

INC-5 pre-event on Plastic Pollution and Trade

What statistics tell us about international trade of plastics and non-plastic substitutes?

November 23, 2024

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UNCTAD Statistics

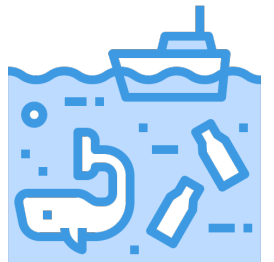


➤ Background

Governing Plastic: The Global Political Economy and Regulation of Plastic Production and Pollution

- Launched in early 2019
- Project for research and policy dialogue hosted by the **Graduate Institute's Global Governance Centre**
- Bringing together a group of leading experts from academia, international organizations and stakeholder groups to focus on the '**supply side**' of **plastic production and pollution** at the global level

Involved partners: Institute's Centre for Trade and Economic Integration and Centre for International Environmental Studies, along with UNCTAD and four Swiss Universities



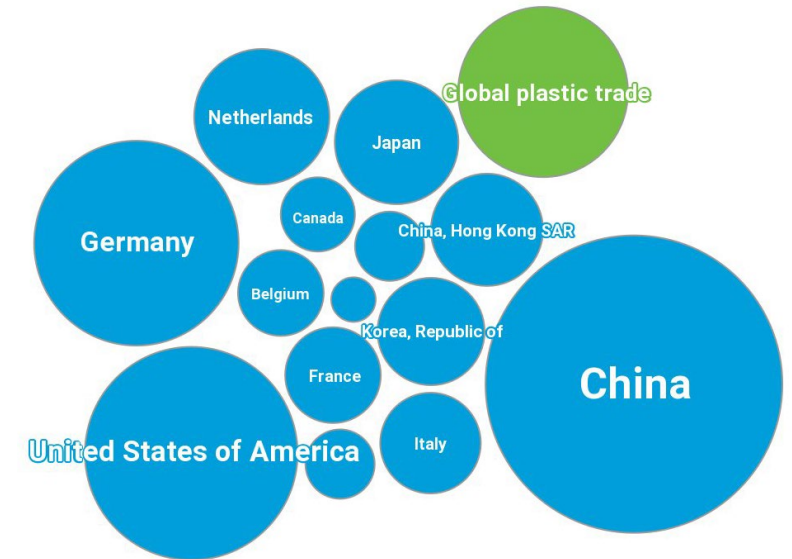
➤ Creation of the UNCTAD plastic trade dataset

- **Data source:** UN Comtrade
- Individual goods are classified according to the **Harmonized Commodity Description and Coding System (HS)**
- Data are reported in **value** (US Dollars) and **quantity** (metric tons)
- Commodities are described in a hierarchy of codes of 2, 4 or 6 digits where longer codes provide more detail
- Data set still labeled as experimental



If the global plastics trade were a country, it would be the 4th largest exporter

Global plastic goods exports compared to total goods exports of selected countries in 2021, billions of US dollars



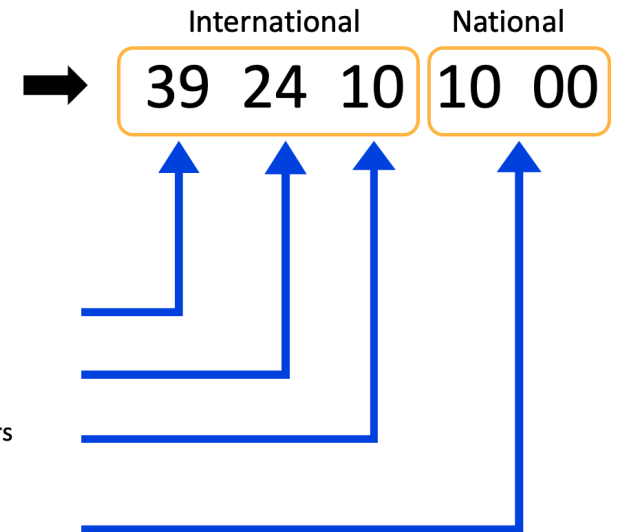
➤ Use of HS codes to identify plastic products

Advantages: Detailed list of commodities

Disadvantages: HS codes are primarily designed to classify goods for customs purposes (such as the administration of tariffs and quotas at the border) rather than for purposes related to tackling the environmental implications of trade



Ketchup Dispensers
HS Code: 3924101000



Section VII: Plastics and Rubber articles

Chapter 39: Plastics and articles thereof

Heading 24: tableware and kitchen ware

Subheading 10: Salt, pepper, ketchup dispensers and similar dispensers

Country Specific Divisions

Methodology

Plastic trade categories:

Total plastics	
P1	Plastics in primary forms
P2	Intermediate forms of plastic
P3	Intermediate manufactured plastic goods
P4	Final manufactured plastics goods
P5	Plastic waste
Total associated trade relevant to the life cycle of plastics	
P6	Feedstocks and precursors used in plastics
P7	Additives used in plastics
Selected topics in plastics trade	
P8	Synthetic textiles
P9	Plastic packaging
P10	Synthetic rubber



Plastics in primary forms



Intermediate forms of plastic



Intermediate manufactured plastic goods

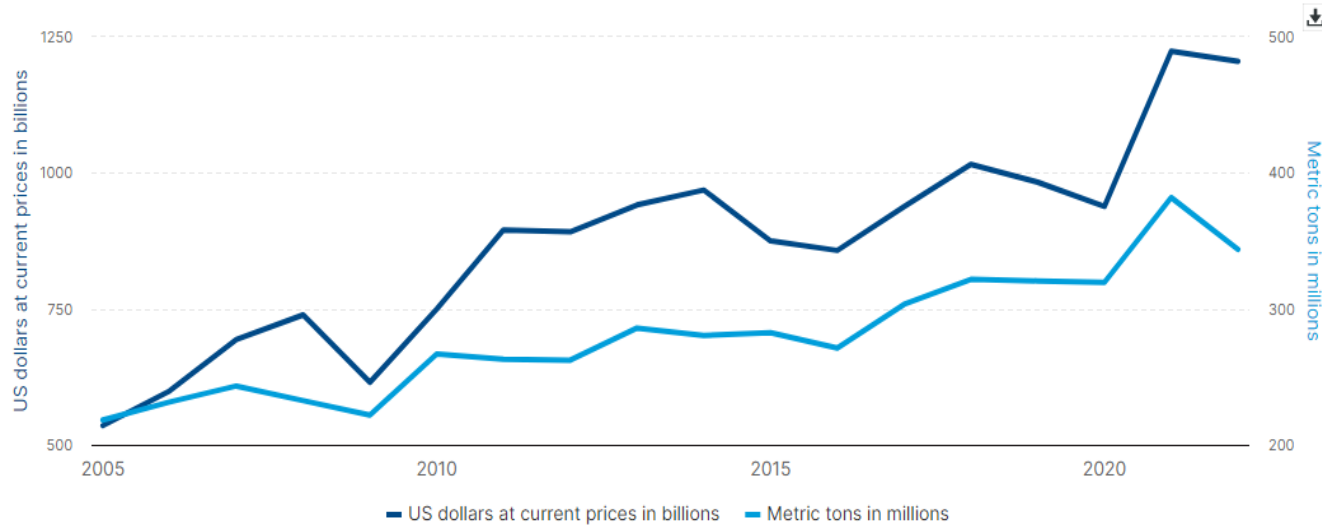


Final manufactured plastics goods



Plastic waste

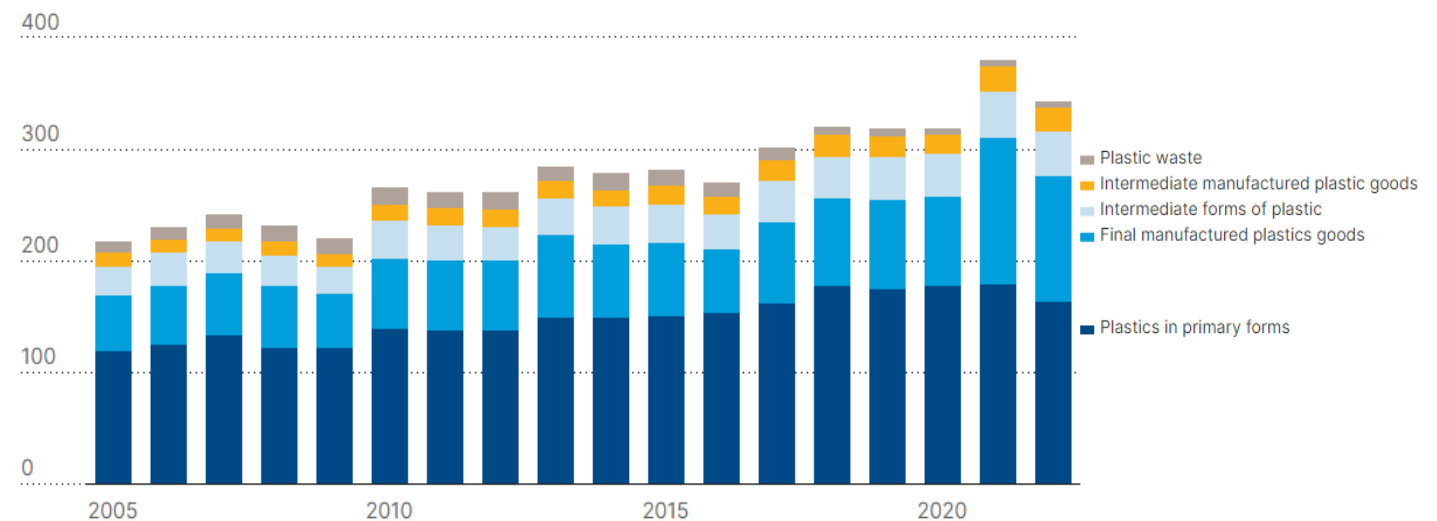
➤ Global plastics trade continues to thrive



Global exports of plastics, or goods made from plastic, have more than **doubled in value since 2005**, reaching nearly **US\$1.2 trillion in 2022**

Half of global exports of plastics consist of **primary forms**, but **manufactured plastics** is booming

