KEY ELEMENTS TO BEAT PLASTIC POLLUTION TOWARDS A LEGALLY BINDING INSTRUMENT





INTRODUCTION

Global plastic production in 2021 was of almost 391 million tons. OECD estimates indicate that both the use of plastic and the generation of plastic waste will triple by 2060. Without new policies to improve its life cycle, 50% of plastic waste generated will still be disposed of in landfills, 15% will be mismanaged, and at least double of what is currently destined for the sea will be found in 2060 (between 10 to 24 million tons of plastic based on Jambeck et al., 2015 estimates for 2010).

Based on this scenario and bearing in mind that 80% of the marine litter originates on the continent and needs to be treated at the source, ISWA presents five key principles for an international legally binding instrument to beat plastic pollution, focusing on regenerative measures for the planet: (i) reduction, (ii) circularity, (iii) waste management and leakage prevention, (iv) governance and funding, and (v) sustainable communities.

These principles coincide with other submissions to the INC Secretariat and are aligned with the ISWA vision as well as the main contributions of the waste and secondary resources management sector. These principles are key to solve the triple planetary crisis while aiming at a positive regional and global impact through local implementation.



PRINCIPLES FOR THE PLASTIC TREATY



COLLABORATION

The exchange of experiences and cooperation will create opportunities to increase public, technical, and scientific knowledge, which will help to avoid deficiencies and unnecessary failures along value chains, as well as to increase resource efficiency and achieve the improvements that the treaty seeks.

INNOVATION, RESEARCH, AND DEVELOPMENT

Research, development, and innovation programs linked to product design, resource recovery, collection logistics, and finance are essential for overcoming barriers in circular economy and sustainable waste management.

AWARENESS RAISING

Awareness raising must focus on developing and implementing solutions that make up the entire value chain of plastics and are adaptable according to the local reality. The activities should work on creative, practical, playful, participatory, and collaborative solutions that use resources efficiently and involve different stakeholders from civil society, and the public and private sectors.

EQUITY

All treaty decisions should be implemented equitably, with a win-win arrangement and burden-sharing across sectors, geographical borders, and generations. They should be feasible and viable for all nations, with risk-based and plausibility approaches as core considerations.





I - REDUCTION

As mentioned in the introduction, global plastic production is expected to triple by 2060, driven by both economic and population growth, reaching 1,014 million tons. While the developed OECD countries are expected to double their plastics use, emerging economies in Sub-Saharan Africa and Asia are projected to see the largest increases. Accompanying the growth of production, plastic waste generation is also projected to triple by 2060, with more than half still being landfilled and less than a fifth being recycled. Furthermore, the environmental impacts of plastics are also expected to increase, primarily due to the production phase. The projections serve as a warning that urgent actions, especially regarding to the reduction of its generation, are necessary to face the plastic crisis and promote the circular economy to reduce its waste.

> The treaty must limit access to the market of short-lived plastic products and packaging and limit the use of virgin resources. Obligations to document such as eco-design and participation in an EPRscheme or similar must be made mandatory.



Restrain plastic production and consumption to sustainable levels, considering its post consumption recovery.

- Ensure a diminished volume of plastic waste.
- Reduce plastic not suitable for recycling or posing a risk to human health through the life cycle.
- Avoid plastics that end up in the natural environment right after its use.

CORE OBLIGATIONS AND CONTROL MEASURES

- Obligation to reduce the production and use of single-use, high-volume, leakage-prone, and short-lived plastic packaging and products, as well as plastic products produced from virgin resources, considering scientific evidence when considering bans and restrictions.
- Set clear and ambitious targets to reduce the use of plastics.
- Increase the availability of recycled plastic and focus on the sustainable use of recycled resources for all products and sectors of society.
- Incentivize business models for reuse, such as products as a service and the sharing economy.

IMPLEMENTATION AT THE NATIONAL LEVEL

- Incentivize businesses that promote a net-zero plastic production model.
- Develop product design policies across sectors to optimize and simplify supply chains to avoid the use of single-use, high volume, leakage prone, harmful additives and short-lived plastic packaging and products, as well as plastic products produced from virgin resources. Industrial players must be included.
- Establish conditions for well-functioning markets for recycled plastics, including commonly agreed quality standards, testing methods and trading conditions.

