

# SAIMUN 2017 Research Report

**Committee:** Environmental

**Issue:** Developing an international consensus on all forms of waste disposals

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## 1. Description of Issue

The issue of improper incineration and disposal of waste has existed for many decades since the advent of fossil fuels and toxic man-made materials. Currently, more than 60,000 unapproved chemicals are used in customer products and 254 million tons of waste are being produced as a result, 40% of it being plastic. The fundamental reason for the over flooding amount of waste has its roots in the difference between human aims and the natural capacity. Waste combustion still happens due to the short-term economic profit and convenience, despite the fact that the Earth lacks the capacity to absorb all the toxic chemicals produced.

High tech incineration methods and landfills have been utilized throughout the years but have failed to resolve the issue, as they are too cost inefficient. Organic wastes are usually considered valuable to be simply discarded, but emit toxic methane gas when they rot under anaerobic conditions.

Taking this into consideration, the United Nations and NGOs have started acting upon the issue through promoting recycling, multiple conventions and protocols, which have successfully tackled the issue (As further explained below). Yet, there are unknown amounts of illegal waste disposals and e-waste trade that continues to harm the habitat for the future generations. Thus, member states are highly encouraged to produce resolutions that approach this issue in a reasonable manner and potentially provide solutions for developing an international consensus on all forms of waste disposals.

## 2. Definition of Key Terms

**UNEP (United Nations Environment Programme)** – A leading environmental authority that works under the United Nations in order to set global agenda regarding sustainable development and environmental protection. UNEP currently has its global base in Nairobi as it is mostly concerned with problems in the developing world. It mainly focuses on providing framework of possible environmental policies, monitoring and assembling statistics, and providing UN activists to assist environmental capacity building and environment ministries.

**GEF (Global Environment Facility)** – A partnership established in 1992 Rio Earth Summit, which works alongside the United Nations and NGOs as a financial mechanism of environmental conventions such as the Minamata Convention on Mercury. GEF has aided sound disposal of 200,000 tons of Persistent Organic Pollutants, which are known to be highly toxic.

**Trust Fund** – The United Nations and UNEP are responsible for multiple trust funds that aim to support on-going environmental projects in developing countries where governments are impotent, as well as promoting transparency within operations. Many wealthier countries, including GEF 39 donor countries, contribute in these environmental trust funds to gain authority and reduce transaction costs between countries in return.

**ISWA (International Solid Waste Association)** – An organization working under The General Assembly, that strives to promote and develop sustainable waste management by supporting LEDCs through the international network, providing education, and cooperating with stakeholders in the field, including governments and international organizations.

**The Strategic Approach to International Chemicals Management (SAICM)** – It is a framework to promote chemical safety formed around the ‘2020 goal’ that was adapted from the Sustainable Development Goals. It is administered by UNEP and is funded by trust funds that support QSP (Quick support projects) A, B, and C.

Priority A – Development of national chemical profiles and capacity assessments

Priority B – Development and strengthening of national chemicals management institutions, plans, programmes and activities.

Priority C – Mainstreaming the sound management of chemicals in national strategies

### 3. Timeline of Key Events

<b>Event</b>	<b>Description</b>
1874 – A new systematic incinerator called ‘The Destructor’ was created in Nottingham, England.	Traditionally, incineration was seen as the most sanitary way of waste disposal. However, nowadays, it is causing serious concerns globally as it is the major cause for many health related problems.
1965 – The United States federal solid waste management laws were enacted.	This classified minimum standard of landfills, enforcing illegality of ‘open dumps’ and promoted continuous monitoring of such regions.
1970 – Environmental Protection Agency was created under the Federal government of the United States, along with the celebration of the first Earth Day.	The EPA has its purpose in creating sustainable environment for the globe, but especially focuses on Sustainable materials management (SMM) that ensures systematic approach of productive recycling of materials.
1979 – EPA issued criteria regarding open waste disposal and dumping.	The criteria included 8 major elements related to sanitary landfill: Floodplains, endangered species, disease, air, safety, surface water, groundwater, and application to land used for production of food chain crops.
26 August 1987 - Montreal Protocol, an international treaty that promised eradication of substances that cause ozone depletion was signed.	This allowed recovery of ozone layer and prevented about 2 million cases of skin cancer worldwide. Consequently, the government spending on healthcare

	drastically decreased due to the phase-out plans of Chlorofluorocarbons(CFC) and Hydrochlorofluorocarbons (HCFC).
2001 May 22 – The Stockholm convention was signed	This global treaty focused on eliminating usage of POPs in member nations. Following this convention, member states were forced to submit national reports and thus consequently eliminated/restricted 26 POPs.
2013 January 19 – Minamata Convention signed	Intergovernmental Negotiating committee agreed to sign the Minamata Convention on Mercury on their 5 <sup>th</sup> session in Geneva.
2013 October 10 - Minamata convention was adopted	This then phased out and banned mercury mines in order to reduce related health issues.
2014 June 27 - UNEP resolution 1/5 Chemicals and waste	
2016 May – UNEP/EA2 resolution 7	This urged states to comply with the environmental international humanitarian law manuals, providing framework for legal and safe waste disposal in developing countries.

