensive development approach towards circular economy development, including objectives and activities related to sustainable production, efficient resource-use, waste management and responsible consumption, and awareness-raising among producers and consumers.

## The EU Circular Economy Action Plan

In 2015, the Commission adopted an ambitious new Circular Economy Action Plan to stimulate Europe's transition towards a circular economy, which would boost global competitiveness, foster sustainable economic growth and generate new jobs. It was foreseen that the proposed actions would contribute to "closing the loop" of product lifecycles through greater recycling and re-use, and bring benefits for both the environment and the economy. Three years after adoption, the Circular Economy Action Plan can be considered fully completed. Its 54 actions have now been delivered or are being implemented. In 2016, sectors relevant to the circular economy employed more than four million workers, a 6% increase compared to 2012. Circularity has also opened up new business opportunities, given rise to new business models and developed new markets,

domestically and outside the EU. In 2016, circular activities such as repair, reuse or recycling generated almost €147 billion in value added while accounting for around €17.5 billion worth of investments.<sup>16</sup>

One of the main policy advancements related to trade of this action plan is the EU Strategy for Plastics in a Circular Economy which is the first EU-wide policy framework adopting a material-specific lifecycle approach to integrate circular design, use, reuse and recycling activities into plastics value chains. The strategy sets out a clear vision with quantified objectives at EU level, so that inter alia by 2030 all plastic packaging placed on the EU market is reusable or recyclable. To boost the market for recycled plastics, the Commission launched a voluntary pledging campaign on recycled plastics. 70 companies have already made pledges, which will increase the market for recycled plastics by at least 60% by 2025. However, there is still a gap between supply and demand for recycled plastics.<sup>17</sup>

Despite this ambitious circular economy package of a Circular Economy Action Plan and a waste legislation reform, policymakers find themselves desperately trying to catch up with innovative, future-oriented businesses in the circular context. Indeed, many companies are moving a lot faster than what the legislative process is able to. A big part of the problem is that the current legislative system

<sup>16</sup> "Closing The Loop: Commission Delivers On Circular Economy Action Plan". *European Commission*, 2019, [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_19\\_1480](https://ec.europa.eu/commission/presscorner/detail/en/IP_19_1480). Accessed 15 Jan 2020.

<sup>17</sup> Ibid

has been designed to serve the needs of a linear economy, with its compartmentalized needs.

In many cases, however, legislators might not even be aware of the necessary measures to promote the transformation to a circular society. Similarly, the existing mechanisms and procedures e.g. for granting End-of-Waste or by product statutes seem to be poorly understood by local authorities, despite them having been implemented into national legislation already several years ago on the basis of the EU Waste Framework Directive. Training and education are necessary on all fronts, but at the authority front especially. A daring, progressive attitude is key in making interpretations and decisions that are safe and sustainable for all, in the long run as well. Collaboration is of course a two-way street; businesses also need to bring their cases forward in a more discussive and cooperative way.<sup>18</sup>

## A closer look at developing countries

Insufficient attention has been paid to CE pathways in developing countries, despite considerable innovation and policy progress. Structural and political conditions, and the rapid pace of growth and industrial development, will require different solutions to those adopted in developed countries; for example, the agricultural sector has been afforded minimal attention in global CE

discussions to date, but will need to take a central place in developing-country CE pathways. Innovation is already under way in developing countries, in the agricultural sector and beyond, and developing-country governments are beginning to adopt ambitious strategies for more resource-efficient and circular patterns of industrial growth.

Greater focus is needed on circularity in international value chains, and on the governance and investment frameworks required to enable a global CE. In 2015, East African countries proposed a ban on imports of secondary textiles to protect their domestic industries, concerned about large volumes of cheap second-hand clothes entering the market. After the United States of America (USA) threatened retaliation, the ban was replaced with an import tax, but the episode highlighted how the trade in secondary materials, if not carefully managed, can lead to tensions with traditional sectors and between countries.<sup>19</sup> Future import restrictions on second-hand vehicles have also been mentioned by several developing countries.<sup>20</sup>

Another example is China implementing a policy that seeks to increase inspections of scrap materials imported for recycling, which signals to waste processors in exporting countries that sorting practices need to improve, and China notified the World Trade Organization in 2017 of its intention to further restrict such imports.<sup>21</sup> And in 2018, China's

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<sup>18</sup> Ojala, Leea. "Global Policy And Funding In The Spotlight At The World Circular Economy Forum 2019". *Logscale Oy*, 2019, <https://logscale.fi/en/global-policy-and-funding-key-for-circular-economy/>. Accessed 15 Jan 2020.

<sup>19</sup> Preston, Felix et al. "An Inclusive Circular Economy: Priorities For Developing Countries". *Chathamhouse.Org*, 2019, <https://www.chathamhouse.org/sites/default/files/publications/research/2019-05-22-Circular%20Economy.pdf>. Accessed 15 Jan 2020.

<sup>20</sup> Kettunen, M., Gionfra, S. and Monteville, M. "EU circular economy and trade: Improving policy coherence for sustainable development", IEEP Brussels / London, 2019 [https://ieep.eu/uploads/articles/attachments/f560794d-c411-4895-8ae9-910c65548f33/EU%20trade,%20CE%20and%20sustainable%20development%20\(IEEP%202019\)%20FINAL.pdf?v=63741577228](https://ieep.eu/uploads/articles/attachments/f560794d-c411-4895-8ae9-910c65548f33/EU%20trade,%20CE%20and%20sustainable%20development%20(IEEP%202019)%20FINAL.pdf?v=63741577228). Accessed 15 Jan 2020.

<sup>21</sup> "Circular Economy: The New Normal". *Unctad.Org*, 2018,

imposition of a de facto ban on solid waste threw light on the importance of developing integrated, transparent supply chains in waste and secondary materials if harmful waste-dumping practices are to be avoided and CE value chains are to emerge at scale. Greater cooperation is needed at the global level to agree on common rules and standards for international circular value chains, particularly where they risk displacing traditional workers or are associated with environmental or health risks, as is the case with e-waste.<sup>22</sup>

In fact, President Xi Jinping has stipulated that the Belt and Road Initiative (BRI) – an ambitious set of foreign and economic policies centred on infrastructure building to connect China’s less developed border regions with Southeast Asia, Central Asia and Europe – should promote a ‘green, low-carbon, circular and sustainable’ form of development. While the specific activities remain to be determined, China’s recycling industry is preparing to expand its activities abroad. Many of China’s partner or prospective partner countries for BRI projects are still in the early stages of developing modern recycling and waste management, and some of the infrastructure investment planned under the BRI is focused on that sector. At the same time, China is seeking to capitalize on its experience in industrial symbiosis and the use of eco-industrial parks to pilot new business models and activities. One example is the planned construction of a China-African Circular Economy Industrial Park in South Africa, led by GEM Co. Ltd, a Shenzhen-based company specializing in resource recycling.<sup>23</sup>

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[https://unctad.org/en/PublicationsLibrary/presspb2017d10\\_en.pdf](https://unctad.org/en/PublicationsLibrary/presspb2017d10_en.pdf). Accessed 15 Jan 2020.

