

Plastic waste in mountainous areas: An overview of the ongoing project of the Basel, Rotterdam and Stockholm Conventions

Mehrnoosh Azodi

The Basel, Rotterdam and Stockholm Conventions

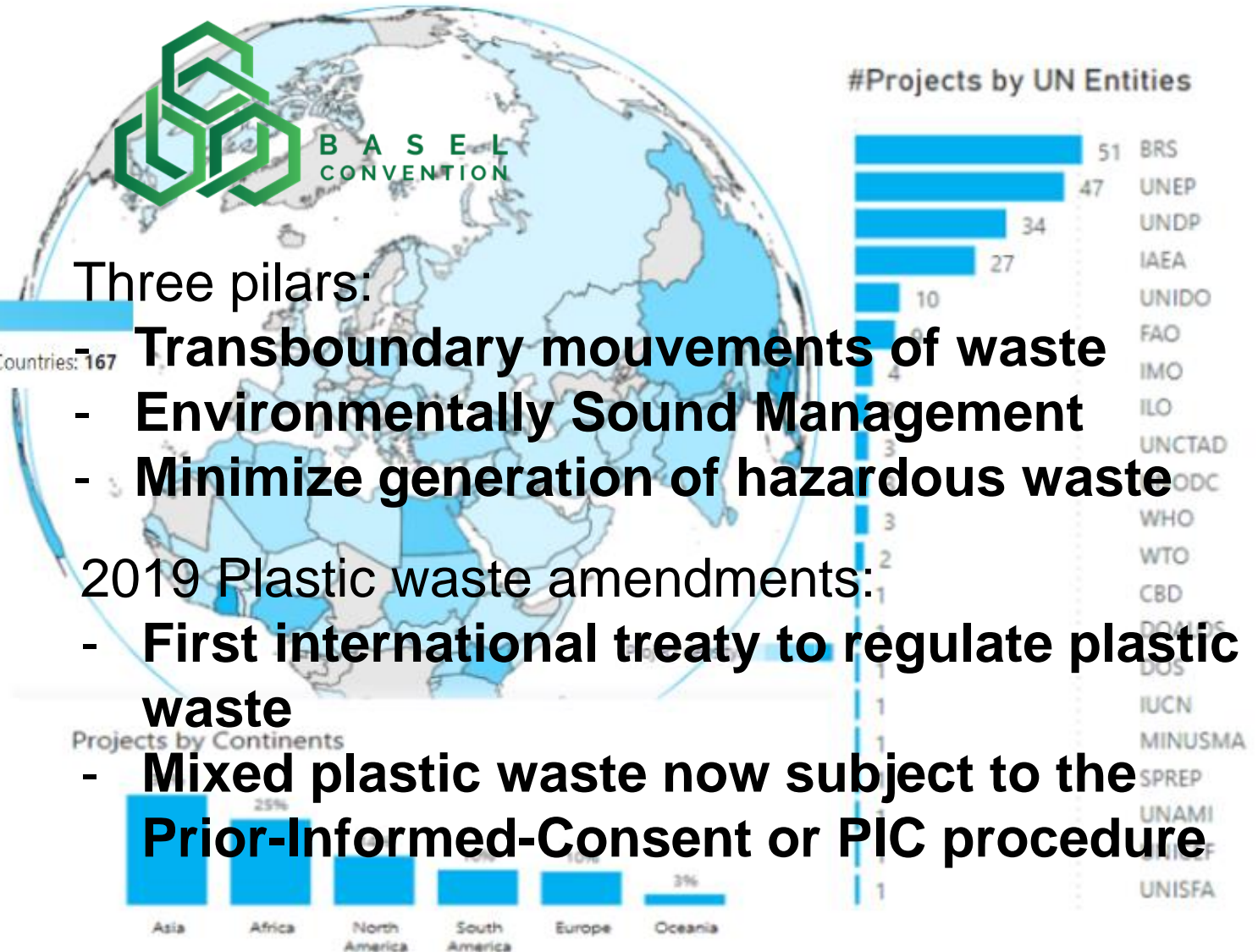
20 March 2025



Who are we?



