Chapter 10

The United Nations Basel Convention's Global Plastic Waste Partnership: History, Evolution and Progress

Susan Wingfield and Melisa Lim

Abstract The pollution of our marine and terrestrial environment by plastic waste is one of the most pressing global environmental challenges faced today. Developing a circular plastic economy and limiting plastic pollution requires multilevel actions from different stakeholders including oil and petrochemical producers, plastic manufacturers, consumer goods companies, retailers, consumers, waste managers, waste management authorities, plastic recyclers and others. As well as cleaning up the enormous quantities of plastic waste already in our oceans and lakes, there is an urgent need to strengthen countries' capacities to prevent, minimize and properly manage this waste. The Basel Convention, the most comprehensive global environmental treaty dealing with hazardous and other wastes, offers an important part of the solution. In addition to its provisions aimed at controlling the exports and imports of hazardous wastes and other wastes generated from households and ensuring their environmentally sound management, the Convention also seeks to tackle the problem at its source through prevention and minimization. With the addition of an amendment to the Convention specifically tackling plastic waste, and

The views expressed in this publication are those of the authors and do not necessarily reflect the views of the Secretariats of the Basel, Rotterdam and Stockholm Conventions (BRS), the United Nations Environment Programme (UNEP), the United Nations (UN) or contributory organizations. BRS, UNEP or the UN do not accept responsibility for the accuracy or completeness of the contents and shall not be liable for any loss or damage that may be occasioned, directly or indirectly, through the use of, or reliance on, the contents of this publication. Mention of the names of companies and commercial products does not imply their endorsement by the UN, UNEP and BRS. The designations employed and the presentation of the materials in this publication do not imply the expression of any opinion whatsoever on the part of BRS, UNEP or the UN, on the geopolitical situations or the legal status of any country, territory, city or area or their authorities, or concerning the delimitation of their frontiers or boundaries.

S. Wingfield (✉) · M. Lim

UNEP Basel, Rotterdam and Stockholm Conventions Secretariat, Geneva, Switzerland
e-mail: susan.wingfield@un.org; melisa.lim@un.org

© The Author(s) 2022

M. S. Bank (ed.), *Microplastic in the Environment: Pattern and Process*,
Environmental Contamination Remediation and Management,
https://doi.org/10.1007/978-3-030-78627-4_10

323

the establishment of a Plastic Waste Partnership, the Convention is positioned at the forefront in the fight against plastic pollution.

10.1 Introduction

The pollution of our marine and terrestrial environment by plastic waste is one of the most pressing global environmental challenges faced today. Over the last 10 years, we have produced more plastic than during the whole of the last century: global plastic production has increased steadily and reached 320 million tonnes a year in 2015 (Beckman 2018). Of the estimated 6.3 billion tonnes of plastic waste produced since the 1950s, only 9% has been recycled and another 12% incinerated (Parker 2018). An estimated 100 million tonnes of plastic is in our seas, 80–90% of which has come from land-based sources (Miles 2019). The good news is, since an estimated 80% of that land-based waste is due to a lack of efficient collection and management schemes, the problem is solvable (European Commission 2020).

Developing a circular plastic economy and limiting plastic pollution requires multilevel actions from different stakeholders including oil and petrochemical producers, plastic manufacturers, consumer goods companies, retailers, consumers, waste managers, waste management authorities, plastic recyclers and others (Ryberg et al. 2018).

Many governments are already taking considerable steps towards curbing plastic pollution, such as bans on the use of single-use plastic bags in at least 69 countries worldwide (United Nations Environment Programme 2018). Corporations are also taking concerted efforts to reduce their plastic footprints (Ellen Macarthur Foundation 2017). Concerned citizens are also doing their part, saying “no” to plastic straws, relying on reusable water bottles and coming equipped with their own grocery bags to the supermarket. There are also multi-million dollar efforts to clean up rivers, seas and oceans.¹ However, as well as cleaning up the enormous quantities of plastic waste already in our oceans and lakes, there is an urgent need to strengthen countries’ capacities to prevent, minimize and properly manage this waste.

The Basel Convention offers an important part of the solution. In addition to its provisions aimed at controlling the exports and imports of hazardous wastes and wastes generated from households and ensuring their environmentally sound management, the Convention also seeks to tackle the problem at its source through prevention and minimization. With the addition of an amendment to the Convention specifically tackling plastic waste,² and the establishment of a Plastic Waste

¹The Ocean Clean-up. Website. <https://theoceancleanup.com/about/>

²Became effective on 1 January 2021. For further information, see the Basel Convention website: <http://www.basel.int/Implementation/Plasticwaste/PlasticWasteAmendments/Overview/tabid/8426/Default.aspx>

Partnership, the Convention is positioned at the forefront in the fight against plastic pollution.