<sup>22</sup> Preston, Felix et al. "An Inclusive Circular Economy: Priorities For Developing Countries". *Chathamhouse.Org*, 2019, <https://www.chathamhouse.org/sites/default/files/publications/research/2019-05-22-Circular%20Economy.pdf>. Accessed 15 Jan 2020

## 2.2 Circular economy in SDGs and trade agreements

### The Sustainable Development Goals

Various studies have identified linkages through which the CE can support delivery on the SDGs, and vice versa. Particularly close links have been identified between CE practices and the following SDGs:<sup>24</sup>

#### SDG 6 – clean water and sanitation

More effective use of water should reduce overall consumption and wastage. The safe and effective recycling and reuse of wastewater can further reduce wastage while providing greater access to water for circular manufacturing processes. CE practices can contribute to more sustainable sanitation, e.g. through composting toilets. CE initiatives can also reduce the release of hazardous waste into water sources, reducing the risks of harm to people and to marine and fluvial ecosystems.

#### SDG 7 – affordable and clean energy

CE approaches have the potential to limit energy use in the extraction of raw materials and manufacturing of primary products. Renewable energy initiatives, including small-scale waste-to-energy technologies, can improve access to clean energy, particularly in rural areas. Waste heat recovery initiatives can contribute to greater energy efficiency. End-of-life battery recovery and reuse can lower the

<sup>23</sup> Ibid

<sup>24</sup> Preston, Felix et al. "An Inclusive Circular Economy: Priorities For Developing Countries". *Chathamhouse.Org*, 2019, <https://www.chathamhouse.org/sites/default/files/publications/research/2019-05-22-Circular%20Economy.pdf>. Accessed 15 Jan 2020

costs of stabilizing mini-grids, thereby supporting rural electrification.

## SDG 8 – decent work and economic growth

The CE can bring new employment opportunities and greater market access for workers in a range of industries, including waste management, textiles, remanufacturing and CE services. At the same time, CE technologies can allow for a greater geographical distribution of employment opportunities. Regional and circular value chains should enable developing countries to position themselves as key players in the trade of high-value circular goods.

## SDG 12 – responsible consumption and production

CE practices and innovations will be critical to achieving more sustainable use of resources, including water and energy. Small-scale waste-to-energy practices can reduce food waste. Sustainable procurement guidelines can incentivize CE business models. Greater valorisation of waste products and secondary materials, together with promotion of the sharing economy, will be central to reducing waste generation.

According to the European Commission, the “value of products and materials is maintained for as long as possible, waste and resource use are minimised, and when a product reaches the end of its life, it is used again to create further value: resulting in major economic benefits, contributing to innovation,

growth and job creation in a circular economy. Via the promotion of circular economy objectives and the involvement of businesses, public bodies, and citizens, SDG 12 supports the efficient use of resources, the sustainable management of waste and chemicals, and the reduction, reuse or prevention of produced waste in an integrated manner”.<sup>25</sup>

## SDG 15 – life on land

Regenerative and organic agriculture can dramatically reduce fertilizer and land use, while contributing to improved soil health and ecosystem conservation. Circular water management can support the restoration of ecosystems in arid and climate-affected regions. Circular means of food production can limit demand for land-use change.

To advance understanding of the synergies between the CE and the SDGs, CE strategies could be incorporated into existing multi-stakeholder discussions on pathways to sustainable consumption and production, such as those instigated in early 2019 in the Republic of the Maldives by the country’s Ministry of Environment and supported by the EU SWITCH-Asia Sustainable Consumption and Production Facility. Bringing together policymakers, civil society organizations and practitioners to explore challenges to the implementation of SCP and set national priorities, such dialogues provide a means to gather a range of perspectives on the opportunities and risks associated with the transition to a CE.<sup>26</sup>

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<sup>25</sup> “Closing The Loop: ASEM’S Transition Towards Achieving A Circular Economy”. *Asef.Org*, 2019, [https://www.asef.org/images/docs/SDG12%20ASEM%20Publication\\_Digital.pdf](https://www.asef.org/images/docs/SDG12%20ASEM%20Publication_Digital.pdf). Accessed 15 Jan 2020.

<sup>26</sup> Preston, Felix et al. “An Inclusive Circular Economy: Priorities For Developing Countries”. *Chathamhouse.Org*,

2019, <https://www.chathamhouse.org/sites/default/files/publications/research/2019-05-22-Circular%20Economy.pdf>. Accessed 15 Jan 2020

## The case of the World Trade Organization

The non-discrimination principle enshrined in the World Trade Organization (WTO) agreements, centred around the General Agreement on Tariffs and Trade (GATT), prohibits the use of protectionist trade measures by member countries. Regulations or taxes must not discriminate between imported and domestically produced 'like products', or between imports from different WTO members. But certain exceptions to these rules permit governments to impose unilateral trade restrictions in specified circumstances, for example when 'necessary to protect human, animal or plant life or health' (GATT Article XX(b)); or 'relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption' (GATT Article XX(g)). A series of dispute cases have helped to clarify the meaning of 'likeness', and the following factors may be taken into account: (1) the properties, nature and quality of the products; (2) the end-uses of the products; (3) consumers' taste and habits in respect of the products; and (4) the tariff classification of the products. In practice, trade measures based on non-product criteria have been more common in respect of product standards, labels and accreditation procedures. These factors offer a further basis for encouraging trade in CE products, above all those that are difficult to distinguish from non-CE products at the point of import, such as e-waste and functional used electrical and electronic equipment.<sup>27</sup>

The WTO's Agreement on Technical Barriers to Trade (TBT Agreement) lays down disciplines regulating the use of standards in

international trade. It employs the same concept of 'likeness' to ensure that domestically produced goods are not treated more favourably than their imported equivalents. Under the TBT Agreement, technical regulations must not be 'prepared, adopted or applied with a view to, or with the effect of, creating unnecessary obstacles to international trade' and 'shall not be more trade-restrictive than necessary to fulfil a legitimate objective, taking account of the risks non-fulfilment would create'. In this context, the protection of human health or safety and/or the health of animals, plants and the environment is considered a 'legitimate objective'. Products manufactured using CE practices could therefore, in theory, be afforded preferential treatment if their positive environmental impact is easily demonstrable, and if the trade measures in question are clearly not protectionist in effect.<sup>28</sup>

However, in reality, the application of trade measures based on processes and production methods rather than on product criteria remains a controversial and contested topic. Developing countries in particular often see such measures as a potential form of protectionism, through which developed countries impose their environmental standards (which are assumed to be higher and costlier) on poorer countries' exports. More broadly, the definition of 'like products' in the context of CE policies, and the WTO treatment of trade measures based on them, remains largely untested topic. The extent to which countries may seek to use trade policies in their pursuit of the CE – for example, to restrict all imports of new cars or virgin plastic packaging and allow the import only of remanufactured cars and recycled plastic, with similar conditions imposed on domestic manufacturers – is itself unclear. The WTO treatment of trade measures such as these is

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<sup>27</sup> Ibid

<sup>28</sup> Ibid



similarly ambiguous; there may be no clear answer until a specific trade dispute on CE actually happens.<sup>29</sup>

At the multilateral level, the EU and sixteen other members of the WTO launched negotiations on an Environmental Goods Agreement (EGA) in July 2014, with the aim of removing trade barriers on EGs. Building on a list of 54 tariff lines selected by the Asia-Pacific Cooperation (APEC) in 2012, negotiators have expanded the list to 340 subheadings falling into ten categories. Among these categories are 'environmentally preferable products', 'resource efficiency' and 'solid and hazardous waste management', all relevant to the circular economy. There are no formal criteria for the selection of EGs, however, with each party submitting products and provides evidence supporting their nominations.<sup>30</sup>

