Joint OECD/UNECE Seminar on Implementation of SEEA, 13-15 March 2023



# Circular Economy applied in international trade, which official statistics do we need?

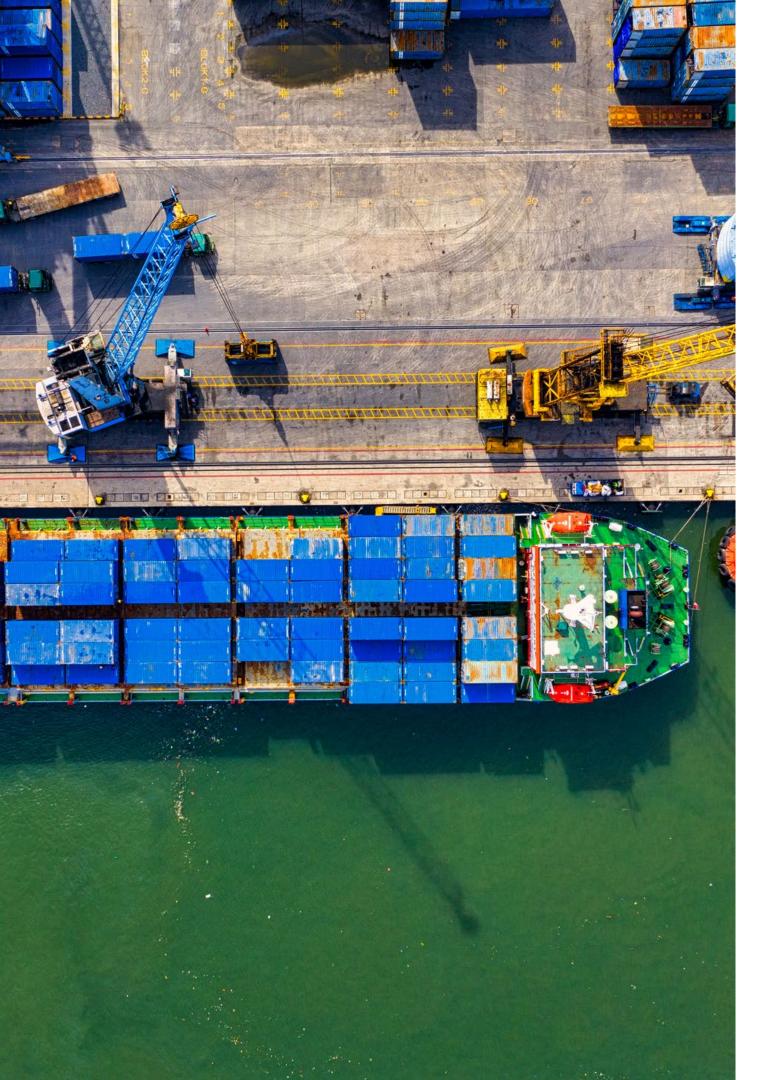
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## Circular Economy

- Circular economy: an economy where the value of materials in the economy is maximised and maintained for as long as possible; the input of materials and their consumption is minimised; and the generation of waste is prevented and negative environmental impacts reduced throughout the life -cycle of materials (OECD expert group and UNECE Task Force).
- Goal: moving away from the traditional linear business models to more circular ones, closing resource loops of current linear resource value chains.
- Helps further the SDGs:
  - SDG 12:Responsible Consumption and Production
  - SDG 13:Climate Action

However, there is no common definition nor terminology of the circular economy.



# Circular Economy & Trade

- Circular trade: any international trade transaction, material or immaterial, that contributes to circular economy activities at the local, national and global levels (<a href="Chatham House">Chatham House</a>). Circular economy is relevant to multiple areas:
  - Trade in services;
  - Trade in food products;
  - Trade in second -hand goods;
  - Trade in goods for refurbishment and remanufacturing;
  - Trade in materials for recycling;
  - Trade in secondary raw materials.

### International trading system:

- Includes numerous bilateral, regional and multilateral agreements, as well as domestic laws, regulations and policies.
- Some contemporary trade agreements cover issues such as regulatory standards, rules on health & safety, investment, banking & finance, intellectual property, labour rights, environmental protection, and many other subjects.

