



# SECURING REVERSE SUPPLY CHAINS TOWARDS A RESOURCE EFFICIENT AND CIRCULAR ECONOMY

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# Cross-border reverse supply chains and reverse logistics

Trade rules key to closing higher value loops across borders





# Background

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## **Circular economy transition has broad interlinkages with international trade**

- via: (i) global circular supply chains, (ii) end-of-life value chains, (iii) services trade.

## **Scaling up circular business models often rely on reverse supply chains across borders**

- Manufacturers set up reverse logistics to collect end-of-life products and reinject reusable components back into production process (e.g. heavy industry, electronics, medical devices)
- Reverse supply chains can make the economy more circular by closing material loops for recycling, reuse, repair, and remanufacturing.
- Such activities often extend beyond borders and require the transboundary movement of end-of-life products to enable economies of scale.

## **Recent developments mainly focusing on increasing transboundary controls**

- Chinese import bans for certain categories of waste and scrap (since 2018)
- Plastic waste amendments to the Basel Convention (since 2021)
- E-waste amendments to the Basel Convention (expected from 2025)



# Objective and outline

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## Report

- Yamaguchi, S (2022), Securing reverse supply chains for a resource efficient and circular economy, *OECD Trade and Environment Working Papers*, No. 2022/02, OECD Publishing, Paris, <https://doi.org/10.1787/6ab6bb39-en>.

## Objective

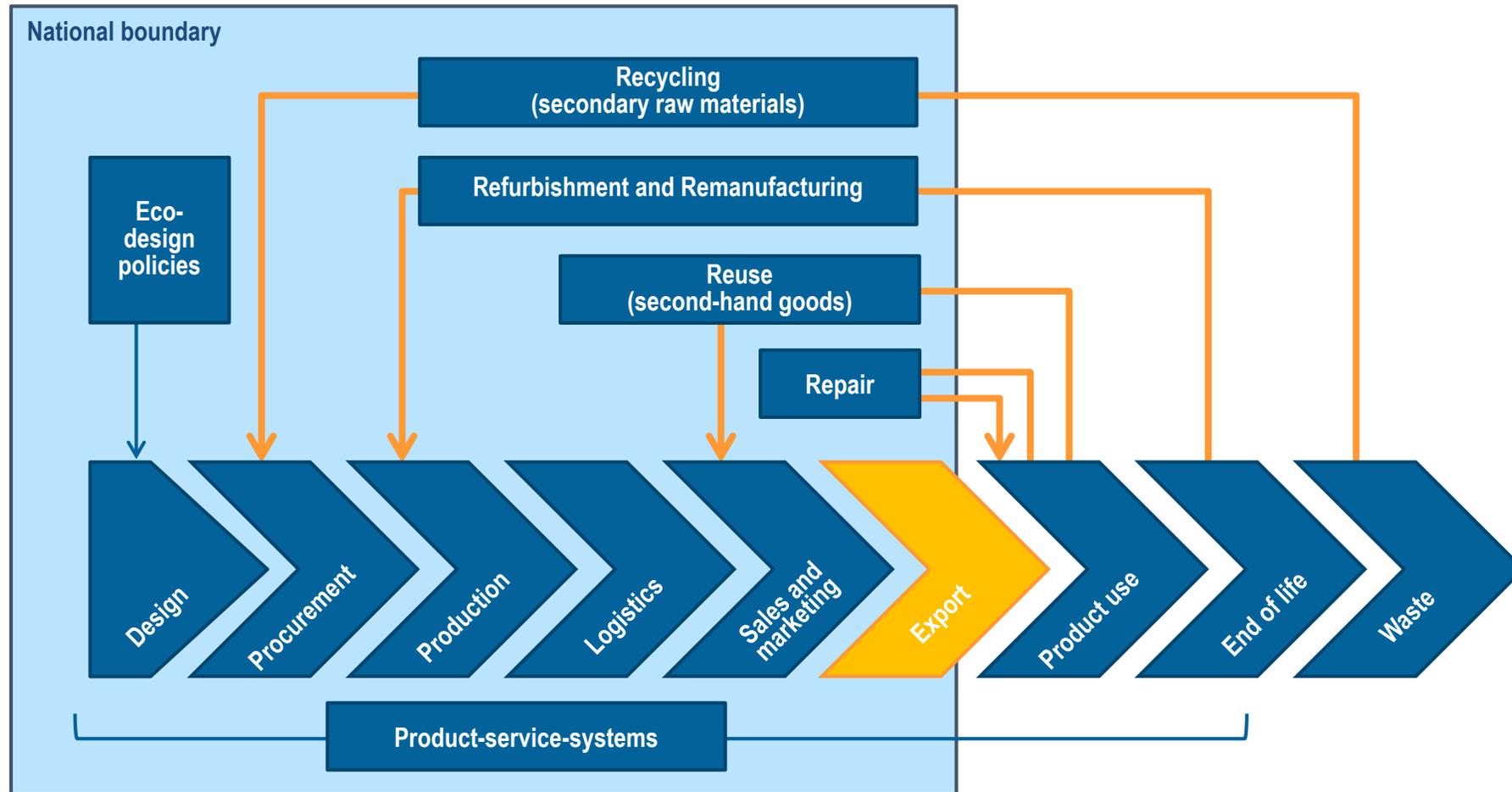
- Explore opportunities and challenges for governments to help establish and scale up cross-border reverse supply chains that can contribute to a resource efficient and circular economy.
- Focus on trade facilitation mechanisms and standards.

