

# Environmental Committee



## Topic B:

### *The Question of Reducing Single Use Plastic Products Pollution*

#### **i. Introduction of the topic**

“The benefits of plastic are undeniable. The material is cheap, lightweight and easy to make. These qualities have led to a boom in the production of plastic over the past century.”<sup>1</sup> In fact, “since the 1950s, annual production of plastics increased nearly 200-fold to 381 million tonnes in 2015. For context, this is roughly equivalent to the mass of two-thirds of the world population.”<sup>2</sup>

The increasing use and production of plastics has consequently been of growing global concern, not only because of the materials used and the effects this exponentially growing production has on climate change and air pollution, but especially because of the disposal of these products. In fact, according to National Geographic, “less than a fifth of all plastic is recycled globally.”<sup>3</sup> This is because, although the production has increased at an exponential rate, the trash collection organizations all around the world have not been able to enlarge itself equally, leading to this non-disposable and non-recyclable excess plastic, which has been polluting our world since then.

The greatest accomplice in this pollution is the rise of single-use plastics, as “the main cause for the increase in plastic production is plastic packaging.”<sup>4</sup>

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<sup>1</sup> “Single-Use Plastics, A Roadmap for Sustainability.” *UN Environment Document Repository*, UN Environment Programme, 2018, [wedocs.unep.org/bitstream/handle/20.500.11822/25496/singleUsePlastic\\_sustainability.pdf?isAllowed=y&sequence=1](http://wedocs.unep.org/bitstream/handle/20.500.11822/25496/singleUsePlastic_sustainability.pdf?isAllowed=y&sequence=1).

<sup>2</sup> Ritchie, Hannah, and Max Roser. “Plastic Pollution.” *Our World in Data*, 1 Sept. 2018, [ourworldindata.org/plastic-pollution](http://ourworldindata.org/plastic-pollution).

<sup>3</sup> Parker, Laura, and Jason Treat. “Fast Facts about Plastic Pollution.” *National Geographic*, 20 Dec. 2018, [www.nationalgeographic.com/news/2018/05/plastics-facts-infographics-ocean-pollution/](http://www.nationalgeographic.com/news/2018/05/plastics-facts-infographics-ocean-pollution/).

<sup>4</sup> “Fact Sheet: Single Use Plastics.” *Earth Day Network*, 10 Apr. 2018, [www.earthday.org/2018/03/29/fact-sheet-single-use-plastics/](http://www.earthday.org/2018/03/29/fact-sheet-single-use-plastics/).

This topic is one of great importance in the modern world, since it affects not only the developing countries where the plastic eventually ends up, but it also greatly affects marine life, the environment, and the society's mentality towards being environmentally mindful.

## ii. Definition of Key Terms

Plastic: "a synthetic material made from a wide range of organic polymers such as polyethylene, PVC, nylon, etc., that can be moulded into shape while soft, and then set into a rigid or slightly elastic form."<sup>5</sup>

Single-use: "designed to be used once and then disposed of or destroyed."<sup>6</sup>

Microplastics: "extremely small pieces of plastic debris in the environment resulting from the disposal and breakdown of consumer products and industrial waste."<sup>7</sup>

Recycling: "the action or process of converting waste into reusable material."<sup>8</sup>

Artificial: "made or produced by human beings rather than occurring naturally, especially as a copy of something natural."<sup>9</sup>

Pollution: "the presence in or introduction into the environment of a substance which has harmful or poisonous effects."<sup>10</sup>

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<sup>5</sup> "Plastic: Definition of Plastic by Lexico." *Lexico Dictionaries | English*, Lexico Dictionaries, [www.lexico.com/en/definition/plastic](http://www.lexico.com/en/definition/plastic).

<sup>6</sup> "Single-Use: Definition of Single-Use by Lexico." *Lexico Dictionaries | English*, Lexico Dictionaries, [www.lexico.com/en/definition/single-use](http://www.lexico.com/en/definition/single-use).

<sup>7</sup> "Microplastic: Definition of Microplastic by Lexico." *Lexico Dictionaries | English*, Lexico Dictionaries, [www.lexico.com/en/definition/microplastic](http://www.lexico.com/en/definition/microplastic).

<sup>8</sup> "Recycling: Definition of Recycling by Lexico." *Lexico Dictionaries | English*, Lexico Dictionaries, <https://www.lexico.com/en/definition/recycling>.

<sup>9</sup> "Artificial: Definition of Artificial by Lexico." *Lexico Dictionaries | English*, Lexico Dictionaries, [www.lexico.com/en/definition/artificial](http://www.lexico.com/en/definition/artificial).