Global exports of plastics, millions metric tons





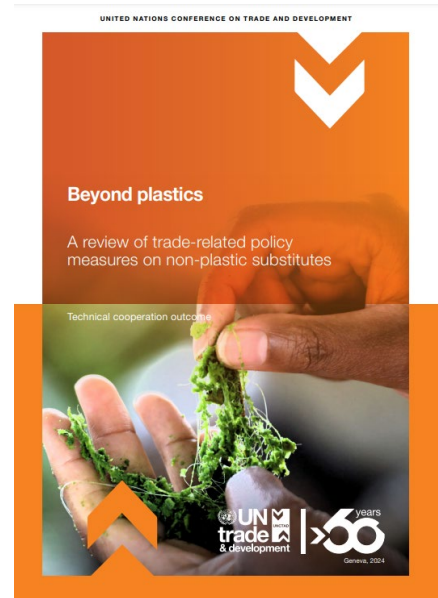
Beyond plastics – creation of UNCTAD Non-Plastic trade dataset

- Urgency in finding **alternatives to plastics**: reusable, biodegradable, and compostable materials

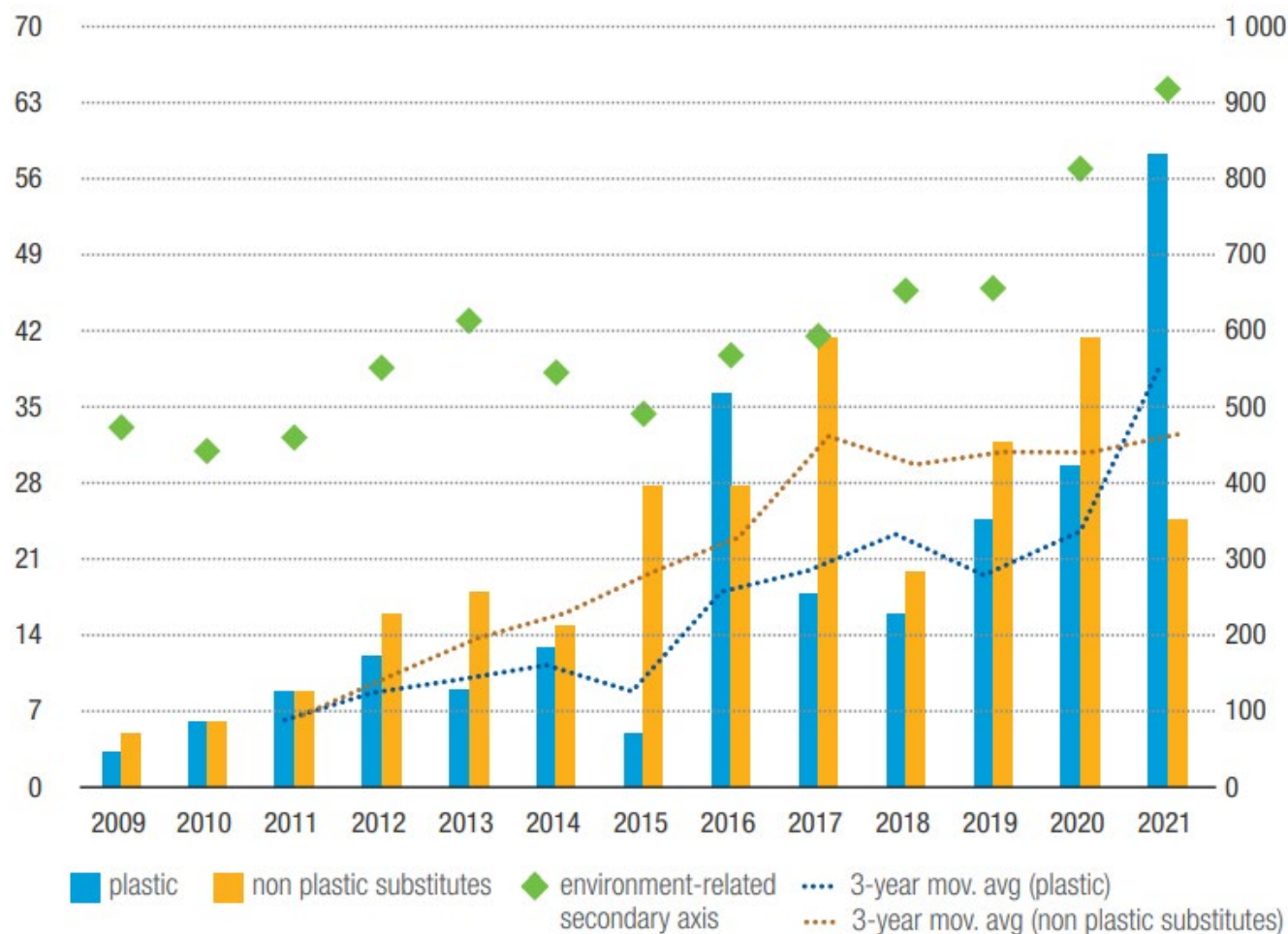
Examples: natural fibers, agricultural waste, glass, aluminum

- UNCTAD identified **282 HS codes** for materials that can perform similar functions to plastics
- Eco-friendly materials like bamboo, hemp, sand, algae offer growing trade opportunities for developing economies
- In 2022, global trade in **plastic substitutes** reached **\$831 billion**

Around two-thirds of global exports are raw materials from developing countries



➤ Trade-related policy measures affecting both plastic and non-plastic substitutes are on the rise



Annual average growth rate of notifications:

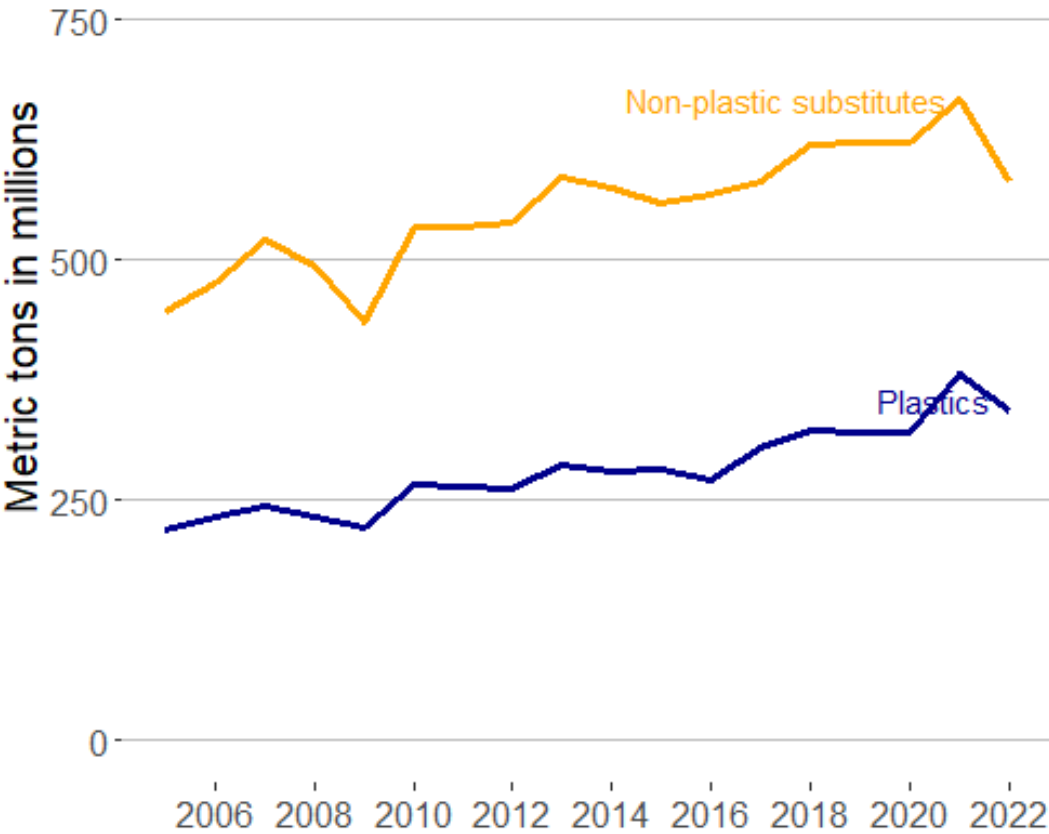
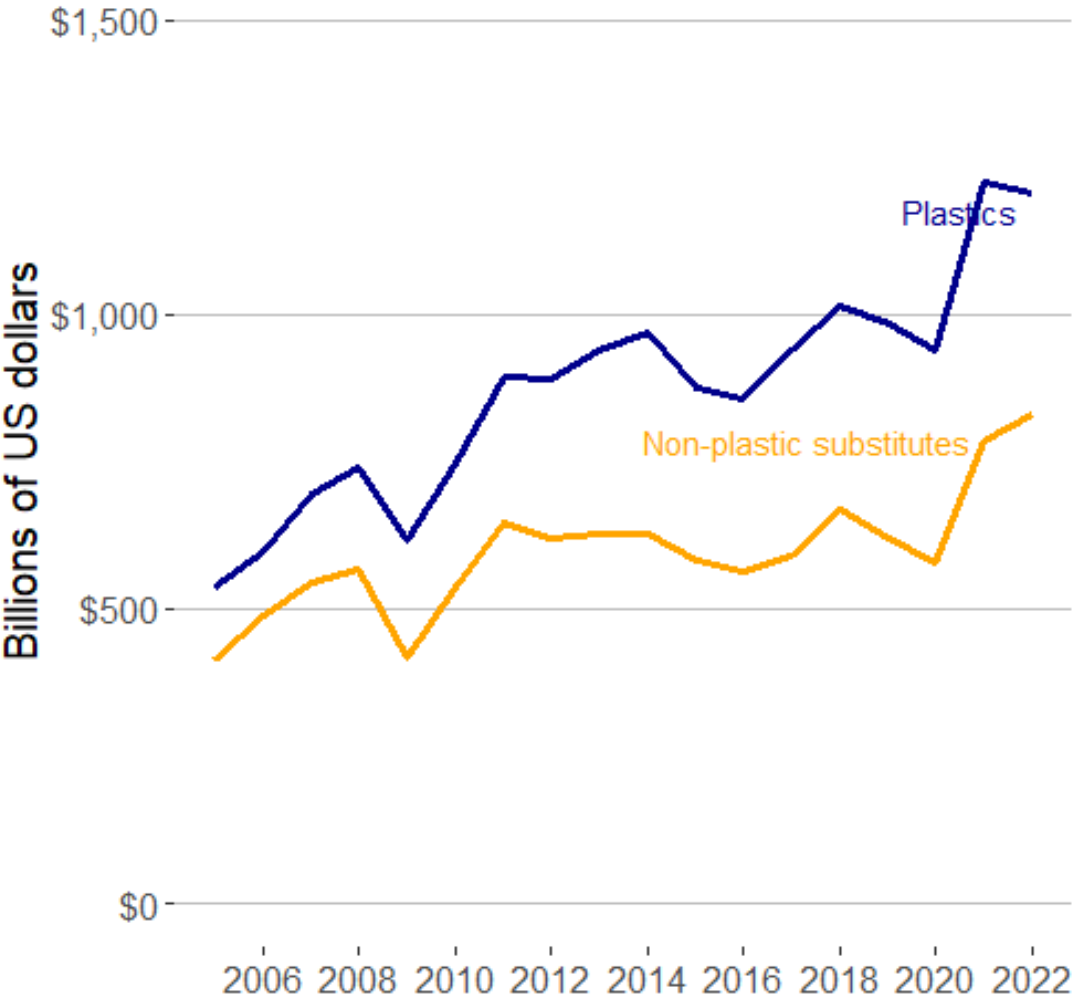
- Plastics: **28%**
- Non-plastic substitutes: **13%**
- Environment-related: **6%**

