UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

IV SELA Virtual Seminar on Circular Economy

Trade, plastics and substitutes

Opportunities for Latin America and the Caribbean to move beyond plastic packaging

Comercio, plásticos y sustitutos terrestres y marinos: oportunidades para América Latina y el Caribe dejando atrás el plástico

27 October 2026 | Online



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Three messages

Trade policy can help the region replace plastic packaging with materials it already produces

1

Packaging is now a trade issue

Rules on plastic packaging increasingly shape market access for the region's agrifood exports, from national bans to the EU packaging regulation (2026)

Negotiations on UN ILB treaty on plastic pollution may created a demand for alternative materials and prevention and mitigation services

2

Materials are abundant but processing is limited

The region exported $40.6 billion of non-plastic substitutes in 2024, 85% of it as raw materials. Its imports of processed substitutes were more than twice its exports.

3

Regional rules can help firms grow

Shared definitions, standards, labels and tariff treatment would let packaging firms sell across the region instead of facing different rules in each market.

Source: UNCTADstat (2026), Trade in non-plastic substitutes; Regulation (EU) 2025/40.

Packaging is now a trade issue

Agrifood exporters must meet packaging rules at home and in destination markets

18%

of world agrifood exports come from Latin America and the Caribbean, the main net food-exporting region

42%

of the region's agricultural and fisheries production is exported

National rules are tightening too. Chile (Law 21.368), Colombia (Law 2232) and Peru (Law 30884) restrict single-use plastics, and at least 12 Caribbean countries have banned some single-use plastic items.

Key dates under the EU packaging and waste regulation

12 Aug 2026	The Regulation applies. Limits on PFAS ("forever chemicals", perfluoroalquiladas y polifluoroalquiladas en Espanol) in food-contact packaging.
Feb-Aug 2028	Fruit and vegetable stickers must be industrially compostable. Harmonized material labels on packaging (August).
1 Jan 2030	All packaging placed on the EU market must be recyclable or include a recyclable content (progressively) by 2030. Single-use plastic packaging restricted for fresh fruit and vegetables under 1.5 kg, with exemptions.
1 Jan 2038	Only packaging in the two highest recyclability grades (80% or more) can be sold.

Sources: IDB (2024), Latin America's role in global food security; Regulation (EU) 2025/40 and AGRINFO (2025); national legislation via UNEP LEAP; Government of Saint Kitts and Nevis (2021).

