

GHANA
REPORTING OF SHIPMENTS OF INEFFICIENT RACHP EQUIPMENT
CONTAINING OR RELYING ON ODSs & HFCs

COUNTRY: GHANA

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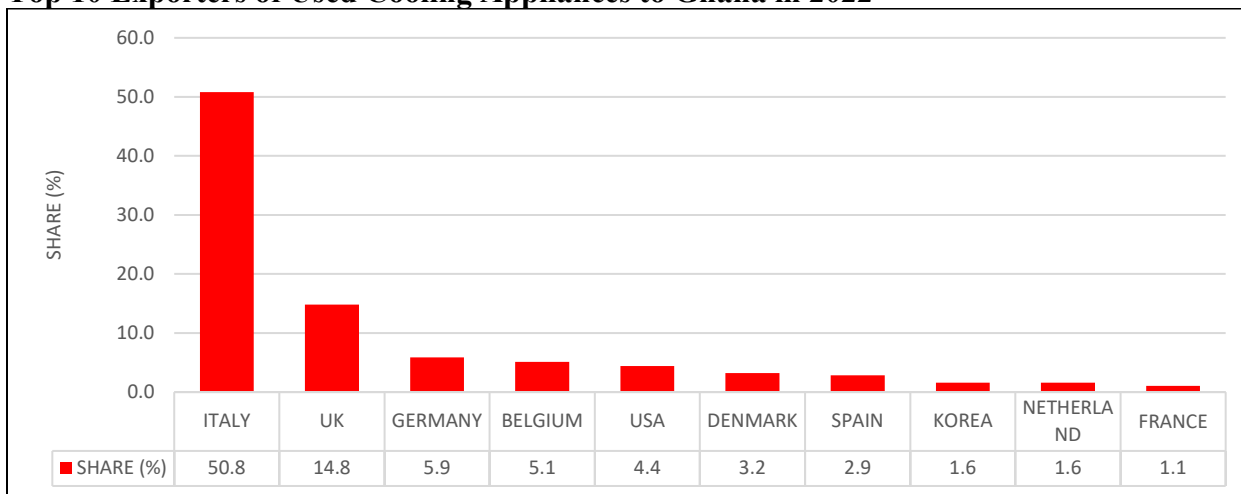
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This information is submitted to the Ozone Secretariat in response to the invitation to Parties in Decision XXXIV/4 that have restricted the manufacture and/or import of certain refrigeration, air-conditioning and heat-pump (RACHP) products and equipment containing or relying on controlled substances, including with respect to energy efficiency, **and that do not want to receive** such products and equipment from other parties against payment or free of charge, to submit information such as that provided below to the Ozone Secretariat by 1 May 2023. (Emphasis added.)

1. Key Information

- (a) Summary of unwanted refrigeration, air-conditioning and heat pump (RACHP) products and equipment containing or relying on controlled substance that has been discovered, including their codes in the Harmonized Commodity Description and Coding System (HS Codes), where applicable

Top 10 Exporters of Used Cooling Appliances to Ghana in 2022



The top ten (10) countries (out of 23) exporting used fridges and air conditioners into the country in 2022 are shown in Figure above. Italy accounted for over half (50.8%) of the total export, the UK (14.8%), Germany (5.9%), Belgium (5.1%), the United States (4.4%), Denmark (3.2%), Spain (2.9%), South Korea (1.6%), Netherlands (1.6%) and France (1.1%) The eight (13) remaining countries accounted for only 8.6% of the total export.

Ghana has set Minimum Energy Performance Standards(MEPS) for cooling appliances being imported into the country. This means that, new sub-standard appliances and new appliances with obsolete refrigerants which have been phase-out such as R12 is not allowed into the country.

<http://www.energycom.gov.gh/public-notices/144-phasing-out-of-the-importation-of-hydrochlorofluorocarbon-based-air-conditioners-in-ghana>

http://www.energycom.gov.gh/files/ENERGY%20COMMISSION%20PRESS%20RELEASE%20-%20IMPORTATION%20BAN_012023.pdf

<http://www.energycom.gov.gh/public-notices/156-enactment-of-new-regulations-on-electrical-appliances-and-renewable-energy-products>

HS CODE	Customs regime	
8415109000	IMPORT	Air conditioning machines: Window or wall types, self-contained or split system : Other
8415909000	IMPORT	Air conditioning machines: Parts: Other
8418109000	IMPORT	Combined refrigerator-freezers, fitted with separate external doors : Other
8418219000	IMPORT	Refrigerators, household type : Compression-type : Other
8418299000	IMPORT	Refrigerators, household type : not Compression-type : Other
8418309000	IMPORT	Freezers of the chest type, not exceeding 800 l capacity : Other
8418409000	IMPORT	Freezers of the upright type, not exceeding 900 l capacity : Other

- (b) Types of products and equipment concerned, including their codes in the Harmonized Commodity Description and Coding System, where applicable; If you need assistance designing and implementing restrictions to prevent exports/imports of unwanted RACHP products and equipment containing or relying on controlled substances, including with respect to energy efficiency, please also note so here.