## Outline

- Importance of reverse supply chains for resource efficiency and circular economy (Chapter 2)
- Unpacking the policy landscape (Chapter 3)
- Trade facilitation (TF) mechanisms and standards (Chapters 4-5)
- Policy responses (Chapters 6-7)



# Cross-border reverse supply chains for a resource efficient and circular economy



Note: Orange arrows represent cross-border reverse supply chains.

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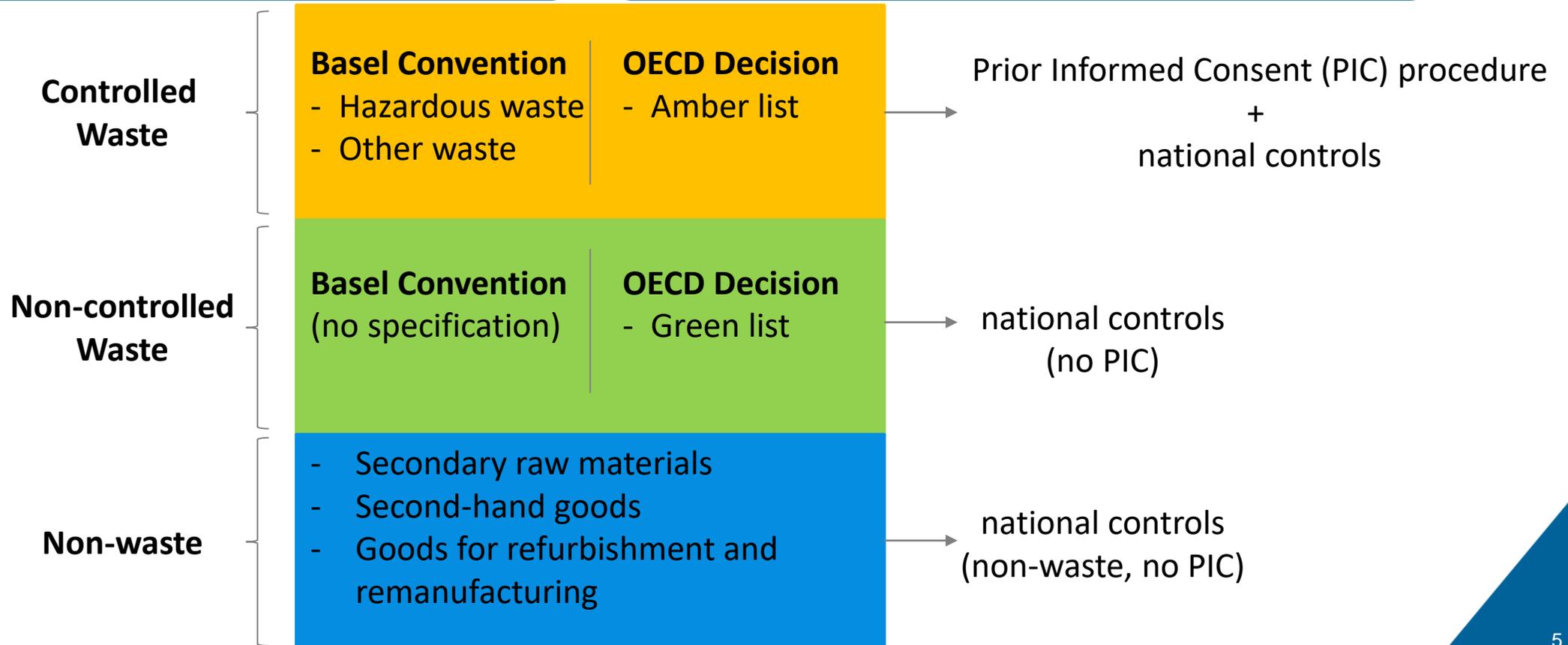
# Rules for trade in waste and end-of-life products under international legal frameworks

