

# POSITION STATEMENT

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## The Influx of Plastic Waste by International Fossil Fuel and Chemicals Companies into Africa

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UNIVERSITY OF CAMBRIDGE  
**ALUMNI**  
CONSERVATION LEADERSHIP  
ALUMNI NETWORK

## Who are We?

The African University of Cambridge Conservation Leadership Alumni Network (UCCLAN) comprises over 40 environmental leaders in 18 African nations. We represent a voice for change, provide input into African policy processes and advocate for lasting conservation impact for a better planet.

## What is the Problem?

Recent investigations reveal that the world's largest chemical manufacturers and fossil fuel companies under an umbrella group, the American Chemistry Council, are lobbying to influence US trade negotiations with Kenya to reverse its ban on plastics and to carry on with importing plastic waste (ACC, 2020; Tabuchi et al. 2020). These industrial actors are looking beyond Kenya to other markets in Africa, with plans to channel US-made chemicals and plastics into the continent via Kenya (ACC, 2020; Tabuchi et al. 2020). With China having closed its doors to imports of plastic waste in 2017, after historically taking on 45% of global outputs, and other countries in South East Asia following suit (Brooks et al. 2018), African countries are in increasing danger of being targeted and incidents such as this raise growing concerns for countries' abilities to stand their ground to such pressures.

The African UCCLAN finds this especially untenable as the influx of plastic waste into Africa poses a threat to the health of both people and nature, disproportionately affecting the most disadvantaged communities. Furthermore, the direct links between plastic, especially single use, and its hazardous effects on accelerating climate change are becoming increasingly clear with annual CO2 emissions from plastics set to grow to more than 2.75 billion tonnes by 2050 (Hamilton et al. 2019) further exacerbating social and economic inequities.

Accordingly, we call on Africa's leaders to reject proposals to import plastics and remain committed to instituting bans that inevitably protect the environment. We further urge Africa's leaders to continue to craft policies and enact laws for the efficient control, management, and timely transition from plastics dependence.

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## Our Position on Plastics in Africa

- **The production of virgin plastics is a dead end.** Plastics have no sustainable future for humanity given their demonstrable infiltration into and deterioration of all habitats across the planet. Given this reality, production of virgin plastics for single-use and packaging needs to undergo a steady, consistent, and purposeful transition to sustainable alternatives and new ways of living and working that do not rely on single-use materials. Research and development must support these new systems, as well as improved methods to reuse all recovered plastic waste through a circular economy in a just and equitable way.
- **Nations and industry must not transfer their waste burden.** We strongly reject the proposal by the American Chemistry Council of the United States of America to channel US-made chemicals, plastic and waste into Africa (ACC, 2020). This stance extends to other high-to-middle income countries with similar interests. According to the principle of fairness, all countries should take responsibility for their own waste reduction and management rather than transferring the burden to other nations, especially disadvantaged and poor countries. Similarly, industry must take responsibility for the full life cycle and all social and environmental impacts of its product.
- **Collective African leadership is required to control their own plastic production and waste.** African governments are responsible for the future of the continent's environment, wildlife and health and well-being of its people. By identifying a collective approach to lead and manage a coordinated action plan on controlling the influx of plastics and associated waste, intergovernmental actors can learn, innovate and partner to mitigate the impacts of plastic production and waste across the continent.

## Our Call to African Governments

- 1. Transition from plastics dependence.** We call on Africa's governments to unite under a common agenda for a timely transition from plastics dependence including the chemicals used in producing plastics, and in the short term, to enact increasingly strong controls on plastic production and waste management. African governments could accomplish this by building solidarity, knowledge exchange, and collaborative systems. This is even more needed as political leaders from around the world recently endorsed the "Leaders' Pledge for Nature", a global commitment to reverse biodiversity loss by 2030 for sustainable development with one of the components of the pledge being the elimination of plastic leakage into the oceans by 2050 (Leaders' Pledge for Nature, 2020).
- 2. Refuse to import foreign plastic waste.** We call on Africa's governments to unite to collectively refuse foreign plastic waste. Following China's lead to ban plastic waste imports signals the need for developed nations to address plastic waste at the source, reducing the inequitable impacts on nature, health, and climate across borders.
- 3. Adopt the Extended Producer Responsibility (EPR).** We call on Africa's governments to adopt EPR, where the responsibility and financial burden for the post-consumer stages and impacts of plastics is held by the corporations and businesses involved in the development, production, collection, recycling and disposal of plastic products.
- 4. Enforce the Basel Convention.** We call on Africa's governments to enforce The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.