<sup>10</sup> "Pollution: Definition of Pollution by Lexico." *Lexico Dictionaries | English*, Lexico Dictionaries, [www.lexico.com/en/definition/pollution](http://www.lexico.com/en/definition/pollution).

### iii. Background Information

“In 1907 Leo Baekeland invented Bakelite, the first fully synthetic plastic, meaning it contained no molecules found in nature. Over the last century and a half humans have learned how to make synthetic polymers, often using carbon atoms provided by petroleum and other fossil fuels. Synthetic polymers are made up of long chains of atoms, arranged in repeating units, often much longer than those found in nature. It is the length of these chains, and the patterns in which they are arrayed, that make polymers strong, lightweight, and flexible. Plastic debris in the oceans was first observed in the 1960s, a decade in which Americans became increasingly aware of environmental problems. Rachel Carson’s 1962 book, *Silent Spring*, exposed the dangers of chemical pesticides. Plastic also gradually became a word used to describe that which was cheap, flimsy, or fake. Also while so many plastic products are disposable, plastic lasts forever in the environment. The ultimate symbol of the problem of plastic waste is the Great Pacific Garbage Patch, which has often been described as a swirl of plastic garbage the size of Texas floating in the Pacific Ocean.”<sup>11</sup>

### iv. Major Countries and Organisations involved

- The United Nations Environment Programme, which not only holds assemblies between the members of the UN, but also organises events to raise public awareness of the problem, such as the “World Environment Day”<sup>12</sup>
- The European Union, which has approved a plastic ban on single-use plastics, and plans to “collect and recycle 90 percent of plastic bottles by 2025.”<sup>13</sup>
- The People’s Republic of China, which was the world’s “biggest consumer of discarded plastics, [and has now] [banned nearly all waste imports](#)”<sup>14</sup>
- The United States of America, which are the second highest producer of plastic in the world.<sup>15</sup>

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<sup>11</sup> “The History and Future of Plastics.” *Science History Institute*, 20 Dec. 2016, [www.sciencehistory.org/the-history-and-future-of-plastics](http://www.sciencehistory.org/the-history-and-future-of-plastics).

<sup>12</sup> “Beat Plastic Pollution.” *UN Environment*, 2018, [www.unenvironment.org/interactive/beat-plastic-pollution/](http://www.unenvironment.org/interactive/beat-plastic-pollution/).

<sup>13</sup> Howard, Brian Clark. “A Running List of Action on Plastic Pollution.” *National Geographic*, 10 June 2019, [www.nationalgeographic.com/environment/2018/07/ocean-plastic-pollution-solutions/](http://www.nationalgeographic.com/environment/2018/07/ocean-plastic-pollution-solutions/).

<sup>14</sup> “Asian Countries Take a Stand against the Rich World's Plastic Waste.” *Los Angeles Times*, Los Angeles Times, 17 June 2019, [www.latimes.com/world/la-fg-asia-plastic-waste-20190617-story.html](http://www.latimes.com/world/la-fg-asia-plastic-waste-20190617-story.html).

<sup>15</sup> Ritchie, Hannah, and Max Roser. “Plastic Pollution.” *Our World in Data*, 1 Sept. 2018, [ourworldindata.org/plastic-pollution](http://ourworldindata.org/plastic-pollution).

- There are also several NGOs such as:
  - Plastic Oceans Foundation, Clean Ocean Actions, and SLOActive, all of which try to raise awareness and decrease the plastic pollution of the ocean.

## v. Timeline of Events

**1946:** The first National Plastics Exhibition opens in New York City to showcase all the new consumer uses for the plastics developed to aid in World War II. During the war, plastic production had increased nearly four-fold.

**1979:** Plastic grocery bags are introduced in the U.S.

**1990s:** Widespread use of plastic microbeads in cosmetics begins.

**1997:** Charles Moore discovers the Great Pacific Garbage Patch, the world's largest collection of floating garbage, when sailing home to Los Angeles.

**2008:** A government study confirms that Bisphenol A, a chemical used to manufacture hard plastic bottles and the lining of baby-formula cans, may increase risks of early puberty, breast cancer, prostate issues and behavioral problems.”<sup>16</sup>

### The Current Situation:

Many resolutions are taking place on plastic pollution. “In May 2019, 180 countries reached a deal that aims to sharply reduce the amount of plastic that gets washed into the world’s oceans. They agreed to amend the Basel Convention to make global trade in plastic waste more transparent and better regulated, while also ensuring that its management is safer for human health and the environment.”<sup>17</sup> “One hundred and seventy countries have pledged to “significantly reduce” the use of plastics by 2030 at the UN Environment Assembly in Nairobi”<sup>18</sup> “The President of the UN General Assembly launched a new global call to action

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<sup>16</sup> Rosane. “Plastics: The History of an Ecological Crisis.” *EcoWatch*, EcoWatch, 22 Mar. 2019, [www.ecowatch.com/plastics-history-ecological-crisis-2560978473.html](http://www.ecowatch.com/plastics-history-ecological-crisis-2560978473.html).

