

ENDING THREATS FROM TOXIC PLASTICS

An IPEN Citizens' Report on
Over Two Decades of Work
to Protect Our Health and
Environment from Chemicals
in Plastics



for a toxics-free future

TAKING ON PLASTICS FOR A TOXICS-FREE FUTURE

Established in 1998, IPEN today is the leading global public interest organization promoting policies to protect human health and environmental rights from toxic chemicals and plastics, especially in low- and middle-income countries. **Our network includes more than 600 public interest groups in 131 countries,** largely in low- and middle-income nations.

Our mission is a toxics-free future for all.

Resource: [IPEN's Plastics Website](#)



SPEAKING OUT TO PROTECT HEALTH AND THE ENVIRONMENT

One crucial role IPEN plays is to support participation by our global members in global policy negotiations. The voices and active participation of these public interest groups from low- and middle-income countries are urgently needed, as they often experience the greatest threats from plastic chemicals and waste.

Resource: [Plastics Treaty INC-5](#)



A TOXICS-FREE FUTURE FOR ALL

IPEN partners with our member organizations to nurture and support their local and national campaigns, develop and produce local research and local data, and foster collaborations to focus the power of their collaborative efforts in international policy debates. Stronger global policies then help catalyze and reinforce their local and national efforts.

Resource: [IPEN's Role](#)