Source | Chatham House

# Policy Areas – Circular Economy & Trade

#### **Border measures**

- Tariffs
- Export restrictions
- Anti-dumping

### **Regulatory measures**

- Standards
- Extended Producer Responsibility (EPR) schemes
- Sanitary and Phytosanitary (SPS) checks
- Technical regulation

### **Trade agreements**

- Strengthening the Trade and Sustainable Development (TSD) Chapters
- Including provisions on circularity throughout the trade agreements

#### **Economic incentives**

- Subsidies
- Intellectual Property Rights (IPRs)
- Free allowances

# Raising awareness & building capacities

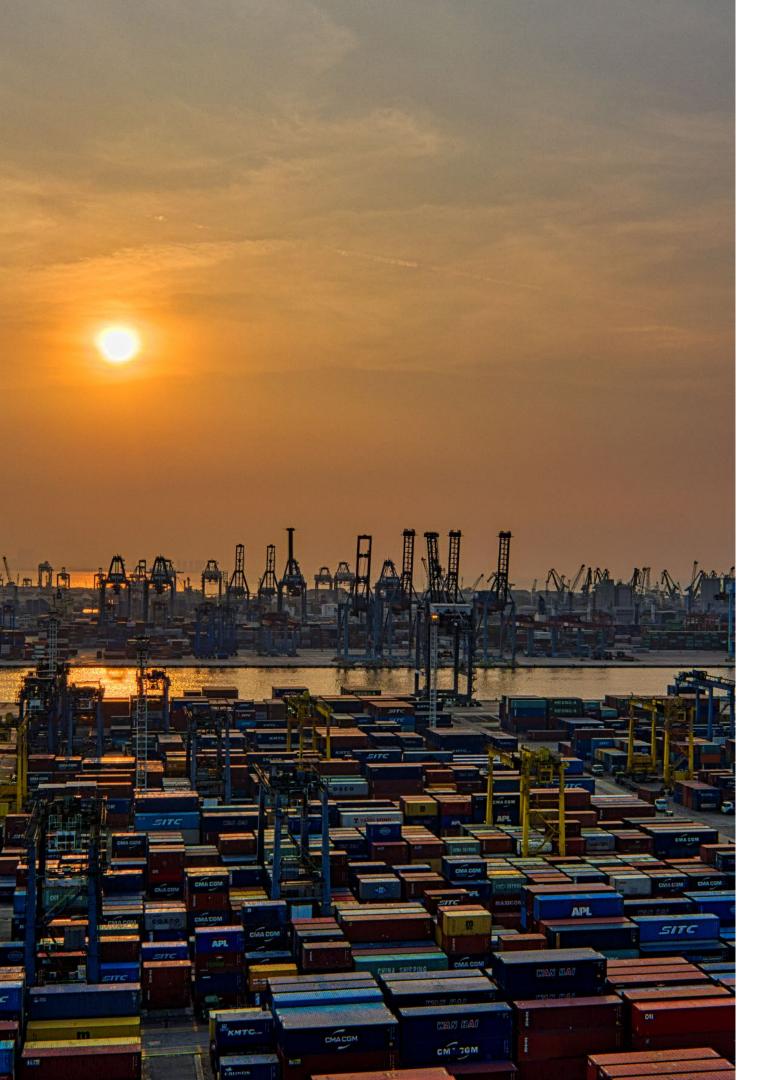
- WTO Aid for Trade initiative
- UN Capacity Building Task Force on Trade, Environment and Development
- UNECE Circular STEP stakeholder engagement platform







What we need: modernization and integration of economic policies -> collaboration



## Interaction:

Possible impacts of circular trade on circular economy progress:

- Closing loops
  - Circular trade can reduce reliance on virgin raw materials and promote trade in recycled and used/secondary (raw) materials .
- Extending product life cycles:
  - Circular trade can help extend the use of existing products across global value chains.
- Increasing efficiency/competitiveness
  - Circular trade can facilitate information and material sharing, making consumption more efficient and less resource - intensive.

## Interaction:

### Possible implications of circular trade on trade patterns

The transition to a more circular economy will require a departure from our current practices as producers and consumers of goods and services.

- Moving from trade in primary materials to trade in secondary materials;
- Moving from global trade to more regional and local trade;
- Moving from resource dependence to resilience;
- Moving from trade in goods to trade in service; and,
- Moving from analogue to digital.





Source | Policy Options for Harnessing the Power of Trade and Economic Cooperation (UNECE, 2022)

# Priority Sectors for Enhancing Circularity

For international trade to develop its full potential to scale up circularity, action is required in different sectors of the economy, including the following:

- Trade in services;
- Trade in textiles;
- Trade in agricultural products;
- Trade in critical raw materials.