[Dataset non-plastic substitutes](#)



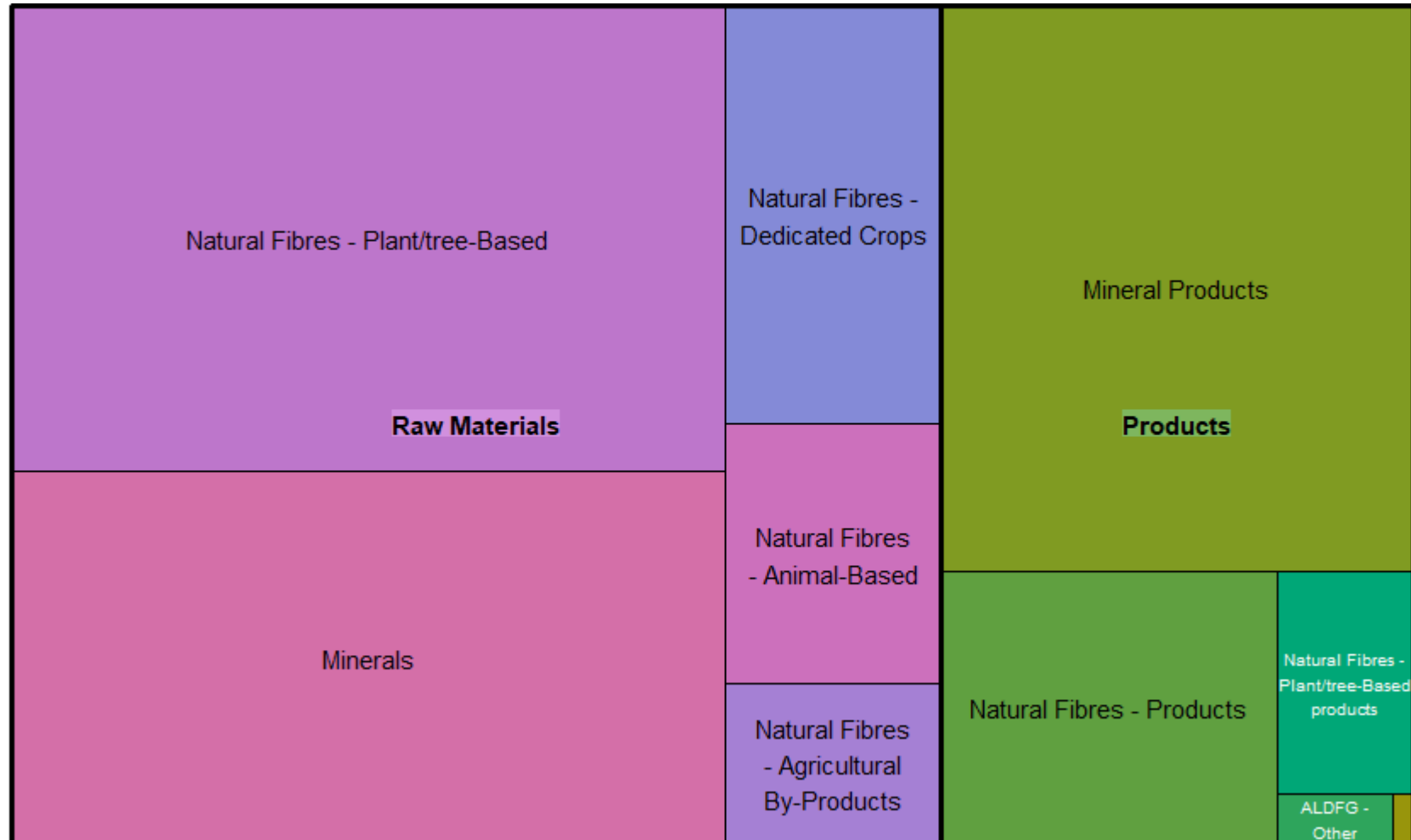
Global exports in plastic and non-plastic substitutes

(US\$ and metric tonnes)



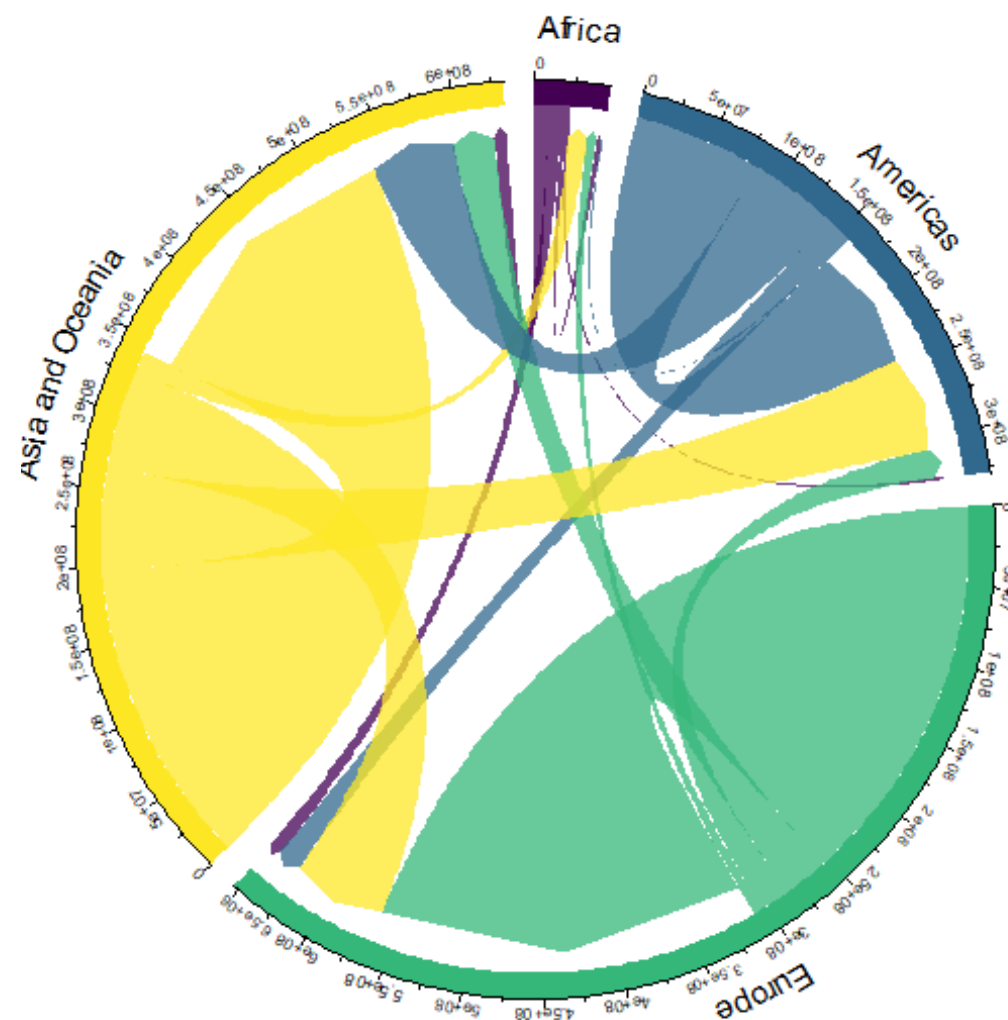
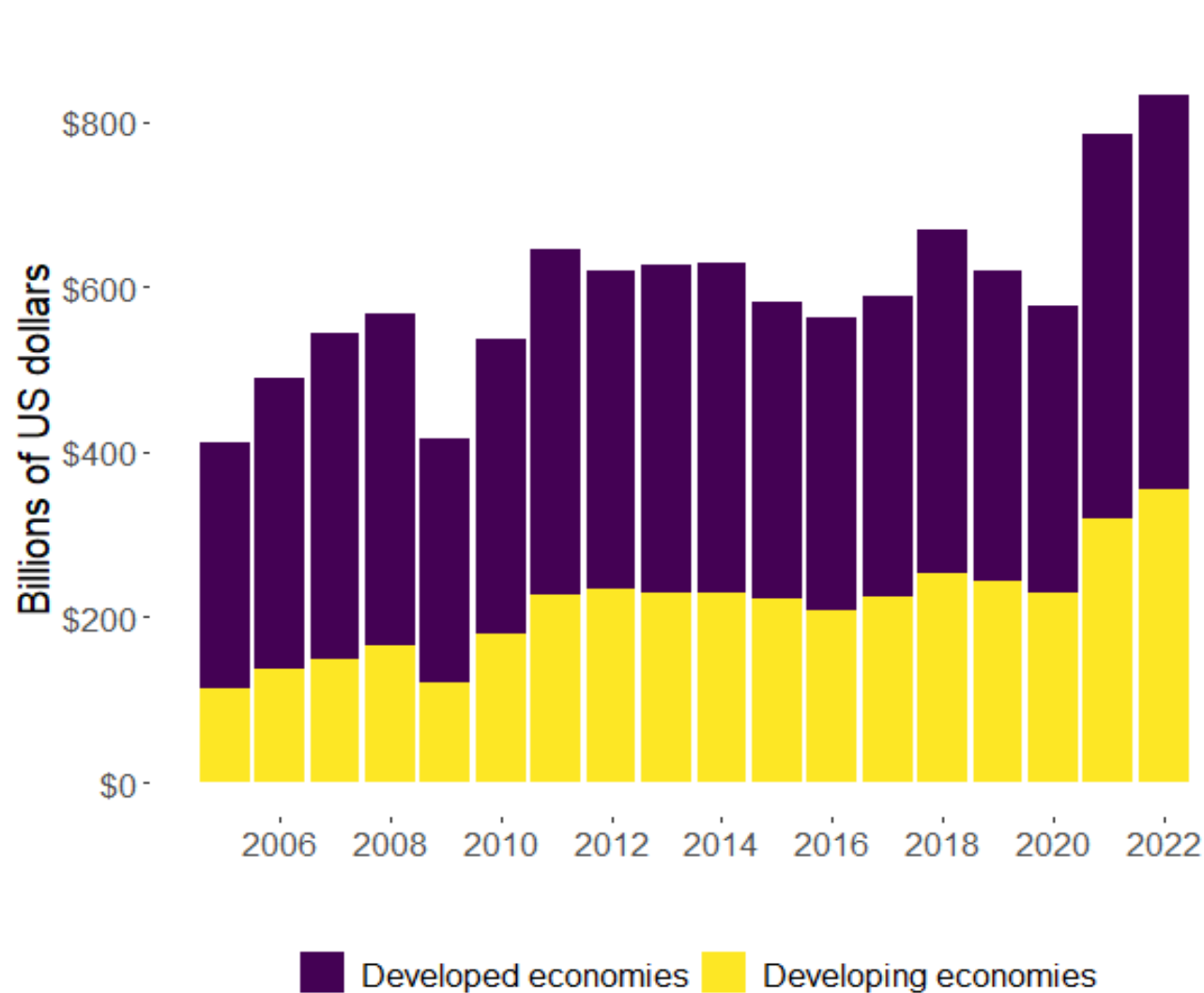


