POLICY BRIEF 2021, No. 01

Transposition of the Basel Convention Amendment in Nigeria

National Policy on Plastics Waste Management: Gaps & Recommendations

Targets of the Policy Brief

Environmental policy makers and planners in government and public institutions

Key Outcomes

- Plastic wastes with additive are harmful to the environment and human health.
- ▶ The Nigerian plastic policy document lays the foundations for a circular economy when it comes to plastics, where the design and production fully comply with the 5R's (Reduce, Reuse, Repair, Recycle and Recovery). However, The major elements and issues in the Basel Convention plastic waste amendments are patently missing in the document.
- The Nigeria plastic waste policy does not cover the international trade (import and export) of plastic waste with contamination and non-environmentally sound management methods of disposing the waste.
- ▶ The Nigeria National Policy has not addressed the issues of trade in plastic waste even though the new Basel Convention plastic waste trade rules became effective on 1 January 2021.

Policy Options

- Transposition of Basel Convention (BC) Amendment on trade control of plastic waste into national legislation.
- Establishment of limits of contamination of plastic waste.
- Increased in awareness and training of key enforcement stakeholders on management of plastic waste, especially the control of transboundary movement of plastics
- National recognition and inclusion of cured resins and fluorinated polymers as an exemption from trade control of plastic waste in Annex IX of the BC. The indication is that these group of plastics should be subject to PIC control procedure due to their tendency to be hazardous





December 2021

1.0 Introduction

The Nigerian National Policy on Plastics Management prepared and published in January 2020 was prepared to regulate and control the use of plastics in the Nigeria nation. As Nigeria is a party to the Basel Convention (BC) ratified in May 2004 and the nation is therefore obliged to implement the plastic waste amendments already adopted by BC and took effect on 24/03/20. Hence the "national policy on plastics waste management" was expected to be based upon the Basel Convention guidelines as well as any adopted amendments on plastics especially to ensure the transposition of the "best practice" Basel Convention on plastic waste amendments into the national law.

The intent of this policy brief is to examine the Nigeria National policy framework and compare with the expectations of the BC Amendments towards identifying gaps in the Nigeria Policy document. Essentially it undertook the review of the current national policy on plastic waste management in Nigeria and its proposed action plans with a view of producing a gap analysis in conformance with the Basel Convention Amendments on plastic waste (Annexes II, VIII and IX to the Convention).

1.1 NATURE OF PLASTICS

Plastics are synthetic or semi-synthetic polymeric, sometimes resinous, large molecular weight materials obtained by industrial polymerization of simple organic monomers in linear or cross-linked modes. Plastics may be classified as thermoplastics and thermosetting plastics (thermosets) according to their mode of production and the nature of the final products.



Waste dump in Bonny Cantonment, Victoria Island, Lagos, Nigeria. Photo Credit: SRADeV Plastics Brand Audit, 2020

Thermoplastics are a family of plastics that can be melted when heated and hardened when cooled. These characteristics, which lend the material its name, are reversible. That is, it can be reheated, reshaped and frozen repeatedly. Thermosets are a family of plastics that undergo a chemical change when heated, creating a three-dimensional network. After they are heated and formed, these plastics cannot be re-melted and reformed. Plastics may also be described according to the types of monomer/polymer from which they are derived. For example,

- Thermoplastics may be made of: Polyethylene Terephthalate (PET), Polypropylene (PP), Low-Density Polyethylene (LDPE), High-Density Polyethylene (HDPE), Polystyrene (PS), Expanded polystyrene (EPS), Polyvinyl-chloride (PVC), Polycarbonate (PC), Polylactic acid (PLA), Polyhydroxyalkanoates (PHA).
- Thermosets are mostly made from Polyurethane (PUR), Phenolic resins, Epoxy resins, Silicone, Vinyl ester, Acrylic resins, Urea-formaldehyde (UF) resins.

Plastics may also be produced from many other monomers / polymer systems including derivatives of those listed above. Examples are fluorinated polymers such as:

- Perfluoroethylene propylene (FEP)
- Perfluoroalkoxy alkanes: such as
 - Tetrafluoroethylene/perfluoroalkyl vinyl ether (PFA)
 - Tetrafluoroethylene/perfluoromethyl vinyl ether (MFA)
- Polyvinylfluoride (PVF)
- Polyvinylidenefluoride (PVDF)

1.2 ADDITIVES IN PLASTICS

The polymers used in plastics are generally harmless. However, they are rarely used in pure form. In almost all commercial plastics, they are compounded with monomeric ingredients to improve their processing and end-use performance. Some of these additives may be classified as follows:

- reinforcing fibers (e.g., glass fibers, carbon fibers).
- fillers (e.g., mica, talc, kaolin, clay, calcium carbonate, barium sulfate)
- plasticizers (e.g. short, medium and long chain chlorinated paraffins, such as phthalates, etc.)
- colorants (pigments and dyes such as azo-dyes, anthraquinone, etc)
- stabilizers (halogen stabilizers, antioxidants, ultraviolet absorbers, and biological preservatives); (e.g. bisphenol A (BPA); cadmium and lead compounds; nonylphenol compounds; etc.
- processing aids (lubricants, flow controls, etc.);
- flame retardants (Short, medium, long chain chlorinated paraffins: boric acid; brominated flame retardants with antimony as synergist, inorganic nonreactives (e.g. antimony oxide, aluminum oxide trihydrate, zinc borate, ammonium orthophosphate, ammonium sulfamate)
- antistats (e.g. phosphates, quaternary amines, etc.)

Many additives are the causes of concern about plastic wastes because they often become hazardous during the application of non- environmentally sound management methods for disposing the wastes (Rochman and Browne, 2013; Hahladakis, 2018). For example, incineration of wastes containing BFRs yield furans, dioxins and other toxic chemicals. Toxic metals in the plastic colorants may pollute the environment during leaching and incineration.

1.3 CONTAMINATION OF PLASTIC WASTE

Contamination of plastic wastes is a major issue under the Basel Convention plastic waste amendments. Many contaminants may render plastics difficult or impossible to recycle in environmentally sound manner, and it is thus often important to guaranty that plastics destined for recycling are free from contaminants to an acceptable extent compatible with the protection of human health and the environment. Contaminants in plastic wastes may be derivable from several sources such as the following:

- Plastic wastes may contain toxic additives that make the recycling process unsafe.
- Plastic wastes may contain traces of un-polymerised parent monomer of the plastic.
- A given plastic waste may be co-mixed with wastes of other polymers.
- Plastic wastes may be mixed with other wastes that are non-plastic.
- Plastic wastes may be contaminated with dirt and residues of materials originally contained in the plastic, e.g., solvents, salts, medicines, pesticides, etc.

1.4 PLASTIC WASTE POLLUTION

The polymeric materials constituents and the organic/inorganic additives in plastics may constitute hazards to human health and the environment when waste plastic is not managed in environmentally sound manner. According to a hazard-ranking model based on the United Nations' Globally Harmonized System of Classification and Labelling of Chemicals, the chemical ingredients of more than 50% of plastics are hazardous (Rochman and Browne, 2013). Unfortunately, plastics are persistent in the environment and do not biodegrade easily. It takes about 500 years for a plastic material to fully biodegrade. Large amounts of plastics are indiscriminately littered on land, into waterways, beaches, seas and oceans. It is estimated that more that 400 million metric tons of plastic is currently produced annually (Geyer et al., 2017; UNEP, 2018), while about 8300 million metric tons (Mt) of virgin plastics have been produced to date, since the 1950s. As of 2015, approximately 6300 Mt of plastic waste has been generated, around 9% of which have been recycled, 12% incinerated, and 79% accumulated in landfills or the natural environment.

Eight million pieces of plastic littering materials find their way into our oceans daily. (Condor ferries, 2020). If current production and waste management trends continue, about 12,000 Mt of plastic waste will be in landfills or in the natural environment by 2050.

Nigeria generates some 32 million tons of waste per year, of which more than 2.5 million tons is plastic waste. The Oxford University (2010a, b) estimates a generation rate of about 0.1kg per capita per day for the country. The country's disposal, recycling and general waste management systems are very inefficient, dealing with both plastic and non-plastic waste, most of which (about 70%) end up in open lands, landfills, drainage channels, beaches and water bodies.



Plastic wastes washed to the shoreline from the sea at Bonny Cantonment, Victoria Island, Lagos, Nigeria on September 19, 2020.

Photo Credit: SRADeV Plastic Brand Audit, 2020

2.0 The Basel Convention Plastic Waste Amendments

The Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and their Disposal came into force in 1992 as the most comprehensive global multilateral agreement on the management and control of hazardous wastes. It has as its three pillars: the control of transboundary movements of hazardous wastes, the environmentally sound management of wastes, and the prevention and minimization of hazardous waste at sources. Many waste streams, including plastic wastes, are listed and managed under the Convention. A very important tool of the Convention is the use of the Prior Informed Consent (PIC) procedure for controlling the transboundary movement of certain classes of wastes. The Annexes to the texts of the Convention are critical as they list important features of the scope of the convention, and are used for reflecting and understanding amendments to the scope.