Key issues:

### **Impact of Hazardous materials**

Amongst the numerous hazardous materials that are being disposed, plastics are one of the most alarming ones. They are responsible for approximately 40% of solid waste and are not

biodegradable, meaning that they cannot disappear. Plastics are known to go through photo-degradation that relies on sunlight to be broken down, but this damages co-existing ecosystems by affecting natural habitats and thus exacerbates the situation.

### **Leaking of landfills**

According to EPA, all landfills are known to eventually leak and thus damage the groundwater. Landfills filled with numerous harmful materials can potentially threaten human habitats by producing toxic gases and foul odours, as well as through increasing the risk of birth defects and health problems.

### **Zero Waste**

Many argue that the production of waste is abnormal as it goes against the cycle of natural habitat. Based on this statement, many government bodies and organizations including the United Nations are working towards the goal of 'Zero Waste', which aims for the elimination of waste that is beyond mere 'management'. This includes providing state level programs that will increase incentives for companies and consumers to recycle, reuse materials, and forcing companies to produce minimum packaging.

### **Difference between LEDCs and MEDCs in terms of approaching the issue**

Although MEDCs produce significantly greater amount of waste than LEDCs, are financially more affluent, which allows them to use the latest technology when disposing waste. MEDCs traditionally relied on appropriate technology and legislations that enabled sustainable level of waste production and disposal such as Clean Air Act in the UK. LEDCs, due to their rapid industrialization, are experiencing increasing amount of waste produced. The unplanned slumps and lack of environmental protection leads to the population being more exposed to harmful products, which makes it necessary for LEDCs to follow the footsteps of LEDCs' laws and regulations.

## **4. Position of Key Member Nations and Other Bodies on the Issue**

### **USA**

As a nation that produces one of the greatest amounts of waste every year, USA has been working on habitat recovery and sustainable means of disposal. All waste material produced is controlled based on the Resource Conservation and Recovery Act (RCRA) produced in 1976, which requires individual states to create instructions of sustainable waste disposal. USA produced over 250 million tons of municipal solid waste annually in the last decade, and is also responsible for the questionable amount of electronic and toxic waste being sent over sea. Despite these irresponsible behaviours shown by major US MNCs, the USA is the largest donor nation of the UN trust funds, including UNEP trust fund.

## **UNEP**

The United Nations Environment Programme is currently assisting various sub-branches and long term projects with the aim of awareness building, capacity building, promotion of reusing waste, and assisting governments and policy makers. The UNEP division of technology, industry and economy was set up in 1975 to tackle the issue of waste disposal at a more regional level by cooperating with businesses in the industrial sector. The division contributed greatly in implementing Montreal Protocol to protect the Ozone layer since 1991, and hosts 10-Year Framework of Programmes on Sustainable Consumption and Production. The branch is also carrying out application of 'Integrated Waste Management Scoreboard', primarily aimed for ASEAN nations, which provides mechanism for evaluating waste disposal status in regions.

## **Japan**

Japan is renowned to be one of the cleanest and most sanitarily advanced countries in the world, and their laws and community values regarding waste management are no exception. The lack of space for landfill resulted in the inventions of high tech incinerating machines that use thermal treatment in order to reduce the cost and production of nitrogen oxides and sulphur dioxide. Although the recycling rate is noticeably low (20.8%) compared to other developing countries such as the UK (39%) and the Netherlands (51%), they are one of the few countries that are experimenting the possibilities of incineration that is regarded as a more traditional method.

## **Canada**

Canada's National Implementation Plan (NIP) is known to be one of the few effective forms of tackling the issue of Persistent Organic Pollutants (POPs). Canada has continued to take the leadership role in producing global protocol, alarmed by the effects of toxic waste on the Northern regions of the nation. The government regularly provides subsidies and aid to NGOs and NIP and also collaborates with community partners to ensure progress on the Waste Management Task Group (WMTG).

### **Germany**

As a country that has 87% of recycling rate, people are extremely familiar with source separation that is considered to be the most basic step of sustainable waste disposal. Surprisingly, Germany has no active landfills but rather relies on few incinerators. In 1994, the Focal Point to the Basel Convention was set up to serve as the contact point for UNEP secretariat and the European Commission. Germany strongly sticks to the fundamental idea of five level waste hierarchy composed of waste prevention, reuse, recycle, energy recovery, and waste disposal, which enables minimal waste production and maximum recycling rate.

## **5. Suggested Solutions**

After decades of discussion regarding the international agreement of waste disposal, 128 parties have now signed the Minamata Convention as well as the Montreal Protocol that have phased out 98% of the substances that are ozone damaging. These protocols provided guidelines for both LEDCs and MEDCs that were struggling to set targets and carry out their capacity building programmes.

More than 43 countries have implemented legal restrictions regarding lead paints under the UNEP's framework. Also, under the consensus of SAICM, \$44.5 million was spent to implement UNEP programmes in over 100 countries, including Mozambique where 79 hazardous pesticides were banned.

Although continuous efforts from the international society have resulted in well-constructed frameworks and diplomatic regulations, the detailed international consensus on waste disposals is yet to be agreed upon.

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