## Supporting Research

### Plastics are Piling Up

Plastics are one of the most ubiquitous materials on Earth, with 40% of all plastics made for single use (WWF, 2020). Since the 1950s, plastics have outpaced most manufactured materials worldwide and it is estimated that 8,300 million metric tons (Mt) of virgin plastics were produced through 2017 (Geyer et al. 2017). Under a business as usual scenario, approximately 12,000 Mt of plastic waste will be found in landfill sites or in nature by 2050 (Geyer et al. 2017). Plastics are so widespread and plentiful that our capacity to manage them is already overwhelmed (WED, 2018). Approximately 5 trillion plastic bags, alone, are used globally annually, which equates to 10 million plastic bags every minute (WED, 2018). The speedy growth of the use and disposal of plastics presents an unprecedented challenge and financial burden for solid waste management systems with resulting impacts on the environment and our water bodies (Brooks et al. 2018).

Africa already suffers from a heavy plastic waste burden. According to Babayemi et al. (2019), the estimated plastic consumption for the continent in 2015 was 19.5 Mt. They further estimate that for 33 African countries, 117.6 Mt of plastics were imported into these countries from 1990 to 2017. Six countries: Egypt, Nigeria, South Africa, Algeria, Morocco, and Tunisia (in decreasing order) are responsible for approximately 74.6% (about 87.7 Mt) of the polymer and plastics usage in 33 African countries (Babayemi et al. 2019). Poorly managed plastic waste in Africa amounted to approximately 4.4 Mt just in 2010 (Jambeck et al. 2018). In Nigeria, there are over 1,500 sachet water factories in Lagos, alone, and approximately 60 million sachets are distributed daily (Babayemi et al. 2019). The resulting plastic waste is disposed of as litter or ends up draining into water systems (Babayemi et al. 2019).

### Policy and Attitude Shifts

Given the growing plastic burden, some African governments took initial decisive steps to control plastics proliferation, such as stringent bans and/or

taxes on the use of plastic bags. Mauritania was identified as the first country to adopt such policies (Jambeck et al. 2018), a measure taken after an estimated 70% cattle and sheep mortality from ingestion of plastic bags (Larsen and Venkova, 2014). In addition, Senegal, Côte d'Ivoire, Mali, Ghana, Kenya, Ethiopia, Malawi, Mauritius, Zanzibar (Tanzania) and Uganda have implemented similar bans (Jambeck et al. 2018). Meanwhile, Cameroon and South Africa have adopted plastic bag taxes (Jambeck et al. 2018). Cameroon also enacted a ban on single-use plastics (Ministry of the Environment, Protection of Nature and Sustainable Development and the Ministry of Trade, 2012). Botswana introduced a plastic bag tax in 2007 leading to a significant decline in plastic bag consumption (Dikgang and Visser, 2012). Rwanda may have the world's strictest plastic bag ban (Larsen and Venkova, 2014). In 2008, they became the global leader in banning non-biodegradable polyethylene bags (Adebisi-Abiola et al. 2019). In 2017, Kenya became one of the countries with the toughest plastic bag bans in the world with fines up to \$38,000 or prison sentences up to four years (BBC, 2017). However, even though efforts to control such plastic consumption may limit the introduction of plastics into the environment, it is still necessary to address the plastic pollution already in the African continent (Adebisi-Abiola et al. 2019).

### Global Efforts to Regulate Plastics Are Threatened

Globally, the Multilateral Environmental Agreement (MEA) most relevant to plastics management is the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Raubenheimer and McIlgorm, 2018). It is the only internationally legally binding MEA that especially addresses plastic waste (Basel, 2020). In 2019, the Conference of the Parties to the Basel Convention adopted amendments to actions to address plastic wastes (Annexes II, VIII and IX to the Convention) (Basel, 2019). The new entries make clear the scope of plastic waste presumed to be hazardous and those that are not (Basel, 2019). Beginning in January 2021, Basel Convention provisions should, in theory,

substantially limit the ability of countries like the United States to ship plastics waste to other countries, especially developing countries (<https://tinyurl.com/yy9vw8da>). However, concern is mounting that the plastics and fossil fuel industries are influencing governments in an attempt to undermine the Basel Convention.

Such pressures are growing as nations reject imported plastics. In 2017, China permanently stopped importing most of the plastic waste it had been receiving since 1992 (a cumulative 45% of global plastic waste) (Brooks et al. 2018). Brooks et al. (2018) estimate that 111 Mt of plastic waste will be relocated by 2030 based on the Chinese policy and the question remains regarding where these ousted plastics will be taken. High Income Countries have been largely responsible for the primary exportation of plastic waste since 1988, comprising 87% of all exports with a value of \$71 billion USD (Brooks et al. 2018). Wealthier nations with more efficient and greater waste management infrastructure are exporting plastic to countries with less-developed economies and below par waste management infrastructure (Brooks et al. 2018). Concerningly, recent investigations reveal that the world's largest chemical manufacturers and fossil fuel companies under an umbrella group, the American Chemistry Council, are lobbying to influence US trade negotiations with Kenya to reverse its ban on plastics and to carry on with importing plastic waste (Tabuchi et al. 2020). These industrial actors are looking beyond Kenya to other markets in Africa, with plans to "flood Africa with plastic" (Tabuchi et al. 2020) via Kenya.