Packaging in key agrifood chains

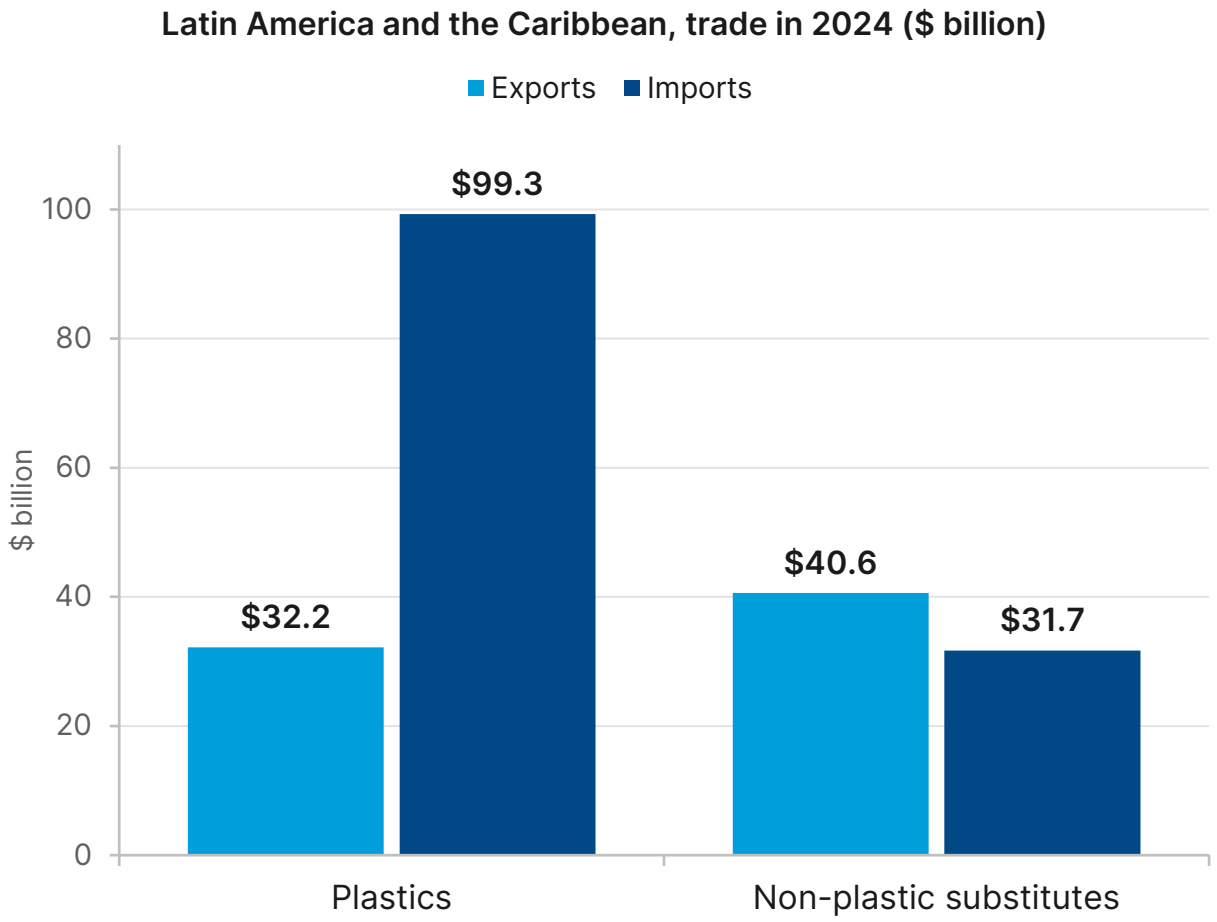
Six flows where plastic packaging is common and alternatives already exist

Value chain	Leading suppliers in the region	Common plastic packaging	Non-plastic options in use
Bananas and pineapples	Ecuador, Costa Rica, Colombia, Guatemala	Polyethylene bunch covers, bags and liners	Paper and fibre covers, corrugated board, banana-fibre paper
Berries, grapes and cherries	Peru, Chile, Mexico	PET clamshells, punnets and liners	Moulded pulp and board boxes, paper liners
Avocados, mangoes and citrus	Mexico, Peru, Brazil	Nets, trays and fruit stickers	Board trays, cellulose nets, compostable stickers
Coffee and cocoa	Brazil, Colombia, Central America, Peru, Ecuador	Hermetic plastic liners, polypropylene sacks	Jute, sisal and fique sacks
Fish and shrimp	Ecuador, Chile, Peru	Expanded polystyrene boxes, films	Insulated fibre boxes, coated board
Retail and food service	All countries	PET bottles, multilayer pouches, foam containers	Glass, aluminium, bagasse and moulded pulp, coated paper

Source: UNCTAD illustrative compilation. PET: polyethylene terephthalate.

Trade in plastics and substitutes

In 2024 plastics imports were three times exports, while substitutes had a trade surplus