Figure 1. Geographical coverage of reported UN projects and leading UN agencies



Administered by the **United Nations Environment Programme (UNEP)** We are implementing plastic projects (and others)

Three pillars:

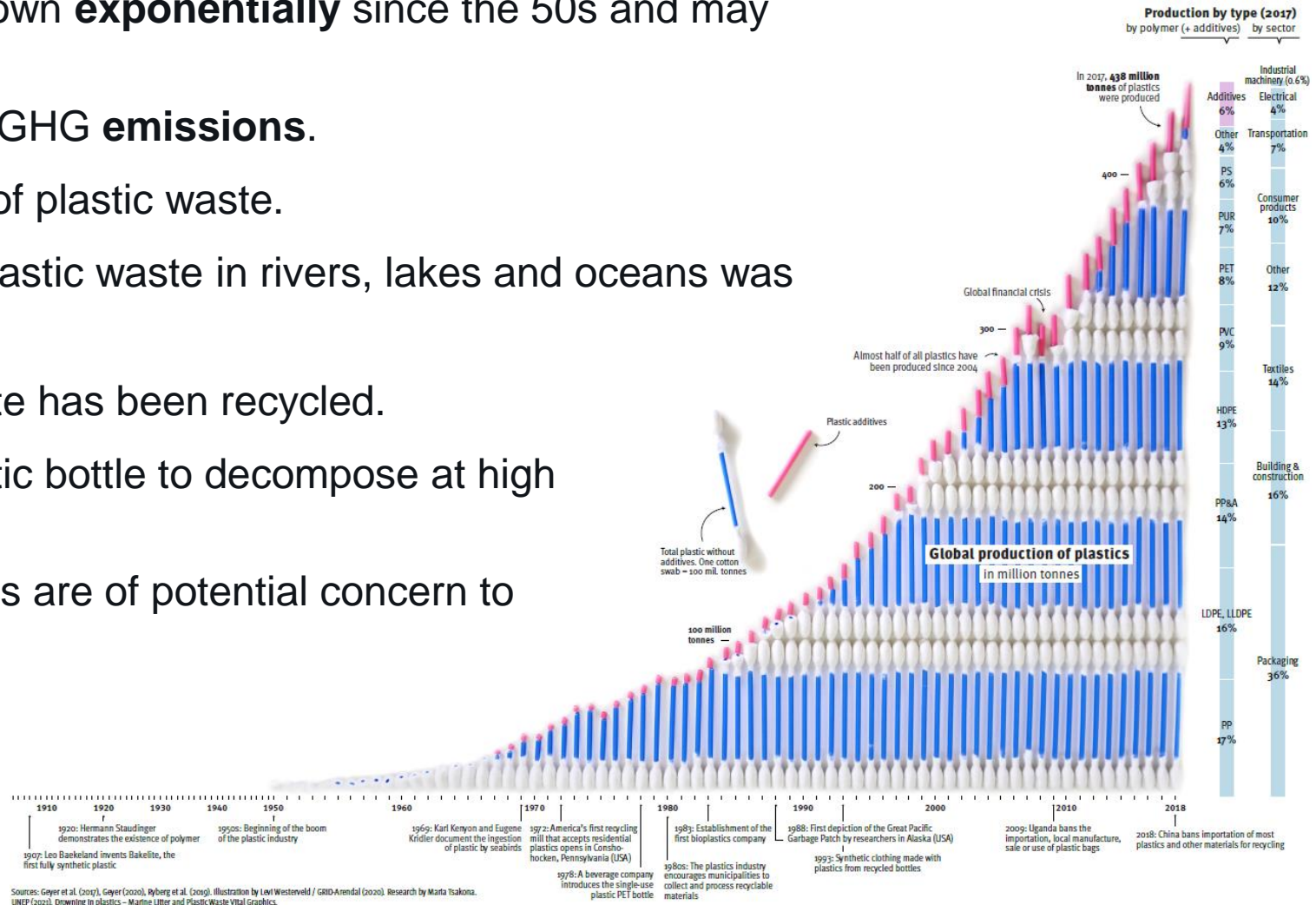
- Transboundary movements of waste
- Environmentally Sound Management
- Minimize generation of hazardous waste

