

# Mapping of measures related to circular economy – circularity in WTO

TESSD Working Group on Circular Economy - Circularity

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WTO OMC

# Approach and overview

- Objective: Identify measures that relate to circular economy at the WTO
- WTO Environmental Database as a source of information.
- Activity / objective:
  - Reduce, Biocycles, Substitute, Repair, Remanufacturing / Refurbishment, Reuse, Recycling, Waste to energy, Hazardous substances and waste management, Technology / Research, Transparency
- Lifecycle stage:
  - Raw material; Design; Production; Packaging and Distribution; Product use; End of life/waste disposal
- Presentation is divided into two parts:
  - Part 1: Circular economy measures relating to the renewable energy sector
  - Part 2: Circular economy measures across all sectors (work in progress)



# Measures on renewable energy related to circular economy



# Few measures on RE relate to circular economy

- There are only a handful of measures that relate specifically to circular economy in the renewable energy sector.
- Majority of the measures relate to biofuels.
  - Total of 35 measures in notifications and 29 measures in TPRs that relate to renewable energy
  - Most of these relate to biofuels (including biomass), with the CE linkage being Waste to energy
  - There are no measures that specifically deal with circular economy aspects of renewable energy like the solar or wind sector
  - Most notified measures (29) are subsidies, and few technical regulations (3) and import licensing procedures (3)
  - Environmental objectives for measures vary from promoting use of alternative energies to fostering investments
    - Converting the waste material into marketable product used in exactly the same way as an ordinary fuel (G/TBT/N/GBR/22)
    - Aid measures to promote the use of biofuels (G/SCM/N/186/EEC/ADD.8)
    - Fostering investment in biofuels (G/SCM/N/343/USA)
    - “Measures are also expected to be taken to ensure the proper recycling of used solar panels.” (Japan 2020 - WT/TPR/S/397/REV.1)



# **Measures related to circular economy across all sectors in the WTO Environmental Database**



# Mapping of measures related to circular economy

## Notifications:

- **440** measures related to circular economy (out of 1,536 measures relating to circular economy keywords based on activity / objective)
- This includes the **35** measures related to renewable energy
- Notified by **65** Members (including EU) under **10** Agreements

## Trade Policy Reviews:

- **218** measures included in **41** TPRs

# Measures by Agreement

Agreement	Count of measures
Subsidies and Countervailing Measures	197
Technical Barriers to Trade	139
Import Licensing Procedures	52
Quantitative Restrictions	25
Sanitary and Phytosanitary Measures	14
Government Procurement	7
Trade Facilitation	2
Agriculture	1
Customs Valuation	1
General Agreement on Trade in Services	1
Safeguards	1