10.2 The Evolution of the Basel Convention

The cross-border transport of hazardous wastes seized the public's attention in the 1980s. The misadventures of "toxic ships" such as the *Katrin B* and the *Pelicano*, sailing from port to port trying to offload their toxic cargoes made the front-page headlines around the world. These tragic incidents were motivated in good part by tighter environmental regulations in industrialized countries. As the costs of waste disposal skyrocketed, "toxic traders" searching for cheaper solutions started shipping hazardous wastes to Africa, Eastern Europe and other regions. Once on shore, these waste shipments were improperly managed, resulting in profound impacts on human health and the environment. It was against this backdrop that the Basel Convention was negotiated in the late 1980s. Its thrust at the time of its adoption was to combat the "toxic trade", as it was termed.

The Basel Convention, which entered into force in 1992, is the most comprehensive global environmental treaty dealing with hazardous and other wastes requiring special consideration. It has near universal coverage, encompassing 188 Parties as of November 2020. The central objective of the Convention is "to protect, by strict control, human health and the environment against the adverse effects which may result from the generation and management of hazardous wastes and other wastes".³ The main provisions of the Convention focus on i. the reduction of hazardous and other waste generation and the promotion of environmentally sound management of hazardous and other wastes, wherever the place of disposal; ii. the restriction of transboundary movements of hazardous wastes except where it is perceived to be in accordance with the principles of environmentally sound management; and iii. a regulatory, or prior informed consent (PIC), procedure applying to cases where transboundary movements are permissible (Krueger 1999).

Since its inception, Parties to the Convention have developed a selection of tools to aid in its implementation. Technical guidelines, guidance documents and manuals, developed under the Convention by experts from developed and developing countries, in addition to stakeholders from industry and civil society, have provided countries with practical solutions to prevent and minimize their waste, to inventory that which is produced and to develop infrastructure and effective techniques to ensure its proper recycling and final disposal. Coupled with this extensive repository of guidance designed to assist Parties and others in implementing the Convention are technical assistance and capacity building efforts undertaken by the Secretariat

³Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention), U.N.T.S. vol. 1673, p. 57, Preambular para. 24.

and the Basel and Stockholm Convention's 22 regional centres worldwide.⁴ Added to this, a partnership programme under the Convention has a successful track record in tackling problematic waste streams such as end-of-life mobile phones,⁵ electrical and electronic waste or e-waste,⁶ household waste⁷ and, more recently, plastic waste.⁸

10.3 Basel Tackles Plastic Waste

Historically, China has been the largest plastic waste importer. China has imported 72.4 percent of traded plastic waste globally (Brooks et al. 2018). China's "National Sword" policy, enacted in January 2018, banned the import of most plastics and other materials headed for recycling processors, which had handled nearly half of the world's recyclable waste for the past quarter century (Katz 2019). The introduction of these plastic waste import restrictions by China led to an increased amount of plastic waste being sent to countries in Southeast Asia such as Indonesia, Malaysia, Vietnam and the Philippines. These countries, faced with the same challenges that China faced, are subsequently closing their doors (Niranjan 2019).

10.4 The Plastic Waste Amendments

Responding to growing concern and public awareness of the issue of marine plastic litter and microplastics, the Government of Norway submitted in June 2018 a proposal to amend the annexes to the Basel Convention to address plastic waste within its provisions.

The fourteenth meeting of the Conference of the Parties to the Basel Convention (COP-14, 29 April–10 May 2019) adopted amendments to Annexes II,⁹ VIII¹⁰ and

⁴For further information, see the Basel Convention website: <http://www.basel.int/Partners/RegionalCentres/Overview/tabid/2334/Default.aspx> and the Stockholm Convention website: <http://chm.pops.int/Partners/RegionalCentres/Overview/tabid/425/Default.aspx>

⁵For further information, see the Basel Convention website: <http://www.basel.int/Implementation/TechnicalAssistance/Partnerships/MPPI/Overview/tabid/3268/Default.aspx>

⁶For further information, see the Basel Convention website: <http://www.basel.int/Implementation/TechnicalAssistance/Partnerships/PACE/Overview/tabid/3243/Default.aspx> and <http://www.basel.int/Implementation/TechnicalAssistance/Partnerships/FollowuptoPACE/tabid/8089/Default.aspx>

⁷For further information, see the Basel Convention website: <http://www.basel.int/Implementation/HouseholdWastePartnership/Overview/tabid/5082/Default.aspx>

⁸For further information, see the Basel Convention website: <http://www.basel.int/Implementation/Plasticwaste/PlasticWastePartnership/tabid/8096/Default.aspx>

⁹Categories of waste requiring special consideration.

