



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Federal Department of the Environment, Transport,
Energy and Communications DETEC
Federal Office for the Environment FOEN
Waste and Resources Division

Tackling Plastic Pollution - Insights into National and Global Environmental Governance

OST Coffee Lectures

21.05.2024 | Elias Rehmann, FOEN



Benefits of plastic

Plastic has many advantages that allow unique applications

- Versatile
- Lightweight
- Cheap





Plastic pollution



Image: Antoine Giret



Contents

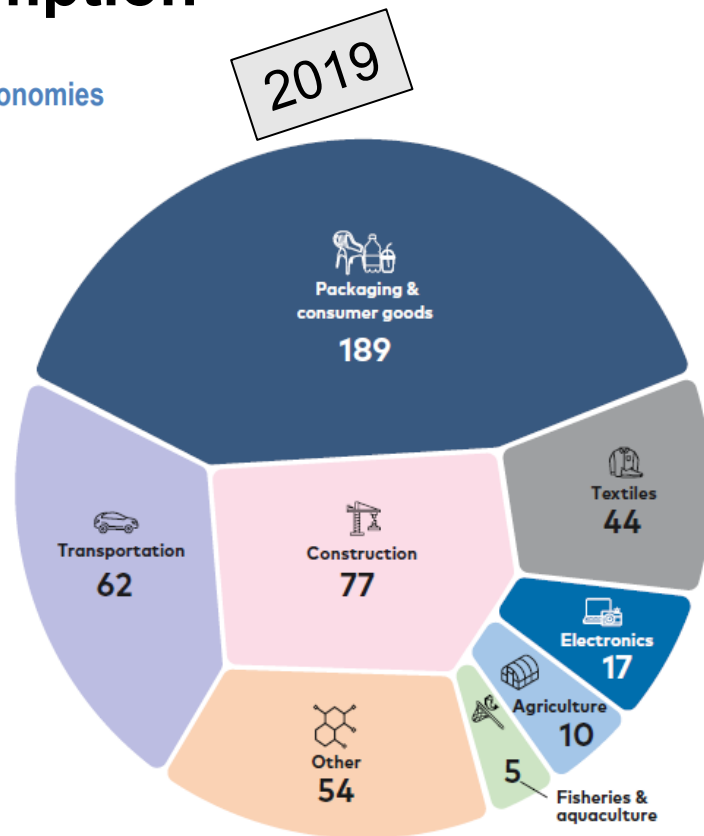
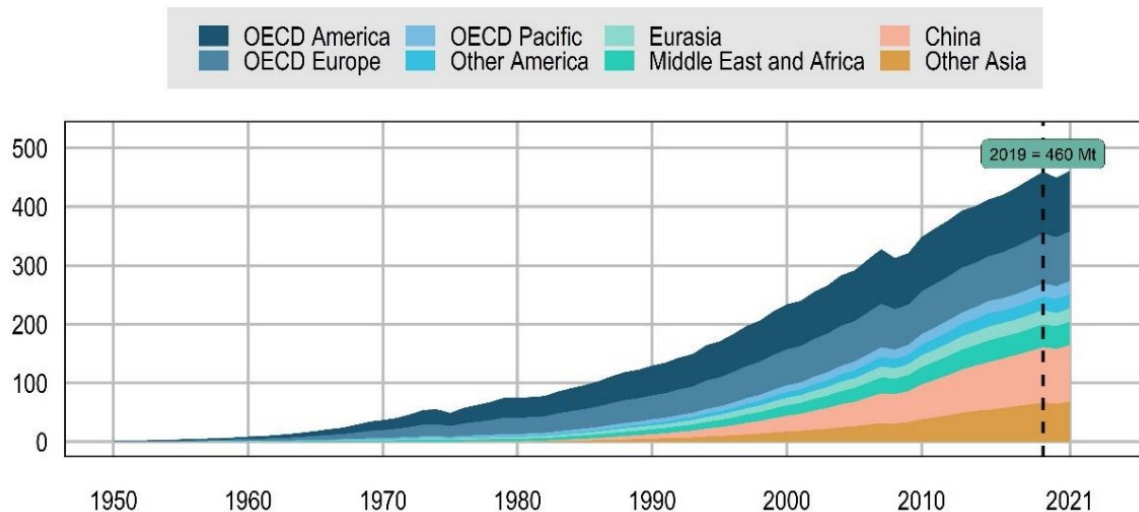
- **Statistics** on plastic production and pollution
- International and national **governance** on plastics
- What can plastic product **producers, engineers and researchers** do for the environment?



