

# Making Waves -- Plastic Production and Trade in Latin America and the Caribbean: The shift towards a Circular Economy |



SELA/UNCTAD Virtual event

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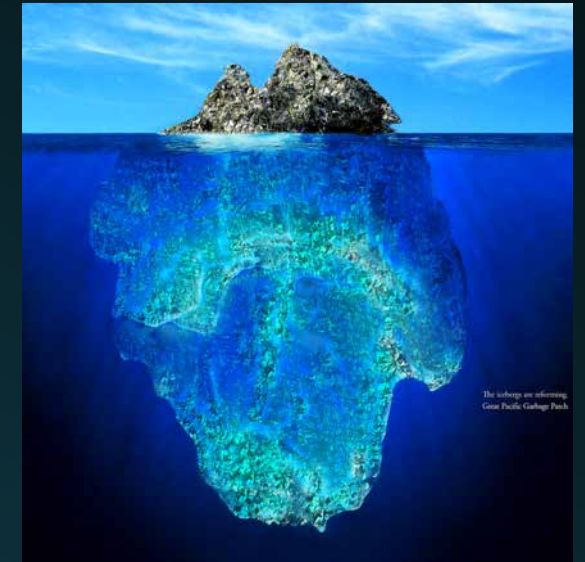
David Vivas Eugui, Legal Officer

Diana Barrowclough, Senior Economist  
UNCTAD



# Impacts of Plastics on the Oceans and LAC (Layer 1)

- 'Downstream' plastics pollution to the ocean: About 8 MT of plastic end up in the world's oceans every year (about 3 % of annual plastic production).
- About six huge patches of plastic waste & other forms of garbage on the ocean
- Unseen problem: Sea bottom plastic accumulation
- If current trends continue, our oceans could contain more plastic than fish by 2050
- A key concern in fisheries & aquaculture is the ingestion of microplastics by fish and its impact on the fauna & human food safety.
- Negative impacts on oceans economic sectors such as fisheries, aquaculture, and tourism. All key for LAC and particularly SIDS.
- MORE than oceans – CO2 emissions, toxic chemicals and health, ground pollution, water ways, waste and rubbish disposal
- However, plastic use is forecast to INCREASE. It is cheap, and about to get cheaper; useful (including in Covid PPE) and ubiquitous.





# Beyond Oceans – Wider Impacts are multi-faceted

(Layer 2 and 3)

- Layer 2: An array of challenges across plastics life-cycle from production to disposal.
- Economic effects -- Trade revenues (LAC exports worth \$27 bn in global market of \$1 trillion); role in diversification and value-added; employment...
- Fiscal costs - Current account and BOP effects..
- Chemical pollution, carbon footprint, health impacts... Especially in developing countries
  
- Layer 3 = Economic opportunities from a change to a more circular path
- The prevalence of plastics suggests market potential for new products and processes that are as useful as plastic and without the negatives
- Green funds and green finance are seeking investment opportunities – how can LAC States and the plastics substitutes industry benefit?
- Assuming a green transition is coming – how can we help it be just and sustainable?
  
- Source: Barrowclough and Birkbeck (2020), Barrowclough and Vivas (2021)



# Plastics Exports (2018) – virtually every country is touched

(\$US billions and Million Metric Tons). **PRELIMINARY DATA**

	Global exports	Latin America	Caribbean
Intermediate forms of plastic	\$158 bn (38.5 MMT)	\$4.2 bn (1.2 MMT)	\$34 m (0.01 MMT)
Intermediate manufactured plastic goods	\$82.6 bn (18.3 MMT)	\$0.9 bn (0.21 MMT)	\$4 m (0.001 MMT)
Final manufactured plastic products	\$416 bn (74 MMT)	\$13.8 bn (2.5 MMT)	\$360 m (0.04 MMT)
Plastic textiles	\$209 bn (38 MMT)	\$3.7 bn (0.5 MMT)	\$177 m (0.01 MMT)
Plastic packaging	\$53 bn (14 MMT)	\$2.4 bn (0.7 MMT)	\$17 m (0.004 MMT)
<b>Total plastics exports</b>	<b>\$1,008 bn</b> <b>(336 MMT)</b>	<b>\$26.8 bn</b> <b>(9.7 MMT)</b>	<b>\$509 m</b> <b>(0.1 MMT)</b>