<sup>17</sup> Miles, Tom. “U.N. Clinches Deal to Stop Plastic Waste Ending up in the Sea.” *Reuters*, Thomson Reuters, 13 May 2019, [www.reuters.com/article/us-environment-plastic/u-n-clinches-deal-to-stop-plastic-waste-ending-up-in-the-sea-id-USKCN1SG19S](http://www.reuters.com/article/us-environment-plastic/u-n-clinches-deal-to-stop-plastic-waste-ending-up-in-the-sea-id-USKCN1SG19S).

<sup>18</sup> “UN Resolution Pledges to Plastic Reduction by 2030.” *BBC News*, BBC, 15 Mar. 2019, [www.bbc.com/news/science-environment-47592111](http://www.bbc.com/news/science-environment-47592111).

on Tuesday, to help end the scourge of plastic pollution in the ocean in December 2018.”<sup>19</sup>

“In 2018, the General Assembly today adopted two texts on the oceans and seas linked to the implementation of the landmark 1982 United Nations Convention on the Law of the Sea, with speakers asserting during the annual debate on the matter that healthy, productive, resilient oceans and seas are central to sustainable development.”<sup>20</sup>

“One-hundred-and-ninety-three countries - including Britain - have signed a UN resolution to drastically reduce the amount of plastic that ends up in our oceans. So, the UN's agreement to start keeping better track of how much plastic is being dumped in the oceans and begin trying to find new ways to make plastic pollution illegal is massive news. The UN Environmental Programme also wants to see some packaging and, in particular, plastic straws, redesigned or banned altogether.”<sup>21</sup> These recent resolutions that have passed or that are being worked on are trying to protect the environment from plastic.

## **vi. Relevant UN Treaties**

Addressing single-use plastic products pollution, March 2019<sup>22</sup>

Marine plastic litter and microplastics, March 2019<sup>23</sup>

Implementation plan “Towards a pollution-free planet,” March 2019<sup>24</sup>

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<sup>19</sup> “Assembly President Launches New Initiative to Purge Plastics and Purify Oceans | UN News.” *United Nations*, United Nations, 4 Dec. 2018, [news.un.org/en/story/2018/12/1027571](https://news.un.org/en/story/2018/12/1027571).

<sup>20</sup> “Adopting Two Resolutions, General Assembly Speakers Stress That Healthy, Resilient Oceans, Seas Play Central Role in Achieving Sustainable Development Goals | Meetings Coverage and Press Releases.” *United Nations*, United Nations, 11 Dec. 2018, [www.un.org/press/en/2018/ga12103](https://www.un.org/press/en/2018/ga12103).

<sup>21</sup> Phillipson, Daisy. “All 193 UN Countries Have Signed A Pledge To Reduce Plastic Pollution In The Oceans.” *LADBible*, LADBible, 28 Aug. 2019, [www.ladbible.com/community/inspirational-un-countries-sign-pledge-to-reduce-plastic-pollution-in-the-oceans-20180515](https://www.ladbible.com/community/inspirational-un-countries-sign-pledge-to-reduce-plastic-pollution-in-the-oceans-20180515).

<sup>22</sup> “Addressing Single-Use Plastic Products Pollution.” *UN Environment Assembly*, 15 Mar. 2019, <http://wedocs.unep.org/bitstream/handle/20.500.11822/28471/English.pdf?sequence=3&isAllowed=y>.

<sup>23</sup> “Marine Plastic Litter and Microplastics.” *UN Environment Assembly*, 15 Mar. 2019, <http://wedocs.unep.org/bitstream/handle/20.500.11822/28471/English.pdf?sequence=3&isAllowed=y>.

<sup>24</sup> “Implementation Plan ‘Towards a Pollution-Free Planet.’” *UN Environment Assembly*, 15 Mar. 2019, <http://wedocs.unep.org/bitstream/handle/20.500.11822/28484/English.pdf?sequence=3&isAllowed=y>.

## vii. Previous attempts to solve the issue

“In the last decade, dozens of national and local governments around the world have adopted policies to reduce the use of disposable plastic. And the number continues to grow.