Plastic production and consumption

Figure 2.2. Global plastics use has quadrupled in 30 years, mainly driven by emerging economies

In million tonnes (Mt), 1950-2021



[Global Plastics Outlook: Economic Drivers, Environmental Impacts and Policy Options \(OECD 2022\)](#)

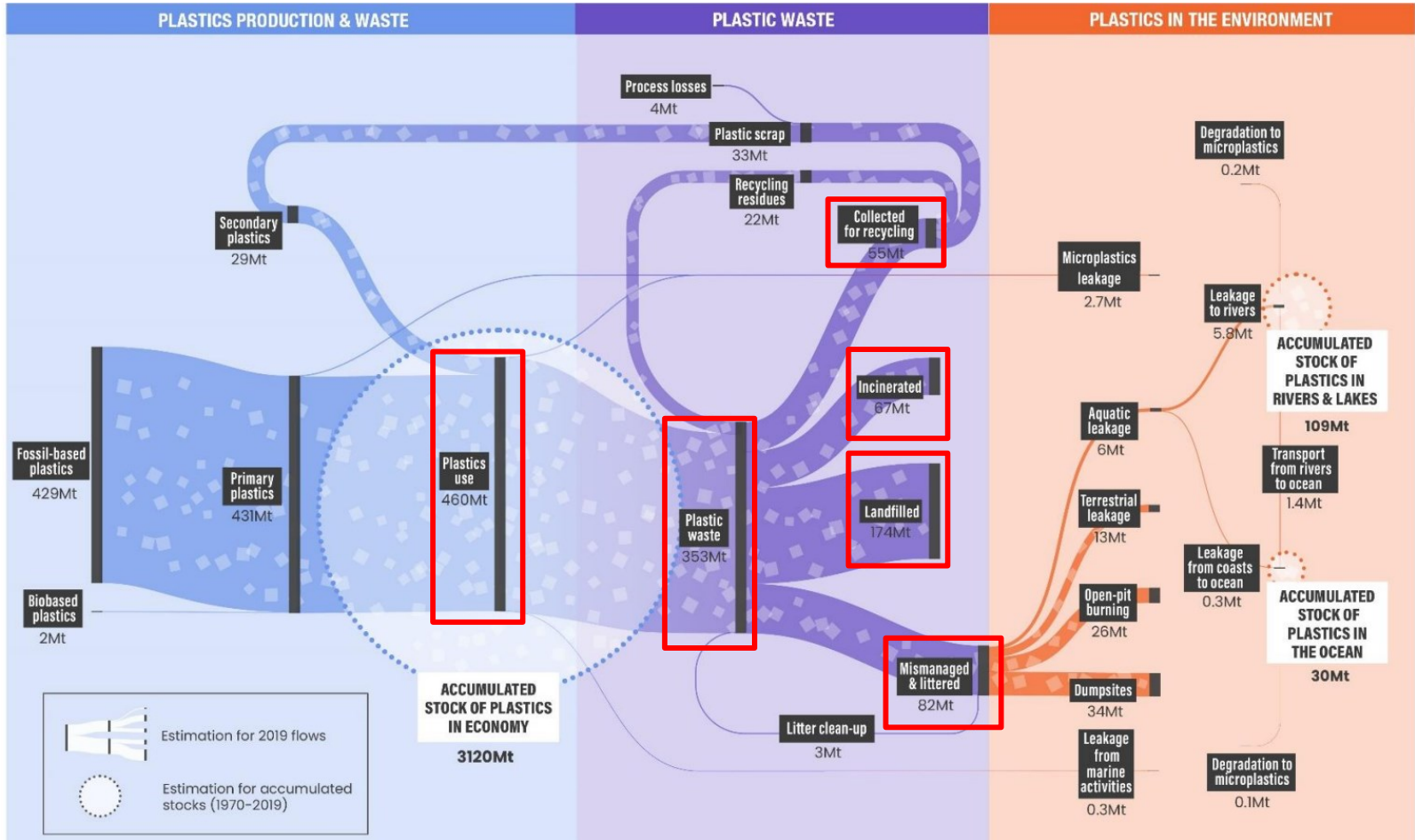
[Towards Ending Plastic Pollution by 2040 \(Nordic Council of Ministers 2023\)](#)

[Climate Impact of Primary Plastic Production \(Karali 2024\)](#)



Plastic mass flows

2019





Fossil resource use and CO₂ emissions



- Production is energy-intensive: **3 kg of fossil fuel** is needed to produce 1 kg of plastic.
- Production of plastics generated about **5% of total global greenhouse gas emissions** in 2019.