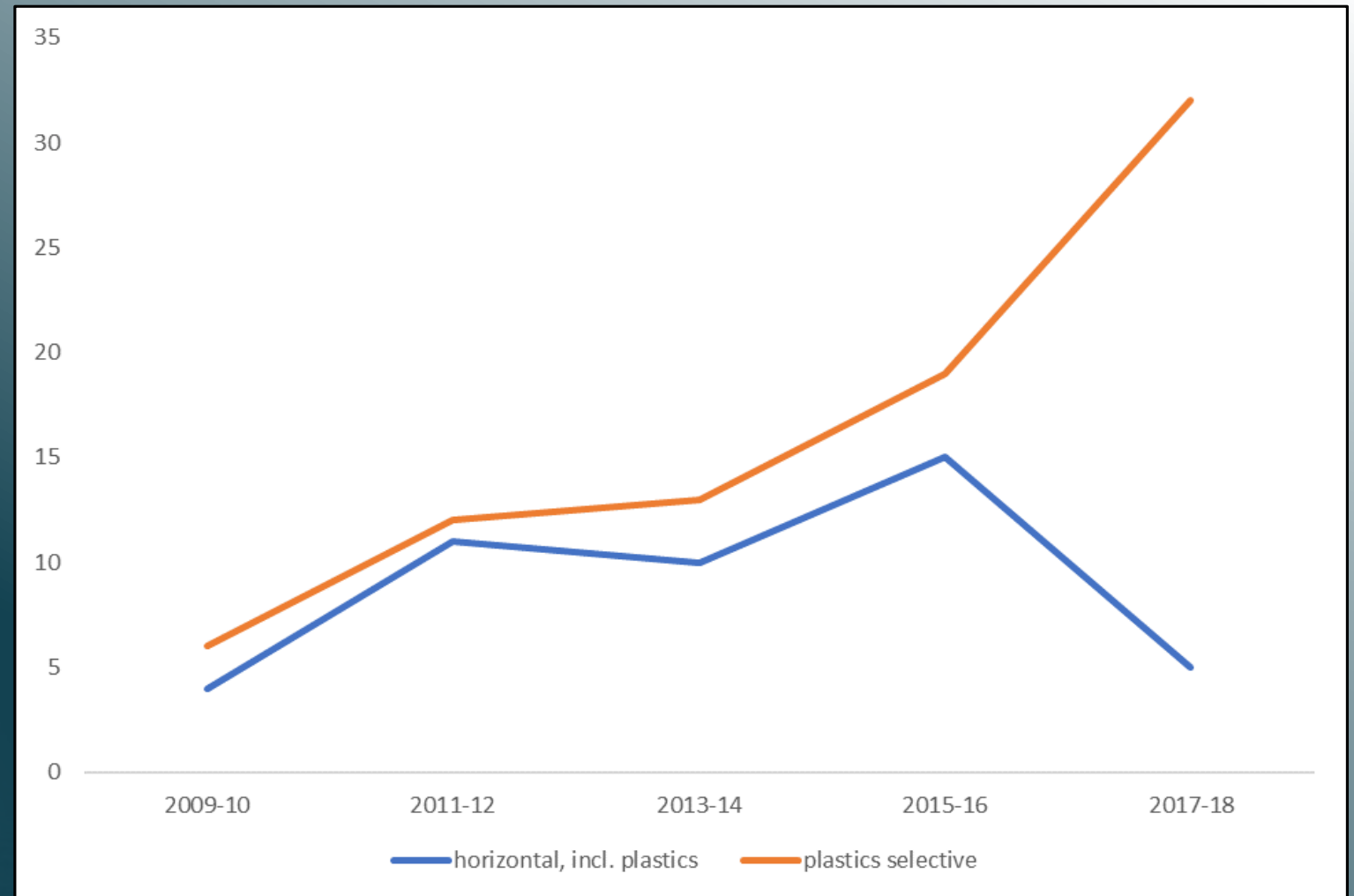
Source: Barrowclough, D and Vivas Eugui, D. (2021), "Making Waves -- Plastic Production and Trade in LATIN America and the Caribbean - the shift Towards a Circular Economy". Preliminary data from UNCTAD plastics lifecycle trade database (prototype) as of December 2020. Final database to be released in 2021 and provided free for users. Note: Total volume is the sum of all individual transactions, i.e., the volume of plastics traded, not necessarily the volume created.