# The Importance of Statistics on Circular Trade

- Measuring and monitoring circularity and its trade-related dimension should be a priority action.
- Though some measures of circularity are available for some countries, trade-related circularity data are almost non-existent.
- Joint efforts are needed, involving a wide range of different actors, e.g. UNECE (through its work on statistics), think tanks (e.g. Chatham House, Ellen McArthur) and other international organizations (e.g. OECD, WTO, WCO).



## Data Collection

Challenges and Opportunities in Circular Trade

Lack of official statistics measuring all aspects of the circular economy in a coherent way.

Deliverables such as OECD/UNECE work.

Little experience and no unified approach to definitions and metrics in circular trade.



Increased interest in the trade community

Weak recording of circularity aspects in supply chains.



Increased debate about making supply chains circular and sustainable (incl. through digitalization)

Long established Harmonized System (HS) codes.



Modernizing and greening Harmonized System (HS) codes.

No unified way to measure circular skills, knowledge, services, investments.



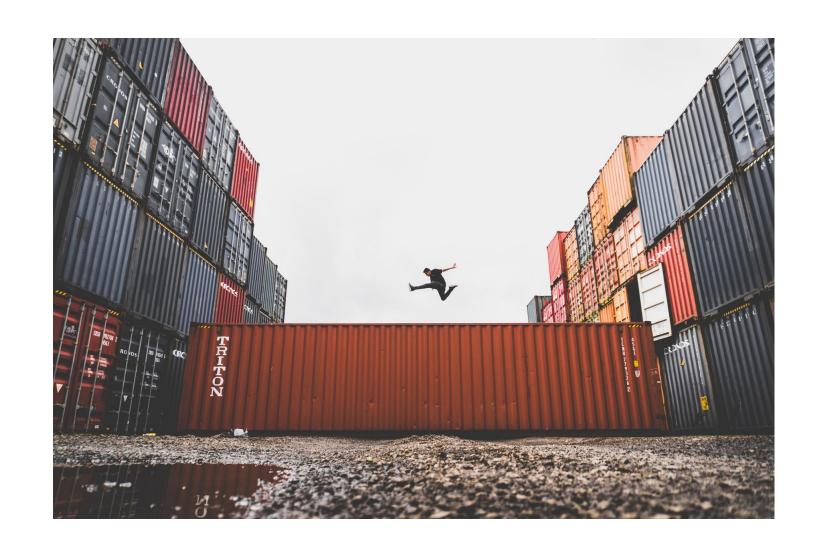
Awareness about the need for a holistic and comprehensive approach.

# Bridging Data Gaps

Many useful indicators for the circular economy are not yet measured (or could be measured in better ways).

Some indicators that need better measurement include:

- **Design:** design is often being measured by number of patents. Would be useful to identify additional ways.
- Material extraction : few statistical classifications distinguish the use of raw materials by source.
- Production: few statistical classifications separate circular economy activities from other business activities.
- Logistics: there is no indicator for logistics related to the circular economy.







## INCREASING CIRCULARITY



Rule of Thumb:

