



Plastic Waste and How it is connected to Climate Crisis

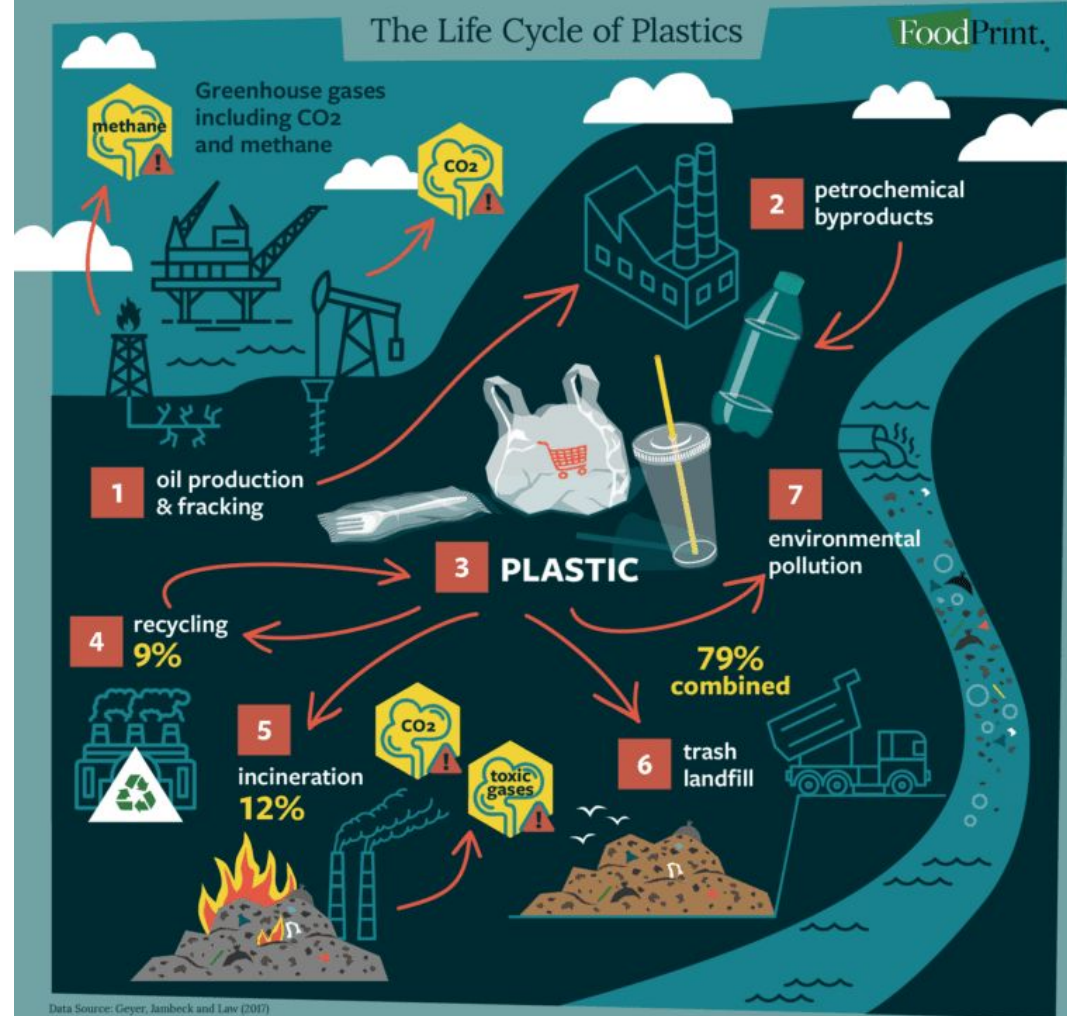
Chalani/ FoE Sri Lanka & Luna/ FoE Korea



Line up

1. How plastics affect climate change
2. The current situation of plastic issues especially in the APAC region and connection to Climate Change
3. Global Plastics Treaty: what was done at INC4, what we are demanding and expectation for INC5