## Basel Convention

aims to restrict the transboundary movements of hazardous wastes with respect to its parties

## OECD Decision

aims at facilitating trade of recyclables in an environmentally sound and economically efficient manner within OECD member countries

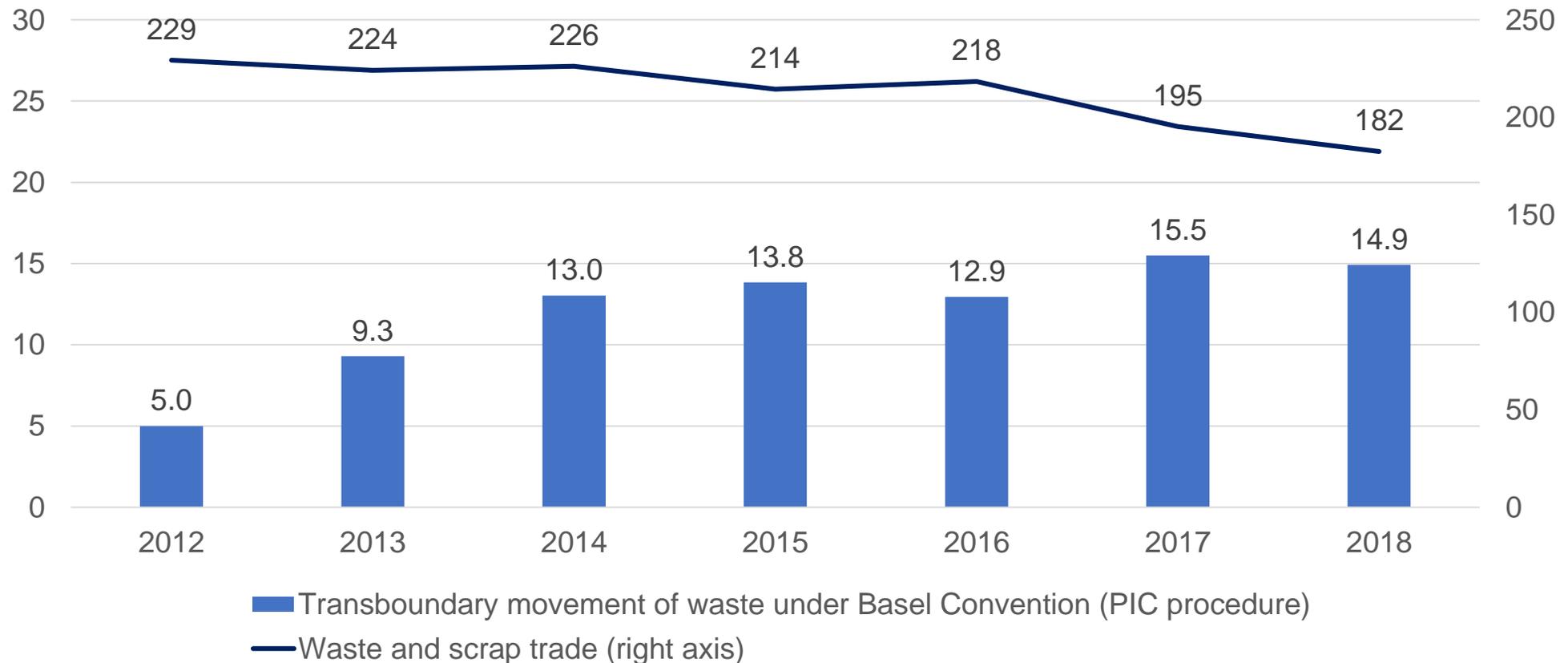




# Trends of trade in waste and scrap

**In 2018, around 8% of global waste and scrap trade by weight was subject to PIC procedures under the Basel Convention**

million metric tonnes





# Potential issues and trade barriers

## Procedural burden & delays

- Procedural burden, delays in cross-border shipment of end-of-life products
- In some cases, 14 to over 42 months to obtain consent under PIC procedure
- Shipments can be more costly compared to conventional logistics

## Definitions and classification

- Patchwork of diverging definitions and classifications of end-of-life products between countries and with trade codes (HS codes).

## Nature of custom controls

- Supplementing border controls by customs beyond physical characteristics
- (e.g. treatment method at destination, circular use).

## Trade restrictions

- Import and export restrictions on end-of-life products.
- e.g. 40% of copper in globally traded waste and scrap face export restrictions

## Illegal waste trade

- Illegal waste trade undermining legitimate trade & competition for recyclers.

## Upstream issues

- eco-design - securing recyclability and reparability, phasing out hazardous substances.



# Trade facilitation mechanisms

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## Authorized economic operators (AEOs)

- AEOs demonstrate established levels of security management / legal compliance and receive preferential treatment (e.g. expedited custom procedures).
- Similarities between AEOs and pre-consented facilities under OECD Decision.
- Reflecting environmental criteria in obtaining AEO status is still at nascent stage.
- AEOs can complement existing trade controls.