Structure of global exports in non-plastic substitutes in 2022





Global exports in non-plastic substitutes by region



Thank you!
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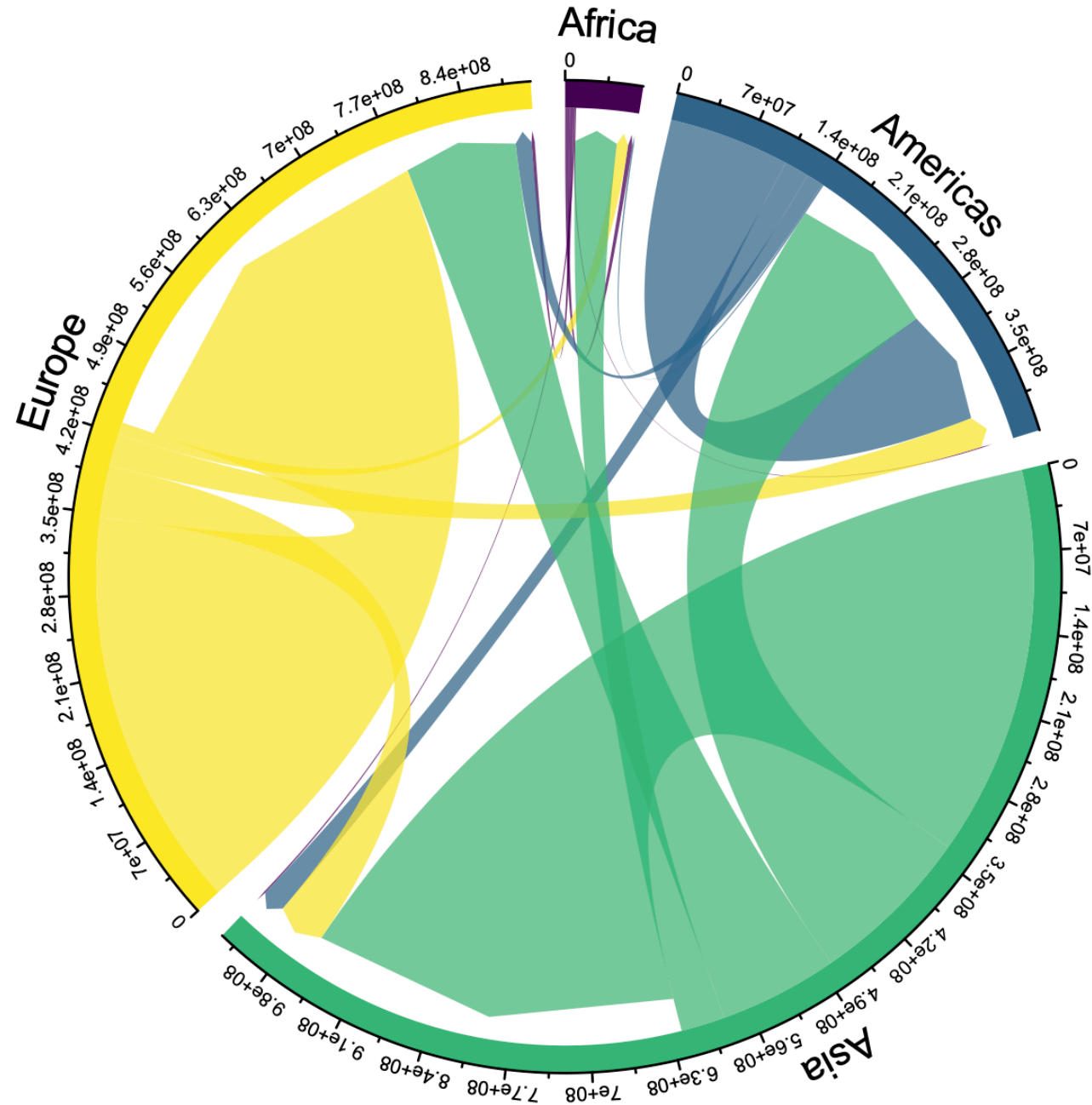


➤ Methodology

Trade flows of plastics:

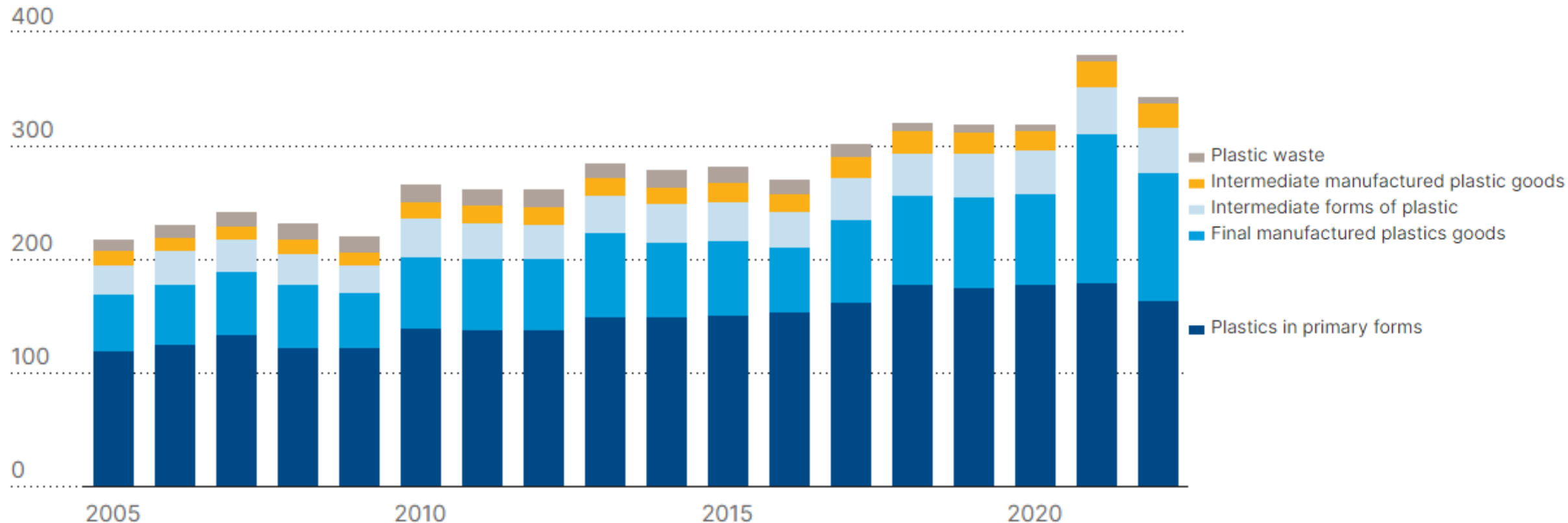
- **Input flows** - flows in feedstocks, precursors and additives used in production of primary plastics;
- **Non-hidden flows** - those included in **HS Chapter 39** Plastics and articles thereof, as described above;
- **Semi-hidden flows** - those plastic products that can be readily identified under other chapters of the HS, such as synthetic textiles and rubber;
- **Hidden flows** - products with embedded or associated plastics where the volume and value of plastics is not readily identifiable or traceable.
 - packaging associated with specific products (pre-packaged food and beverages) (e.g., not empty packaging);
 - packaging used in the distribution and transportation of products;
 - plastic embedded in household and consumer goods