How plastics affect climate change



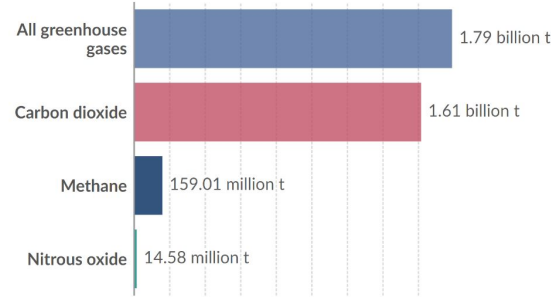
Source:
<https://foodprint.org/blog/plastic-and-climate-change/>

How plastics affect climate change

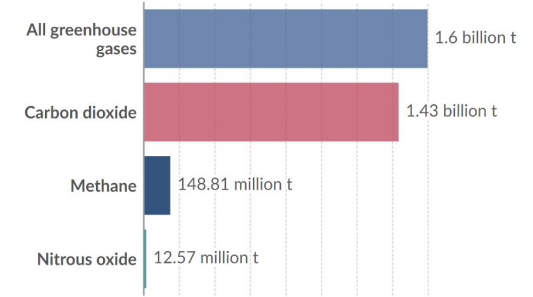
Greenhouse gas emissions from plastics, 2019

Emissions are measured in tonnes of carbon dioxide-equivalents¹.

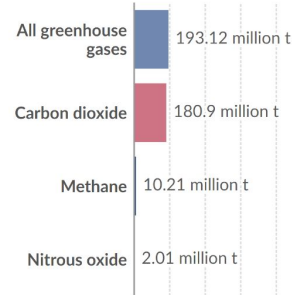
All lifecycle stages



Production and conversion



End-of-life



Data source: OECD (2022)

OurWorldInData.org/plastic-pollution | CC BY

[How much of global greenhouse gas emissions come from plastics? - Our World in Data](#)

[The impacts of plastics' life cycle - ScienceDirect](#)

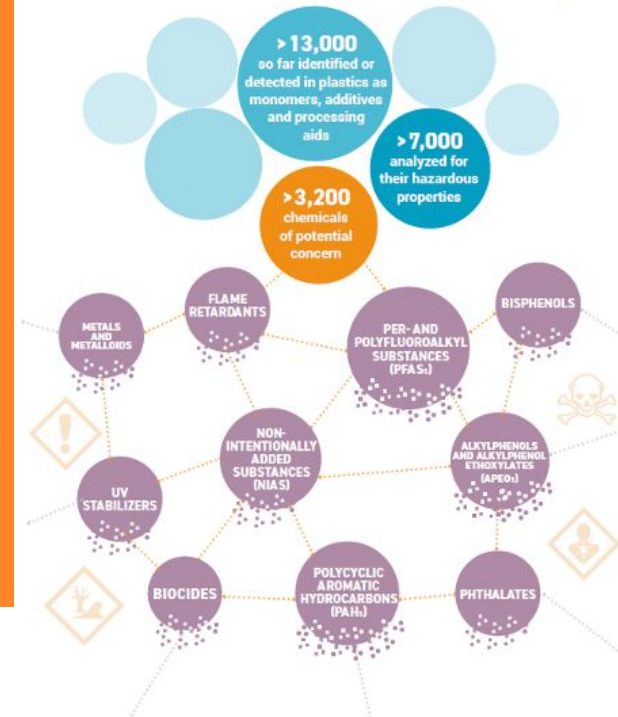
1. Carbon dioxide equivalents (CO₂eq): Carbon dioxide is the most important greenhouse gas, but not the only one. To capture all greenhouse gas emissions, researchers express them in "carbon dioxide equivalents" (CO₂eq). This takes all greenhouse gases into account, not just CO₂. To express all greenhouse gases in carbon dioxide equivalents (CO₂eq), each one is weighted by its global warming potential (GWP) value. GWP measures the amount of warming a gas creates compared to CO₂. CO₂ is given a GWP value of one. If a gas had a GWP of 10 then one kilogram of that gas would generate ten times the warming effect as one kilogram of CO₂. Carbon dioxide equivalents are calculated for each gas by multiplying the mass of emissions of a specific greenhouse gas by its GWP factor. This warming can be stated over different timescales. To calculate CO₂eq over 100 years, we'd multiply each gas by its GWP over a 100-year timescale (GWP100). Total greenhouse gas emissions – measured in CO₂eq – are then calculated by summing each gas' CO₂eq value.