$99 billion

of plastics imported in 2024, about 29 million tonnes

$40.6 billion

of non-plastic substitutes exported in 2024, up from $16.8 billion in 2005

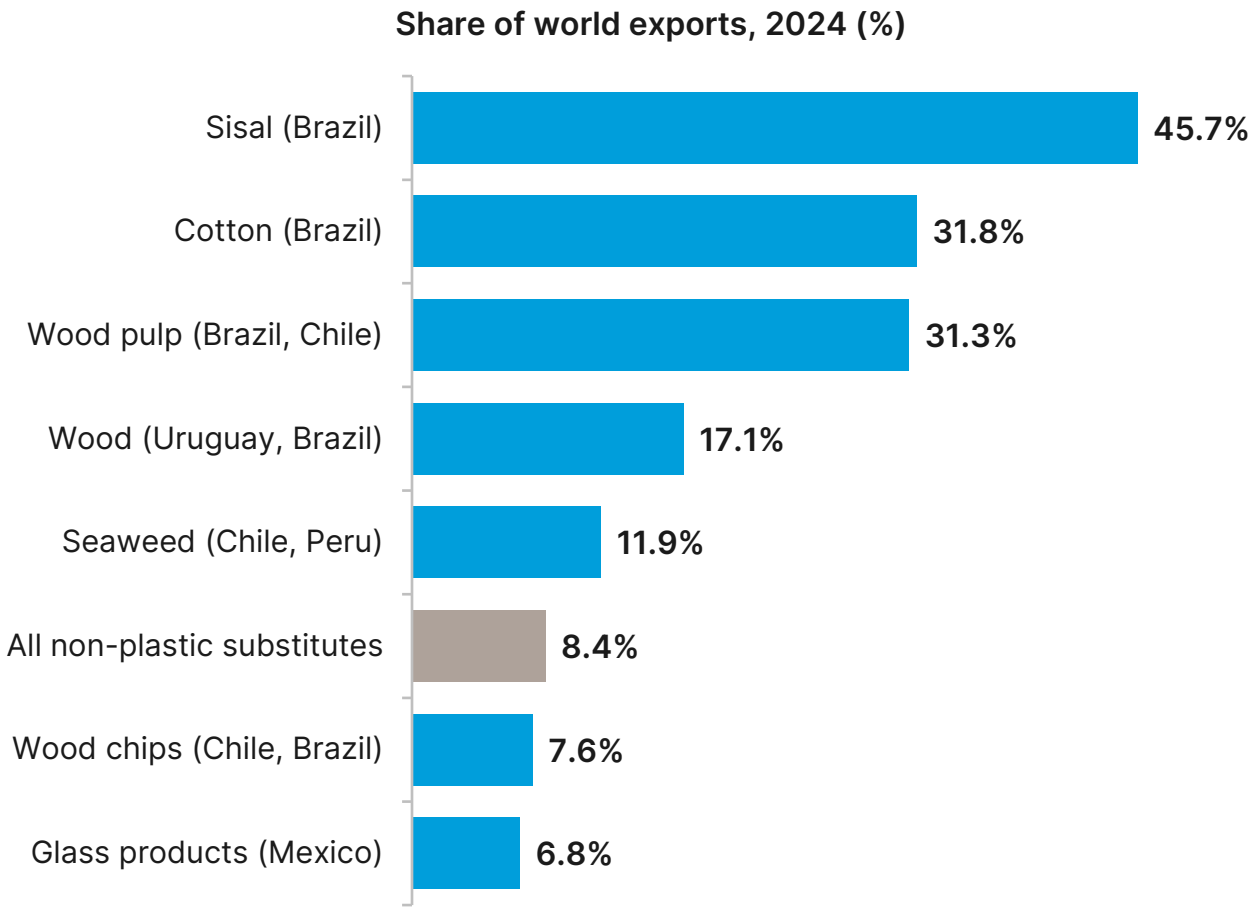
8.4%

of world exports of substitutes, up from 5.9% in 2005

Source: UNCTADstat (2026), Plastics trade by partner and Trade in non-plastic substitutes, annual (analytical). No 2024 data for Cuba, Haiti and the Bolivarian Republic of Venezuela.

What the region has in abundance

Latin America and the Caribbean supplies a large share of world trade in several substitutes



Residues that trade data do not yet capture

Sugarcane bagasse
Brazil is the largest sugarcane producer. Bagasse feeds moulded pulp trays and tableware.

Banana and pineapple residues
Pseudostems and leaves from the region's plantations can yield fibre for paper and nets.