2019 Plastic waste amendments:

- **First international treaty to regulate plastic waste**
- **Mixed plastic waste now subject to the Prior-Informed-Consent or PIC procedure**

A global plastic waste crisis

- Production and consumption has grown **exponentially** since the 50s and may triple by 2060 to 1,231 million tons.
- In 2019, plastics generated 3.4% of GHG **emissions**.
- **Packaging** is the largest generator of plastic waste.
- In 2019, the accumulated stock of plastic waste in rivers, lakes and oceans was estimated at **139 million tons**.
- **9%** of plastic waste generated to date has been recycled.
- It takes around **300 years** for a plastic bottle to decompose at high altitudes.
- Ca. **4,000 chemicals** used in plastics are of potential concern to human health.
- Plastic pollution is **lethal** for many species.

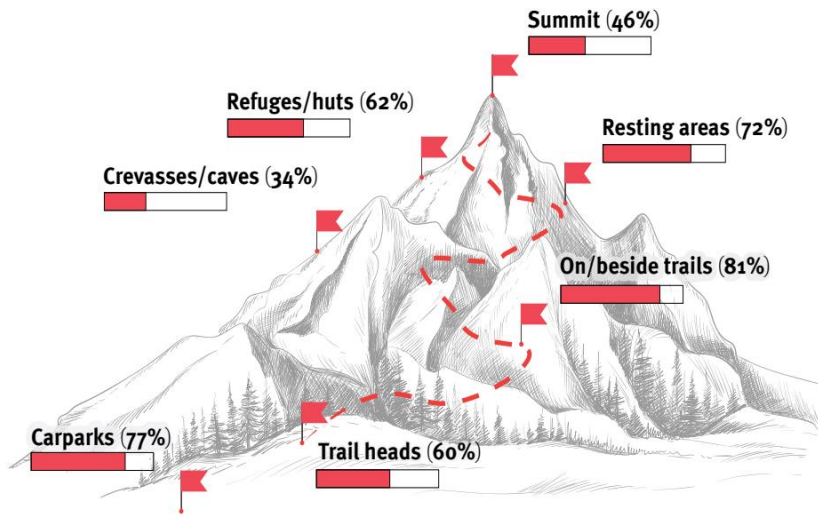


Plastic waste in the mountains and the glaciers: The situation

- Plastic waste in mountains increasing significantly; packaging the primary source
- Findings from two global surveys

Where is waste seen on mountains?

