

# What Role for the WTO on Plastic Pollution?

---

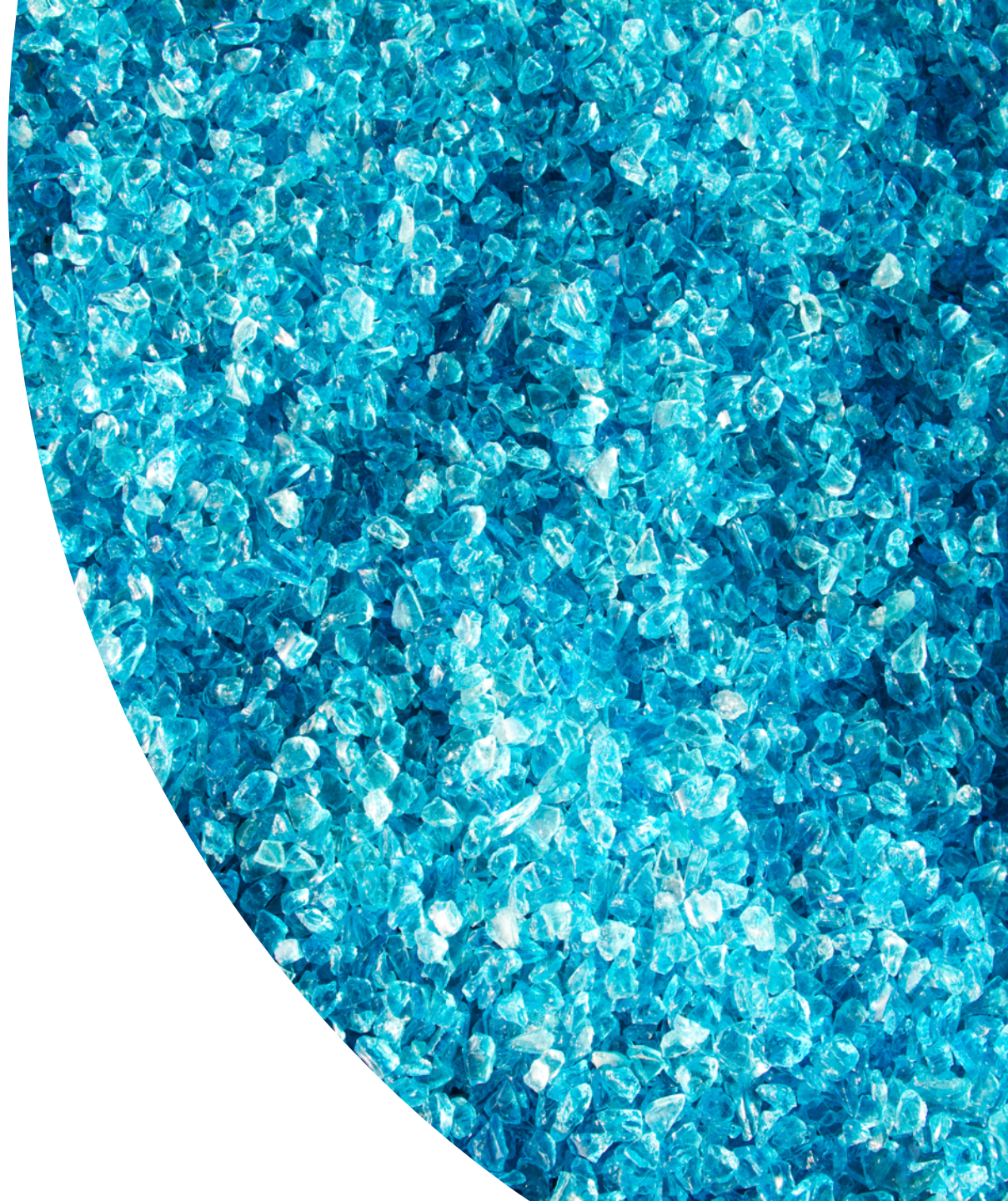
## Trade Dimensions and Trade Policy Options for Transforming the Global Plastics Economy

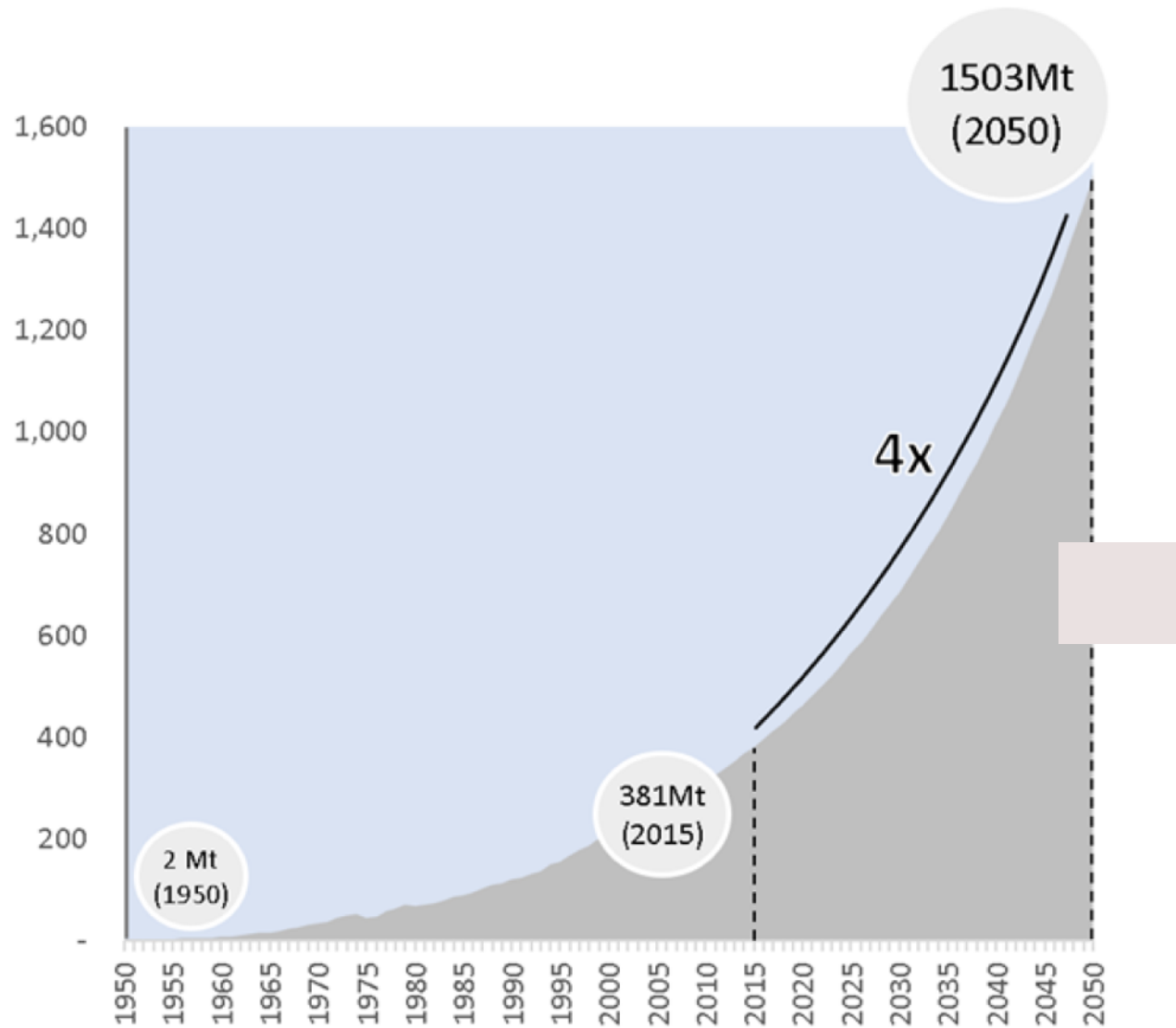
WTO Workshop, November 25<sup>th</sup> 2019

