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**Twelfth meeting of the Conference of  
the Parties to the Vienna Convention  
for the Protection of the Ozone Layer, part II**  
Online, 23–29 October 2021

**Thirty-Third Meeting of the Parties to  
the Montreal Protocol on Substances  
that Deplete the Ozone Layer**  
Online, 23–29 October 2021

**Draft decisions for consideration by the Conference of the  
Parties to the Vienna Convention at its twelfth meeting (part II)  
and the Thirty-Third Meeting of the Parties to the Montreal  
Protocol**

**Note by the Secretariat**

**Addendum**

The annex to the present note sets out a draft decision entitled “Stop the Harmful Dumping of New and Used, Inefficient Refrigeration and Air Conditioning Appliances Using Obsolete ODS and HFC Refrigerants”, which was submitted to the Secretariat by Ghana on behalf of the African States that are parties to the Montreal Protocol. The draft decision, is presented as received, without formal editing by the Secretariat, for consideration and possible adoption by the Thirty-Third Meeting of the Parties.

## Annex

**Objective:** Positively influence collaborative efforts of Montreal Protocol Parties to stop environmentally harmful dumping of inefficient refrigerant and air conditioning appliances using obsolete refrigerants

**Updated submission by:** Ghana on behalf of African states parties to the Montreal Protocol

### *Stop the Harmful Dumping of New and Used, Inefficient Refrigeration and Air Conditioning Appliances Using Obsolete ODS and HFC Refrigerants*

*The Parties to the Montreal Protocol,*

*Noting with concern* the increasing numbers of new and used appliances that are not acceptable for sale in countries of origin and that are exported to African and other developing countries that may have less stringent laws or enforcement systems that are being overwhelmed with such dumping;

*Aware* that dumping of inefficient appliances causes importing countries harm by, *inter alia*, creating or prolonging dependence on obsolete refrigerants that are increasingly expensive and unavailable; flooding markets with poor quality equipment; stressing over-burdened energy grids and perpetuating elevated energy demand; aggravating air pollution and climate change from avoidable electricity consumption; increasing non-recyclable refuse; and damaging the quality of life of low-income consumers with unaffordable electricity costs;

*Recognizing* that Ghana and other Article 5 Parties in Africa and elsewhere have worked hard to prevent this environmentally harmful dumping and to increase energy efficiency within their borders, but that countries working alone are never as effective as they are when working with the combined strength of the Montreal Protocol;

*Recalling* the [Report of the Technology and Economic Assessment Panel, September 2020, Decision XXXI/7– Continued Provision of Information on Energy-Efficient and Low-GWP Technologies](#) (Volume 2), which *inter alia* recognizes studies documenting widespread dumping of new and used refrigeration and air conditioning equipment that is inefficient in energy use and utilizing obsolete ODS and HFC refrigerants scheduled for phase out and phase down, respectively, under the Montreal Protocol;

*Further recalling* [Decision X/9](#), which establishes a list of countries that do not manufacture for domestic use and do not wish to import products and equipment whose continuing functioning relies on Annex A and Annex B substances, and which noted *inter alia* that “in order for...export measures to be effective, both importing and exporting parties need to take appropriate steps;”

*Further recalling* [Decision XIX/12](#), which stressed the need for action to prevent and minimize illegal trade in controlled ozone-depleting substances, and recognizing, *inter alia*, the importance of measures that promote information sharing information among Parties, such as Project Sky Hole Patching’s, informal prior informed consent (iPIC) procedure, or similar systems, implemented with certain regional parties and the Regional Intelligence Liaison Office of the World Customs Organization;

*Further recalling* [Decision XXVII/8](#), which invited those parties that do not permit the importation of products and equipment containing or relying on hydrochlorofluorocarbons from any source to inform the Secretariat that they do not consent to the importation of such products and equipment, and requesting the Secretariat to maintain a list of such parties, to be distributed to all parties by the Secretariat and updated on an annual basis;

*Also recognizing* that multiple decisions of the Montreal Protocol, including Decision XIX/6, and XXIII/2, have highlighted the importance of promoting the use of alternatives that minimize environmental impacts, including on the climate, taking into account global warming potential (GWP).

*Recognizing* the common practice of trade controls and other measures to support compliance and stop illegal trade in ODSs under the Montreal Protocol;

*Acknowledging* that Parties to the Montreal Protocol have strengthened the partnership of Multilateral Environmental Agreements involved in the [Green Customs initiative](#) aimed at enhancing the capacity of customs and other relevant border control officers to monitor and facilitate the legal trade and to detect and prevent illegal trade in environmentally sensitive commodities, including those within scope of the Montreal Protocol.