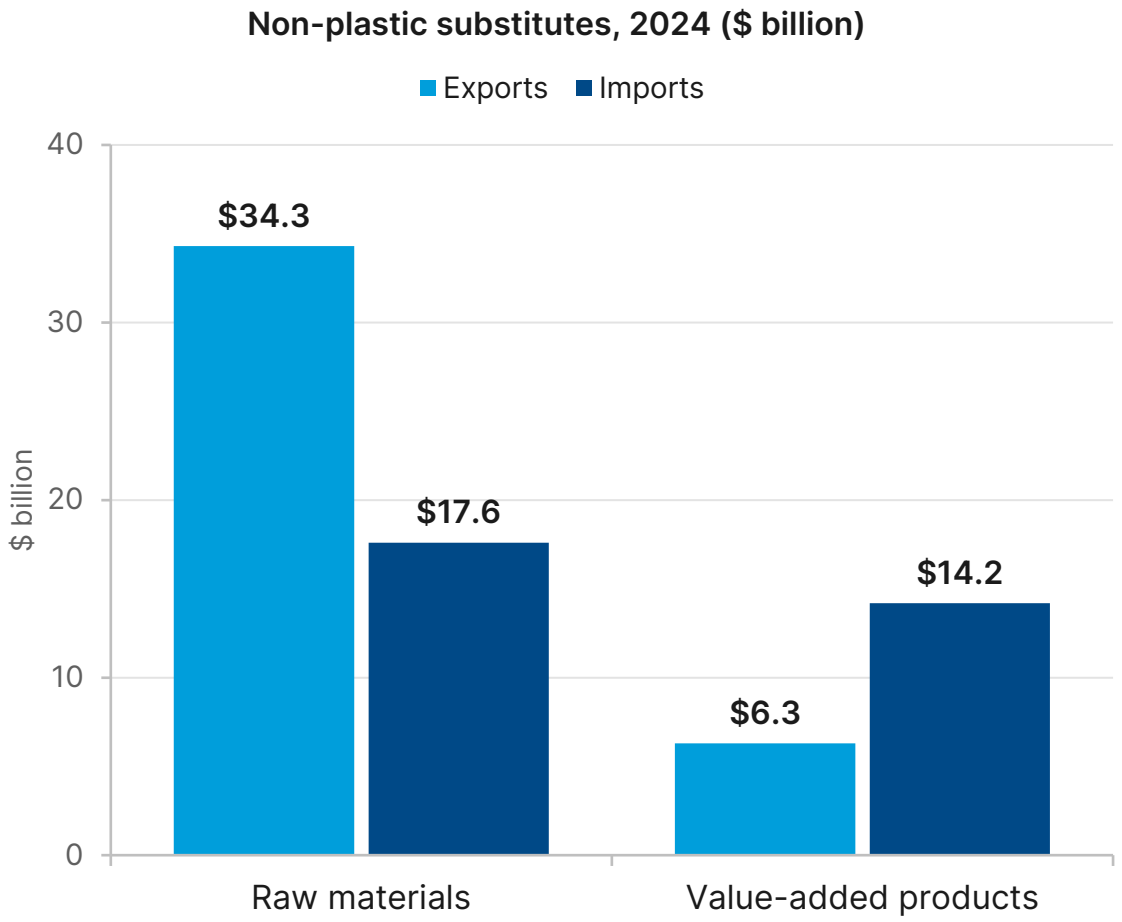
Coffee husks and cocoa shells
Fillers for bio-based composites and moulded packaging.

Fique, sisal and other hard fibres
Established sack and twine makers in Colombia and Brazil.

Sources: UNCTADstat (2026), Trade in non-plastic substitutes (main regional exporters in brackets); FAOSTAT.

The value-addition gap

The region exports mainly raw materials and is a net importer of processed substitutes



$14.1 billion

of wood pulp exported, 31% of the world total, mainly from Brazil and Chile

$6.5 billion

of paper and paperboard imported, against $2.6 billion exported

35% vs 7%

of value-added and of raw substitute exports, respectively, went to buyers in the region

Processed substitutes rely on regional buyers five times as much as raw materials.

Source: UNCTADstat (2026), Trade in non-plastic substitutes. Paper and paperboard combines the UNCTAD categories "Paper" and "Paper products" (plant/tree-based).