Carolyn Deere Birkbeck

Senior Researcher, Global Governance Centre, Graduate Institute

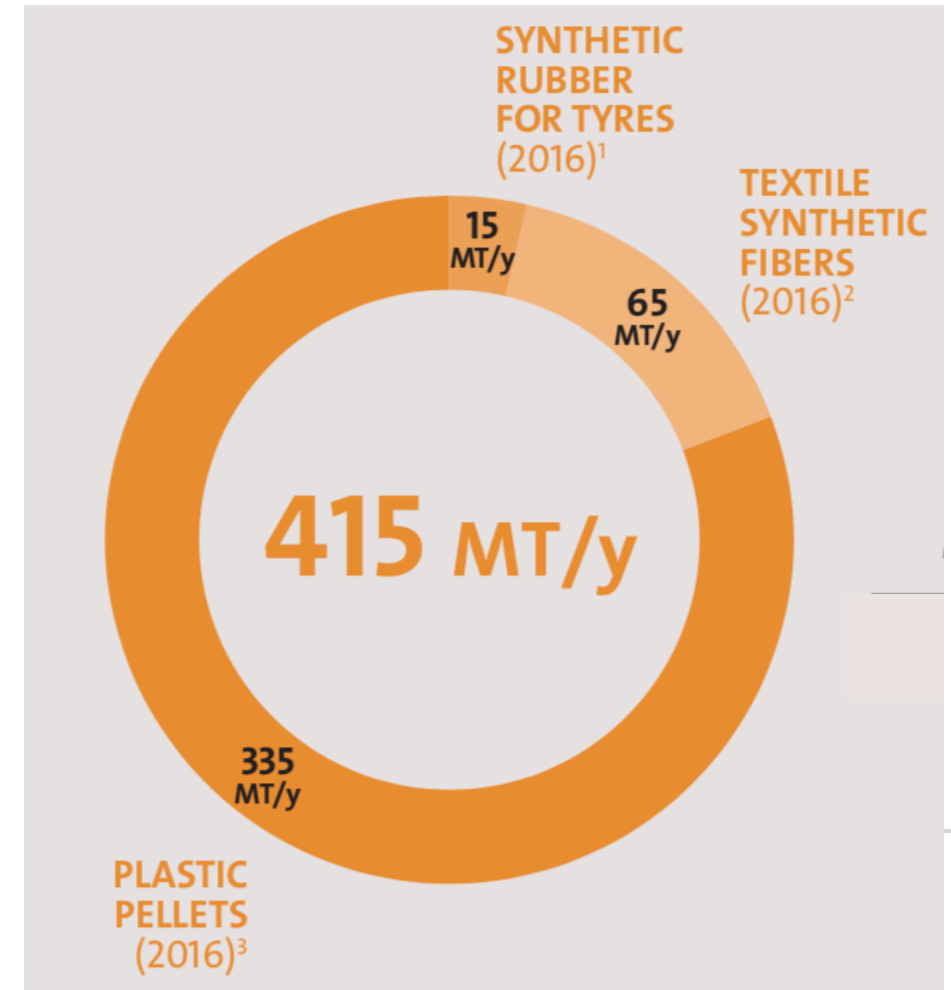
[carolyn.deere@graduateinstitute.ch](mailto:carolyn.deere@graduateinstitute.ch) @politicsplastics @carolyndeere





**Growth of annual global polymer resin & fibre production and projections (1950-2050)**

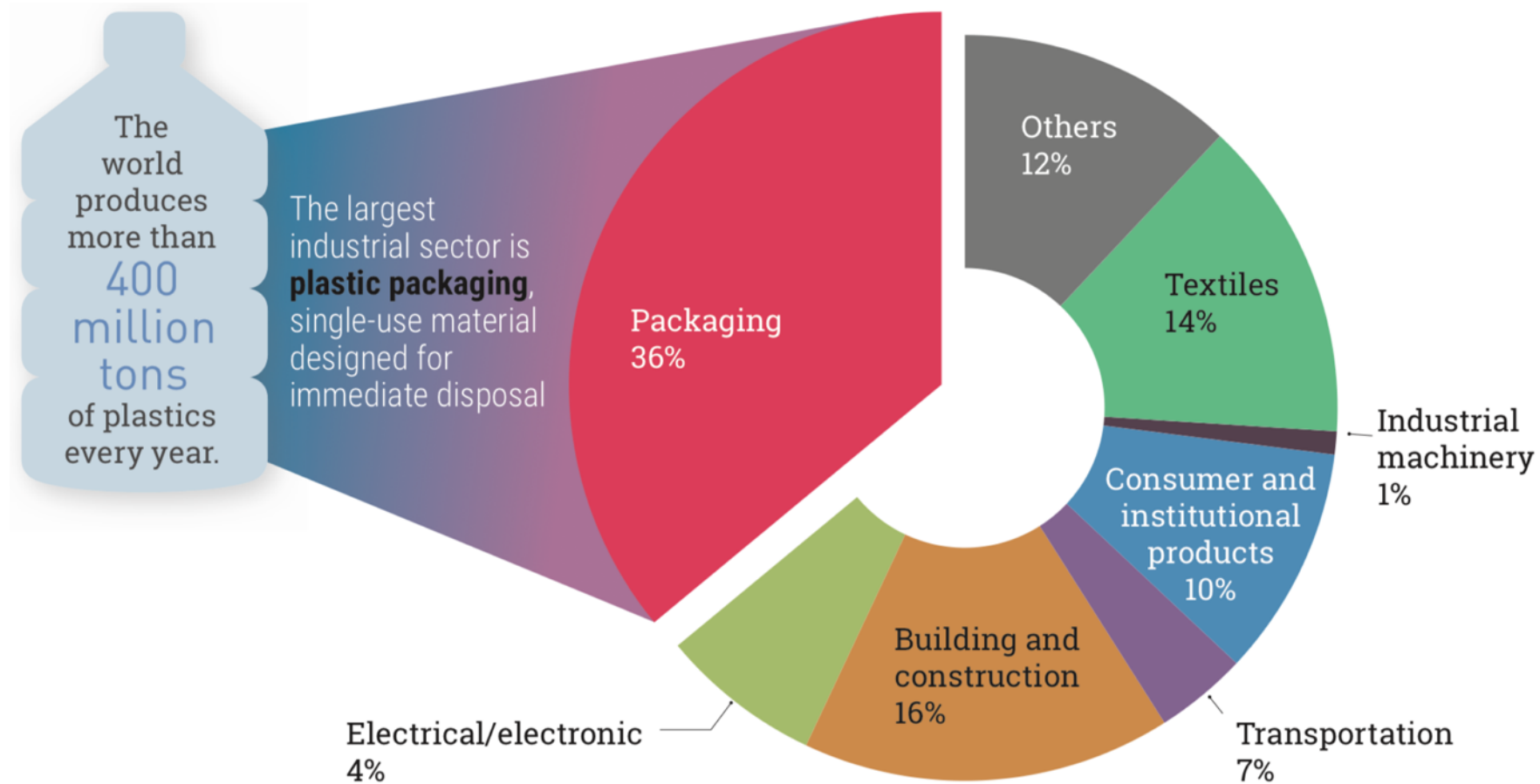
Source: Geyer, Jambeck, and Lavender, 2017



**Global production of plastic by category (2016)**

Source: Billard and Boucher, 2017

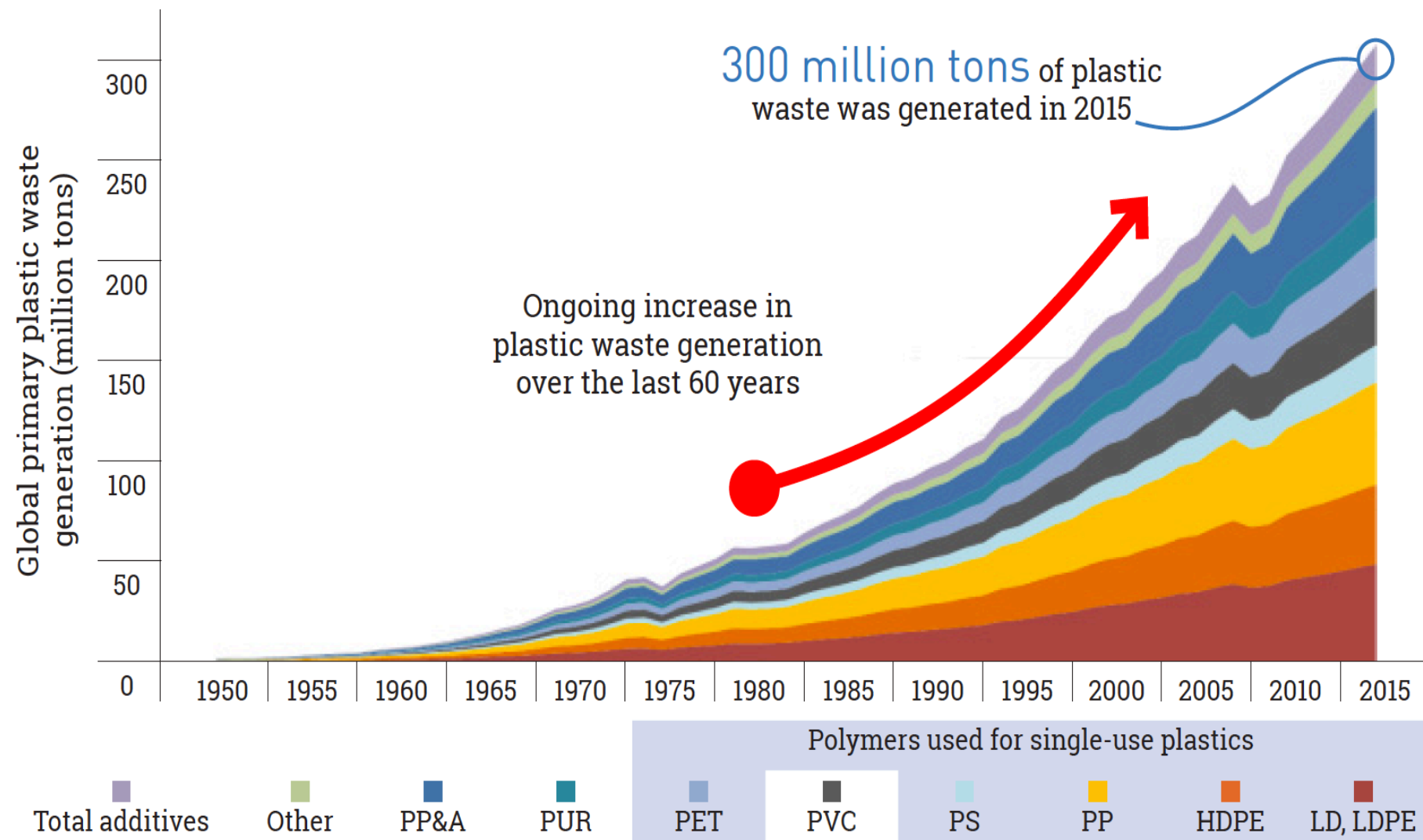
## Global plastic production by industrial sector (2015)