The Basel Convention regulates the transboundary movements of hazardous wastes and other wastes and obliges its Parties to ensure that such wastes are managed and disposed of in an environmentally sound manner. The Convention covers toxic, poisonous, explosive, corrosive, flammable, ecotoxic, and infectious wastes. During the Basel CoP from 29 April to 10 May 2013, Governments (Parties) amended the Basel Convention to include Plastic Wastes in a legally binding framework which will make global trade in plastic waste more transparent and better regulated whilst also ensuring that its management is safer for human health and the environment.

Before April 2019, most plastic waste flows between countries were uncontrolled under international law. Exporters only had to obtain prior informed consent from importing countries before shipping hazardous plastic waste, as is the case for all hazardous waste under the Basel Convention. However, companies in high-income countries have been exporting mixed, heavily-contaminated, and often unrecyclable plastic waste abroad in order to avoid paying to properly manage it locally. The waste management sector in many of the world's highest-income countries has become structurally dependent on large-scale plastic waste dumping abroad. Often, all such plastic waste is counted as "recycled" in the exporting country, regardless of its ultimate fate. In April 2019, the Basel Convention agreed on new rules that require exporters to secure prior informed consent from importing countries for shipments of all but a narrow set of nonhazardous plastic wastes. The rules stipulate that the plastic wastes so exempted from controls must be sorted, mostly halogen-free, free from contamination, and destined for environmentally-sound recycling. In other words, the new Basel Convention plastic rules clearly require trade controls for all mixed plastic wastes not destined for environmentallysound recycling.

2.1 Plastic Wastes under the Basel Convention (Effective till 31 December 2020)

Under this old dispensation, the only direct reference to plastic waste was in Annex IX (List B), Entry B3010, in which certain groups of plastic wastes are exempted from being classified as 'hazardous wastes', and were therefore not subject to the PIC control procedures of the convention (SBC, 2018). Thus, under this dispensation no plastic waste was specifically identified as hazardous waste and subject to the PIC procedure. However, Annexes I and III may be utilized by a Party to designate any waste, including plastic waste, as hazardous. Entry B3010 ceased to be in effect from 1 January 2021 when the new Plastic Waste Amendments became effective.

2.2 The Basel Convention Plastic Waste Amendments (Effective from January 1, 2021)

Following the consideration of the proposals of the Government of Norway to amend Annexes II, VIII and IX to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, the Conference of the Parties to the Convention, by Decision BC 14/12 decided to amend the Annexes as indicated below (to take effect from 1 January 2021). The amendments affect only Annexes II, VIII and IX. The summary of this particular amendment is the inclusion in Annex II of all plastic waste except (i) those clearly specified as hazardous by their inclusion in Annex VIII, and (ii) those exempted from the PIC control procedure by virtue of their inclusion in Annex IX. By the inclusion of any plastic waste in Annex II, such a plastic waste type becomes subject to the PIC procedure.

Core features of the Basel Convention Plastic Waste Amendments

Plastic waste exempted from controls are defined in new Annex IX entry B3011 and include:

- mixes of polypropylene (PP), polyethylene (PE) and polyethylene terephthalate (PET) destined for recycling, almost free from contamination;
- Shipments of a single type of non-halogenated plastic wastes destined for recycling, almost free from contamination;

Two sets of plastic wastes that were already exempted from trade controls under the Basel Convention is included in entry B3011 on an interim basis until their reconsideration at the 15th Conference of Parties to the Basel Convention in 2021 (COP15). These are:

- all thermoset plastics ("cured resins and condensation products")
- five fluorinated polymers: perfluoroethylene/propylene (FEP), tetrafluoroethyleneperfluoroalkyl vinyl ether (PFA), tetrafluoroethyleneperfluoromethyl vinyl ether (MFA), polyvinyl fluoride (PVF) and polyvinylidene fluoride (PVDF).

All other plastic wastes are either subject to prior informed consent under new Annex II entry Y48, or, if they are hazardous (new Annex VIII entry A3210), subject to a trade ban for parties to the Basel Ban amendment, and to prior informed consent otherwise. (GAIA, 2020 Policy Brief)

2.3 Transposition of the Plastic Waste Amendments: Matters Arising for Parties to the Convention

A number of issues related to the amendment need to be specially considered for action by Parties intending to transpose the amendment into national legislation. Some of these are as follows:

(*i*) Level of Contamination of Plastic Waste: The amendments specifically restrict unregulated plastic waste shipments to those that are "almost free from contamination" and "almost exclusively consisting of" waste of one type of plastic polymer. These critical terms are not defined, nor limits of contamination specified in the amendment. Instead, the amendment merely contain footnotes 6 and 7 that state, respectively, that in relation to "almost free from contamination from other types of wastes" and to "almost exclusively", "international and national specifications may offer a point of reference".