[For example] Africa stands out as the continent where the most countries have adopted a total ban on the production and use of plastic bags. Of the 25 African countries that have banned the bags, more than half have done so in the last four years alone.”<sup>25</sup>

In total, “more than 60 countries have introduced bans and levies to curb single-use plastic waste. Plastic bags and, to a certain extent, foamed plastic products like Styrofoam have been the main focus of government action so far. [This is because] these plastic products are often the most visible forms of plastic pollution. It is estimated that 1 to 5 trillion plastic bags are consumed worldwide each year. Five trillion is almost 10 million plastic bags per minute. If tied together, all these plastic bags could be wrapped around the world seven times every hour. It is too early to draw robust conclusions on the environmental impact that bans and levies have had. In 50 per cent of cases, information about their impact is lacking, partly because some countries have adopted them only recently and partly because monitoring is inadequate. In countries that do have data, about 30 per cent have registered drastic drops in the consumption of plastic bags within the first year. The remaining 20 percent of countries have reported little to no change.”<sup>26</sup>

Plus, during a G7 Summit in Canada on the 7<sup>th</sup> and 8<sup>th</sup> of June 2018, a charter was proposed “which called on countries to reduce single-use plastics, prevent plastic from entering the world’s oceans, clean up existing plastic pollution, and invest in technologies for monitoring the impacts of the problem.”<sup>27</sup> However, the 7 countries didn’t reach an agreement, and Japan and the USA refrained from signing said charter.

Finally, another action that has been made in the past years has been during a UN Environment Assembly in Nairobi on the 15<sup>th</sup> of March 2019, in which “one hundred and seventy countries have pledged to ‘significantly reduce’ the use of plastics by 2030.”<sup>28</sup> The

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<sup>25</sup> “Beat Plastic Pollution.” *UN Environment*, 2018, [www.unenvironment.org/interactive/beat-plastic-pollution/](http://www.unenvironment.org/interactive/beat-plastic-pollution/).

<sup>26</sup> “Single-Use Plastics, A Roadmap for Sustainability.” *UN Environment Document Repository*, UN Environment Programme, 2018, [wedocs.unep.org/bitstream/handle/20.500.11822/25496/singleUsePlastic\\_sustainability.pdf?isAllowed=y&sequence=1](http://wedocs.unep.org/bitstream/handle/20.500.11822/25496/singleUsePlastic_sustainability.pdf?isAllowed=y&sequence=1).

<sup>27</sup> McCarthy, Joe. “US and Japan Refuse to Sign G7 Pact Against Plastic Pollution.” *Global Citizen*, 11 June 2018, [www.globalcitizen.org/en/content/us-japan-reject-g7-plastic-pollution-pact/](http://www.globalcitizen.org/en/content/us-japan-reject-g7-plastic-pollution-pact/).

<sup>28</sup> “UN Resolution Pledges to Plastic Reduction by 2030.” *BBC News*, BBC, 15 Mar. 2019, [www.bbc.com/news/science-environment-47592111](http://www.bbc.com/news/science-environment-47592111).

importance of this meeting was to set the tone for the upcoming UN Climate Action Summit in September 2019.

### **viii. Conclusion**

With “one million plastic bottles sold every minute in the world,”<sup>29</sup> time is key in this topic. And, although countries differ in opinion - especially for their economic interests - a compromise is necessary, to help the world maintain a healthy ecosystem and geology. Possible solutions are many. In the long-term, one could be to successfully recycle all plastics produced and consumed. Another one, but in the short-term, could be to directly ban all kinds of plastics, but then the impact on the world’s economy would also have to be somehow alleviated. Or, a way could also be found to decrease the world’s dependence on the material, such as purifying tap water to decrease plastic bottles sales.

These ideas can be recycled, but, in the end, the resolutions will all be discussed by you, and that is why we expect a great debate to be produced from this topic to which all of you have been exposed to, and consequently have a life-long connection.

### **ix. Optional Reading**

“Single-Use Plastics: A Roadmap for Sustainability.” *UN Environment Document Repository*, UN Environment Programme, 2018,

[wedocs.unep.org/bitstream/handle/20.500.11822/25496/singleUsePlastic\\_sustainability.pdf?isAllowed=y&sequence=1](http://wedocs.unep.org/bitstream/handle/20.500.11822/25496/singleUsePlastic_sustainability.pdf?isAllowed=y&sequence=1).

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<sup>29</sup> Nace, Trevor. “We’re Now At A Million Plastic Bottles Per Minute - 91% Of Which Are Not Recycled.” *Forbes*, Forbes Magazine, 28 July 2017, [www.forbes.com/sites/trevornace/2017/07/26/million-plastic-bottles-minute-91-not-recycled/#1804e92f292c](http://www.forbes.com/sites/trevornace/2017/07/26/million-plastic-bottles-minute-91-not-recycled/#1804e92f292c).

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[www.nationalgeographic.com/environment/2018/07/ocean-plastic-pollution-solutions/](http://www.nationalgeographic.com/environment/2018/07/ocean-plastic-pollution-solutions/).

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