
WORLD ENVIRONMENT DAY
2023
BEAT PLASTIC POLLUTION
USG/UISG Commission for Justice, Peace & Integrity of Creation
JPIC Roma

This year, we celebrate the 50th World Environment Day

It was established by the United Nations General Assembly in 1972.

WHAT IS PLASTIC ?

Plastics are a wide range of synthetic or semi-synthetic materials that use polymers as a main ingredient. Their plasticity makes it possible for plastics to be moulded, extruded or pressed into solid objects of various shapes.

The word ‘Plastic’ comes from the Greek word ‘Plastikos’ which means ‘fit for moulding’.

Plastic Is Useful

It keeps things airtight, which is ideal for keeping food fresh.

It is waterproof so nothing leaks out or drips in.

It can be made into a range of items from chairs to cars, dice to drainpipes.

It can even be used in craft and art work!

Where Is Plastic Found?

Plastic is **versatile** and cheap to make, so it is used to make lots of things. It is quite easy to tell when some items are plastic, such as drinks bottles and shopping bags.

However, plastic can be found in some surprising places:

- Some shampoos, face washes and toothpaste have plastic in them.
- Clothes made from material like nylon, polyester and lycra come from plastic.
- The outside of golf and tennis balls are made from plastic.

Production of Plastic

- The material is made from fossil fuels such as crude oil, which are transformed via heat and other additives into a polymer.
- The production of plastic is one of the most energy-intensive manufacturing processes in the world.

- **Produced almost entirely from virgin fossil fuel, greenhouse gas emissions associated with the production, use and disposal of single-use plastics is forecast to swell to 19 percent of the global carbon budget by 2040.**
- **The industry will account for 20% of oil consumption by 2050.**

KNOW YOUR PLASTICS

1 PET or PETE

Polyethylene Terephthalate

MODERATE HAZARD

Plastic breaks down after multiple uses allowing antimony to seep into liquids.

TYPICALLY USED FOR:

Soft Drinks

Water

Sports Drinks

Ketchup

Salad Dressing

2 HDPE

High Density Polyethylene

LOW HAZARD

TYPICALLY USED FOR:

Milk Containers

Cosmetics

Shampoo

Dish Soap

Plastic Bags

3

PVC

Polyvinyl Chloride

HAZARD

Endocrine disruption.

TYPICALLY USED IN:

Cleaner Bottles

Toys

Shower Curtains

Tablecloths

Deli Meat Wraps

4 LDPE

Low Density Polyethylene

LOW HAZARD

TYPICALLY FOUND IN:

Dry Cleaning Bags

Bread Bags

Newspaper Bags

Produce Bags

Garbage bags

5 **PP**

Polypropylene

LOW HAZARD

TYPICALLY FOUND IN:

Pill Bottles

Bottle Caps

Straws

Yogurt Tub

Margarine Tub

6 **PS**
Polystyrene

HAZARD

Styrene can leach from polystyrene. This can lead to nervous system damage and cancer.

TYPICALLY REFERRED TO AS STYROFOAM & USED IN:

Cups | Plates | Take-Out Containers | Coolers | Packing Peanuts

7 OTHER

HAZARD

Leaches BPA which causes endocrine disruption and reproductive toxicity.

TYPICALLY FOUND IN:

Reusable Water Bottles

Soup Cans

Baby Bottles

Oven-Baking Bags

Custom Packaging

WHY PLASTIC A PROBLEM?

- The main problem with plastic is that it takes an extremely long time to decompose.
- A plastic bottle can last for up to 500 years.
- That means that a bottle dropped in the ocean or put in a landfill site today could still be there in the year 2523.
- Plastic has toxins in it that are harmful to wildlife as well.


Humanity produces more than430 million tonnes of plastic annually
JPIC-Roma 2023

Around the world, one million plastic bottles are purchased every minute


Every year, more than 280 million tonnes of short-lived plastic products become waste.
JPIC Roma 2023

Plastic production has surged over the past 50 years and is expected to double over the next 20 years.

