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**ABIDJAN CONVENTION DRAFT REGIONAL FRAMEWORK FOR THE
PREVENTION AND MANAGEMENT OF MARINE LITTER
AND PLASTIC POLLUTION**

Abidjan Convention



DRAFT REGIONAL FRAMEWORK for the Prevention and Management of Marine Litter and Plastic Pollution



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¹The Abidjan Convention (Convention for Cooperation in the Protection, Management and Development of the Marine and Coastal Environment of the Atlantic Coast of the West, Central and Southern Africa Region) encompasses the marine environment, coastal zones and related inland waters of countries in West, Central and Southern Africa. The Abidjan Convention area comprises 22 countries: Angola, Benin, Cameroon, Cabo Verde, Congo (Republic of Congo), Democratic Republic of the Congo (DRC), Côte d'Ivoire, Equatorial Guinea, Gabon, The Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mauritania, Namibia, Nigeria, São Tomé e Príncipe, Senegal, Sierra Leone, South Africa and Togo.

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EXECUTIVE SUMMARY

RATIONALE

The management of marine litter, including marine plastic pollution, is a transboundary issue that requires regional cooperation and collaboration. The Abidjan Convention, which is administered by the United Nations Environment Programme (UNEP), provides for the coordinated implementation of regional initiatives for the protection of the marine environment and coastal areas, and serves as an overarching legal framework for the region's marine-related programmes. At the fifth United Nations Environment Assembly (UNEA 5.2) held in Nairobi, Kenya on the 2nd of March 2022, 175 member states of the United Nations approved a landmark resolution on plastic pollution, paving the way towards the development of a legally binding global treaty that will address the entire plastics value chain, including pollution in the marine environment.

Marine pollution results from activities at sea, as well as on land, with land-based sources of waste estimated to account for almost 80% of marine pollution globally². The Abidjan Convention area, which encompasses most of Africa's Atlantic seaboard and offshore islands (refer to Geographical Context), is disproportionately affected by a burgeoning marine pollution crisis that is being driven by the proliferation of plastic waste and microplastics³. Leakage of pollutants from Atlantic-facing African countries into the ocean is exacerbated by the region's dysfunctional waste management systems and weak enforcement of existing legislation, among other factors.

The impact of mismanaged waste is profound and far-reaching. It threatens human and animal health, increases the risk of flooding, and results in environmental degradation and biodiversity loss, jeopardising lives, as well as livelihoods. Furthermore, plastic generates around 1.8 billion tonnes of greenhouse gas (GHG) emissions per year across its life cycle, making the plastic industry one of the largest drivers of climate change⁴. Downstream, the uncontrolled burning of post-consumer plastic waste produces harmful GHG emissions and can create black carbon, which is more harmful than carbon dioxide. Moreover, marine plastic waste is believed to be accelerating climate change by inhibiting the ocean's capacity to sequester (absorb and store) carbon dioxide.

STRUCTURE AND SCOPE

The Draft Regional Framework for the Prevention and Management of Marine Litter and Plastic Pollution in the Abidjan Convention Area comprises the following components:

²Mendenhall, E. (2018). Oceans of plastic: a research agenda to propel policy development. *Marine Policy*, 96, 291-298.

³Plastic particles measuring less than 5 millimetres (mm) in diameter.

⁴Organisation for Economic Co-Operation and Development (OECD).

- A comprehensive regional profile of the Abidjan Convention area, including an overview of the region's geographical context, socio-economic indicators, an analysis of the plastics industry and trade data, a review and gap analysis of existing policy and legal frameworks, and a regional waste management assessment;
- A regional action plan on marine pollution for Abidjan Convention member states;
- A draft text of the additional protocol to the Abidjan Convention on plastic pollution (Annex 2);
- Best practice guidelines to support the development of national action plans on plastic pollution that are specifically geared to the region's socio-economic, demographic and other circumstances (Annex 3); and
- Draft national action plans to support national processes for developing policies on plastic pollution (specifically problematic plastics and non-essential single-use plastics) for Côte d'Ivoire, the Islamic Republic of Mauritania and the Democratic Republic of the Congo (Annexures 4 – 6).

OBJECTIVES

The overarching objective of this framework is to promote environmental sustainability and to protect human health and the environment by reducing the amount of waste that is accumulating on land and flowing into the marine environment of the Abidjan Convention region. This will be achieved by strengthening environmental governance, policies and legislation relating to waste, with a particular focus on problematic plastics, toxic chemicals, waste from electrical and electronic equipment (WEEE/e-waste) and other hazardous waste.

The Draft Regional Framework for the Prevention and Management of Marine Litter and Plastic Pollution in the Abidjan Convention Area proposes goals and associated strategies to reduce the amount of marine litter from land- and sea-based sources. The framework aligns with objectives contained in the Zero Draft Text of the International Legally Binding Instrument on Plastic Pollution, including in the Marine Environment, and includes elements related to waste management; primary plastic polymers; chemicals and polymers of concern; problematic and avoidable plastic products; product design and performance; reduce, reuse, refill and repair of plastics and plastic products; use of recycled plastic content; extended producer responsibility (EPR)⁵; emissions and releases of plastic through its life cycle; fishing gear; existing plastic pollution, including marine plastic pollution; and the need for a just transition. In line with Resolution 48/13, adopted by the United Nations Human Rights Council (UNHRC) on the 8th of October 2021, and United Nations Resolution 76/300, adopted by the United Nations General Assembly (UNGA) on the 28th of July 2022, the framework recognises that a clean, healthy and sustainable environment is a fundamental human right.

⁵Refer to the Glossary of Key Terms for a definition of EPR.

IMPLEMENTATION CHALLENGES

- Waste flows in Abidjan Convention member countries are generally underreported.
- There is a paucity of data, a lack of transparency, as well as contradictory data.
- Historically, the actual scale of plastic inflows to the region has been significantly underestimated, as trade statistics do not include the volume and value of plastics embedded in traded consumer products, as well as the plastics used in pre-packaged products that are not imported under a plastic-related code.
- Added to the underreporting of plastic imports, plastic waste products, notably WEEE/e-waste and textile waste, are continuing to enter countries under the guise of being second-hand goods.
- Unregulated plastic manufacturing enterprises operating “under the radar” are highly prevalent.
- The failure of enforcement agencies to address issues relating to non-compliance.

RECOMMENDATIONS

- A regional strategy to combat marine pollution should include all member states of the Abidjan Convention area. Membership could potentially be expanded to incorporate other Atlantic-facing countries, territories and islands. While extending membership to the Kingdom of Morocco is reported to be under consideration, the inclusion of Western Sahara⁶ could be problematic as it is a disputed territory. Islands that could be considered as prospective candidates for membership include the Canary Islands (Spain) and Madeira (Portugal), which are geologically located on the African Tectonic Plate, and the British Overseas Territory of Saint Helena, Ascension and Tristan da Cunha. Like other island nations, these territories are disproportionately affected by marine pollution that washes ashore.
- All citizens have the right to live and work in an environment that is clean and healthy, and should be provided with appropriate waste collection/removal services, as well as access to safe drinking water and adequate sanitation.
- In addition to the prevention and minimisation of marine pollution, policies should address the accumulation of existing waste.
- Comprehensive baseline waste management assessments should be conducted by all member states.
- Sustainable financing of waste management is imperative.
- Monitoring, evaluation and reporting on plastic flows and emissions are required throughout the plastic life cycle.

⁶The political status of Western Sahara is disputed. Around 80% of the territory is administered by Morocco, with the remaining 20% controlled by the Popular Front for the Liberation of the Saquia el Hamra and Rio de Oro (Polisario Front).

- A centralised regional database for all land- and sea-based sources of waste is needed in order to capture and share data across member states. This should be done regionally, and relevant authorities should be responsible for updating national statistics on a regular basis.
- Harmonised regional and sub-regional waste management protocols should be developed to curb plastic pollution, including the transboundary flows of plastic waste across shared rivers, lakes and other waterways. Additionally, regional waste management initiatives could be introduced to prevent the disposal of waste at African ports that do not have adequate waste handling infrastructure.
- Well-designed mandatory extended producer responsibility (EPR) schemes should be introduced, where feasible. Where not, voluntary schemes following international best practice can be initiated by the obliged industry.
- Legislation, including municipal by-laws, should be rigorously enforced.
- Certain types of non-essential single-use plastic packaging (including polystyrene food and beverage containers) and problematic plastics (such as microbeads) should be prohibited. In countries where bans have been implemented, such regulations should be strictly enforced.
- Given the significant risks to human health and climate change, open burning should be prohibited, along with the uncontrolled dumping of waste.
- Standards should be developed for recycling, and, where feasible, recycled content should be integrated into products.
- Action plans should allow for a just transition.
- Capacity development tailored to the specific needs of the member countries of the Abidjan Convention area is key to the success of the proposed interventions and should include targeted education and awareness programmes, knowledge sharing, technical assistance, training and policy support.

Effective waste prevention and management policies can perform a pivotal role in tackling the intersecting triple planetary crises of pollution, biodiversity loss and climate change. However, to create positive change, actions need to go beyond the conventional waste management approach and must give rise to an enabling environment that supports circularity and sustainable economic development. The development and successful implementation of regional and national action plans aimed at flattening the growth trajectory of waste generation will largely depend on political will; appropriate funding and investment in sustainable waste management systems; capacity development; and constructive collaboration between government authorities, their agencies and citizens, international, regional and sub-regional inter-governmental organisations, non-governmental organisations, research institutions, industry, the informal sector, civil society, and other relevant stakeholders.

ABBREVIATIONS AND ACRONYMS

ALDFG	Abandoned, Lost or otherwise Discarded Fishing Gear
DRS	Deposit-Refund/-Return System
EPR	Extended Producer Responsibility
EPS	Expanded Polystyrene
GESAMP	The Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection
GDP	Gross Domestic Product
GHGs	Greenhouse Gases
HDI	Human Development Index
HDPE	High-density Polyethylene
IMO	International Maritime Organisation
IWMS	Integrated Waste Management Strategy
LCA	Life Cycle Assessment
LDPE	Low-density Polyethylene
LLDPE	Linear Low-density Polyethylene
MARPOL	International Convention for the Prevention of Pollution from Ships
MSW	Municipal Solid Waste
OPRL	On-Pack Recycling Label
PA6	Polyamide 6 (Nylon)
PET	Polyethylene Terephthalate
PP	Polypropylene
PRO	Producer Responsibility Organisation
PS	Polystyrene
PVC / PVDC	Polyvinylidene Chloride / Polyvinylidene Dichloride
SDGs	Sustainable Development Goals
SMART	Specific, Measurable, Relevant, and Time-based Targets
UNEA	United Nations Environment Assembly
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
WEEE	Waste from Electrical and Electronic Equipment
XPS	Extruded Polystyrene Foam

GLOSSARY OF KEY TERMS⁷

Bio-based plastics

Plastic derived fully or partially from plant materials, such as cellulose, potato or corn starch, sugar cane, maize and soy, instead of petroleum or natural gas. Bio-based plastic can be engineered to be biodegradable or compostable, but not all bio-based plastics are biodegradable. They can be designed to be structurally identical to petroleum-based plastics, in which case they can last in the environment for the same period of time.

Source: UNEP/World Resources Institute (2021). Tackling Plastic Pollution: Legislative Guide for the Regulation of Single-Use Plastic Products. p.32 (Box 8) Sources: Green Dot Bioplastics; Kubowicz and Booth (2017); Rujnic-Sokele and Pilipović (2017); UNEP (2015); United States of America (2020).

Biodegradable plastic

Packaging in which the waste shall be of such a nature that it is capable of undergoing physical, chemical, thermal or biological decomposition such that most of the finished compost ultimately decomposes into carbon dioxide, biomass and water; Plastic polymers that can be metabolized by microorganisms (enzymes such as bacteria and fungi) into water, carbon dioxide and biomass under aerobic conditions and methane under anaerobic conditions. Whether a plastic material is biodegradable depends on its chemical structure (not on the feedstock from which it is produced, which can be either a fossil fuel or bio-based) and on the environmental conditions in which the material ends up. Biodegradable plastics are not always compostable or recyclable. *Sources: UNEP (2018). Legal Limits on Single-Use Plastics and Microplastics: A Global Review of National Laws and Regulations. p. 4; UNEP/World Resources Institute (2021). Tackling Plastic Pollution: Legislative Guide for the Regulation of Single-Use Plastic Products. p.32 (Box 8) Sources: Green Dot Bioplastics; Kubowicz and Booth (2017); Rujnic-Sokele and Pilipović (2017); UNEP (2015); United States of America (2020).*

Bioplastics

A term used for plastics that are bio-based (fully or partially), but non-biodegradable; petroleum-based and biodegradable; and both bio-based (fully or partially) and biodegradable. The term can be confusing because it can lead consumers to assume that the plastic product is completely plant-based or is biodegradable and they may dispose of it in the open environment. *Source: UNEP/World Resources Institute (2021). Tackling Plastic Pollution: Legislative Guide for the Regulation of Single-Use Plastic Products. p.32 (Box 8) Sources: Green Dot Bioplastics; Kubowicz and Booth (2017); Rujnic-Sokele and Pilipović (2017); UNEP (2015); United States of America (2020).*

⁷Definitions of key terms are sourced from the UNEP Law and Environment Assistance Platform (UNEP-LEAP).

Circular economy

One of the current sustainable economic models, in which products and materials are designed in such a way that they can be reused, remanufactured, recycled or recovered and thus maintained in the economy for as long as possible, along with the resources of which they are made, and the generation of waste, especially hazardous waste, is avoided or minimised, and greenhouse gas emissions are prevented or reduced. *Source: United Nations Environment Assembly resolution 4/1, "Innovative pathways to achieve sustainable consumption and production", fourteenth preambular paragraph.*

Compostable plastics

Packaging waste that can be recycled through a process of organic recovery comprised of composting and anaerobic digestion; Compostable plastics utilise microorganisms, heat and humidity to yield carbon dioxide, water, inorganic compounds and biomass that is similar in characteristic to biological composted products. Composting has the potential to transform plastics that are biodegradable under defined conditions into soil amendment products without toxic residue. According to internationally accepted criteria, to be industrially compostable, the plastic must meet specific criteria relating to chemical characteristics (at least 50 per cent organic matter, based on dry weight, and not in excess of a given concentration for some heavy metals); biodegradation rate (at least 90 per cent within six months at temperatures of 58°C, +/-2°C); disintegration rate (fragments into pieces smaller than 2 millimetres (mm) under controlled composting conditions within 12 weeks); and non-toxic (or the compost obtained at the end of the process should have no negative effect).

Source: UNEP - Legal Limits on Single-Use Plastics and Microplastics. p. 4; UNEP/World Resources Institute (2021). Tackling Plastic Pollution: Legislative Guide for the Regulation of Single-Use Plastic Products. p.32 (Box 8).

Deposit-refund schemes

Market-based instruments that combine a tax or disposal fee (deposit) when purchasing a product with a recycling subsidy (refund) when the product is collected and/or recycled. *Source: UNEP/World Resources Institute (2021). Tackling Plastic Pollution: Legislative Guide for the Regulation of Single-Use Plastic Products. p.61 citing Walls, 2011.*

Extended producer responsibility (EPR)

An environmental policy approach in which a producer's responsibility for a product is extended to the waste stage of that product's life cycle. In practice, EPR involves producers taking responsibility for the management of products after they become waste, including: collection; pre-treatment, e.g., sorting, dismantling or depollution; (preparation for) reuse; recovery (including recycling and energy recovery) or final disposal. EPR systems can allow producers to exercise their responsibility by providing the financial resources required and/or by taking over the operational aspects of the process from municipalities. They assume the responsibility voluntarily or

mandatorily; EPR systems can be implemented individually or collectively. *Source: Conference of the Parties to the Basel Convention, "Revised draft manuals on extended producer responsibility and financing systems for environmentally sound management" document UNEP/CHW.14/5/Add.1.*

Hazardous waste

Any waste or combination of wastes with the potential to damage human health, living organisms or the environment. Hazardous wastes usually require special handling and disposal procedures which are regulated by national and international laws. *Source: InforMEA.*

Life cycle

Life cycle refers to the consecutive and interlinked stages of a product system, from raw material acquisition, or generation from natural resources, to final disposal. *Source: International Organisation for Standardisation, "Environmental management – Life cycle assessment – Principles and framework", document ISO:14040:2006, s.3.1.*

Life cycle approach

A life cycle approach means considering all potential impacts of all activities and outcomes associated with the production and consumption of plastics, including raw material extraction and processing (for plastics: refining; cracking; polymerisation), design and manufacturing, packaging, distribution, use and reuse, maintenance and end of life management, including segregation, collection, sorting, recycling, and disposal. *Source: UNEP, "Life Cycle Initiative". Available at [https://www.lifecycleinitiative.org/life-cycle-approach-to-plasticpollu....](https://www.lifecycleinitiative.org/life-cycle-approach-to-plasticpollu...)*

Marine litter

Marine litter, also known as marine debris, is any persistent, manufactured or processed solid material discarded, disposed of or abandoned in the marine and coastal environment. This definition includes items originating from land or sea-based sources. *Source: UNEP Marine Litter web page.*

Marine pollution

Marine pollution is defined as "a direct or indirect introduction by humans of substances or energy into the marine environment (including estuaries), resulting in harm to living resources, hazards to human health, hindrances to marine activities including fishing, impairment of the quality of seawater and reduction of amenities". *Sources: The United Nations Convention on the Law of the Sea (UNCLOS) and Group of Experts on the Scientific Aspects of Marine Pollution (GESAMP).*

Mechanical recycling

Processing of plastics waste into secondary raw material or products without significantly changing the chemical structure of the material. *Source: International Organization for Standardization, "Plastics – Vocabulary", document ISO:472:2013, s.2.1697.*

Microbeads

Human made plastic particles intentionally added to consumer products, typically less than or equal to 5 mm in size. Microbeads can vary in chemical composition, size, share and density. *Source: UNEP (2018). Legal Limits on Single-Use Plastics and Microplastics: A Global Review of National Laws and Regulations. p. 5 adapted from IMO/ FAO/ UNESCO-IOC/ UNIDO/ WMO/ IAEA/UN/ UNEP. UNDP Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) 2015.*

Microplastics

Microplastics are plastic particles measuring less than 5 mm in diameter, including nano-sized particles.

Source: United Nations Environment Assembly resolution 2/11, "Marine litter and microplastics", para. 1.

Primary microplastics are plastic microparticles specifically manufactured for industrial and domestic purposes, while secondary microplastics are created by the weathering and fragmentation of larger plastic objects.

Source: UNEP 2016a.

Organic waste

Waste containing carbon compounds; derived from animal and plant materials. *Source: GEMET/PUE*

Oxo-degradable plastics

Conventional petroleum-based plastics, such as polyethylene or polypropylene containing additives (metal salts) that act as a catalyst, or pro-oxidant, to accelerate fragmentation or mechanical or physical degradation when exposed to ultraviolet radiation or heat. *Source: UNEP/World Resources Institute (2021). Tackling Plastic Pollution: Legislative Guide for the Regulation of Single-Use Plastic Products. p.32 Sources: Green Dot Bioplastics*

Plastic packaging

A packaging component is a product that is designed to be suitable for use, whether alone or in combination with other products, in the containment, protection, handling, delivery or presentation of goods at any stage in the supply chain of the goods, from the producer of the goods to the consumer or user. *Source: UK Government (HMRC) Policy Paper. Introduction of Plastic Packaging Tax from April 2022. Updated July 2021.*

Polystyrene (PS)

A hard, stiff, transparent synthetic resin produced by the polymerisation of styrene. It is widely employed in the food-service industry as rigid trays and containers, disposable eating utensils, and foamed cups, plates and bowls. Polystyrene is also copolymerised, or blended with other polymers, lending hardness and rigidity to a number of important plastic and rubber products. *Source: Encyclopaedia Britannica.*

Recyclable packaging

Packaging, including plastic bags, that can be reprocessed in a production process of the waste materials for the original purpose, or for other purposes including organic recycling, but excluding energy recovery. *Source: UNEP (2018). Legal Limits on Single-Use Plastics and Microplastics: A Global Review of National Laws and Regulations. p. 4.*

Recycling

A resource recovery method involving the collection and treatment of a waste product for use as raw material in the manufacture of the same or a similar product. *Source: GEMET/LANDY*

Processing of waste materials for the original purpose, or for other purposes, excluding energy recovery. *Source: International Organisation for Standardisation, "Plastics –Vocabulary", document ISO:472:2013, s.2.1706.*

Single-use plastics

Often also referred to as disposable plastics, are commonly used plastic packaging, including items intended to be used only once before they are thrown away or recycled, e.g., grocery bags, food packaging, bottles, straws, containers, cups, cutlery, etc. *Source: UNEP (2018). Legal Limits on Single-Use Plastics and Microplastics: A Global Review of National Laws and Regulations. p. 4.*

Waste picker

A person who picks out recyclables from mixed waste wherever it may be temporarily accessible or disposed of. *Source: Solid Waste Management: Glossary <http://www.gdrc.org/uem/waste/swm-glossary.html>*

1. INTRODUCTION

At the United Nations Ocean Conference held in Lisbon in June 2022, experts called for collective action to address the critical state of the world's oceans. While marine environments are impacted by a broad spectrum of pollutants originating from land- and sea-based sources, research indicates that plastic waste accounts for the lion's share of marine litter, and that almost 80% of marine plastic pollution originates from land-based sources⁸. Significantly, marine plastic pollution, is estimated to account for 4.5% of carbon emissions⁹. Scientists warn that the quantity of plastic waste in the ocean could triple by 2040¹⁰ if significant action is not taken urgently.

With a combined population of over 607 million inhabitants in mid-2023¹¹, the 22 countries that make up the Abidjan Convention area are expected to generate more than 118 million tonnes of municipal solid waste in 2023, with plastic waste contributing around 20.1 million tonnes. The inflow of plastics to the Abidjan Convention area has risen significantly in recent years, with quantities increasing from around 3.9 million tonnes in 2015 to an estimated 5.7 million tonnes in 2022. Although countries in the area do not have the recycling capacity and infrastructure required to adequately manage plastic waste, plastic imports are projected to remain on an upward trajectory. During the Russia-Africa summit held in St. Petersburg in July 2023, a representative from SIBUR, Russia's largest petrochemical producer, stated that the company plans to double its polymer sales to Africa in response to growing demand.

The Abidjan Convention's Draft Regional Framework for the Prevention and Management of Marine Litter and Plastic Pollution is a proactive response to the global call to address the marine plastic pollution crisis, as articulated in the landmark resolution on plastic pollution approved in Nairobi, Kenya on the 2nd of March 2022. In elaborating a strategy that seeks to promote environmental sustainability and protect human health and the environment by combatting marine litter, including plastic pollution and microplastics, the aim is to establish a guiding framework that outlines the actions required to prevent and reduce the amount of plastic waste that is accumulating on land and flowing into the marine environment. The proposed strategy addresses certain categories of problematic plastics, products containing toxic chemicals and other potentially harmful substances, such as waste from electrical and electronic equipment (WEEE/e-waste), as well as non-essential single-use plastic products.

⁸Mendenhall, E. (2018). Oceans of plastic: a research agenda to propel policy development. *Marine Policy*, 96, 291-298.

⁹2022 United Nations Ocean Conference, Lisbon.