Standards of eco design need to be established globally. The treaty needs to establish a global framework for incentives to producers such as ecolabels, certification schemes and economic mechanisms.

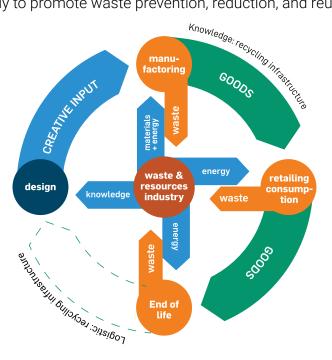






II - CIRCULARITY

The current linear economic "take-make-disposal" system is exhausted, putting increased pressure on the environment, depletion of natural resources and negatively influencing the climate. This situation urgently calls for a transition to a more sustainable and circular system where products and resources are recovered and sustainably kept in the cycle as long as possible. It is imperative for the waste management sector to be considered as a central pillar and key material provider of the circular economy, partnering up with other stakeholders along the value chain, working persistently and proactively to promote waste prevention, reduction, and reuse.





Enable a circular economy for plastics (and other materials) that protects the environment and human health, generating valuable secondary resources and green jobs.

- Keep plastic items in the loop as long as possible at their highest value.
- Strengthen innovation for resource-efficient solutions in the economy.
- Prevent hazardous chemicals from circulating in the value chains.

CORE OBLIGATIONS AND CONTROL MEASURES

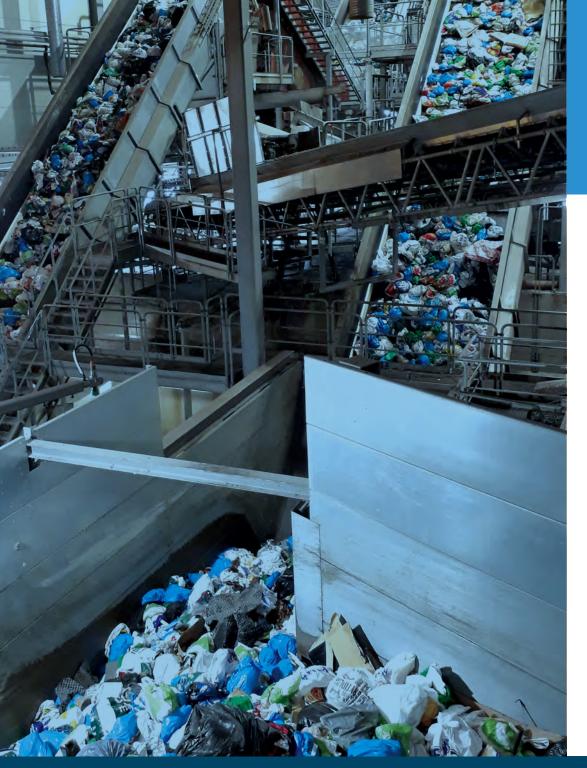
- Apply principles of eco-design by defining common criteria and standards (such as durability, repairability, recyclability, and safety).
- Reduce the types of plastic polymers being brought onto the market, and improve the potential and infrastructures for collection, sorting, and recycling.
- Ensure clearly defined and viable circular economy systems and resource recovery options for all new plastic products put on the market.
- Prevent or remove the use of chemicals that hinder progress towards a circular economy or pose critical health risks or risks to the natural environment.

ISWA aims to mobilise the waste sector as a driving force for systemic change towards a circular economy as well as to enable practical improvement measures. ISWA emphasises the importance of regional and local adaptation, learning from and replicating best practices across the globe.

IMPLEMENTATION AT THE NATIONAL LEVEL

- Create consistent definitions for significant terms such as recycling, recyclability, recycled materials, and recycled content.
- Streamline and implement a consistent and harmonized international labeling of plastic products and packaging, and incentivize collaboration between producers, the retail sector, and the waste and secondary resources management sector.
- Restrict the use of hazardous chemicals that hinder progress towards the circular economy and pose critical health risks or risks to the natural environment.
- Establish a fundamental prerequisite and a guiding action plan to ensure that all plastic items (and also of other materials) at the end of any life cycle are appropriately collected and sorted to optimal forward destinations (upstream circularity pathways) along with well-defined wider product stewardship or other EPR and recycling schemes.