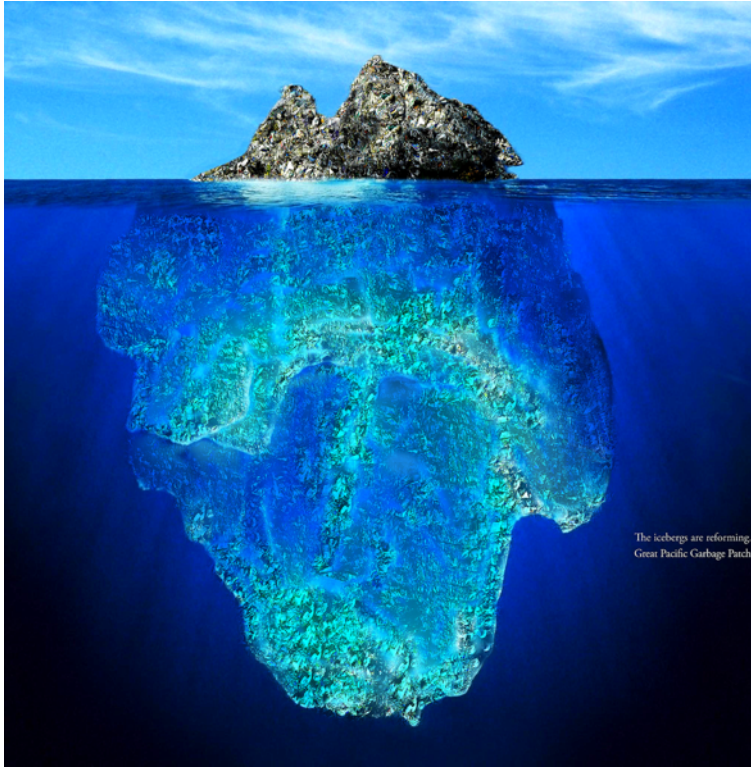
Source: Adapted from Geyer, Jambeck, and Law, 2017



# Global primary plastics waste generation (1950-2015)







## Understanding of the plastics crisis is evolving

Plastic pollution the oceans

- Marine litter
- Microplastics



Challenges across the life cycle of plastics

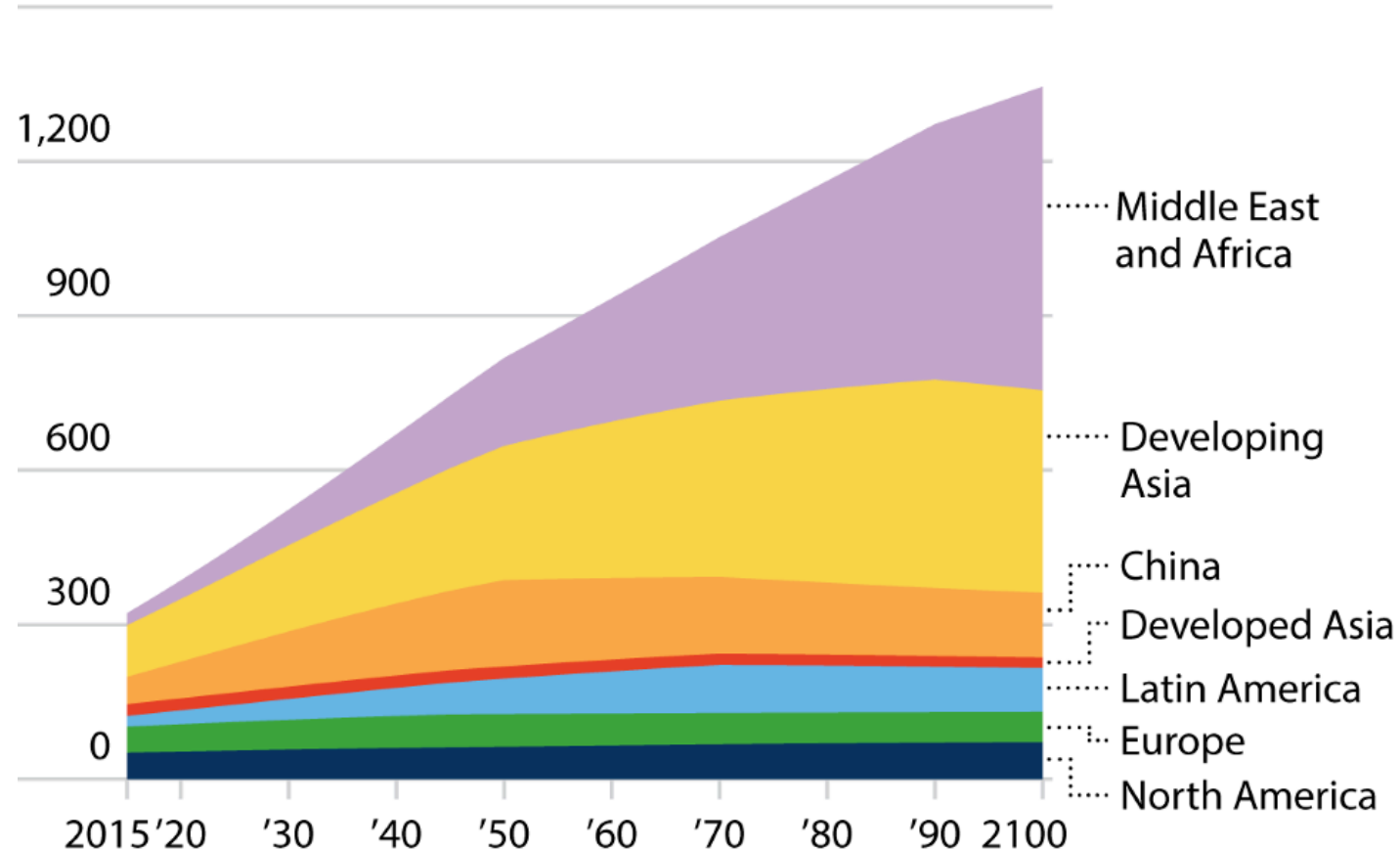
- Environmental
- Health
- Development

## World Plastics Demand May Increase Significantly

Projections based on business-as-usual growth predict markedly increased plastic use through 2100.

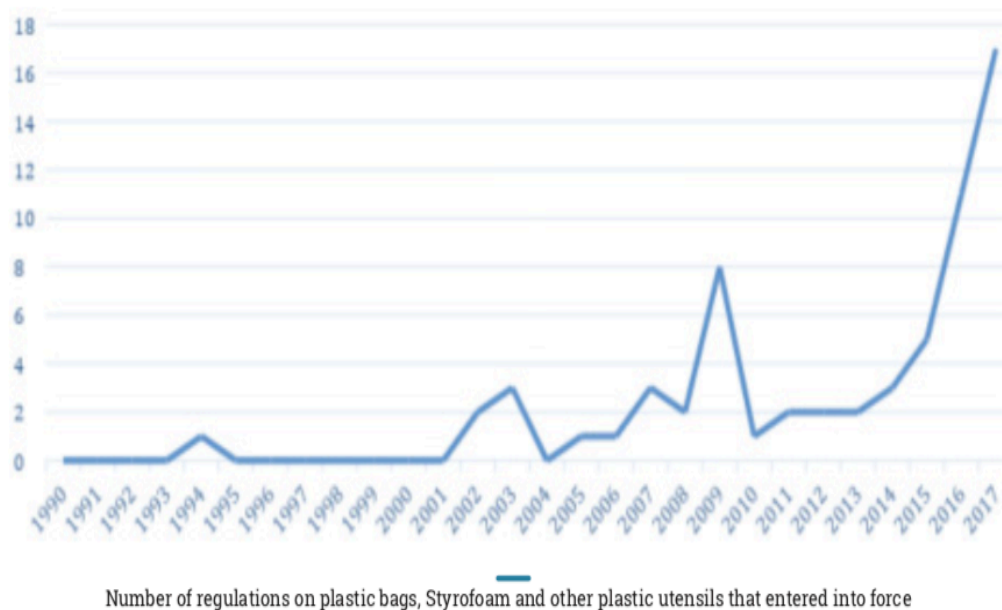
Plastics Demand by Region, 2015 to 2100

1,500 million tons per year



Source: Material Economics, The Circular Economy (2018).