The intention to promote a circular economy at the national level has at times raised concerns of creating unnecessary trade barriers and has led to disputes between trading partners with regards to trade and domestic policies. At the WTO level, disputes have been recorded in 2013 in two cases raised by the European Union and Japan where it is claimed that the Russian Federation imposed a recycling fee on motor vehicles giving preferable conditions to domestic manufactures over their foreign counterparts. The cases are pending final decisions as of December 2019.<sup>31</sup>

The current trade regime does not seem to yet fit for a circular economy. Trade negotiators are in a key position in terms of setting up trade agreements that promote circular economy. As per the Director of the Trade and Environment Division of WTO, Aik Hoe Lim, and the Deputy Director of the Environment Directorate of the OECD, Anthony Cox, setting up the rules of play for global circular trade would require at least<sup>32</sup>:

- International, technical classifications and definitions of secondary raw materials, waste and hazardous waste
- Instead of a myriad of national standards and agreements, joint standards, wherein the technical aspects are agreed upon
- A re-evaluation of tariff structures and subsidies, incl. getting the pricing right for fossil fuels

## A snapshot of some bilateral agreements and free trade agreements

Some countries have tackled the notion of circular economy in trade agreements with other counterparts, at different levels, to different extents. Firstly, the Memorandum of Understanding (MoU) on Circular Economy Cooperation between the EU and China, signed in July 2018, could be mentioned, as it provides a vehicle through which to broaden circular economy cooperation and leadership.

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<sup>29</sup> Ibid

<sup>30</sup> Kettunen, M., Gionfra, S. and Monteville, M. "EU circular economy and trade: Improving policy coherence for sustainable development", IEEP Brussels / London, 2019 [https://ieep.eu/uploads/articles/attachments/f560794d-c411-4895-8ae9-910c65548f33/EU%20trade,%20CE%20and%20sustainable%20development%20\(IEEP%202019\)%20FINAL.pdf?v=63741577228](https://ieep.eu/uploads/articles/attachments/f560794d-c411-4895-8ae9-910c65548f33/EU%20trade,%20CE%20and%20sustainable%20development%20(IEEP%202019)%20FINAL.pdf?v=63741577228). Accessed 15 Jan 2020.

<sup>31</sup> Yamaguchi, Shunta. "International Trade And The Transition To A More Resource Efficient And Circular Economy: A Concept Paper". *Oecd-Ilibrary.Org*, 2018, <https://doi.org/10.1787/847feb24-en>. Accessed 15 Jan 2020.

<sup>32</sup> Ojala, Leea. "Global Policy And Funding In The Spotlight At The World Circular Economy Forum 2019". *Logscale Oy*, 2019, <https://logscale.fi/en/global-policy-and-funding-key-for-circular-economy/>. Accessed 15 Jan 2020.



Under the MoU, the EU and China agree to cooperate on 'dialogue on the design, planning and implementation of strategies, legislation, policies, and research', 'strategic exchanges on management systems and policy tools such as eco-design, eco-labelling, extended producer responsibility and green supply chains', 'strategic exchanges on best practices of circular economy', and 'exchanges on investments in and financing of circular economy'. Such modes of cooperation could, in theory, be extended to third countries, including in sub-Saharan Africa where both the EU and China have significant investment interests and existing donor programmes<sup>33</sup>

Some countries have gone a step further, especially from the EU. Since 2010, all EU Free Trade Agreements (FTAs) include a Trade and Sustainable Development (TSD) chapter. Although specific provisions differ, some core elements are recurrent in all post-2010 FTAs. Such elements include commitment of the Parties to Multilateral Environmental Agreements (notably the UN Framework Convention on Climate Change - UNFCCC), promotion of sustainable forest management; sustainable management of fish stock, and cooperation on liberalisation of environmental goods and services. Despite its somewhat limited scope, the introduction of the TSD framework provides a considerable opportunity for the integration of the circular economy objectives in future EU FTAs. For now, the concept of circular economy is far from being a regular feature of EU FTAs and other relevant trade agreements. It is however being progressively integrated. References to

circular economy relevant concepts, such as energy efficient products or goods that contribute to environmentally sound practices, can be found in most FTAs negotiated after 2010. Sound management of waste also repeatedly stands amongst the focus areas for cooperation between trading parties. More importantly perhaps, several agreements, among which the partially in place CETA (with Canada) and the pending FTA with Vietnam, explicitly mention sustainable production and/or consumption (SCP). The significance of these clauses is, however, limited as the texts only call for parties to promote or facilitate trade in relevant products, as well as to cooperate on promotion of best practices, but do not specifically commit parties to favour those practices against others.<sup>34</sup>

To date, the circular economy is explicitly mentioned only in two agreements, both of which are still under negotiation: the trade part of the modernised global agreement with Mexico, agreed in principle in April 2018 but still under negotiation, and the EU proposals for FTA between the EU and New Zealand. Both these draft agreements explicitly call on parties to promote circular economy as part of their cooperation on trade-related aspects of environmental policies and measures. Neither of these texts, however, are final and the vocabulary chosen leaves room for interpretation. No concrete incentive is presented explicitly for choosing to promote the circular economy and nothing is said on the possible means to promote circularity in practice. It is also important to note that all the above references to circular economy feature in the TSD chapter of the agreements only, as

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<sup>33</sup> Preston, Felix et al. "An Inclusive Circular Economy: Priorities For Developing Countries". *Chathamhouse.Org*, 2019, <https://www.chathamhouse.org/sites/default/files/publications/research/2019-05-22-Circular%20Economy.pdf>. Accessed 15 Jan 2020

<sup>34</sup> Kettunen, M., Gionfra, S. and Monteville, M. "EU circular economy and trade: Improving policy coherence for

sustainable development", IEEP Brussels / London, 2019 [https://ieep.eu/uploads/articles/attachments/f560794d-c411-4895-8ae9-910c65548f33/EU%20trade,%20CE%20and%20sustainable%20development%20\(IEEP%202019\)%20FINAL.pdf?v=63741577228](https://ieep.eu/uploads/articles/attachments/f560794d-c411-4895-8ae9-910c65548f33/EU%20trade,%20CE%20and%20sustainable%20development%20(IEEP%202019)%20FINAL.pdf?v=63741577228). Accessed 15 Jan 2020.

well as in the Environment section of the FTA's Cooperation chapter if separate from TSD chapter. This seems to indicate that circular economy is set out as pertaining to the

environmental safeguards for trade only rather than being considered an underlying imperative for the economy as a whole.<sup>35</sup>

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<sup>35</sup> Ibid

## SECTION 3

# Implementation of circular economy in current trade: A closer look at some value chains

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Trade policies and trade agreements could be vectors for more circular value chains in developed and developing countries. However, some private and public actors have been proactive and already changed their ways of producing, selling, recycling, etc. without waiting for their policy makers and governments to act. In fact, companies in a number of different sectors, in both developing and developed countries, are already committing to ambitious circular economy targets and taking actions to enable more circular practices along their supply chains. Clothing retailer H&M, for example, is aiming to use 100 per cent recycled or other sustainability sourced materials by 2030. With manufacturing and processing plants in Bangladesh, Cambodia, Ethiopia, India, Indonesia, Kenya, Myanmar, Pakistan, Rwanda, Sri Lanka and Vietnam, among other countries, achieving this goal requires new processes and training in lowering the environmental and resource impacts of production across these settings.<sup>36</sup> Below, some concrete examples of multinational companies, NGOs as well as Small & Medium Sized Enterprises (SMEs) in developed as well as developing and least developed countries will be presented in the agriculture and textile sectors.