See also responses to (a), above.

The Ghana National Ozone Unit and supporting Energy Commission and other inspection and enforcement personnel are key to preventing unwanted imports/exports of inefficient RACHP products and equipment using high-GWP refrigerants. The Ghana NOU and inspection and enforcement personnel are frequently overwhelmed with surges in unwanted equipment. The Ghana National Ozone Unit, as well as the Energy Commission, charged with implementing and enforcing Ghana's restrictions on the import of RACHP products and equipment, respectfully call the Ozone Secretariat's attention to the following. RACHP equipment exporting parties should not exploit A5 Parties' controlled substance phase down schedule, which is later than the schedule applicable to non-A5 Parties, to shift to vulnerable A5 Parties the environmental, social, border-control, economic and other burdens associated with inefficient, high-GWP RACHP products and equipment. This ensures the continued exporting of poverty and an unjust transition for A5 parties. Having exporting Parties take up their responsibility to help importing Parties, such as Ghana, prevent such shipments is critical to solving this problem.

- (c) The minimum energy efficiency performance standard permitted under domestic legislation for each category of RACHP product and equipment;

New L.I. 2458 (2022)

L.I. 1815 has been revoked and replaced with L.I. 2458 which was approved by the Ghanaian Parliament in November 2022. The revision has become necessary due to technological changes, innovations and new economies of scale.

The MEPS has been revised to increase the star ratings from 1 to 7 stars with a QR code linked to each model registered with the Energy Commission. MEPS requirements need to be met using the computation method of the Annual Energy Efficiency Ratio (AEER). It is only when this is met, then that the star rating will be determined using Total Seasonal Cooling Performance Factor (TSCPF) according to GS ISO 16358-1:2013.

The minimum TSCPF is 2.60.

The new regulation applies to air conditioners, multi-split outdoor units, multi-split systems, and single-split outdoor units that have a rated standard cooling full capacity of 65 kW or less that are designed primarily for human comfort.

Star rating	TSCPF
7	11.5 □□ TCSF
6	10.0 □□ TCSF < 11.5
5	8.5 □□ TCSF < 10.0
4	7.0 □□ TCSF < 8.5
3	5.5 □□ TCSF < 7.0
2	4.0 □□ TCSF < 5.5
1	2.6 □□ TCSF < 4.0

Find the link to the new regulation at the following URL:

<http://www.energycom.gov.gh/files/Air%20Conditioners%20Regulations%202022.pdf>

See also information on the following pages.

Category of product	Product class	Characteristics	Value of P _{rated}		MEPS value
Air-to-air unitary air conditioners	1	Wall-mounted unitary double duct air conditioners		P _{rated} ≤ 65kW	3.10
	2	Portable unitary double duct air conditioners		P _{rated} ≤ 65kW	2.60
	3	Wall-mounted unitary single-duct air conditioners		P _{rated} ≤ 65kW	3.10
	4	Portable unitary single-duct air conditioners		P _{rated} ≤ 65kW	2.60
	5	Ducted or non-ducted, excluding product classes 1 to 4		P _{rated} < 10kW	3.10
	6	Ducted or non-ducted, excluding product classes 1 to 4	10kW ≤	P _{rated} ≤ 39kW	3.10
	7	Ducted or non-ducted, excluding product classes 1 to 4	39kW <	P _{rated} ≤ 65kW	3.00
Air-to-air single-split systems	8	Non-ducted		P _{rated} < 4kW	3.66
	9	Non-ducted	4kW ≤	P _{rated} < 10kW	3.22
	10	Ducted		P _{rated} < 10kW	3.10
	11	Ducted or non-ducted	10kW ≤	P _{rated} ≤ 39kW	3.10
	12	Ducted or non-ducted	39kW <	P _{rated} ≤ 65kW	3.00
Air-to-air single-split outdoor units (not supplied or offered for supply as part of a single-split system)	13	Supplied or offered for supply to create a non-ducted system		P _{rated} < 4kW	3.66
	14	Supplied or offered for supply to create a non-ducted system	4kW ≤	P _{rated} < 10kW	3.22
	15	Supplied or offered for supply to create a ducted system		P _{rated} < 10kW	3.10
	16	Whether supplied or offered for supply to create a ducted or a non-ducted system	10kW ≤	P _{rated} ≤ 39kW	3.10
	17	Whether supplied or offered for supply to create a ducted or a non-ducted system	39kW <	P _{rated} ≤ 65kW	3.00
Air-to-air multi-split outdoor units	18			P _{rated} < 4kW	3.66
	19		4kW ≤	P _{rated} < 10kW	3.22
	20		10kW ≤	P _{rated} < 39kW	3.10

(whether or not supplied or offered for supply as part of a multi-split system)	21		$39\text{kW} \leq P_{\text{rated}} \leq 65\text{kW}$	3.00
Water-to-air air conditioners	22		$P_{\text{rated}} < 39\text{kW}$	3.50
	23		$39\text{kW} \leq P_{\text{rated}} \leq 65\text{kW}$	3.20

New L.I. 2441 (2022)

L.I. 1958 has been revoked and replaced with L.I. 2441 which was approved by the Ghanaian Parliament in June 2022. The revision has become necessary due to technological changes, innovations and new economies of scale.