¹⁰Lau, W., et al. (2020). Evaluating scenarios toward zero plastic pollution. *Science*, 369(6510), 1455-1461.

¹¹World Population Review, based on United Nations projections contained in the 2022 Revision of World Population Prospects.

2. REGIONAL PROFILE

2.1. Geographical Context

Abidjan Convention Area

The Abidjan Convention underpins the Atlantic-facing Western Africa area of the Regional Seas Programme¹² that was launched by UNEP in 1974, with the aim of addressing marine pollution (Figure 1). The extensive coastline of the Abidjan Convention area extends more than 14,000 kilometres (km), from the southernmost point of the African continent at Cape Agulhas in South Africa to Ras Nouadhibou (Cap Blanc) in the Islamic Republic of Mauritania (Mauritania).



Figure 1: Regional Seas Conventions. Source: UNEP.

¹²The Regional Seas Programme comprises the following 18 areas: Antarctic; Arctic; Baltic Sea; Black Sea; Caspian Sea; Eastern Africa; East Asian Seas; Mediterranean; North-East Atlantic; North-East Pacific; Northwest Pacific; Pacific; Red Sea and Gulf of Aden; ROPME Sea Area (comprising Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates); South Asian Seas; South-East Pacific; Western Africa; and the Wider Caribbean.

With a total area of around 10.1 million square kilometres (sq. km), spanning Southern Africa, Central Africa and West Africa, the Abidjan Convention area is made up of 22 countries¹³: South Africa¹⁴; Namibia; Angola; the Democratic Republic of the Congo (DRC); the Republic of Congo; Gabon; São Tomé e Príncipe; Equatorial Guinea; Cameroon; Nigeria; Benin; Togo; Ghana; Côte d'Ivoire; Liberia; Sierra Leone; Guinea; Guinea-Bissau; The Gambia; Senegal; Mauritania; and Cabo Verde. These countries are all signatories of the African Continental Free Trade Area (AfCFTA)¹⁵ agreement and are members of the African Union, as well as various regional economic communities:

- South Africa, Namibia, Angola and the DRC are members of the Southern African Development Community (SADC)¹⁶.
- Namibia and South Africa are members of the Southern African Customs Union (SACU)¹⁷.
- Angola and the DRC are members of the Economic Community of Central African States (ECCAS)¹⁸, along with the Republic of Congo, Gabon, São Tomé e Príncipe, Equatorial Guinea and Cameroon.
- The DRC is a member of the Common Market for Eastern and Southern Africa (COMESA)¹⁹.
- The Republic of Congo, Gabon, Equatorial Guinea and Cameroon are members of the Economic and Monetary Community of Central Africa (CEMAC)²⁰.
- Nigeria, Benin, Togo, Ghana, Côte d'Ivoire, Liberia, Sierra Leone, Guinea-Bissau, The Gambia, Senegal, and Cabo Verde are members of the Economic Community of West African States (ECOWAS)²¹. Guinea's membership of ECOWAS was suspended in September 2021, following a coup d'état.
- Mauritania is a member of the Sahel G5, which focuses on economic development and regional security in the Sahel²².

¹³Membership of the Abidjan Convention could be expanded to include the Kingdom of Morocco.

¹⁴South Africa, which has Atlantic and Indian Ocean coastlines, is a contracting party to the Convention for the Protection, Management and Development of the Coastal and Marine Environment of the Western Indian Ocean region (Nairobi Convention), as well as the Abidjan Convention.

¹⁵AfCFTA is a free trade area encompassing most of Africa.

¹⁶SADC is an intergovernmental organisation that promotes socio-economic development and regional co-operation in the Southern Africa sub-region.

¹⁷SACU is a customs union comprising five Southern African states.

¹⁸ECCAS is an economic community of the African Union that promotes regional economic co-operation in Central Africa.

¹⁹COMESA is a customs union that provides free trade among its member states. A common external tariff (CET) is levied on goods imported from outside the region.

²⁰CEMAC promotes a common monetary union and economic integration among countries sharing a common currency (the CFA franc).

²¹ECOWAS was established with the aim of promoting regional economic cooperation, but its mandate has since expanded to include political and military cooperation.

²²The Sahel is a semi-arid region of western and north-central Africa that separates the tropical savannas to the south from the Sahara Desert to the north.

The Atlantic Ocean forms part of a vast, interconnected body of water. While oceanic boundaries are not universally defined, the National Oceanic and Atmospheric Administration (NOAA) and the International Hydrographic Organisation (IHO) regard the Equator as the boundary that divides the Atlantic into northern and southern sections. The Food and Agriculture Organisation of the United Nations (FAO) has delineated the tropical and subtropical sections of the North and South Atlantic Oceans as the Central Atlantic Ocean. The Mid-Atlantic Ridge, a submarine mountain range on the Atlantic's north-south axis, is generally accepted as the boundary that separates the Atlantic into eastern and western sections. Located east of the Mid-Atlantic Ridge, the Abidjan Convention area spans the South and Central Atlantic Oceans.



Figure 2: The Atlantic Ocean, as defined by the International Hydrographic Organisation.

Though geologically located on the African Tectonic Plate, the Canary Islands and Madeira are autonomous regions of Spain and Portugal respectively. As such, these Atlantic archipelagos are party to the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention). The Kingdom of Morocco (Morocco) is bordered by the Atlantic Ocean and the Mediterranean Sea, but is not currently a member of the Abidjan Convention. However, the inclusion of Morocco as a member of the Abidjan Convention is under consideration. The North African country is a contracting party to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention). Other territories that are not Abidjan Convention members include Western Sahara²³ and the British Overseas Territory of Saint Helena, Ascension and Tristan da Cunha.

Territorial Waters

Coastal countries and island states have jurisdiction over the territorial waters²⁴ adjacent to their shores, including the seabed, subsoil and airspace above these waters up to a maximum of 12 nautical miles (22.2 km) from the coastal low-water mark (baseline). In the contiguous zone, which extends from the outer edge of the territorial waters, or up to 24 nautical miles (44.4 km) from the coastal baseline, countries have the authority to exercise limited control for the purpose of preventing or punishing transgressions of laws and regulations within their territory or territorial waters. Countries have control of economic resources within their exclusive economic zones (EEZs), which extend up to a maximum of 200 nautical miles (370.4 km) from their respective coastal baselines, and they are responsible for controlling pollution arising from fishing, mining, oil and gas exploration/extraction, tourism, or other economic activities in their EEZs.

Several countries have established protected areas of coastline or ocean, known as Marine Protected Areas (MPAs), for the purpose of promoting the sustainable management of the marine environment. For a protected area to be recognised as an MPA, it must meet the criteria specified by the International Union for Conservation of Nature (IUCN), which defines an MPA as “a clearly defined geographical space, recognised, dedicated, and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values”.

Large Marine Ecosystems

Large marine ecosystems (LMEs) are near-coastal areas that extend from river basins and estuaries to the edge of continental shelves or to the outer limits of major currents. LMEs comprise marine and coastal habitats, such

²³The political status of Western Sahara is disputed. Around 80% of the territory is administered by Morocco, with the remaining 20% controlled by the Popular Front for the Liberation of the Saquia el Hamra and Rio de Oro (Polisario Front).

²⁴As defined by the 1982 United Nations Convention on the Law of the Sea.

as kelp forests, coral reefs, islands, seagrass meadows, mangroves, estuaries, bays, rivers, sandy shores, rocky shores, and wetlands, which support endemic and migratory species, as well as coastal communities that depend on the ocean for their livelihoods.

Three transnational LMEs are located off the western coastline of the African continent (Figure 3).

- The Canary Current LME spans Morocco, Cabo Verde, Mauritania, Senegal, The Gambia, Guinea and Guinea-Bissau, covering an area of approximately 1.13 million sq. km. The cold Canary Current, which is the continuation of the North Atlantic Drift, flows between Madeira and Cabo Verde along the northwestern coast of Africa before merging with the North Equatorial Current.
- The Guinea Current LME extends from Guinea-Bissau to Angola, covering an area of around 1.93 million sq. km. The warm waters of this LME incorporate the Gulf of Guinea, which extends from Cape Lopez in Gabon to Cape Palmas in Liberia forming the northeastern section of the tropical Atlantic Ocean.
- The Benguela Current LME spans Angola, Namibia and South Africa, covering an area of around 1.46 million sq. km. The cold Benguela Current flows south-north along South Africa's west coast to Angola.

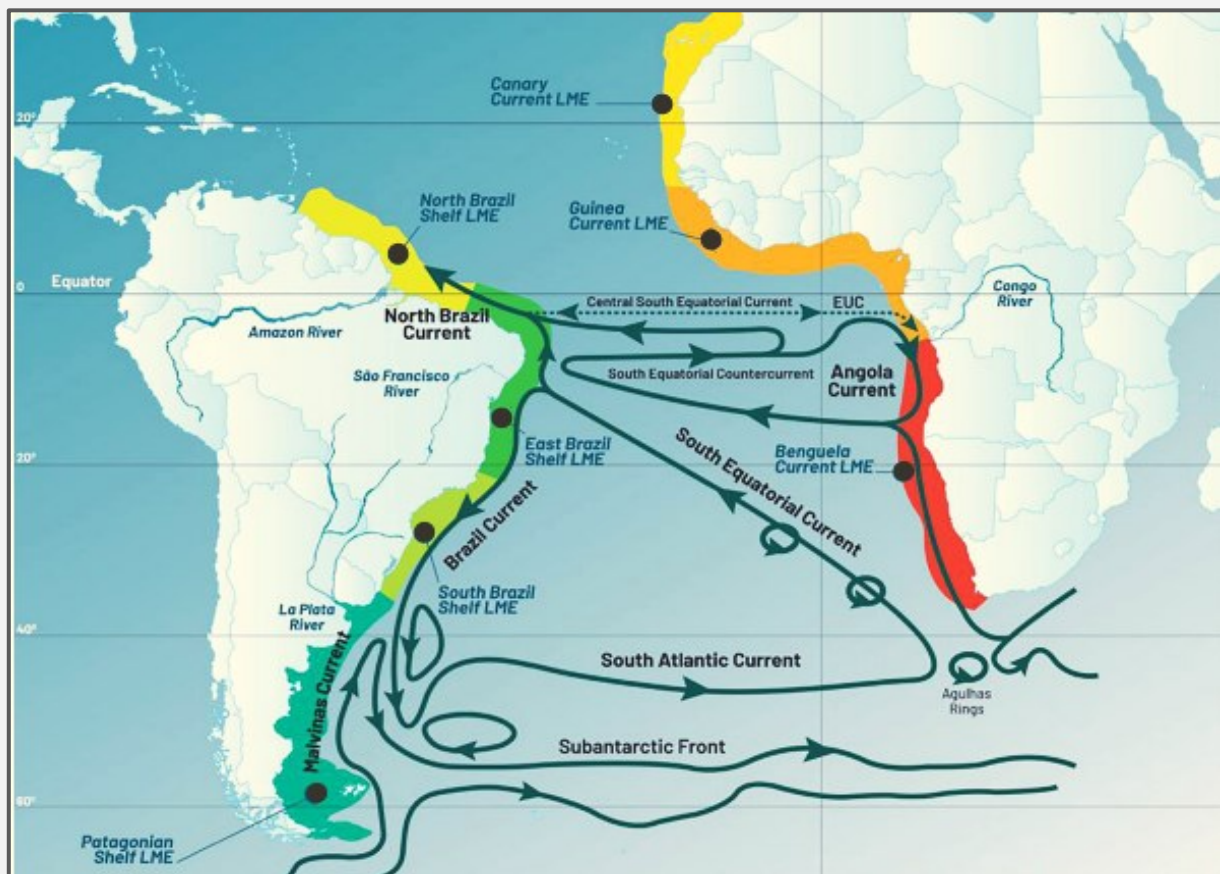


Figure 3: LMEs off the western coastline of Africa. Source: Hatje et al. (2021), adapted from Talley et al. (2011).

Various institutions facilitate regional consultation and collaboration on transboundary matters relating to marine and coastal environmental issues (refer to Appendix 1 for a list of key stakeholders). They include the Intergovernmental Oceanographic Commission (IOC) of the United Nations Educational, Scientific and Cultural Organisation (UNESCO) - Sub-Commission for Africa and the Adjacent Island States; the FAO, which oversees the Canary Current Large Marine Ecosystem (CCLME); the Benguela Current Commission; and the Gulf of Guinea Commission. The World Bank's West Africa Coastal Areas Management Programme (WACA) supports West African coastal communities in their efforts to strengthen the management of shared coastal resources and reduce risks linked to pollution, flooding, coastal erosion and climate change.

Transboundary River Basin Water Management

Major conduits of pollution from mainland Africa to the Atlantic Ocean include the following rivers:

- The Congo River is the deepest river in Africa and, with a length of 4,700 km, it is the continent's second longest river after the Nile. Spanning nine countries across West-Central Africa, the vast river basin is the world's second-largest (after the Amazon). The Kinshasa-based Commission Internationale du Bassin Congo-Oubangui-Sangha (CICOS) is responsible for overseeing inland navigation and integrated water resources management. The Commission's member states are Angola, Republic of Congo, DRC, Cameroon, Gabon and the Central African Republic.
- The Niger River is the third longest river in Africa. It covers a distance of 4,184 km, flowing through Guinea, Mali, Niger Benin and Nigeria, before emptying into the Gulf of Guinea. The Niger Basin Authority (Autorité du Bassin du Niger) coordinates the management of resources in the Niger Basin. Member states are Niger, Burkina Faso, Côte d'Ivoire, Guinea, Cameroon, Mali, Benin, Nigeria and Chad. The Niger is the second most polluting river in Africa (after the Nile) and is ranked as the ninth most polluting river in the world.
- The Orange River rises in the Lesotho Highlands and covers a distance of 2,300 km before reaching the South Atlantic Ocean. The river basin includes Lesotho, South Africa, southwestern Botswana and Namibia. The Orange-Senqu River Commission (ORASECOM) is responsible for managing the resources of the Orange-Senqu River Basin.
- The Senegal River flows 1,800 km from its source in Guinea, across Mali and Mauritania, before emptying into the Atlantic Ocean at Saint Louis in Senegal. The Senegal River Basin is managed by the Senegal River Development Organisation (Organisation pour la Mise en Valeur du Fleuve Sénégal).
- The Volta River originates in Burkina Faso and flows south through Ghana over a distance of 1,500 km before emptying into the Gulf of Guinea. The Black Volta forms the border between Ghana and Burkina Faso, and also separates Côte d'Ivoire from Ghana. The resources of the Volta Basin are managed by the

Volta Basin Authority (VBA). The VBA is responsible for ensuring the sustainable and integrated management of the resources of the basin and protecting the environment and ecosystems of the river basin.

- The Gambia River flows westward over a distance of 1,120 km from its source in Guinea, through Senegal and The Gambia, before entering the Atlantic Ocean. The Gambia River Development Organisation (OMVG) oversees the management of the shared resources of The Gambia, Kayanga-Geba and Koliba-Corubal river basins.

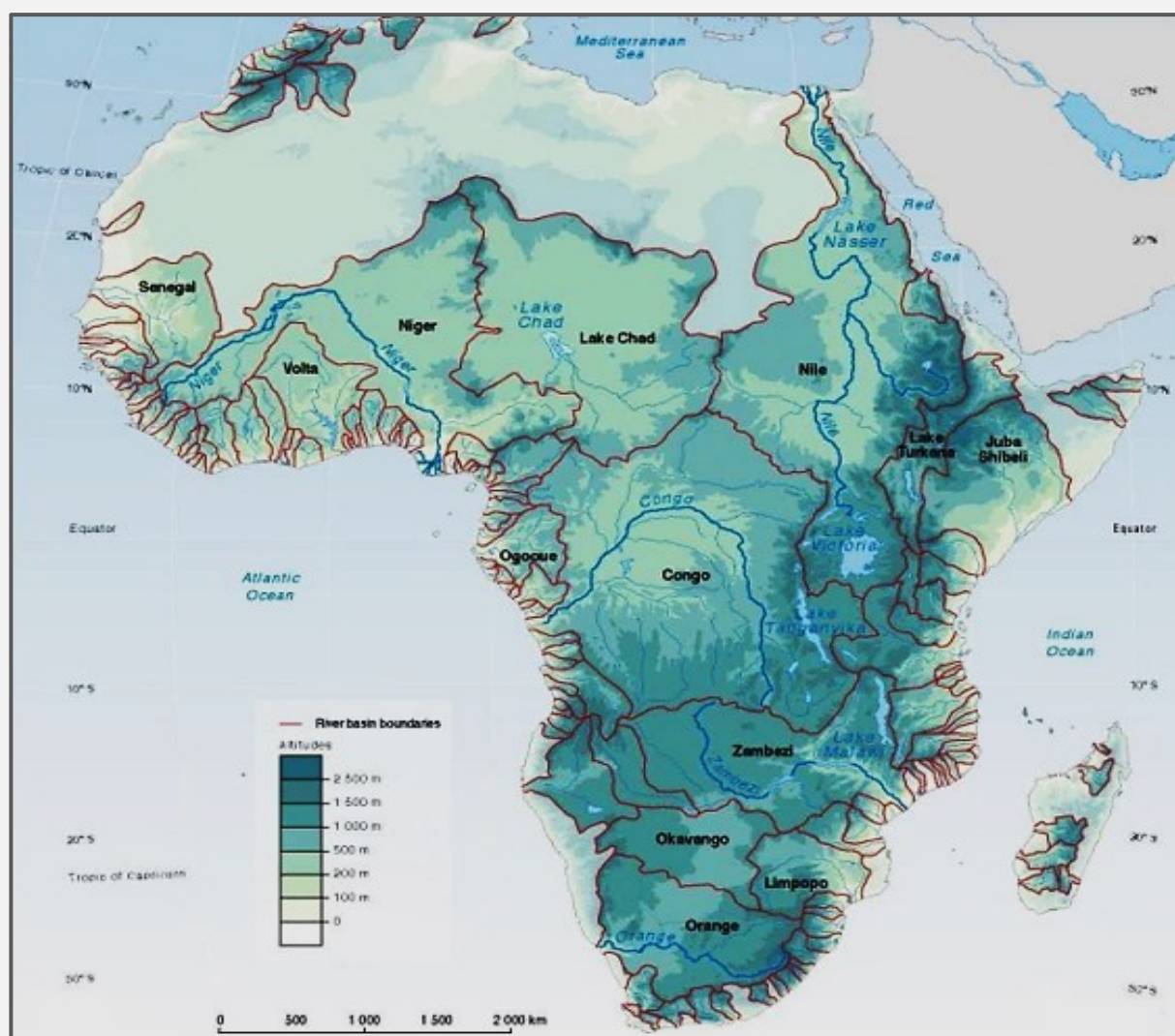


Figure 4: Africa's major river basins. Source: UNEP.

River basin organisations have been established across the Abidjan Convention area to promote equitable and sustainable development of the region's shared water resources. These organisations provide a forum for coordination and consultation on issues relating to river basin management, including environmental concerns, such as the flow of pollutants from rivers and other waterways into the ocean.

Sea-based Sources of Marine Pollution

It is widely reported that around 20% of marine plastic pollution originates from sea-based sources. Although there is limited evidence to support this estimate, a recent study found that 22% of the 12 million litter items surveyed in seven major riverine and marine environments globally were linked to fishing, shipping, aquaculture and mariculture²⁵, or other sea-based activities. (Morales-Caselles et al. 2021). The actual contribution of sea-based sources to marine plastic pollution is estimated to be even greater, as there is evidence that plastic waste is dumped at sea and cargo is sometimes lost at sea. A further concern is the offshore oil and gas industry operating off Africa's Atlantic seaboard, which presents a significant pollution risk.

Fisheries

The FAO has divided the global ocean into major fishing areas and has established regional intergovernmental fisheries bodies to promote the sustainable use of the world's living marine resources, coordinate regional cooperation among member states, provide scientific advice and gather statistical data. As shown in Figure 5, fishing area 34 (the eastern central Atlantic Ocean) and fishing area 47 (the southeastern Atlantic Ocean) traverse the Abidjan Convention area.

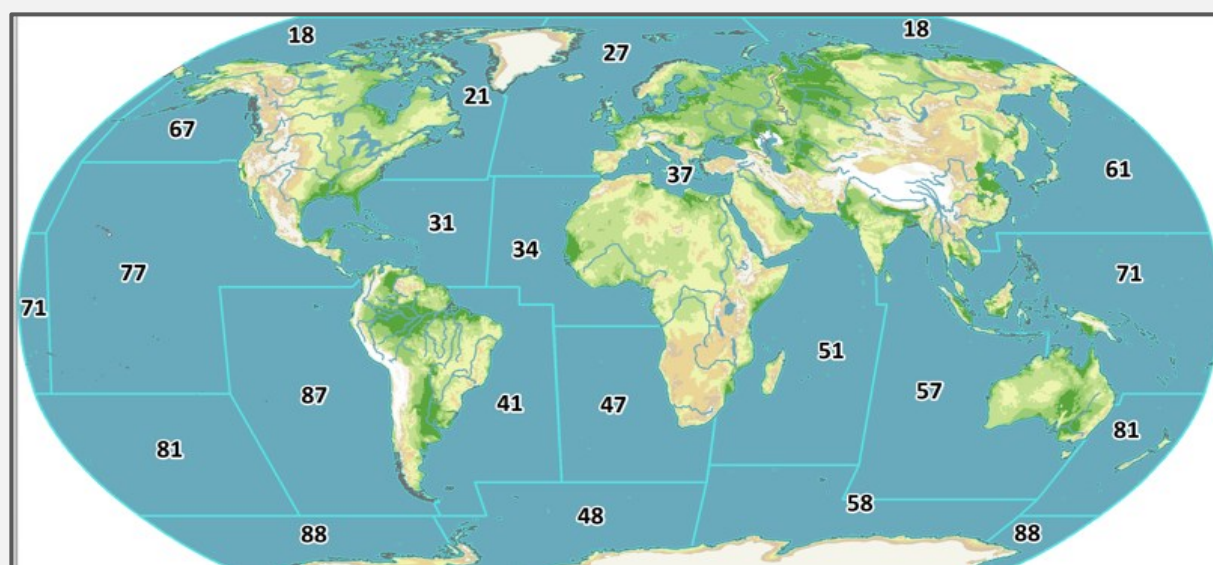


Figure 5: FAO fishing areas. Source: Marine Regions.

Fishing area 34, which encompasses the waters of the Atlantic Ocean from Morocco to the northern border of Angola, is overseen by the Fishery Committee for the Eastern Central Atlantic (CECAF). Countries in the Abidjan Convention area that are members of CECAF are Angola, Benin, Cameroon, Cabo Verde, DRC, Republic of the Congo, Côte d'Ivoire, Equatorial Guinea, Gabon, The Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mauritania,

²⁵Marine fish farming.

Nigeria, São Tomé e Príncipe, Senegal, Sierra Leone, and Togo. The South East Atlantic Fisheries Organisation (SEAFO) has jurisdiction over fishing area 47. Angola, Namibia and South Africa are SEAFO member states. Another notable organisation is the Fisheries Committee for the West Central Gulf of Guinea (FCWC). The FCWC, which is based in Ghana, facilitates cooperation in fisheries management between Benin, Côte d'Ivoire, Ghana, Liberia, Nigeria and Togo. The organisation plays an important role in curbing illegal, unregulated and unreported (IUU) fishing in the waters of FCWC member countries. IUU fishing is known to be a major contributor to ghost fishing gear in Africa.