### 3.1 Agriculture: Beyond policy, what is being done to promote more circularity?

Circular economy models in agriculture provide an alternative to the exhaustion of raw materials produced by linear models. This not only means companies and individuals in the agricultural sector can decrease environmental damage but also circular models could help them create more profitable ways of producing. An example of the positive impact of transitioning to circularity is reflected in the work of JM Green, a Chinese company that provides environmental solutions for waste management to businesses. This company utilizes black soldier flies (a specific type of larvae) to turn waste into animal feed. Food waste is collected to feed the larvae, which are later converted into a nutrient-rich animal feed themselves. In this way, agricultural businesses make productive usage of organic residues, which would otherwise end up in the landfill, to create their own animal feed. This strategy for waste management both replaces traditional sources of proteins for animals in the livestock and fish sectors and reflects the hidden potential of organic food

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<sup>36</sup> Preston, Felix et al. "An Inclusive Circular Economy: Priorities For Developing Countries". *Chathamhouse.Org*, 2019,

<https://www.chathamhouse.org/sites/default/files/publications/research/2019-05-22-Circular%20Economy.pdf>. Accessed 15 Jan 2020

waste. Additionally, the residues left in cases when the larvae are processed and used as fertilizer, meaning that this model offers a highly sustainable and non-contaminating alternative to traditional models of production.<sup>37</sup>

Another example of circular economy in agriculture is present in the work model of the Instituto Tecnológico Agrario de Castilla y León (ITACyL), an institute of the government of Spain. This institute has developed several projects for the application of more circular models of production in this country. By following the concept of cascading use<sup>38</sup>, this government agency has developed a project to convert residual biomass from the wine sector into bioproducts and biofuels. Through this initiative, ITACyL extends the life cycle of biomass residues and utilizes the untapped potential of this resource. The project requires the treatment of both residual waters and solid waste from wine refineries in order for these to be converted into bioproducts. Under this project, treatment processes include systems of energy recovery for a full utilization of resources. ITACyL emphasizes both the environmental impact of this project as well as the economic benefits; as it contributes to energy diversification, reducing dependence on external energy sources and creating rural labour opportunities.<sup>39</sup>

The application of cascade systems for the conversion of biomass waste has become a topic of debate among international organizations, since the European Union has

started to promote the utilization of this resource for the production of bioproducts. By employing it to produce new products, the biomass that would otherwise be burnt or incinerated becomes part of the biomass supply chain, which refers to the flow of biomass from the land to its end use for producing bioenergy.<sup>40</sup> This source constitutes a clean and renewable alternative to traditional sources of energy; “it does not have any carbon dioxide side effects in its use.” Due to the low cost of biomass waste, the trade impact of this project is less related to the provision of this material than to the costs associated with the production of biofuels and bioproducts emerging from it. Having the source of biomass waste identified, trade benefits and challenges come into place throughout the conversion process. Biofuels and bioproducts are faced with the challenge of becoming competitive vis-a-vis fossil-fuels, with several researchers looking for ways to optimize the biomass supply chain. While the benefits of this initiative are clear, breaking with the linearity of biomass waste being discarded, the challenges for the utilization of such resource to be competitive remain significant.

Safi Organics, a company that produces and sells fertilizers in Kenya, has also turned to a more circular model of production. This company has the goal of “decentralizing fertilizer production” in this country. Waste rice husk is collected from farmers and processed into biochar, the biochar is then stored, processed, and a local enzyme is

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<sup>37</sup> "Using Larvae To Convert Food Waste Into Animal Feed". *Global Opportunity Explorer*, <https://goexplorer.org/using-larvae-to-convert-food-waste-into-animal-feed/>. Accessed 15 Jan 2020.

<sup>38</sup> Cascading use can be defined as the efficient utilisation of resources by using residues and recycled materials to extend total biomass availability within a given system. Cascading at the market level (sectors and products) can be quantified through product flow analysis.

<sup>39</sup> "Valorización Integral De Biomazas Agrícolas". *Itacyl.Es*, <https://bit.ly/30l3Pok>. Accessed 15 Jan 2020

<sup>40</sup> Atashbar, N. Zandi et al. "Modeling And Optimization Of Biomass Supply Chains: A Review And A Critical Look". *IFAC-Papersonline*, vol 49, no. 12, 2016, pp. 604-615. *Elsevier BV*, doi:10.1016/j.ifacol.2016.07.742. Accessed 15 Jan 2020.

added to enable microbial growth. The fertiliser and soil treatments are sold back to the farmers directly or through agents. This fertilizer is carbon-negative and is suitable for a variety of products such as maize, rice, wheat, beans, peas, vegetables, fruits, flowers, and grasses. This initiative reduces the emissions caused by open-field residue burning by 95% by reusing these as materials for fertilizer production. Additionally, Safi Organics product can be made on a village-level basis using locally available resources and labour.<sup>41</sup>

The company has been able to create a more sustainable way of production that merges circularity with a positive social impact. It responds to the problematic of high costs associated with large-scale produced fertilizers. Because of the logistical challenges linked to importing traditionally-produced fertilizers to rural areas, rural farmers especially in developing economies end up paying much more than the rest of the world for these products. In this way, the cost of food-production is increased and farmers' poverty is worsened. By decreasing the demand for large-scale produced fertilizers and creating a local and circular source of this product, small-scale farmers are able to improve their yields by 30%. An internal network for the provision of materials and products are created on a village-level, making fertilizers more accessible and farming more profitable for farmers.<sup>42</sup>

The Roots micro-enterprise model is an WSV Social Franchise model created by the Wessex Social Venture, in the United Kingdom, from which NGOs and SMEs can purchase a license to develop their business models. They support them to establish pre-designed

and highly impactful community run businesses. Their business model has been applied by several entrepreneurs especially in Kenya and Zambia. One of them consists of the construction of toilets for the collection of human waste that is then used to produce fertilizer, which is sold by entrepreneurs to farmers. The toilets are built mainly in schools, providing permanent and improved facilities for a hygienic learning environment in areas normally lacking toilet access. This initiative provides business opportunities to individuals in economically disadvantaged communities, creating infrastructure for more hygienic living standards, representing a cheaper alternative to pit latrines (the most common option), and providing a sustainable source of fertilizers for local farmers.<sup>43</sup>

By providing several solutions to both environmental and social issues on a small-scale, Roots is a good example of the various benefits circular models have to offer. Roots' model creates a way for making business within frameworks completely outside of linear understandings of the supply chains. Human residues become not only object of economic opportunities for entrepreneurs, but also becomes part of the supply chain for rural farmers, making fertilizers more accessible as it is the case in the Safi Organics model as previously mentioned. By trading human residue-based fertilizers, entrepreneurs are able to decrease the demand for large-scale produced fertilizers that are usually more expensive and are produced under contaminating processes.

Tyegro-Ci, a company in Cote d'Ivoire, has applied the concept of circularity by producing vegan leather out of crop residues, more specifically pineapple leaves. This company

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<sup>41</sup> "Safi Organics – Decentralizing Fertilizer Production". *Safiorganics.Co.Ke*, <http://safiorganics.co.ke/>. Accessed 15 Jan 2020.