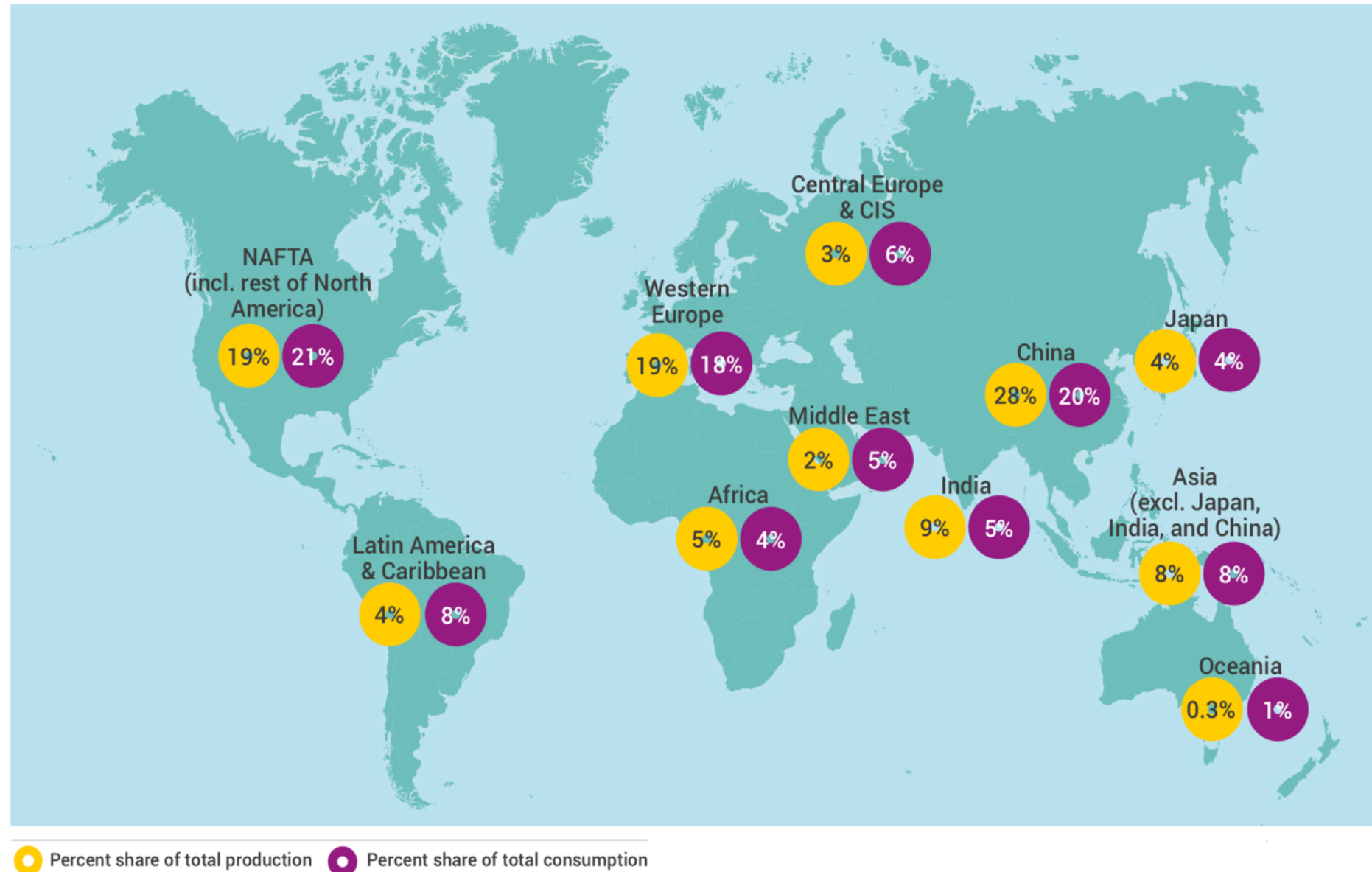




# A Global Plastics Economy

---

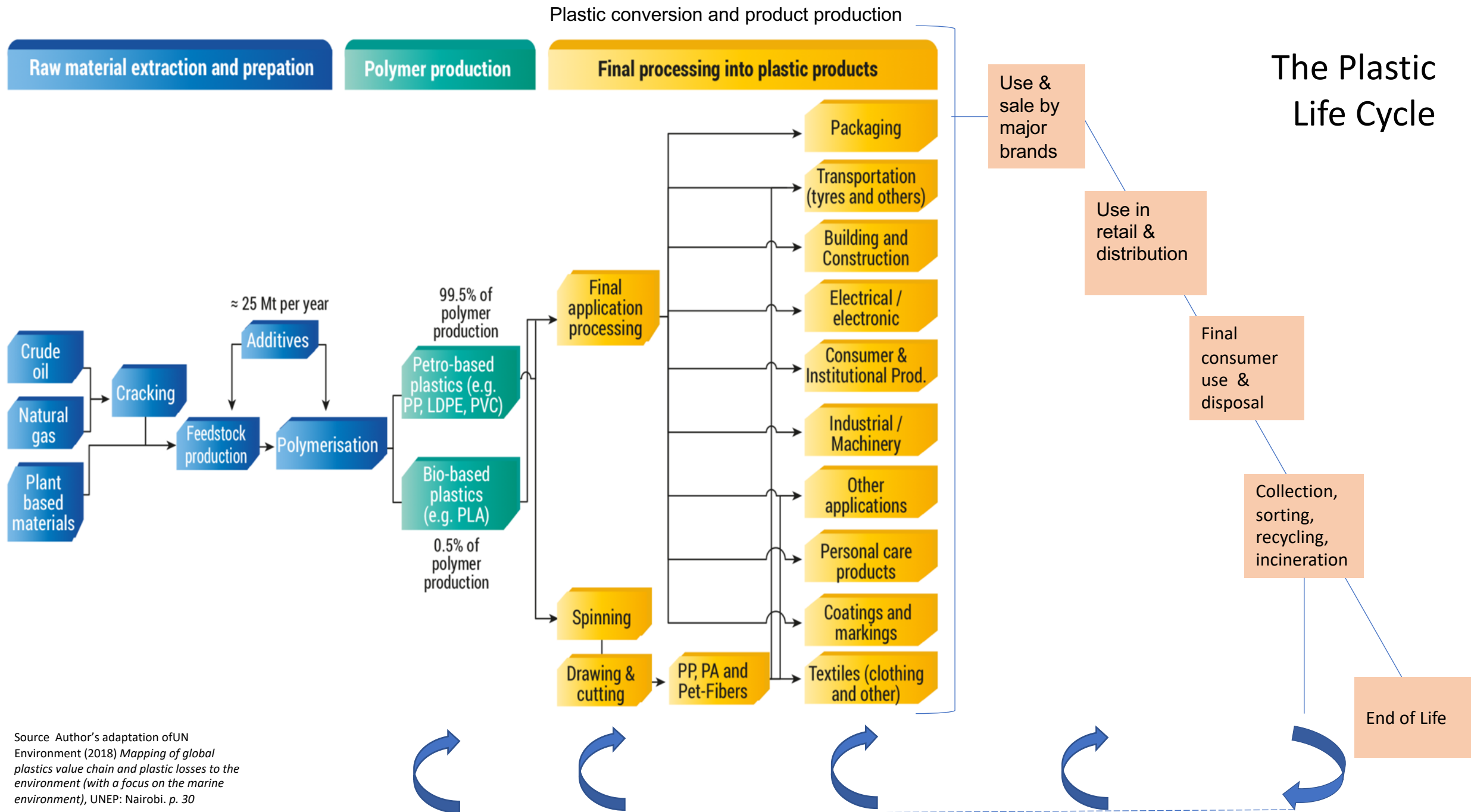
# A global system of production and consumption



Share of plastic production and consumption by region, 2015

Source UN Environment (2018) *Mapping of global plastics value chain and plastic losses to the environment (with a focus on the marine environment)*, UNEP: Nairobi. p. 30

# The Plastic Life Cycle







Headquarters	Company (billion euros)
United States	Exxon Mobile (210.7) Chevron Philipps (12) Dow (43.7)
Germany	BASF (56.9) Lanxess (7.1)
Italy	Eni (55)
United Kingdom	Ineos (53.6)
Saudi Arabia	SABIC (31.6)
Netherlands	Lyondell Bassell (29.5)
Korea	LG Chem (15.9)

## Strong Commercial Interests

Starting with petrochemical and chemical industries that produce:

- the fossil fuel feedstocks for plastics, and
- primary plastic polymers in forms such as resins & pellets that are converted into plastic products