➤ Plastics trade highly concentrated regionally

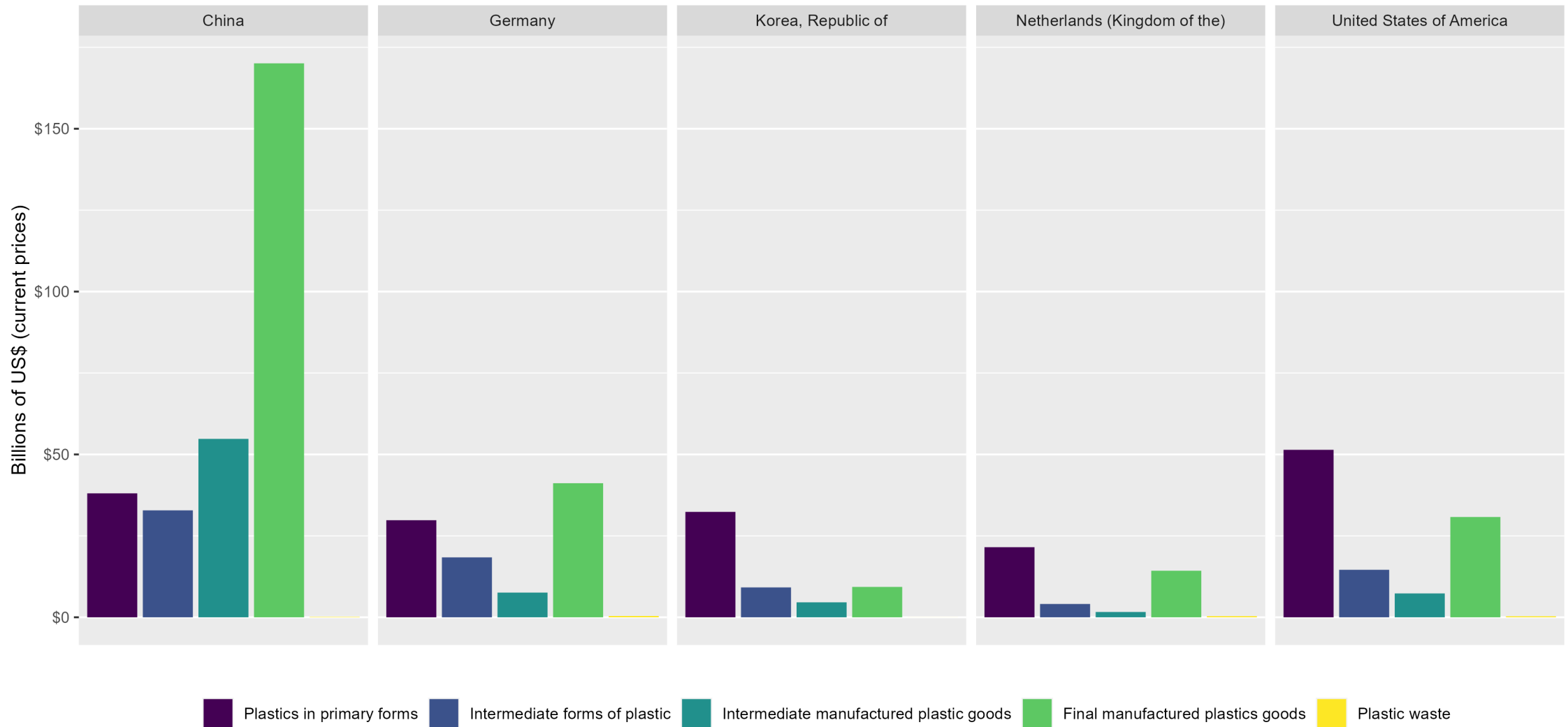


➤ Half of global exports of plastics consist of primary forms, but manufactured plastics is booming

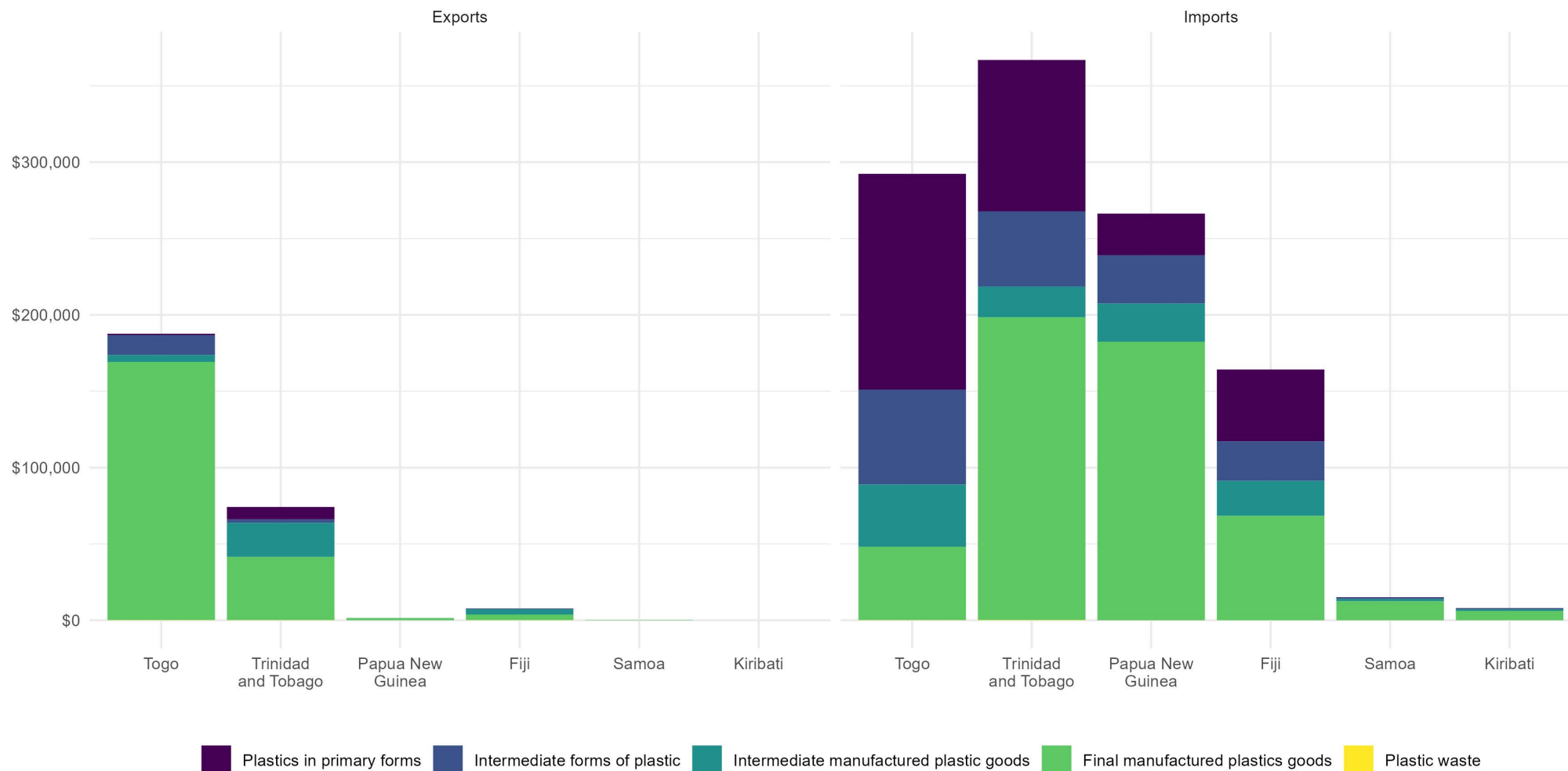
Global exports of plastics, millions metric tons



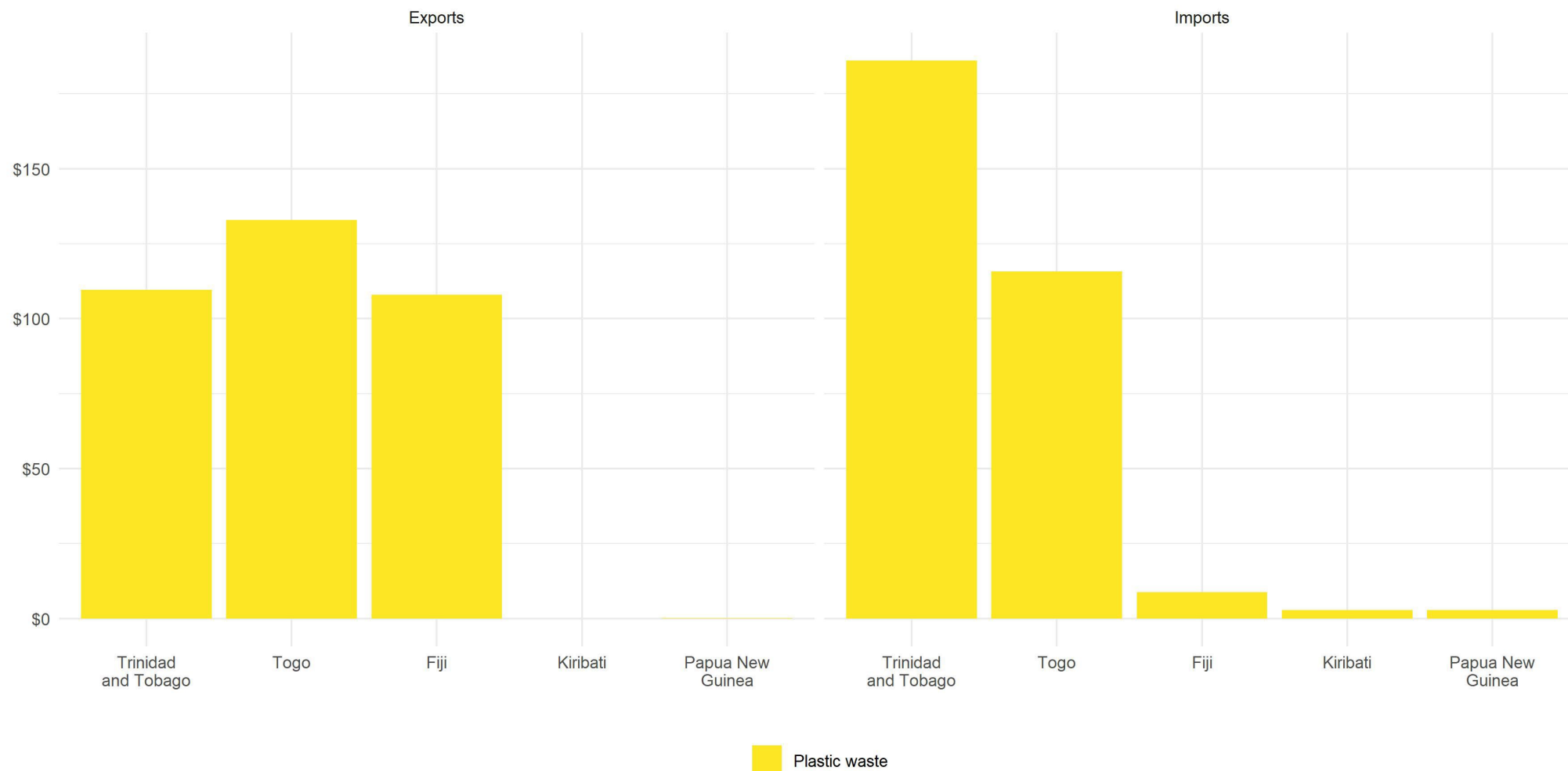
➤ Top 5 exporters in total plastic trade (US\$)



➤ GPML countries trade in plastic products (US\$)