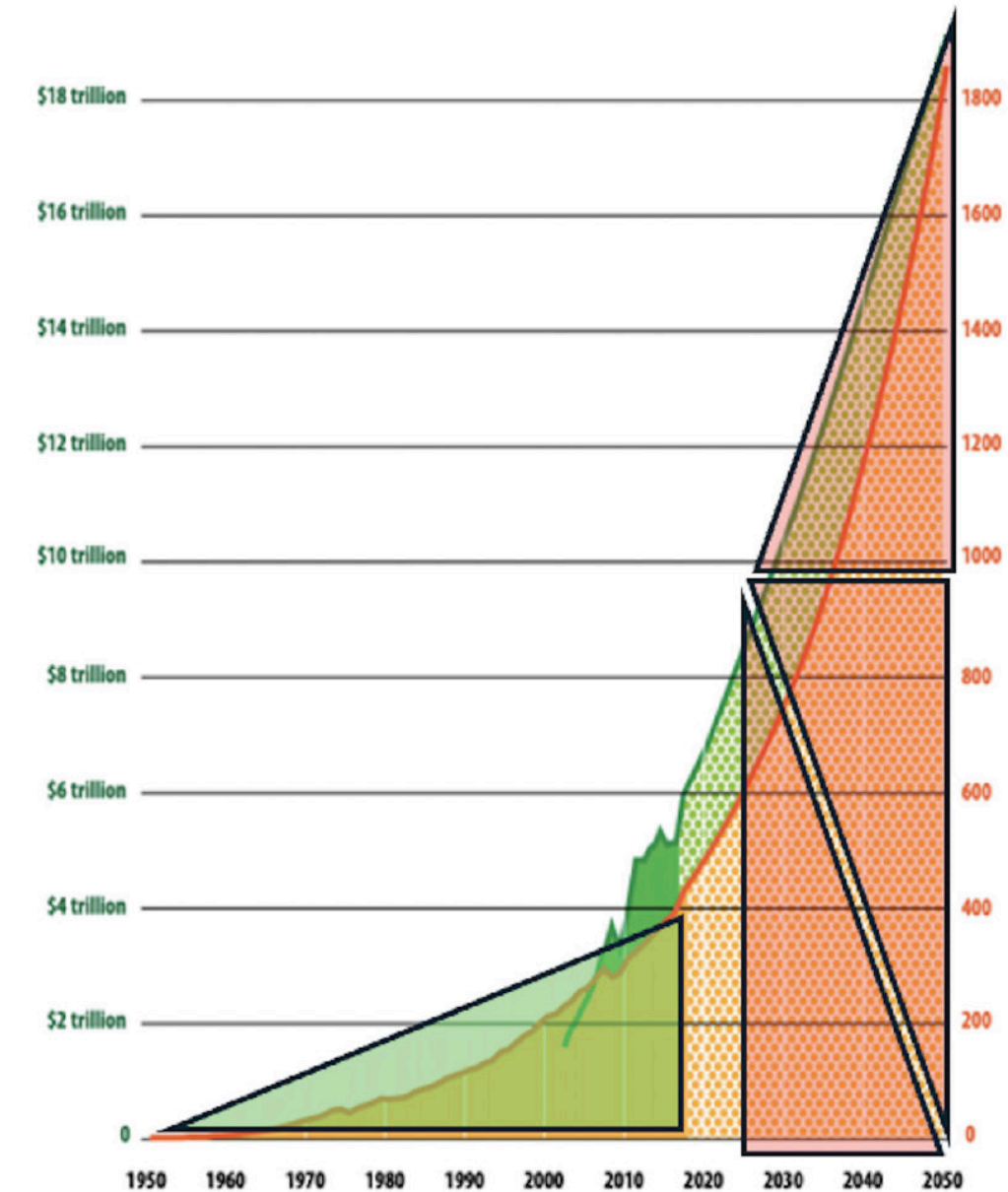
MORE PRODUCTION = MORE POLLUTION

We are already facing dire consequences from plastic pollution and climate change. **Chemicals in plastics are linked to cancer, infertility, and other serious health concerns.** But industry is aiming to triple plastics production by 2060. More production will mean more pollution: with increased fossil fuel extraction and petrochemical production, there could be disastrous consequences for the climate, health, and the environment.

Resource: [Introduction to Plastics and Chemicals](#)



Global
Chemical
Industry
Sales
(USD)



Global
Plastics
Production
(millions of
metric tons)

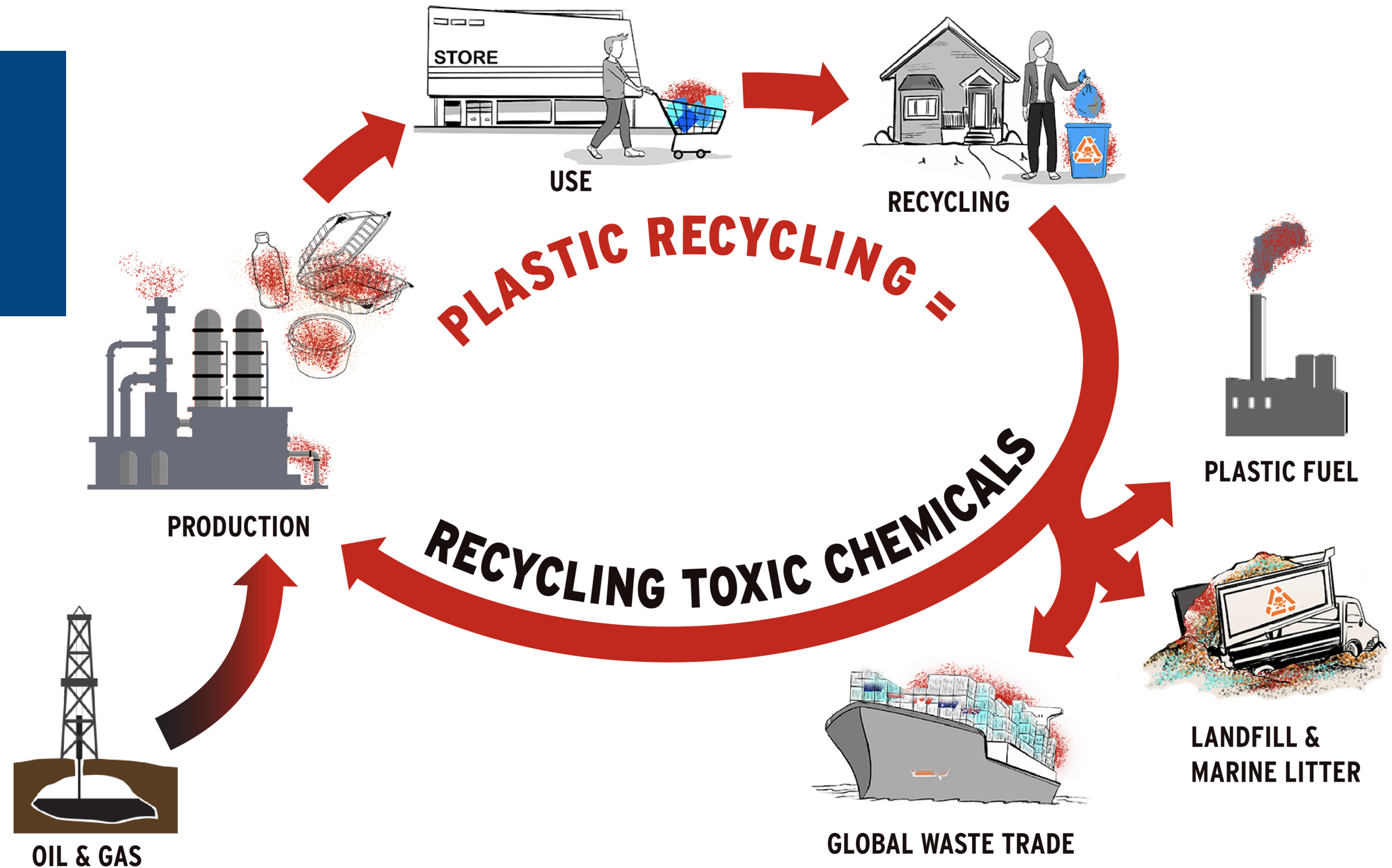
 = plastics and chemical production, 1950-2024