If no action is taken plastic pollution is set to triple by 2060.

If historic growth trends continue, global production of primary plastic is forecasted to reach 1,100 million tonnes by 2050.

46% of plastic waste is landfilled


Unlike other materials, plastic does not biodegrade.
This pollution chokes marine wildlife, damages soil and poisons groundwater, and can cause serious health impacts.
JPIC Roma 2023


18 million tons of plastics enter our oceans every year.


By 2025, for every 3 pounds of fish there will be 1 pound of plastics.


By 2050 oceans are
expected to contain more
plastics than fish

BIGGEST CONTRIBUTORS OF PLASTIC

The packaging sector is the largest generator of singe-use plastic waste in the world.

PACKAGING SECTOR

Farming is another area where plastic is ubiquitous: it is used in everything from seed coatings to mulch film.

FARMING SECTOR

FISHING SECTOR

- The fishing industry is another significant source.
- Recent research suggests more than 100 million pounds of plastic enters the oceans from industrial fishing gear alone.

The fashion industry is another major plastic user. About 60 per cent of material made into clothing is plastic, including polyester, acrylic and nylon.

FASHION INDUSTRY

Approximately **36%** of all plastic produced is for packaging.

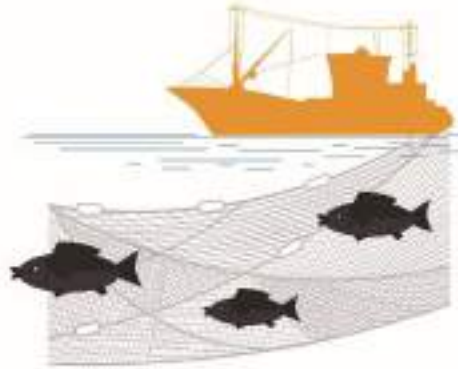
Approximately

100 billion

tonnes of waste from the building and construction industry is generated annually and about

35%

is sent to landfill.



More than

45 million kg

of plastic enters the ocean from industrial fishing gear alone.

Cars are made up of around

30%

of plastic components.

Plastic used in the consumer goods industry causes an estimated

US$75 billion

in environmental damage per year.

Single-use plastic is made almost exclusively from fossil fuels, and plastic production accounts for around

3.4%

of global greenhouse gas emissions.

Eight out of 10 tourists visit coastal areas, adding to the

8 million

tonnes of plastic that enter the ocean every year.

About **60%** of material made into clothing is plastic. Laundry alone causes around 500,000 tonnes to be released into the ocean every year.

Approximately

12.5 million

tonnes of plastic products are used in plant and animal production, and

37.3 million

tonnes in food packaging per year.


Recycled
9%
Incinerated
17%
Where does this plastic end up?
Landfilled
46%
Mismanaged, uncollected
22%

Microplastics

- They are tiny shards of plastic measuring up to 5mm in length. They come from everything from tires to beauty products, which contain microbeads, tiny particles used as exfoliants.
- Another key source is synthetic fabrics. Every time clothing is washed, the pieces shed tiny plastic fibres called microfibres – a form of microplastics.
- Laundry alone causes around 500,000 tonnes of plastic microfibres to be released into the ocean every year –the equivalent of almost 3 billion polyester shirts.

- **Microplastics can enter the body through inhalation and absorption via the skin and accumulate in organs.**
- **Some of the chemicals in microplastics are associated with serious health impacts, especially in women.**
- **40% of the world's garbage is burnt, 12% of which consists of plastic.**
- **The burning of plastic waste has multiple health impacts such as asthma and emphysema.**