<sup>42</sup> Ibid

<sup>43</sup> WSV. (n.d.). *Roots - W/SV*. [online] Available at: <http://wsv.global/wsv-portfolio/roots/>. Accessed 15 Jan. 2020.

also produces ecological charcoal from organic waste. Considering that most agricultural waste in Cote d'Ivoire is not used and is generally burnt in the open air, the environmental impact of this initiative is highly significant. By implementing this waste management strategy, farmers are able to recover their own waste into value-added material. The company employs young locals for farming and provides trainings on a regular

basis for the population. Under this model, pineapple leaves and other types of organic waste become primary materials of production that are low-cost and accessible. Farming, therefore, is able to not only produce agricultural products but also allows for the production of leather by exploiting the untapped potential of the residues it produces.<sup>44</sup>

**Table 3: CE-specific opportunities and challenges for food-manufacturing Multi-National Companies in developing countries<sup>45</sup>**

Actions MNCs can take in developing countries	Specific challenges for sector in developing countries	Example of MNC activity
<p>Tackling packaging waste, e.g. innovative packaging, public awareness campaigns, investment in waste management infrastructure, providing incentives for recovery and recycling.</p> <p>Tackling food waste, e.g. investment in cold-chain infrastructure, public awareness campaigns, food-sharing networks.</p> <p>Adopting CE standards in procurement from local food suppliers, e.g. emphasis on organic fertilizer, reuse of farm by-products.</p> <p>Helping to promote local CE value chains, e.g. through facilitating trade among local suppliers across multiple sectors in by-products and agricultural waste to be turned into energy and fertilizer</p>	<p>Moving away from plastic in food and drink packaging can be more challenging in developing countries where water and food safety is not always assured.</p> <p>Moving away from sachets in food, drink and consumer goods packaging can make these goods too expensive for poorer communities.</p> <p>Demand for recycled plastics may be limited owing to low commodity prices. When oil prices are low, virgin plastic may be cheaper than recycled plastic.</p>	<p>Unilever is a member of Project MainStream, a multi-industry, CEO-led global initiative to accelerate business-driven innovation and help scale the CE, and has formed a Global Partnership with Ellen Mac Arthur Foundation. The company has set out its waste strategy commitments in its Sustainable Living Plan.</p> <p>Unilever initiatives in developing countries include the Community Waste Bank Programme in Indonesia and a project to establish a pilot plant in the Philippines to recycle plastic sachets.</p>

<sup>44</sup> Djouman. "l'innovation agricole au service du développement durable en Afrique.", 2018, [online] Available at: <http://blog.djouman.com/fr/innovation-agricole-service-du-developpement-durable-afrique.html> Accessed 15 Jan. 2020.

<sup>45</sup> Preston, Felix et al. "An Inclusive Circular Economy: Priorities For Developing Countries". *Chathamhouse.Org*, 2019, <https://www.chathamhouse.org/sites/default/files/publications/research/2019-05-22-Circular%20Economy.pdf>. Accessed 15 Jan 2020



Circular economy is also economically and socially relevant for businesses in the developed countries. In fact, in this part of the world, agriculture and the meat industry produce a lot of organic waste. The raw materials contained in them are still an unexploited resource in developed countries in particular, where waste often ends up unprocessed in landfills and waste ponds. Insufficient treatment methods spread waste-based matter into the environment, where it causes nutrient loads and methane emissions, and possible risk of contagion to animals and people. Honkajoki, a Japanese company, uses animal-based waste from farms, slaughterhouses and meat-cutting plants and refines them into raw materials for products such as pet food and biofuels. The surplus energy generated by the production plant is sold to other companies in the region, and the nutrients contained in the wastewater are recycled.<sup>46</sup>

Honkajoki's largest business area is the sale of processed animal protein and purified fat to industrial companies. The use of its own waste for energy production and the sale of self-generated energy to other companies lowers Honkajoki's energy expenses. In addition, the company offers a waste collection service to farms and slaughterhouses and exports its circular economy solution to developing countries.<sup>47</sup>

### 3.2 Textile: Beyond policy, what is being done to promote more circularity?

Textiles are fundamental to modern society, providing clothing, shoes, carpets, curtains, furniture, etc. for homes, offices and public buildings. The textiles industry employs millions of people worldwide, making it among the largest in the world and an important part of Europe's manufacturing industry. However, textile production and consumption cause significant environmental, climate and social impacts by using resources, water, land and chemicals and emitting greenhouse gases and pollutants. The textiles market is highly globalised, and millions of producers and billions of consumers across the world are involved in so-called linear value chains. These chains from raw material extraction to production, transport, consumption and waste include little or no reuse or recycling. Since 1975, the global production of textile fibres has almost tripled. Today, 60 % of textile fibres are synthetic. Private companies and public authorities are increasingly seeing the potential economic, social, environmental and climate benefits of a circular textiles system. Recently, circular business models focusing on circular textile design, sharing, recycling and reuse of textiles have surfaced. Education and behavioural change are an important part of the shift towards circular textiles to bring about behavioural change across the entire system from production and processing to transport, consumption and waste. The Ellen MacArthur Foundation describes a circular textiles system as one that is: "restorative and regenerative by design and provides benefits for business, society and environment. A

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<sup>46</sup> "Reusing Animal-Based Waste." *Sitra*. N.p., 2019. Web. 15 Jan. 2020.

<sup>47</sup> Ibid

system in which clothes, fabrics and fibres are kept at their highest value during use, and re-enter the economy after use, never ending up as waste”.<sup>48</sup>

Corporate action on the agenda in developing countries is likely to grow. The opportunities for CE activities cover a wide range of companies, from SMEs to Multinationals, in both developed and developing countries. For

instance, Adidas is planning to use only recycled polyester in all its shoes and clothing by 2024 to help increase the sustainability of its supply chain. Another clothing retailer, Levi Strauss and Co., is targeting a 40 per cent reduction in greenhouse gas emissions in its supply chain by 2025. More details on the specific case of multinationals could be found in the table below.

**Table 4: CE-specific opportunities and challenges for textiles’ Multi-National Companies in developing countries<sup>49</sup>**

Actions MNCs can take in developing countries	Specific challenges for sector in developing countries	Example of MNC activity
<p>Lowering impacts in production, e.g. procurement and specification of lower-impact fibres from local suppliers, adopting CE principles on dyeing, working with supply chain partners to increase resource efficiency.</p> <p>Extending the life cycle of clothes, e.g. designing clothes to prolong their useful life, providing consumer information on use, reuse and recycling.</p> <p>Encouraging the recycling of clothes, e.g. establishment of take-back schemes for textiles and garments.</p>	<p>Textile and garment supply chains generally face higher risks in terms of labour rights observation in developing countries. Any changes to supply chain management to promote CE practices must take into account impacts on workers’ health, safety and income.</p>	<p>H&amp;M is an EMF Global Partner and a signatory of the New Plastics Economy Global Commitment. The company has made a commitment to be 100 per cent circular and renewable by 2030.</p> <p>H&amp;M initiatives in developing countries include a hazardous-substances training pilot scheme for supply chain partners in Bangladesh, China, India, Indonesia and Turkey.</p> <p>H&amp;M has also developed a tool to assess performance in chemical usage by suppliers, which it has subsequently tested in Bangladesh, China, India, Indonesia, Pakistan and Turkey. The firm has partnered with the food company Danone and an Indonesian textile supplier to recycle plastic bottles into clothes.</p>

An innovative initiative called “Make Fashion Circular” drives collaboration between

industry leaders and other key stakeholders to create a textiles economy fit for the 21st

<sup>48</sup> "Textiles In Europe's Circular Economy." *European Environment Agency*. N.p., 2019. Web. 15 Jan. 2020.

