OECD-UNCTAD workshop within the framework of WTO-DPP

Rethinking the need for single-use plastics: standards for sustainable plastic alternatives and non-plastic substitutes

-Version of 16 November-

Background and objective

Driven by rapid economic and population growth, global plastics use has increased 230-fold between 1950 and 2019 (from 2 million tonnes to 460 Mt) and is expected to further triple by 2060, exacerbating environmental degradation.[1] As 40-60% of all plastic packaging is single-use and quickly discarded,[2] its growth will also continue contributing to plastic leakage and pollution with significant negative environmental and human health impacts, including e.g. disruption of ecosystems and a wide range of species.[3]

Addressing the impacts of single-use plastics throughout their lifecycle requires a comprehensive approach that manages plastics use and demand, considers designs for more circular economies, enhances recycling and sound waste management, and closes pathways for leakage into the environment. A specific lever to address the impacts of single-use plastics is the replacement of conventional fossil-based plastics by plastic alternatives[4] and non-plastic substitutes[5]. However, given the variety of alternatives and substitutes[6], their environmental impacts can vary significantly depending on the materials used, process and production methods employed during production and end of life management, and standards and regulatory requirements in place. This has prompted discussions around the need to avoid regrettable substitution and unintended environmental impacts, such as increased emissions from transport due to heavier product or packaging weights, or adverse biodiversity and land use impacts related to wastewater and chemical discharges, as well as additives and chemicals of concern that may be used to enhance both conventional plastics and non-plastic substitutes and alternatives.[7]

Several international frameworks are exploring how trade can better support the transition to a circular economy of the plastics sector. For example, the WTO's Dialogue on Plastic Pollution and Environmentally Sustainable Plastics Trade (DPP) is advancing discussions on enhancing trade

[1] OECD (2022), *Global Plastics Outlook: Policy Scenarios to 2060*, OECD Publishing, Paris, https://doi.org/10.1787/aa1edf33-en.

[2] Barone, A. et al. (2025), "Rethinking single-use plastics: Innovations, polices, consumer awareness and market shaping biodegradable solutions in the packaging industry", *Trends in Food Science & Technology*, Vol. 158, p. 104906, https://doi.org/10.1016/j.tifs.2025.104906.

[3] IPBES (2019), "Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services", https://zenodo.org/records/6417333.

[4] Plastic alternatives refer to bio-based plastics not made with conventional fossil- based polymers but composed or derived, entirely or partially, from renewable products from plant, animal and microbial biomass. Plastic alternatives also include biodegradable fossil-based plastics.

[5] Substitutes are non-plastic materials that can replace synthetic fossil-based polymers and bio-based plastics. They include for example natural fibres like bamboo and seaweed or mineral products like aluminium and glass. See UNCTAD (2023) for working definitions.

[6] See indicative mapping of non-plastic substitutes by UNCTAD in the HS system: https://unctadstat.unctad.org/datacentre/dataviewer/US.NonPlasticSubstsTradeByPartner

[7] Watkins, E. et al. (2019), "Policy approaches to incentivise sustainable plastic design", *OECD Environment Working Papers*, No. 149, OECD Publishing, Paris, https://doi.org/10.1787/233ac351-en.

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cooperation on environmentally sound, safe and effective plastic alternatives and non-plastic substitutes, with a specific focus on the role of standards.[8]

This event will comprise a technical workshop in the morning, followed by a policy-focused workshop in the afternoon. It will bring together governments, international organisations, academia, private sector and civil society for discussions that aim to enhance the understanding of the role of trade and trade-related policy for plastic alternatives and non-plastic substitutes that replace fossil-based single-use plastics without increasing environmental pressures.

Panel A of the technical workshop will set the scene by drawing on recent trade data and exploring insights relating to barriers to the wider uptake and dissemination of sustainable plastic alternatives and non-plastic substitutes, and incentives that could support their use.

Panel B of the technical workshop will examine how to distinguish sustainable progress from potential regrettable substitution risks across the product lifecycle, including contribution to and effects on climate change, pollution, chemical safety, biodiversity loss, and human health.

Finally, the **policy roundtable** in the policy workshop discusses how standards and regulatory measures applicable to plastic alternatives and substitutes can be used and improved.

Organisers

This OECD-UNCTAD workshop is organised within the framework of the WTO-DPP.