Exclusivity in this context implies that the plastic is composed only of very pure polymer of the plastic, and no traces of contaminants, residues of stored items, monomers, etc. are present. What national specifications? Most Parties do not have these specifications in their existing legislations. And, what international specifications? For many possible contaminants, no international specifications currently exist that are widely/globally accepted. In some cases, industry-specific voluntary specifications/standards exist (e.g. the standards of the Institute of Scrap Recycling Industries [ISRI]), but these are mostly designed to facilitate trade, and are often also ambiguous and not sufficiently stringent to protect human health and the environment.

In other to facilitate compliance with the provisions of the amendment, and to facilitate enforcement, it is critical that the contamination limits be defined globally and nationally. In recent times, a few countries have defined the limits acceptable to them. For example, China has a stringent limit of 0.5%. The EU is promoting limits that may be up to 2.5%. Other Parties need to define such limits in their relevant national legislations.

ii) Inclusion of some cured resins/condensation products and fluorinated polymers in Annex IX: The inclusion of any class of plastics in Annex IX presupposes that such products are non-hazardous and can be recycled in an environmentally sound manner. It is however well known that cured resins (thermosetting plastics) are almost impossible to recycle. They are often disposed by incineration that itself yields hazardous emissions. Similarly, many fluorinated polymer compounds are naturally hazardous and also emit hazardous chemicals when incinerated. Both groups of plastic products, presently in Annex IX will be due for reevaluation of their status during COP15 in July 2021. It is important for Parties to take special note of these groups of plastics and make appropriate national legislation that takes cognizance of their "ambiguous" assignment to this Annex,

(iii) The case of refuse-derived fuels (RDFs): Some organisations (GAIA, 2020) have drawn attention to the special case of RDFs. RDFs are obtained from household and municipal waste that has been processed to remove glass and metals, and then compacted into briquettes. They may compose of a significant proportion of mixed plastic wastes. Unfortunately, RDFs are often shipped as non-waste despite the content of hazardous plastic waste. Parties may consider addressing the status of RDFs while formulating their national legislations.

Therefore, It is expected that when transposing the rules into national legislation, countries can either clarify these points or stretch them into loopholes that undermine the spirit of the Basel Convention. Countries may also pass laws that place greater controls on plastic waste trade than the Basel Convention and therefore provide greater environmental protection, such as import or export bans.

3.0 Highlights of Nigeria's Policy on Plastic Waste Management

Nigeria's policy on plastic waste management was approved by the Federal Government in October 2020. It represents a veritable tool for determining the general direction in which the country proceeds in the management of its resource of plastic waste. As a policy document, it is not expected to deal in detail with technical issues pertaining to a given subject. It gives life and form to other laws, regulations and guidance documents related to the subject matter of plastic waste. The National Policy on Plastic Waste Management derives its strength from existing in country ESM policies such as the need to drive resources efficiency, cleaner production taking cognizance of the lifecycle of plastic and the fundamental obligation for the protection of the environment as stated in Section 20 of the Constitution of the Federal Republic of Nigeria 1999 which provides that the "States shall protect and improve the environment and safeguard the water, air and land, forest and wild life of Nigeria". The overall goal of the National Policy on Plastic Waste Management is to promote IN-COUNTRY sustainable use of plastic as a resource through its life cycle management.

The objectives of the National Policy on Plastic Waste Management is to promote environmental protection, resource and energy-efficient circular plastics economy and enhance the conservation of natural resources through sustainable production and consumption of plastics, in line with the sustainable development objectives of the country.

Objectives of the National Policy on Plastic Waste Management

- Make Nigerian cities, ecosystems and human settlements clean, plastic litter-free and sustainable.
- Manage carbon offsetting and carbon emissions.
- reducing carbon footprint and benefiting from carbon credit financing.
- Ensure sustainable consumption and production patterns that recognize the environmental guiding principles, waste management hierarchy and support the setting of circular plastic economy in Nigeria.

3.1 Strengths of the Nigeria Policy on Plastic Waste Management

The Nigeria Policy is primarily an IN-COUNTRY document for regulation and control of the use of Plastics within the country. This policy document lays the foundations for a circular economy when it comes to plastics, where the design and production fully comply with the 5R's (Reduce, Reuse, Repair, Recycle and Recovery). This is expected to deliver greater added value in Nigeria and boost innovation. It will curb plastic pollution and its adverse impact on lives and the Nigerian environment.