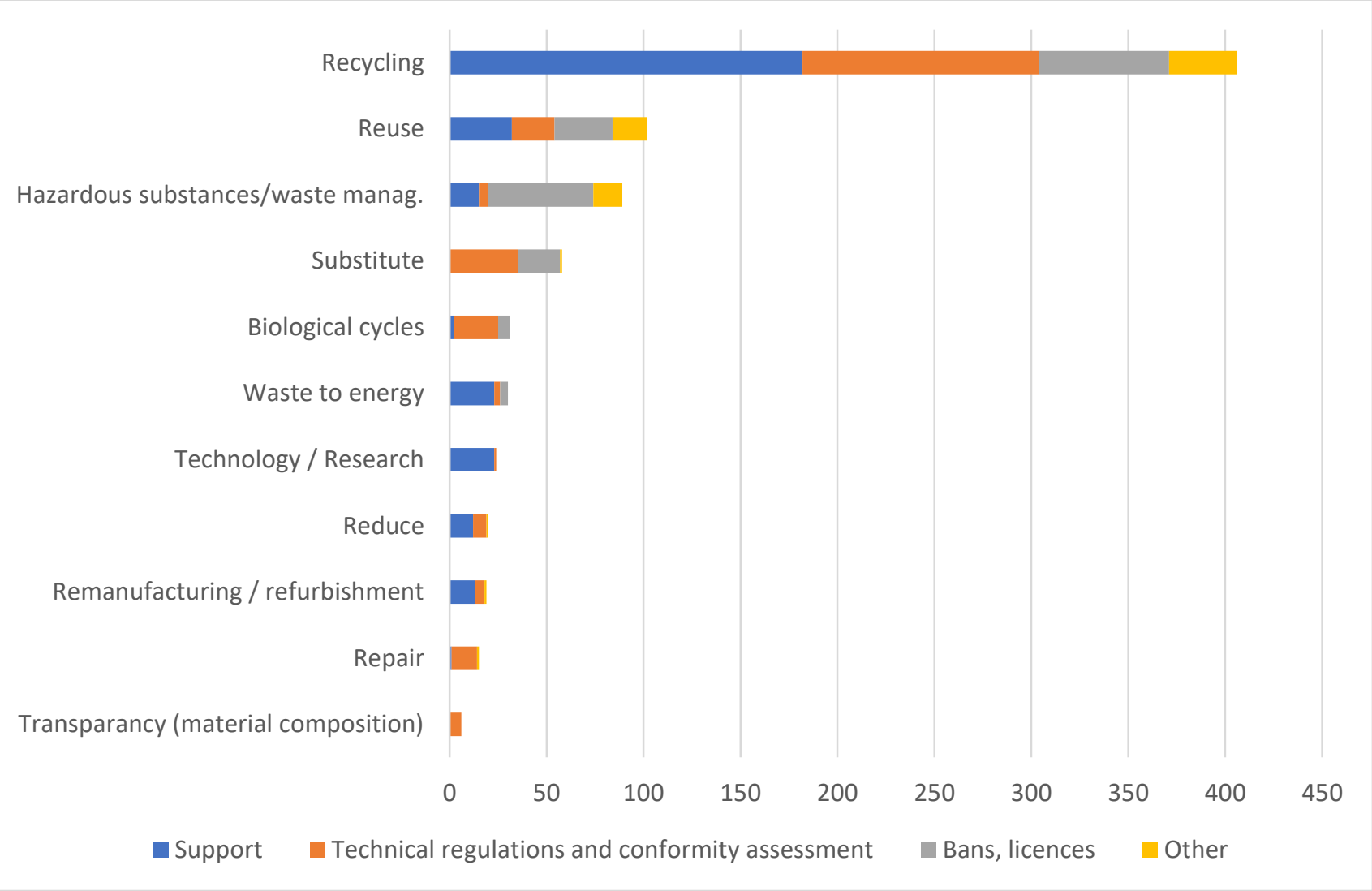
# Measures by notifying member

Member	Measures	Member	Measures
United States of America	89	New Zealand	2
China	35	Qatar	2
Korea, Republic of	26	Rwanda	2
Australia	19	Switzerland	2
Hong Kong, China	19	Turkey	2
European Union	17	Ukraine	2
Philippines	16	Bangladesh	1
France	15	Bolivia, Plurinational State	1
Mauritius	8	Burundi	1
Thailand	8	Cambodia	1
European Union: Finland	7	Chinese Taipei	1
Japan	7	Dominica	1
Seychelles	7	Dominican Republic	1
European Union: Romania	6	Ecuador	1
Bahrain, Kingdom of	5	Egypt	1
European Union: Estonia	5	European Union: Malta	1
Saudi Arabia, Kingdom of	5	European Union: Spain	1
Canada	4	European Union: Sweden	1
Paraguay	4	European Union: United Kingdom	1
Uganda	4	Germany	1
United Arab Emirates	4	India	1
United Kingdom	4	Indonesia	1
Costa Rica	3	Israel	1
Malaysia	3	Italy	1
Oman	3	Maldives	1
Viet Nam	3	Myanmar	1
Afghanistan	2	Panama	1
Belize	2	Peru	1
Côte d'Ivoire	2	Russian Federation	1
Chile	2	Tanzania	1
European Union: Austria	2	Togo	1
European Union: Latvia	2	Trinidad and Tobago	1
Kazakhstan	2	Tunisia	1
Kuwait, the State of	2	Uruguay	1
Mexico	2	Yemen	1