III - SOUND WASTE MANAGEMENT AND LEAKAGE PREVENTION

According the projections made by OECD for 2060, although the world waste management presents some improvements, with an increase in recycling rates (going from 33 million tons in 2019 to 176 million tons in 2060) and an increase in the environmentally appropriate final disposal (with dumpsites closures), the amount of mismanaged waste will still increase, rising from 79 million tons in 2019 to 153 million tons in 2060 (although in percentage terms this represents 15% in 2060, compared to 22% in 2019). Such mismanaged waste is currently estimated at 22 million tons of plastics leaking into the environment (2019) and could reach up to 55 million tons in 2060, therefore, preventive actions are essential.



Achieve environmentally sound management of all waste and stop leakages to the environment.

- Achieve environmentally sound collection, sorting, preparation for reuse and recycling of all remaining plastic items.
- Ensure sustainable and sufficient waste management capacity and infrastructure.
- Implement enough capacity for environmentally sound final disposal of non-recyclable plastic items and thereby avoid leakages to the environment.

IMPLEMENTATION AT THE NATIONAL LEVEL

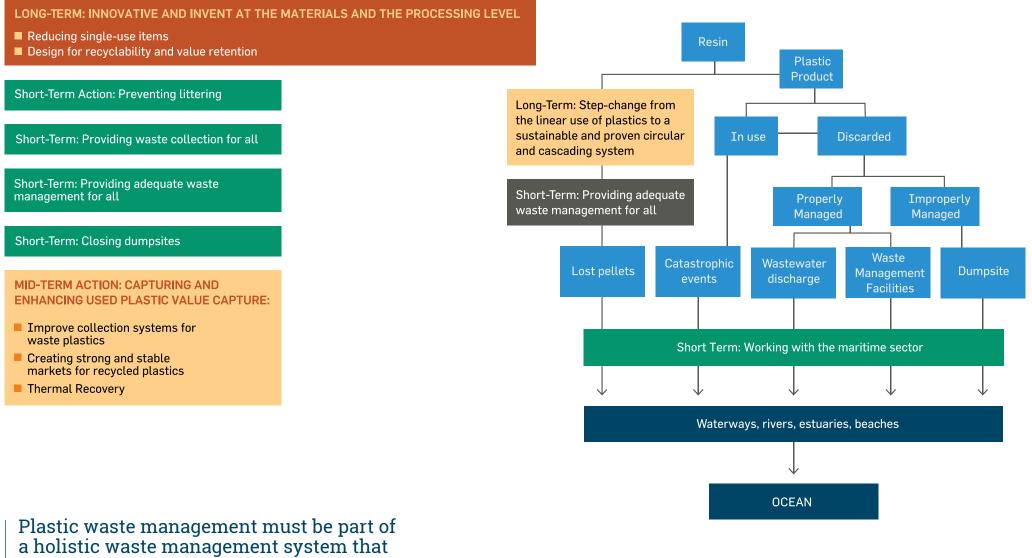
- Establish pathways and incentives to ensure sound infrastructure for an adequate waste management system in all communities. Incentivize adequately financed waste management systems.
- Develop policies aimed at increasing the capacities of collection and sorting of plastic packaging. Including both increasing the total volume capacity and the material separation effectiveness.
- Strengthen labor conditions in waste management by establishing mandatory HSE (health, safety, environment) standards and training programs.
- Establish public-private, as well as cross-sectoral, partnerships to secure a holistic approach to plastics and other waste management.

