**FORUM:** Environment Commission (CM)

**QUESTION OF:** Measures to Combat Plastic Pollution

**SUBMITTED BY:** France

THE ENVIRONMENT COMMISSION,

*Expressing* appreciation for the previous action of the United Nations to combat the issue of plastic pollution through the UN Environment Programme’s (UNEP) international #CleanSeas campaign, World Environment Day on June 5th, the Race for Water project, and the adoption of A/RES/44/228 and A/RES/71/220 affirming measures to halt and reverse the effects of environmental degradation,

*Recalling* the previous relevant United Nations resolution signed in December of 2017 illustrated a legally binding instrument to plastic waste, and stated to significantly reduce marine pollution of all kinds by 2025, in particular from land-based activities, including marine debris and nutrient pollution,

*Alerting* that plastic production in the past 10 years has outweighed the amount of plastic manufactured prior to the year 2000 and has resulted in billions of plastic being deposited into the ocean, making up about 40% of the world’s ocean surfaces,

*Approving* the recent initiative from two hundred and fifty organizations, called the ‘New Plastics Economy Global Commitment’ working to create a circular economy for plastic that entails reusing or repurposing plastic,

*Noting* the fact that plastic pollution in marine ecosystems contributes to the death of 100,000 aquatic mammals and 1 million seabirds every year, and the ingestion of plastics leads to a 50% mortality rate for these creatures,

*Unsatisfied* that without immediate action the count of plastic pollutants, including Bisphenol A (BPA), will continue to rise, and meet the estimated figure of 12 billion tons residing in either landfills, or the environment by the year 2050,

*Mindful* of the continual production of plastic waste of which nearly 6,300 metric tons have been accrued since 2015 with only about 9% being recycled,