Structurally, the national policy consists of six main chapters dealing with the following subject matters:

- Chapter 1: Introduction; review of existing legislation; justification; stakeholders
- Chapter 2: Policy framework
- Chapter 3: Strategy for policy implementation
- Chapter 4: Institutional frameworks, roles and responsibilities
- Chapter 5: Funding and resource mobilization
- Chapter 6: Monitoring and evaluation

3.2 Relevance of the Policy document to international trade in plastic waste and the plastic waste amendments:

An examination of the texts of the policy document reveals some, but scanty, relevance to the subject of international trade in plastic waste that could have bearing on the plastic waste amendments (Table 1).

Table 1: Texts of the Nigeria's Plastic Waste Management Policy that have relevance to plastic waste import/export, and to the BC plastic waste amendments

Section	Document Text	Comment Related to TBM/PWA
1.4: Relevant Stakeholder	those involved in plastic waste materials collection, recycling, reusing, recovery, operations for production, import or export or management and users of alternatives to plastic.	Recognizes import and export as significant component of the life cycle
2.3: Policy Goals	To develop legislative instruments, standards, trade measures, models and systems that shall support plastic waste management taking cognizance of the lifecycle in an environmentally sustainable and socially safe manner	Need for standards and trade measures
2.3: Policy Goals	To generate a database on plastic from production through use to its disposal, including import or export, taking cognizance of lifecycle approach	Database of import and export
3.1/23: Strategy for Implementation	Ban on importation of foreign non recyclable materials	Imports; but no examples, no dates
3.1/25: Strategy for Implementation	All state shall Invest in waste collection infrastructure and services (including at ports)	Ports? For imports and exports?
3.2/ Note 1: Ensure Sustainable Consumption and Production Patterns	Improve legislation on plastic lifecycle management that provides clear definitions of plastic polymers, waste and secondary raw materials.	Definition of polymers critical for plastic waste amendment
3.2/ Note 3: Ensure Sustainable Consumption and Production Patterns	New legislations should be put in place for micron standards and information requirements on recycled content, recyclability, recoverability and/ or biodegradability on all plastic products.	Standards making critical for plastic waste amendment
3.2/ Note 6: Ensure Sustainable Consumption and Production Patterns	The Federal Government through the Federal Ministry of Environment in collaboration with the Federal Ministry of Industry, Trade and Investment (FMITI) to institute ecolabelling criteria with respect to all plastic products, produced, imported or sold within the Nigerian market and packaging materials.	Includes imported products

Section	Document Text	Comment Related to TBM/PWA
4.6.3/8:Guiding Principles for Assigning Institutional Roles and Responsibilities	1 / 6	Responsibility for control of international trade in plastic waste; and prevention of dumping
4.6.3/9: Guiding Principles for Assigning Institutional Roles and Responsibilities	Develop, set and circulate minimum environmental standards with regards to plastic material production, technology, personnel and duty-of-care responsibilities for public and private sector participants in manufacturing and Plastic Waste Management services and ensure their implementation.	Standards for plastic manufacture is critical for waste TBM
4.6.3/18: Guiding Principles for Assigning Institutional Roles and Responsibilities	Domesticating all global treaties to which Nigeria is signatory, to support management of plastic in its lifecycle.	Responsibility for transposing the PW amendment assigned to an entity
4.6.5/3: NESREA Act 2007	Domesticate provisions of international agreements, protocols, conventions and the treaties on the environment as it relates to plastic waste specifically and Solid Waste in general.	Responsibility for transposing the PW amendment
4.6.13/2: Producers / Manufacturers of Plastics	EPR shall be extended to all those involved in the plastic product chain from cradle to grave (importers, manufacturers, suppliers, retailers, consumers, and disposers of plastic product waste).	Imports recognised
4.6.16/5	Encourage ratifications to international conventions and treaties concerning PWM	Leading to domestication

3.3 Weaknesses and Gaps of Nigeria Plastic Waste Management Policy

While the Nigeria National Policy document recognizes and states that "Nigeria is party to several international treaties and Multilateral Environmental Agreements (such as the Basel Convention, the MARPOL Convention and United Nations Climate Change Convention among others) governing environmental issues and most recently the sustainable development goals." And then also states that the key Sustainable Development Goals (SDGs) achievable with the development of this national policy on plastic waste management are Goals 3,6,9,11,12,14 and 17.

The Nigeria Policy then affirms that " It is on the combined thrust of these instruments that the National Policy on Plastic Waste Management rests." But a cursory study of the National Policy document shows that the contents are only implicitly based on the instruments rather than rather than explicitly.