CORE OBLIGATIONS AND CONTROL MEASURES

- Regard plastic waste management as part of a holistic waste management system and not as an issue isolated from other materials and waste streams.
- Set clear and ambitious collection and recycling targets and establish a monitoring mechanism to gradually increase them over time, with mandatory deadlines.
- Provide access to adequate waste collection and waste infrastructures for all, as a global human right and as part of basic services for sustainable cities and communities.
- Ensure environmentally sound management and disposal for any remaining materials and those plastics not suitable for reuse, recovery, and recycling.
- Improve availability and reliability of waste and resource management data and make mapping of local materials and waste resources mandatory, in terms of quantity and type of waste generated by the most relevant actors.
- Ban all open dumping and open burning of wastes, including plastic waste, as part of national legislation, and create mechanisms to effectively enforce the bans.
- Separate hazardous waste from other waste types at the source.



Short, Mid and Long Term Actions Interventions within plastics life cycle



a holistic waste management system that includes other materials and waste streams. Access to adequate waste collection and waste management need to be considered a global human right.

Source: Velis C., Lerpiniere D., Tsakona M. (2017)





IV - GOVERNANCE AND FUNDING

A critical component for any successful waste management system is to make sure that a reliable, inclusive, and transparent governance model is in place. The model must be supported by a robust legal framework that ensures efficient and sustainable waste management operations and a viable long-term financial and organizational model. Furthermore, the governance framework must ensure that policy makers, public servants, operators, and users of the system all are held responsible and accountable to the goals of an integrated waste management system. A very useful tool for designing such a governance model and for successfully operating a waste management system is the integrated sustainable waste management strategic framework. A crucial prerequisite is that adequate financing, political, social, and public awareness are in place, which calls for real inclusion and professional and straight forward communication. There is also a need to follow legal and normative developments, to ensure the technical aspects are taken into consideration and guarantee that the required resources are available.



Create robust governance and financing systems.

- Establish financial tools, strategic planning, and governance which reflect the local needs and are tailored to promote best practices.
- Consider a reliable, inclusive and transparent governance model and provide capacity building at all levels.
- Enable circular business models and overcome obstacles in funding the transition to a circular economy.
- Establish the polluter pays principle and producers' responsibility schemes as the basis for financing systems.

IMPLEMENTATION AT THE NATIONAL LEVEL

- Set-up waste management funding systems with a combination of means, such as waste generator/user fees, extended producer responsibility (EPR) schemes, and recycling credit systems.
- Establish sound legal frameworks for EPR schemes regulated by the government that include transparency, isonomy and avoid double counting.
- When considering funding schemes; include eco-modulation through e.g., taxing and EPR fees of plastics with low recyclability, depending on the type, the content of chemicals, and the level of transparency.
- Establish global funds for investment in waste management systems in developing countries and SIDS or integrate funding for waste management initiatives in existing financing mechanisms.