Maritime Transport

The tip-of-Africa trade route is one of the world's busiest shipping routes and around 30,000 vessels round South Africa's Cape of Good Hope each year. Figure 6 shows the density of commercial maritime traffic based on Automatic Identification System (AIS) signals detected from space.



Figure 6: Commercial maritime traffic based on AIS signals. Source: Luxembourg Space Agency (LuxSpace).

The International Maritime Organisation (IMO) is a United Nations agency that regulates the global maritime transport sector. All of the countries in the Abidjan Convention area are members of the IMO. In addition to maritime safety and security, the agency is responsible for the protection of the marine environment including pollution prevention and response measures. The focus of the IMO's work has expanded from the prevention of marine pollution by oil, as originally detailed in the International Convention for the Prevention of Pollution from Ships (MARPOL) adopted in 1973, to include a broader range of measures addressing pollution from garbage, sewage, chemicals and other harmful substances, as well as air pollution and emissions from ships.

The revised MARPOL Annex V, which entered into force on 1 March 2018, prohibits the discharge of various types of garbage, including plastics, synthetic ropes, fishing gear, plastic garbage bags, lining and packing materials, bottles, and other refuse. The IMO performs Secretariat functions for the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (the London Convention and its 1996 Protocol), with the objective of preventing dumping of waste and other matter into the sea.

Although the dumping of plastics at sea is prohibited, research conducted in the South Atlantic by a team led by Professor Peter Ryan of the University of Cape Town suggests that dumping of general litter by ships and fishing vessels remains prevalent. Isolated islands, particularly those in proximity to oceanic gyres, are disproportionately affected by plastic pollution. The South Atlantic Gyre is a subtropical “garbage patch” that lies between South America and southern Africa. The oceanic gyre flows counterclockwise, accumulating substantial quantities of plastic debris and other litter.

Located south of the South Atlantic Gyre and over 2,500 km from the African mainland, Inaccessible Island (part of the Tristan da Cunha archipelago) is littered with plastic bottles and other debris. Litter monitoring studies undertaken at this uninhabited island over the last three decades provide evidence that plastic bottles are being dumped by ships in contravention of Annex V of the MARPOL Convention. The high proportion of plastic bottles originating from Asian countries (Figure 7) would appear to correspond with the increase in maritime traffic between Asia and South America.

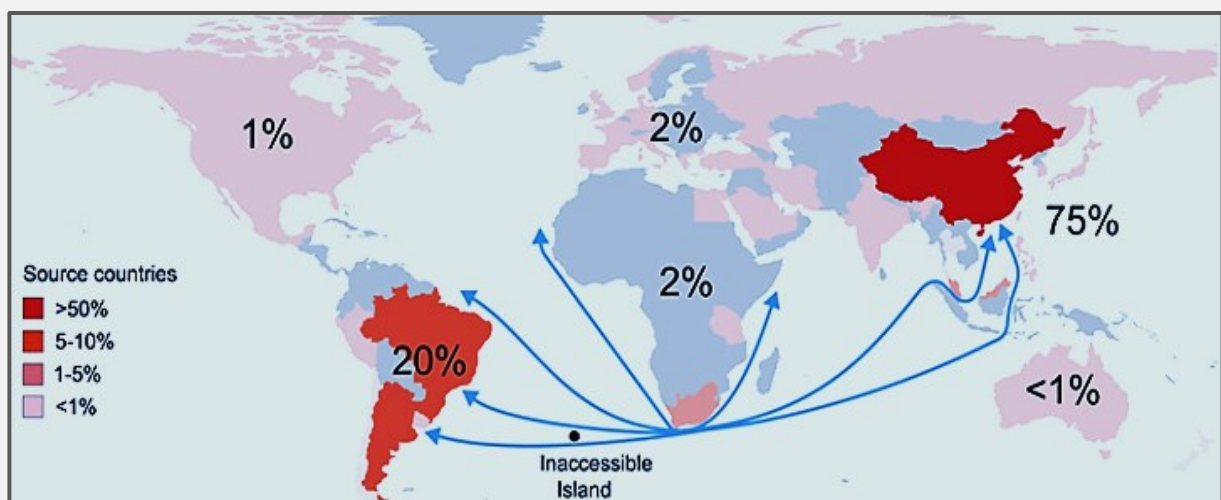


Figure 7: Maritime trade routes and the origins of plastic bottles dumped by ships in the South Atlantic Ocean.
Source: Ryan, P.G. et al. (2019).

The Oil and Gas Industry

The major oil- and gas-producing countries in the Abidjan Convention area are Angola, Nigeria, the Republic of Congo, Gabon, Ghana, Equatorial Guinea and Cameroon. The Gulf of Guinea, which accounts for around 4.5% of the world's proven oil reserves, is a regional oil and gas hub of strategic importance. Offshore oil spills originating from platforms and support vessels operating off the African coast are not always reported by companies responsible for the leakages. Studies of Envisat satellite images undertaken by the French research consultancy, VisioTerra, found more than 18 thousand oil slicks in the Gulf of Guinea between 2002 and 2012, with density highest in Nigerian and Cameroonian waters. The majority of these spills were linked to leakages from offshore oil platforms and shipping. Efforts to enforce pollution control measures continue to be undermined by the high incidence of piracy in the Gulf of Guinea.

2.2. Waste Generation

Waste Streams

Waste is differentiated according to material type (plastic, glass, wood, paper and paperboard, ferrous and non-ferrous metals, composites, etc.); product type (food waste, textiles, e-waste, tyres, etc.); and sector (agricultural, industrial, medical, mining, construction and demolition, shipping, fisheries, etc.). Based on its composition, waste is classified as either solid, liquid or gas, and as non-hazardous or hazardous. The following categories of waste require specialised treatment:

- Biomedical²⁶ waste;
- Sewage sludge;
- Flammable waste, including waste oil, waste solvents, ash and cinders;
- Electrical and electronic waste (WEEE/e-waste);
- Automotive waste (end-of-life vehicles, used tyres and oil);
- End-of-life boats, ships and other vessels;
- Hazardous waste, such as chemicals and expired pharmaceuticals;
- Toxic waste, such as receptacles containing pesticides or other poisonous residues;
- Toxic heavy metals, such as lead and mercury; and
- Other hazardous items, such as batteries, fluorescent tubes and light bulbs.

Hazardous waste, including biomedical waste, should be collected and treated separately from non-hazardous waste. However, given that not all hospitals are equipped with incinerators, medical waste, along with other types of potentially hazardous waste, commonly enters the general waste mix.

²⁶Biomedical waste has infectious or potentially infectious properties.

Sources of Waste

Sources of waste include, but are not limited to, the following notable contributors (in no particular order):

- Households;
- Water treatment and sewage treatment facilities;
- Schools, training centres, universities, prisons and other institutions;
- Hospitals, clinics, nursing homes and other healthcare facilities;
- Wholesalers and retailers, including informal market vendors;
- Food and beverage service providers (restaurants, street food vendors, bars, taverns, etc.);
- Tourism service providers (including hotels and tourist resorts);
- Sports venues, recreation centres and other public facilities;
- Building, construction and demolition activities;
- Shipping and other transport networks (ports, airports, roads and railways);
- Fishing, aquaculture, mariculture and fish processing operations;
- The artisanal sector (handcrafted goods, textile dyeing, tanneries, etc.);
- The beauty and haircare industry (synthetic hair extensions, wigs, braids, etc.);
- Shipyards/boat yards (marine manufacturing and repairs);
- The agriculture sector, notably fertilisers, pesticides, herbicides and fungicides, as well as animal excreta and carcasses from commercial livestock rearing and smallholder animal farming;
- Offshore and onshore oil and gas operations, and the associated release (accidental and/or intentional) of oil and other toxic pollutants into the environment;
- Mining and other extractive operations;
- Heavy industrial activities, notably those involving the discharge of contaminated wastewater, heavy metals, chemicals and other pollutants;
- Manufacturing activities, notably the packaging sector, textiles, clothing and footwear, and the automotive industry;
- The energy sector;
- Public and private services (administrative, commercial, financial, etc.);
- Telecommunications service providers;
- Landfills, waste transfer stations, uncontrolled garbage dumps; and
- The global waste trade.

Key Drivers of Waste Generation

The main drivers of consumption and associated waste generation across the Abidjan Convention area include:

- Population expansion;
- Urbanisation;
- Economic development;
- The emerging middle-class and rising consumerism; and
- The global waste trade.

The population of the Abidjan Convention area, which was estimated to total around 607.22 million in mid-2023²⁷, is projected to exceed 1.05 billion by 2050²⁸. It is estimated that the coastal population accounts for approximately one-third of the area's total population. Countries in the Abidjan Convention area are becoming increasingly urbanised and it is estimated that 57.5% of the region's total population will be urbanised by the end of 2023²⁹.

Migration from rural areas to towns and cities is being driven by the following key factors:

- Unemployment, poverty and socio-economic needs;
- Security threats (insurgencies, political unrest and/or terrorism); and
- Climate-related concerns, including droughts, desertification, flooding and coastal surges.

With over 223.8 million inhabitants in 2023, Nigeria has the largest population in Africa and is also the continent's largest economy. The DRC is the second most populous country in the Abidjan Convention area (102.3 million inhabitants), followed by South Africa (60.4 million inhabitants). Table 1 provides a summary of key indicators for the 22 countries of the Abidjan Convention area.

²⁷World Population Review, based on United Nations projections contained in the 2022 Revision of World Population Prospects.

²⁸As above.

²⁹As above.

	Area ³⁰ (sq. km)	Population (2023) ³¹	Annual population growth rate (%), 2023 ³²	Population density (inhabitants per sq. km)	Urban population (% of total population) ³³	Population projections for 2050 ³⁴	Nominal Gross Domestic Product (GDP), 2022 (US\$) ³⁵	Nominal GDP per capita, 2022 (US\$) ³⁶
Abidjan Convention Area	10,104,753	607,218,135	2.27	93	57.5	1,054,018,737	US\$1.4 trillion	US\$2,617
Angola	1,246,700	36,684,202	3.08	29	67.46	72,328,068	106.71 billion	2,917
Benin	114,763	13,712,828	2.7	119	48.97	25,264,035	17.4 billion	1,269
Cabo Verde	4,033	598,682	0.93	148	67.1	727,457	2.32 billion	3,875
Cameroon	475,442	28,647,293	2.63	60	58.15	51,279,560	44.34 billion	1,548
Congo (Rep. of)	342,000	6,106,869	3.29	18	68.28	10,378,912	14.62 billion	2,394
Côte d'Ivoire	322,462	28,873,034	2.16	90	53.1	51,358,242	70.02 billion	2,425
DRC	2,344,858	102,262,808	3.29	44	46.24	217,494,003	58.07 billion	568
Equatorial Guinea	28,051	1,714,671	2.37	61	73.56	2,790,532	11.81 billion	6,888
Gabon	267,668	2,436,566	1.99	9	85.3	3,757,053	21.07 billion	8,647
Gambia (The)	11,295	2,773,168	2.48	246	63.22	4,673,742	2.27 billion	819
Ghana	227,533	34,121,985	1.93	150	58	52,231,784	73 billion	2,139
Guinea	245,857	14,190,612	2.39	58	37.26	23,711,700	21.23 billion	1,496
Guinea-Bissau	36,125	2,150,842	2.15	60	44.62	3,445,289	1.63 billion	758
Liberia	111,369	5,418,377	2.18	49	52.57	8,890,700	4 billion	738
Mauritania	1,030,700	4,862,989	2.68	5	57.7	8,914,672	10.38 billion	2,134
Namibia	824,292	2,604,172	1.45	3	53.01	3,779,918	12.61 billion	4,842
Nigeria	923,769	223,804,632	2.41	242	52.75	377,459,883	477 billion	2,131
São Tomé e Príncipe	1,001	231,856	1.97	232	75.07	366,662	0.547 billion	2,359
Senegal	196,722	17,763,163	2.58	90	48.6	32,562,868	27.68 billion	1,558
Sierra Leone	71,740	8,791,092	2.15	123	43.37	13,595,022	3.97 billion	452
South Africa	1,221,037	60,414,495	0.87	49	67.85	73,529,752	405.87 billion	6,718
Togo	56,785	9,053,799	2.32	159	43.36	15,478,883	8.13 billion	898

Table 1: Countries of the Abidjan Convention area: summary of key indicators. Sources: World Atlas, United Nations, World Bank Group.

³⁰World Atlas.

³¹World Population Review, based on United Nations projections contained in the 2022 Revision of World Population Prospects.

³²As above.

³³As above.

³⁴As above.

³⁵World Bank Group.

³⁶As above.

Municipal Solid Waste

The Organisation for Economic Co-operation and Development (OECD) defines municipal solid waste (MSW) as “waste collected and treated by or for municipalities. It covers waste from households, including bulky waste, similar waste from commerce and trade, office buildings, institutions and small businesses, as well as yard and garden waste, street sweepings, the contents of litter containers, and market cleansing waste if managed as household waste. The definition excludes waste from municipal sewage networks and treatment, as well as waste from construction and demolition activities.”

The 22 countries within the Abidjan Convention area are expected to generate more than 118 million tonnes of MSW in 2023. This equates to approximately 0.53 kilograms (kg) of MSW per person per day, or 195 kg per capita per annum, which is less than the global average of 0.74 kg per person per day (270.1 kg per capita per annum), but higher than the sub-Saharan average of 0.46 kg per person per day (167.9 kg per capita per annum)³⁷. Waste generation is significantly higher in urban areas than in rural communities, with high income and upper-middle income earners generating higher levels of waste than lower-middle income and low-income earners. Urbanisation, economic development and rising income levels are expected to boost waste generation in sub-Saharan Africa to 0.63 kg per person per day (230 kg per capita per annum) by 2050. Based on the current trajectory, and in keeping with regional trends, the total quantity of MSW generated by the countries of the Abidjan Convention area could exceed 242 million tonnes by 2050.

Plastics may be broadly categorised into short-lived products, including single-use plastics; durable plastics (such as those used in agriculture, fishing, electronics, construction, textiles, and the automotive industry, among other sectors); and microplastics³⁸ (paint, pellets/nurdles, textile microfibres, tyre abrasion, personal care products, cleaning agents, etc.). Microplastics are conveyed through waste water (laundry, cleaning agents, microbeads in personal care products, etc.), via rivers (through the breakdown of macroplastics³⁹), through rainwater runoff (tyre abrasion) and through the air (resulting from open burning of waste, or the breakdown of macroplastics by the sun and wind). Short-lived household and commercial products account for the bulk of plastic waste.

³⁷Kaza, S. et al. (2018). What a waste 2.0. A global snapshot of solid waste management to 2050. World Bank Group.

³⁸Microplastics are plastic fragments that are smaller than 5 mm in diameter, while nanoplastics are typically less than 1 micrometre in size.

³⁹Macroplastics are generally defined as plastic materials that are larger than 5 mm in diameter. The term “mesoplastics” is also used for plastic materials ranging from 5 mm to 10 mm in size.

Based on the extrapolation of available data, it is estimated that at least 20.1 million tonnes of plastic waste will be generated in the Abidjan Convention area in 2023⁴⁰. This equates to 17% of the total MSW mix. Table 2 provides a breakdown of current MSW and plastic waste estimates.

	Average quantity of MSW generated per person per year (kg/capita/annum)	Total quantity of MSW generated in 2023 (in tonnes)	Average quantity of plastic waste generated per person per year (kg/capita/annum)	Total quantity of plastic waste generated in 2023 (in tonnes)
Angola	167.9	6,159,278	22.63	830,163
Benin	127.75	1,751,814	15.70	215,223
Cabo Verde	259.15	155,148	23.73	14,204
Cameroon	153.3	4,391,630	16.79	480,988
Congo (Rep. of)	175.2	1,069,923	25.19	153,801
Côte d'Ivoire	233.6	6,744,741	21.17	611,242
DRC	182.5	18,662,962	16.43	1,679,667
Equatorial Guinea	164.25	281,635	52.56	90,123
Gabon	204.4	498,034	19.71	48,025
Gambia (The)	149.65	415,005	17.52	48,586
Ghana	186.15	6,351,808	24.82	846,908
Guinea	76.65	1,087,710	10.95	155,387
Guinea-Bissau	164.25	353,276	19.71	42,393
Liberia	156.95	850,414	30.66	166,127
Mauritania	131.4	638,997	16.43	79,875
Namibia	200.75	522,788	52.56	136,875
Nigeria	186.15	41,661,232	36.50	8,168,869
São Tomé e Príncipe	135.05	31,312	37.60	8,717
Senegal	160.6	2,852,764	37.60	667,806
Sierra Leone	113.15	994,712	14.97	131,559
South Africa	357.7	21,610,265	87.6	5,292,310
Togo	153.3	1,387,947	20.81	188,364

Table 2: Waste generation in the Abidjan Convention area. Sources: Kaza, S. et al. (2018). *What a waste 2.0. A global snapshot of solid waste management to 2050*. World Bank Group; Jambeck, J. R. et al. (2015). *Plastic waste inputs from land into the ocean*. *Science*, 347(6223), 768-771.

The main sectoral contributors to plastic waste include the packaging industry (food and beverages, home and personal care (HPC) and other consumer goods); fisheries, aquaculture and mariculture; maritime, coastal and inland water transport; the food and beverages services industry (street food vendors, bars and taverns,

⁴⁰SST estimate, based on the current population statistics for the 22 member countries and annual per capita plastic waste generation rates.

restaurants, fast-food outlets, catering, etc.); tourism and recreational activities, including beachgoing, cultural and religious festivals, music concerts and sports events; textile, clothing and footwear manufacturing; building and construction; agriculture; furniture and household goods; and the synthetic haircare sector. Nigeria currently generates the largest quantity of plastic waste in the Abidjan Convention area, followed by South Africa, the DRC, Ghana and Angola (Figure 8).

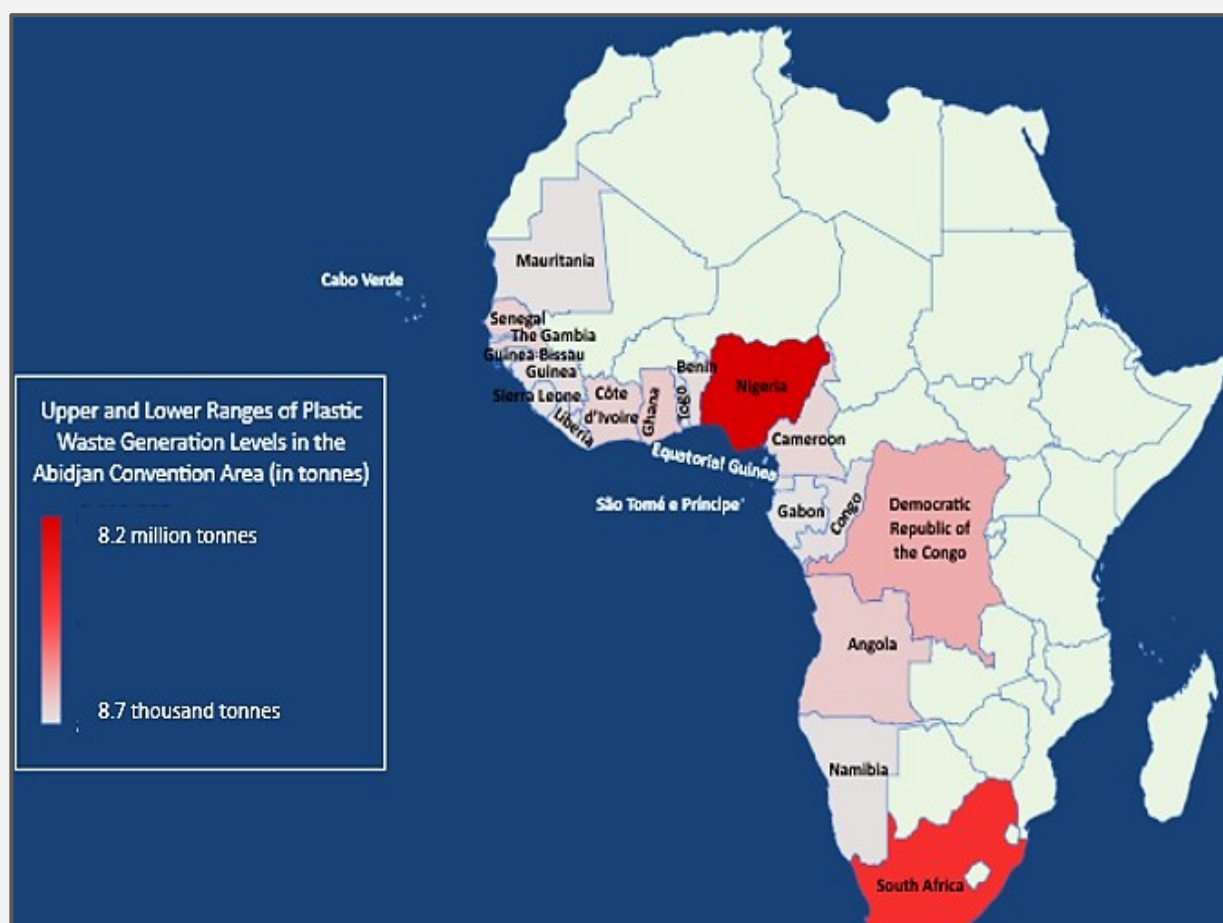


Figure 8: Map showing estimated levels of plastic waste generation in Abidjan Convention countries, 2023.

2.3. The Plastics Industry

The Plastics Trade

Plastics are traded in various forms:

- Primary forms of plastic include various types of virgin plastic resins (polymers);
- Intermediate forms of plastic include sheets, filaments, synthetic yarns, plates, sheets, film, foil, etc.;
- Intermediate manufactured plastic goods, including synthetic textiles;
- Final manufactured plastic products that are made entirely or mostly of plastic; and
- Plastic waste.

Internationally traded plastics are differentiated according to type, in compliance with Harmonised System (HS) classification codes⁴¹. It is important to note that these trade statistics do not include the volume and value of plastics embedded in traded consumer products (such as electronics, vehicles and tyres), as well as products that are not made entirely or mostly of plastic, and plastics used in pre-packaged products that are not imported under a plastic-related HS code. According to research commissioned by the United Nations Conference on Trade and Development (UNCTAD), the actual quantities and value of plastics traded globally could be 40% higher than reported trade figures⁴². In October 2021, members of the World Trade Organisation (WTO), including Cabo Verde and The Gambia, co-sponsored an informal dialogue on plastic pollution and discussed a roadmap aimed at reducing plastic pollution and transitioning towards an environmentally sustainable plastics trade.

The inflow of plastics to the Abidjan Convention area has risen significantly in recent years. HS 3901 (polymers of ethylene in primary forms) is the largest category of imported plastics, followed by HS 3902 (polymers of propylene or other olefins in primary forms) and HS 3907 (polyacetals, other polyethers and epoxide resins in primary forms). Appendix 2 contains a comprehensive list of traded plastic products and their respective HS codes.

The largest exporters of plastics to the region are China, Saudi Arabia, India and South Africa, with Russia set to significantly increase its market share. During the Russia-Africa summit held in St. Petersburg in July 2023, a representative from SIBUR, Russia's largest petrochemical producer, stated that the company plans to double polymer sales to Africa in response to the growing demand.