Donors

The OECD contribution to the workshop has been co-funded by the European Union.

Date and Location

The workshop will take place at the WTO on 26 November 2026, back-to-back with the DPP pre-plenary meeting on 27 November.

Format and participants

The workshop will bring together experts and stakeholders in the field of trade and plastics, including from academia, civil society, governments, international organisations, and the private sector. The workshop will be in hybrid format.

[8] WTO (2026), *Technical outcomes attached to the ministerial statement*, https://www.wto.org/english/tratop_e/ppesp_e/dpp_mc14_technical_outcome_documents.pdf.

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TENTATIVE AGENDA

Workshop on 26 November 2026

Technical workshop:

9:30	*REGISTRATION*
10:00 (15 mins)	**Opening remarks:** DPP Coordinators, UNCTAD, OECD (5mins each) • DPP Coordinators: TBC • UNCTAD: David Vivas Eugui • OECD: Rob Dellink
10:15 (1 hr)	**Panel A: Key insights and trade data for understanding plastic alternatives and non-plastic substitutes replacing single-use plastics** **Suggested key questions:** • To which extent does existing data capture trade in plastics, plastic alternatives, and non-plastic substitutes, and what are the main data gaps? • What are the main technical, trade, economic, and financing barriers to scaling up sustainable plastic alternatives and non-plastic substitutes, and which incentives (e.g., investment, finance) could help overcome them? • Which tradable product categories are critical for plastic substitution to lower plastic pollution and leakage, how can we ensure additives and chemicals of concern are responsibly governed in plastic alternatives and substitutes, and what role could marine-based alternatives and substitutes play? **Suggested moderator:** David Vivas Engui (UNCTAD) **Suggested panellists:** • Mr. Michael Shaver (University of Manchester) • Ms. Sonia Blachier or Petra Kynclova (UNCTAD Stats) • Ms. Luciana Pellegrino, President, World Packaging Organization (WPO) • Mr. Adi Reza Nugroho, CEO, MYCL (mycelium-based material producer), Indonesia **Discussion with delegates/participants**
11:15	*COFFEE BREAK*
11:45 (1 hr)	**Panel B: Distinguishing genuine progress from regrettable substitution** **Suggested key questions:** • What are the key environmental and human health risks and impacts associated with plastic alternatives and non-plastic substitutes across their lifecycle? How do these compare to each other and to those of fossil-based plastics? • How can the environmental performance of alternatives and substitutes be improved through standards and other measures? • Can trade in environmental services be key to reducing risks and impacts related to potentially regrettable substitution? **Suggested moderator:** Manuela Kiehl (OECD) **Suggested panellists:** • Government representative (Thailand) - TBC • Sophie Huysveld (University of Ghent)

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	• Axel Marx (KU Leuven) • Henrique Pacini (UNCTAD) **Discussion with delegates/participants**
12:45	*LUNCH BREAK*

Policy workshop:

14:30 (1.5 hrs)	**Policy roundtable: Using trade-related policy to promote sustainable progress on plastic alternatives and non-plastic substitutes** **Key questions:** • How can standards and regulatory measures for plastic alternatives and non-plastic substitutes (including their chemical additives) be developed, used and improved? • How can international co-operation, regional initiatives and private-public partnerships help reduce fragmentation in standards on plastic alternatives and non-plastic substitutes and reduce unnecessary trade barriers? • How can economies and regional communities use trade-related policies to support the adoption and scaling of sustainable plastic alternatives and non-plastic substitutes, as part of a broader policy package to address plastic pollution? **Suggested moderator:** Vicky Blackman (DPP coordinator; Barbados) **Suggested panellists:** • Simon Ardila / Kerry Allbeury (TESS) • Angeles Jimenez Redondo (EU, DG ENV) • Government representative (Mauritius) - TBC • Private sector representative (ICC) - TBC • Ieva Baršauskaitė (IISD) • Ebenezer Laryea (Aston University, West African Plastics Alternative Initiative - WAPAI) **Discussion with delegates/participants**
16:00 (15 mins)	**Closing remarks:** OECD, UNCTAD, DPP Coordinators (5mins each) • OECD: Rob Dellink • UNCTAD: Henrique Pacini • DPP Coordinators: TBC
16:15	*END OF WORKSHOP*

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