[Growing environmental footprint of plastics driven by coal combustion \(Cabernard 2022\)](#)

[Climate Impact of Primary Plastic Production \(Karali 2024\)](#)



Future scenario



[Towards Ending Plastic Pollution by 2040 \(Nordic Council of Ministers 2023\)](#)

➤ Coordinated global action is needed!



International governance: INC on Plastic Pollution

In March 2022, the United Nations Environment Assembly (UNEA) decided to convene an **intergovernmental negotiating committee (INC)** to develop an **international legally binding instrument to end plastic pollution**.



United Nations
Environment Assembly of the
United Nations Environment
Programme

United Nations Environment Assembly of the United
Nations Environment Programme
Fifth session
Nairobi (hybrid), 22 and 23 February 2021
and 28 February–2 March 2022

Resolution adopted by the United Nations Environment
Assembly on 2 March 2022

5/14. End plastic pollution: towards an international legally binding instrument

- A new **treaty at the global level**.
- Address the **full life cycle of plastic**.

[Intergovernmental Negotiating Committee on Plastic Pollution | UNEP - UN Environment Programme](#)
[International Legally Binding Instrument on Plastics Pollution | IISD Earth Negotiations Bulletin](#)



INC on Plastic Pollution: Swiss position

Press release about the Swiss mandate:

[Die Schweiz setzt sich für eine griffige Plastikkonvention ein](#)

Switzerland is a member of the [High Ambition Coalition \(HAC\)](#) with the aim to **end plastic pollution by 2040.**





INC on Plastic Pollution: Swiss position

*Switzerland is engaged for an **international instrument** that:*

- contributes effectively to the **protection of human health and the environment** from plastic pollution;
- contains specific measures that cover the **full life cycle of plastics**;
- **does not create new problems** (no regrettable substitutions).





INC on Plastic Pollution: Swiss position

*Switzerland is engaged for **control measures** that:*

- reduce **primary plastic polymer production**;
- eliminate **problematic, harmful or avoidable** plastic products;
- promote a non-toxic and sustainable **circular economy** for plastics based on the **waste hierarchy**;
- guarantee the sustainable **management of plastic waste**;
- strengthen **transparency**.

reduce
reuse
recycle



INC on Plastic Pollution: process



Images: UNEP - Artan Jama, IISD/ENB - Kiara Worth



INC-4 in Ottawa



Images: IISD/ENB - Kiara Worth





INC-4 in Ottawa: results

First text-based negotiations based on the [Revised Draft Text](#)



Images: IISD/ENB - Kiara Worth

Areas of divergence

- National action plans vs. global rules
- Primary plastic production
- Problematic chemicals and products
- Financing

Areas of convergence

- Waste management
- Legacy pollution
- Emissions of macro- and microplastic

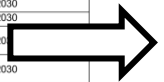


INC-4 in Ottawa: results

Switzerland, Georgia, Peru, Rwanda and Thailand proposed an [initial product list](#) that was incorporated into the draft text.

- List of plastic products to be **eliminated** under the treaty.
- **Review mechanism** to extend the list over time.

Initial Product List - Products subject to Elimination	
Plastic Products	Date after which the manufacture, import, or export of the product shall not be allowed (phase-out date)
EPS (Expanded Polystyrene) packaging	2030
PS (Polystyrene) packaging	2030
PVC (Polyvinyl chloride) packaging	2030
PVDC (Polyvinylidene chloride, or polyvinylidene dichloride) packaging	2030
PETG (Polyethylene terephthalate glycol) packaging	2030
Oxo-degradable products	2030
Intentionally-added microplastics	2030
Single use and short-lived plastic products (to be specified)	TBD