Higher level of circularity

=

Fewer natural
resources used
and lower
environmental pressure



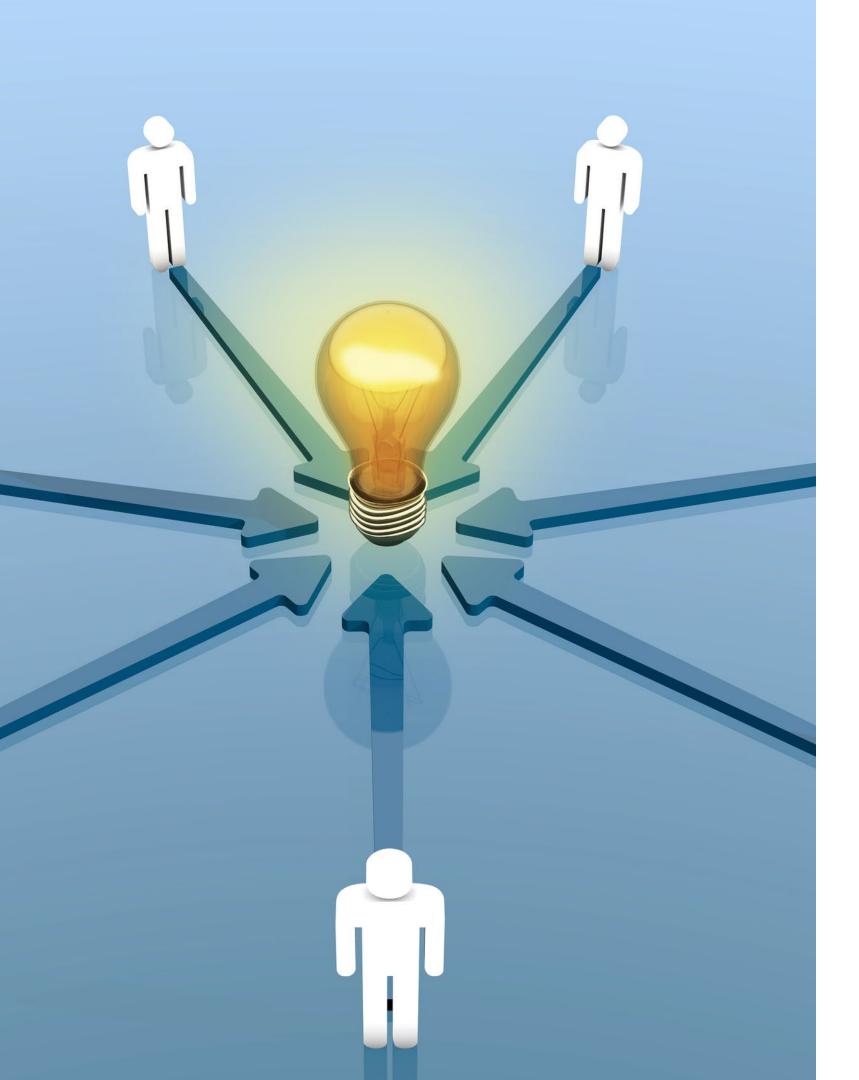
LINEAR

	Smarter product use and manufacture	R0 Refuse	Make product redundant by abandoning its function or by offering the same function with a radically different product
		R1 Rethink	Make product use more intensive (e.g. through sharing products or putting multifunctional products on the market)
		R2 Reduce	Improve efficiency in product manufacture or use by consuming fewer natural resources and materials
	Extended lifespan of products and their parts	R3 Reuse	Enable reuse by another consumer of discarded products that are still in good condition and fulfil their original functions
		R4 Repair	Repair and maintain defective products so they can be used with their original function
		R5 Refurbish	Restore old products and bring them up to date
		R6 Remanufacture	Use parts of discarded products in a new product with the same function
		R7 Repurpose	Use discarded products or their parts in a new product with a different function
	Useful application of material	R8 Recycle	Process materials to obtain the same (high grade) or lower (low grade) quality
	or material	R9 Recover	Incinerate materials and recover embodied energy