All Abidjan Convention member countries are net importers of plastics. Based on the value of imported plastics, South Africa was the region's largest importer in 2022, with imports totalling more than US\$3.22 billion, followed by Nigeria (US\$2.32 billion) and Ghana (US\$1.01 billion)⁴³. As shown in Table 3, the total value of plastics imported under a plastic-related HS code by the countries of the Abidjan Convention area increased from around US\$6.9 billion in 2015 to approximately US\$10.63 billion in 2022.

⁴¹ The Harmonised System (HS) is an international classification defined by the World Customs Organisation for the classification of products. It allows participating countries to classify traded goods on a common basis for customs purposes.

⁴² Barrowclough, D. et al. (2020). UNCTAD Research Paper No. 53 UNCTAD/SER.RP/2020/12. Global trade in plastics: insights from the first life-cycle trade database. United Nations Conference on Trade and Development.

⁴³ Provisional statistics.

Imports of Plastics into the Abidjan Convention Area, 2015 - 2022								
Importers	2015	2016	2017	2018	2019	2020	2021	2022
UNIT: US\$ THOUSANDS ('000)								
South Africa	2,400,566	2,257,082	2,483,402	2,841,127	2,493,921	2,032,337	2,925,314	3,224,644
Nigeria	1,533,337	1,548,336	1,340,737	1,384,566	1,530,889	2,399,919	2,547,651	2,323,597
Ghana	514,274	396,465	468,530	584,649	499,852	895,217	1,213,645	1,009,205
Côte d'Ivoire	421,641	374,530	474,478	462,172	471,960	513,938	667,000	777,635
DRC	288,761	171,297	179,129	240,029	286,541	221,457	426,285	632,339
Angola	310,803	327,483	404,155	451,999	467,241	365,708	409,364	556,716
Cameroon	180,457	171,584	168,299	190,862	202,439	201,367	262,093	391,945
Senegal	172,866	168,949	192,905	227,106	224,507	233,071	254,990	351,027
Namibia	186,886	156,798	164,723	197,364	205,209	174,553	232,753	226,349
Togo	128,313	125,931	128,857	113,790	152,623	147,066	183,816	213,459
Guinea	114,679	114,254	136,585	126,583	156,981	183,079	205,152	183,541
Benin	118,145	105,936	90,422	93,229	98,664	101,749	126,000	143,159
Mauritania	67,705	87,892	79,058	85,538	84,861	87,625	113,788	119,293
Republic of Congo	153,525	117,055	75,892	86,459	69,619	69,531	93,151	99,168
Sierra Leone	51,150	41,063	40,792	48,137	114,930	58,205	94,280	91,458
Gabon	85,402	68,446	67,713	76,126	74,463	74,750	85,080	91,432
Liberia	59,730	49,359	49,477	43,724	44,610	57,155	79,581	70,227
The Gambia	31,635	33,861	36,095	37,286	54,376	38,166	46,682	39,093
Equatorial Guinea	36,307	26,649	19,546	24,233	26,149	26,616	28,381	36,753
Cabo Verde	20,965	23,571	21,275	27,801	26,928	24,690	26,550	34,291
Guinea-Bissau	16,840	11,163	8,735	10,702	15,626	18,666	30,274	9,893
São Tomé e Príncipe	3,805	4,450	4,708	4,763	3,997	4,544	4,442	4,618
TOTAL	6,897,792	6,382,154	6,635,513	7,358,245	7,306,386	7,929,409	10,056,272	10,629,842

Table 3: The value of plastics imported under a plastic-related HS code by countries in the Abidjan Convention area between 1 January 2015 and 31 December 2022. Data is based on direct data and trade partner reported data (mirror data). Sources: International Trade Centre (ITC), UNCTAD, United Nations (UN) COMTRADE, national statistical and revenue services.

Although COVID-19-related disruptions negatively affected trade in 2021, volumes have since recovered. Nigeria imported the largest quantity of plastics in 2022 (1.58 million tonnes), ahead of South Africa (1.37 million tonnes). The total quantity of plastics imported under a plastic-related HS code by countries in the Abidjan Convention area increased from around 3.92 million tonnes in 2015 to an estimated 5.7 million tonnes in 2022 (Figure 9).

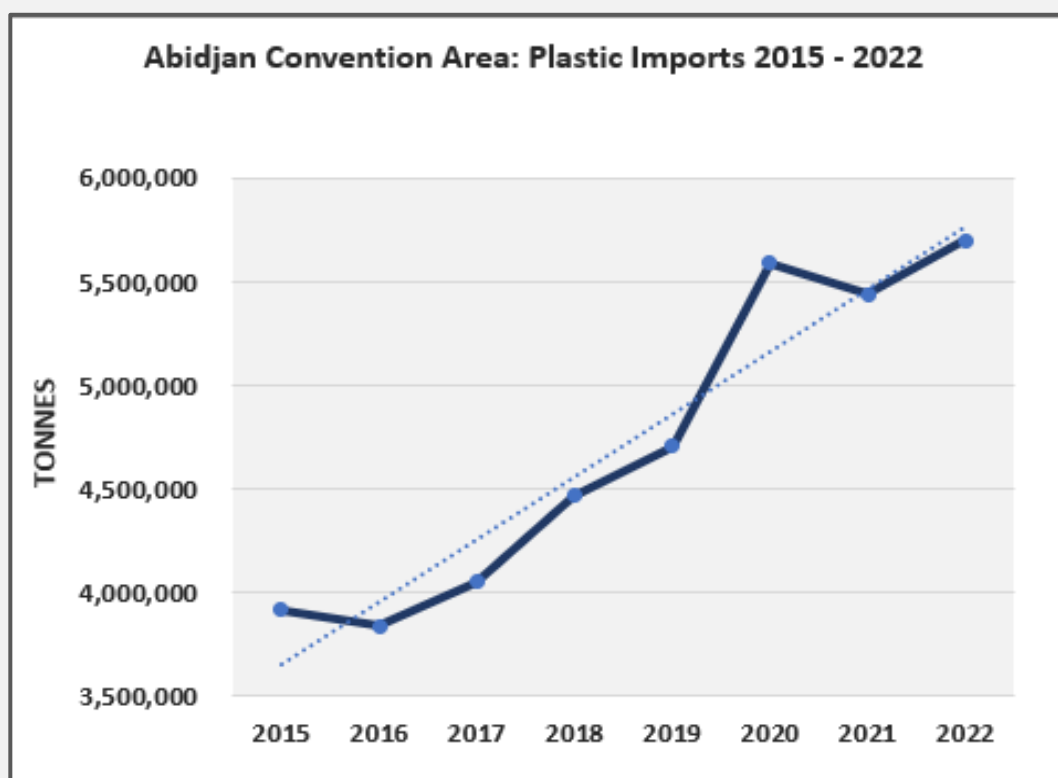


Figure 9: The quantity of plastics imported under a plastic-related HS code by the 22 countries within the Abidjan Convention area between 2015 and 2022. Data is based on direct data and trade partner reported data (mirror data). Sources: ITC, UNCTAD, UN COMTRADE, and national statistics agencies.

The total value of plastic exports from Abidjan Convention countries was estimated at around US\$2.23 billion in 2022. With plastic exports totalling US\$1.69 billion⁴⁴ in 2022 (2021:US\$1.55 billion⁴⁵) South Africa is currently the largest plastic exporting country in the Abidjan Convention area. Its main plastic exports are polypropylene (HS 3902); plastic articles for the conveyance or packaging of goods, such as closures, stoppers, lids, caps, etc. (HS 3923); polyethylene (HS 3901); and plastic tubes, pipes and hoses, as well as fittings thereof, such as joints, elbows and flanges (HS 3917).

In 2019, the Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention) adopted amendments to three annexes to incorporate certain categories of plastic waste. These amendments give parties the right to prohibit the import of plastic waste and also require prior written informed consent for the export of plastic waste. Uncontaminated plastic waste may be exempted from these obligations, provided that it is “destined for recycling in an environmentally sound manner”.

⁴⁴Rounded.

⁴⁵As above.

Plastic waste is widely traded across the Abidjan Convention area, and although imports and exports of plastic waste are reported by member countries, the actual quantities and values of waste would appear to be underreported, with certain types of waste being categorised as second-hand goods. Moreover, anecdotal evidence suggests that illegal transboundary trade in hazardous waste is being facilitated by corruption and inadequate enforcement measures. With plastic waste imports valued at around US\$4.57 million, South Africa was the largest importer of waste plastic in 2021, followed by Angola (US\$3.84 million) and Nigeria (US\$3.45 million). Nigeria was the largest exporter of waste plastic in 2021, with plastic waste exports amounting to US\$5.6 million, followed by Ghana (US\$2.5 million) and South Africa (US\$1.4 million).

Production of Virgin Plastics Resins

In the Abidjan Convention area, the production of virgin plastic polymers (resin) is concentrated in South Africa and Nigeria. In 2020, South African output was estimated at 1.4 million tonnes, with Nigeria contributing around 513 thousand tonnes⁴⁶. Plastic polymer production in the region is dominated by four major players:

- Sasol Chemicals, a division of Sasol South Africa, produces low-density polyethylene (LDPE), linear low-density polyethylene (LLDPE), polypropylene (PP) and polyvinyl chloride (PVC) for a broad range of applications and industries in South Africa and other countries across sub-Saharan Africa, the European Union, Asia and the Americas.
- Safripol (South Africa) produces PP, high-density polyethylene (HDPE) and polyethylene terephthalate (PET) for domestic, regional and international markets.
- Indorama Eleme Petrochemical Limited (IEPL), located in Port Harcourt, Rivers State, Nigeria, produces polyolefins, including PP and polyethylene (PE).
- Engee PET Manufacturing Company Nigeria Limited produces PET resin at its continuous polymerisation PET resin plant in Igbesa, Ogun State. The facility, which has a PET resin production capacity of 150,000 tonnes per annum, sources over 20% of its raw materials from locally sourced post-consumer plastic bottles. The facility is certified to produce high-quality food grade PET for the export market.

Conversion of Polymers into Plastic Products

Polymers in primary form are imported via distributors or directly by companies that manufacture plastic products for various applications and end-users across the Abidjan Convention area. While South Africa and Nigeria supply polymers to their respective domestic markets, both countries also import polymers. South Africa

⁴⁶ Euromap; Reed Business Information (ICIS); International Monetary Fund (IMF); VDMA Fachverband Kunststoff- und Gummimaschinen.

and Nigeria aside, the production of recycled polymer is still in its infancy across the region. The South African plastics industry converted more than 1.9 million tonnes of polymer⁴⁷ into new plastics in the year to end-December 2021. Industry association, Plastics SA, reported that locally recycled polymer accounted for 21.7% of polymer consumption in South Africa in 2021, with the percentage of recycled content in new products having increased from 14.8% in 2012 to 16.7% in 2021.

Various manufacturing processes are used to convert polymers into intermediate and/or finished products. The most common processes are injection moulding, plastic extrusion and blow moulding.

- Injection moulding is typically used to create consumer goods (plastic cutlery, toys, containers, etc.), medical components and automotive parts, among other items.
- Plastic extrusion is used to make products such as plastic film, tubes, piping, coated paper, insulation on electrical wires and plastic timber.
- Blow moulding is used in conjunction with injection moulding or extrusion to produce disposable containers for packaging and liquids, such as plastic bottles.

2.4. Policy and Legal Frameworks

Environmental policy refers to guidelines, strategies or principles to guide targeted actions. Policies are informed by international, regional and sub-regional multilateral environmental agreements (MEAs), conventions, protocols and resolutions covering such issues as pollution, hazardous waste, marine litter and dumping, biodiversity, wetlands, climate change, desertification, endangered species, and ozone layer protection. The Convention for Cooperation in the Protection, Management and Development of the Marine and Coastal Environment of the Atlantic Coast of the West, Central and Southern Africa Region (Abidjan Convention) entered into force in 1984. Guided by UNEP, the Abidjan Convention provides for the coordinated implementation of regional initiatives for the protection of the marine environment and coastal areas of the West, Central and Southern Africa Region, and serves as an overarching legal framework for the region's marine-related programmes.

The Bamako Convention, adopted in Mali on 30 January 1991, is a regional treaty that prohibits the importation of hazardous waste (including radioactive waste) into Africa. This convention, which entered into force on 22 April 1998, also seeks to minimise and control intra-African transboundary movements of hazardous waste, and ensure that the disposal of waste takes place in an environmentally sound manner. Although the majority of

⁴⁷This includes the total quantity of locally produced polymers, net imported polymers as recorded by the South African Revenue Services (SARS), and recycled polymers sold locally by converters.

countries in the Abidjan Convention area have ratified⁴⁸ or acceded⁴⁹ to the Bamako Convention, the provisions of the convention are not rigorously enforced. Other regional and international instruments and mechanisms pertaining to marine pollution that are of relevance to Abidjan Convention member countries are listed in Table 4⁵⁰.

Year	International Multilateral Environmental Agreements (MEAs), Conventions, Protocols and Resolutions that address Pollution and/or Related Issues
1969	International Convention on Civil Liability for Oil Pollution (signed in Brussels).
1971	Convention on Wetlands of International Importance (Ramsar Convention).
1972	Convention Concerning the Protection of the World's Cultural and Natural Heritage (Paris).
1972	Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention).
1973/1978	International Convention for the Prevention of Pollution from Ships (MARPOL). MARPOL Annex V, which came into effect in 1983, prohibits the disposal of garbage from ships, including plastic waste (operational or accidental causes).
1974	The Regional Seas Programme (UNEP).
1979	Convention on Long-range Transboundary Air Pollution (Geneva).
1979	The Convention on the Conservation of Migratory Species of Wild Animals, also known as the Convention on Migratory Species (CMS) or the Bonn Convention, which seeks to protect migratory species within their migratory ranges.
1982	United Nations Convention on the Law of the Seas (UNCLOS), which establishes a legal framework for all marine and maritime activities that requires countries to "adopt laws and regulations to prevent, reduce and control pollution" from land-based sources and dumping.
1985	Convention for the Protection of the Ozone Layer (Vienna).
1985	Montreal Guidelines for the Protection of the Marine Environment against Pollution from Land-based Sources.
1987	Montreal Protocol on Substances that Deplete the Ozone Layer.
1990	Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer (London).
1989	The Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention), which entered into force in 1992, aims to reduce the generation of hazardous and other

⁴⁸The United Nations (UN) defines ratification as "the international act whereby a state indicates its consent to be bound to a treaty if the parties intended to show their consent by such an act." Unlike the signing of a treaty, which signifies an intention to "continue the treaty-making process", ratification indicates consent to be legally bound by the terms of the legal instrument.

⁴⁹The UN defines accession as "the act whereby a state accepts the offer or opportunity to become a party to a treaty already negotiated and signed by other states". It has the same legal effect as ratification and usually occurs after the treaty has entered into force.

⁵⁰This list is not exhaustive.

	waste, promote its environmentally sound management and regulate its transboundary movements. Amendments adopted in 2019, broaden the scope of the convention to incorporate certain categories of plastic waste. Parties to the Basel Convention are expected to implement the law nationally.
1991	Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention).
1992	Rio Declaration on Environment and Development (Rio Declaration).
1992	Convention on Biological Diversity (Rio de Janeiro). Decision XIII/10, adopted in 2016, included voluntary guidelines for preventing and mitigating the impacts of marine litter.
1992	Convention on the Protection and Use of Transboundary Watercourses and International Lakes (The Water Convention, adopted in Helsinki).
1992	Protocol of 1992 amending the International Convention of 1969 on Civil Liability for Oil Pollution.
1992	The United Nations Framework Convention on Climate Change that commits parties to reduce greenhouse gas emissions (New York).
1994	The United Nations Convention to Combat Desertification (Paris).
1995	The United Nations Agreement for the Implementation of the Provisions of UNCLOS relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UN Fish Stocks Agreement), including obligations for parties to minimise pollution, waste and abandoned, lost or otherwise discarded fishing gear. Although the scope of the agreement covers areas beyond national jurisdictions, it is limited to specific species and does not cover all fishing activities.
1996	The Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention), which entered into force in 2006, includes a list of items that may be dumped at sea. Dumping plastic waste at sea is prohibited.
1997	The Convention on the Law of the Non-Navigational Uses of International Watercourses (UN Watercourses Convention), which pertains to watercourses such as rivers, lakes or other surface water bodies that fall under the jurisdiction of two or more countries, requires parties to take appropriate measures to prevent, reduce and control pollution, including plastic pollution.
1997	The Kyoto Protocol, which extended the 1992 United Nations Framework Convention on Climate Change.
1998	Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (Rotterdam Convention).
2000	Cotonou Agreement (the successor to the Lomé Conventions), focusing on Sustainable Development and Poverty Reduction.
2001	Convention on Persistent Organic Pollutants (Stockholm Convention), which requires parties to implement measures to reduce or eliminate the release of harmful persistent organic pollutants (POPs), including the restriction or elimination of POP-based additives in the manufacture of plastic products.
2013	Minamata Convention on Mercury.
2014	United Nations Environment Assembly (UNEA 1) UNEP/EA.1/Resolution 6: Marine plastic debris and microplastics (Nairobi, Kenya), which noted the need for further research on marine litter and microplastics.
2015	The Paris Agreement (Accord de Paris), also known as the Paris Climate Accord, is a legally binding international treaty on climate change that was adopted at the United Nations Climate Change Conference (COP21) on 12 December 2015.

2016	UNEA 2 UNEP/EA.2/Resolution 11: Marine plastic litter and microplastics (Nairobi), which requested UNEP to assess the effectiveness of pertinent international, regional and sub-regional regulatory frameworks, governance strategies and approaches to combat marine plastic litter and microplastics, and identify possible gaps, as well as options to address these gaps.
2017	UNEA 3 UNEP/EA.3/Resolution 7: Marine litter and microplastics (Nairobi), which adopted a global zero-emission vision, with the aim of eliminating the discharge of litter and microplastics into the oceans. The resolution requested an overview of all voluntary commitments targeting marine plastics and microplastics and established an Ad Hoc Open-Ended Expert Group (AHEG) to study and propose solutions to marine plastic pollution.
2018	Bali Declaration on the Protection of the Marine Environment from Land-based activities.
2019	UNEA 4 UNEP/EA.4/Resolution 9: Addressing single-use plastic products pollution, which requested UNEP to share information on strategies to address plastic pollution, including information on the full life cycle impacts of single-use plastic products; and UNEP/EA.4/Resolution 6: Marine plastic litter and microplastics (Nairobi), which extended the mandate of the AHEG and, stressing the importance of coordination and collaboration, called on UNEP to strengthen scientific and technological knowledge on marine plastics.
2021	UNEA 5.1 (Nairobi) called for the negotiation of a global treaty to address plastic pollution and announced the first Ministerial Conference on Marine Litter and Microplastics.
2021	The first Ministerial Conference on Marine Litter and Microplastics was hosted by Ecuador, Germany, Ghana and Viet Nam in September 2021. The Ministerial Statement, endorsed by 65 countries (including Cameroon, Côte d'Ivoire, the DRC, Ghana and Mauritania) commits to taking "the next decisive steps by working towards the timely establishment of an Intergovernmental Negotiating Committee (INC) on Marine Litter and Plastic Pollution at UNEA-5.2, with the aim of achieving a new Global Agreement with ambitious goals, wide participation and means of implementation".
2021	The World Trade Organisation (WTO) informal dialogue on Plastics Pollution and Environmentally Sustainable Plastics Trade focused on the need to develop a roadmap to support global efforts to reduce plastic pollution and transitioning towards an environmentally sustainable plastics trade. Co-sponsors of the informal dialogue included Cabo Verde and The Gambia.
2022	UNEA 5.2 - Resolution 5/14: "End plastic pollution: Towards an international legally-binding instrument." (Nairobi) was approved by 175 UN member states, paving the way to the drafting of a legally binding global treaty that will address the full life cycle of plastic, including its production, design and disposal. In addition to recognition of Africa's special needs and circumstances, South Africa requested that the instrument include the principles of equity and common but differentiated responsibilities and respective capabilities in light of national circumstances.
2021	The United Nations Human Rights Council (UNHRC) adopted Resolution 48/13, recognising that a clean, healthy and sustainable environment is a human right.
2022	The United Nations General Assembly (UNGA) adopted Resolution 76/300, recognising the human right to a clean, healthy and sustainable environment. In affirming the right of all people to a healthy environment, the UN General Assembly called on all states to implement their international commitments.
2022	During the second half of 2022, the Intergovernmental Negotiating Committee (INC) to develop the international legally binding instrument on plastic pollution, including in the marine environment, began its work, with the aim of completing negotiations by the end of 2024. The first session of negotiations (INC-1) was held in Punta del Este, Uruguay from 28 November to 2 December 2022.

2023	The second session of negotiations to develop an international legally binding instrument on plastic pollution, including in the marine environment (INC-2), was held in Paris, France from 29 May to 2 June 2023. The zero draft of the incipient legal instrument will be presented at the third session (INC-3), which is scheduled to take place in Nairobi from 13 to 19 November 2023.
Year	Regional Multilateral Environmental Agreements (MEAs), Treaties, Conventions, Protocols, Charters and Decisions that address Pollution and/or Related Issues
1968	African Convention on the Conservation of Nature and Natural Resources (Algiers Convention).
1981	The Convention for Cooperation in the Protection, Management and Development of the Marine and Coastal Environment of the Atlantic Coast of the West, Central and Southern Africa Region (Abidjan Convention).
1985	Protocol Concerning Co-operation in Combating Pollution in Cases of Emergency in the Western and Central African Region adopted by parties to the Abidjan Convention in 1985.
1991	The Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa (Bamako Convention). The convention came into force in 1998.
1991	The Abuja Treaty providing for the creation of the African Economic Community.
1999	The Memorandum of Understanding on Port State Control for West and Central Africa region (Abuja MoU) is one of nine regional MoUs established pursuant to International Maritime Organisation (IMO) Resolution A.682(17) of 1991. Covering the entire Southeast Atlantic region, the MoU's mandate is to develop a system of harmonised port state control inspection procedures with the aim of eliminating or reducing identified risks to human life, the marine environment and cargo.
2001	The Convention on the Conservation and Management of Fisheries Resources in the South East Atlantic Ocean (SEAFO) was adopted by the Conference on the South East Atlantic Fisheries Organisation on 20 April 2001, in Windhoek, Namibia.
2009	The Niger Basin Water Charter seeks to promote sustainable, equitable and coordinated use of the water resources of the Niger Basin catchment area. The agreement, which was adopted in April 2009, has been signed by Benin, Cameroon, Côte d'Ivoire, Guinea, Nigeria, Burkina Faso, Mali, Chad and Niger.
2012	The Additional Protocol to the Abidjan Convention Concerning Cooperation in the Protection and Development of Marine and Coastal Environment from Land-Based Sources and Activities in the West, Central and Southern African Region (LBSA Protocol, also known as the Grand Bassam Protocol) seeks to prevent, mitigate and control pollution caused by land-based activities.
2019	The Protocol on Integrated Coastal Zone Management (Pointe-Noire Protocol), adopted by parties to the Abidjan Convention, aims to facilitate the implementation of integrated coastal zone management, including coordinated development of coastal zones.
2019	The Protocol on Sustainable Mangrove Management (Calabar Protocol), adopted by parties to the Abidjan Convention, creates a regional framework for sustainable mangrove management.
2019	The Protocol on Environmental Norms and Standards for Offshore Oil and Gas Exploration and Exploitation Activities (Malabo Protocol), adopted by parties to the Abidjan Convention, seeks to establish a common framework to strengthen the supervision of offshore oil and gas activities and ensure the protection of the marine environment.