 = plastics and chemical production projected to triple, 2025-2050

HEALTH THREATS ACROSS THE LIFE CYCLE

Many people think of visible waste and pollutants as the main problems from plastics, but plastics are made from invisible toxic chemicals, and chemical contamination poses threats to our health and the environment throughout the life cycle of plastics: when raw materials (fossil fuels) and plastic's building blocks (chemicals) are extracted and produced, during production and use of plastics, and through plastic recycling and waste management.

Resource: [Plastics, EDCs, and Health](#)





“The chemicals present in our bodies are passed on to our Indigenous children and harm their ability to learn our languages, songs, stories, and knowledge.”

VI PANGUNNAQ WAGHIYI, YUPIK MOTHER AND GRANDMOTHER,
MEMBER OF THE WHITE HOUSE ENVIRONMENTAL JUSTICE ADVISORY COUNCIL,
FROM SIVUQAQ, ALASKA

EXTRACTION AND PLASTIC PRODUCTION THREATENS COMMUNITIES

The extraction of fossil fuels and production of petrochemicals are the starting point for the problems related to plastics. Plastics are made from fossil fuels and chemicals. **More than 16,000 chemicals are used in plastics: 25% are known to be toxic and for 66% there is no information** on how they may affect human health and the environment. Toxic chemicals are released during extraction and plastic production, posing threats to fence-line and frontline communities, including many Indigenous groups globally.

Resource:
[The Arctic's Plastic Crisis](#)



The report “The Arctic’s Plastic Crisis” by IPEN and our member group Alaska Community Action on Toxics documents the ongoing threats from fossil fuels, petrochemicals, and plastics to Arctic Indigenous Peoples; the Arctic is a source and sink for toxic pollution, and Arctic Indigenous communities are among the earliest groups impacted by climate change.

PLASTIC SPREADS TOXIC CHEMICALS GLOBALLY

Plastic pellets are often lost during production and transportation, carrying toxic chemicals around the world. IPEN members in 23 countries collected plastic pellets from beaches for lab testing, finding highly toxic chemicals in all samples. The concentrations of toxic substances were especially high in the samples from African countries, even though they are not major producers of chemicals or plastics.