Trade plays a  
central role across  
the life cycle of  
plastics



Fossil fuel feed stocks



Primary/virgin plastics



Plastic packaging



Synthetic textiles



Multiple plastic products



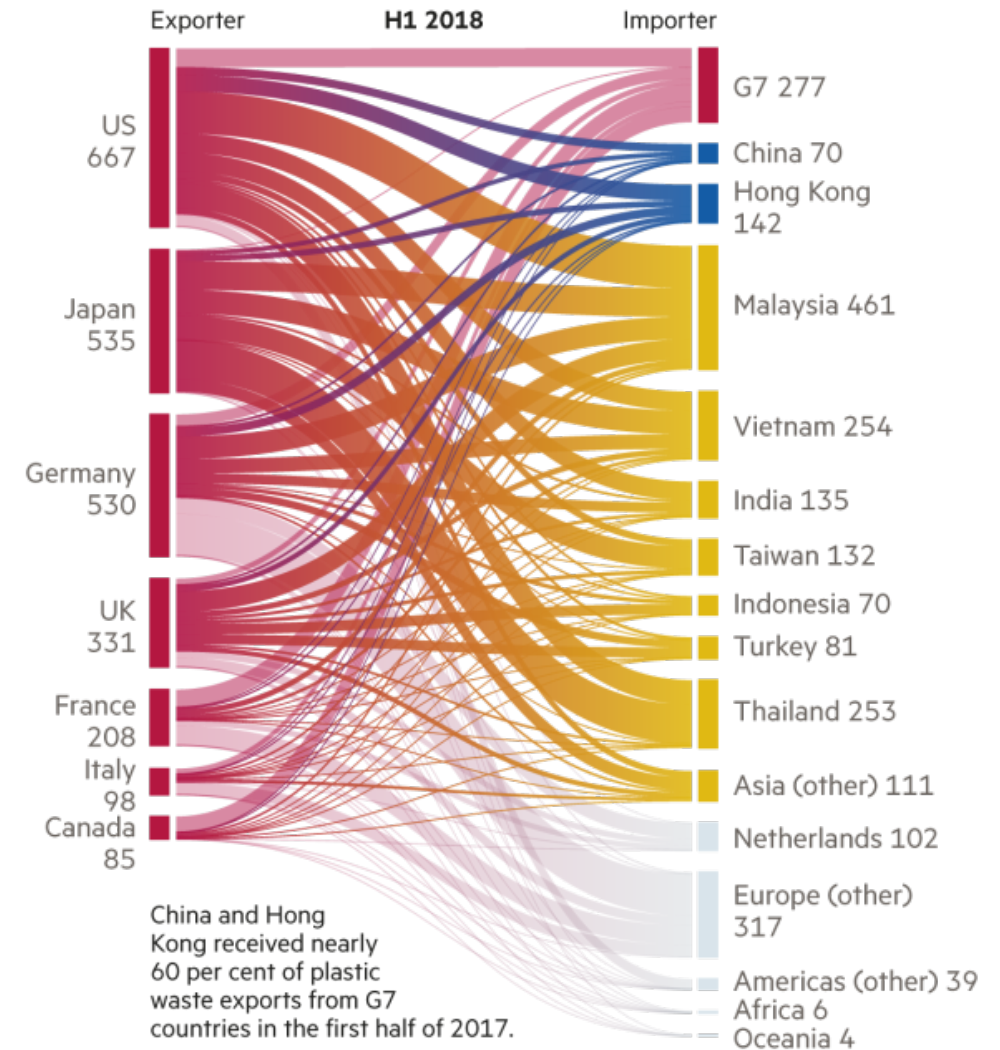
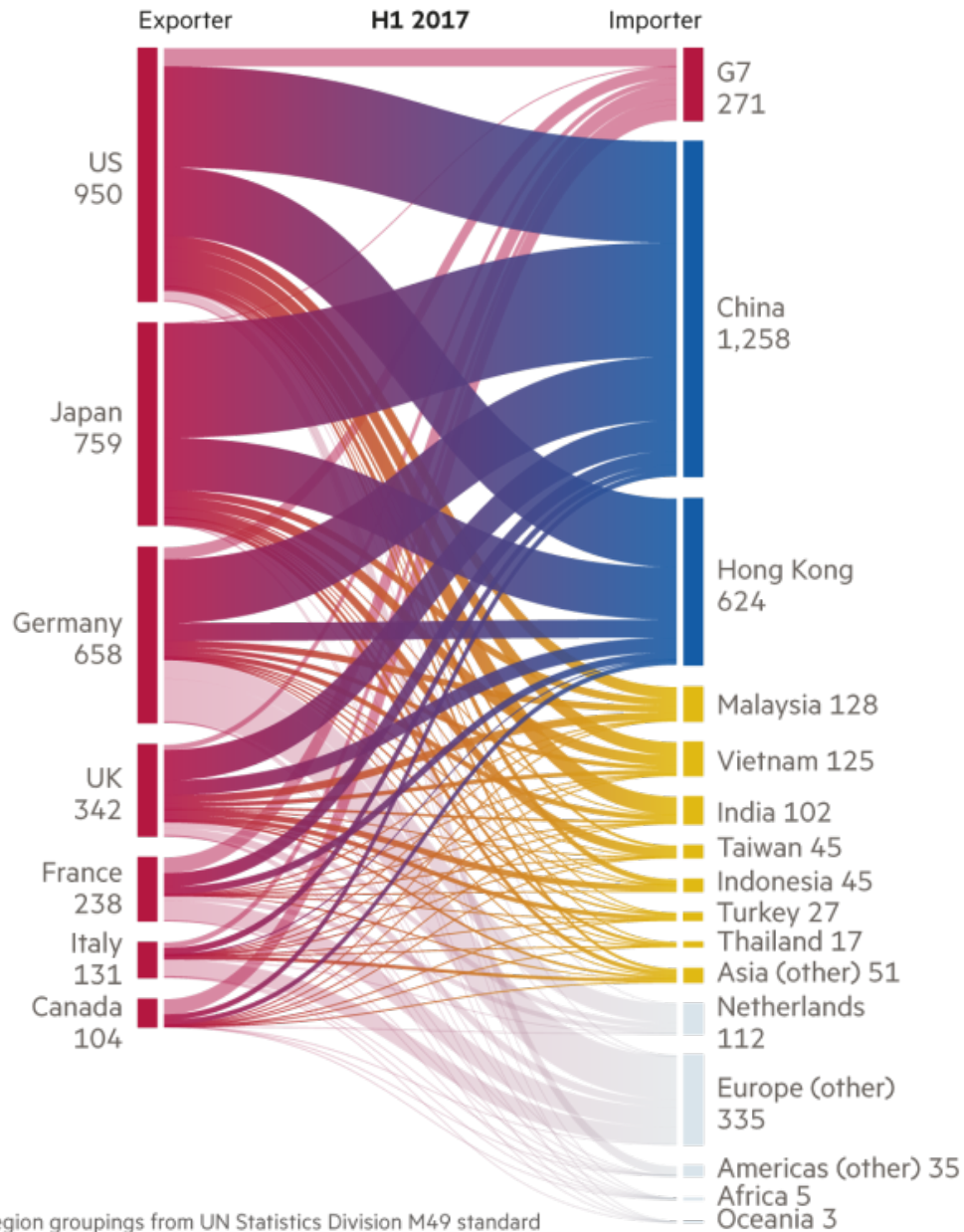
Products wrapped in plastic



Waste

# How the global river of plastic waste changed course in just 12 months


Exports of plastic waste, parings and scrap from G7 countries ('000 tonnes)



Following a Chinese crackdown on imports of plastic waste, which came into effect at the beginning of 2018, exports from the G7 fell by more than 20 per cent overall. The share of the remaining exports that went to China and Hong Kong fell below 10 per cent, with other Asian countries – particularly Malaysia – making up much of the shortfall.

Visual journalism: David Blood, Liz Faunce, Aendrew Rininsland





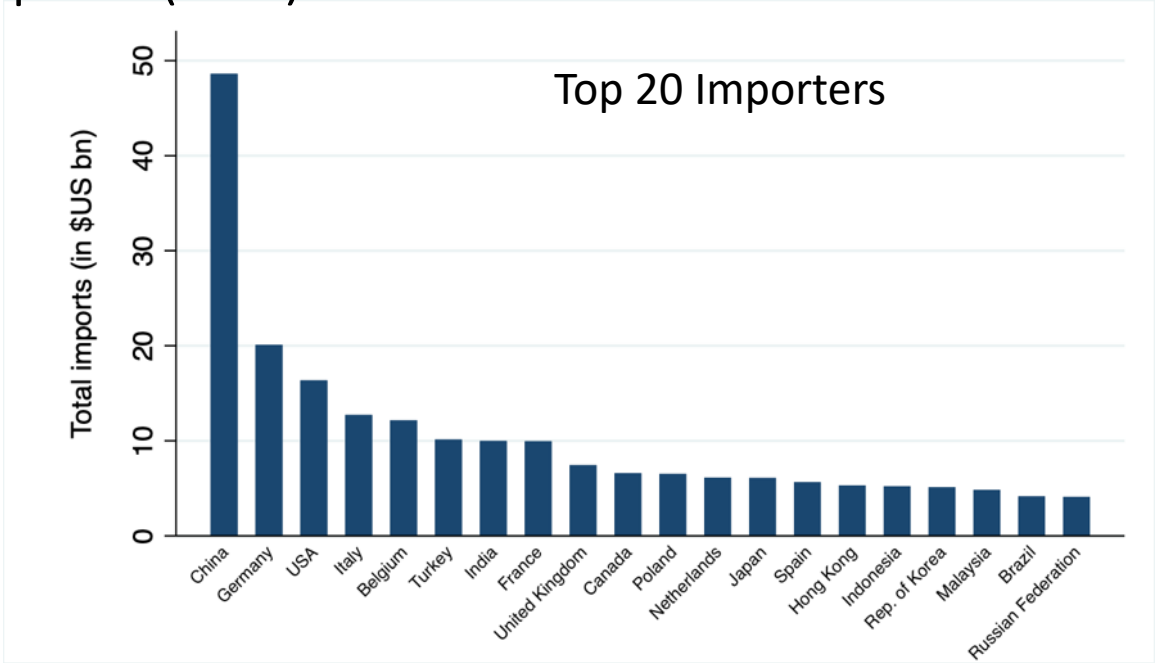
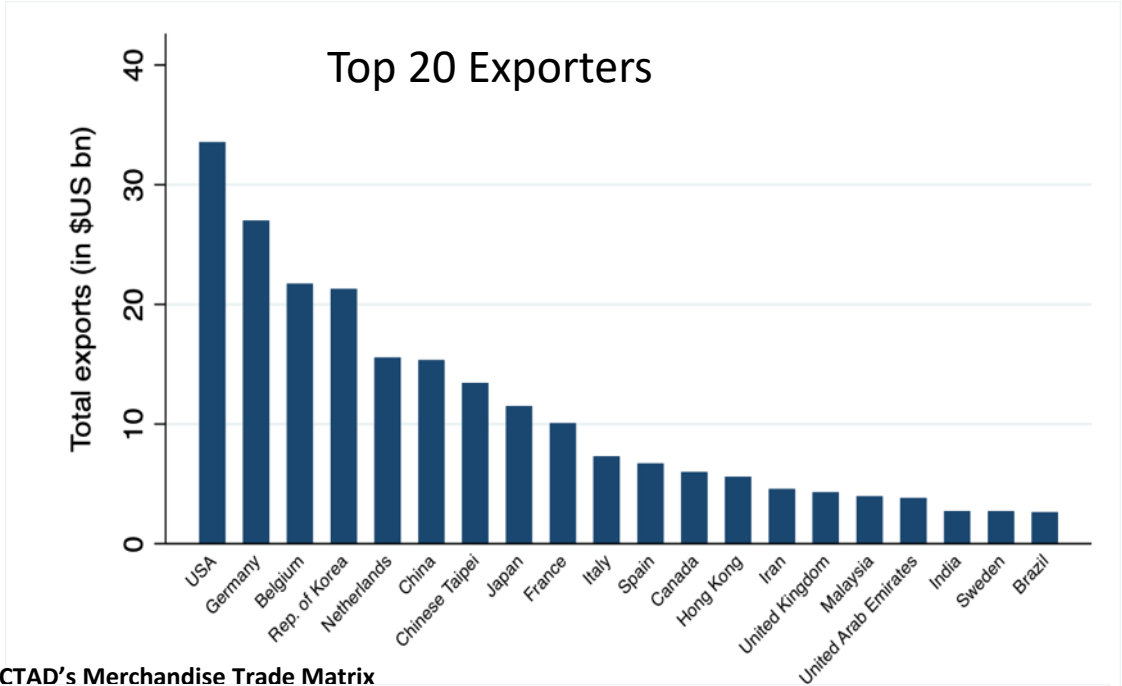
## Trade as a share of global plastic production (2015)