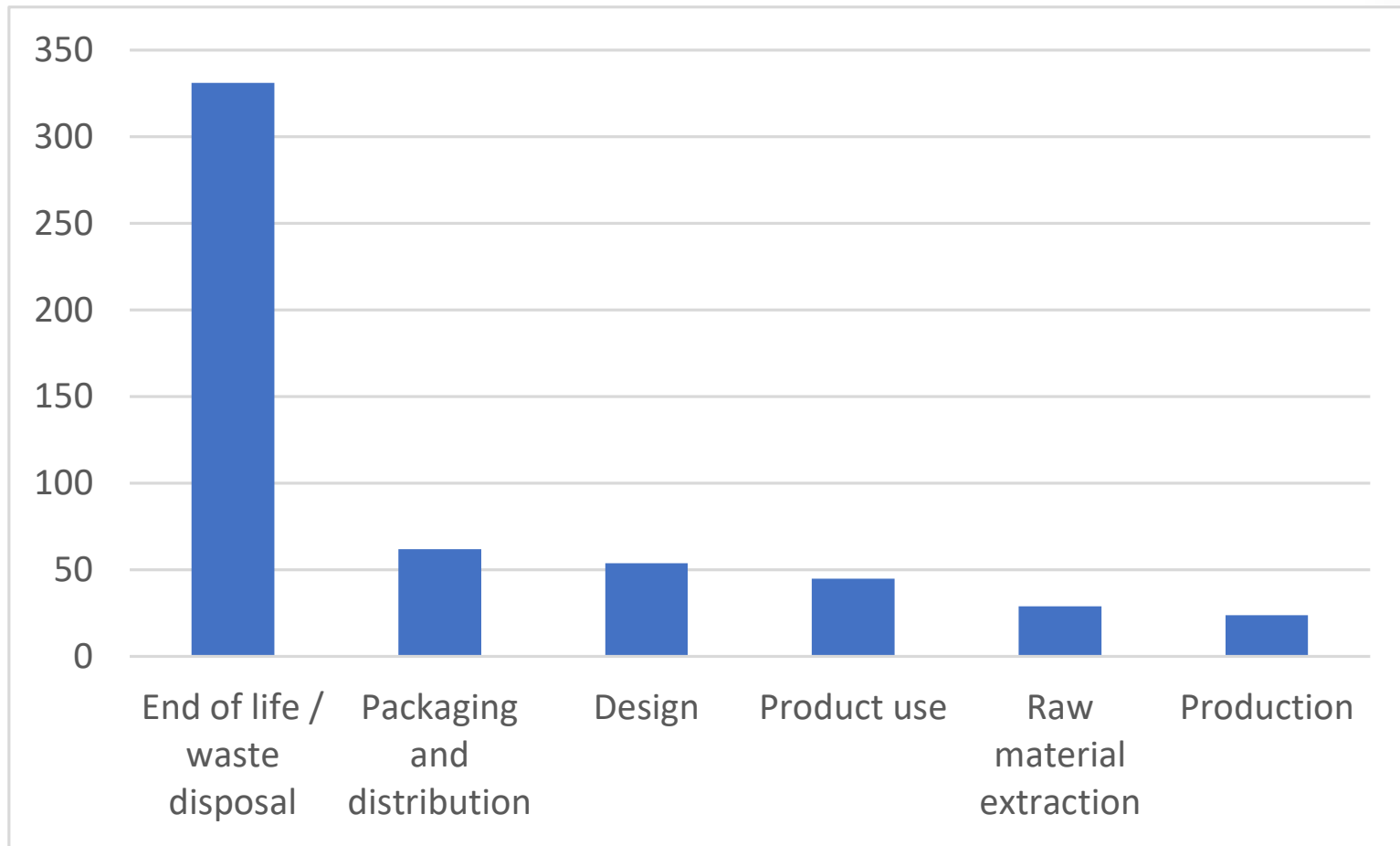




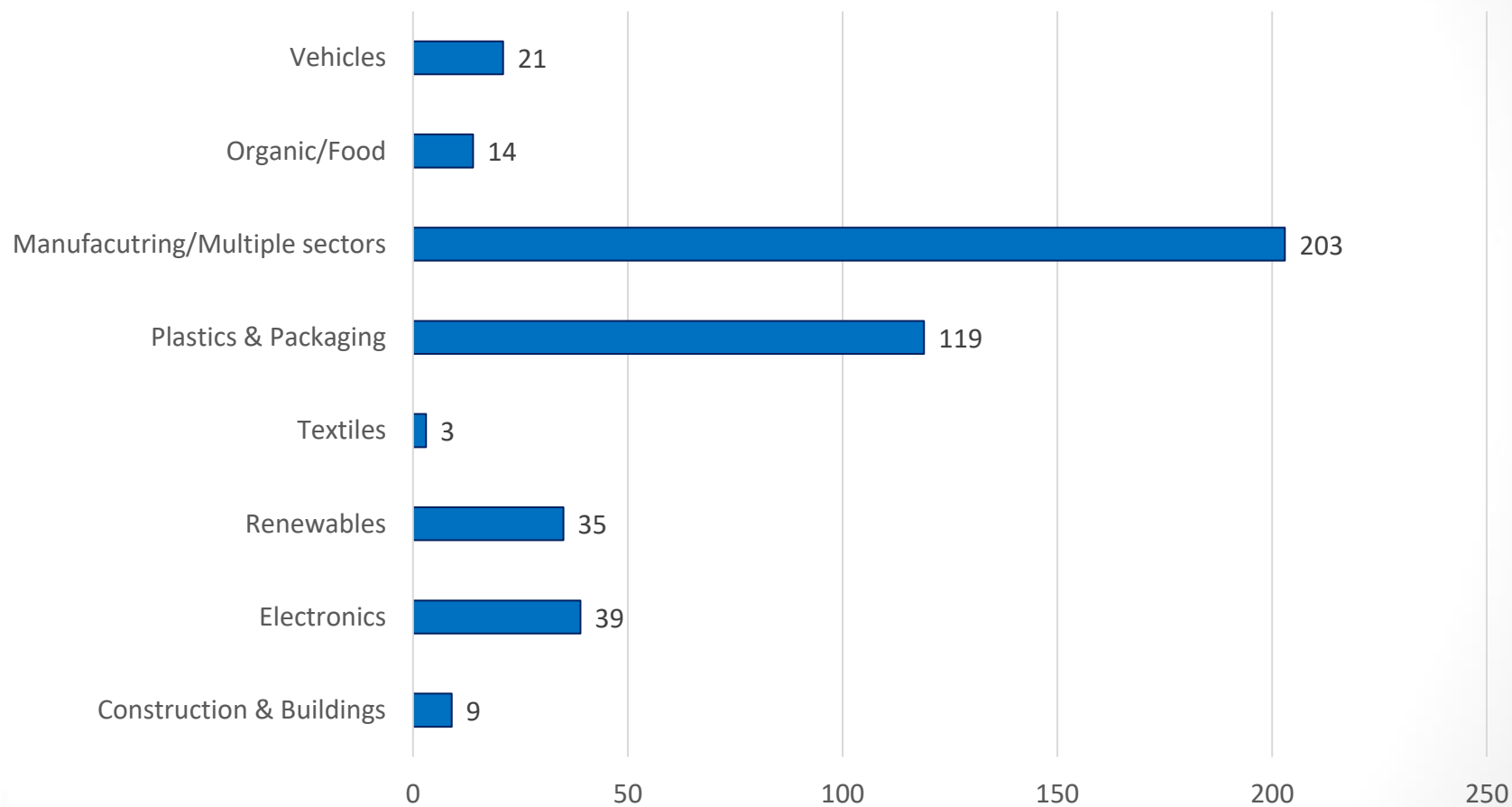
# Measures by circular economy activity / objective