## Trends in plastic trade-related measures notified to the WTO (2009-18)

83% of all trade-related WTO notified measures related to plastics to the WTO originate from developing countries, including SIDS & LDCs

Number of notified measures, plastic-selective vs. horizontal incl. plastics



Source: UNCTAD analysis on data from the WTO Environmental Database (2020).

# Illustrative list of trade policy & regulatory responses in Latin America & the Caribbean (2015-2020)

Country (year)	Scope and key features of the measures taken	Notified to the WTO
Antigua & Barbuda (2016-18)	<b>Ban</b> on the import, distribution, sale, and use of plastic bags as well as the use of Styrofoam. <b>Regulation</b> seeks to promote the use of biodegradable and reusable materials	
Barbados (2019)	<b>Ban</b> on single-use plastic and plastic bags made with a petroleum-based resin. Exceptions for bags for garbage, medical use, preservation of food and a few other uses.	X
Belize (2020)	<b>Regulation</b> on single-use plastics such as plastic bags and straws and Styrofoam plates, bowls, cups, cutlery and boxes.	X
Chile (2018)	<b>Ban</b> for the delivery of single use plastic bags Regulations on the collection and recovery targets for wastes and recycling including plastics	Partially
Colombia (2017)	<b>Tax</b> for the use of plastic bags in companies that uses plastic bags for transporting or saving products	
Dominican Republic (2012)	<b>Standard</b> for the plastics industry: recycling	X
Ecuador (2013)	<b>Draft standards</b> for testing plastic bags, disposal of plastic products	X
Guyana (2016)	<b>Ban</b> on the importation and use of Styrofoam items.	
Panama (2009)	<b>Tax concessions in export processing zones</b> for recycling of materials including plastics	X
Paraguay (2016, 17-18)	<b>Import licenses and standards</b> for plastic bags and biodegradable bags	Partially
Peru (2017-18)	<b>Ban</b> on production, use, delivery, and distribution of single use plastics by 2021. <b>Taxes</b> on bags and minimum content requirement on recycled materials.	

## Illustrative list of potential top plastic substitutes

Product	Origin	Main uses	Properties	Health impact	Environmental impact
Glass	Sand based	Food and pharmaceutical products containers, and construction material	Solid, fragile, flexible, insulating, microwavable, heavy but tradable	Very good insulating material and non-toxic <sup>1</sup>	It does not contain chemicals or carbon (only minerals), reusable, very slow degradation by erosion, and recyclable. High emissions generated.
Pottery and ceramics	Mineral and water based	Tableware, container and ornamental uses	Solid, fragile, flexible, supports heat, heavy but tradable	Non-toxic material	Reusable, very slow degradation by erosion and recyclable
Natural fibres	Plant- based (e.g. jute, cotton, coconut, palm)	Textiles, packaging, ropes, clothes, furniture, etc	Strong, flexible, light, and fully tradable	Non-toxic. Production can allow carbon stocks	Reusable, biodegradable and recyclable.
Paper and carboard	Cellulose based	Bags, boxes, packaging, decoration, inputs industrial products	Flexible, light, and fully tradable	Non-toxic	Reusable, biodegradable and recyclable. Increase in use may generate pressure on timber extraction, unless from managed or certified forests or from recycling. High emissions generated.
Organic wastes	Bagasse, rice & corn husks, other organic wastes	Cups, cutlery, dishes, construction components and inputs for composite materials	Flexible and light, and tradable.	Non-toxic with some insulation properties	Biodegradable