2022	Decision 18/2: Decision on Africa's participation in the development of an international legally binding instrument on plastic pollution, including in the marine environment (adopted in Dakar at the African Ministerial Conference on the Environment).
Year	Other Notable Measures, Mechanisms and Strategies
1992	Agenda 21 for Sustainable Development.
1995	Code of Conduct for Responsible Fisheries.
1995	Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA).
2005	The African 10-Year Framework Programme on Sustainable Consumption and Production (2005 -2015).
2011	The Honolulu Strategy: A Global Framework for Prevention and Management of Marine Debris.
2012	South East Atlantic Fisheries Organisation System of Observation, Inspection, Compliance and Enforcement.
2012	Africa's Integrated Maritime Strategy – 2050 (African Union).
2014	Small Island Developing States Accelerated Modalities of Action (Samoa Pathway).
2015	The 2030 Agenda for Sustainable Development.
2015	Agenda 2063: The Africa We Want adopted by the African Union Assembly of Heads of State and Government in 2015.
2017	United Nations Clean Seas Campaign.
2019	African Union Blue Economy Strategy.
2019	The African Ministerial Conference on the Environment (AMCEN) Durban Declaration.
2020-2025	"No Plastic in Nature" Global Initiative and Regional Strategy for Africa – World Wide Fund for Nature (WWF).
2021	"Close the Plastic Tap Programme" – International Union for Conservation of Nature (IUCN).

Table 4: Notable regional and international instruments (binding and voluntary) that deal with pollution.

The environmental ministries of member states are responsible for evaluating existing national legal frameworks and developing new legislation. Legislation may be defined as any law or laws passed by a legislative body, as well as secondary legal instruments (regulations, local government by-laws, etc.) enacted by an authority empowered by law to do so. Legislation may also include customary law and religious laws. Together with their agencies, environmental ministries oversee the implementation of national policy and strategic plans pertaining to environmental protection, sustainable development, pollution control and waste management. Governments from several countries across the Abidjan Convention area have implemented regulations, or are in the process of drafting legislation, to address problematic plastics. Table 5 provides a summary of pertinent laws.

Country	National Plastic Policies and Legislation
Angola	The Angolan government has formed a working group to draft a national plan to regulate the production and use of non-biodegradable plastic products and other problematic plastics.
Benin	A ban on the production, importation, marketing, possession and use of non-biodegradable plastic bags in Benin entered into force in mid-2018. The country's legislative and regulatory frameworks are based on the "polluter pays" principle.
Cabo Verde	In 2015, Cabo Verde banned the production, import, marketing and use of plastic bags as nonreusable packaging in the wholesale and retail trade.
Cameroon	A ban on the importation, production and sale of non-biodegradable plastic packaging of less than 60 microns entered into force in Cameroon in April 2014.
Congo (Republic of)	In June 2011, the Congolese government banned the manufacture, import, sale and use of plastic shopping bags and sachets for food, water and other beverages. Oxo-biodegradable plastic bags, sachets and films are also prohibited.
Côte d'Ivoire	In 2013, the Ivorian government outlawed the production, importation, marketing, possession and use of any non-biodegradable plastic bag made of lightweight plastic with a thickness of less than 50 microns. The law includes plastic sachets used for drinking water. Plastic sachets used for alcohol were banned in 2016. The country's legislative and regulatory frameworks are based on the "polluter pays" principle.
DRC	A ban on the production, import, trade and use of non-biodegradable plastic bags, plastic films and other forms of plastic packaging used for food, water and other beverages came into effect in the DRC in July 2018. Implementation of this law remains a significant challenge.
Gabon	A ban on the importation and marketing of nonrecyclable plastic bags in Gabon has been in force since 2010.
Gambia (The)	The importation and use of plastic bags in The Gambia has been outlawed since July 2015.
Ghana	In 2015, Ghana issued a directive banning the manufacture and sale of lightweight plastic bags of less than 20 microns. However, this directive was abandoned following a backlash from plastic bag manufacturers. A directive relating to the use of biodegradable additives in plastic has proved difficult to enforce. The National Plastics Management Policy of 2019 (revised in March 2020) prioritises the need for behavioural change; strategic planning and cross-sectoral collaboration; resource mobilisation towards a circular economy; and good governance, inclusivity and shared accountability. Interventions focus on the need to reduce and substitute; product redesign; boosting recycling; expanding waste collection services; and facilitating the safe disposal of waste.
Guinea-Bissau	A ban on plastic bags in Guinea-Bissau entered into force in 2014.
Liberia	Legislation that relates to plastic waste management includes the Maritime Pollution Act of 2010 and City Ordinance Law of 2017.
Mauritania	In 2013, Mauritania introduced a ban on the manufacture, marketing and use of plastic bags. The country's legislative and regulatory frameworks are based on the "polluter pays" principle.
Namibia	Namibia has drafted regulations that prohibit the dumping of waste on land, in coastal areas and at sea.

Nigeria	In 2019, Nigeria's House of Representatives passed a bill prohibiting the sale and use of plastic bags. It is yet to be signed into law. Nigeria has formulated a National Policy on Plastic Waste Management (2020) and has drafted a National Action Plan on Marine Plastic Litter, which was released in March 2023.
São Tomé and Príncipe	The island state has drafted an Extended Producer Responsibility law and an Environmental Impact Tax, both of which hold producers responsible for the treatment or disposal of post-consumer waste. The 2018 National Plan for Integrated Solid Waste Management, provides for incentives to reduce plastic consumption, recover or store recyclable waste, and also promotes private entrepreneurship in the waste management system. Law No. 8/2020 prohibits the production, importation, marketing and distribution of non-biodegradable plastic bags in the national territory. In partnership with UNEP, São Tomé and Príncipe is working on establishing a sustainable national coordination framework to further strengthen its National Chemicals and Waste Management Programme.
Senegal	Law No. 2020-04 of 08 January 2020 prohibits the importation, stocking, marketing, sale and use of single-use or disposable plastics, including beverage containers and lids, cutlery and plates, straws and beverage stir sticks, sachets used for selling water or other beverages. Plastic bags used at the point of sale to package food items must be transparent and made from recyclable plastic materials. Products made from non-recyclable plastic are subject to a tax. The law also provides for the creation of Extended Producer Responsibility programmes, as well as deposit-refund systems for plastic bottles, with producers being responsible for the establishment of collection points and the recovery of bottles.
Sierra Leone	Sierra Leone has developed a Draft Plastic and Plastic Waste Management Policy and Draft Marine Pollution Regulations.
South Africa	A levy on plastic bags was introduced in 2004. In April 2021, amendments to the Plastic Carrier Bags and Plastic Flat Bags Regulations came into effect, which specify that plastic carrier bags and plastic flat bags must contain a minimum of 50% post-consumer recycle content from 1 January 2023, increasing to 75% in 2025 and to 100% by 1 January 2027. In 2021, the South African government gazetted regulations making Extended producer responsibility (EPR) mandatory in the packaging sector.
Togo	In September 2011, a ban on the manufacture, importation, distribution and marketing of non-biodegradable bags and packaging entered into force in Togo.

Table 5: Notable national laws pertaining to the regulation of problematic plastics.

Extended producer responsibility (EPR) is an environmental policy approach that extends a producer's responsibility for an identified product to the post-consumption stage of the product's life cycle. Although definitions may vary from country to country, an obliged company is generally regarded as an entity that has control over the design characteristics of its product, and which places this plastic packaging/product on the consumer-facing market. Within the context of EPR, the definition of producer could therefore apply to importers of finished goods in plastic packaging, fillers/bottling companies and brand owners, as well as retailers with own-branded products.

Responsibility may be financial and/or physical, and extends to operational responsibility for collection, pre-treatment and recovery or disposal of product-related waste. EPR requires producers to be accountable for the type and amount of plastic used during the creation of products and packaging. Responsible practices would include the production of recyclable plastics that do not contain toxic additives and/or chemicals, reducing the amount of packaging used, and ensuring that packaging is designed for recycling or reuse.

Producer Responsibility Organisations (PROs) play an important role in the EPR system. PROs take responsibility for the collection and sorting of plastic waste on behalf of their members, and ensure that member-companies comply with EPR obligations. EPR funding is used to cover various processes, including research; development costs; collection and recycling systems; auditing; and monitoring and reporting. EPR fees must be ringfenced to fund the collection and further treatment of waste, and to cover all the PRO's funding flows.

Countries that have introduced EPR schemes include Ghana, Nigeria, São Tomé and Príncipe and South Africa. To date, South Africa and Kenya are the only African countries to have made EPR mandatory. While voluntary EPR can be helpful in the short- to medium- term, through the creation of markets, building systems and processes required for a well-designed EPR scheme, etc., it does not represent a sustainable, long-term funding solution. Mandatory EPR provides incentives to prevent waste at its source, promote eco-design, drive consumer choice for well-designed products, and support the achievement of public recycling, while enhancing the efficiency and transparency of the system.

Policy and Legal Frameworks: Gap Analysis

1. The integration and implementation of policies pertaining to pollution and waste management should be coordinated at a regional level. Moreover, in alignment with UNHRC Resolution 48/13 of October 2021 and UNGA Resolution 76/300 of July 2022, a clean, healthy and sustainable environment must be recognised as a human right.
2. Standards, definitions and processes, including those applicable to monitoring and reporting, need to be aligned across the relevant Multilateral Environmental Agreements (MEAs). Standardised labelling of products containing hazardous substances should be mandatory.
3. Where applicable, MEAs should be strengthened and expanded to support the scope of the incipient international legally binding instrument on plastic pollution.
4. The handling, treatment and disposal of all potentially hazardous waste, including waste from electrical and electronic equipment (WEEE/e-waste), and plastic packaging waste that may be contaminated with toxic chemicals (such as pesticide residues), must be strictly regulated.

5. Measures to combat pollution contained in relevant international and regional conventions should be rigorously enforced. Such measures include the guidelines to plastic waste management, adopted under the Basel Convention, and measures to combat the movement of transboundary hazardous waste in Africa, adopted under the Bamako Convention.
6. Policies should include robust measures to combat abandoned, lost or otherwise discarded fishing gear (ALDFG), as well as the illegal dumping of waste at sea.
7. Policies pertaining to plastics should be strengthened to include the principles of prevention, precaution⁵¹ and “polluter pays”⁵². In line with the latter, policies should provide for the development and implementation of EPR schemes that oblige companies that place products containing plastic on the local market to ensure an end-of-life solution for such product. This obligation also extends to importers of finished products.
8. Standards should be developed for the monitoring and reporting of plastics flows and emissions, including leakage of plastics and microplastics into the environment.
9. Policy instruments aimed at ensuring accountability across the entire plastics value chain should be strengthened and legislation should be systematically enforced.
10. To facilitate the development of a circular economy in member countries, policies should encourage the reduction, reuse and recycling of plastic products, and should promote the development and production of sustainable alternatives to plastics.
11. Policies should include provisions that provide for the fair and just transition of informal waste collectors, with a particular focus on safeguarding the rights and well-being of women and other vulnerable groups.
12. Legislation should be drafted or expanded to include the regulation of non-essential single-use plastics⁵³.
13. Environmental impact assessments should be strengthened in respect of the impact of plastics, toxic chemicals, and other hazardous substances on the environment.
14. Trade policy measures, including technical regulations, customs tariffs, trade licences, trade bans (on certain problematic products, including microbeads in personal care and cleaning agents), and subsidies for sustainable substitutes (including products containing recycled content), should be coordinated.
15. Enforcement agencies need to ensure that policies, laws and regulations pertaining to marine litter are consistently implemented and enforced.

⁵¹As formulated in Principle 15 of the Rio Declaration.

⁵²The polluter pays principle is contained in Principle 16 of the Rio Declaration: “The polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment.”

⁵³Other types of problematic single-use plastics that could be considered include: disposable e-cigarettes/vapes; disposable plastic takeaway food and beverage containers, including polystyrene containers; disposable plastic plates, cups and cutlery; plastic straws; drink stirrers; plastic ear bud sticks; plastic lollipop and ice-cream sticks; and disposable diapers.

2.5. The Current Status of Solid Waste Management

Service Delivery

The inaugural Africa Waste Management Outlook, published by UNEP and South Africa's Council for Scientific and Industrial Research (CSIR) in 2018, recognises “comprehensive, reliable and regular city cleansing and controlled waste disposal” as the foundation of any integrated waste management system⁵⁴. Ensuring that all citizens have access to proper waste management services is a public health imperative and, as such, should be the first priority of any waste management strategy. The report also identifies the need to unlock socio-economic opportunities by harnessing waste as a resource, shifting away from disposal, towards prevention, reuse, recovery and recycling.

The provision of municipal solid waste collection services across the Abidjan Convention area is largely inadequate. While collection rates in many cities and towns have improved in recent years, levels of service delivery in informal settlements, peri-urban, rural and remote areas generally remain limited or even non-existent. Waste collection varies significantly between countries and is estimated to be no more than 50% on average.

Waste Mismanagement

Waste mismanagement (of collected, as well as uncollected waste) is highly prevalent and it is estimated that at least 70% of waste is discarded at open dump sites⁵⁵. Uncontrolled dumping attracts rodents and causes offensive odours, fires, methane emissions and waste mound collapses, while the dumping of waste in rivers, canals and storm water drains attracts disease-carrying insects, and can cause blockages that result in flooding. Anecdotal evidence indicates that a substantial proportion of plastic waste leaks into the sea as a result of land-based littering and uncontrolled and illegal dumping.

Open burning of solid waste is prevalent at uncontrolled landfills and dumpsites. Olusosun Landfill in Nigeria, which is Africa's largest landfill site, is one of a number of landfills where informal waste collectors (waste pickers) extract precious metals from electronic waste through burning. The associated release of toxic fumes poses significant health risks. Furthermore, open burning of plastic waste produces harmful GHG emissions and can create a substance known as black carbon, which is potentially more harmful than carbon dioxide. Besides environmental degradation, flooding and the threats to human and animal health, the impacts of mismanaged

⁵⁴Africa Waste Management Outlook (2018).

⁵⁵African Clean Cities Platform.

waste include economic risks. The sectors that are most severely affected by the effects of pollution include fisheries, agriculture, and tourism.

Challenges

The capacity of Abidjan Convention member countries to provide adequate solid waste management services is impacted by the following key factors:

- Weak governance, institutional capacity constraints, specifically human and technical resources, coupled with inadequate regulatory enforcement mechanisms;
- Insufficient budgetary allocations for waste management and/or misallocation of funding;
- Inadequate waste treatment infrastructure, a lack of technological support, vehicles and equipment, as well as a dearth of recycling facilities;
- Unsanitary landfills that are saturated, poorly constructed and/or inadequately managed, leading to leakage into the environment;
- Challenging local conditions, notably urban planning inadequacies, limited transport networks, the lack of service delivery in rural and remote areas, inaccessible terrain and security risks, among other factors;
- Widespread illegal dumping and littering, and the open burning of waste;
- Low levels of separation-at-source, owing to a lack of public awareness; and
- Working conditions that are unsafe and unhealthy, particularly for informal waste collectors.

Quantity and Composition of Solid Waste

Based on current projections, the 22 countries in the Abidjan Convention area will collectively generate more than 118 million tonnes of municipal solid waste (MSW) in 2023, with organic waste (food and green waste) accounting for an estimated 44% of the total waste mix, followed by plastic waste (17%), paper and paperboard (9%), composite materials⁵⁶ (7%), metals (5%) and glass (4%). As shown in Figure 10, other (non-specified) waste makes up approximately 14% of the solid waste mix. Such waste may include textiles and rags, ash, building rubble, animal remains, broken furniture, ceramics, tyres, electronic/electrical waste, and medical waste.

⁵⁶Composites, which are produced from two or more constituent materials, include materials such as fibreglass and plywood.

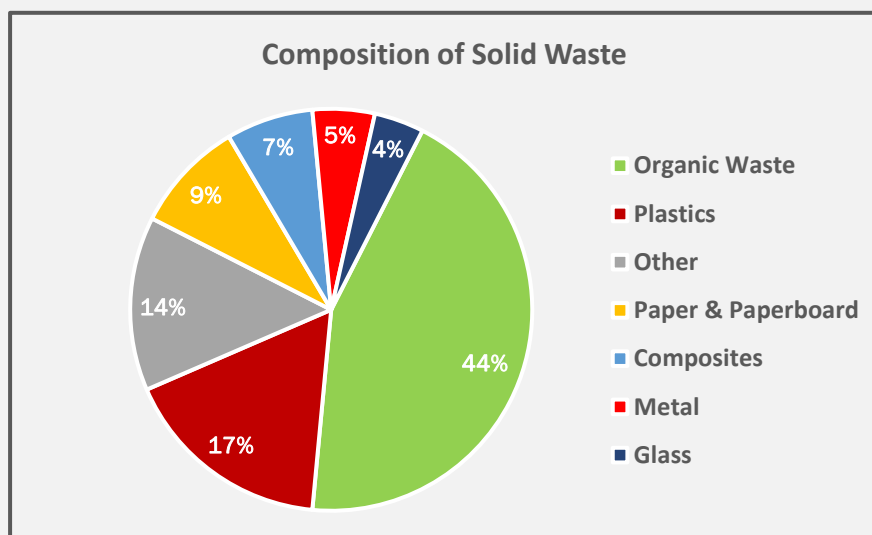


Figure 10: Solid waste mix - Abidjan Convention area, 2023.

Waste Management Interventions

Waste management initiatives include the roll out public awareness campaigns; the production of compost from organic waste; the development of mobile applications (apps) to facilitate the collection of recyclable waste; the establishment of collection systems for recyclable waste; the establishment of recycling facilities in various locations; and the beneficiation of non-recyclable waste using waste-to-energy technologies. Waste industries that offer significant growth potential include the conversion of food waste into carbon-negative compost fertiliser (biochar) and/or energy; the recycling of electronics; the recycling of textile and clothing waste into yarns or the upcycling of used clothing into new garments; and the recycling or reuse of packaging (glass, metal, plastic, paper and paperboard, and other fibres).

Separation-at-source at the household level is extremely low across the Abidjan Convention area. On average, only around 4% of municipal solid waste is recycled across the region. Recycling rates are extremely low across all waste streams, with the notable exception of South Africa, which collected approximately 54% of around 3.4 million tonnes of packaging (glass, paper and paperboard, metal and plastic) consumed locally in 2021. In South Africa, as is the case in most other African countries, informal waste collectors are the backbone of the recycling industry. A significant proportion of recyclables are sourced through landfill and dumpsite harvesting and kerbside and waste bin “picking”. A 2014 study conducted by the Council for Industrial and Scientific Research (CSIR), found that informal waste collectors recovered 80-90% (by weight) of paper and packaging waste in South Africa⁵⁷.

⁵⁷Godfrey, L. et al. (2016). Integrating the Informal Sector into the South African Waste and Recycling Economy in the Context of Extended Producer Responsibility.

Recycling of Plastic Waste

With the notable exception of South Africa, the recycling of post-consumer plastic waste takes place on a very limited scale across the Abidjan Convention area. Plastic recycling in the region is constrained by the following key challenges:

- Inadequate investment in waste management infrastructure and training, which is needed to improve collection and sorting, boost recycling capacity and develop domestic end-markets for post-industrial and post-consumer recycled materials (recyclate);
- In many countries, the end-use market for recycled plastic is too small to support investment in recycling facilities;
- Weak governance, compounded by a lack of coordinated planning;
- The lack of appropriate legislation and/or weak enforcement of existing legislation;
- Relatively low levels of community awareness regarding the importance of separation-at-source and the economics of recycling;
- The lack of waste collection points and waste transfer stations;
- Insufficient waste buy-back centres and a lack of storage sites for recyclables;
- Scarcity of water for cleaning recyclable waste;
- Inadequate infrastructure, specifically a lack of recycling/reprocessing facilities;
- The high cost of reprocessing machinery and equipment, such as technologies that enable mechanised scanning and sorting;
- High processing and operating costs (notably labour, energy and transport), compounded by power supply challenges and the requirement to separate different grades of plastic;
- Specific technological challenges relating to waste contaminated with residues and/or containing a high proportion of sand, and the need for research and development (R&D) to develop viable solutions;
- A lack of awareness of the economics of recycling and material flows, as well as a lack of understanding of appropriate end-use markets for recyclables;
- End-markets for the different grades of plastic recyclate are not well established and domestic demand is generally weak;
- A lack of recycling facilities that are certified to process high quality food grade recyclate, and the high cost of the process, with the result that most recycled PET (rPET) is used in the fibre industry;
- Post-consumer waste feedstocks typically do not meet the quality and traceability requirements of export markets; and
- The fragmentation and volatility of the waste sector, with micro- and small recycling enterprises entering and exiting the market with a relatively high level of frequency.

If South Africa is excluded, the recycling of plastic waste is estimated to average less than 5% across the Abidjan Convention area. In 2021, 344,527 tonnes of plastics were recycled in South Africa⁵⁸, which equates to a domestic recycling rate of 21.7%⁵⁹. Plastic recyclate production in South Africa increased by 36% in the ten-year period to end-December 2021, with the percentage of recycled content in new products rising from 14.8% in 2012 to 16.7% in 2021⁶⁰.

The South African Plastics Pact (SA Plastics Pact), which was launched in January 2020, aligns with the New Plastics Economy vision of The Ellen MacArthur Foundation's Plastics Pact global network, and commits its members to the following four targets for 2025, with the aim of preventing plastic packaging from becoming waste or pollution:

1. Reducing problematic or unnecessary plastic packaging;
2. 100% of plastic packaging to be reusable, recyclable or compostable;
3. 70% of plastic packaging to be effectively recycled; and
4. 30% of recycled content across all plastic packaging.

Notwithstanding the achievements of the South African plastics recycling industry, developing new end-markets for recycled plastics is critical to ensure the long-term sustainability and viability of the industry. South African industry association, Plastics SA, is advocating for systems to be put in place to ensure that recyclable waste is collected from the solid waste stream as early as possible and is calling for appropriate investment in waste management services and infrastructure. Additionally, Plastics SA has highlighted the importance of designing products for recyclability, and developing, implementing and enforcing standards for recycling processes, as well as for recyclate.

Notable industry-led collaborations in South Africa include the producer responsibility organisation (PRO), Petco, which administers EPR schemes on behalf of its members in the PET and liquid board packaging sectors. Of the 121,369 tonnes of PET packaging placed on the South African market by Petco members in 2022, 66% was recycled. Food grade rPET is used to manufacture products such as new beverage bottles, plastic sheeting for punnets, and trays used for food packaging. While the technology to recycle food grade HDPE exists, it has not yet been introduced into Africa, and food grade rPET is the only recycled plastic material that meets international certification standards to be used to manufacture plastic packaging that may come into contact with food and beverages. Petco promotes recycling efficiency in the production, design, conversion, collection and recycling of

⁵⁸Plastics SA.

⁵⁹As above.

⁶⁰As above.

post-consumer products and associated labels and closures. In addition, the PRO conducts recycling awareness programmes and provides educational material. To date, the Petco model has been introduced in Kenya, Ethiopia and Tanzania, with further plans to roll out the model in other countries.