# Measures by lifecycle stage



# Sectors covered by measures related to the circular economy



# Examples - I

A small number of horizontal measures apply to most/all manufacturing sectors:

These may be national measures:

- European Union, “Science and Innovation Mission”, 2021 (G/SCM/N/372/EU/ADD.26 ): Financial support for industrial research, development and innovation projects in the manufacturing sector provided that the projects must be consistent with some thematic priorities, which includes: circular economy.
- Australia, “Manufacture Modernization Fund”, 2021 (G/SCM/N/372/AUS): To avail subsidy, firms need to, *inter alia*, demonstrate alignment to at least one of the six National Manufacturing Priorities, which includes recycling.

Or these may apply only within a region:

- Certain regions in China (for e.g., Longmen County and Boluo County, Huizhou City of Guangdong Province) have policies promoting circular economy with the goal to “promote energy conservation and remission reduction” (G/SCM/N/372/CHN)



# Examples - II

## Reduce – promoting material efficiency – Subsidies:

- United Kingdom, “Northern Ireland Executive: Resource Efficiency Capital Grant”, 2021 (G/SCM/N/372/GBR): Financial support for the installation of new equipment that delivers a reduction in raw materials, water and/or waste. The aim is to enable businesses to achieve material efficiencies.

## Reuse; recycling – differentiation between “waste” products and products which can be recycled – Subsidies:

- Australia, “Queensland Waste Levy”, 2021 (G/SCM/N/372/AUS): Levy imposed on waste, but discounts on levy can apply for certain recycling activities like, *inter alia*, e-waste recycling to separate e-waste into clean streams of individual components and materials; and re-purposing e-waste for re-use.

## Recycling – focussed on raw materials – Subsidies:

- European Union, “Environmental Cleaning Measures”, 2009 (G/SCM/N/186/EEC/ADD.22): Subsidies for environmental cleaning within recycling process of lead wastes and ancillary products resulting from the process of lead and copper extracting.
- Canada, Tax Credit for the region of the “Vallée de l’aluminium”, (G/SCM/N/315/CAN): Companies active in recovery and recycling of waste and residue from aluminium processing are eligible for subsidy.

## Tech – R&D; recycling – focused on electric vehicles – Subsidies:

- European Union (Sweden), “Support for Research, Development and Innovation in the field of electromobility”, 2021 (G/SCM/N/372/EU/ADD.27): Grant for promoting research in material recycling, mainly for EV.



# Examples - III

## Tech – R&D; recycling – promoting recycling industry – Subsidies:

- Korea (Republic of), “Loan Programme for Recycling Industry Promotion”, 2015 (G/TBT/N/VNM/68): Recipients include recycling business operators specified in the Act on the Promotion of Saving and Recycling of Resources, including a business to build a recycling complex, and a business of research and technical development to facilitate recycling of resources.

## Recycle – ship scrapping industry – Technical regulation :

- Viet Nam, “Draft National technical regulation on used ship imported for scrapping and recycling”, 2015 (G/TBT/N/VNM/68): Applies to used ship imported for scrapping and recycling which applies to used ships imported for scrapping.



# Examples from TPRs

## Colombia (2018) – Recycling (WT/TPR/S/265/REV.2)

“Certain imported products that are not produced in Colombia are **exempt or excluded from the payment of VAT, such as machinery or equipment for the recycling** and processing of garbage or waste [...] provided they are approved by the Ministry of the Environment”

## Hong Kong, China (2015) – Recycling (WT/TPR/G/306)

“In the Hong Kong Blueprint for Sustainable Use of Resources (2013-2022) published in May 2013, we set out a series of policy measures to create a more favourable operating environment for sustainable development of the recycling and green industries in HKC. These measures include the implementation of programmes on source separation of waste, **the identification of more suitable sites for leasing to the recycling industry** [...]”