Percentage of survey respondents having seen waste in such places

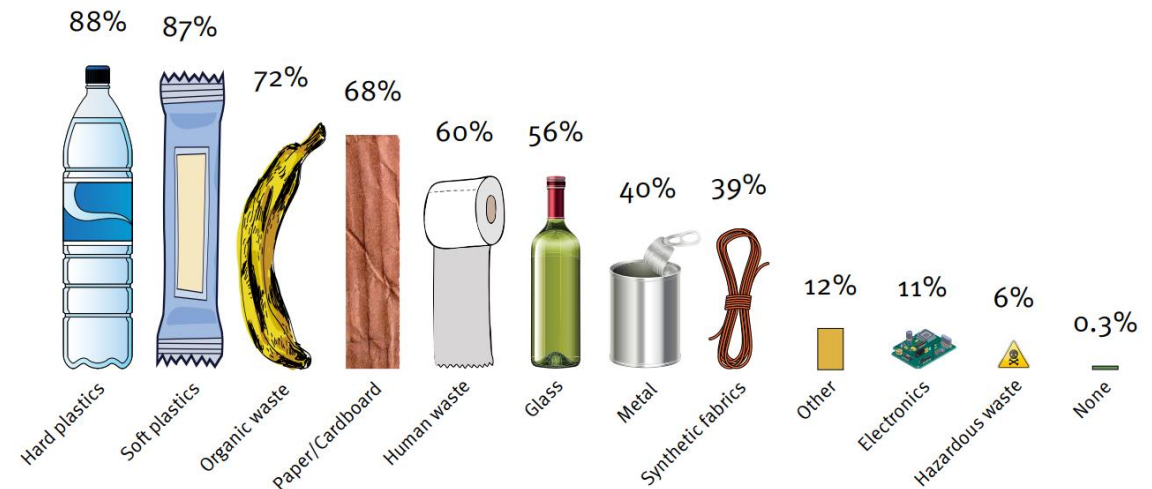


Sources: The 2021 Mountain Waste Survey; Mountain drawing Harryarts/FreePik
Partners: UNEP, MRI, IFMGA, UIAA; Kilian Jornet Foundation, UIMLA, Secretariat of BRS Conventions

GRID-Arendal (2021)

Types of waste seen in the mountains

Percentage of the total number of respondent having seen such waste



Sources: The 2021 Mountain Waste Survey; icons from Vecteezy.com
Partners: UNEP, MRI, IFMGA, UIAA; Kilian Jornet Foundation, UIMLA, Secretariat of BRS Conventions

GRID-Arendal (2021)

Plastic waste in the remote and mountainous areas

- Implemented by the Secretariat of the Basel, Rotterdam and Stockholm Conventions (BRS Secretariat)
- Funded by the governments of France, Germany, Netherlands and Norway, the Norwegian Agency for Development Cooperation and the Norwegian Retailers Environment Fund
- Phase 1: Data gathering/analysis and development of outreach/education materials (2019 onwards)
- Phase 2: Development of outreach and awareness-raising materials (2021 onwards)
- Phase 3: Funded projects



What are the drivers of plastic pollution in mountains and glaciers?

- Plastic waste footprint of tourism
- Economic growth, increasing consumption
- Atmospheric transport of microplastics



(Photo: ©Jason Sheldrake)



(Photo: ©Vladimir Komissarov)

What makes plastic waste management in mountains so challenging?

- Inherent challenges of mountainous regions: remoteness, limited resources etc. ...
- ...lead to insufficient legal and institutional frameworks, monitoring, financing etc. ...
- ...resulting in a lack of awareness, incentives and infrastructure for ESM of plastic waste...
- leading to open burning and dumping.



(Photos: ©Jason Sheldrake, Stepen J. Taylor)



Basel Convention addresses plastic waste in mountainous regions through:



Policy



Financing



Infrastructure



Outreach



Funded project in North Macedonia, Shara Mountains



Jost Dittkrist

Programme Officer at the Secretariat of the Basel,
Rotterdam and Stockholm Conventions

Phase 3: funded projects 11 countries





Financing

- Extended producer responsibility, deposit-return schemes, fees, taxes, fiscal incentives, fines etc.
 - Eswatini