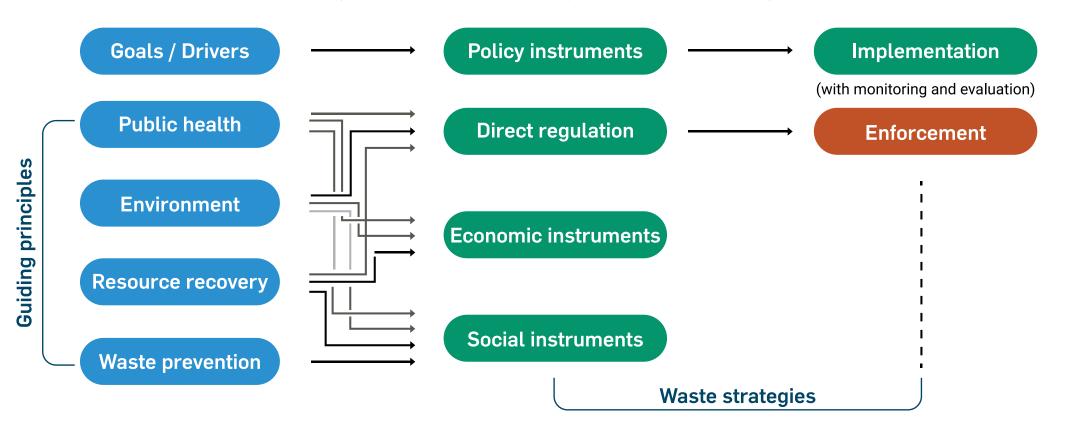
CORE OBLIGATIONS AND CONTROL MEASURES

- Finance waste management systems through a combination of waste generator/user fees, extended producer responsibility (EPR) schemes, and other mechanisms such as recycling credits systems and deposit schemes.
- Incentivize investment from the private sector including the development of new business models towards a circular economy.
- Develop financing mechanisms observing the polluter-paysprinciple, where the producer has full responsibility for the packaging and product's waste management.
- Develop EPR schemes that incentivize producers to manage their plastic packaging and all products containing plastics according to eco-design criteria.
- Establish global funding mechanisms and global platforms for investments in waste management systems in developing countries.
- Include waste management in all aid programs in line with other technical infrastructures such as water and energy supply.
- Develop good governance systems that rest on the three pillars of reliability, inclusiveness, and transparency, supported by a robust legal framework and a long-term viable financial and organizational model.
- Make sure that the governance model holds all policymakers, public servants, operators, and users of the system responsible and accountable.



Waste governance

(Stakeholders and the participatory process of their interactions)



Ensure efficient waste governance systems considering the achievement of the goals set by the 2030 Agenda are in place, using the integrated sustainable waste management framework as a guiding tool and following the principles of duty of preventing pollution, life-cycle based approach, polluter-pays and internalization of costs.





V - SUSTAINABLE COMMUNITIES

The guest for sustainable cities and communities is one of the 17 UN Sustainable Development Goals, and there are countless challenges to be faced. Regarding the waste sector, all the principles mentioned above are part of creating more sustainable communities and as pointed out in their respective introductions, each one has challenges and difficulties to overcome. In addition to what has been pointed out, it is important to highlight that the waste sector is often subject to political and economic pressures that prioritize short-term results to the detriment of long-term environmental sustainability, being one of the main obstacles, if not the biggest, currently faced.



Create livelihood opportunities and contribute to healthier and wealthier communities.

- Contribute to sustainable economic development by generating jobs and wealth in cities and regions.
- > Develop resource-efficient, sustainable, and livable cities.
- Promote social inclusion and an equitable transition.

IMPLEMENTATION AT THE NATIONAL LEVEL

- Establish a pathway to ensure a fair and just transition, for the affected formal and informal workers, with special attention to those in small-scale services.
- Consider the right for fair remuneration, incorporating the payment for the services carried out to prevent plastic leakage into the environment (not only for the commercialization of materials).
- Deliver comprehensive environmental education and capacitybuilding programs and campaigns, aiming to raise awareness to prevent plastic pollution and to promote best practices among the different stakeholders.
- Encourage enterprises and entrepreneurs to develop, pilot, and put into practice locally adapted technology and solutions, as well as develop new business models and new ways of collaborating across value chains in all relevant sectors of society.

CORE OBLIGATIONS AND CONTROL MEASURES

- Ensure that means of governance and financial tools reflect the local needs and are tailored to promote best practices in diversity, equity, and inclusion.
- Establish policies and mechanisms for a fair integration plan for everybody working in small-scale waste services.
- Ensure that the contribution to recycling and the livelihoods of informal waste workers are maintained through the integration of the informal waste workers into the formal waste management systems.
- Use waste management as a catalyst for sustainable livelihood and economic development, as well as encourage new business models and business opportunities in a circular economy, realizing the potential worldwide for new jobs in the circular economy.
- Ensure a gender-sensitive approach as an integrated part of national legislation and policies, based on the knowledge of gender issues, barriers, and gaps in waste management activities.



CONCLUSIONS

The waste and secondary resources management sector has a key role to play in achieving a plastic pollution-free environment contributing to the development of a successful international legally binding instrument.

The first goal should be to reduce plastic production and consumption by promoting waste prevention and minimization at source, as well as supporting Extended Producer Responsibility (EPR) schemes. Implementing a holistic waste management system, that considers the whole life cycle of products and packaging – mostly the plastic items – delivering collection services for all and providing environmentally sound infrastructures to stop all inadequate disposal practices (open dumping and open burning of wastes) is crucial to prevent leakages and pollution to the environment, being one of the short-term goals of the instrument.

Even though reduction and prevention measures are in place, the remaining items and materials require better practices to ensure its recovery and recycling and, on that sense, providing advance recycling technologies and infrastructure to enable a circular economy for plastics, while preventing plastic waste from leaking into the environment is mandatory.