1. Strongly encourages the expansion of the Plastic Bank to reduce the amount of plastic waste in the oceans while allowing impoverished nations to build a future beyond poverty in which:
   1. plastic is translated into a monetary currency either to be exchanged for Blockchain secured digital tokens, cash, or items or services
      1. called Social Plastic, this form of plastic currency transforms the market, as recycled materials can be directly exchanged for tuition, medical insurance, or necessities like cooking fuel
      2. can be redeemed through a personal online account that keeps track of an individual’s plastic monetary balance;
   2. Social Plastic provides unlimited income opportunity, because:
      1. the more plastic collected, the more money that can be made
      2. it has allowed workers to more than triple their income by collecting plastics and redeeming their profits through the Plastic Bank;
   3. plastics are collected in developing nations are sent to raw material companies to be sold, which:
      1. in turn reuse materials, prohibiting the cycle of oceanic bound plastics,
      2. advocates for the slightly increased plastic prices due to the social responsibility and environmental cause of Social Plastics,
   4. the plastic industry is providing more jobs an economic opportunity to all persons living in impoverished nations overrun by plastic pollution,
   5. since it’s debut in Haiti in 2015, it has prevented over 8 million tons of plastics from flowing into the oceans;
2. Promotes the implementation of technological advancements and technologies such as plastic pyrolysis funded by the UN Technology Bank in assistance to the United Nations Environmental Program (UNEP) in order to:
   1. transform single-use plastic products back into petroleum fuel sources like oil done through a process by which:
      1. unused plastics are heated to high temperatures without oxygen
      2. these heated gases are then cooled and compressed into fuel;
   2. convert plastics in landfills to fuel that can be used to power cars, electricity, and manufacturing lubricants,
   3. reduce the quantity of plastics piled in landfills by altering its chemical compounds to become an abundant source of renewable energy, which:
      1. reduces greenhouse gas emissions by over 70%,
      2. opens up over 39,000 jobs in the United States,
      3. could potentially stimulate a 9 billion dollar economic boom;
   4. aim specifically at large more developed plastic producing nations including the United States, China, and Germany, due to their economic capability to harness large infrastructural pyrolysis plants to support them with help from plastic pollution proponents including the Plastic Pollution Coalition and Greenpeace;
   5. allow developing nations to participate with the incorporation of mobile pyrolysis converters like RenewOne;
3. Urges Member States to adopt policies from the Draft Directive proposed by the European Commission such as but not limited to:
   1. a ban on the private use of disposable plastic products like straws, plastic plates, plastic utensils, plastic coffee stirrers, cotton swabs with plastic stems and plastic balloon holders,
   2. a restriction on the use of plastic cups for beverages as well as plastic food containers, such as the ones used for take-away,
   3. a requirement to help cover the costs of clean-up and waste treatment, including tobacco products with filters (such as cigarette butts), plastic bags, candy wrappers, potato chip packages, and wet wipes,
   4. required labels on menstrual pads and wet wipes indicating how the product should be disposed of,
   5. requirement of payments by producers of fishing gear — which accounts for 27 percent of beach litter — to cover the costs of waste collection in ports,
   6. the use of a deposit system or other measure in order to collect 90 percent of plastic bottles used in their country by 2025,
   7. an increase in consumer information about the dangers of plastic packaging and pollution;
4. Calls upon member states to educate both children and adults (users and producers) on the causes, effects, solutions, and encourage all citizens to come up with solutions to plastic pollution through means such as but not limited to:
   1. classes and lessons at all schools and universities,
   2. the expansion of programs like Project Star to add to the curriculum of schools and encourage outreach seminars to teach the youth about the negative implications of polluting the environment, thus incentivizing these individuals to adopt good environmental habits from a young age,
   3. educational advertisements,
   4. free seminars and courses for adults held by local representatives or UN NGOs or ENGOs such as but not limited to:
      1. The Nature Conservancy,
      2. Friends of the Earth,
      3. Greenpeace;
5. Suggests the implementation of acetone based dissolvents in areas such as the Great Pacific Garbage Patch, in order to diminish large collections of plastic waste currently in the Ocean which:
   1. would deteriorate large masses of plastic pollutants currently in the ocean, in a way that’s harmless towards the environment as well as the inhabitants therein;
   2. serve as a harm free plastic dissolvent which would be slow acting and serve as a method by which large buildups of plastic pollution may be reduced in order to simplify the procedure of extraction;
   3. provide a reasonably inexpensive method to allow the large build ups of plastic to be effectively reduced through active extraction such as the use of nets and large vessels, may be removed from the ocean;
   4. is a beneficial method of plastic management due to the fact that large buildups of plastic in the ocean such as that of the (GPGP), may not always be most effectively reduced through the utilization of active extraction, acetone treatment can be utilized to shrink such large masses so that they may be completely extracted from the ocean;
6. Requests the development of the Excavate, Recycle, and Dispense initiative, (ERD) which would target landfills of plastics which have been discarded and are rendering large amounts of soil infertile due to toxicity derived from chlorinated plastics by:
   1. excavating, which would be the primary phase in this operation and would command the use of international cooperation to uproot large waste deposits wherein plastics would be removed,
   2. recycling, is the second stage of the ERD initiative and would shred and subsequently melt these plastics into a uniform state after being retrieved from large landfills and plastic buildups,
   3. dispensing the recycled plastics to producers who utilize recycled plastics rather than those newly produced;
7. Strongly suggests that companies inform people of the dangers of plastic on any product contain (non biodegradable) plastics, similarly to what is on cigarette packages, these must contain information as to the dangers of plastic, including but not limited to:
   1. global warming,
   2. health risks, to animals and people alike,
   3. imagery of the dangers of plastic such as:
      1. the heavily polluted parts of the ocean,
      2. the heavily polluted LCDC’s that willingly or unwillingly have to deal with our trash,
      3. the unnecessary death of animals due to ingestion of plastic;
8. Emphasizes the gradual integration alternative materials and substances to replace the use of plastic in everyday items through the use of:
   1. nanocellulose, which is:
      1. derived from cellulose, the main component found in stems, roots and leaves of plants, which makes it completely biodegradable with virtually no effects on the environment,
      2. found in three different forms, Cellulose Micro Fibrils (CMF), Cellulose Nano Fibrils (CNF), Cellulose Nano Crystals (CNC), which all have a different density and strength to be utilized in different ways;
   2. fungi being developed by Utrecht University, because:
      1. fungi are decomposers and can easily break apart types of organic compounds to create a type of fortified film or pulp that can be baked in order to become inert and usable as an object,
      2. certain types of fungi are being used currently that mimic the properties of hard plastics, more malleable plastics, rubber, and cork, so the usage of these substances can be very versatile,
      3. the decomposition of such materials only takes approximately 180 days in comparison to the 1,000 years estimated for the decomposition of most plastics,
      4. companies like the U.S. company, Ecovative, are already successfully using these naturally-generated materials to replace packaging,
      5. it would be advisable to use this technology in the packaging, manufacturing of furniture, and service-related products;
9. Expresses its hope for all UN member states to support both financially and logistically the OCF (Ocean Cleanup Foundation), which has recently launched the colossal project of removing plastic waste from oceans from the Great Pacific Garbage Patch, in pursuance of:
   1. organizing expeditions to map the plastic pollution problem to an unprecedented degree of detail,
   2. bridging the gap between the current project and the full scale deployment of the solution for the whole world and thus combating the issue of plastic pollution in the oceans;
10. Further urges the utilization of Ideonella sakaiensis 201-F6, a bacterium identified in 2016, to reduce the existing amount of plastic that is present in waterways worldwide which works through the process of attacking the substance with two enzymes:
    1. polyethylene terephthalate hydrolase (PETase), which:
       1. is a mutant enzyme from a common material, polyethylene terephthalate (PET), used to manufacture plastic bottles, whose presence has decimated marine life
       2. results in mono(2-hydroxyethyl) terephthalic acid (MHET)
       3. begins breaking down PET to its less detrimental components within a matter of days as compared to its natural decomposition period of 460 years
    2. mono(2-hydroxyethyl) terephthalate hydrolase (MHETase), which derives itself from MHET
    3. breaks down the original PET into harmless monomers that are able to be released into the environment with minimal damage;
11. Recommends that all member states implement taxes on conventional plastic products in order to reduce excessive and unnecessary uses of plastic;
12. Calls for the creation of the United Nations Plastic Recycling Program (UNPRP), financially and logistically supported by the GPWM, with a mission of:
    1. setting up plastic recycling programs in countries who do not have the financial or logistical capacity which includes:
       1. planning and developing waste management infrastructure on a local level to help organize the movement and management of waste, to ultimately reduce the waste pollution
       2. adding plastic recycling waste bins in public areas, schools and near food centers, alongside garbage bins,
       3. additional larger plastic waste containers to be allocated to corporations, businesses and governmental buildings,
       4. setting up distribution centers in certain countries with the task of transporting and organizing and the plastic from the allocated plastic waste containers to recycling facilities,
       5. the creation of State-owned plastic recycling plants to ensure that the current and near future plastic products can be disposed and recycled accordingly, to combat the further pollution of plastic globally,
    2. working with NGOs striving to combat the plastic pollution within the ocean, as more than 50 percent of the ocean is outside of national jurisdiction;
13. Further invites the utilization of mealworms to break down polystyrene (PS), a non-biodegradable chemical component of styrofoam, by means of:
    1. their ability to digest styrofoam and safely convert polystyrene to carbon dioxide through their digestive tracts,
    2. the slow decomposition of the 25 billion styrofoam coffee cups thrown away in the U.S. alone each year,
    3. the allocation of further research on mealworm capabilities through organizations Oceana and Plastic Change to:
       1. incorporate the digestive talents of mealworms into a much more time efficient solution,
       2. use findings on mealworm digestion to fuel discoveries on similar marine-dwelling animals who have the potential to reduce plastics in the Great Pacific Garbage Patch.