



# Committee N°8

# Age of plastic

## Expert's report



**ФОРУМ**  
ПО УСТОЙЧИВОМУ  
РАЗВИТИЮ

## AGE OF PLASTIC Committee №8

### **Age of plastic: plastic waste as a threat to sustainable development**

Plastic waste has become one of the biggest threats not only to ecological condition of environment but to health and well-being of each human.

It is nearly impossible to imagine our life without plastic as everyday consumption bases on products consisting or bagged with plastic. Every single minute about one million plastic items are being sold. About 8 million tons of plastic find their way to the world ocean per year. However unthinkable the world without plastic may seem, the formidable impact of plastic invasion that has already been revealed or is going to be revealed soon is hard to underestimate.

The history of plastic begins with the name of Alexander Parks, creator of the first celluloid, in 1855. During World War Two owners of factories and plants being in need of natural sources started replacing them with plastic. In 1955 popular American magazine «Life» unfolded advertising of plastic for everyday usage. At that point broad masses of population have evaluated the merits of plastic - its low price, practicality, availability.

Now we can see consequences of plastic revolution:

- Since 1950s we have produced about 8,3 billion tones plastic.
- About 1 million birds and 100 thousand sea creatures die because of plastic.
- About 12 million tones plastic get into the world ocean per year.
- On the average, every person eats 5 grams of plastic per week. That happens due to micro plastic.

As the pace of urbanisation does not seem to subside in foreseeable future, about 5 billion people will live in cities by 2030. That will stimulate the industrial production and the amount of waste, including,

undoubtedly, plastic waste. Which means our society is going to face even more challenging issue than we deal with at the time.

The United Nations has taken on the responsibility to confront ecological deterioration and preserve important environmental sources for future generations. One of the key events in this field was the Paris agreement on climate change adopted on December 12, 2015.

Plastic pollution control as one of major ecological concerns has been named significant aim in The UN General Assembly resolution adopted on September 25, 2015.

The UN Secretary-General Antonio Guterres has numerously emphasized that the ecological challenges are not about politics, they are the question of survival. That statement, without a doubt, reflects the UN's approach to the problem of plastic waste – be the country developed, developing or in conflict, it should contribute to fighting against this problem of the modern world.

Plastic waste harms the environment in multiple ways, not all of which come to surface at first sight:

- As products containing plastic decompose for 100-900 years depending on the type of plastic, it results in degradation of soils and deterioration of natural habitats.
- Having reached water objects, plastic products harm animals as they may be misled by its appearance recalling small fish or plankton and ingest it.
- Tons of plastic that have been ejected to water objects and have reached the ocean form giant so-called «Plastic islands». Such plastic clusters can even be seen from the outer space! The biggest one was called The Great Pacific Garbage Patch. The Great

Pacific Garbage Patch is a collection of marine debris in the North Pacific Ocean.

- Plastic decomposition in natural habitat leads to even more menacing problem – microplastic. It could get into food and water through subsoil water. Recent research has shown that in some regions one of three fishes has traces of micro plastic in digestive organs.
- When being burnt plastic items release amounts of toxins that are dangerous for humans and greenhouse gases that affect climate change. Toxins cause respiratory problems.
- Plastic toxins may seep into the subsoil water sources and end up in humans drinking spoilt water.
- More than 200 animal species are known to ingest plastic that they find in their habitats. When animals come into contact with plastic waste, they may consume the toxins or become entangled in the plastic. Even a piece of plastic can be clogged in animal's stomach and cause painful death.
- As the world population is growing at a fast pace, the sizes of plastic consumption are rapidly increasing as well. Not hard to imagine, thus, that we will need more space to locate dumps and landfills. That in its turn will affect animal habitats.

There is a variety of actions to be done on local, municipal and state level.

Measures that could be taken by the government in order to eliminate effects of plastic usage:

- Constructing recycling plants that can recycle numerous types of plastic
- Setting limits on plastic production and usage. For example, Latvian government has imposed an extra tax on shops using plastic bags.
- Creating flexible legislation that can encourage citizens to separate waste, take responsibility when throwing plastic. For example, Australian government has introduced strict regulations of waste disposal: unauthorised collection, transportation and placement of waste leads to the payment of a fine in the amount of \$ 7500 for individual person and \$ 15,000 for legal entity.

- Encouraging initiatives to replace plastic with other materials. For example, some countries started bagging groceries in plants leaves.

- Encouraging implementation of innovative technologies and methods.

However, such methods are often controversial and cause debates. For example, more and more countries start to admit advantages of using plastic waste when constructing roads. Such roads are proved to be more wear-resistant and solve the problem of plastic invasion as 684 thousand plastic bottles and 1,6 million plastic bags can be used for 1 kilometre of such a road. Nonetheless, a lot of questions are raised: Will not it be possible for plastic leavings to get into subsoil water? Will not terrestrial biosystem be affected? Such initiatives should be finalised and discussed on state level or within international organisations with focus on the environment.

What measures have already been taken by the world community with the help of the UN?

- 59 countries have prohibited usage of plastic in some extent or completely.

Bangladesh was the first country to have banned plastic bags in 2002. In 2017, the government of Kenya imposed strict plastic ban. Punishment for carrying plastics bags includes heavy penalties and jail terms. Manufacturing and importing plastic bags attract penalties ranging between \$19,000 and \$38,000 and jail terms of up to 4 years.

- 170 countries have committed to have reduced the plastic production by the 2030 at the UN Environment Assembly that was held in Nairobi in 2019

- Since 1 August 2018, the UN Gigiri compound is the first UN headquarters free of single-use plastic in its cafeterias. Disposable plastic cups, cutlery, coffee lids and takeaway containers are also not available.

- In 2019 countries exporting hard-to-recycle plastic to Asian and African countries have signed the agreement to stem flow of plastic. Once the agreement enters into force, exporting countries will need consent from

countries receiving contaminated, mixed or unrecyclable plastic waste.

- The UN Environment Program has launched the Inclusive Green Economy Initiative.

In order to prevent our planet from plastic captivity and create the economic pattern that takes into account citizens well-being and social equity more and more countries begin to adhere basic principles of the Inclusive Green Economy. It takes the ground in producing less carbon, stimulating efficient and clean production, inclusive consumption and outcomes, encouraging creation of eco-friendly production.

One of the most important steps in fighting plastic invasion is distributing the idea of conscious consumption as most of the plastic pollution comes from everyday products. The culture of conscious consumption is the key element in preventing ongoing plastic oversupply and it includes small but important steps:

- Rejecting plastic bags and using eco-alternatives
- Rejecting buying products packed in plastic
- Rejecting plastic straws and cups
- Separating waste
- Participating in personal ecological initiatives such as eco-hiking, collective clean-ups
- Distributing basic principles of eco-friendly behaviour with the help of charity events etc

Despite all the measures taken, current state of affairs concerning plastic waste fighting leaves much to be desired. So the contribution of every individual is highly important.

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