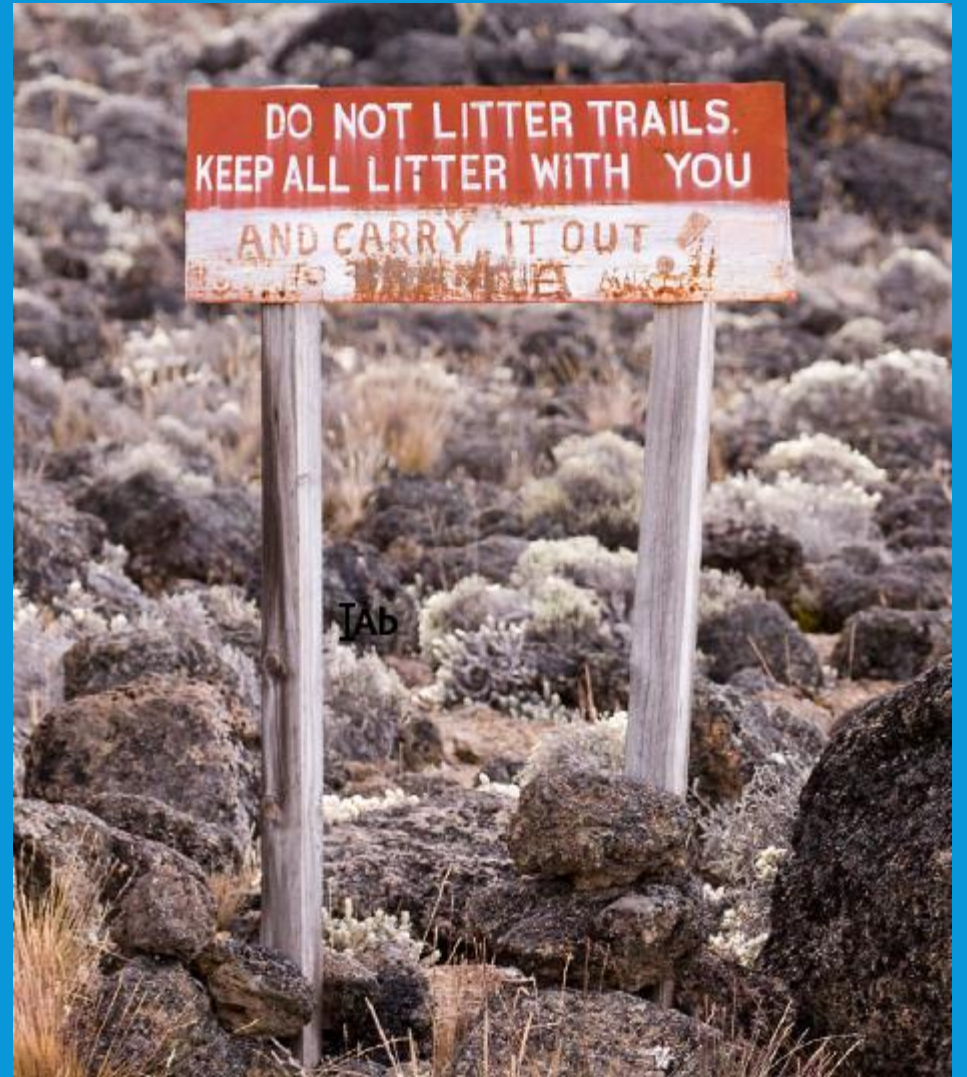


Garbage bin in the Khumbu region. © Sagarmatha Pollution Control Committee (SPCC)



Policy

- Analysis of the national legal, policy and institutional framework for the environmentally sound management of plastic waste with the objective of adequately implementing the Basel Convention requirements;
- Plastic waste ban.
 - Eswatini
 - Tajikistan
 - Uzbekistan
 - Argentina
 - Chile
 - Seychelles



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Infrastructure

- Separation, collection, transport systems, sorting and shredding facilities;
 - Kazakhstan
 - Peru
 - Tajikistan
 - Uzbekistan
 - Argentina
 - Chile
 - Seychelles



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Outreach

- Signage in the mountain resorts, information campaigns, social media campaigns, school educations, etc.
- Partnership with snowsport associations, Interski International, ISIA, and IAESS.



© Photo: Martin Künzle

Addressing plastic waste in mountains and glaciers

- Local: municipalities, park administrations, mountain guides, individuals etc.
- National: legal and institutional frameworks, provision of resources etc.
- Regional: cross-border cooperation, regional instruments etc.
- Global: international initiatives, partnerships, agreements, frameworks etc.





THANKS

Visit our website:

[basel.int/Implementation/Plasticwaste/Technicalassistance/Projects/RemoteandMountainousAreas](https://www.basel.int/Implementation/Plasticwaste/Technicalassistance/Projects/RemoteandMountainousAreas)

Contact:

mehrnoosh.azodi@un.org

<https://www.un.org>



BASEL | ROTTERDAM | STOCKHOLM
CONVENTIONS

Secretariat of the Basel Convention
International Environment House I
11-15 Chemin des Anémones
CH-1219 Châtelaine, Geneva, Switzerland
www.basel.int