## Single window mechanisms and electronic systems

- Linking these two mechanisms could make border procedures easier and transparent, and streamline regulatory controls for trade.
- Electronic data interchange is a key factor, international initiatives available so far:
  - Waste shipment notifications, e.g. USA-CAN-MEX, AUS-CHE.
  - Other environmental frameworks, e.g. CITES, ePhyto (IPPC).
  - Reference tools, e.g. UN/CEFACT standards, WCO Customs Data Model.



# Standards

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## Standards on recovery facilities

- Can help demonstrate sufficient capacity, environmentally sound management.
- Currently available standards are either country or region-specific, no internationally agreed standards on recovery facilities to date.
- Setting forth clear and harmonised standards for recovery facilities could provide further opportunities to establish reverse supply chains.

## Standards on end-of-life products

- Can help establish reverse supply chains, by creating common understanding of environmental requirements between traders and regulators.
- Majority of standards have been recently issued, updated, or currently under development, reflecting the growing interest for a circular economy.
- However, very few standards are recognised and used internationally (or used in regulation) to date, remains an area for possible future development.



# Policy responses considering trade facilitation mechanisms and standards

## Controlled waste under international legal frameworks

### Secure swift implementation of PIC procedures:

- Establish better understanding on actual implementation, clarify and align used criteria.
- Adherents to OECD Decision could exploit potential of pre-consented facilities (ref. AEO).
- Consider linking single window and electronic systems to facilitate PIC procedures.
- Consider fulfilling additional gaps – e.g. financial guarantees, differences in administrative costs, fragmentation of waste classification system between countries and HS codes.
- Draw on regulatory co-operation initiatives (e.g. North-Sea Resources Roundabout).