- The major elements and issues in the Basel Convention plastic waste amendments are patently missing in the Nigeria National Policy. This is not unrelated to the fact that the Nigeria Policy is primarily an IN-COUNTRY document for regulation and control of the use of Plastics within the country.
- The Nigeria National Policy has not addressed the issues of trade in plastic waste even though the new Basel Convention plastic waste trade rules will become effective on 1 January 2021. The new rules apply to all Basel Convention parties as importers or exporters of plastic waste, except those who have formally notified that they are not accepting the amendments. The Policy does not recognize that significant amount of imports and exports of plastic waste do occur in Nigeria. Hence, reference to this is somewhat scanty in the document. Transboundary movement and trade of plastic waste is not a major issue in the policy, especially under the section on strategic goals where it could have been prominently articulated. However, the document clearly assigns to NESREA the role of domesticating various multilateral environmental agreements into national legislation. Thus, it would be the responsibility of NESREA to ultimately transpose the technical details of the plastic waste amendment into national regulations for the plastic sector.

- Apparently arising from the above-mentioned lapse, the Nigeria Customs Service (NCS) has not been recognised as a key stakeholder government parastatal in the management of plastic waste, especially the control of transboundary movement of plastics. It needs to be recognized that NCS will play critical role in enforcement through technical identification of various plastic waste types, and their passage or interception as may be appropriate. NCS will have to collaborate with NESREA in this regard.
- Standardization is a critical requirement for effective implementation of the plastic waste amendments. In this regard, the limits of contamination and other quality requirements of the products and associated wastes have to be established. Given that plastics are core industrial products, the Standards Organization of Nigeria (SON) should have responsibilities and roles to play in this regard. The policy document completely omits the mention of the SON.
- The draft National Action Plan for plastic waste management which was formulated and validated by stakeholders, as deriving from the formulated policy document The activities determined for implementation under this plan are listed as follows:

(a) Presentation of Draft National Policy on Plastic Lifecycle Management for review and adoption at National Stakeholder Workshop. (already achieved).

(b) Workshop, public sensitization and awareness creation on (i) value-chain of plastic,(ii) alternatives to plastics, (iii) ban on single-use plastics.

(c) Inventory on (i) plastic manufacturers, (ii) bulk users of single-use plastics, (iii) plastic recyclers, (iv) identification of more friendly alternatives to single-use plastic and registration of manufacturer of single-use plastics.

(d) Developing and establishment of standards for plastics; biodegradability, recyclability, recoverability and alternatives.

(e) Establishment of suitable models for collection, segregation and recycling of existing single-use plastics.

(f) Introduction of programme and implementation mechanism of tax, levy on singleuse plastics, and EPR

(g) Training for journalists, policy and decision-makers, informal sectors and other stakeholders on plastic lifecycle management and phase-out of single-use plastics.

(h) Enforcement, monitoring and evaluation.

SRADeV Nigeria Policy Brief | December 2021

• Examples of the core principles and recommendations of the Basel Convention plastic waste amendments that are missing in the Nigeria Policy document include inter alia: Main recommendations in BC Plastic Waste Amendments as succinctly captured in GAIA 2020 Policy Brief



Exports of wastes with a significant plastic fraction for co-incineration or co-processing:

Clearly communicate and apply waste trade controls applicable to RDF, SRF, PEF, AFR and other plastic waste-based fuels

Contamination limits in B3011 plastic wastes:

- Impose a 0.5% contamination limit for non-hazardous, non-target material in plastic waste exports and imports
- No hazardous and toxic contaminants

Place burden on exporters to prove absence of hazardous and toxic contaminants

Industry specifications are not an appropriate substitute for contamination limits.

Thermosets ("cured resins") and fluorinated polymers:

Regulate transboundary movements of all thermosets and fluorinated polymers FEP, PFA, MFA, PVF and PVDF through prior informed consent, or where applicable, a trade ban between parties to the Ban amendment for hazardous plastic wastes.

Measures further upstream:

- Phase out unnecessary single-use plastics
- Support systems for reusable products & packaging
- Phase out plastics that are challenging to recycle
- Require disclosure on additives in plastics to end toxic recycling
- Establish separate collection of waste at source to reduce contamination
- Recognize and integrate waste-pickers as municipal service providers
- Ensure recycling industries serve domestic waste-management needs as a priority

It can be seen from the list that the proposed activities will not adequately address the implementation of the plastic waste amendments in Nigeria. There is only a marginal possibility that the topics of imports and exports may be slightly addressed in the course of discussions on life cycle management and standards for plastics.