*Taking note of the [2019 African Ministerial Conference on the Environment, Decision 17/1](#), wherein the African ministers of the environment “urge Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer to adopt an action plan preventing market penetration of obsolete equipment in Africa while facilitating access to secure and energy-efficient technologies on the continent.”*

The Meeting of the Parties:

*Recommends* all Parties wanting to avoid imports of inefficient appliances containing obsolete ODSs and HFCs register their country with the UNEP OzonAction Informal Prior Informed Consent (iPIC) [platform](#);

*Requests* all Parties implement domestic legislation enforcing iPIC registration by importing countries;

*Invites* the Secretariat to update the iPIC platform to include the option for countries to designate upper GWP bounds and minimum energy efficiency, in line with the Kigali Amendment, that are acceptable for specific equipment categories;

*Requests* UNEP’s OzonAction and its Regional Offices in consultation with National Ozone Units to intensify training and coordination efforts, consistent with [Decision XVI/34](#) on cooperation between the Secretariat of the Montreal Protocol and other conventions and international organizations to stop unwanted dumping;

*Further requests* that the Technology and Economic Assessment Panel put forward a methodology and associated bibliography for estimating the integrated damage of the obsolete products traded today compared to the environmental performance required by law for products sold in countries of manufacture.

*Further requests* that Parties consider the advantage of additional funding for national action plans to prevent dumping of obsolete equipment in A5 parties while facilitating access to affordable energy-efficient technologies to support early compliance with the HFC phase down.

## Background Information:

### Draft decision to Stop the Harmful Dumping of New and Used, Inefficient Refrigeration and Air Conditioning Appliances Using Obsolete ODS and HFC Refrigerants

1. **Environmentally harmful product dumping (“environmental dumping”)** is defined as “the practice of exporting products to another country or territory that: 1) contain hazardous substances; 2) have environmental performance lower than is in the interest of consumers or that is contrary to the interests of the local and global commons; or 3) can undermine the ability of the importing country to fulfill international environmental treaty commitments.”<sup>1</sup>
2. **Environmentally dumping has a long history**, affecting developed and developing nations and their peoples, working in opposition to the effort countries expend to innovate and transform their technologies to protect their environment, human health, and sustainable economies built on those protections. Consider Africa’s experiences surrounding leaded gasoline phaseout,<sup>2</sup> used vehicles that do not meet modern vehicle emissions and safety standards,<sup>3</sup> obsolete information technology tools,<sup>4</sup> and the dumping of hazardous waste and chemicals.<sup>5</sup>
3. **The export of refrigeration and air conditioning equipment that cannot be legally sold in the country of export, or that is unusable in the country of export, is environmental dumping.** Environmental dumping of refrigeration and air conditioning equipment includes: “1) export of technology that cannot legally be sold in the country of export as a consequence of failure to meet environmental, safety, energy efficiency, or other product standards; and 2) export of technology that is unusable in the country of export because refrigerants are no longer available because of national regulation or phaseout and phasedown control schedules under the Montreal Protocol.”<sup>6</sup> To prevent environmental dumping, new or used refrigeration and air conditioning appliances must be energy efficient using sustainable refrigerants to achieve affordable low carbon footprint.
4. **Africa has experienced egregious harms, including from environmental dumping of refrigeration and air conditioning equipment.** Recent research documented that, of 650,000 new, low efficiency air conditioners sold in 10 African countries in 2018, 170,000 were imported products that did not meet the minimum energy efficiency standards and almost all contained obsolete refrigerants that are powerful ozone-depleting and greenhouse gases scheduled for phase out and phasedown under the Montreal Protocol.<sup>7</sup>
5. **Environmental dumping of obsolete products in countries and territories that can least afford related economic burdens creates a market for low-quality, bad-performance products that serve as barriers to introducing and selling higher-quality products.** In Ghana, as an example, the market for low-quality, bad-performance products has hindered our efforts to build the market for energy-efficient equipment.<sup>8</sup> Further, inefficient used appliances that use obsolete refrigerants smother economic growth through high ownership costs of electricity, costly repair, and the inevitable abandonment after the short remaining operating life.<sup>9</sup> Consumers waste money on these appliances, which are often unrepairable because parts are not available for brands not sold new. Similarly, appliances that use obsolete refrigerants increase future demand for servicing of those refrigerants, which will become increasingly expensive and unavailable as the HCFC phaseout and HFC phasedown under the Montreal Protocol proceeds, increasing future compliance costs. Ultimately, the used appliances are a burden to public waste management and recycling systems.
6. **Africa is rallying to stop environmental dumping of new and used, inefficient refrigeration and air conditioning appliances using obsolete ODS and HFC refrigerants.** At the African Ministerial Conference on the Environment (AMCEN) in November 2019, the African ministers for the environment, in Decision 17/1, XII(43), “urge Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer to adopt an action plan preventing market penetration of obsolete equipment in Africa while facilitating access to secure and energy efficient technologies on the continent.”<sup>10</sup> Africa’s resolve and outreach to the Montreal Protocol community to work in partnership to combat environmental dumping is reflected in the proposal for a Decision to Stop the Harmful Dumping of New and Used Inefficient Refrigeration and Air Conditioning Appliances Using Obsolete ODS and HFC Refrigerants, consistent with the AMCEN Decision.