# Top Producers, Exporters and Importers of JACKS Fibres (Plastics substitutes)

(Based on most recent reporting year)

Fibre Type	Production (thousand tonnes)	Exports (thousand tonnes)	Imports (thousand tonnes)
Raw Jute, Kenaf and Allied Fibres	India 1656 (2016-17)	Banglades- 219.7(2016-17)	Pakistan 78.3 (2017)
Sisal fibres	Brazil 69.4 (2017)	Tanzania 25.5 (2017)	Europe 14.3 (2017)
Abaca	Philippines 71.9 (2017)	Philippines 18.2 (2017)	Europe (EU-28) 17.7 (2017)
Coir (coconut fiber)	India 473.3 (2017) [Data does not include coir pith]	India 930 (2017) [Data also includes coir pith]	China 662.9 (2017)



# Latin America and Caribbean economy, trade & waste management responses

## Potential trade responses

- Reduce plastic use & increase use of environmentally preferable plastic substitutes
- Undertake a detailed mapping of non-tariff measures (NTMs) beyond WTO T&E database - use UNCTAD Trains database
- Reduce tariffs and address NTMs for plastics substitutes & alternatives @WTO
- Promote environmental services liberalization & minimum regulatory harmonization, including for solid waste management @WTO
- Promote *ex ante* coherence and mutual supportiveness between a future marine litter treaty @UN & @WTO agreements
- Incorporate plastic related challenges & opportunities in Oceans & circular economy strategies

## Potential Waste Management responses

- Increase understanding on how to deal with different types of plastics wastes and associated risks
- Increase coordination of national & municipal authorities - create economies of scale & scope for interested businesses
- Develop rivers, gulfs & estuaries pollution control, filtration and clean up strategies (main source of marine pollution)
- Regulate the recycling & second use waste sectors
- Increase technical assistance and capacity building for avoiding marine pollution and to enhance waste & plastic management

Promoting <i>sustainable transformation</i>	Ensuring a <i>just transition</i> to support process of transformation
Policies, rules and regulations to require and enforce shift toward more sustainable production (including taxes, charges and extended producer responsibility);	Capacity building and support for research, technical assistance and A4T support for developing countries to invested/active in GVCs involving plastics
Trade policies to support national efforts to reduce unsustainable production and consumption	Technology transfer and capacity build for developing countries to adapt production for greater sustainability; trade in waste management services and technologies; production of substitutes
Correct pricing to internalise real environmental impacts and strong environmental legislation (including possible regional approaches);	Clear sun-set periods for removal of existing incentives for unsustainable production or single use plastics;
Incentives for producers to adapt existing process and products to a more circular economy;	Incomes policies to support temporarily displaced workers;
Removal of existing subsidies or incentives no longer appropriate;	R&D, education and skills policies for re-training in use of new processes and products;
Support for development banks and financial institutions to finance transformative leaps toward sustainability by governments, firms and investors;	Social services for permanently displaced workers and transitional support for removal of subsidies;
Sustainability standards for products and production methods; certification of environmental standards	Information exchange, monitoring & assessment (e.g., on trade flows & related plastic pollution measures)
Procurement policies at national and regional level.	Cooperation with other international processes

Source: Derived from Barrowclough and Deere Birkbeck (2020); UNCTAD TDR 2019, 2016.





## Riding the new wave – finance and industrial policy act together.

- **Basic minimum** – national goals are supported through coherent and integrated trade, financial, industrial and macroeconomic policies.
- **Finance for transformation** -- Multilateral BW banks; Regional development banks; national public and development banks.
- What if we do nothing.... More than fear of “Climate Minsky Meltdowns” – transformation is not just about risk transfer.
- **Green industrial competitiveness** – build on existing advantages and/ or create new ones.
- History lessons – seized opportunities, bold strategies, missed opportunities, some challenges ahead.
- Sources: TDR 2019, 2017; Barrowclough and Vivas 2021.

Make use of opportunities to introduce a sustainable trade & development of plastics substitutes into the multilateral trade and financial system...



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