<sup>49</sup> Preston, Felix et al. "An Inclusive Circular Economy: Priorities For Developing Countries". *Chathamhouse.Org*,

2019, <https://www.chathamhouse.org/sites/default/files/publications/research/2019-05-22-Circular%20Economy.pdf>. Accessed 15 Jan 2020.

century. Its ambition is to ensure clothes are made from safe and renewable materials, new business models increase their use, and old clothes are turned into new. This new textiles economy would benefit business, society, and the environment. Under this initiative, “The Jeans Redesign Guidelines” set out minimum requirements on garment durability, material health, recyclability, and traceability. Based on the principles of the circular economy, the guidelines will work to ensure jeans last longer, can easily be recycled, and are made in a way that is better for the environment and the health of garment workers.<sup>50</sup>

The Jeans Redesign – created by the EMF’s Make Fashion Circular initiative – brought together more than 40 denim experts from academia, brands, retailers, manufacturers, collectors, sorters, and NGOs, to develop the Guidelines. Confirmed participants to date include Arvind Limited, Bestseller (through the Vero Moda brand), Boyish Jeans, C&A, GAP, Hirdaramani, H&M Group (through the H&M and Weekday brands), HNST, Kipas, Lee®, Mud Jeans, OUTERKNOWN, Reformation, Sai-Tex, Tommy Hilfiger. The Guidelines have been endorsed by clothing collectors and recyclers Bank and Vogue, Circular Systems, EVRNU, HKRITA, I:CO, Infinited Fiber Company, Lenzing, Recover, re:newcell, Texaid, Tyton Biosciences LLC, Wolkat, and Worn Again. They have also been endorsed by the NGOs Fashion Revolution and Textile Exchange. The Jeans Redesign will drive others to join the project and produce jeans in line with the Guidelines at scale. The first pairs of the redesigned jeans will be on sale in 2020.<sup>51</sup>

Textiles’ SMEs are also concerned by the challenges posed by their industry, and are

taking action to make their value chains more circular and sustainable. This is the case of the Finnish company, Infinited Fiber, which harnesses recycled fibres for reuse and makes new raw materials for textile products from them. Textile, paper and cardboard waste can be used to produce a cotton-like, soft textile fibre using Infinited Fiber’s technology. The cellulose in the raw materials is processed into a 100% cellulose solution and reshaped into ready fibre using nozzle technology. The fibre can be used to solve the environmental problems caused by textile production and textile waste disposal.<sup>52</sup>

The company sells technology licences for producing fibre. The usefulness of the fibre has been demonstrated in laboratories and the next step is to start operations in a pilot plant in Espoo. The technology licence was ready for the global markets in 2018/2019. There is a demand for a cotton-like fibre that is produced ecologically in the global textile and consumer markets. Infinited Fiber offers considerable brand benefits to customers who are seeking more sustainable alternatives for textile fibre – customers will also be able to use the solution to ensure the supply of affordable recyclable textile in the future.<sup>53</sup>

Fashion for Good, a global initiative hub based in Amsterdam has started a South Asia Innovation Program, which aims to bring together global and local apparel brands, manufacturers, investors and innovators to accelerate the transition towards a circular economy and to scale innovative solutions. The program seeks innovators in raw material, dyeing, finishing, manufacturing, retail, end-of-use and transparency and traceability to provide close mentoring from industry experts to create investment opportunities. The 12-

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<sup>50</sup> "Make Fashion Circular Launches The Jeans Redesign." *Ellenmacarthurfoundation.org*. Ellen Macarthur Foundation, 2019. Web. 15 Jan. 2020.

<sup>51</sup> Ibid

<sup>52</sup> "Textile Fibres From Recycled Mass -". *Sitra*. N.p., 2017. <https://www.sitra.fi/en/cases/textile-fibres-from-recycled-mass/>. 15 Jan. 2020.

<sup>53</sup> Ibid

week program in February 2020 aims to accelerate and scale up startups which drives innovation in sustainability, circularity and transparency.<sup>54</sup>

Fashion for Good's accelerator program which is a global version of the same concept began in 2017. The accelerator program has produced some companies that are based in developing countries such as FarFarm which is based in Brazil. According to the fashion for good website "FarFarm develops responsible fabrics using Agroforestry systems that regenerate nature and communities in Brazil. They educate agricultural families to plant natural fibres such as cotton, jute, ramie and dye-producing plants using agroforestry principals that mimic nature, doesn't require chemical fertilizers, all while restoring biodiversity and keeping a standing forest."<sup>55</sup>

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<sup>54</sup> "South Asia Programme". *Fashion For Good*, <https://fashionforgood.com/south-asia-programme/>. Accessed 15 Jan 2020.

<sup>55</sup> "Fashion for Good Accelerator". *Fashion For Good*, <https://fashionforgood.com/innovation-platform/accelerator-programme/>. Accessed 15 Jan 2020.

## SECTION 4

# Lessons learnt and Way forward: Making trade more circular?

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Whilst international trade, through diverse agreements, standardization scheme, collaboration, etc. has slowly started to support the economy to be more circular and sustainable, stakeholders at all levels in all types of countries should be involved and engaged in a coherent way. Some successes and efforts have been highlighted below, as potential examples to be followed by public and private actors in the developed and developing world.

## 4.1 How can international trade help circular economy move forward?

Although domestic policies (such as EPR schemes, standards for recycled materials, standards for recyclability and reparability of products, requirements for eco-design, requirements to secure information on chemical and material composition of products, and to phase-out hazardous substances from products) are increasingly in place to pursue circular economy objectives, domestic policies alone may not be enough to facilitate a transition towards a global circular economy. There is a question to whether further efforts are required at the global or regional level, such as revisiting trade disciplines, or considering global or regional

recyclability and reparability standards, requirements on ecodesign, requirements to provide information on chemical and material composition of products, mutual recognition of schemes, and possible international co-operation. Since the transition towards a circular economy entails the application of new and innovative policies, there could be potential additional issues to investigate in the nexus of trade policies and the circular economy transition.<sup>56</sup>

In fact, a clearer understanding of traded waste products, secondary resources and their physical trade flows across a range of sectors is needed to design effective national and international trade policies that support the circular economy. More research studies and analytical work should be undertaken to provide more clarity, keeping in mind the specificities of developed and developing countries, on, among other: (i) What impact do export and import regulations of waste and secondary materials have on global value chains? (ii) How will the shift from the acquisition and consumption of goods to services in a circular economy influence trade patterns? (iii) As extracting secondary materials e.g. through urban mining becomes economically and technologically viable, how will this affect low- and middle-income countries dependent on primary resource extraction and exports?<sup>57</sup>

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<sup>56</sup> Yamaguchi, Shunta. "International Trade And The Transition To A More Resource Efficient And Circular Economy: A Concept Paper". *Oecd-Ilibrary.Org*, 2018, <https://doi.org/10.1787/847feb24-en>. Accessed 15 Jan 2020.

<sup>57</sup> "Building Transformative Alliances For An Inclusive Global Circular Economy." *Chatham House*. Web. 15 Jan. 2020.