7. **Stopping environmental dumping provides an opportunity for multilateral, regional, national, and civil-society leadership toward a different, more sustainable and equitable pathways.** For over 50 years, countries have responded to global challenges such as environmental dumping by combining science, innovation, and policy to find sustainable and equitable solutions. The Montreal Protocol offers the most effective environmental forum for countries to present issues that arise from a globalized world for cooperative problem solving.
8. **The international community recognizes the climate and sustainable development benefits from policies to prevent environmental dumping, but more collaboration is needed.** The International Energy Agency and UN Environment Programme *Cooling Emissions and Policy Synthesis Report: Benefits of cooling efficiency and the Kigali Amendment* (July 2020) recognizes that “[e]ffective anti-environmental dumping campaigns can help transform markets.”<sup>11</sup> The Intergovernmental Panel on Climate Change (IPCC) has also recognized in its Special Report on Global Warming of 1.5°C that policy tools, (which include tools to stop environmental dumping), can help mobilize resources to secure equity of transition to climate-resilient development.<sup>12</sup> Stopping environmental dumping was also highlighted in recommendations for the G20: “Enhance trade of and technology transfer in high energy efficiency products and design of anti-dumping policies in developing countries in order to prohibit the import of both new and used obsolete technologies.”<sup>13</sup>
9. **Africa, at the regional and national levels, is working hard to block dumping and promote high-efficiency refrigerators and air conditioners that use low global warming potential refrigerants.** Individual country border-control authorities are undertaking heroic efforts to stop environmental dumping. Even where such efforts are at maximum effect, the rising tide of new and used inefficient refrigerator and air conditioner imports from overseas threatens African nations’ success. Furthermore, unprincipled organizations engaged in environmental dumping of appliances are more likely to be engaged in other illegal activity, such as trade in and venting of prohibited refrigerants, rather than engaging in environmentally sound recycling or destruction.
10. **Exporting countries and importing parties can develop and implement policies to stop environmental dumping.** Together, the Montreal Protocol community can join Africa in doing its part to better understand and stop environmental dumping. The proposal for a Decision to Stop the Harmful Dumping of New and Used Inefficient Refrigeration and Air Conditioning Appliances Using Obsolete ODS and HFC Refrigerants is an important next step.

<sup>1</sup> S. Andersen, R. Ferris, R. Picolotti, D. Zaelke, S. Carvalho, & M. Gonzalez, *Defining the Legal and Policy Framework to Stop the Dumping of Environmentally Harmful Products*, DUKE ENV’T L. & POL’Y F, Fall 2018, (hereinafter *Environmental Dumping* 2018), p. 9, available at: <https://delplf.law.duke.edu/article/defining-the-legal-and-policy-framework-to-stop-the-dumping-of-environmentally-harmful-products-andersen-vol29-iss1/> (last accessed 14 April 2021). Although not a new phenomenon, this article, published in the Duke Environmental Law & Policy Forum, was the first to define this practice and present an initial set of law and policy “tools” to combat the practice.

<sup>2</sup> The LEAD Group, *Chronology of Leaded Gasoline / Leaded Petrol History* (23 December 2011) at pp. 4, 9, available at: [https://lead.org.au/Chronology-Making\\_Leaded\\_Petrol\\_History.pdf](https://lead.org.au/Chronology-Making_Leaded_Petrol_History.pdf) (last accessed 14 April 2021); see also UNEP, *Exporting Pollution: Dumping Dirty Fuels and Vehicles in Africa* (15 September 2016), available at: <https://www.unep.org/news-and-stories/story/exporting-pollution-dumping-dirty-fuels-and-vehicles-africa> (last accessed 14 April 2021).

