"The lifecycle of plastics and human rights"

Mandate of the Special Rapporteur on toxics and human rights

Zero Waste Europe submission

Zero Waste Europe (ZWE) would like to thank the UN Special Rapporteur for the opportunity to provide inputs to inform the thematic report on the lifecycle of plastics and human rights.

Plastics have an impact on human health and the environment along its value chain, thus impacting fundamental human rights to health and to living in a healthy environment. . Below, ZWE provides a few elements and information related to specific elements of the value chain of plastics and/or specific plastic products.

Toxics in plastic products and packaging

More than 12,000 chemicals are used in food contact articles or packaging. Amongst those chemicals for which hazard data is available, 608 chemicals were identified as most hazardous. These chemicals migrate from the food packaging to the food, impacting human health. Indeed, several of these chemicals are associated with development impairment, cancer and impacts on the immune, endocrine and nervous systems. Vulnerable populations are particularly impacted . More information can be found in the database and in this Consensus Statement from March 2020, both led by the Food Packaging Forum.

Current legislations across the world are insufficient or inadequate to protect human health and the environment. More information in this Declaration on Concern from civil society organisations. chemicals also pollute our environment

Toxics in menstrual products and nappies

Single-use menstrual products and nappies create serious environmental, economic and social impacts throughout their lifecycle, from the production phase to the end-of-life. Compared to reusable products, these single-use items still dominate the market and their production in Europe has actually increased in recent years.In fact, conventional menstrual products and nappies being sold on the EU market:

- are single-use made of 90% plastic contributing in large to waste generation and marine litter (most of these products end-up incinerated, landfilled or littered which leads to serious environmental impacts), In the 28 EU Member States, by 2017 (reference year), research has shown that more than 49 billion units of menstrual products were consumed, meaning an annual generation of about 590,000 tonnes of waste, and around 33 billion single-use baby nappies were consumed, resulting in 6,731,000 tonnes of waste per year.
- contain a cocktail of toxic chemicals harming menstruator's and baby's health, and

- are not accessible to everyone that needs them (one in five women cannot afford basic single-use menstrual products in the EU, contributing to menstrual poverty. Also millions of parents cannot afford an adequate supply of nappies, contributing to the so called "nappy need".

It's also a social justice issue, as the cheapest single-use menstrual products and nappies are often those with the most potential to damage our health and planet - and people with the least economic power have the greatest exposure to these hazardous products.

Reusable menstrual products and nappies have proven to be environmentally-friendly (saving resources and generating 99% less waste than their single-use counterpart), as well as safer (toxic and plastic-free) and more cost-efficient for menstruators, families and public authorities (when it comes to the management of this waste stream). Reusable menstrual products are also a crucial element in the fight against menstrual poverty

Some useful resources:

Menstrual products:

- The Bloody Manifesto (the Annex provides good summary of all the impacts).
- Toxic-free periods
- The Shocking Truth About Plant-Based Plastic Applicators (health impact)
- Break the barriers: girls' experiences of menstruation in the UK (Social impact)
- Making the case for investing in menstrual health and hygiene (Health impact)
- Chem fatale - Potential Health Effects of Toxic Chemicals in Feminine Care Products (Health impact)

(*All of them and more can be found in our Environmenstrual Campaign webpage*).

Nappies

- Potential for circularity in diapers and incontinence care products.
- Single-use nappies and their alternatives: Recommendations from Life Cycle Assessments. Life Cycle Initiative, (UN Environment Programme)
- An updated lifecycle assessment study for disposable and reusable nappies Environment Agency's science programme (UK)

(*All of them and more can be found in our Reusable Nappy Week Campaign webpage*).

Both:

- The environmental and economic impacts of menstrual products, baby nappies and wet wipes (mostly environmental and economic impacts)
- Existing measures & policy recommendations to minimise the impact of menstrual products, nappies & wet wipes (legal measures)

- Policy recommendations to make menstrual products, nappies and wet wipes circular.(Policy Briefing by Zero Waste Europe)

Impacts of incineration on pollution, health and communities

In addition to greenhouse gas emissions that exacerbate climate change, incinerators emit many toxins and pollutants that harm local air quality. Emissions include dioxins, NOx and ultrafine particulate matter that can be harmful to both human health and the natural environment. There is not enough monitoring, not enough enforcement, and not enough transparency.

- Greenhouse Gas and Air Quality Impacts of Incineration and Landfill https://www.clientearth.org/latest/documents/greenhouse-gas-and-air-quality-impacts-of-incineration-and-landfill/
- The impact of Waste-to-Energy incineration on climate https://zerowasteeurope.eu/library/the-impact-of-waste-to-energy-incineration-on-climate/
- Technical note on convertingmass of PM2.5 particles to number of particles https://ukwin.org.uk/files/particulates/Reeks-2019-Converting-mass-of-PM2-5-particles-to-number-of-particles.pdf

Chemical recycling

There is a significant lack of transparent information and data on environmental impacts of chemical recycling and recovery technologies; related to GHG emissions as well as toxicity. Further life cycle assessments with robust accounting and allocation methods must be performed prior to incentivising such technologies through funding and legislation.

This is also echoed by the European Environment Agency in 2021 as they write that "*There is a significant lack of knowledge about the overall life cycle impacts of chemical recycling on the environment. There are indications, however, that chemical recycling works only under very specific and narrow conditions and that it consumes energy, water and chemical resources that increase the pollution of water, air and land. If chemical recycling is to become a more widely used technology, it will be important to explore the environmental and climate implications and risks as well as the financial costs in more detail.*'European Environment Agency (EEA), 2021 https://www.eea.europa.eu/publications/plastics-the-circular-economy-and/

Existing LCA studies indicate that technologies like pyrolysis and gasification are not competitive with virgin plastic production or mechanical recycling from a GHG emission perspective. The studies have given "climate credits" to such technologies via allocating 'avoided emissions' from incineration to make the technologies look less carbon-intensive.

Waste trade impacts on communities and environment

- One third of plastic packaging destined for recycling is shipped outside of EU territory: https://www.eca.europa.eu/Lists/ECADocuments/RW20_04/RW_Plastic_waste_EN.pdf

- In 2019, the EU exported a monthly average of 150,000 tonnes of plastic waste beyond its borders: https://www.eea.europa.eu/publications/the-plastic-waste-trade-in
- Illegal plastic waste trade has increased globally since the China ban: https://www.eea.europa.eu/publications/the-plastic-waste-trade-in
- Shipment to and mismanagement of plastic waste in illegal operations is rife, and the resulting toxic burden exacerbates global inequalities: https://wastetradestories.org/.
- Shredded traded plastic disposed at several dumpsites in Malaysia contain a range of metals, metalloids and organic chemicals, including persistent organic pollutants (POPs), which have likely been contaminating the surrounding environments during their storage or processing/recycling activities: https://www.greenpeace.org/malaysia/publication/3349/the-recycling-myth-2-0/
- Traded plastic waste contributes to direct plastic leakages in the Ocean: https://www.sciencedirect.com/science/article/pii/S0160412020318481?via%3Dihub
- EU plastic waste is shipped to be recycled in Turkey and causes environmental damage, to be then shipped back to the EU under the form of recycled plastic: https://www.arte.tv/fr/videos/102862-000-A/turquie-la-nouvelle-poubelle-de-l-europe/

Zero Waste Europe is the European network of communities, local leaders, businesses, experts, and change agents working towards the same vision: phasing out waste from our society. We empower communities to redesign their relationship with resources, to adopt smarter lifestyles and sustainable consumption patterns, and to think circular.