Despite the emerging political interest, very few studies are dedicated to investigating the interface of international trade and the transition to a more resource efficient and circular economy. Further research and empirical evidence are necessary to understand the possible synergies and trade-offs between the transition to a circular economy and international trade. The ultimate question is how could circular economy policies and trade policies be aligned to encourage the decoupling of resource consumption from economic growth at the global level without creating unnecessary barriers to international trade as well as undesirable environmental consequences. The scarce literature available on this question to date forms the strong motivation for further work in this area. Importantly, identifying potential opportunities, challenges and knowledge gaps in the interface of trade and the circular economy would be beneficial to increase global material circularity to meet the needs of growing populations and their resource use as well as to mitigate associated environmental pressures.<sup>58</sup>

Trade could be a powerful tool for fostering engagement from both the public and private sectors in regional and global circular value chains. Trade-focused CE discussions have the potential to open up new perspectives on opportunities for mutual gain, and to shape a global and inclusive vision that goes beyond the zero-sum world implied by some CE strategies today. While the CE may offer some protection in a turbulent world in which tensions over trade are rising, it will only reach meaningful scale through international coordination and alignment. At the global level, this will be critical to expanding the markets for circular goods and services, pooling

innovation knowledge bases, optimizing circular value chains, attracting cross-border investment and providing entrepreneurs with access to data while delivering an inclusive approach.<sup>59</sup>

The current trade regime is not yet fit for a circular economy. Trade negotiators are in a key position in terms of setting up trade agreements that promote circular economy.

With negotiations on multilateral liberalization agreements on trade in environmental goods and services having stalled, interest in regional trade initiatives has been growing. A number of agreements have been successfully completed. Countries may wish to build upon or replicate these agreements and include CE-based elements in order to address barriers not only to trade in primary environmental goods and services, but also to trade in secondary materials.<sup>60</sup>

A plurilateral agreement similar to the WTO's information technology agreement, whereby like-minded countries could agree to reduce or remove all duties on specific types of secondary materials on a most-favoured-nation (MFN) basis, could offer a promising avenue for collaboration. Alternatively, governments could negotiate bilateral or regional trade agreements through which concessions are made available only to participants in the agreement (a permitted exception to WTO non-discrimination rules). In either case, countries could be given the option to select the particular secondary material category (e.g. specific types of plastic waste or remanufactured goods) for which they would be ready to lower import duties.<sup>61</sup>

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<sup>58</sup> Yamaguchi, Shunta. "International Trade And The Transition To A More Resource Efficient And Circular Economy: A Concept Paper". *Oecd-Iibrary.Org*, 2018, <https://doi.org/10.1787/847feb24-en>. Accessed 15 Jan 2020.

<sup>59</sup> Preston, Felix et al. "An Inclusive Circular Economy: Priorities For Developing Countries". *Chathamhouse.Org*, 2019, <https://www.chathamhouse.org/sites/default/files/publications/research/2019-05-22-Circular%20Economy.pdf>. Accessed 15 Jan 2020.

[search/2019-05-22-Circular%20Economy.pdf](https://www.chathamhouse.org/sites/default/files/publications/research/2019-05-22-Circular%20Economy.pdf). Accessed 15 Jan 2020.

<sup>60</sup> Preston, Felix et al. "An Inclusive Circular Economy: Priorities For Developing Countries". *Chathamhouse.Org*, 2019, <https://www.chathamhouse.org/sites/default/files/publications/research/2019-05-22-Circular%20Economy.pdf>. Accessed 15 Jan 2020.

<sup>61</sup> Ibid



Mutual recognition agreements (MRAs) on CE-related standards and conformity assessment offer another form of possible coordination at bilateral or regional level. Such MRAs could build on existing regional trade agreements. They could include ‘WTO plus’ provisions on mutual recognition, and conformity assessment agreements on standards and certification procedures related to the CE, as well as technical and financial assistance packages. The reduction or elimination of tariffs and non-tariff measures on environmental goods and services and secondary materials relevant to the CE – such as equipment to sort and process e-waste, recycling equipment, and equipment for extracting secondary raw materials from products in a safe manner – could significantly boost access to CE activities.<sup>62</sup>

## 4.2 How enlarging stakeholders’ involvement could support circular economy move forward?

It is critical for both public and private stakeholders, from developing and developed countries, to be involved to ensure circular economy and trade are mutually supportive. Different methods have been / could be used to involve different actors in the process.

First option, at a global level, could be to widen the global CE conversation to include developing countries and to invest political and financial capital in promoting the development of an inclusive, global CE. Developed-country governments have an important role to play in facilitating a meaningful dialogue on how the international dynamics of CE policies may best be managed. Support from international agencies such as the UN Industrial Development

Organization (UNIDO) and the UN Environment Programme (UNEP) will be critical to facilitating the piloting of CE solutions among SMEs in developing countries and along international value chains to demonstrate the viability of cross-border circular value chains at scale. And proactive engagement by multinational companies with suppliers in developing countries – including SMEs and those operating in the informal sector – will be necessary for circular activities to be scaled up in a manner that is inclusive and avoids the displacement of vulnerable workers.<sup>63</sup>

The next years present a moment of opportunity to develop a global vision for the CE aligned with trade, climate action and the broader sustainable development agenda. There is much scope for aligning CE strategies with climate action and sustainable development commitments at the national and international level. Key international milestones in global climate change talks, in the delivery of the UN’s Sustainable Development Goals (SDGs), in the agreement of a global treaty on biodiversity protection in 2020, as well as the upcoming World Trade Organization’s Ministerial Conference in June 2020 present a unique opportunity to integrate the CE into existing global political and environmental agendas and catalyse increased public and private investment in the roll-out and scale-up of CE solutions in developing countries.<sup>64</sup>

Second option is at a State level, as the central government is supposed to play a key role in streamlining the circular economy and in the implementation of smart and stimulative steering and regulation. Public research, development and innovation funding should enable circular economy research in the education and corporate fields, as well as the development and commercialisation of innovations. Green deal agreements between the state and business

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<sup>62</sup> Ibid  
<sup>63</sup> Ibid

<sup>64</sup> Ibid

sectors have turned out to be a good way of promoting the circular economy in Northern Europe for instance, and more similar commitments should be attracted.<sup>65</sup>

The circular economy is integrated into structures. The circular economy is a phenomenon that can be compared to digitisation, requiring an approach that crosses the boundaries of administrative sectors and levels. Separate processing of matters in one sector is not enough, but all administrative sectors must be brought into the circular economy game. Co-operation between ministries lies at the heart of everything. Good examples of applying the human-oriented way of thinking included in the circular economy have been seen in the Agenda for Sustainable Growth facilitated by the Ministry of Economic Affairs and Employment, the Finnish Government's Bioeconomy and Clean Solutions Programme and the Finnish National Commission on Sustainable Development from the Prime Minister's Office. This points to the need to think about how, in future, circular economy issues could be tackled in a more efficient and effective manner by the central government.<sup>66</sup>

Third option, at a company level, could be through the adoption and implementation of a voluntary code or standards relevant and applicable to a company, in both developed and developing countries, and its supply chain. ISO 26000 is a voluntary standard that gives guidance on Social Responsibility (SR)<sup>67</sup>. The below picture demonstrated what ISO 26000 considers as SR (i.e. large scope encompassing economic, social, environmental and governance

internal and external impacts of a company's supply chain).<sup>68</sup>

## Social responsibility: 7 core subjects



ISO 26000 provides guidance for businesses (including SMEs), on how to integrate SR in their organization, in both developed and developing countries (i.e. large beneficiaries/stakeholders' scope, although buying/accessing the ISO document costs almost 200CHF). It is critical to note that ISO 26000 can not be used as a certification standard, and has no proper monitoring or evaluation processes in place to ensure its compliance.