# Bridging Data Gaps: Who can help?

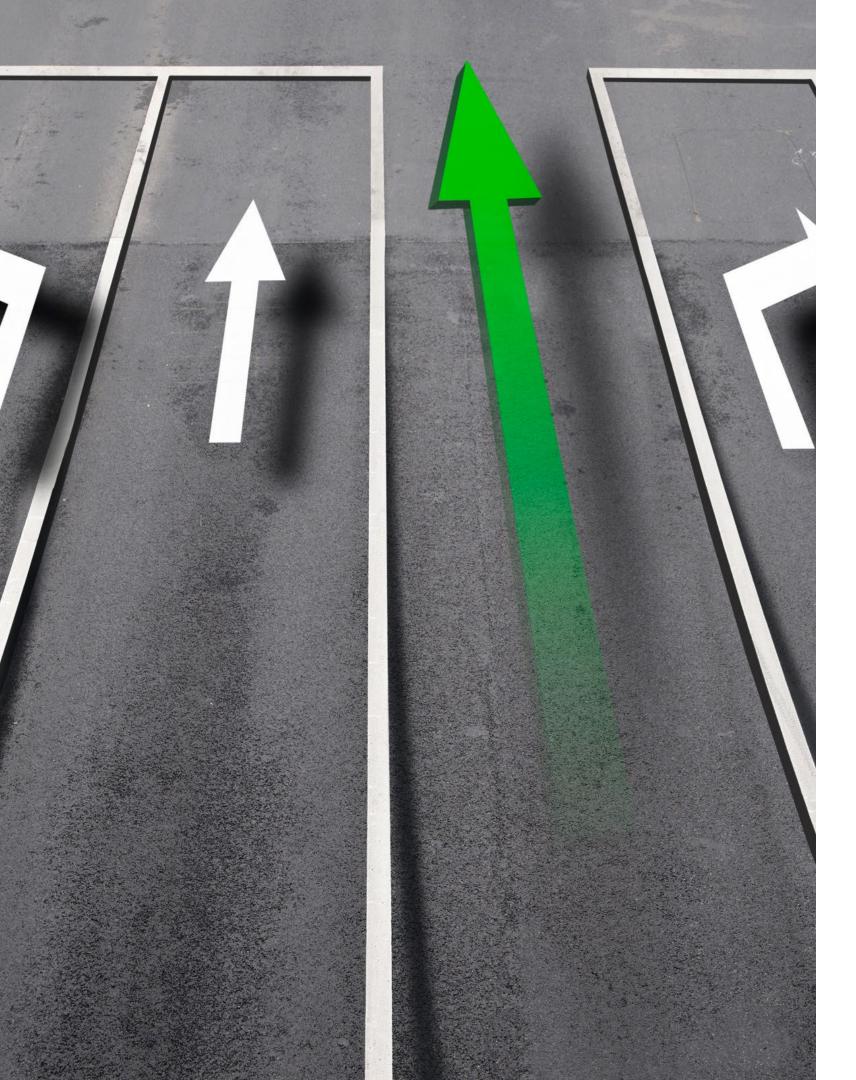


• It will be crucial to identify who is responsible for tracking and reporting on the 9 Rs:Refuse, Rethink, Reduce, Reuse, Repair, Refurbish, Remanufacture, Repurpose, Recycle and Recover.



## Summary

- Circular trade can help reduce waste, improve resource efficiency, and increase competitiveness.
- The transition to circular trade faces challenges of monitoring, standardization, and data collection.
- Current indicators for circular economy progress are limited, not unified and not well linked to trade.
- New indicators could focus on design material life cycle and extraction, production, and logistics, while allowing for a trade-related perspective.



# Way forward



- Involve the circular and trade communities in data discussions.
- Share knowledge through Circular STEP, UNECE's Circular Economy Stakeholder Engagement Program (<u>LinkedIn Group</u>).
- Join the next circular economy discussions at the side events to the 70th session of UNECE.







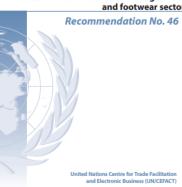
## UNECE ECTD tools

## Transparency & Traceability Textiles



UNEC

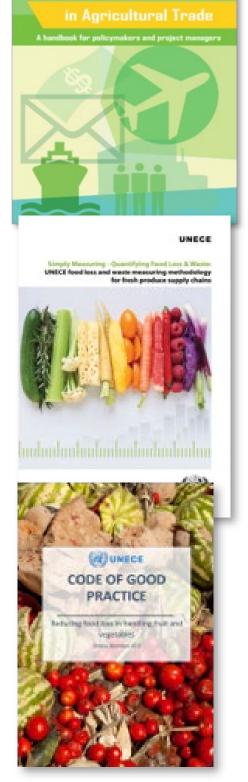
Enhancing traceability and transparency of sustainable value chains in the garment and footwear sector



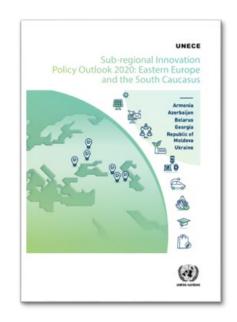


#### Agriculture

mplementing UN/CEFACT e-Business Standards



#### **Innovations**







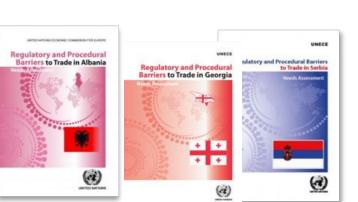
#### **Policies & Awareness**



"Accelerating transition towards a circular economy in UNECE region" (2021-2024), 550,000 USD.
Supporting governments in assessing gaps and developing roadmaps for circular transition in specific sectors (agri-food, textile industry).



for Europe

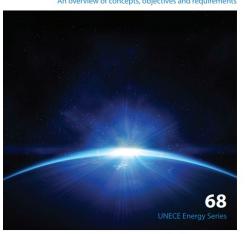


#### **Critical raw materials**



UNECE

United Nations Resource Management System





Transforming Extractive Industries for Sustainable Development



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