## The Climate, Health, and Ecosystem Impacts of Plastic Production and Waste

### *Climate Change and Harms to Health*

The Center for International Environmental Law (CIEL) writes that almost every piece of plastic starts as a fossil fuel, with the plastic life cycle characteristic of each of the following stages, where greenhouse gases (GHGs) are emitted: 1) fossil fuel withdrawal and conveyance; 2) plastic production; 3) plastic waste management and 4) plastic's continuing impact when it reaches the environment (Hamilton et al. 2019). Hamilton et al. (2019) predicts that if plastic manufacture and use increase, by 2030 GHG emissions could reach 1.34 gigatons yearly. This is equal to the emissions of over 295 new 500-megawatt coal-fired power plants. By 2050, the contributions of GHG emissions from plastic

production is estimated to reach 56 gigatons which is 10-13% of the remaining carbon budget (Hamilton et al. 2019). Therefore, GHG emissions throughout the plastic life cycle endanger the world's ability to limit global temperature increases to under 1.5°C (Hamilton et al. 2019). Thus, independent of wherever plastic is produced, the whole world will suffer the resulting climate impacts.

The severe impacts of climate change on peoples, especially poor and vulnerable communities around the world, is widespread knowledge. Plastics production and the associated GHG emissions and wastes will deeply worsen this global challenge. Beyond climate change, plastic production and waste management is known to harm people. For example, in the US, waste management facilities, such as incinerators, are often built close to disadvantaged communities, who suffer from the resulting pollution (Bauman, 2019). In Africa, plastic waste is causing human rights, child labor, and health challenges coupled with environmental degradation (Lerner, 2020).

Plastic waste is often burnt in the open on landfills and in backyards in African countries (Babayemi et al. 2017). And when plastic is disposed of this way, it emits dangerous chemicals such as hydrochloric acid, sulphur dioxide, dioxins, furans, heavy metals and particulates (Biemiller, 2013). These emissions can cause respiratory problems, stress the immune system and are potentially carcinogenic (Biemiller, 2013).

### *Diminishing Ecosystem Services & Impacts on Wildlife*

The ecosystems on which humanity depends for food, water and livelihoods are also harmed by plastic waste. Plastic marine debris is harming biodiversity in the oceans through ingestion by sea life and fishing equipment entanglement (CBD, 2012). Approximately 15% of species impacted by marine debris, according to the IUCN Red List, are vulnerable, endangered or critically endangered (CBD, 2012). Wilcox et al. (2015) predict that plastic consumption is rising in sea birds and will get to 99% of all species by 2050. In one study, 73% of 70 estuarine mullet *Mugil cephalus*, in an urban harbor in Kwazulu-Natal, South Africa, reportedly ingested plastic (Naidoo et al. 2016). In Zimbabwe, African elephant mortalities resulting from plastic waste were recorded, with 71.6% of dung found in the vicinity of dumpsites in Victoria Falls containing plastic waste (Le Breton, 2019). Due to plastic contamination,

reductions in most marine ecosystem services is expected (Beaumont et al. 2019).

Marine debris including plastics are also described in terms of their socioeconomic impacts, as “extensive and overwhelmingly negative” leading to economic losses to commercial fishing, shipping, recreation and tourism (CBD, 2012). In relation to tourism, this impact is majorly aesthetic as relates to the attractiveness of the coastlines and beaches that will bring in tourists (CBD, 2012).

### *Microplastics Contamination*

Microplastics pose an additional threat to human health as well as other species and our food resources. Microplastics are smaller than 5mm either because they were manufactured that way for industrial purposes or as a result of breaking down due to degradation of plastic products (FAO, 2017). These products include clothing made from fossil fuels (UNEP, 2019). Microplastics build up in inland waters, oceans, seas, beaches, surface water, the water column, deep-sea floor (FAO, 2017) and groundwater (Panno et al. 2019). They are associated with two kinds of chemicals that pose a

health risk to humans by entering cells and chemically interacting with biological molecules, which could disrupt the endocrine system (Teuten et al. 2009). These two chemical groups are: 1) hydrophobic chemicals that absorb to the surface of plastics from the surrounding sea water and 2) additives, monomers, and oligomers used in manufacturing the plastic (Teuten et al. 2009). Many of these chemical contaminants can influence the biology of organisms including humans (Teuten et al. 2009). For example, bisphenol A (BPA) and alkylphenol additives have estrogenic effects and some phthalate plasticizers have been associated with decreased testosterone production (Teuten et al. 2009). Rochman et al. (2013) show that fish exposed to a blend of polyethylene with chemical contaminants absorbed from the marine environment bioaccumulate these chemicals and are negatively impacted by liver toxicity and pathology. Microplastics have been discovered in different types of human food such as beer, honey, sugar and table salt (FAO, 2017). Recent studies by Conti et al. (2020) have found micro and nano plastics in edible fruit and vegetables. They call for urgent toxicological and epidemiological studies to understand the possible effects of microplastics on human health.

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| <b>Endorsement of the African UCCLAN<br/>Position Statement on Plastics</b> |                            |  |
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