## Non-controlled waste and non-waste products

### Clarify status of non-controlled waste and non-waste products:

- Consider AEO with possible environmental criteria, for increased regulatory confidence.
- Consider electronic systems for consignments accompanied by supplementary documentation to clarify status (e.g. used goods).
- Consider using standards or develop international standards on end-of-life products to secure confidence in status (in reference to WTO-TBT Principles).
- Draw on existing examples to clarify the status of remanufactured goods (e.g. EU-Japan EPA)



# Policy responses beyond trade facilitation mechanisms and standards

## Trade restrictions

- Reconsider & avoid the use of trade restrictions on end-of-life products to extent possible.
- Limit use of import restrictions for remanufactured goods (e.g. CP-TPP, USMCA)
- Consider alternative measures, such as those encouraging traders to assume some responsibility for the circular use of traded goods (e.g. setting warranty periods, Extended Producer Responsibility schemes).

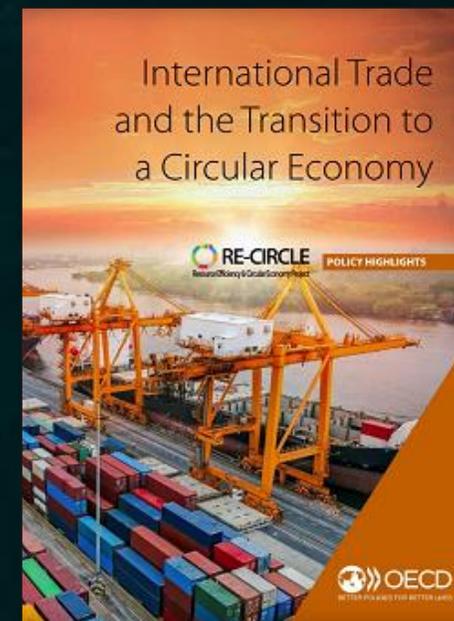
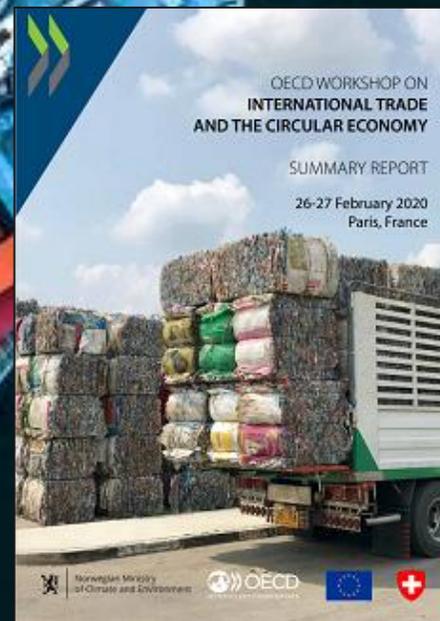
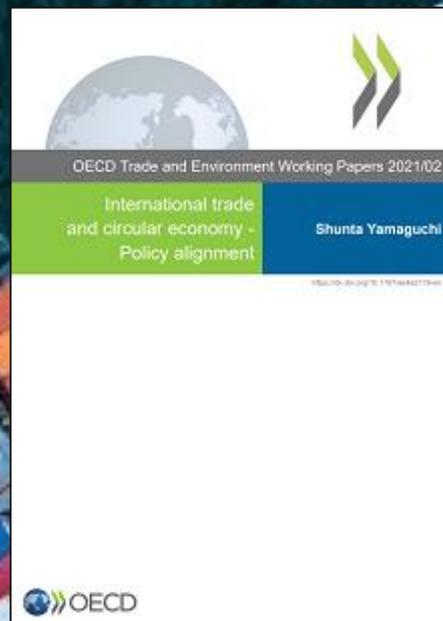
## Illegal waste trade

- Improve law enforcement, intelligence sharing, and cross-border co-operation to better identify and tackle illegal waste trade.

## Eco-design

- Place efforts in upstream value chain via eco-design policies to:
  - incentivise recycled content
  - avoid hazardous content
  - encourage product recyclability, reparability and durability
- Consider alignment of eco-design standards across countries to make products designed for the environment enter into various markets and benefit from economies of scale.

Thank you for joining the discussion!



Access reports: <http://oe.cd/trade-ce>

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