- Exports in primary forms of plastic = 160.08 million tons (42% of the 381 million tons produced)
- Exports in plastic packaging = 13 million tons (8.9% of the 146 million tons produced)
  - Note this figure significantly underestimates the total amount of plastic packaging that crosses borders. It reflects only those HS codes specifically related to trade in plastic packaging. It does not capture the millions of tons of plastic packaging that forms part of the many other traded products listed under other HS codes.
- Exports in synthetic textiles = 28.37 million tons (60.4% of the 47 million tons produced)

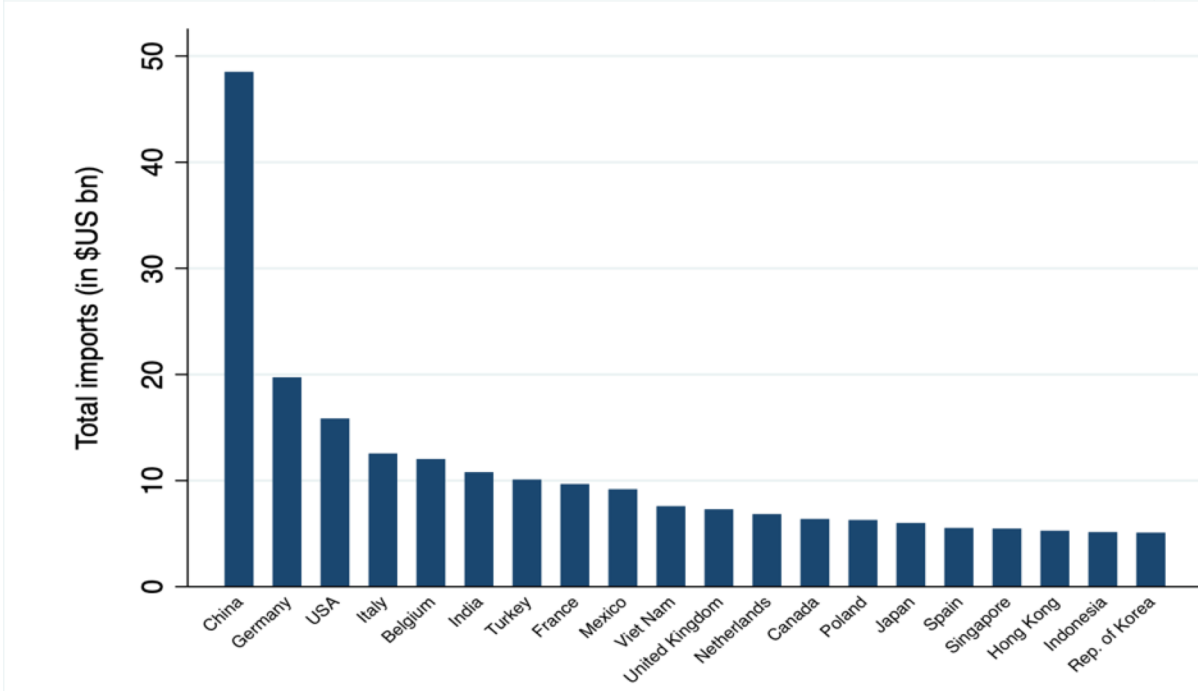
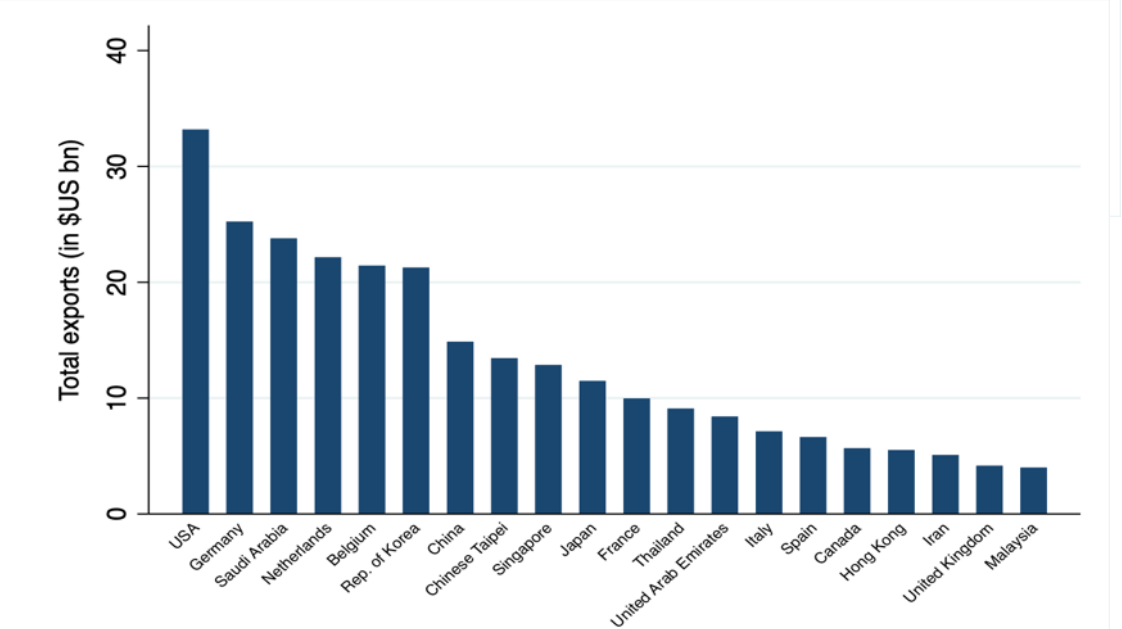
# Trade in primary forms of plastic (2017)

Source: Barrowclough, D., Christen, J., Deere Birkbeck, C., & MacFeely, S. (2019)  
"Mapping global trade flows in plastics," Research Paper, Global Governance Centre.