Seaweed as a packaging feedstock

Fast-growing biomass that needs no arable land, fresh water or fertilizer

Films and bioplastics

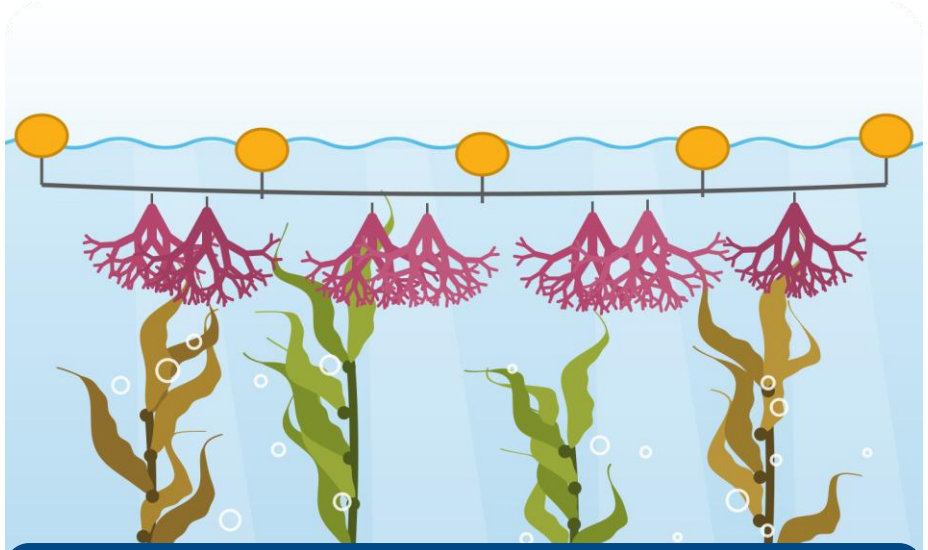
Alginate, carrageenan and agar can be used in the production of biodegradable films and edible wraps. Seaweed can be a feedstock for bioplastics such as polyhydroxyalkanoates (PHA) and polylactic acid (PLA).

Coatings and additives for paper

Seaweed-based coatings can replace plastic linings and PFAS treatments on paper and board, keeping the package fibre-based and easier to recycle or compost.

A growing trade

Production tripled to 36.3 million tonnes in 2002-2022, and exports of seaweed and its products reached $3.9 billion. Chile and Peru supply 12% of world exports of raw seaweed ($155 million in 2024).



UN Global Seaweed Initiative (UNGSI)

Membership grew from 3 to 11 States in its first year. Belize, Brazil, Chile and the Bolivarian Republic of Venezuela are members, and Brazil joined at COP30 in Belém. The UNGSI Plan to Accelerate Solutions, presented at COP30 and updated for COP31, aims to double seaweed farming output by 2030.

Sources: UNCTAD (2026), Seaweed for development; UNGSI (2026), Plan to Accelerate Solutions on algae aquaculture; COP30 (2025); UNCTADstat (2026); Packaging Europe (2023) on seaweed-coated board.

Ghana: fresh produce and plastics

FRESHPPACT brought exporters, retailers and researchers together to test alternatives on farms

The Fresh Produce Impact Hub (FRESHPPACT, 2022-2026) was funded through the UK-UNCTAD Sustainable Manufacturing and Environmental Pollution (SMEP) Programme and led by the University of Northampton with Blue Skies, HPW Fresh and Dry, Primafruit and Waitrose & Partners.

1 Define the challenge
Over 150 stakeholders, three challenge funds

2 Test with researchers
On-farm trials with exporters

3 Fund and scale
Grants of up to £33,000, then follow-on support

Results so far



Coir mulch (mantas de coco)
Coconut coir matched plastic mulch for durability in pineapple trials, with comparable plant growth.



Seaweed packaging
Kelpi developed seaweed-based packaging prototypes for fresh produce, with a cost model and production plan.



Policy blueprint
"Moving Ghana beyond plastics" supports government work on collection and alternatives.

Relevance for the region: many fruit exporters in Central America and the Caribbean supply the same European retailers.

Source: SMEP Programme (2025), FRESHPPACT: The Fresh Produce Impact Hub.

East Africa: residues into fibres

UNCTAD supports a regional forum on turning crop residues into fibres and other materials

Mananasi Fibre
Kenya, pineapple leaves

Leaves left after harvest on a Del Monte plantation become fibre. Over 1,500 tonnes of waste diverted, 22 tonnes of fibre, 158 tonnes of compost and 85 jobs.