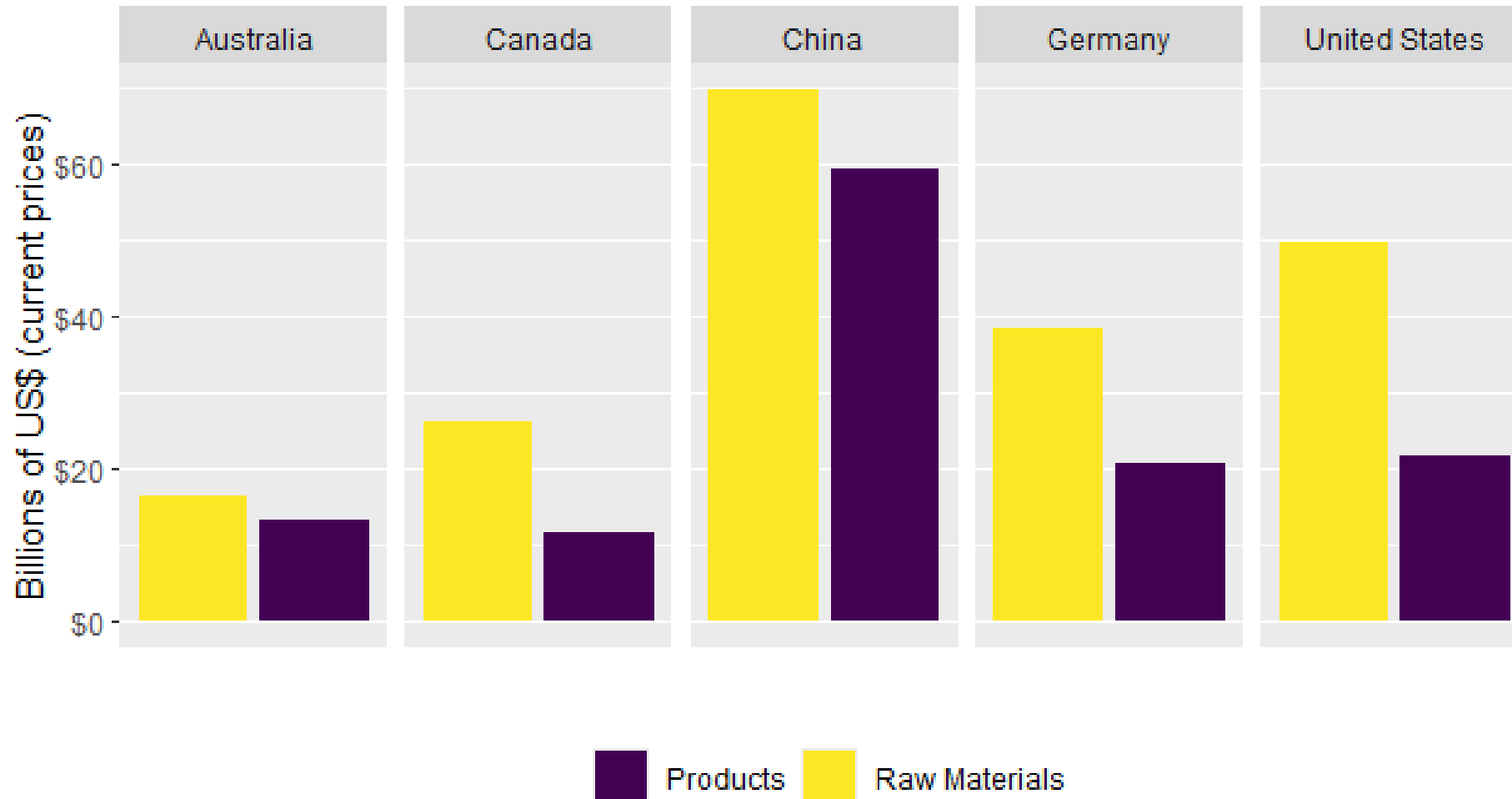


➤ GPML countries trade in plastic products (US\$)



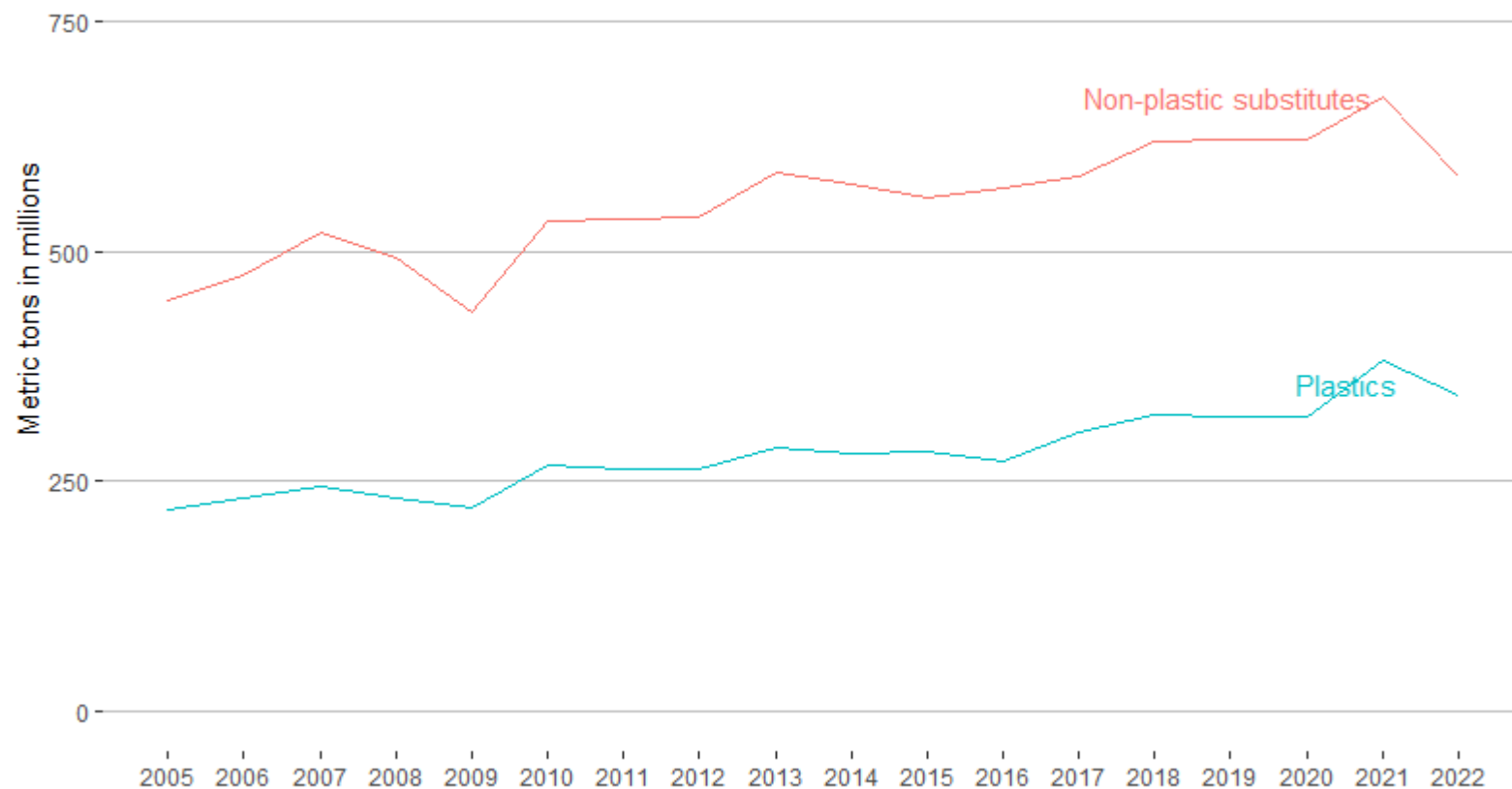
➤ Top 5 exporters in total plastic trade (US\$)

Top 5 exporters in non-plastic substitutes (in US\$)



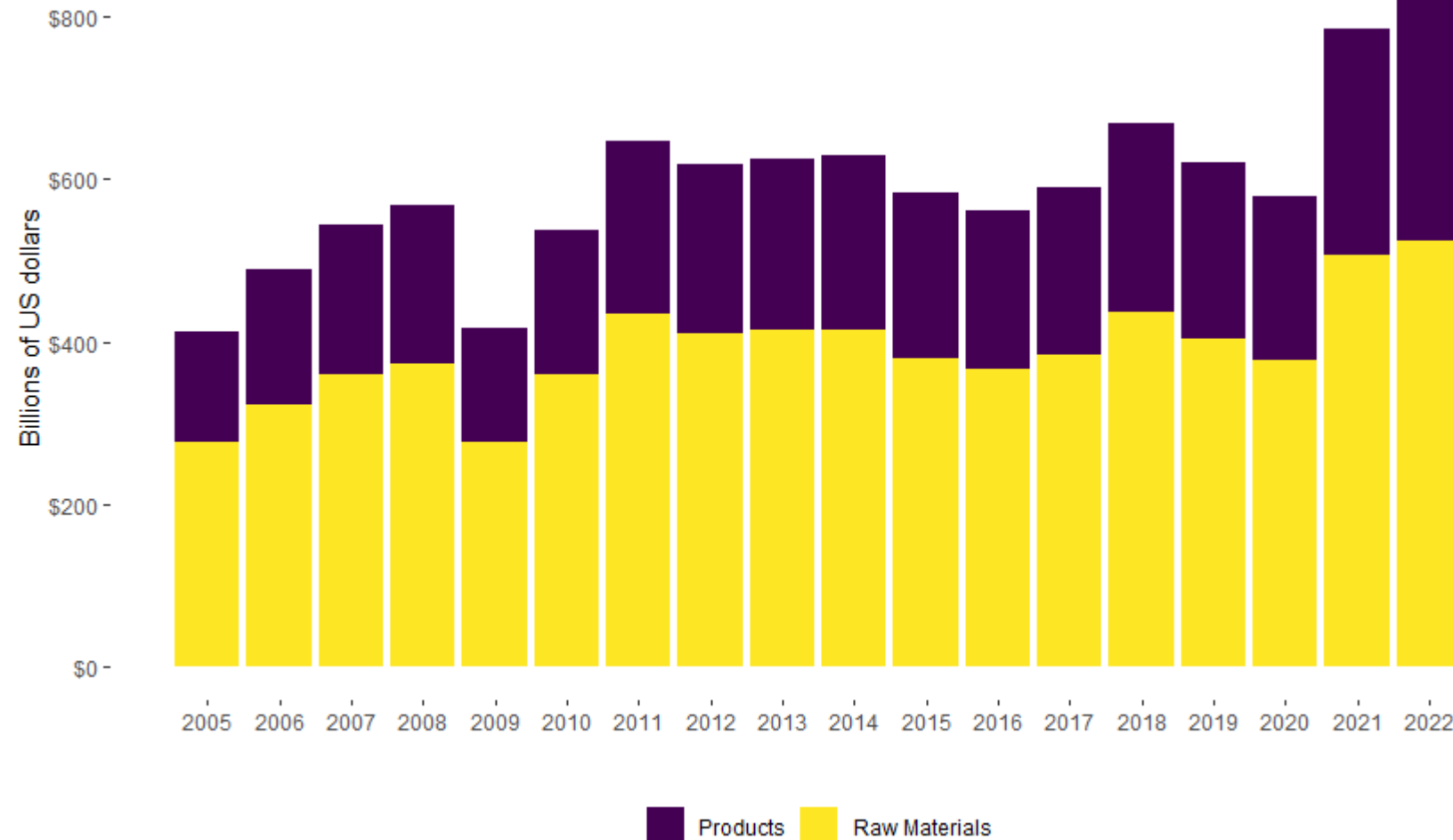


Global exports in plastic and non-plastic substitutes(Metric tons)