It is necessary to review these proposed activities to include specific allocations to the issue of the control of transboundary movements and trade of plastic waste. This should incorporate awareness-raising workshops, formulation of standards for contamination limits, etc., training of customs, ports authority staff, importers, regulators, and other stakeholders, training for laboratory analysis of plastics, and establishment of relevant laboratory facilities.



A virtual stakeholders dialogue on plastic waste policy in Nigeria and the transposition of the Basel Convention Amendment

Photo Credit: SRADeV Nigeria, March 23rd 2021

4.0 Recommendations and Conclusion

I. Awareness

The D-day (January 1 2021) has now come and gone. The plastic waste amendment is now in force! Awareness, readiness and action appears to be poor and lacking among stakeholders in Nigeria, including government organs that should be in the lead on the matter. What is needed very urgently now is a massive awareness campaign targeting all critical stakeholders: Customs, Ministry of Environment, NESREA, Ministry of Industry, Trades and Investments, SON, NGOs, Importers, Shipping agents, Plastics manufacturers and recyclers, etc. The subject matter of the workshop should focus on the nature and classes of plastics, additives and contaminants, plastics import and export under the Basel Convention, the Amendment, etc. The opportunities for job creation in the business of 'cleaning up' plastic wastes destined or export should be pointed out.

II. Establishment of Contamination Limits

A critical requirement for implementing the provisions of the amendment is the establishment of the limit of contamination of plastic materials, as this determines what is classified as being hazardous or not. Given that there are really no widely acceptable global standards for these limits, most countries are establishing their own standards on the basis of which they can receive imports. Nigeria should quickly establish its own standards, but this must not be done arbitrarily in order not to hamper otherwise beneficial international trade. The SON and NESREA should through their usual procedures of standardization and regulation work out and publish the relevant standards and limits. In doing so, appropriate consultations with other national and international standards and all stakeholders will be valuable.

III. Review of National Environmental Regulations for the Plastic Sector

Concomitant to point (ii) above is the need for NESREA to upgrade its existing National Environmental Regulations for the Plastic Sector (a 2011 document) to now include aspects on plastic wastes and transboundary movements. A quick look at the 2011 document reveals the absence of provisions on plastic waste and international trade in such wastes. The technical details of the plastic waste amendment should be reflected in any revision, along with the prescribed contamination limits. It is noteworthy that NESREA is already in the process of reviewing its 2011 regulation. It should seize this opportunity to include the relevant BC plastic waste amendments provisions in the revised version.

IV. Transposition of Basel Conventions on trade control of plastic waste into national legislations

The new Basel Convention plastic rules clearly require trade controls for all mixed plastic wastes not destined for environmentally-sound recycling. In April 2019, the Basel Convention agreed on new rules that require exporters to secure prior informed consent from importing countries for shipments of all but a narrow set of non-hazardous plastic wastes. Even those plastic wastes exempted from controls must be sorted, mostly halogen-free, free from contamination, and destined for environmentally-sound recycling. All of these requirements of the new BC Amendments are missing in the new Nigeria National Policy document. It is expected that these rules should be transposed into national legislation even though countries may also pass laws that place greater controls on plastic waste trade than the Basel Convention and therefore provide greater environmental protection, such as import or export bans. (GAIA -BC Policy document, 2020).

V. Training for Key Enforcement Stakeholders

Very specialized technical trainings need to be conducted for officials of Customs, NESREA, NPA and FMENV and few other stakeholders on aspects of the enforcement and permitting procedure. Hitherto, most plastic waste imports had not been subject to the PIC control procedure, and the new regime that will arise from the amendment will require some institutional changes, new documentation schemes and other intra- and inter-agency activities. Appropriately trained staff should be immediately deployed to appropriate ports of imports and exports of plastic wastes for enforcement of the amendments.

VI. Laboratory Training on Analysis of Plastics for Contaminants

It is envisaged by the amendments that it shall be the onus of the exporter to establish the concentrations of contaminants in the plastic wastes. However, it may often be necessary for the importer and importing country to verify the exporter's certificate of analysis by reanalyses of the materials. Moreover, Nigeria may also be the exporting country! In this respect, it is necessary to conduct specialized training workshops for NESREA and SON laboratory staff, public analysts and other relevant national stakeholders on the analysis of plastic wastes for the appropriate contaminants and additives. Laboratory facilities should be enhanced to enable support for such analysis.

VII. On the Placement of Cured Resins and Fluorinated Polymers in Annex IX

Nigerian should immediately make its stand known on the question of the inclusion of cured resins and fluorinated polymers in Annex IX. There has been growing pressure and representation by many international NGOs and some scientists on this subject matter. The indication is that these groups of plastics should be subject to the PIC control procedure due to their tendency to be hazardous (Alliance of NGO, 2020). Nigeria could liaise with some other African countries to take a regional position for presentation to COP15 of the Basel Convention in July 2021. The issue of refuse-derived fuels could similarly be addressed.