## European Union (2015) – Reduce; reduce; recycling (WT/TPR/S/395/REV.1)

“The full implementation of the circular economy approach is also critical for decarbonizing the EU's economy, notably in energy-intensive sectors such as steel, cement and glass, while keeping or increasing its competitiveness. **Reuse and recycling of raw materials lead to lower emissions, and reduce dependency on raw material supplies.**”



# Examples from TPRs

## Myanmar (2020) – Reduce; reduce; recycle (WT/TPR/G/405)

“The **importation of recyclable clean scrap is under close watch**. In the 2019 review of the import licensing list, the **importation of the recyclable clean scrap was subject to non-automatic licensing**. A technical regulation for the importation of recyclable clean scrap is currently under preparation [...]

**Myanmar only allows the importation of the recyclable non-hazardous scraps which must be clean, homogenous, intended for direct-use in production processes and free from contamination and other types of waste [...]**”

## Türkiye (2016) – Recycle (WT/TPR/S/331/REV.1)

“The Input Supply Strategy has led to various policy results, including:(...)- the formation and establishment of the **National Recycling Strategy**; (...)

## Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu (2018) – circular economy (WT/TPR/S/377)

“A Five-Plus-Two Industries Innovation Plan emphasizes accelerating overall industrial upgrades through [...] **The "Plus-Two" element of the Plan relates to "new materials" and the "circular economy"** with the aim of supporting across-the-board industrial transformation and upgrading.





# Takeaways

- There are a good number of measures that have circular economy aspects or elements
- However, only few measures notified to the WTO have a specific focus on circular economy
- While the majority of measures is sector-specific, more than 40% of measures apply to multiple sectors/horizontal
- Measures are concentrated in downstream stages of the lifecycle, i.e. recycling
- Regulatory and subsidy measures are most common; some market access measures. Support measures to build recycling capacity and waste to energy are frequent
- There appears to be a lack in differentiation between waste and end-of-life (e.g. recycling) in notified measures
- Limited evidence is available from notifications on the linkages between trade facilitation and the circular economy



# Thank you

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# Annex – Definitions – Activities / Objectives

- **Reduce:** It increases efficiency in manufacturing a product, or use, by consuming fewer natural resources and materials.
- **Biological cycles:** Processes like composting and anaerobic digestion but only for materials that can be safely returned to the biosphere.
- **Substitute:** Switching from one product to another with the latter offering the same through a different product or service
- **Repair:** Fixing and maintenance of defective product so it can be used with its original function.
- **Remanufacturing:** Using parts of a discarded product in a new product with the same function, and as-new-condition.
- **Refurbishment:** Process of restoring an old product and bringing it to specified quality level.
- **Reuse:** Product is still in good condition and fulfils its original function for the same purpose for which it was conceived, or a slightly alternative function.
- **Recycling:** Process of recovering materials from waste to be reprocessed into new products, materials or substances whether for the original or other purposes.
- **Hazardous substances and waste management:** Limiting impact of hazardous substances such as, for e.g., mercury content of batteries. Waste management includes collection, transport, disposal and recovery of waste, including the control of these operations and after-care of disposal sites
- **Waste to energy:** Process of treating waste that creates energy in the form of electricity, heat or fuel.
- **Technology / Research:** Supporting research and development of technology for circular economy
- **Transparency on material composition:** Details regarding material composition, as well as transparency regarding end-of-life activities such as recycling, waste sorting, etc. (does not include labelling requirements, certification schemes, standard of information schemes)



# Annex – Definitions – Lifecycle stage

- **Raw material extraction:** Process of extracting crude or virgin materials that are used in product manufacturing or processing.
- **Design:** Decisions made at the design phase influence how long something lasts, what it is made of, if it can be repaired, and what happens to it at the end of life.
- **Production:** Processes or methods that converts inputs like raw material or semi-finished goods to make finished product or services.
- **Packaging and distribution:** Packaging and distribution will provide information on material composition.
- **Product use:** Product use includes consumption, maintenance, and repair of products.
- **End of life and waste disposal:** Reduce, reuse and recycle are captured by different elements of end of life, while waste disposal is limited to incineration and landfills.