Resources:
[Plastic Pellets Report](#)
[X-Press Pearl: A New Kind of Oil Spill](#)

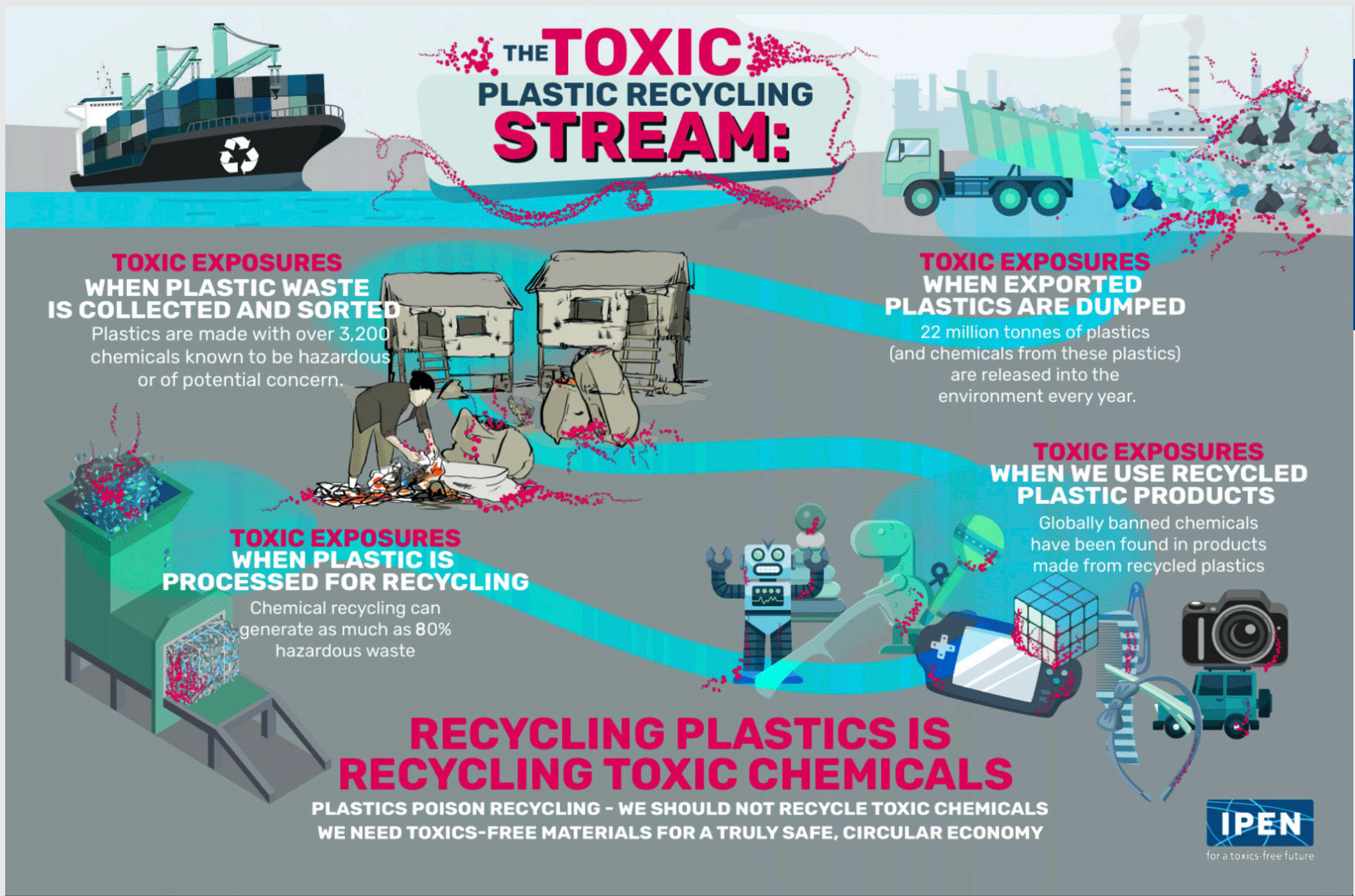


PLASTIC PRODUCTS THREATEN OUR HEALTH

IPEN and our partners have tested thousands of plastic products for toxic chemicals, finding that plastics sold around the world contain banned flame retardants, PFAS “forever chemicals”, and chemicals linked to cancer, infertility, and other serious conditions. One recent IPEN study found that **some plastic products contain levels of toxic chemicals that would qualify the products as hazardous waste** under proposed regulatory guidelines.