Banatex-EA
Uganda, banana pseudostems

Works with 80 farms. Seven stems give about 1 kg of raw fibre for textiles, paper and other uses.

East Africa Alternative Fibres Forum

Nairobi, October 2025
First regional dialogue of producers, buyers, financiers and policymakers.

Kampala, 30-31 October 2026
Second symposium, towards a coordinated African platform on standards, certification and investment.

What the work shows

- Processing must sit close to farms. Banana stems need processing within about four days.
- Novel fibres need their own standards and customs codes, separate from food rules.
- Scaling depends on a reliable feedstock supply and buyer confidence.

Relevance for the region: the banana and pineapple belts of Ecuador, Colombia, Costa Rica and Guatemala produce the same residues.

Sources: UNCTAD and SMEP (2025), From waste to value: upcycling agricultural residues for sustainable textiles; UNCTAD meeting pages (2025, 2026).

Standards and consumer labels

Buyers and regulators need to know what a package is made of and where it ends up

Biodegradability and compostability

UNCTAD and ECOS workshop with ISO for East and West Africa, Nairobi, 2024

- **Compostable is not the same as biodegradable**. Compostable plastics do not break down well in the open environment.
- Use industrially compostable packaging (ISO 17088) only where separate collection and composting exist. Apply ISO 23517 to mulch films that biodegrade in soil.
- Exclude oxo-degradable plastics, which fragment into microplastics.
- Shared regional standards support mutual recognition and trade. The work informed the East African Community Single-Use Plastics Bill.

Consumer labels

UNCTAD review of label requirements, 2025

19% of recycling and sustainability labels on plastic packaging give consumers good-quality information

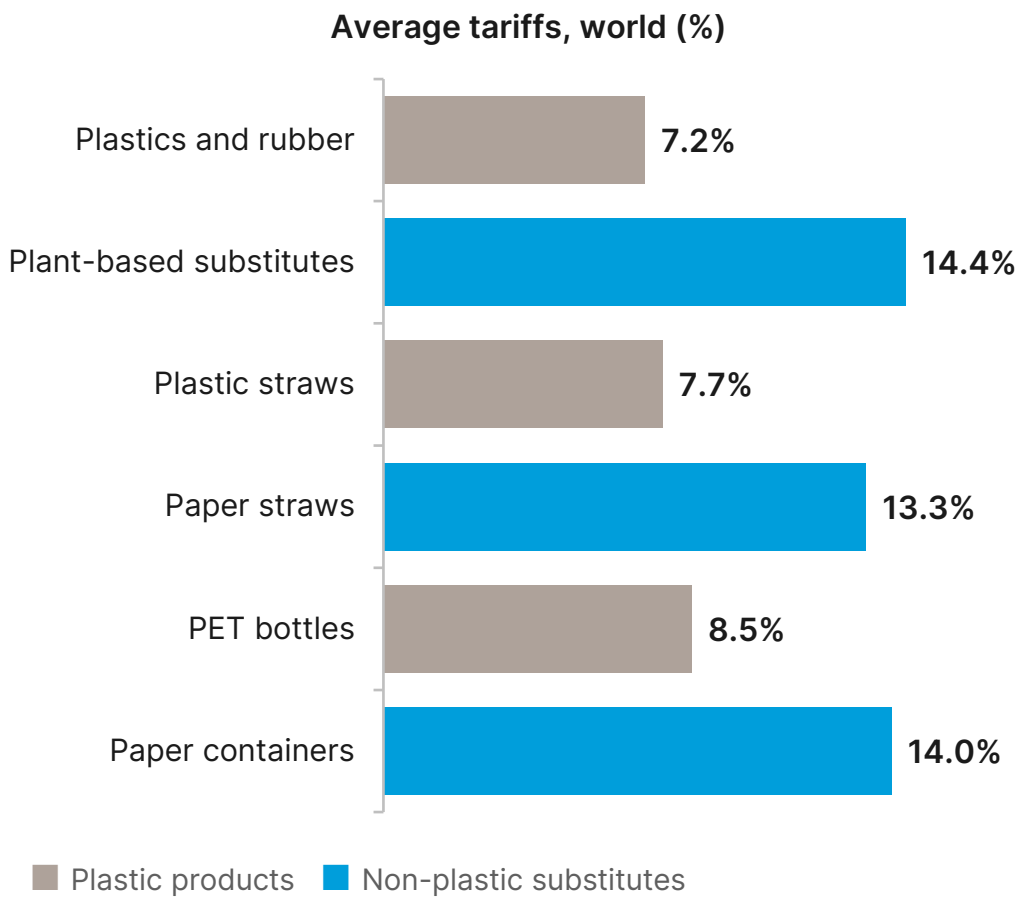
- Plain words and icons, tested with consumers before and after launch.
- Disposal instructions that match local collection and composting.
- Start as a voluntary label with government support, then phase in requirements.