¹⁰Wastes presumed to be hazardous and therefore subject to the PIC procedure.

IX¹¹ to the Convention with the objectives of enhancing the control of the transboundary movements of plastic waste and clarifying the scope of the Convention as it applies to such waste. Starting with Annex VIII, the amendment sees insertion of a new entry, A3210, that clarifies the scope of plastic wastes presumed to be hazardous and therefore subject to the PIC procedure. The amendment to Annex IX, with a new entry B3011 replacing existing entry B3010, clarifies the types of plastic wastes that are presumed to not be hazardous and, as such, not subject to the PIC procedure. The wastes listed in entry B3011 include a group of cured resins, non-halogenated and fluorinated polymers, provided the waste is destined for recycling in an environmentally sound manner and almost free from contamination and other types of wastes, and mixtures of plastic wastes consisting of polyethylene (PE), polypropylene (PP) or polyethylene terephthalate (PET), provided they are destined for separate recycling of each material and in an environmentally sound manner and almost free from contamination and other types of wastes. The third amendment is the insertion of a new entry Y48 in Annex II which covers plastic waste, including mixtures of such wastes unless these are hazardous (as they would fall under A3210) or presumed to not be hazardous (as they would fall under B3011). The new entries became effective as of 1 January 2021.

Taken collectively, the ultimate result of the plastic waste amendments is the broadening of the scope of plastic wastes, including mixtures of such wastes, that could be subject to the PIC procedure, meaning that exporting countries will need to formally obtain the consent of importing countries to receive shipments of such plastic waste and ensure that the importing countries have the capacity to manage plastic waste in an environmentally sound manner. It will be up to each Party to take the necessary measures to transpose the new entries into national law, as needed and depending on its legal system. Such measures should be taken in a timely manner to ensure that, on 1 January 2021, each Party is in a position to implement the provisions of the Basel Convention with respect to the plastic wastes listed in entries A3210 and Y48. This includes applying the PIC procedure in case of a transboundary movement of such wastes but also applying the Convention's provisions with respect to minimizing waste generation and ensuring their environmentally sound management.

To assist Parties with these new undertakings, the Conference of the Parties decided on a range of additional steps to ensure that, once the entries became effective, the world would be ready to overcome the plastic waste challenge.¹² To start with, the Plastic Waste Partnership was established to provide a global platform to bring together countries from all over the world, working hand in hand with stakeholders from civil society and the business community to promote the environmentally sound management of plastic waste and prevent and minimize its generation. Additional guidance on how to ensure, more generally, the environmentally sound management of waste as well as its prevention and minimization is available in an

¹¹ Wastes that are presumed to not be hazardous and, as such, not subject to the PIC procedure.

¹² Thanks to generous support from Norway, France, Switzerland, Sweden, Japan, Germany, Canada and the European Union, as well as from the private sector, BRS has been in a position to mobilize around 10 million US dollars over the past 2 years to support these efforts.

ESM toolkit.¹³ Equally important is the launch of additional technical and legal work on how to develop an inventory of plastic wastes; on the updating of the technical guidelines on the identification and environmentally sound management of plastic wastes and for their disposal; and to consider whether any additional constituents or characteristics in relation to plastic waste should be added to Annexes I or III, respectively, to the Convention.

Along with supporting these new undertakings, the Basel Convention Secretariat is providing technical assistance to support the preparedness of countries to implement the amendments. The amendments are expected to significantly impact the way in which plastic waste is traded internationally and consequently the extent to which it is generated and how it is managed at the national level. It is also anticipated that the amendments will provide a powerful incentive not only for the private sector – but also for governments and other stakeholders – to strengthen capacities for recycling in an environmentally sound manner. Moreover, by encouraging the expansion of infrastructures for the environmentally sound management of plastic waste, the amendments should also help create jobs and economic opportunities, not least by incentivizing innovation, such as in the design of alternatives to plastic and the phase-out of hazardous additives.¹⁴