In Conclusion, Nigeria can take the opportunity provided by the transposition process to pass comprehensive legislation that prevents plastic waste at source or prevent the country from becoming a dumping ground for plastic waste from developed countries as was the case with e-waste! The country can then begin a shift towards a local, climate-protective and toxic-free circular economy.

Bibliography

- 1. Geyer, R., Jambeck, J. R. and Law, K. L. (2017) Production, use, and fate of all plastics ever made. Science Advances Vol. 3, no. 7, DOI: 10.1126/sciadv.1700782
- 2. Global Alliance for Incinerator Alternatives [GAIA] (2020). Transposing the Basel Convention plastic waste amendments: challenges & recommendations. Berkeley, CA. 18p.
- 3. Hahladakis, J. N., Velis, C. A., Weber, R., Iacovidou, E. and Purnell, P. (2018). An overview of chemical additives present in plastics: Migration, release, fate and environmental impact during their use, disposal and recycling. Journal of Hazardous Materials, 344, 179–199
- 4. Condor ferries (2020). Plastics in the ocean: Statistics. https://www.condorferries.co.uk/plastic-in-the-ocean-statistics
- 5. Alliance of NGOs (2020) NGO response to the draft Commission Delegated Regulation amending Annexes III, IIIA, IV, V and VIII to Regulation (EC)No1013/2006 of the European Parliament and of the Council on shipments of waste. (https://zerowasteeurope.eu/wp-content/uploads/2020/08/zwe_NGOresponse-to-the-draft-Commission-Delegated-Regulation-amending-Annexes-III-IIIA-IV-V-and-VIII-to-Regulation-EC-No-1013_2006-of-the-European-Parliament-and-of-the-Council-on-shipments-of.pdf Page | 32
- 6. Rochman, C. M. and Browne, M. A. (2013). Classify plastic waste as hazardous. Nature, 494, 169-171
- 7.SBC [Secretariat of the Basel Convention] (2018). Basel Convention on the control of transboundary movements of hazardous wastes and their disposal. Geneva. 92p.
- 8. United Nations Environment Programme (2018). Single-Use Plastics A Roadmap for Sustainability.
- 9. University of Oxford (2010a). https://ourworldindata.org/grapher/plastic-waste-per-capita
- 10. University of Oxford (2010b). https://ourworldindata.org/grapher/plastic-waste-generation-total
- 11. FMEnv 2020, Nigeria's National Policy on Plastic Wastes Management, Abuja Jan 2020
- 12. Global Alliance for Incinerator Alternatives (2020) Policy Briefing- Transposing the Basel Convention plastic waste amendments: challenges & recommendations, November 2020
- 13. Basel Convention Plastic Waste Amendments, Basel Convention website.
- 14. UNEP (2018) "Legal limits on single-use plastics and microplastics: A Global Review of National Laws and Regulations"
- 15.IPEN and BAN (2020) The entry into force of the Basel Ban Amendment: A guide to implications and next steps.

This policy brief was produced and edited by **Dr. Leslie Adogame**, *Executive Director*, *Sustainable Research and Action for Environmental Development (SRADeV Nigeria)*.

Acknowledgment and Funding

This policy brief presents independent research funded by the Global Alliance for Incinerators Alternative (GAIA) through the Global Policy Funds. Our appreciation also goes to FMENV, NESREA and the GAIA Nigeria Team. *The views and opinions expressed in this document are those of the authors only.*

Contributors:

Prof. Babajide Alo, University of Lagos, Chemistry Department. **Prof. Percy Onianwa,** Director, Basel Convention Coordinating Centre for the African Region, Nigeria (BCCC-Africa), University of Ibadan

Design/Layout by:

Anuoluwa Alaka & Abdul Azeez Yusuf (SRADeV Nigeria)



SRADeV Nigeria is a professional, non-governmental, non-profit think tank in environmental health research and development, advocacy, and action organization. It seeks to be the voice for environmental development in Africa particularly, Nigeria while acting as a catalyst, advocate, educator, and facilitator to promote the wise use and sustainable development of the environment.

Copyright @ Sustainable Research and Action for Environmental Development, December 2021 18, Olorunlogbon Street, Anthony Village, Lagos State, Nigeria. www.sradev.org, sradevnigeria@yahoo.com



Photo Credit: SRADeV Nigeria Brand Audit, 2020

SRADeV Nigeria Policy Brief | December 2021