A minimum investment of approximately US\$15 million is required to establish a PET recycling plant and, for such a facility to be financially viable, it would need to produce at least 12 thousand tonnes of rPET per annum. In countries with small populations, such as Namibia where the total beverage PET market is only around 5.3 thousand tonnes, a possible solution could be to convert post-consumer plastic bottles into washed flakes, before exporting the material to a country with adequate recycling capacity for further processing into rPET, such as South Africa. Cross-border EPR would require regional collaboration and could potentially be driven by the major brand owners that export their packaging for filling and consumption to other African countries.

Repurposing of Plastic Waste

Post-consumer waste processing businesses that repurpose plastic waste into products such as bricks, tiles and pavers are steadily gaining traction across the Abidjan Convention area. Other initiatives include the upcycling of plastic waste into crocheted mats, furniture, purses, carrier bags and other hand-crafted items. Within the context of the circular economy, the goal is to keep plastic within the economy at its highest value and at the lowest cost to the consumer. However, given the lack of recycling facilities across the Abidjan Convention area, the repurposing of plastic waste is increasingly being explored as an alternative solution to the waste crisis. Significantly, waste repurposing presents lower barriers to entry than mechanical and chemical recycling, as the processes are significantly less capital intensive.

Capacity Development

Capacity development (also known as capacity building) forms an integral part of social and economic development. While capacity development interventions undertaken by governments, international and regional organisations, non-governmental organisations (NGOs) and other entities typically focus on human resource development, the scope of the process is broader than education and training, knowledge sharing and technical assistance. The United Nations, the World Bank and the European Commission have identified five key components that form part of the capacity building process:

- Development of an enabling policy framework;
- Institutional development and the development of an appropriate legal framework;
- Citizen participation and oversight;
- Human resource development, including education and training; and
- Sustainability.

In addressing development challenges, such as waste management, it is important to ensure that institutional and technical capacity building interventions are sustainable. Centres of excellence tasked with building capacity in the broader Abidjan Convention include the following institutions:

- The International Ocean Institute Southern Africa (IOL-SA) based in Cape Town, South Africa, which produces research, policy and strategy-related outputs relating to sustainable ocean governance and marine spatial planning;
- The Centre de Suivi Écologique (CSE), based in Dakar, Senegal, which is involved in environmental policy development, environmental monitoring, national resources management and environmental impact assessments; and
- The Environmental Protection Agency (EPA), based in Sierra Leone.

The African Ministerial Conference on the Environment (AMCEN) is the permanent African ministerial authority on the environment and sustainable development. One of its core functions is to develop African capacity in the field of environmental management. Since its establishment in 1985, AMCEN has implemented various measures relating to regional policy development, advocacy, awareness-raising, networking, knowledge management and dissemination, and training.

Civil society organisations play a valuable role in interventions aimed at combatting pollution, encouraging behavioural change, reducing plastic consumption and promoting reuse and recycling. In addition to raising public awareness, organising community clean-ups, and providing education on social and environmental issues, many organisations provide training to informal waste collectors and micro-enterprises. Providers of capacity building services in the region include the following organisations:

- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ);
- Sustainable Seas Trust (SST);
- World Wide Fund for Nature (WWF);
- GAIA Africa; GRID-Arendal; and
- The International Union for Conservation of Nature (IUCN).

Notable Partnerships

Governments, intergovernmental organisations, industry, civil society and other stakeholders have formed partnerships at global, regional and national levels to address issues relating to environmental management, waste management and pollution. Notable initiatives include the following collaborations:

- Capacity building related to Multilateral Environmental Agreements (MEA) in African, Caribbean and Pacific (ACP) Countries - Phase III (ACP-MEAs III).
- GRID-Arendal and IUCN are preparing negotiators from the AFRIPAC group (Cabo Verde, Guinea-Bissau, São Tomé and Príncipe, Senegal and Sierra Leone) for the Intergovernmental Negotiating Committee to develop an international legally binding instrument on plastic pollution.
- The West Africa Coastal Areas Resilience Investment Project for Climate Change Adaptation (WACA ResIP-CCA) in partnership with the World Bank.
- The Global Plastic Action Partnership (GPAP), a multi-stakeholder platform convened by the World Economic Forum, that facilitates collaboration between governments and other partners, with the aim of turning plastic waste and pollution commitments into action. GPAP members include Nigeria and Ghana. The GPAP-aligned Ghana National Plastic Action Partnership (NPAP) was established in 2019.
- The Ellen MacArthur Foundation's Plastics Pact Network facilitates knowledge sharing and coordinated action to implement solutions towards a circular economy for plastic, tailored to each geography. South Africa, which is a member, launched its national pact, the SA Plastics Pact in January 2020.
- The GloLitter Partnerships (GLP) Programme assists developing countries to prevent and reduce marine plastic litter from the maritime transport and fisheries sectors and identifies opportunities for the reduction of plastic uses in both fisheries and maritime transport sectors. Participating partner countries include Cabo Verde, Côte d'Ivoire, The Gambia, Nigeria, Senegal and Togo.
- The Mami Wata project ("Enhancing Marine Management in West, Central and Southern Africa through Training and Application"), a partnership between the Abidjan Convention Secretariat and GRID-Arendal, with funding provided by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), through its International Climate Initiative (IKI).
- The African Circular Economy Alliance (ACEA) is a government-led coalition of African countries that support Africa's transformation to a circular economy that delivers economic growth, jobs, and positive environmental outcomes. Member states include Benin, Côte d'Ivoire, Ghana, Nigeria and South Africa.
- The African Plastics Recycling Alliance was launched in March 2019 by The Coca Cola Company, Diageo, Nestlé and Unilever. The Alliance collaborates on technical solutions, facilitates and supports local pilot initiatives to improve the collection and recycling of plastics, and engages with decision makers on matters relating to the development and financing of waste management systems and infrastructure.
- The High Ambition Coalition to End Plastic Pollution is an intergovernmental coalition committed to the development of an ambitious legally binding global treaty based on a comprehensive and circular approach that ensures urgent action and effective interventions along the full lifecycle of plastics, with the objective of ending plastic pollution by 2040. Members of the coalition include Cabo Verde, Gabon, Guinea, Ghana, Nigeria and Senegal.

3. DRAFT REGIONAL ACTION PLAN ON MARINE POLLUTION

3.1. Objectives of the Regional Action Plan

The Regional Action Plan for the Prevention and Management of Marine Pollution in the Abidjan Convention Area is a strategy that outlines the steps that need to be taken to reach specific goals relating to the prevention of marine pollution and the sustainable management of waste, specifically plastic waste. The action plan aims to improve existing systems and infrastructure, with the aim of reducing the accumulation of existing plastic waste, as well as future plastic waste.

Key objectives of the regional action plan include:

- Achieving environmental sustainability, by reducing the amount of waste that is accumulating on land and flowing into the marine environment;
- Achieving an environment that is clean and healthy;
- Promoting sustainable production and consumption across the full life cycle of plastics;
- Eliminating problematic and unnecessary or avoidable plastic products, with a focus on waste prevention and minimisation;
- Eliminating the use of non-essential toxic and/or hazardous chemical additives in products;
- Promoting the sustainable management of essential plastics through innovation, including redesign;
- Facilitating a just transition, with a view to improving the working conditions, opportunities and livelihoods of impacted communities, including informal waste sector workers, with a particular focus on the health and safety of women and other vulnerable people;
- Strengthening waste collection and management processes with the aim of improving the quantity and quality of post-consumer waste recovered for reuse, recycling and/or repurposing; and
- Promoting capacity development to support sustainable waste management practices.

In addressing the management of plastics, progress can be made towards certain targets under the 17 Goals of the 2030 Agenda for Sustainable Development adopted by all member states of the United Nations in 2015, with a particular focus on the following sustainable development goals (SDGs):



Figure 11: SDGs pertaining to the management of plastics. Source: United Nations.

- SDG 3 (Good health and well-being, specifically SDG 3.9);
- SDG 9 (Industry, innovation and infrastructure);
- SDG 11 (Sustainable cities and communities, specifically SDG 11.6);
- SDG 12 (Responsible consumption and production, specifically SDGs 12.4 and 12.5);
- SDG 13 (Climate action);
- SDG 14 (Life below water, specifically SDG 14.1);
- SDG 15 (Life on land); and
- SDG 17 (Partnerships for the goals).

3.2. Strategic Goals

Strategic goals aimed at promoting circularity and combatting pollution should align with the globally recognised waste hierarchy, with waste prevention regarded as a first priority, and disposal being the least preferred option (Figure 12).

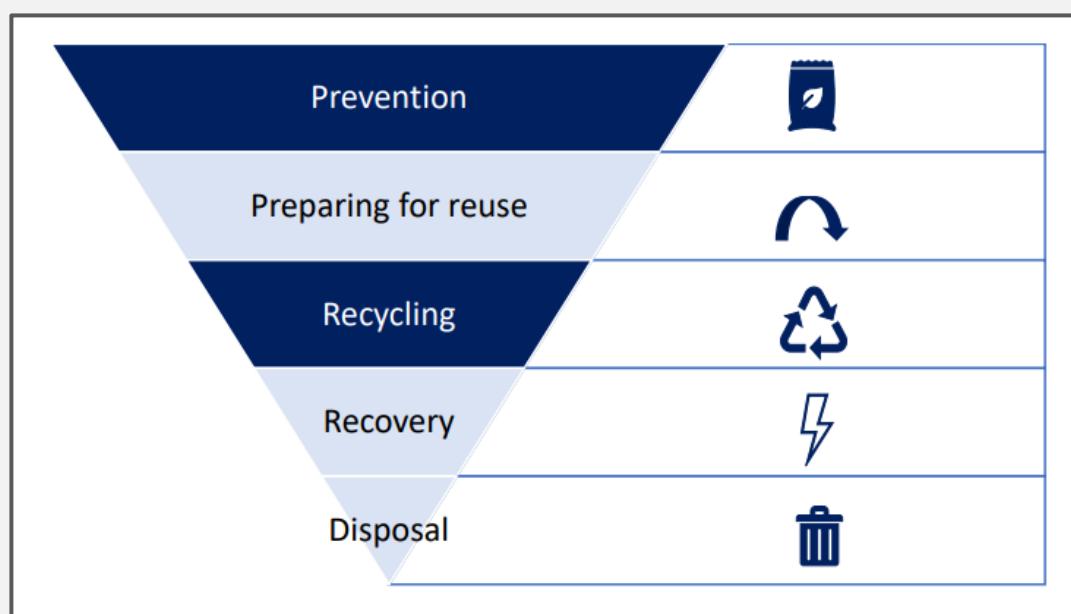


Figure 12: The Waste Hierarchy. Source: European Union, 2018.

In setting goals to tackle plastic pollution, options to consider could include the following:

- The sustainable management of plastic in all its forms throughout its life cycle;
- Chemical hazard reduction, supported by transparency and traceability requirements for chemical additives;
- Phasing out and/or elimination of problematic and avoidable plastic products;

- Sustainable management of plastic waste.

Target setting should be guided by strategic goals that are specific and solution-focused, measurable, attainable, relevant and time-bound. It is important for targets to be attainable and they should also be progressive, reflecting the highest feasible level of ambition at a given point in time.

3.3. Guiding Principles

Strategies aimed at mitigating pollution should be guided by high-level principles for sustainability. These could include:

- The prevention principle⁶¹;
- The precautionary principle⁶²;
- Producer responsibility⁶³;
- The polluter-pays principle⁶⁴;
- The principle of circularity⁶⁵;
- Sustainable production and consumption⁶⁶;
- The life cycle principle⁶⁷;
- The waste minimisation principle⁶⁸;
- Environmentally sound management of waste⁶⁹;
- The principle of proximity (in the context of waste management), requiring waste to be managed as close as feasibly possible to the location of generation;

⁶¹A doctrine that requires preventative measures to be taken to avoid environmental harm before it occurs.

⁶²A doctrine that allows protective measures to be taken if there is uncertainty about the potential risk of environmental harm.

⁶³A doctrine that requires producers to take responsibility for their products through all phases of the product life cycle.

⁶⁴A doctrine that makes the party responsible for producing pollution, responsible for paying for the damage caused to the environment.

⁶⁵A sustainable model of production and consumption that aims to keep materials and products in circulation through processes such as reuse, refurbishment, repair, and recycling.

⁶⁶The concept of Sustainable production and consumption refers to the use of services and related products which respond to basic needs and bring a better quality of life while minimising the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardize the needs of further generations.

⁶⁷A concept that helps to identify the environmental impact of a product by evaluating its full life cycle, from the extraction of raw materials to end-of-life treatment or disposal.

⁶⁸Waste minimisation refers to the quantity of waste generated, as well as the potential of end-of-life products to cause pollution.

⁶⁹Environmentally sound waste management is regarded as a basic condition for permitting or prohibiting the transboundary movement (import/export) of waste.

- Progressive target setting, with targets reflecting the highest feasible level of ambition at a given point in time;
- Environmental democracy, including the right to information, access to public participation and access to justice;
- The principle of common but differentiated responsibilities⁷⁰;
- The principle of cooperation; and
- The principle of a just transition.

The Regional Action Plan for the Prevention and Management of Marine Pollution in the Abidjan Convention Area is guided by ten underlying principles:

1. The action plan, when implemented, must be geared to reducing the amount of waste that is accumulating on land and flowing into the marine environment. Strategies must be designed to stop littering at its source and prevent its accumulation on land and leakage into the seas.
2. The action plan should be informed by best practice guidelines that are specifically geared to the region's socio-economic, demographic, and other circumstances.
3. Recommendations should be designed to strengthen environmental governance.
4. Recommendations should be designed to support the region's transition to a circular economy.
5. The action plan should provide for multi-level stakeholder engagement.
6. Goals should be specific and solution-focused, measurable, attainable, relevant and time-bound.
7. The action plan should be aligned to the international legally binding instrument on plastic pollution, which is in the process of being negotiated.
8. In addressing plastic pollution, the action plan should use a life cycle approach that interrogates every step of the plastics value chain.
9. The approach should promote plastic reduction, the rethinking and redesign of products, reuse, recycling, and the reorientation and diversification of markets to provide for sustainable plastic alternatives.
10. Strategies must assist and support processes for managing problematic plastics, such as microbeads, as well as non-essential single-use plastic products, such as polystyrene containers in the packaging sector.

⁷⁰A legal principle that establishes that, while all states are responsible for addressing global environmental destruction, they are not equally responsible, with developed countries responsible for shouldering a greater burden of responsibility than developing countries.

3.4. Scope and Elements of the Regional Action Plan

The scope of the action plan refers to the geographical area of jurisdiction, plastic pollution sources, pathways and sinks⁷¹, materials and substances, microplastics and macroplastics:

- The geographical area of jurisdiction comprises the land territories, internal waters, territorial seas, archipelagic waters and exclusive economic zones established in accordance with international law, and any territories over which the member countries have international responsibilities;
- Sources of plastic pollution include land-based sources, including littering, wastewater, stormwater, agriculture, industrial activities, poor landfill management, etc., as well as sea-based sources of pollution, including fisheries, mariculture, maritime and coastal transport, offshore oil and gas exploration and extraction, etc.;
- Plastic pollution pathways include aquatic, terrestrial and atmospheric conduits;
- Plastic pollution sinks include landfill sites, rivers, lakes, the ocean, and other locations where plastic may accumulate for a significant period of time;
- Materials and substances refer to all materials and substances used in the production, manufacturing and reprocessing of plastics, including virgin plastic polymers, recycled materials (recyclate) and chemical additives;
- Interventions should include both microplastics⁷² and macroplastics⁷³.

The scope of regional and national action plans should include all of the elements proposed in the Zero Draft Text of the International Legally Binding Instrument on Plastic Pollution, including in the Marine Environment, namely:

- Primary plastic polymers;
- Chemicals and polymers of concern;
- Problematic and avoidable plastic products;
- Product design and performance;
- Reduce, reuse, refill and repair of plastics and plastic products;
- Use of recycled plastic content;
- Extended producer responsibility (EPR);
- Emissions and releases of plastic through its life cycle;

⁷¹A plastic pollution sink is a location where plastic accumulates and settles for a long period of time.

⁷²The term, “microplastics”, refers to plastic particles measuring less than 5 mm in diameter, and includes nano-sized particles.

⁷³The term, “macroplastics”, refers to plastic materials that are greater than 5 mm in diameter.

- Waste management;
- Fishing gear;
- Existing plastic pollution, including in the marine environment; and
- Ensuring a just transition⁷⁴.

3.5. Structure and Key Focus Areas

The regional action plan focuses on strategies to prevent and reduce land- and sea-based sources of plastic pollution, and also includes cross-cutting actions to deal with existing plastic pollution, as well as future plastic waste generation. Actions are grouped into three categories:

1. Focus Area 1: Actions to prevent and reduce land-based sources of plastic pollution.
2. Focus Area 2: Actions to prevent and reduce sea-based sources of plastic pollution.
3. Focus Area 3: Cross-cutting actions to prevent and reduce plastic pollution.

Interventions proposed in this regional action plan are based on a life cycle approach, encompassing the creation of plastic, consumption of plastics by end-users, and end-of-life management of plastic waste (Figure 13). Recommended actions address the upstream, midstream and downstream stages of the plastic life cycle.

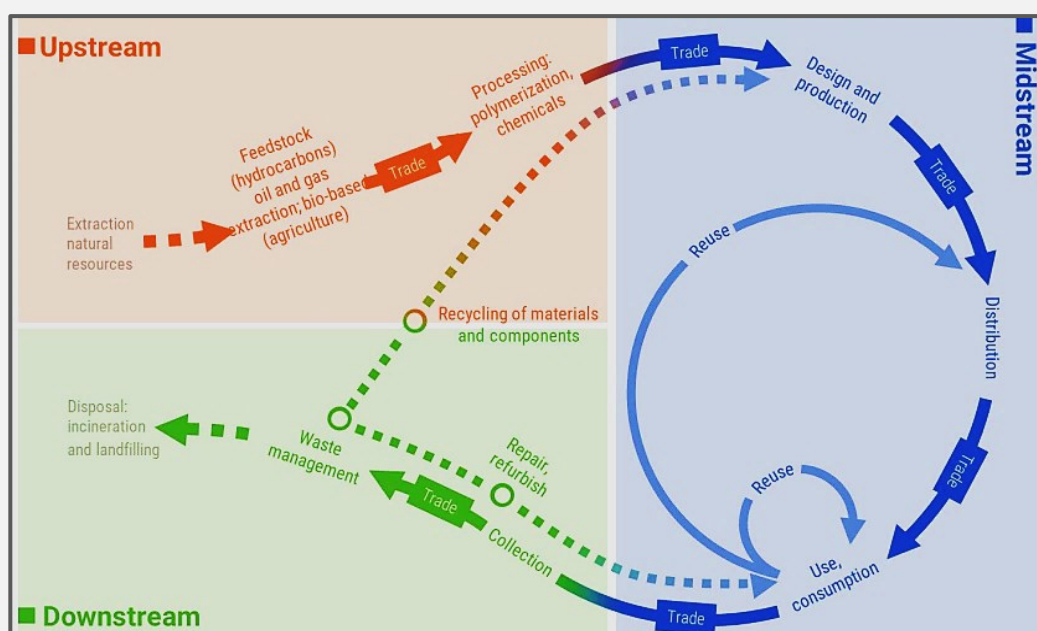


Figure 13: The life cycle of plastic. Source: UNEP/PP/INC.1/7 Pollution Science, 2022.

⁷⁴The Just Transition refers to "a set of principles, processes and practices that aim to ensure that no people, workers, places, sectors, countries or regions are left behind in the transition from a high-carbon to a low-carbon economy." (Intergovernmental Panel on Climate Change).

The upstream phase of the plastic life cycle comprises all activities pertaining to the production of plastic in its primary forms:

- The extraction of oil and gas, and the mining of coal;
- Production and supply of bio-based raw materials;
- The production of plastic in primary forms (refining, cracking and polymerisation); and
- The processing of secondary raw materials derived from recycled plastics.

The midstream phase of the plastics life cycle includes the following activities:

- The trade in plastics in primary forms/polymers (locally-produced and/or imported materials);
- The development and design (redesign) of plastic products for various applications across multiple sectors;
- The conversion of primary plastic materials (resin) into intermediate (semi-finished) and/or finished plastic products;
- The distribution of products to the wholesale and retail sectors;
- Trade; and
- Use/consumption, reuse and repair/refurbishment of plastic products.

The downstream phase is a post-consumer stage centred around waste and the management, or mismanagement thereof. Activities may include separation-at-source, collection, sorting, repair and refurbishment, repurposing, recycling, transportation, treatment and the disposal of waste, including incineration and landfilling. Recycling is a process that starts downstream and “closes the loop” by connecting with upstream activities. Similarly, repair/refurbishment processes provide another way to close the loop by bringing products back into the midstream. To reduce the quantity of plastic waste entering the marine environment, action needs to be taken across the full life cycle of plastics.

Like the life cycle of plastics, the plastics value chain covers all stages in a product’s life, from the supply of raw materials through to disposal after use. However, it also encompasses activities linked to value creation, such as policy and legislation, research and development, and capacity building.

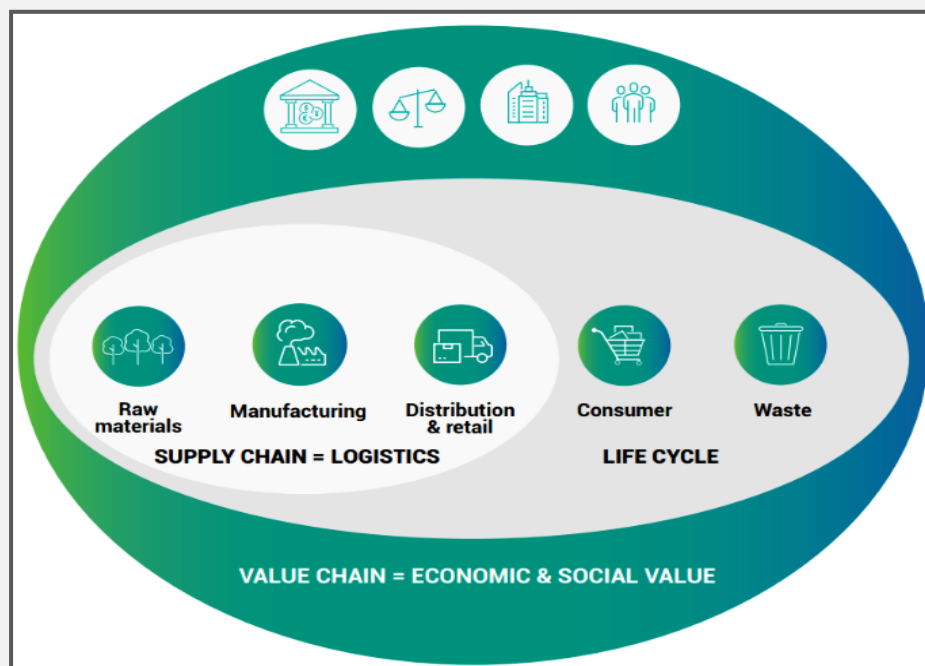


Figure 14: The Plastics Value Chain

3.6. Key Stakeholders: Roles & Responsibilities and Recommended Actions

Direct stakeholders in the plastics value chain include producers of virgin plastic resins; raw material suppliers; importers of plastic products and finished goods in plastic packaging; plastic converters/manufacturers; brand owners; fillers/bottling companies; distributors; retailers; end-users/consumers; waste management service providers; waste facility operators; recyclers; and informal sector actors (waste collectors and micro-entrepreneurs).