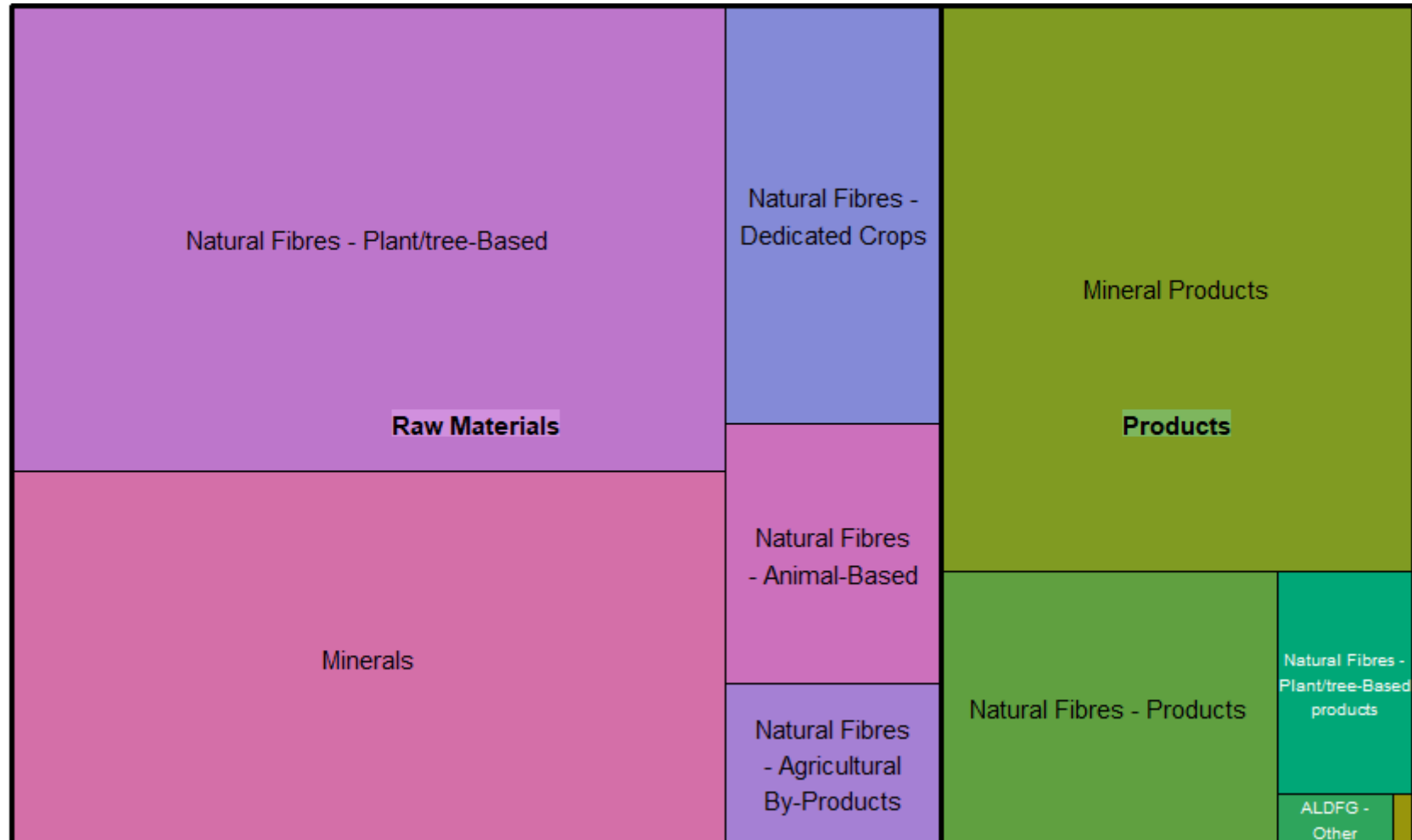


Global exports in non-plastic substitutes by product





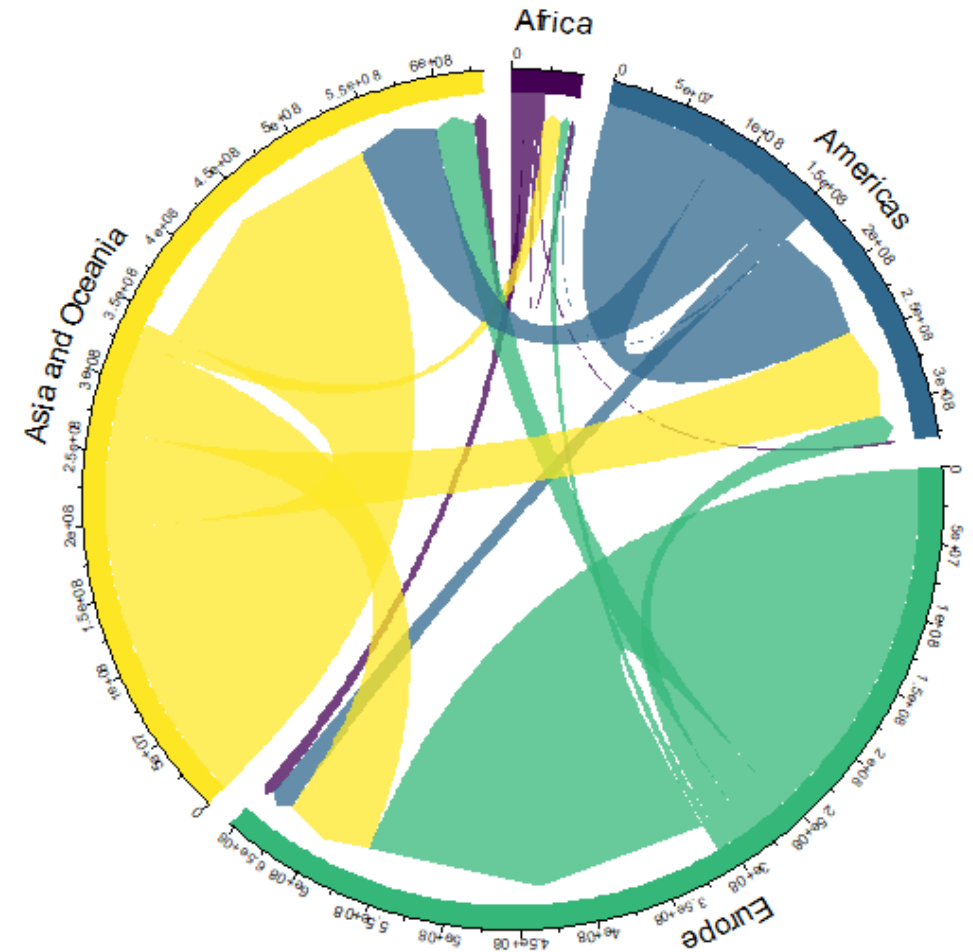
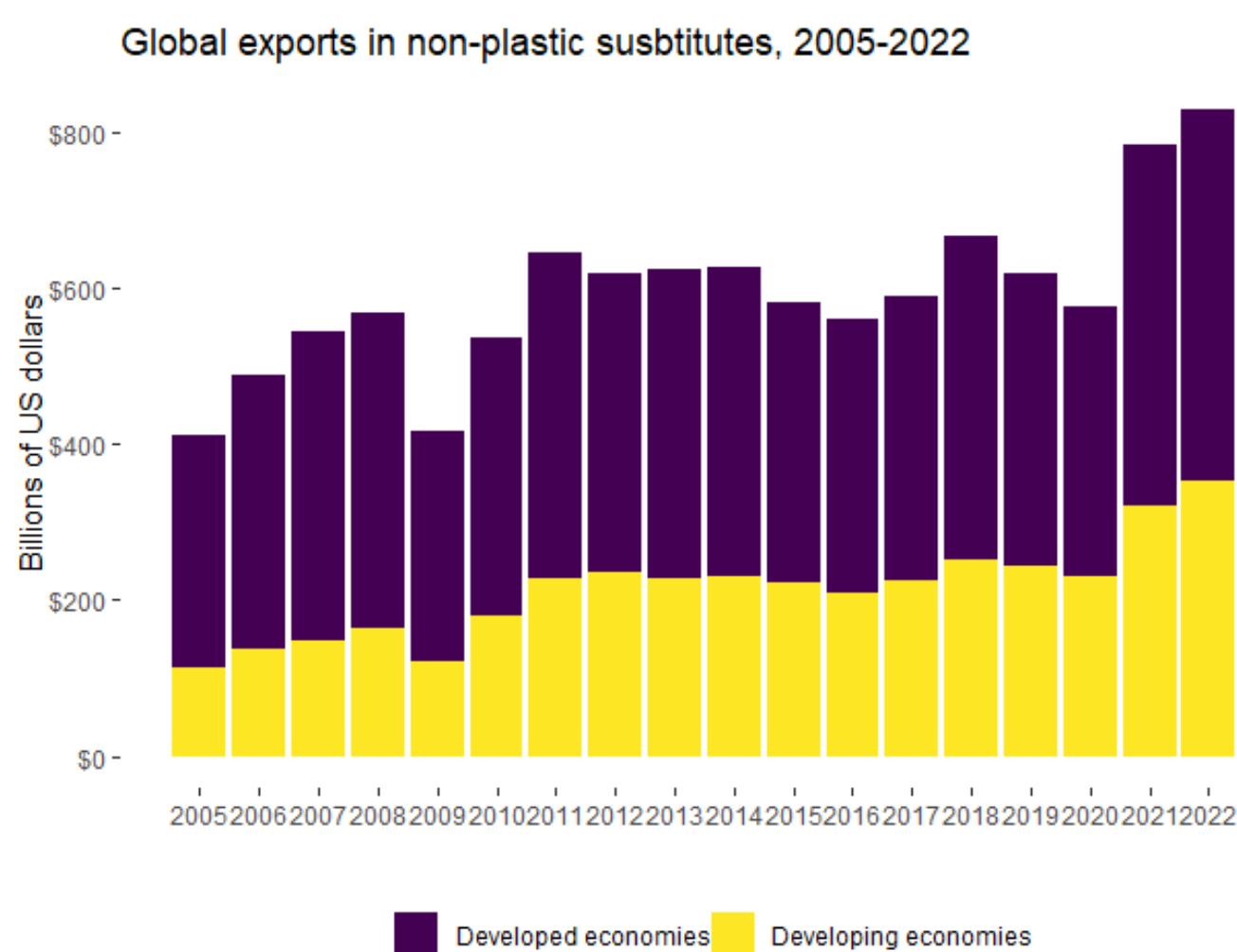
Global exports in non-plastic substitutes by product