UN Comtrade Database

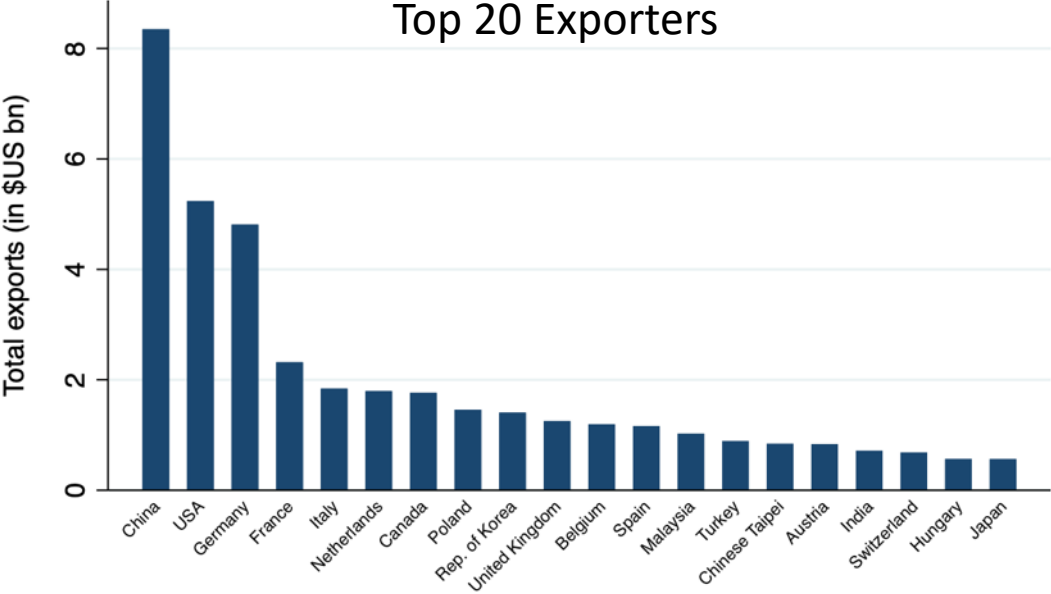


UNCTAD's Merchandise Trade Matrix

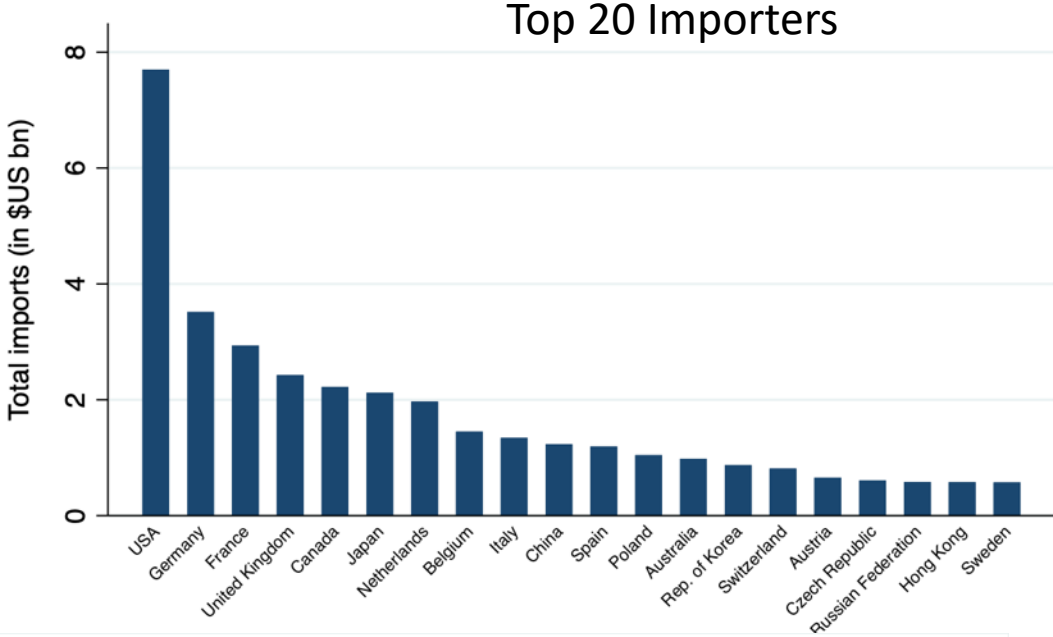


Trade in plastic packaging (2017)

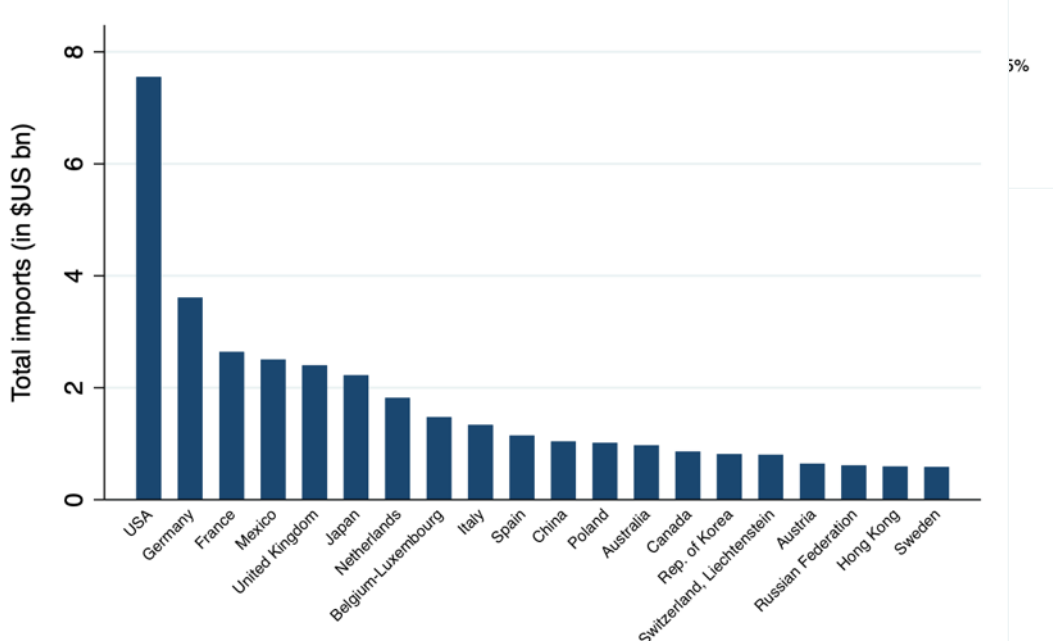
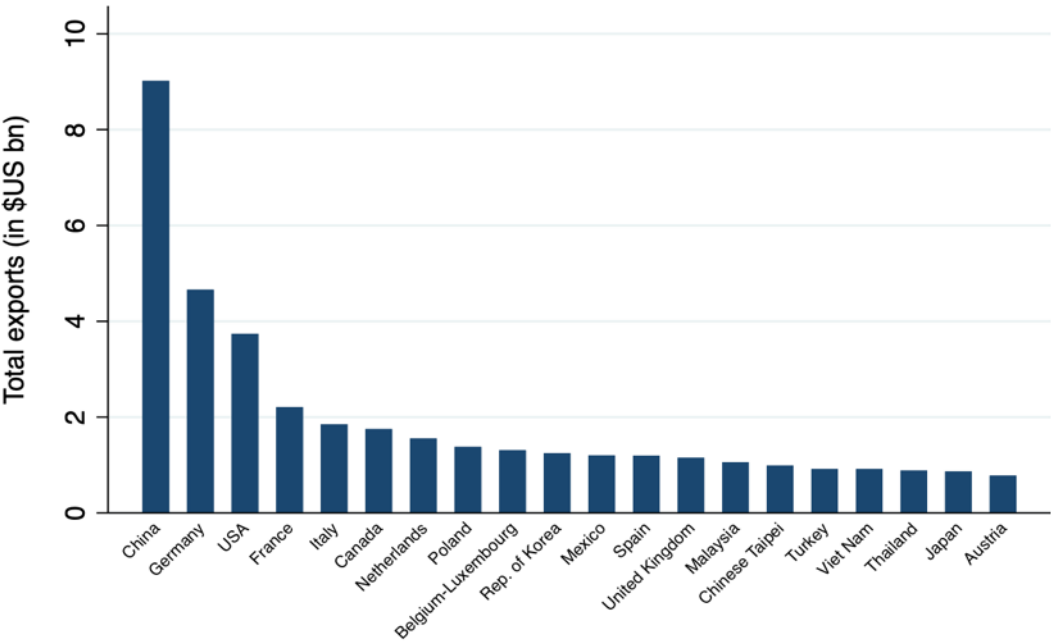
Top 20 Exporters



Top 20 Importers



UNCTAD's Merchandise Trade Matrix







## Trade Policy Dimensions 1

- Import bans on plastic waste.
- Import restrictions on certain single use plastics (e.g., 61 countries have adopted manufacturing and/or import bans on plastic bags).
- From 2009 to 2018, WTO Members notified 128 measures affecting trade in plastics for environmental reasons.
- This number has been growing: 71 of 128 notified in last 3 years.
- Most measures were notified by developing countries (68%) & LDCs (13%).
- An array of development dimensions

## Trade Policy Dimensions 2

Trade restricting or distorting interventions related to plastic (2008-2019)

Type of trade-restricting/distorting intervention	Total number
Anti-dumping	8
Anti-subsidy	2
Capital injection and equity stakes (incl. bailouts)	1
Competitive devaluation	4
Export ban	1
Export subsidy	5
Export tax	1
Financial assistance in foreign market	1
Financial grant	47
Import ban	4
Import licensing requirement	5
Import tariff	160
Interest payment subsidy	2
Internal taxation of imports	3
Local sourcing	2
Public procurement localisation	1
State loan	4
Tax-based export incentive	24
Tax or social insurance relief	3
Trade finance	10
<b>TOTAL</b>	<b>288</b>

Source: Global Trade Alert, 2019



## Trade Policy Dimensions 3.

**Additional policies  
and actions with  
trade impacts and  
trade policy  
dimensions**

### Domestic policy frameworks

- to promote a circular economy for plastic
- to spur innovation, use, and trade/technology transfer in 'greener' plastics, plastic substitutes & waste management technologies

### Domestic Measures

- taxes and fees (e.g., on plastic consumption)
- extended producer responsibility including deposit- refunds, product take-back & recycling targets
- government procurement policies to reduce plastic use
- subsidies that promote plastic production and trade

Environmental standards and labelling on plastics products and production processes

### Efforts by market-leading companies

- to reduce plastic use & footprint in their supply chains



## Existing WTO discussions on trade and plastics


Every CTE meeting since November 2016 has featured some Member State remarks or discussion on plastic pollution.