Indirect stakeholders include all tiers of government and public sector authorities and their agencies; international, regional and sub-regional multilateral organisations; education and research institutions; civil society organisations, including community-based organisations, faith-based organisations, charitable organisations, non-profit organisations (NPOs), non-governmental organisations (NGOs), and labour unions, investors, donors and development finance institutions; among other actors (refer to Appendix 1 for a list of key stakeholders).

The roles and responsibilities of direct and indirect stakeholders, as well as recommended actions to be taken by the respective stakeholder groups to mitigate marine litter and plastic pollution, are summarised in Table 6.

THE PLASTICS VALUE CHAIN		
Direct Stakeholders	Roles & Responsibilities	Recommended Actions
Raw Material Suppliers (Wholesalers and Importers)	Supply plastic polymers in primary form (virgin resin), and/or bio-based raw materials, and/or secondary raw materials (recyclate).	• Ensure that materials are traceable, non-toxic, non-hazardous and responsibly sourced. • Ensure that adequate loss prevention and mitigation measures are in place to deal with the possible loss of resin and/or recyclate during transportation.
Manufacturers of Plastic Products	Convert plastic formulations into plastic products.	• Substitute virgin fossil fuel-based feedstock with recyclate or bio-based raw materials, if feasible. • Undertake materials testing (colour, properties, identification of additives and contaminants) and set measurable targets for the reduction and ultimate elimination of toxic, hazardous and potentially hazardous inputs. • Eliminate toxic chemicals and additives, as well as colourants, additives and other substances that inhibit recyclability. • Design products and packaging to be reusable and/or compatible with available recycling infrastructure (local or regional).
Brand Owners; Importers of Plastic Products, Plastic Packaging and Finished Products in Plastic Packaging; Fillers/Bottling Companies; and Retailers with Own-Branded Products	Place plastic products and/or plastic packaging and/or products packaged in plastic on the consumer-facing market. Brand owners, including retailers with own-branded products, are the key players in the value chain. In addition to being responsible for the design of their products and determining the materials to be used, they can also dictate the percentage of recycled content to be used in their products and packaging.	• Eliminate non-essential packaging and reduce unnecessary packaging “headspace” (the empty space between the top of the contents of a container and its seal). • Eliminate non-recyclable plastics and oxo-degradable⁷⁵ plastics in non-essential products, if feasible. • Eliminate microbeads from cosmetics and personal care products. • Eliminate non-essential toxic chemicals and other potentially harmful ingredients. • Phase out non-essential single-use plastics. • Design plastic products/packaging for reuse and/or recycling using the re-processing infrastructure that is locally and/or regionally available. • Ensure that on-pack recycling labels (OPRL) are accurate and easy to understand, and that they indicate the reusability and/or local/regional

⁷⁵Oxo-degradable plastics are fossil-fuel based plastics containing additives that accelerate the fragmentation of the material into microplastics when it is in the environment. However, these plastics do not degrade at the molecular level.

		recyclability of plastic products and/or plastic packaging. OPRL should also indicate the correct disposal methods for bioplastics⁷⁶. • Take responsibility for post-consumer product-related waste, including the implementation of a responsible management plan for empty containers contaminated with potentially hazardous or toxic substances, such as pesticides. • Establish an EPR scheme and establish PROs to ensure that member-companies comply with EPR obligations. • Invest in R&D initiatives to build new end-use markets for recycled content. • Investigate the feasibility of introducing deposit-refund schemes. • Educate consumers about the importance of handling plastic waste in an environmentally-responsible manner. • Develop markets for recycled plastics (construction, agriculture, consumer goods, etc.). • Develop multiple waste stream plastic recovery procedures, including e-waste and end-of-life vehicles.
End-Users/Consumers	End-users of plastic products and plastic packaging include household, business and institutional consumers, as well as industrial users across all sectors.	• Reduce consumption of plastics by avoiding the use of non-essential single-use plastic products. • Replace plastic carrier bags with more sustainable options, such as baskets or bags made from natural fibres, and/or reusable bags made from recycled plastic. • Use reusable/refillable drinks bottles and other containers. • Support community-based reuse and repair service providers. • Choose products that contain recycled content. • Implement separation-at-source waste systems within homes and communities, in the workplace, at hotels, restaurants, places of worship, markets, shopping centres, transport hubs, schools and other institutions. • Engage with local informal collectors, acknowledge the valuable role that they perform in the circular economy and support them by facilitating access to recyclable waste.

⁷⁶Bioplastics behave like ordinary plastics in the environment and, if not disposed of correctly, will contaminate plastic recycling systems, processes and infrastructure.

		• Participate in community and/or coastal clean-up activities. • Ensure the safe disposal of waste that is potentially contaminated with toxic chemicals and/or other hazardous substances.
Waste Management Service Providers and Waste Facility Operators	Although local government authorities are responsible for providing services and infrastructure for the collection of recyclables and other waste, the delivery of services and the operation of facilities may be outsourced to private service providers. Waste management service providers are involved in the collection, transportation, treatment and disposal of waste, while facilities such as landfills, incinerators and recycling centres are operated by waste facility operators.	• Strengthen waste management service delivery. • Introduce separate bins for different waste streams. • Provide safe working conditions (including protective clothing and equipment), training and a living wage to all waste sector workers. • Promote separation-at-source to ensure that recyclable waste is not contaminated. • Ensure the safe handling and disposal of waste that is potentially contaminated with chemicals and other hazardous substances (empty pesticide containers, etc.).
Informal Collectors and Processors of Plastic Waste	Stakeholders in the informal waste sector include waste reclaimers/collectors (waste pickers) and informal entrepreneurs. The latter are involved in activities such as waste buyback centres, the repurposing of waste into products such as plastic pavers, and hand-crafted mats, bags and other items.	• Establish associations, collectives or networks to represent the interests of informal workers and entrepreneurs in the waste sector. • Engage with local authorities, businesses and households. • Lobby for social justice, including safe working conditions, protective clothing and equipment, and the right to earn a fair living.
Plastic Recyclers	Recyclers reprocess plastic waste into recyclate, which is then used as a secondary raw material to manufacture new plastic products.	• Engage with the informal sector to buy feedstock. • Investigate all avenues to improve the quality of feedstock.

Indirect Stakeholders	Roles & Responsibilities	Proposed Actions
Intergovernmental Organisations (International, Regional and Sub-Regional (Economic entities, river basin commissions, fisheries management, marine and coastal management, maritime transport, trade organisations, etc.)	Responsible for facilitating, coordinating, drafting and overseeing the development and implementation of policies, legal instruments, guidelines and other mechanisms (binding, as well as non-binding).	• Establish a Regional Coordination Committee tasked with implementing the regional action plan across the Abidjan Convention area. • Establish a Regional Monitoring Committee tasked with monitoring progress at the regional level. • Establish harmonised policies and standards for the labelling of toxic chemicals and other hazardous materials. • Establish harmonised policies and standards for the handling and safe disposal of packaging waste that may be contaminated with toxic/hazardous residues. • Establish harmonised policies and standards for the handling and safe disposal of e-waste. • Develop and implement a regional strategy to phase out problematic plastics.
National Government and other Public Authorities and Agencies	Responsible for drafting and overseeing implementation of national policies and legislation (including the facilitation, coordination and enforcement of laws).	• Establish a National Coordination Committee tasked with implementing the action plan at national level. • Establish a National Monitoring Committee tasked with monitoring progress at national level. • Create a regulatory environment that promotes the development and production of sustainable alternatives to plastic, by levying taxes on virgin plastic materials, where appropriate, and providing tax rebates and subsidies to support the development of sustainable alternatives. • Develop a strategy to phase out problematic single-use plastics. • Develop guidelines and regulations to minimise plastic packaging. • Establish policy and standards for the labelling of toxic chemicals and other hazardous materials, as well as for the handling and disposal of plastic packaging waste that may be contaminated with toxic/hazardous residues. • Establish policy and standards for the labelling of biodegradable and compostable materials. • Standardise the labelling of plastic products and materials, and provide clear definitions of the terms: biodegradable, recyclable, and compostable. • Provide for the establishment of laboratory infrastructure for product and materials testing and certification.

		• Implement policy to eliminate toxic and/or hazardous additives from plastic products and packaging. • Develop regulations pertaining to minimum recycled content requirements for plastic packaging, construction materials and textiles. • Provide the population with access to safe drinking water. • Incorporate plastic waste awareness and education programmes into the curricula of primary and secondary schools, polytechnical and vocational colleges, and universities. • Develop an inclusive waste management policy, with the objective of integrating informal workers, notably women and the vulnerable. • Allocate sufficient funding to enable the successful implementation of policies. • In consultation with industry players, evaluate the feasibility of introducing mandatory Extended Producer Responsibility (EPR) legislation.
Local Government (Local/Municipal Authorities/Agencies)	Responsible for drafting, implementing and enforcing local waste management policies, regulations and by-laws.	• Establish a Local Coordination Committee tasked with implementing the plastic action plan at local/municipal level. • Establish a Local Monitoring Committee tasked with monitoring progress at local/municipal level. • Strengthen the enforcement of existing anti-littering regulations. • Strengthen industrial waste regulations, particularly legislation pertaining to the handling and disposal of hazardous waste. • Train municipal officials on best practices for waste management options. • Implement separation-at-source pilot programmes in selected communes. • Provide training to informal collectors. • Roll out community awareness campaigns and interventions that promote understanding of the valuable role performed by informal collectors in the economy.
Research Organisations (Universities and Non-University Research Entities)	Responsible for undertaking research, whether scientific or social, which may be used to inform policy development and/or product development.	• Initiate studies to establish baselines for monitoring waste sources and accumulation. • Investigate sustainable alternatives to plastic. • Provide best practices for product design. • Study appropriate waste treatment options.

		• Use geographic information system (GIS) mapping to monitor waste hot spots. • Develop evidence-based solutions and evaluate progress.
Civil Society Organisations (Community-based Organisations, NGOs, NPOs, Charitable and Faith-based Organisations, Labour Unions and Informal Sector Worker Representatives, among others)	Responsibilities may include citizen engagement and outreach, raising public awareness, contributing to the well-being of society, promoting education on social, economic, political, and/or environmental issues, promoting good governance, and holding government, its agencies and/or industry to account, among other issues.	• Initiate awareness campaigns aimed at promoting behavioural change, reducing plastic consumption and promoting reuse and recycling. • Introduce recycling and clean-up campaigns in schools, colleges, universities and other institutions. • Promote active citizenship initiatives, such as cleaning streets and beaches. • Implement stormwater and storm drain filtration interventions, river mouth waste/litter collections, and marine litter monitoring. • Lobby for the integration and protection of informal workers. • Work with other NGOs where appropriate to support training of the informal collection sector. • Promote citizen science and the sharing of indigenous knowledge.
Investors/Donors/Financiers	Play a crucial role in enabling infrastructure development and capacity expansion.	• Invest in waste management infrastructure. • Invest in R&D to establish new end-use markets for recycled plastic. • Provide financial support to recycling start-ups.

Table 6: Summary of key stakeholders, their roles & responsibilities, and recommended actions to be taken to mitigate plastic pollution.

3.7. Actions to Prevent and Reduce Land-based Sources of Marine Pollution

Research indicates that nearly 80% of the plastic entering the marine environment originates from land-based sources (LBS). The Regional Action Plan for the Prevention and Management of Marine Pollution in the Abidjan Convention Area identifies specific actions to be taken, the level of priority of each action, the implementation time-frame, and the entities responsible for implementation. Solutions-focused actions to address land-based sources of marine pollution, including microplastics, are summarised in Table 7.

Actions for Focus Area 1 - LBS	Description	Level of Priority	Short term (2024 to 2025)	Medium term (2026 to 2028)	Long term (2029 to 2033)	Responsible Entities
1.1.	Establish a regional platform to facilitate stakeholder engagement and allow for the co-creation of interventions.	High	✓	✓	✓	- Relevant intergovernmental entities - National governments of member countries
1.2.	Collect and record data relating to the trade in primary plastic polymers sub-regional, regional, international).	High	✓	✓	✓	- Trade organisations - Customs and revenue authorities of member countries
1.3.	Review the existing import tariffs/customs duties applicable to primary plastics, with the aim of “levelling the playing field” and promoting greater use of plastic recyclate in industry.	High	✓	✓	✓	- Trade organisations - Customs and revenue authorities of member countries
1.4.	Develop strategies and measures aimed at eliminating the use of harmful additives and/or toxic chemicals, and phasing-out problematic primary plastics that are harmful to the environment and difficult to recycle.	High	✓	✓	✓	- Relevant intergovernmental entities - National governments of member countries - Research institutes
1.5.	Develop harmonised standards for recyclate content requirements.	Medium		✓	✓	- Relevant inter-governmental entities - National governments of member countries and their relevant agencies

1.6.	Develop minimum sustainability and safety requirements for primary plastics, including bio-based feedstock.	High	✓	✓	✓	- Relevant inter-governmental entities - National governments of member countries and their relevant agencies - Research institutes
1.7.	Adopt best practice guidelines to prevent the accidental loss and/or leakage of plastic pellets, flakes, powder and nurdles while in transit.	High	✓	✓	✓	- Producers - Transport and logistics service providers
1.8.	Develop policies on the minimum recycled content requirements for plastic packaging and other plastic products.	High	✓	✓		- Relevant inter-governmental entities - National governments of member countries
1.9.	Develop mandatory extended producer responsibility (EPR) schemes, including regional EPR frameworks for countries that do not have large markets, and set up non-profit Producer Responsibility Organisations (PROs) in cooperation with key stakeholders.	High	✓	✓	✓	Brand owners supplying the markets of member countries
1.10.	Design (Redesign) products, including packaging, for reusability and/or recyclability.	High		✓	✓	- Research institutes - Brand owners - Manufacturers - Retailers
1.11.	Introduce clear On-Pack Recycling Labels (OPRL) indicating the reusability and/or recyclability of products and packaging, and allowing for clear identification of bio-plastics.	High	✓	✓	✓	- Retailers - Brand owners - Manufacturers

1.12.	Set measurable targets for the increased use of reusable/refillable packaging.	High	✓			- National governments of member countries - Brand owners - Retailers
1.13.	Develop health and safety standards for food and beverage reuse models; and for packaging waste contaminated with toxic chemicals; as well as standards to ensure that recycled plastics are safe and fit for use as a secondary raw material.	High	✓			- Relevant inter-governmental entities - National - Research institutes
1.14.	Develop policies for problematic plastics, (microbeads, cigarette filters, disposable e-cigarettes/vapes, etc.), as well as for non-essential single-use plastics.	High	✓			- Relevant inter-governmental entities - National governments
1.15.	Establish plastic innovation hubs to support innovation (specifically the development of local products made from recycled materials);and utilise R&D to identify and/or create new end-use markets.	Medium		✓	✓	- Brand owners - PROs
1.16.	Develop guidelines for the establishment of integrated waste management systems that provide for the fair inclusion and protection of the informal sector.	High	✓			- Relevant inter-governmental entities - National governments of member countries
1.17	Define measures to strengthen institutional capacity and increase investment in waste	High	✓	✓	✓	- Relevant inter-governmental entities - National governments of member countries

	services, equipment and infrastructure.					
1.18.	Promote investment, (including public-private partnerships) in waste sector infrastructure, such as material recovery facilities, composting facilities, buy-back centres, sanitary landfills, and recycling facilities.	High	✓	✓	✓	• Relevant inter-governmental entities • National governments of member countries
1.19.	Identify waste leakage hotspots and other areas of accumulation and encourage targeted clean-up interventions in these areas.	High	✓	✓	✓	• Local governments • Formal waste service providers • Community-based organisations (CBOs) • Civil society
1.20.	Coordinate the installation of litter traps in rivers and their tributaries, as well as in other polluted watercourses.	High	✓	✓	✓	• River basin organisations • Research institutes • NGOs and NPOs • CBOs

Table 7: Summary of actions to address land-based sources of marine pollution.

3.8. Actions to Prevent and Reduce Sea-based Sources of Marine Pollution

A recent study found that 22% of the 12 million litter items surveyed in seven major riverine and marine environments globally were linked to fishing, shipping, aquaculture and mariculture, or other marine activities. (Morales-Caselles et al. 2021). Actions to address sea-based sources (SBS) of marine pollution, including microplastics, are summarised in Table 8.

Actions for Focus Area 2 - SBS	Description	Level of Priority	Short term (2024 to 2025)	Medium term (2026 to 2028)	Long term (2029 to 2033)	Responsible Entities
2.1.	Develop guidelines for recording trade statistics on plastic resin shipments.	High	✓	✓	✓	• Trade organisations • Statistics agencies of member countries • Research institutes • Customs and revenue authorities of member countries
2.2.	Develop guidelines for the establishment of a regional database for recording the location and quantity of any accidental loss and/or leakage of plastic resin, pellets, flakes, powder and nurdles.	High	✓	✓	✓	• Relevant intergovernmental entities • Port authorities • Shipping companies • Vessel owners
2.3.	Make use of existing design guidelines, and develop new ones, for fishing gear and nets to prevent “ghost fishing”. These include marking systems, embedded tracking technologies and biodegradable escape panels. It is important that any new technology does not negatively impact the fishing itself.	High	✓	✓	✓	• FAO • IMO • Fisheries management organisations • Fishing gear manufacturers (product designers)

2.4.	Develop guidelines to ensure that fishing gear and ropes are designed for recyclability.	High	✓	✓	✓	- FAO and other relevant intergovernmental organisations - Fisheries management organisations - Fishing gear manufacturers (product designers)
2.5.	Define and strengthen measures to curb the illegal trade in hazardous waste, including plastics.	High	✓	✓	✓	- Relevant inter-governmental entities - National governments of member countries - Customs and port authorities
2.6.	Evaluate the fishing gear value chain to define roles and responsibilities, develop an appropriate EPR scheme for fishing gear and establish designated PROs for the sector.	Medium		✓	✓	Brand owners
2.7.	Develop an EPR scheme for the boat building and boat repair industry to reduce the incidence of boats, including end-of-life vessels, releasing microplastics and toxins into the sea.	Medium		✓	✓	Marine manufacturing industry
2.8.	Develop data capturing and reporting guidelines for sea-based sources of waste, including fishing gear and mariculture equipment, lost cargo (including containers and plastic resin/pellets/nurdles) and	High	✓			- IMO and other relevant intergovernmental entities - Oceanographic research institutions - Fisheries management entities - Environmental protection agencies - Vessel owners

	illegally dumped ships' waste.					
2.9.	Develop a regional marine waste database, which includes an inventory of fishing gear and mariculture equipment, so that authorities are better able to record and monitor abandoned, lost or otherwise discarded fishing gear (ALDFG).	High	✓	✓	✓	• Relevant intergovernmental entities • Fisheries management entities • Marine and coastal management entities • Vessel owners
2.10.	Develop protocols that outline port waste management processes. Ensure that ports have adequate waste receiving facilities. Ensure that designated waste management companies are licensed and approved by national port authorities.	High	✓			• Relevant intergovernmental entities • National governments of member countries • Port authorities of member countries
2.11.	Strengthen the capacity of ports to deal with the safe disposal of end-of-life fishing gear and other types of plastic waste.	High	✓	✓	✓	• Relevant inter-governmental entities • Port authorities of member countries • Fisheries management entities
2.12.	Ensure strict implementation and enforcement of MARPOL Annex V (Regulations for the Prevention of Pollution by Garbage from Ships).	High	✓	✓	✓	• IMO and other relevant intergovernmental entities • Relevant government departments in partnership with port management authorities.

Table 8: Summary of actions targeting sea-based sources of marine pollution.

3.9. Cross-cutting Actions to Prevent and Reduce Marine Pollution

Cross-cutting actions (CCA) are important tools to mitigate pollution. Such interventions relate to research; capacity development; health and safety; climate change; and financing, among other issues.

Actions for Focus Area 3 - CCA	Description	Level of Priority	Short term (2024 to 2025)	Medium term (2026 to 2028)	Long term (2029 to 2033)	Responsible Entities
3.1.	Establish a multi-stakeholder steering committee tasked with coordinating proposed and future interventions.	High	✓			- Relevant intergovernmental entities - National governments of member countries and relevant agencies
3.2.	Harmonise and standardise data collection to facilitate the creation of regional baselines against which progress can be measured.	High	✓	✓		Multidisciplinary Scientific and Technical Committee (to be established by the Conference of the Parties)
3.3.	Promote active citizenry through educational programmes, raising awareness and knowledge sharing.	High	✓	✓	✓	- Civil society organisations - Community-based organisations (CBOs) - Schools, youth networks, etc. - Residents' associations - Traditional leaders - Religious leaders
3.4.	Build capacity and technical competencies in waste management (all streams)	High	✓	✓	✓	- Ministries of education - Waste management companies - Civil society organisations

3.5.	Ensure that waste handling companies comply with occupational health and safety regulations.	High	✓	✓	✓	Ministries of health of the member countries and their enforcement agencies
3.6.	Educate communities about environmental and human health risks associated with open burning of plastic waste.	High	✓	✓	✓	- Ministries of health and the environment of the member countries - Civil society organisations
3.7.	Establish a financing mechanism to fund the development of waste sector infrastructure.	High	✓	✓		- Relevant government ministries of member countries - Development finance institutions
3.8.	Initiate awareness programmes on EPR for the boat building, ship repair and fishing sectors. EPR for the fishing sector should include the training interventions outlined in 3.10.	Medium		✓		- Relevant inter-governmental organisations - Marine and coastal management organisations - Fisheries management organisations - Boat building/repair industry - Civil society organisations
3.9.	Engage with the fishing industry (commercial, small-scale and subsistence fishers) to understand the reasons for gear losses and to determine the local barriers to the retrieval of lost gear and/or disposal of end-of-life gear.	High	✓			- Oceanographic research institutes - Fisheries management organisations - Civil society organisations

3.10.	Provide training to small-scale and subsistence fishers on the repurposing and recycling of fishing gear and ropes, as well as best disposal practices.	High	✓	✓	✓	Civil society organisations
3.11.	Develop public awareness programmes on marine litter for small-scale fishers and subsistence fishing communities.	High	✓	✓	✓	• Civil society • CBOs
3.12.	Provide funding to build facilities for the recycling of fishing gear and ropes.	High	✓	✓	✓	• Fishing gear manufacturers • Fisheries management organisations
3.13.	Establish financing mechanisms to fund the development of port waste sector infrastructure.	High	✓	✓		• National governments of member countries • Development finance institutions
3.14.	Provide training to port officials, including customs officials, on port waste management, and the trade in plastics, including the illegal waste trade.	High	✓	✓	✓	• Relevant intergovernmental organisations • Civil society organisations

Table 9: Summary of cross-cutting actions relating to the prevention and reduction of marine pollution.

4. CHARTING THE WAY FORWARD

4.1. Implementation

The implementation of strategies to combat marine pollution should be informed by multiple factors, including pollution assessments across the plastics value chain, socio-economic information and guidance based on best available science, traditional and indigenous knowledge, as well as local knowledge systems. Means of implementation should include capacity development, encompassing awareness raising, education and training, and technical assistance; monitoring and evaluation; and financing. Responsible ministries and their agencies should collaborate with all relevant stakeholders.