Global exports in non-plastic substitutes by region

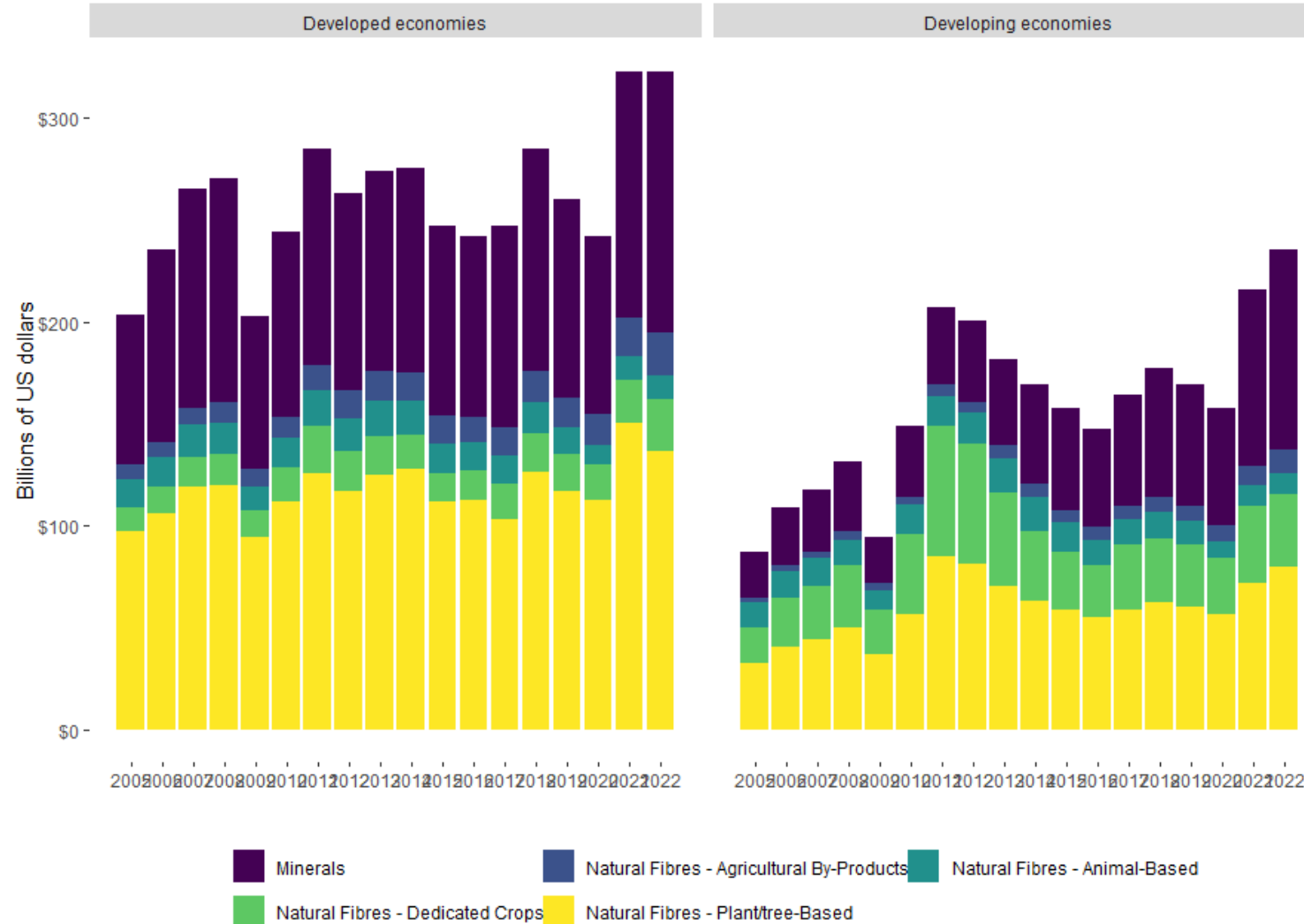
Global exports in non-plastic substitutes, 2005-2022





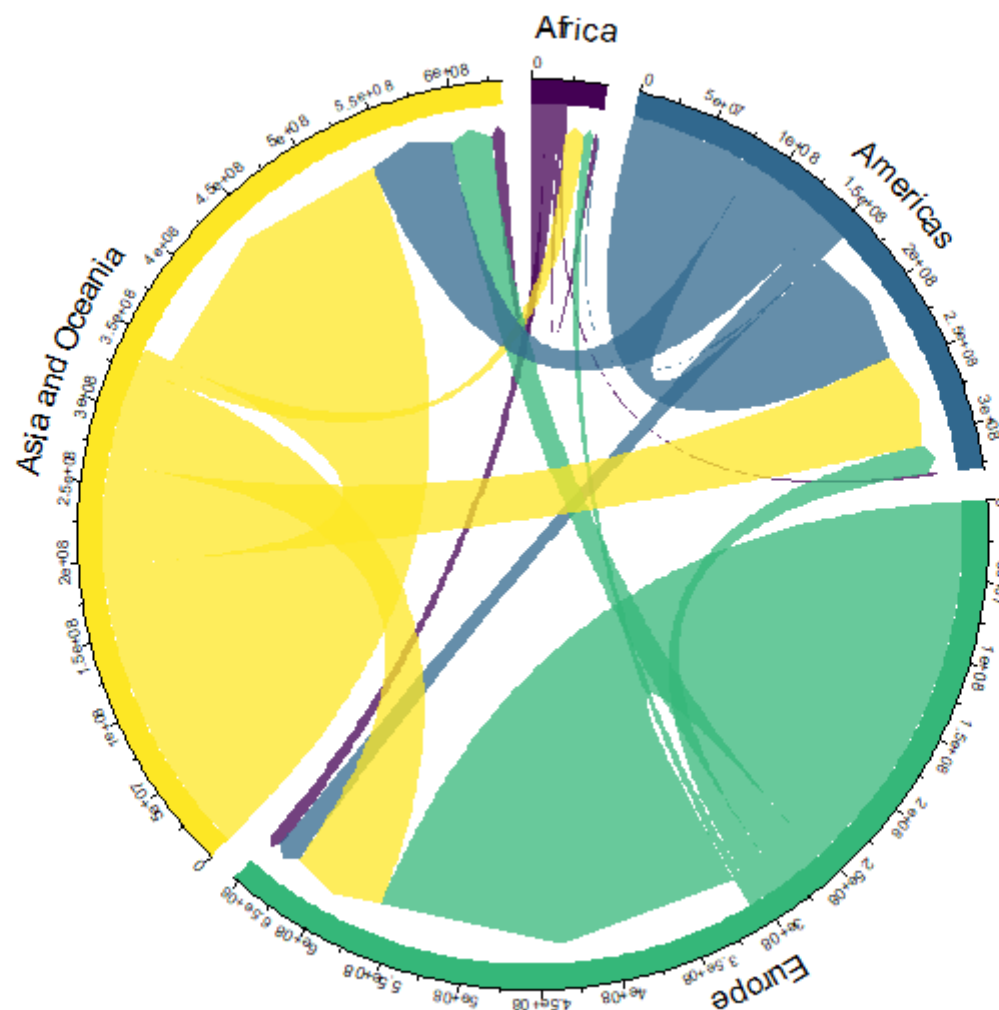
Global exports in non-plastic substitutes by region

Exports in raw materials, 2005-2022





Global exports regional trade

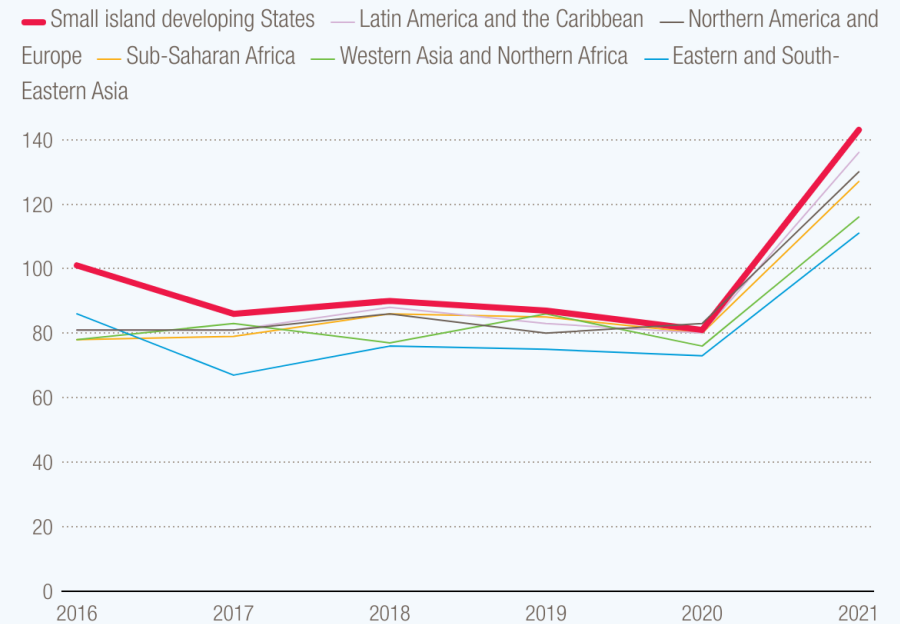


➤ Trade and transport data

- First comprehensive global picture of the transport that enables trade, including the costs associated with moving different products between economies.
- The data, broken down by **commodity group** and **mode of transport**, provides a suite of derived indicators such as freight rates and transport cost intensities by value and volume.
- It could be the basis for calculating **emissions from the transport of traded goods**, or costs of trading routes.

➤ Small islands pay the most for their imports

Maritime transport and insurance costs for merchandise imports, US dollars per ton, median per selected country groups



Source: UNCTADstat