10.5 The Plastic Waste Partnership

The Plastic Waste Partnership, established by the Conference of the Parties to the Basel Convention in May 2019,¹⁵ is a platform that unites stakeholders from governments, international organizations, NGOs and industry towards the common objective of eliminating the leakage of plastic waste into our environment. The Partnership seeks to mobilize its broad stakeholder base to tackle the issue of plastic pollution on multiple fronts: from stimulating the development of strategies to strengthen policy and regulatory frameworks within countries; to developing solutions to improve the collection, separation and sound management of plastic waste; and to stimulating innovations for increasing the durability, reusability, reparability and recyclability of plastics. The Partnership creates a collaborative environment promoting the sharing of experiences, best practices and technologies towards this

¹³ For further information, see the Basel Convention website: <http://www.basel.int/Implementation/CountryLedInitiative/EnvironmentallySoundManagement/ESMToolkit/Overview/tabid/5839/Default.aspx>

¹⁴ Bartley, R. 24 November 2020. Sea of Solutions event (online) on “Tackling Plastic Waste under the Basel Convention”. For further information: <https://www.unenvironment.org/cobsea/events/virtual-meeting/sea-solutions-2020>

¹⁵ At its fourteenth meeting, in its decision BC-14/13, the Conference of the Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, among others, welcomed the proposal to establish the Basel Convention Partnership on Plastic Waste and decided to establish the Partnership and its working group; adopted the terms of reference for the Partnership; and requested the working group to implement its workplan for the biennium 2020–2021.

common objective. Membership is open to Parties and other stakeholders dealing with the different aspects of prevention, minimization and management of plastic waste. It currently stands at 210 representatives from Parties to the Convention, its regional centres, the private sector, civil society and intergovernmental organizations.¹⁶ This robust stakeholder base is representative of all UN geographic regions, from national to local levels of government, from multinational companies to grass-roots NGOs.

Adding value to an area of work rich in initiatives attempting to solve a complex problem is a particular challenge for the Partnership. Its uniqueness lies in the broad diversity of its members, the linkage to the normative work undertaken under the Basel Convention and the conduit provided to decision-makers in all 188 Parties to the Convention. Its work is thus expected to inform the work of the Conference of the Parties and could help shape the future decision-making on plastic waste under the Basel Convention. The Plastic Waste Partnership is also uniquely placed to support and prepare Parties, as well as the private sector, in implementing the Plastic Waste Amendments. The work of the Plastic Waste Partnership has been organized around the waste hierarchy, with the underlying idea that tackling sources of plastic waste is the most preferable option, while we also cannot neglect more downstream solutions, such as environmentally sound recycling. A series of pilot projects will be financed through the Plastic Waste Partnership.¹⁷ The first round of applications in 2020 saw 23 projects from 22 countries being selected for implementation. These pilot projects will operationalize the work of the Partnership on the ground and are expected to be replicated in other countries and regions.

The Partnership itself is organized into a working group and four project groups¹⁸ addressing different thematic issues. The working group is mandated by the terms of reference of the Partnership¹⁹ to oversee organizational matters pertaining to the implementation of the activities of the Partnership, including setting priorities and ensuring timely implementation of its workplan; establishing project groups, as necessary, to work on specific tasks; leading awareness raising, outreach, coordination and resource mobilization initiatives; and preparing an annual budget.

Four project groups were established under the Partnership at its first meeting. The first two groups follow the steps of the waste management hierarchy, i.e. focusing on plastic waste prevention and minimization and recycling and other recovery of plastic waste. Another group was established to bring support to the implementation of the Plastic Waste Amendments, and it was deemed important to have a final group focused on outreach, education and awareness raising.

¹⁶ For further information, see the Basel Convention website: <http://www.basel.int/Implementation/Plasticwaste/PlasticWastePartnership/Membership/tabid/8098/Default.aspx>

¹⁷ For further information, see the Basel Convention website: <http://www.basel.int/Implementation/Plasticwaste/PlasticWastePartnership/CallforPWPpilotprojectproposals/tabid/8494/Default.aspx>

¹⁸ For further information, see the Basel Convention website: <http://www.basel.int/Implementation/Plasticwaste/PlasticWastePartnership/Projectgroupsandactivities/tabid/8410/Default.aspx>

¹⁹ COP document UNEP/CHW.14/INF/16/Rev.1 available at:

<http://www.basel.int/TheConvention/ConferenceoftheParties/Meetings/COP14/tabid/7520/Default.aspx>

The first project group focusing on plastic waste prevention and minimization is looking at issues such as reducing single-use packaging waste, improving the design of plastic products to increase durability, scaling up re-use solutions and biodegradable plastic products. As a first step, the group will compile information on best practices and identify challenges for improving the design of plastic products to increase their durability, reusability, reparability and recyclability, as well as to reduce hazardous constituents in plastic products.