A wide range of Members have participated – making interventions or sharing experiences.

WTO Members have notified the WTO of 128 measures affecting trade in plastics for environment reasons

5 plastic-related measures have been raised as specific trade concerns (STCs) in the WTO's TBT Committee (4 of which in 2019)





Globalized  
nature of plastics  
production and  
distribution  
means there are  
limits to what  
national  
governments can  
accomplish on  
their own to  
reduce plastic  
pollution

## What is missing?

- Data and monitoring – on trends in global trade flows, production, supply chains, and trade-related measures and their relevance to efforts to reduce plastic pollution.
- Dialogue and cooperation - national approaches are being developed in an uncoordinated and disjointed manner.
- Transparency – exporters and innovative companies are at risk of increasingly complex and diverging regulatory frameworks. There is poor transparency of trade-related measures & sustainability standards.
- Policy coherence – trade policy frameworks not well aligned with domestic measures to reduce plastic pollution or with the WTO objective of sustainable development.
- Development dimensions – developing country dimensions of plastics trade and plastic pollution are widely neglected.


# Looking Ahead: What Role for the WTO?



- Reducing plastic pollution will require transformation of the global plastics economy *and* a just transition
- Trade and trade policy are central to the global plastics economy; they will have a role to play in both its transformation and in ensuring a just transition.
- Progress will require dialogue and cooperation among governments on how to align trade, trade policy & other policies/actions that have trade-dimensions with their efforts to reduce plastic pollution.



How can the WTO add value?



## 1. Strengthen coherence between domestic restrictions and trade measures on certain types of plastics


- Encourage Members with domestic prohibitions on certain types of plastics to also restrict or ban exports of those products (exports of domestically prohibited goods)
- Explore best approaches to minimize or restrict imports of certain types of plastics in support of domestic prohibitions or restrictions of these same goods.



## 2. Voluntary Actions

- Encourage adoption of non-binding targets and voluntary pledges to reduce and phase out excessive and problematic manufacture, use and trade of plastics.
- Promote transparency, certification and disclosure of environmental performance along plastic supply chains.
- Adopt national reforms on subsidies that promote unsustainable plastics production and trade (including fossil fuel feedstocks for plastics) and support international disciplines on relevant subsidies.





### 3. Promote transparency & information-sharing for effective measures on plastic pollution and a coherent policy environment


- Establish a monitoring mechanism on trade flows, trade-related measures, and supply chains in the plastics sector.
- Promote transparent, effective and WTO-consistent measures
- Use the Committee on Trade and Environment to identify, compile & discuss, national experiences and best practices, with a cross-cutting focus on developing country concerns, in regard to:
  - trade-related measures and options to reduce plastic pollution;
  - trade policy frameworks for a more circular plastics economy;
  - sustainability standards & labelling of plastics;
  - avoiding trade-induced leakage across plastic life cycle/supply chains;
  - supporting compliance with national requirements;
  - national market restrictions; subsidies reform; recycling targets, taxes and charges; extended producer responsibility schemes; supply chain transparency & accreditation; and plastic footprint disclosure
- Conduct research on the relationship between the global plastics economy, plastic pollution and trade



## 4. Improve trade-related capacity for reducing plastic pollution in developing countries

Identify technical assistance, capacity building and Aid for Trade needs in the implementation of relevant trade-related action, including:

- greater co-operation between customs and other relevant authorities;
- technical assistance/advice on effective, WTO-consistent measures to implement national policies and international commitments to reduce plastic pollution;
- help industries and exporters adjust to new policies and regulations.
- support for production and export of non-plastic alternatives & substitutes, and more environmentally sustainable plastics.



## 5. Reduce trade barriers for products and services that reduce and phase out plastic pollution

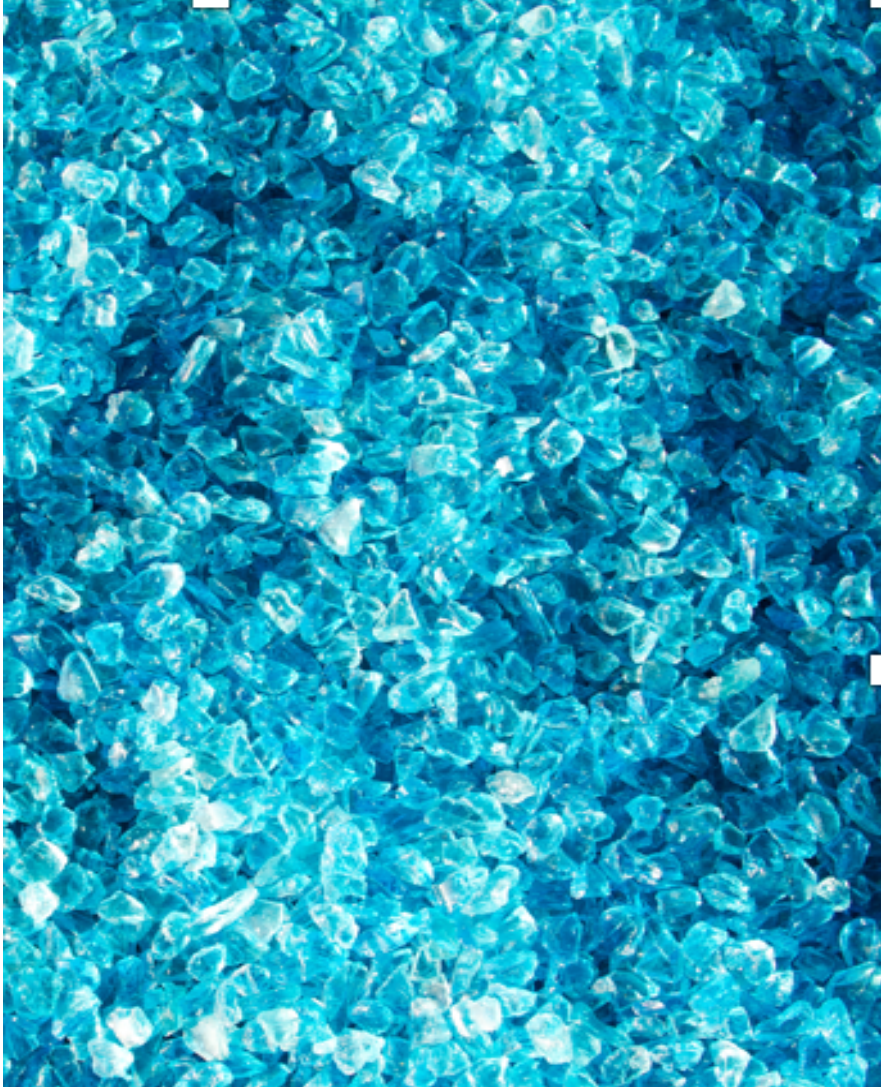
Reduce tariff and non-tariff barriers on:

- substitute products (such as non-plastic packaging);
- more environmentally-sustainable alternative plastics;
- product delivery models that reduce plastic pollution;
- goods used to enhance environmentally-sound plastic waste management

Enhance market access for related services

- With a focus on opportunities for developing countries

# A WTO Initiative on Plastic Pollution



- ✓ Support existing international efforts to reduce plastic pollution & to phase out excessive/problematic plastic production & consumption;
  - ✓ Complement intergovernmental cooperation underway in UN Environment processes, Basel Convention, UN SDGs, and any future global agreement on marine litter, microplastics and plastic pollution;
  - ✓ Promote coherence with the WTO's objective of sustainable development; and
  - ✓ Promote a coherent trade policy framework
- 

*by working together at the WTO to:*

- increase transparency, data and monitoring of plastic trade flows, supply chains & trade-related measures relevant to reducing plastic pollution;
- improve understanding of the role of trade & trade policy in the global plastics economy – both upstream (plastic production & consumption) and downstream (e.g., management & recycling of plastic waste) – and their development dimensions;
- promote information-sharing & dialogue on trade-related policies, measures, innovations & best practices relevant to reducing plastic pollution;
- encourage coherence between domestic & trade policies to reduce plastic pollution;
- encourage voluntary trade-related targets & pledges to reduce trade, production and use of excessive and problematic plastics;
- use capacity-building to support trade-related efforts by developing countries that help reduce plastic pollution, including through production/export of non-plastic substitutes/alternatives
- reduce trade barriers and promote technology transfer for goods & services that reduce plastic pollution; and
- cooperate with other international organisations working on plastic pollution.





Carolyn Deere Birkbeck

[carolyn.deere@graduateinstitute.ch](mailto:carolyn.deere@graduateinstitute.ch)  
[@politicsplastics](#) [@carolyndeere](#)

For background on the Graduate Institute's collaborative research project on Transforming the Global Plastics Economy, supported by the Swiss Network of International Studies (SNIS), see [www.plasticpolitics.solutions](http://www.plasticpolitics.solutions).