<sup>3</sup> UNEP, *Used vehicles get a second life in Africa – but at what cost?* (26 October 2020) (referencing UNEP Global Trade in Used Vehicles Report), available at: <https://www.unep.org/news-and-stories/story/used-vehicles-get-second-life-africa-what-cost> (last accessed 14 April 2021); see also C. Ayitey, *American car giant, GM goes electric by 2035; a case for Ghana’s Kantanka Automobile* (12 February 2021) (“The Bloomberg New Energy Finance (BNEF) has predicted a green-energy renaissance of the entire global energy industry. It projects that electric cars in Europe and North America would be cheaper to buy and run than traditional vehicles by 2030. Amidst the fortunes of this renaissance, the trickle-down effect of dumping on Africa looms.”), available at: <https://www.myjoyonline.com/business/american-car-giant-gm-goes-electric-by-2035-a-case-for-ghanas-kantanka-automobile/> (last accessed 14 April 2021).

<sup>4</sup> UN News, *As e-waste mountains soar, UN urges smart technologies to protect health* (22 February 2010) (referencing the study “Recycling – from E-waste to Resources, launched at a meeting of hazardous wastes experts in Bali, Indonesia, [that] predict[ed] that by 2020 e-waste from old computers will have jumped by 500 per cent from 2007 levels in India, and by 200 to 400 per cent in South Africa and China, while that from old mobile phones will be 7 times higher in China and 18 times higher in India.”), available at: <https://news.un.org/en/story/2010/02/330172-e-waste-mountains-soar-un-urges-smart-technologies-protect-health> (last accessed 14 April 2021).

<sup>5</sup> See, for example, UNEP, *History of the negotiations of the Basel Convention*, available at: <http://www.basel.int/TheConvention/Overview/History/Overview/tabid/3405/Default.aspx> (last accessed 14 April 2021).

<sup>6</sup> *Environmental Dumping* 2018, pp. 9–10; see also P. Fleming, *A Flood of Polluting Air Conditioners Hampers Africa’s Climate Efforts*, Yale Environment 360 (9 September 2020), available at: <https://e360.yale.edu/features/a-flood-of-polluting-air-conditioners-hampers-africas-climate-efforts> (last accessed 14 April 2021).

<sup>7</sup> CLASP, *Environmentally Harmful Dumping of Inefficient and Obsolete Air Conditioners in Africa* (24 June 2020), available at: <https://www.clasp.ngo/research/all/environmentally-harmful-dumping-of-inefficient-and-obsolete-air-conditioners-in-africa/> (last accessed 14 April 2021).

<sup>8</sup> K.A. Agyarko, R. Opoku & R. Van Buskirk (2020) *Removing Barriers and Promoting Demand-Side Energy Efficiency in Households in Sub-Saharan Africa: A Case Study in Ghana*, ENERGY POLICY 137: p. 3 (“In ‘Market for lemons,’ Akerlof describes how when a market does not provide consumers reliable information regarding product quality, then the dynamics of the market causes a flood of cheaper, more profitable low-quality products that force higher quality products out of the market. Because of the inability of consumers to reliably identify higher quality products, sellers of high-quality products are unable to make profitable sales and the higher quality products disappear from the market.”), available at: <https://doi.org/10.1016/j.enpol.2019.111149> (last accessed 14 April 2021); see also S. de la Rue du Can, G. Leventis, A. Phadke & A. Gopal (2014), Design of incentive programs for accelerating penetration of energy-efficient appliances, ENERGY POLICY 72: pp. 56–66, 56 (“One of the most significant barriers that policy makers identify to the purchase of energy-efficient equipment is the relatively higher up-front costs of efficient products. In many instances, these costs deter potential purchasers even when investments appear to be in consumers’ interest (i.e., when investments are cost effective over the equipment lifetime). Consumers place great value on immediate savings and heavily discount future savings. Moreover, because they may not be able to easily evaluate future savings, consumers tend to have a low degree of confidence in expected paybacks. As a result, consumers often purchase the cheapest options available.”), available at: <https://doi.org/10.1016/j.enpol.2014.04.035> (last accessed 14 April 2021).