Adhering to ISO 26000 would allow the company to increase knowledge on how its supply chain is affecting its employees, consumers and other stakeholders (i.e. communities), but also becoming more aware of the social, environmental and economic implications of the company's activities (throughout the supply chain). ISO 2600 provides some tools (several

<sup>65</sup> Sitra. (2019). *Central government works across silos in the circular economy*. [online] Available at: <https://www.sitra.fi/en/articles/central-government-works-across-silos-in-circular-economy/> [Accessed 15 Jan. 2020].

<sup>66</sup> Sitra. (2019). *Central government works across silos in the circular economy*. [online] Available at: <https://www.sitra.fi/en/articles/central-government-works-across-silos-in-circular-economy/> [Accessed 15 Jan. 2020].

<sup>67</sup> The four types of Corporate Social Responsibility are environmental sustainability initiatives, direct philanthropic giving, ethical business practices and economic responsibility.

<sup>68</sup> ISO 26000 – Responsabilité sociétale. 2018. ISO 26000 – Responsabilité sociétale. [ONLINE] Available at: <https://www.iso.org/fr/iso-26000-social-responsibility.html>. [Accessed 17 April 2018].

useful documents, including training and case studies) to understand how to make its operations more socially responsible, how to evaluate and revise its stakeholder relationships and community impacts. The company will be better equipped to plan its supply chain activities and objectives, having the full picture including the risks and opportunities at each stage of the supply chain.

On more concrete terms, while making its supply chain more socially sustainable, the company might increase its investments and innovation plans, allowing the company to access new markets at the end (i.e. selling new products, accessing niche markets, etc.).

Moreover, by following the ISO 26 000 guidance the company will be encouraged to pay sufficiently its suppliers for them to fulfil their own social responsibilities. This will mitigate the social disruption risks of the company supply chain, and potentially attract more talents in the organization.

Finally, ISO 26000 guidance and its tools will assist the company to become better able to predict any risks and opportunities throughout its supply chains, and hence becoming more (environmentally, socially and governance) resilient. That could be through the implementation of social projects in the community (aiming at improving youth and women involvement in the value chain for instance), of environmental initiatives (greening its energy-sourcing processes, improving its water management in its production processes, between others) as well as governance-related processes that are more transparent and inclusive (dealing with complaints from consumers on a more regular basis, sharing information through different communication means on the

company's activities and plans, ensuing gender parity in the company management board, etc.).

## 4.3 Why would a multinational get involved into circular economy?

### The success story of Louis Dreyfus Company

Louis Dreyfus Company (LDC) is a fruit-processing multinational and one of the world's largest processors and merchandizers of citrus juices, with more than 400 clients in over 700 countries. It operates in challenging market conditions, with increasing compliance requirements and an evolving (more and more stringent) regulatory environment, as well as very unpredictable commodities' market. Adopting more circular processes have been a way to address those legal, economic and environmental challenges while leveraging new markets and securing existing ones.

LDC has an extensive sustainability strategy, along with different Corporate Social Responsibility (CSR) programs and strategies for specific sector, including the Juice Program. Its sustainability strategy is based on 4 pillars: "community, people, environment and partners". From the different reports and information available on the company's website<sup>69</sup>, it appears clearly that the "Juice Program" in Brazil is a way for LDC to ensure the business benefits local communities and their environment, via diverse community programs. Such working conditions and social advantages make their employees more productive and motivated, ensuring part of the company economic-viability. Second, to mitigate the impacts of producing and processing citrus in

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<sup>69</sup> "Juice - Louis Dreyfus Company". *Ldc.Com*, <http://www.ldc.com/global/en/our-business/our-platforms/juice/>. Accessed 15 Jan 2020.

Brazil, the Juice Program has supported the adoption of mechanisms/strategies leading to sustainable water usage as well as promotion of renewable energy sources. Such actions ultimately lead to environment protection, climate change mitigation and, in a medium/long term less operational costs for the company (i.e. more economic profitability). Finally, the company has been awarded with gold grade in Sustainable Agriculture Initiative (SAI) platforms' self-audit, which is a sustainability self-assessment tool for orange growers in Brazil<sup>70</sup>. The challenge here is the self-evaluation process by the company itself, and the debate about whether it is really credible and reliable.

Beyond moral considerations, LDC through its "Juice Program" *secures its license to operate* in Brazil. Involvement of local communities in the company core-economic activities, as well as social initiatives (as previously demonstrated through some concrete examples), ensure that the local stakeholders (both public and private) are supporting the company, and let it operate smoothly.

In a challenging commodity market, with increasing competition and regulation, as well as evolving consumers' demand (particularly in developed countries), the Juice Program has been a way to try maintaining competitive advantage in the citrus juice field. Through this program, LDC is trying to secure (even increase) its citrus' supply from Brazil, to continue addressing the juice demand. Even if there are many financial,

technical and human investment from the company in this project (training, R&D on energy sources, higher salaries, etc.), it results into a "*win-win*" situation where the employees remain productive, consumers' demands are met, economic activities in the country are not disrupted by communities or governments, etc.

#### **Empowering and engaging consumers: The case of the EU circular economy action plan**

The transition towards a more circular economy requires an active engagement of citizens in changing consumption patterns. The Product Environmental Footprint (PEF) and Organisation Environmental Footprint (OEF) methods developed by the European Commission can enable companies to make environmental claims that are trustworthy and comparable and consumers to make informed choices. The Commission has recognized that strong stakeholder engagement is vital for the transition. The systemic approach of the EU circular economy action plan has given public authorities, economic and social players and civil society a framework to replicate in order to foster partnerships across sectors and along value chains. The role of the Commission in speeding up the transition and leading international efforts for circularity was also recognised at the World Economic Forum 2019 where the Commission received the Circulars Award in the Public Sector Category.

Source: "Press Corner". *European Commission*, 2019, [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_19\\_1480](https://ec.europa.eu/commission/presscorner/detail/en/IP_19_1480). Accessed 15 Jan 2019.

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<sup>70</sup> "Sustainable Agriculture Initiative Platform". *SAI Platform*, <http://www.saiplatform.org>. Accessed 15 Jan 2020.

## SECTION 5

# Conclusion

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The concept of circular economy remains a new and innovative concept at the crossroad of sustainable development and corporate social responsibility, between others. Circular economy is very much linked with trade at national, regional and global levels, which calls for mutually supportive policy and regulatory frameworks. Some States are taking the lead, especially in the EU, in the development and implementation of trading system that promotes circular value chains.

However, developing countries are encouraged, through regional trade agreements, international organizations & NGOs' programmes, as well as by their own citizens and companies, to jump on the *circularity wagon*. Adopting circular economy in developing countries could directly and indirectly support their overall sustainable development. Circular economy could be way to finally “walk the talk”, supporting private and public actors to find ways to increase both productivity and resource efficiency through innovation, appropriate technology development as well as relevant transfer and access to capital. Private companies and other relevant stakeholders should have a role to play in development, implementation and revision of policies that have an impact on their business activities (including environment and trade policies).

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