4.2. Capacity Development

The roll out of the regional action plan, as well as proposed national action plans, will need to be supported by capacity development interventions that include information platforms, knowledge sharing, public awareness programmes, education and training, and technical assistance. In addition to addressing the specific needs of member states, capacity building initiatives should be geared to ensuring that countries are able to meet their current and future regional and international obligations. Educational and awareness-raising programmes should utilise various platforms, including social media, with information provided in the main languages of the region. These programmes should contain context-specific content and should be inclusive, relatable and suitable for people with visual or auditory disabilities.

Training will need to be provided to public and private sector representatives, and should include the formal sector, as well as informal workers.

- All tiers of government should roll out coordinated “in-house” departmental training programmes, as well as targeted public awareness campaigns that address pollution and related waste issues.
- Training on matters relating to the management of waste, and on actions to be taken in the event of non-compliance with regulations, will need to be provided to public officials and enforcement officers.
- Training workshops on sustainable packaging solutions and recommended design criteria should be conducted for manufacturers, brand owners and retailers, so that they know which materials to use and which to avoid.
- Information on accredited waste-related courses should be collated.
- Retailers and brand owners need to educate their customers. This includes making consumers aware of changes in products or packaging and why these changes need to be made to prevent downstream

waste. Clear, easy, country-specific recycling labels are needed on all products and packaging to help consumers make more informed decisions to enable responsible consumerism.

- Capacity building initiatives should also include the training of educators across all phases of the education system in the use of behaviour change principles. Environmental awareness programmes should include the life cycle of plastic and should form part of early childhood education so that young children build a relationship with nature and develop a sense of responsibility towards it. Environmental education should be included in primary and secondary school curricula, as well as in technical and vocational college programmes. Where feasible, curriculum-aligned educational support materials should be supplied to educators to facilitate the teaching process.
- In the context of entrepreneurship and sustainable development, knowledge sharing initiatives could examine the potential of waste as a resource. Moreover, circular design should be incorporated into industrial design, product design, advertising, marketing, manufacturing and business management curricula. Additionally, it would be beneficial to offer specialised tertiary education in the field of sustainable waste management.

4.3. Data Collection

Given the paucity of reliable data on plastics, it is necessary to establish a regional plastics database utilising harmonised methodologies for data collection, capturing and reporting. This data repository will support the creation of regional baseline data, providing a critical reference point against which progress can be measured over time. Data collection should provide for:

- Surveying and recording of plastic material flows across all stages of the plastics life cycle, and should also include data on the volume of plastics (in all forms) that is placed on the domestic markets of member countries;
- Analysis of transboundary movement of plastic in all its forms, including waste (imports/exports of virgin polymers, semi-finished and finished plastic products, recycled materials, and plastic waste), as well as the illegal plastics trade;
- Identification of plastic leakages and chemicals of concern into the environment;
- Reporting on emissions;
- Recording of, and reporting on the location and quantity of any accidental loss and/or leakage of plastic resin, pellets, flakes, powder and nurdles;
- Recording and monitoring of the loss of fishing gear, mariculture equipment, lost cargo, and illegally dumped ships' waste; and
- Monitoring the status of plastic pollution in the environment, and identifying trends.

4.4. Monitoring and Evaluation

Assessing progress made towards achieving the objectives of the regional and national action plans will require regular monitoring and review of all interventions. Independent third-party evaluation committees should be established to assess progress made towards achieving the objectives and strategic goals of the action plans. Their mandate should include:

- i. The establishment of baselines against which progress can be measured and reported on;
- ii. Regular monitoring and review of all interventions;
- iii. Analysis of results and findings, including factors contributing to the success or failure of interventions; and
- iv. The identification of emerging challenges for consideration when reviewing interventions or, where necessary, amendments to the action plans.

4.5. Financing

Given prevailing global economic headwinds, attracting private capital and development financing to fund the transition to a circular economy may prove challenging, making it all the more important for member states to create context-specific solutions. Financing instruments that could be mobilised to tackle plastic pollution and promote the transition to a circular economy include market-based strategies aimed at mitigating the impact of climate change. Such mechanisms include carbon credit schemes that provide for the generation of tradeable credits to finance projects that reduce carbon emissions and combat environmental degradation through the implementation of initiatives such as reforestation, the use of renewable energy, pollution mitigation measures and sustainable waste management practices.

The Africa Carbon Markets Initiative (ACMI) inaugurated at the 27th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP27) held in Sharm El-Sheikh, Egypt, in November 2022, aims to produce 300 million carbon credits annually by 2030, and 1.5 billion credits per year by 2050. Economists estimate that the African carbon credit market has the potential to unlock approximately US\$6 billion in revenue by 2030 and support 30 million jobs. Abidjan Convention countries that have committed to scaling voluntary carbon markets include Gabon, Nigeria and Togo. Blue carbon credit schemes offer countries the opportunity to leverage the potential of their mangrove forests, seagrass beds and other marine and coastal ecosystems that absorb and store carbon.

Other financing instruments include the following mechanisms, all of which need to be considered within a holistic, sustainable management ecosystem, and not in isolation:

- Well-designed extended producer responsibility (EPR) schemes;
- Public-private partnerships;
- The introduction of product charges on problematic plastic products and single-use items; and
- Plastic taxes, levies or fees on plastic production, imports and exports, use, and/or disposal, although it should be noted that the introduction of taxes and levies should not be considered in isolation, as such costs are invariably passed down to the consumer. It is important to note that there needs to be a clear distinction between taxes on local businesses and taxes on products in order to avoid the encouragement of imports *in lieu of* paying a tax.

4.6. Key Recommendations

- In addition to the prevention and minimisation of future plastic pollution, policies should address the accumulation of existing post-consumer plastic waste;
- Monitoring, evaluation and reporting on plastic flows and emissions are required throughout the plastic life cycle;
- A centralised regional database for all land- and sea-based sources of waste should be established, and relevant authorities should be responsible for updating statistics on a regular basis;
- Harmonised sub-regional waste management protocols should be developed to curb plastic pollution, including the transboundary flows of plastic waste across shared rivers, lakes and other waterways. Additionally, waste management initiatives should be introduced to prevent the disposal of waste at ports that do not have adequate waste handling infrastructure;
- Well-designed mandatory extended producer responsibility (EPR) schemes should be introduced, where feasible. Where not, voluntary schemes following international best practice can be initiated by the obliged industry;
- Given the significant risks to human health and climate change, open burning should be prohibited, along with the uncontrolled dumping of waste;
- Standards should be developed for recycling, and, where feasible, recycled content should be integrated into products;
- The regional action plan should allow for a just transition and provide for the mobilisation of resources and capacitation of relevant actors/stakeholders, including women and other marginalised workers in the informal sector;

- Capacity development is key to the success of the proposed interventions and should include targeted education and awareness programmes, knowledge-sharing, technical assistance, training and policy support.

The impact of marine pollution, specifically plastic pollution, extends well beyond its considerable environmental, social and economic consequences. With a “business-as-usual” approach, the cost of plastic pollution is projected to increase exponentially, rapidly exacerbating existing challenges. Effective waste prevention and management policies can perform a pivotal role in tackling the intersecting triple planetary crises of pollution, biodiversity loss and climate change. However, to drive positive change, actions need to go beyond the conventional waste management approach and must give rise to an enabling environment that supports circularity.

The Draft Regional Framework for the Prevention and Management of Marine Litter and Plastic Pollution in the Abidjan Convention Area proposes a broad spectrum of interventions aimed at flattening the growth trajectory of plastic production, consumption and waste generation. However, the development and successful implementation of regional and national action plans will depend largely on political will; appropriate funding and investment in sustainable waste management systems; capacity development; and constructive collaboration between government authorities, their agencies and citizens, international, regional and sub-regional intergovernmental organisations, non-governmental organisations, research institutions, industry, the informal sector, civil society, and other relevant stakeholders. While the cost of managing plastic waste is undeniably high, the cost of inaction is far greater.

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APPENDICES

Appendix 1: List of Key Stakeholders

KEY STAKEHOLDERS ⁷⁷	
National Government Authorities/Agencies	Entity
Angola	Ministry of Culture, Tourism and the Environment (Ministério da Cultura, Turismo e Ambiente)
Benin	Ministry of the Environment and Sustainable Development (Ministère du Cadre de Vie et du Développement Durable)
Cabo Verde	Ministry of Agriculture and the Environment (Ministério da Agricultura e Ambiente); and Ministry of the Sea (Ministério do Mar)
Cameroon	Ministry of the Environment, Nature Conservation and Sustainable Development (Ministère de l'Environnement, de la Protection de la Nature et du Développement Durable)
Congo (Republic of)	Ministry of the Environment, Sustainable Development and the Congo River Basin (Ministère de l'Environnement, du Développement Durable et du Bassin du Congo)
Côte d'Ivoire	Ministry of the Environment and Sustainable Development (Ministère de l'Environnement et du Développement Durable) ; and the Ivorian Anti-Pollution Centre (Centre Ivoirien Anti-Pollution – CIAPOL)
DRC	Ministry of the Environment and Sustainable Development (Ministère de l'Environnement et du Développement Durable)
Equatorial Guinea	Ministry of Forests and the Environment (Ministère des Forêts et de l'Environnement)
Gabon	Ministry of Water, Forests, the Sea and the Environment (Ministère des Eaux, des Forêts, de la Mer et de l'Environnement)
Gambia (The)	Ministry of Environment, Climate Change and Natural Resources (MECCNAR)
Ghana	Ministry of the Environment, Science, Technology and Innovation (MESTI)
Guinea	Ministry of the Environment and Sustainable Development (Ministère de l'Environnement et du Développement Durable)
Guinea-Bissau	Ministry of the Environment and Biodiversity (Ministério do Ambiente e Biodiversidade)
Liberia	Environmental Protection Agency (EPA)

⁷⁷This list is a summary of notable stakeholders and should not be understood to be exhaustive.

Mauritania	Ministry of the Environment and Sustainable Development (Ministère de l'Environnement et du Développement Durable)
Namibia	Ministry of Environment, Forestry and Tourism
Nigeria	The Federal Ministry of Environment
São Tomé and Príncipe	General Directorate of the Environment (Direção Geral do Ambiente)
Senegal	Ministry of the Environment and Sustainable Development (Ministère de l'Environnement et du Développement Durable)
Sierra Leone	Ministry of Lands, Country Planning and the Environment; and the Environment Protection Agency (EPA)
South Africa	The Department of Forestry, Fisheries and the Environment (DFFE)
Togo	Ministry of the Environment and Forestry Resources (Ministère de l'Environnement et de la Ressource Forestière)
Intergovernmental Organisations	Entity/Instrument
International	United Nations Organisation (Organisation des Nations Unies)
International	United Nations Environment Programme (Programme des Nations Unies pour l'Environnement)
International	United Nations Development Programme (Programme des Nations Unies pour le Développement)
International	Food and Agriculture Organisation of the United Nations (Organisation des Nations Unies pour l'Alimentation et l'Agriculture)
International	World Health Organisation (Organisation Mondiale de la Santé)
International	International Labour Organisation (Organisation Internationale du Travail)
International	United Nations Industrial Development Organisation (Organisation des Nations Unies pour le Développement Industriel)
International	United Nations Educational, Scientific and Cultural Organisation (Organisation des Nations Unies pour l'Éducation, la Science et la Culture)
International	Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organisation (Commission Océanographique Intergouvernementale de l'Organisation des Nations Unies pour l'Éducation, la Science et la Culture)
International	Organisation of African, Caribbean and Pacific States (Organisation des États d'Afrique, des Caraïbes et du Pacifique)
Regional	African Union (Union Africaine)
Regional	African Ministerial Conference on the Environment (AMCEN)

Regional	United Nations Economic Commission for Africa (Commission Économique pour l'Afrique de l'Organisation des Nations Unies)
Sub-regional	Community of Sahel-Saharan States (Communauté des États Sahélo-Sahariens)
Sub-regional	The Sahel G5 (G5 du Sahel)
Sub-regional	Economic Community of West African States (Communauté Économique des États de l'Afrique de l'Ouest)
Sub-regional	Economic Community of Central African States (Communauté Économique des États de l'Afrique Centrale)
Sub-regional	Economic and Monetary Community of Central Africa (Communauté Économique et Monétaire de l'Afrique Centrale)
Sub-regional	Southern African Development Community (Communauté de Développement d'Afrique Australe)
Regional	Bamako Convention (Convention de Bamako)
Sub-regional	Abidjan Convention (Convention d'Abidjan)
River Basin Commissions	Entity
Sub-regional	The Orange-Senqu River Commission (ORASECOM)
Sub-regional	Commission Internationale du Bassin du Congo-Oubangui-Sangha (CICOS)
Sub-regional	Niger Basin Authority (Autorité du Bassin du Niger)
Sub-regional	Volta Basin Authority (Autorité du Bassin du Volta)
Sub-regional	Mano River Union (Union du Fleuve Mano)
Sub-regional	The Gambia River Development Organisation (OMVG)
Sub-regional	Senegal River Basin Development Authority (Organisation pour la Mise en Valeur du Fleuve Sénégal)
Marine and Coastal Management	Entity
Regional	Intergovernmental Oceanographic Commission (IOC) Sub Commission for Africa and the Adjacent Island States
Sub-regional	Gulf of Guinea Commission (Commission du Golfe de Guinée)
Sub-regional	Benguela Current Convention (BCC)
Sub-regional	West Africa Coastal Areas Management Programme (WACA) – World Bank
Fisheries Management	Entity
International	Food and Agriculture Organisation of the United Nations (FAO)
International	GloLitter Partnerships

Regional	The Ministerial Conference on fisheries cooperation among African States bordering the Atlantic Ocean (ATLAFCO)
Sub-regional	Sub-Regional Fisheries Commission
Sub-regional	South East Atlantic Fisheries Organisation (SEAFO)
Sub-regional	Fishery Committee for the Eastern Central Atlantic (CECAF)
Sub-regional	Regional Fisheries Commission for the Gulf of Guinea (COREP)
Sub-regional	Fisheries Committee for the West Central Gulf of Guinea (FCWC)
Maritime and Coastal Transport/Shipping	Name of Entity
International	International Maritime Organisation (IMO)
Regional	African Maritime Safety and Security Agency
Regional/International	Ports Environmental Network-Africa (PENAF)
Sub-regional	Regional Maritime Security Centre for West Africa (CRESMAO)
Sub-Regional	Maritime Organisation for West and Central Africa (MOWCA)
International	GloLitter Partnerships
Trade	Name of Entity/Instrument
International	African Business Chamber (AfBC)
International	International Trade Centre (ITC)
International	United Nations Conference on Trade and Development (UNCTAD)
International	World Customs Organisation (WCO)
International	World Trade Organisation (WTO)
Regional	African Continental Free Trade Area (AfCFTA)
Sub-regional	Southern African Customs Union (SACU)
Research Institutes	Name of Institution
International	Institute for Sustainable Development and International Relations (IDDRI)
International	Institute for Advanced Sustainability Studies (IASS)
International	International Ocean Institute
Regional	The African Research Universities Alliance (ARUA)
Sub-regional	International Ocean Institute (Southern Africa)
Sub-regional	Ocean Science Centre Mindelo (OSCM) - Cabo Verde

Sub-regional	Centre de Recherche Océanologiques d'Abidjan (Oceanological Research Centre of Abidjan) - Côte d'Ivoire
National	Council for Scientific and Industrial Research (CSIR) - South Africa
Non-Governmental Organisations (NGOs)	Name of Entity
International	BirdLife International
Regional	Climate Change Africa Opportunities (CCAO) - DRC
International	Environmental Justice Foundation
International	GAIA
International	Greenpeace
International	GRID-Arendal
International	International Union for Conservation of Nature (IUCN)
Regional	Jeunes Volontaires pour l'Environnement (Youth Volunteers for the Environment)
Regional	Sustainable Seas Trust
International	The Major Group of Children and Youth to UN Environment (UNEP-MGCY)
International	World Wide Fund for Nature (WWF)
Industry Associations	Name of Entity
National	Association des Professionnels de l'Emballage en Côte d'Ivoire (Association of Packaging Professionals in Côte d'Ivoire)
National	Association Ivoirienne pour la Valorisation des Déchets Plastique (Ivorian Association for the Beneficiation of Plastic Waste) - Côte d'Ivoire
National	Association of Ghana Industries
National	Chemical and Allied Industries' Association (CAIA) - South Africa
National	Ghana Plastic Manufacturers' Association
National	Manufacturers' Association of Nigeria (MAN)
National	Plastics SA - South Africa
Regional	Fédération Africaine des Chambres de Commerce (African Federation of Chambers of Commerce)
International	World Business Council for Sustainable Development (WBCSD)
Producers of Virgin Plastic Resin (Polymers)	Name of Company
South Africa	Sasol Chemicals, a division of Sasol South Africa (Pty) Ltd.

South Africa	Safripol (Pty) Ltd.
Nigeria	Indorama Eleme Petrochemical Limited (IEPL)
Nigeria	Engée PET Manufacturing Company Nigeria Limited
Labour	Name of Entity
International	International Labour Organisation (Organisation Internationale du Travail)
International	The International Alliance of Waste Pickers (L'Alliance Internationale des Récupérateurs de déchets)
Regional	African Regional Organisation of the International Trade Union Confederation (ITUC-Africa) - Togo
National	South African Waste Pickers' Association (SAWPA)
National	Association de Femmes Récupératrices du Bénin (The Association of Female Waste Reclaimers of Benin)
National	La Société Coopérative des Récupérateurs de Déchets de Mbeubeuss-Bokk Diom, Senegal (The Cooperative Society of Solid Waste Pickers of Mbeubeuss-Bokk Diom, Senegal)
Networks, Pacts and Cooperative Partnerships	Name of Entity
Regional	African Biodiversity Network
Regional	African Circular Economy Alliance (ACEA)
Regional	African Environmental Network
Regional	African Marine Waste Network
Regional	African Petroleum Producers' Organisation
Regional	African Plastics Recycling Alliance
Sub-regional	AFRIPAC
Regional	Alliance of Small Island States (AOSIS)
International	Alliance to End Plastic Waste
International	Atlantic International Research Centre (AIR Centre)
International	Basel Convention - Partnership on Plastic Waste
International	Blue Nature Alliance
International	Clean Seas
International	Climate and Clean Air Coalition (CCAC)
National	Ghana National Plastic Action Partnership (NPAP)

National	Ghana Waste Recovery Platform
International	Global Partnership on Plastic Pollution and Marine Litter
International	Global Plastic Action Partnership (GPAP)
International	Global Water Partnership (GWP)
International	GloLitter Partnerships
International	High Ambition Coalition to End Plastic Pollution (HAC)
International	International Waste Platform
International	International Waters Learning Exchange and Resource Network - Global Environment Facility (GEF)
International	The STRONG High Seas project, a partnership hosted by UNEP, the Institute for Advanced Sustainability Studies (IASS), the Institute for Sustainable Development and International Relations (IDDRI), and TMG – Think Tank for Sustainability, contributes to the work of the Partnership for Regional Ocean Governance (PROG).
National	Nigeria Waste Platform
Regional	One Planet Network
National	Réseau des Éco-Citoyens (Eco-Citizens Network) - DRC
National	South African Plastics Pact
International	The Ellen MacArthur Foundation's Plastics Pact Network
Regional	United Nations Environment Assembly/Ad-Hoc Open-Ended Expert Group on Marine Litter and Microplastics (UNEA/AHEG): Africa Group
Development Agencies & Development Banks	Name of Entity/Institution
International	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) - Germany
International	Agence Française de Développement (French Development Agency)
International	Norwegian Agency for Development Cooperation (NORAD)
International	European Union – Directorate-General for International Partnerships
International	United Kingdom - Foreign, Commonwealth and Development Office (FCDO)
International	United States Agency for International Development (USAID)
International	World Bank Group (Banque Mondiale)
Regional	African Development Bank (Banque Africaine de Développement)
Sub-regional	Development Bank of Southern Africa

Appendix 2: Classification of Plastic Products - Harmonised System (HS) Codes

HS Code	Name of Product
3901	Polymers of ethylene, in primary forms.
3902	Polymers of propylene or of other olefins, in primary forms.
3903	Polymers of styrene, in primary forms.
3904	Polymers of vinyl chloride or of other halogenated olefins, in primary forms.
3905	Polymers of vinyl acetate or of other vinyl esters, in primary forms; other vinyl polymers, in primary forms.
3906	Acrylic polymers, in primary forms.
3907	Polyacetals, other polyethers and epoxide resins, in primary forms; polycarbonates, alkyd resins, polyallyl esters and other polyesters, in primary forms.
3908	Polyamides, in primary forms.
3909	Amino-resins, phenolic resins and polyurethanes, in primary forms.
3910	Silicones in primary forms.
3911	Petroleum resins, coumarone-indene resins, polyterpenes, polysulphides, polysulphones and other polymers and prepolymers produced by chemical synthesis, not elsewhere specified, in primary forms.
3912	Cellulose and its chemical derivatives, not elsewhere specified, in primary forms.
3913	Natural polymers, e.g., alginic acid, and modified natural polymers, e.g., hardened proteins, chemical derivatives of natural rubber, not elsewhere specified, in primary forms.
3914	Ion-exchangers based on polymers of heading 3901 to 3913, in primary forms.
3915	Waste, parings and scrap, of plastics.
3916	Monofilament of which any cross-sectional dimension > 1 mm, rods, sticks and profile shapes, of plastics, whether or not surface-worked but not further worked.
3917	Tubes, pipes and hoses, and fittings therefor, e.g., joints, elbows, flanges, of plastics.

3918	Floor coverings of plastics, whether or not self-adhesive, in rolls or in the form of tiles; wall or ceiling coverings of plastics, in rolls with a width of ≥ 45 cm, consisting of a layer of plastics fixed permanently on a backing of any material other than paper, the face side of which is grained, embossed, coloured, design-printed or otherwise decorated.
3919	Self-adhesive plates, sheets, film, foil, tape, strip and other flat shapes, of plastics, whether or not in rolls (excluding floor, wall and ceiling coverings of heading 3918).
3920	Plates, sheets, film, foil and strip, of non-cellular plastics, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excluding self-adhesive products, and floor, wall and ceiling coverings of heading 3918).
3921	Plates, sheets, film, foil and strip, of plastics, reinforced, laminated, supported or similarly combined with other materials, or of cellular plastic, unworked or merely surface-worked or merely cut into squares or rectangles (excluding self-adhesive products, floor, wall and ceiling coverings of heading 3918).
3922	Baths, shower-baths, sinks, washbasins, bidets, lavatory pans, seats and covers, flushing cisterns and similar sanitary ware, of plastics.
3923	Articles for the conveyance or packaging of goods, of plastics; stoppers, lids, caps and other closures, of plastics.
3924	Tableware, kitchenware, other household articles and toilet articles, of plastics (excluding baths, shower-baths, washbasins, bidets, lavatory pans, seats and covers, flushing cisterns and similar sanitary ware).
3925	Builders' ware of plastics, not elsewhere specified.
3926	Articles of plastics and articles of other materials of heading 3901 to 3914, not elsewhere specified.

Source: World Customs Organisation (WCO).