<sup>9</sup> Centre for Energy, Environment, and Sustainable Development (2020) *Domestic Refrigerating Appliance and Room Air Conditioner Market and Feasibility Assessment: ECOWAS Refrigerators and ACs Initiative (ECOFRIDGES) in Ghana*, p. 2 (“over 2 million inefficient refrigeration appliances are used in households in Ghana, presenting economic cost that runs into hundreds of millions of dollars in electricity bills to the national economy while resulting in increased carbon footprint of the country (each inefficient appliance generates over 0.7 tons of carbon emissions annually. On the other hand, the annual energy consumption of ACs range between 1,532 to 2,680 kWh/yr, depending on the cooling capacity (GIZ 2018). Furthermore, most of the old refrigerators and ACs use environmentally harmful refrigerants that are released into the atmosphere, especially in cases when they are improperly discarded. At least 2 tons of ozone-depleting substances are released into the atmosphere through this phenomenon.”), available at: <https://doi.org/10.1016/j.enpol.2019.111149> (last accessed 14 April 2021), citing S. Gyamfi, F.A. Diawu, E.N. Kumi, F. Sika & M. Modjinou (2017) *The energy efficiency situation in Ghana*, RENEWABLE AND SUSTAINABLE ENERGY REVIEWS 82: 1415–1423 (no link available) and GIZ Green Cooling Initiative (2018) *Ghana’s Greenhouse Gas Inventory and Technology Gap Analysis for the Refrigeration and Air Conditioning Sector* (available at [https://www.green-cooling-initiative.org/fileadmin/Publications/2018\\_GCI\\_Inventory\\_Report\\_Ghana.pdf](https://www.green-cooling-initiative.org/fileadmin/Publications/2018_GCI_Inventory_Report_Ghana.pdf)) (last accessed 14 April 2021); P. Fleming (June 2020) *Tokunbo’: How African nations are battling with the sale of ‘zombie’ appliances*, *World Economic Forum* (“But once the cast-off appliances are carted home, there is no guarantee they will come back to life - and if they do, the cost to run them can be exorbitant, both for their users and the environment, environmental groups say.”), available at: <https://www.weforum.org/agenda/2020/06/africa-selling-air-conditioning-refrigerators/> (last accessed 14 April 2021).

<sup>10</sup> African Ministerial Conference on the Environment (AMCEN) Decision 17/1, XII(43) (Montreal Protocol and Kigali Amendment thereto) (November 2019), available at: [https://wedocs.unep.org/bitstream/handle/20.500.11822/30731/AMCEN\\_17Omnibus.pdf?sequence=7&isAllowed=y](https://wedocs.unep.org/bitstream/handle/20.500.11822/30731/AMCEN_17Omnibus.pdf?sequence=7&isAllowed=y) (last accessed 14 April 2021).

<sup>11</sup> UNEP and IEA (July 2020) *Cooling Emissions and Policy Synthesis Report: Benefits of cooling efficiency and the Kigali Amendment*, pp. 13, 32, and 41, available at: <https://wedocs.unep.org/bitstream/handle/20.500.11822/33094/CoolRep.pdf?sequence=1&isAllowed=y> (last accessed 14 April 2021).

<sup>12</sup> IPCC, Special Report, Global Warming of 1.5°C, (Summary for Policymakers), available at [https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15\\_SPM\\_version\\_report\\_LR.pdf](https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_SPM_version_report_LR.pdf) (last accessed 14 April 2021). The policy tools described in *Environmental Dumping* 2018 are initial examples that the international community can expand. One such tool, the Montreal Protocol “informal Prior Informed Consent” (IPIC) mechanism, is a powerful means for Montreal Protocol community awareness-raising and policy

notification. The more Montreal Protocol Parties register and use this tool to spread awareness of their own policy efforts to stop environmental dumping, the greater the community recognition of anti-environmental dumping efforts and models, opportunities for best practice sharing, and coordination involving domestic law enforcement information. This is one of many tools, but a mechanism with a history of success within the Montreal Protocol community. See, for example, UNEP, OzoNews, Volume XX, 15 April 2020, p. 2 (“OzonAction’s iPIC system helps prevent an illegal shipment of 72 tonnes of HCFC-22”), available at: <https://wedocs.unep.org/handle/20.500.11822/32110> (last accessed 14 April 2021).

<sup>13</sup> N. Howarth, N. Al Saud, M. Al Shalan, T. Al Shehri, M. Bari, M. Beaugrand, R. Khosla, M. Krarti, A. Lanza, B. Lebot, K. Mangotra, N. Odnoletkova, T. Patzek & Y. Saheb (2020) *Policy Brief: Enhancing Voluntary Collaboration on Cooling through the G20, T20 Task Force 2: Climate Change and Environment*, p. 4 (“Enhance trade and technology transfer in high-efficiency products and support the design of anti-dumping policies in developing countries to prohibit the import of inefficient and obsolete technologies—new and used—from G20 countries”), available at: [https://t20saudiarabia.github.io/PolicyBriefs/T20\\_TF2\\_PB11.pdf](https://t20saudiarabia.github.io/PolicyBriefs/T20_TF2_PB11.pdf) (last accessed 14 April 2021).

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