Other problems of plastics - Human health and society

- Ingestion, inhalation, and dermal exposure, to chemicals of concern near production and disposal facilities
- Observed in drinking water (bottled and tap), beer, sea salt, seafood, honey
- Observed in the placenta, lung tissue, and blood
- Chemical toxicity via exposure to additives in plastics
- Physical particle toxicity and accumulation
- Economic losses from littered beaches
- Correlation with irritable bowel syndrome (IBS)
- Psychological impacts from littered beaches

[The impacts of plastics' life cycle - ScienceDirect.](#)

CHEMICALS OF CONCERN IN YOUR PLASTICS



Other problems of plastics - on the Biodiversity

- Entanglement
- Limited mobility
- Strangulation
- Death
- Ingestion and inhalation
- Toxicity
- Decreased reproductive health
- Habitat displacement
- Transport invasive species, viruses and pathogens



Source: [The impacts of plastics' life cycle - ScienceDirect](#).

Other problems of plastics - on the Environment

- Contamination
- Air (e.g., indoor dust, sea spray, etc.)
- Water (e.g., surface water, groundwater, sea ice, glaciers, oceans)
- Soil (e.g., agricultural lands, landfills)
- Impact to plant growth/agriculture from plastics in soils
- Chemical release and transformation
- Polymer-associated chemicals
- Adsorb environmental contaminants
- Climate
- Extraction of fossil fuels for plastic production
- Carbon cycling impeded by microplastics