Resource: [Toys or Hazardous Waste?](#)





RESEARCHING TOXIC PLASTIC RECYCLING

Recycling is often posed as a key solution to the plastics crisis, but **when plastics are recycled, toxic chemicals are spread to the recycled material**, posing threats to waste workers and consumers. Studies by IPEN and our members have found toxic chemicals in recycled plastic products around the world, including in toys, cookware, accessories, and other items. Many products made from recycled e-waste plastics contain highly toxic flame retardants, including chemicals banned globally.

Resource: [Recycled Pellets Report](#)





USING SCIENCE TO EXPOSE TOXIC RECYCLING

Testing of toys made from recycled plastics by IPEN members in 11 African and Arabic countries found high levels of toxic flame retardants, chemicals that can threaten children's health when they play with the plastic toys.

In Jordan, IPEN member Hands for Environment and Sustainable Development found that their release of the study had profound consequences:

"We cannot always publicly share a local study due to fear of legal persecution or discrimination. But after publishing the results of the study showing toxic chemicals in plastic toys, national plastic products importers and traders approached us to resolve the problem. This experience showed us the power of science and lab work and our ability to make change."

Resource: [Toxic Chemicals in Recycled Plastic Products](#)



HEALTH THREATS FROM PLASTIC WASTE DISPOSAL

Disposal of plastic waste often creates more problems than it solves. Toxic plastic chemicals are released from landfills, incineration, and open burning, posing threats to nearby communities. Burning plastic, even as fuel, produces and releases some of the most toxic chemicals known.

Since 2005, IPEN and our members have conducted studies of free-range chicken eggs from more than 100 sites contaminated by plastic and plastic waste from dozens of countries in four continents, demonstrating food chain contamination from plastic waste incinerators, landfills, and open burning. One study found that a person eating just one egg per week from one contaminated site would exceed proposed EU safety levels for a weekly intake of a chemical that has been banned globally.

Resource: [Data from Egg Studies](#)





ecoton
Ecological Observation and Wetlands Conservation



NEXUS3
FOUNDATION

EXPOSING FOOD CHAIN THREATS FROM PLASTIC WASTE EXPORTS

In Thailand, testing by IPEN member EARTH found high levels of a plastic chemical in recycling workers and in their food and surroundings. In Indonesia, IPEN members Ecoton and Nexus3 conducted research and lab testing to expose how plastic wastes exported from the EU, USA, and other areas were dumped in their country and used as fuel or burned openly, contaminating the food chain. Some plastics were used as fuel in tofu production and other food-making facilities.

The research gained international media attention, including a New York Times cover story and coverage by the BBC, and drew the attention of the Indonesian government to the problem of plastic waste dumping.

Resources:
[Plastic Waste Fuel in Indonesia](#)
[Toxic Chemical in Thai Recycling Workers](#)



PLASTIC INDUSTRY MYTHS: CHEMICAL RECYCLING AND PLASTIC WASTE FUELS

Plastic recycling has failed for decades, and the industry is facing numerous lawsuits for decades of false claims about recycling as a plastic waste solution. Now the industry is claiming that their “advanced” or chemical recycling techniques will save the day – even though these technologies have also failed for decades. According to U.S. government research, the energy needs of chemical recycling can create as much as 100 times more damaging environmental and climate impacts than that of virgin plastic production.

Another industry scheme is to use plastic as fuel (sometimes called refuse-derived fuel or RDF). But burning plastic releases large amounts of greenhouse gases and toxic air pollutants, exacerbating climate change and threatening the health of nearby communities.

Resources:
[Chemical Recycling: A Dangerous Deception](#)
[Plastic Waste Fuels](#)



THE NEED FOR A MEANINGFUL PLASTICS TREATY

IPEN works for a meaningful Plastics Treaty that protects human health by:

- Addressing overproduction as the root cause of the plastics crisis;
- Protecting health and the environment;
- Ending the production and use of toxic chemicals in plastics;
- Removing toxic impacts at all stages of the life cycle of plastics;
- Banning recycling of plastics containing hazardous chemicals;
- Protecting the public's right to know about chemicals in plastics and information on plastic production and waste exports;
- Charging plastic producers to finance the Treaty;
- Promoting safer sustainable materials for a non-toxic circular economy; and
- Curbing climate pollutants.



Resource: [Plastics Treaty](#)





for a toxics-free future

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