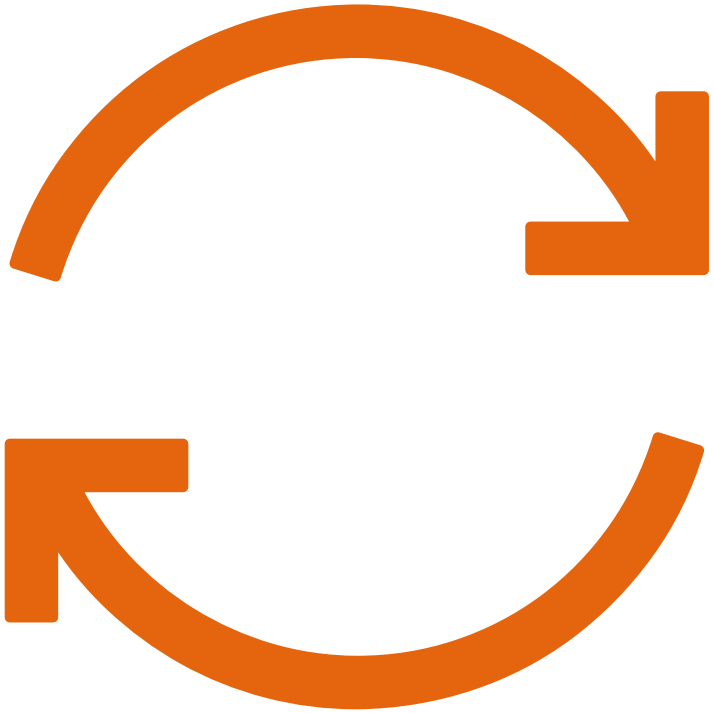
How can we beat plastic pollution?

Circular Plastic Economy

- To effectively tackle the plastic pollution crisis, systemic change is needed.
- This means, moving away from the current linear plastic economy, which centres on producing, using and discarding the material, to a circular plastic economy, where the plastic that is produced is kept in the economy at its highest value for as long as possible.

3 market shifts

- **Reuse**
- **Recycle and**
- **Reorient and Diversify**



Reuse

- **Reuse refers to the transformation of the ‘throwaway economy’ to a ‘reuse society’ where reusing plastic products makes more economic sense than throwing them away.**

Recycling

- **Recycling market for plastic recycling by ensuring that recycling becomes a more profitable venture.**

Reorient and Diversify

- **Reorient and diversify refers to shifting the market towards sustainable plastic alternatives, which will require a shift in consumer demand, regulatory frameworks and costs.**

What can you and I do about plastic pollution?

- Avoid single-use plastic products whenever possible.
- If plastic products are unavoidable, they should be reused or repurposed until they can no longer be used – at which point they should be recycled or disposed of properly.
- Bring bags to the grocery store, and if possible, striving to purchase locally sourced and seasonal food options that require less plastic packaging and transport.
- Educate children in your schools on Plastic Pollution.
- Talk to the local representatives about the importance of the issue of plastic pollution.
- Support businesses that are striving to reduce single-use plastic products in their supply chains.

What can you and I do about plastic pollution?

- Participate in social media campaigns.
- Share solutions when you find them.
- Volunteer with local plastic clean-up groups.
- Commit to celebrate a plastic-free ceremony, festival or event like Plastic-Free celebration of Feasts, Christmas, Lent, Easter, Birthdays etc.
- Preach a sermon, prepare liturgy at your local church or community on the topic.
- Do not give up hope. Progress is being made and momentum is building. Everyone's action on plastic pollution matters.

Resources

https://www.nationalobserver.com/2023/03/23/news/report-paints-starker-picture-plastic-waste-iceberg

https://www.science.org/doi/10.1126/sciadv.1700782

https://www.unep.org/news-and-stories/story/everything-you-need-know-about-plastic-pollution

https://www.unep.org/events/online-event/faiths-have-solution-beatplasticpollution-world-environment-day

https://www.unep.org/interactives/beat-plastic-pollution/

https://wedocs.unep.org/themes/UNEP-KR/vendor/pdfjs/web/viewer.html?file=/bitstream/handle/20.500.11822/42437/Plastic_Pollution_WED23EN.pdf#page=5

https://www.unep.org/resources/turning-off-tap-end-plastic-pollution-create-circular-economy

https://www.unep.org/events/online-event/faiths-have-solution-beatplasticpollution-world-environment-day