In the region: Colombia pairs a voluntary plastics label with producer responsibility and bag rules. Mexico works through a national Plastics Pact. A mandatory consumer label in Brazil is still under development, and Chile's food labels show the value of testing designs with consumers.

Sources: SMEP and Environmental Coalition on Standards (ECOS) (2025), Regional policies and standards on biodegradation and compostability; UNCTAD (2025), UNCTAD/TCS/DITC/INF/2025/7.

Trade barriers facing substitutes

Tariffs, classification gaps and diverging rules raise the cost of switching from plastic



Missing customs codes

Many alternative fibres and bio-based materials fall under "other" tariff lines. They are hard to track or to target with tariff cuts, and may even be treated as waste.

Diverging technical rules

Compostability definitions, food-contact approvals and labels differ by country. Notified measures on substitutes grew by 13% a year in 2009-2021.

Repeated testing and certification

Firms often have to test and certify the same product again for each market.

A thin regional market

Only 11% of the region's substitute exports went to other countries in the region in 2024, down from 16% in 2015.

Sources: UNCTAD (2025), Global Trade Update: Mobilising trade to curb plastic pollution (UNCTAD/DITC/INF/2025/6); UNCTAD and SMEP (2025); UNCTADstat (2026).

A regional packaging agenda

Six steps SELA member States could take together

The region already leads: Chile's Julio Cordano chairs the plastics treaty negotiations, and Barbados and Ecuador are among the co-coordinators of the WTO Dialogue on Plastics Pollution.

1 Common definitions

Agree on what bio-based, biodegradable and compostable mean, based on ISO 17088 and ISO 23517, through the Pan American Standards Commission (COPANT) and subregional bodies.

2 Mutual recognition

Accept each other's test results and certificates, so that one test serves many markets.

3 Tariff lines and preferences

Create subheadings for substitutes in national and regional nomenclatures (NALADISA, NANDINA, MERCOSUR) and lower their tariffs in regional agreements.

4 One regional label

A simple label on material and disposal, consistent with the new EU labels, so that exporters do not need two systems.

5 Local processing

Invest in fibre extraction, pulping and seaweed processing close to the feedstock, backed by development finance and public procurement.

6 Shared data

Track plastics and substitutes trade with UNCTADstat and notify trade measures transparently.

How UNCTAD can help: trade data, analysis, standards dialogue and technical cooperation, including through the proposed UNCTAD-UNEP Sustainable Materials Trade Programme.

Thank you | Gracias

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UNCTAD data and publications

UNCTADstat: trade in plastics and in non-plastic substitutes
unctadstat.unctad.org

Global Trade Update: Mobilising trade to curb plastic pollution (2025)
unctad.org

Seaweed for development: Trade, regulations and standards for inclusive growth (2026) unctad.org

UN Global Seaweed Initiative unctad.org/topic/trade-and-environment

A review of parameters and requirements for an effective consumer label on plastics and plastics alternatives (2025) unctad.org

Regional policies and standards on biodegradation and compostability (SMEP and ECOS, 2025) smepprogramme.org

From waste to value: upcycling agricultural residues for sustainable textiles (2025) smepprogramme.org

FRESHPPACT and the East Africa Alternative Fibres Forum
smepprogramme.org

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