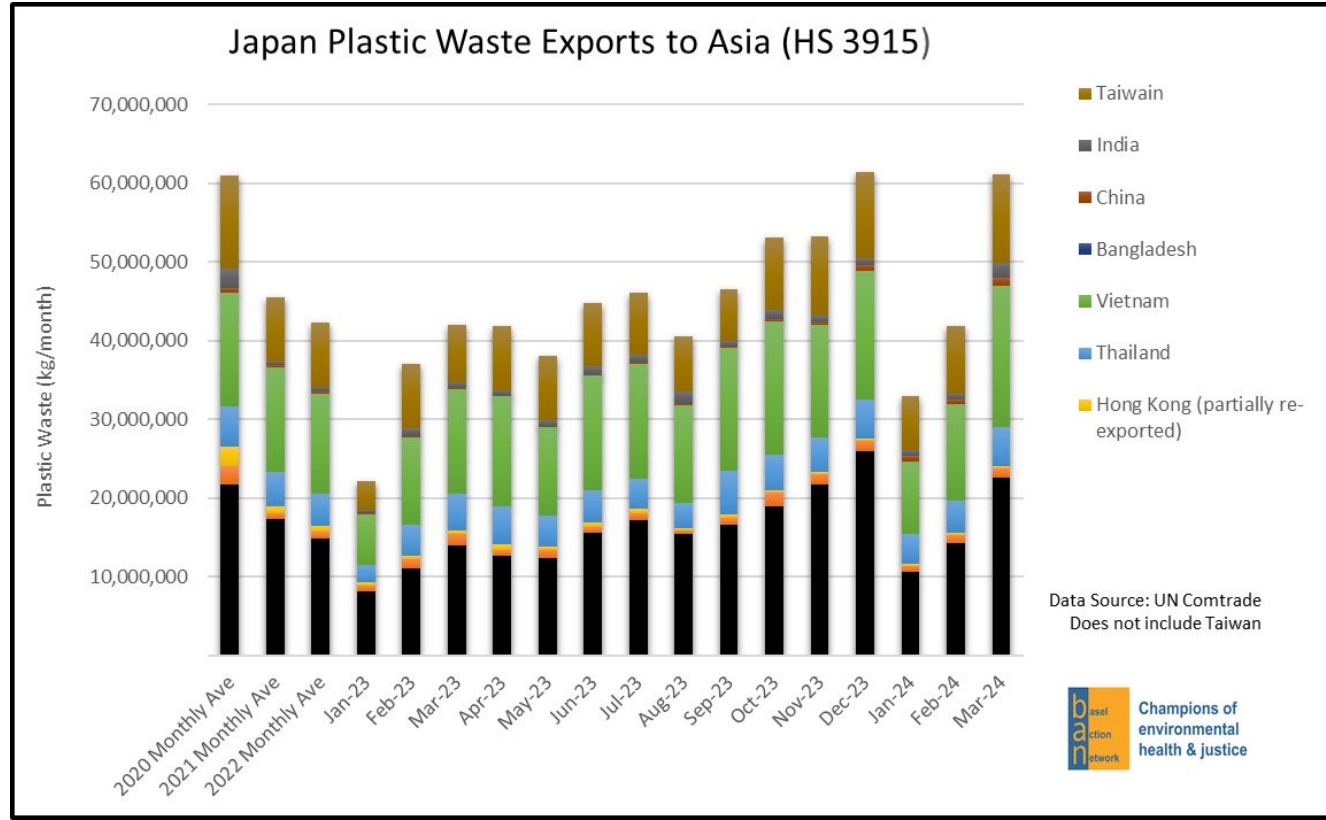


The current situation of plastic issues especially in the APAC region and connection to Climate Change

- Waste colonialism - APAC is a victim of plastic waste trade despite having inadequate waste management/disposal facilities, leading to pollution as well as human rights violations
<https://breakfreepdev.wpengine.com/wp-content/uploads/2022/09/Plastic-Waste-Trade-Briefing-Paper.pdf>

[Japan Export](#)

[Data — Basel Action Network](#)



The current situation of plastic issues especially in the APAC region and connection to Climate Change

Issue	Palestine	Sri Lanka	India	Bangladesh	Indonesia	Malaysia	Philippines	Japan	South Korea	PNG	Australia
1. Waste colonialism	X	X	X		X	X	X	X		X	X
2. Chemical pollution through consumer plastics	X	X	X	X		X	X	X	X	X	X
3. Emissions in production			X	X				X	X		
4. Emissions in disposal		X	X	X	X	X	X	X	X	X	X
5. Inadequate national laws		X	X	X		X				X	X
6. Neglecting equitable, just transition of waste pickers		X	X	X			X				
7. False solutions		X	X		X	X	X	X			

GPT: what was done at INC4, what we are demanding and expectation for INC5

[GPT, Global Plastic Treaty]

- UNEA-5.2
 - International legally binding instrument on plastic pollution, including in the marine environment
 - The approach considering the full life cycle of plastic
- The resolution (5/14) :
https://wedocs.unep.org/bitstream/handle/20.500.11822/39812/OEWG_PP_1_INF_1_UNEA%20resolution.pdf
- INC, Intergovernmental Negotiating Committee
 - INC-1; Punta del Este, Uruguay from 28 November to 2 December 2022
 - INC-2; Paris, France from 29 May to 2 June 2023
 - INC-3; Nairobi, Kenya from 13 to 19 November 2023
 - INC-4; Ottawa, Canada from 23 to 29 April 2024
 - INC-5; Busan, Republic of Korea, from 25 November to 1 December 2024

GPT: what was done at INC4, what we are demanding and expectation for INC5

[INC-4]

- Discussion section
 - Objects, scops, regulations and means of implementation
 - Compilation of draft text

https://wedocs.unep.org/bitstream/handle/20.500.11822/45a858/Compilation_Text.pdf
- Key issues
 - Primary plastic polymers and chemicals of concern
 - Reduce global production of primary plastic polymers VS Oppose
 - Set the global target (Top-down) VS Nationally determined measures (Bottom-up)
 - Eliminate and restrict the use of chemical of concern VS Each party takes the necessary measures
 - Problematic products and product design
 - Restrict the production, sale, import or export of the single-use plastic production VS Take measures based on national plan
 - Enhance the design of plastic products VS Each party takes measures based on national capabilities
 - Extended Producer Responsibility and waste management
 - Financial mechanism and means of implementation
- Upcoming
 - Intersessional Open-ended Expert Groups: From 24 to 28 Aug, Bangkok

GPT: what was done at INC4, what we are demanding and expectation for INC5

[INC-5]

- Scope of the new Treaty - whole lifecycle of all plastics and associated pollution, especially upstream production controls and trade
- Binding rules, not a voluntary approach
- Ambitious global target to reduce plastic production
- Stop the dirty trade in waste and harmful plastic products
- Hold transnational corporations accountable
- No greenwashing or false solutions
- Just transition and a human right-based approach
- Support system change solutions
- Zero waste hierarchy
- <https://www.foei.org/publication/foei-demands-for-the-new-plastics-treaty/>