The second group focuses on plastic waste collection, recycling and other recovery including financing and related markets. Topics being addressed by this group include separation, collection and recycling systems, financing schemes, such as Extended Producer Responsibility, innovative technologies, as well as regulatory and voluntary measures. The group has commenced its work by compiling information on best practices and innovative technologies for separating or eliminating hazardous substances from plastic wastes during sorting and recycling.

The third project group focuses on transboundary movements of plastic waste. Its members are exploring means to support customs authorities in their critical work and are gathering information that will help countries to implement the Plastic Waste Amendments. Such information will be presented as, for example, factsheets outlining the roles and responsibilities of key stakeholders in implementing the amendments, including the role of customs in enforcing the related provisions, and a factsheet on the relevant customs codes (WCO Harmonized System codes) on plastics and plastic waste and their relation to the Plastic Waste Amendments.

The final project group, on outreach, education and awareness-raising, has commenced its work to develop a strategy which will shape the messaging, mode and frequency of the Partnership's communications. The group has also commenced development of an electronic and visually based set of materials on the prevention, minimization and ESM of plastic waste, which it intends to make available in multiple languages (subject to available resources).

10.6 Looking Ahead

At its second meeting set to take place in the first half of 2021, the Partnership working group will consider the progress made by its project groups to date in implementing their respective workplans and will provide direction to the work to be embarked on as a next step. In the meantime, the co-chairs of the Partnership, themselves a senior official in the Norwegian government and trade and environment director for an association representing the recycling industry, together with the Secretariat, are promoting the Partnership through their participation in global negotiating forums, conferences and other initiatives hosted by partner organizations. They are striving to strengthen the Partnership's 200-plus stakeholder base in an endeavour to cover all stages of the plastics value chain and to make the fight against plastic waste and pollution a joint success story.

References

- Beckman E (13 August 2018). The world's plastic problem in numbers. The Conversation, United Kingdom. Retrieved from <https://www.weforum.org/agenda/2018/08/the-world-of-plastics-in-numbers>
- Brooks A, Wang S, Jambeck J (20 June 2018) The Chinese import ban and its impact on global plastic waste trade. Washington DC: American Association for the Advancement of Science. Retrieved from: <https://advances.sciencemag.org/content/4/6/eaat0131>
- Ellen Macarthur Foundation (2017) Global Commitment: A circular economy for plastic in which it never becomes waste. Ellen Macarthur Foundation, Cowes. Retrieved from: <https://www.newplasticseconomy.org/projects/global-commitment>
- European Commission (2 December 2020) European Commission, Brussels.. Retrieved from: https://ec.europa.eu/environment/marine/good-environmental-status/descriptor-10/index_en.htm
- Katz C (7 March 2019) Piling up: How China's ban on importing waste has stalled global recycling. Yale School of the Environment, New Haven.. Retrieved from: <https://e360.yale.edu/features/piling-up-how-chinas-ban-on-importing-waste-has-stalled-global-recycling>
- Krueger J (1999) International trade and the Basel Convention. Earthscan Publications, London
- Miles T (10 May 2019) U.N. clinches deal to stop plastic waste ending up in the sea. Reuters, Geneva.. Retrieved from: <https://www.reuters.com/article/us-environment-plastic-idUSKCN1SG19S>
- Niranjan A (4 July 2019) Amid plastic deluge, Southeast Asia refuses Western waste. Bonn, Germany: Deutsche Welle. Retrieved from: <https://www.dw.com/en/amid-plastic-deluge-southeast-asia-ref-uses-western-waste/a-49467769>
- Parker L (20 December 2018) A whopping 91% of plastic isn't recycled. National Geographic, London. Retrieved from: <https://www.nationalgeographic.com/news/2017/07/plastic-produced-recycling-waste-ocean-trash-debris-environment/>
- Ryberg M, Laurent A, Hauschild M (2018) Mapping of global plastics value chain and plastics losses to the environment (with a particular focus on marine environment). United Nations Environment Programme, Nairobi
- United Nations Environment Programme (2018) Legal limits on single-use plastics and micro-plastics: a global review of national laws and regulations. United Nations Environment Programme, Nairobi

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.