INC-4 in Ottawa: results

Initial Product List - Products subject to Elimination

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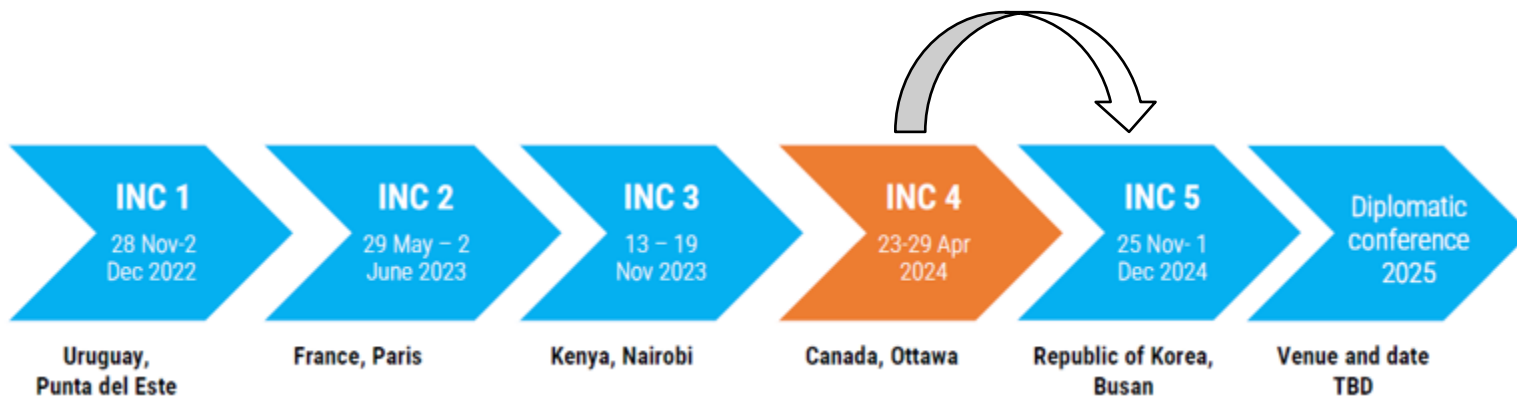
DRAFT



INC-4 in Ottawa: results

Mandate for formal **intersessional work**

- Problematic plastic products
Chemicals of concern
Product design
- Financing





Swiss systems for collection and recycling

Separate collection of **household plastic waste**

- [VSPR Verband Schweizer Plastic Recycler](#)



- [RecyPac](#) (*not collecting yet*)



RecyPac

Kreislauf Plastik und
Getränkekarton

Images:
plasticrecycler.ch
recypac.ch



Swiss national governance



Dobler motion [20.3695](#) | Förderung der Kreislaufwirtschaft. Die Schweiz soll mehr Plastik rezyklieren

- Calls for a **coordinated and nationwide collection** of recyclable plastic waste.



Implementation: influenced by
parliamentary initiative 20.433





Swiss national governance

Parliamentary initiative [20.433 | Schweizer Kreislaufwirtschaft stärken](#), revision of the Environmental Protection Act:

existing
possibility

- **Art. 30b** Oblige vendors to **take back products** after use.

new
possibility

- **Art. 31b** Allow **private companies** to separately collect **plastic waste from households**.

new
possibility

- **Art. 32a^{ter}** Obligate producers and importers of plastic products to pay a **prepaid disposal fee** to an industry organisation.

new
possibility

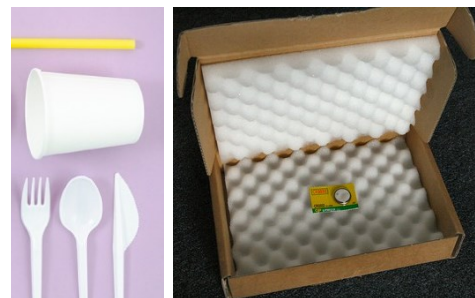
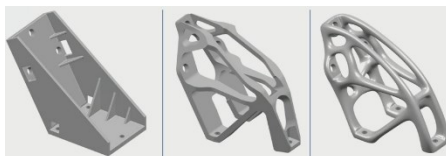
- **Art. 35i** Define **requirements for product and packaging design** (recyclability, durability, marking).



Your contribution - Material and product design for circularity

Reduce

- Use less material
- Avoid unnecessary products and packaging



Reuse

- Increase durability
- New ways of consumption



Recycle

- Use monomaterial
- Simple & non-toxic formulations, transparency about materials

[UNEP Topic Sheet Design Guidelines](#)

[GACERE Policy Brief - Circular Design of Plastic Products](#)

[WPO Packaging Design for Recycling](#)





Questions



Image:
croneri.co.uk