The waste and resources management sector can contribute to the creation of sustainable communities by generating livelihood opportunities within waste and resource management activities and services and to the promotion of good governance and funding by sharing best practices and knowledge for policy and regulatory reforms and exploring different funding sources.

Collaboration across the plastic value chain is vital in achieving these objectives, with all stakeholders, from manufacturers and consumers to waste management and secondary resources companies, recyclers, and policymakers holding significant roles to play.

In the developing world, international cooperation, capacity building, technology transfer, and financial support are essential to bolster waste management infrastructure and practices and thus achieving the goals set for the international legally binding instrument.

By supporting the development of strong waste management systems and fostering collaboration, supported by a legally binding international treaty, the sector can drive the transition towards plastic sustainability, contributing to a future plastic pollution-free environment.

In implementing the treaty ISWA can be an instrumental resource as part of further development and implementation, aiming to engage and mobilize the waste sector as a driving force for systemic change as well as practical improvement measures. Today, the advancement of waste management ranges from complex systems under continued innovation, to having none. ISWA therefore would also like to emphasize the importance of regional and local adaptation, and yet learning from and replicating best practices across the globe.



ACTIONS TO PREVENT PLASTIC POLLUTION

- Establish action plans, strategies and monitoring mechanisms to synchronize and accelerate actions directed to prevent leakages to the environment.
- Establish the requirements for a national reporting obligation on Put on Market (PoM) for the top priority types of plastic products and packaging, including establishing levels of PoM in a baseline year.
- Create a methodology to develop a plastic pollution baseline and annual reporting instructions and introduce legal mandates for reporting and traceability.
- Establish legally mandated auditable certification standards for EPR and other producers' responsibility schemes.
- Introduce annual audits for all cities and regions for key plastic products put on the market and found in plastic pollution on land and in water.
- Create a system of "traffic-light" scores for countries and an annual mapping exercise that assigns colors to countries based on the relationship between plastics unaccounted for, leaked, disposed of, recycled, or tracked to waste prevention cascades.
- Apply principles of transparency to standardized reporting schemes and harmonize reporting for plastic products and waste streams.

MEANS OF IMPLEMENTATION

Technical assistance:

- Coordination with stakeholders to develop new reporting standards and digital forms for countries coherent with the Rotterdam and
- Basel Conventions.
- Technical assistance in the development of projects and in making them technically and financially viable.

Capacity-building:

Global education campaigns with cross-generational engagement with the same relevance and importance as global disease prevention campaigns.

Financial assistance:

- Consider creating specific funds to finance research, baseline studies, assessments on plastic leakage and monitoring, coherent with the Sustainable Development Goals SDGs.
- Develop Extended Producer Responsibility (EPR) schemes designed as a tool to shift the burden of managing certain end-oflife products from municipalities and taxpayers to the producers who place those products on the market. EPR should also stimulate greater engagement of producers in the overall redesign of products and packaging, to reduce environmental and health impacts.
- Consider fundraising by developing push-and-pull policies such as carbon tax, eco-modulations, or other instruments that feed public funds for the development of systemic solutions, infrastructure, and new technologies.
- Mobilizing private capital by making projects for sustainable plastic consumption and management attractive to financial markets.



ACKNOWLEDGEMENTS

This publication is a collective work that has been prepared with valuable inputs and insights from the ISWA Task Force on Plastic Pollution.

GENERAL COORDINATION, EDITING AND REVIEW Carlos RV Silva Filho, Nancy Strand and Alan Encinas

> **COMPILATION END EDITING** Fernanda Romero and Lorena Dobre

> > **GRAPHIC DESIGN** @agenciapituri



© Copyright 2023 ISWA - The International Solid Waste Association

THE WORLD'S LEADING NETWORK REPRESENTING ALL ASPECTS AND STAKEHOLDERS TO PROMOTE PROFESSIONAL ANS SUSTAINABLE WASTE – ANS RESOURCES – MANAGEMENT, SUPPORTING THE TRANSITION TO A CIRCULAR ECONOMY

ISWA.ORG