The MEPS has been revised to increase the star ratings from 1 to 7 stars with a QR code linked to each model registered with the Energy Commission. MEPS requirements need to be met testing the Energy Consumption at an ambient temperature of 32 degrees under Climate Class T. A minimum Energy Efficiency index (EEI) of <85 is required.

Find the link to the new regulation:

<http://www.energycom.gov.gh/files/Refrigerator%20regulation%20L.I%202441.pdf>

"Energy efficiency Star Rating"	Energy efficiency index (EEI)
7 – Star	EEI<22
6 – Star	22≤EEI<33
5 – Star	33≤EEI<40
4 – Star	40 ≤ EEI< 45
3 – Star	45 ≤ EEI<55
2 – Star	55 ≤ EEI<70
1 – Star	70 ≤ EEI<85

(d) Instances of attempted illegal imports of RACHP products and equipment to your country.

Yes. Ghana is constantly addressing instances of attempted illegal imports of RACHP products and equipment. As noted earlier, the notion of “illegal” imports is perhaps too simple to sufficiently capture the issues, relevant to a just transition in A5 countries to low-GWP refrigerants under the Montreal Protocol, with import of unwanted RACHP equipment, including RACHP products and equipment the import of which is illegal under Ghanaian law, and import of RACHP products and equipment that are shipped from countries in which

such products and equipment cannot be legally sold because the refrigerants used in such equipment have been phased out.



Company-specific references redacted and available to the Secretariat for review upon request.



Company-specific references redacted and available to the Secretariat for review upon request.

2. Additional Information relevant to Decision XXXIV/4:

- (a) Does Ghana provide training or notification to customs & border authorities about inefficient RACHP products or equipment? If other training, please make note.

The Energy Commission consistently and continually engages Customs, Importers and manufacturers on the requirement of the regulations on RACHP. The continuous awareness is to help with smooth implementation of the regulations.



<http://www.energycom.gov.gh/efficiency/stakeholder-meeting-on-revised-cooling-appliances-prohibition-law>

(b) Ghana's observed and/or detected impacts of unwanted RACHP products and equipment.

Dumping

- i. **Economy:** Used appliances are high energy guzzlers. Various studies conducted have revealed that a whopping 30% of electricity generated goes waste on used appliances. This puts pressure on the economy to increase generation capacity which requires the building of more power plants and also buying fuel to run these power plants. This robs the economy of monies needed to develop essential sectors like health, education and roads. It should also be emphasized that markets that are inundated with used appliances scare away investors who want to build assembly plants.
- ii. **Individuals:** Unsuspecting individuals who patronize the used appliances are robbed of their hard-earned money in payment of high electricity bills and high maintenance costs. The maintenance cost becomes so high because of lack of spare parts in view of the obsolescence of the technology. The stockpile of appliances in repairers' shops in Ghana attests to this fact.
- iii. **Environment:** The more power plants we build to meet the ever-growing demand; the more fossil fuel we burn with its attendant emissions that pollutes the environment. Secondly, appliances contain hazardous substances and that is the reason why disposal is done in an environmentally friendly manner. The indiscriminate burning of the discarded appliances in search of valuable metals is a major climate and health concern. Following the Paris Agreement on Climate Change in 2015, Ghana has recently developed an action plan to transition to net zero carbon emissions by the year 2070 and the ban on the importation and use of these used and inefficient appliances and new sub-standard appliances will contribute hugely to attaining net zero emissions within the stipulated period.

- (c) Ghana response and/or position on continued influx of RACHP products/equipment.

Ghana cannot, alone, manage the continued flow of RACHP products and equipment from abroad that do not conform to Ghana MEPS and other environmental and safety requirements, which can include RACHP products and equipment that are not able to be sold in the countries of origin because they do not meet those countries' MEPS or contain substances that cannot be used/are phased out in the countries shipping the RACHP products and equipment to Ghana. This export approach amounts to "cleaning out the exporting countries 'house' at the expense of our 'house'---Ghana. What is more, the continued flow of RACHP products and equipment from outside Africa to countries in the region, not just Ghana, where some of those countries have not yet, or are just starting, to build protections such as those we have reflected in this document, is an affront to the idea of a just transition for Africa and other vulnerable A5 countries to more ozone- and climate-friendly refrigerants and associated RACHP products and equipment. We have more than enough to do to ensure our own Montreal Protocol compliance, managing our domestic products and trade in RACHP products among countries in our region, without also having an onslaught of inefficient and high-GWP RACHP products and equipment from outside our region seeking destinations that can least afford additional climate and ozone-depleting substance burdens.

- (d) Is Ghana registered to use the OzonAction iPIC tool to help with unwanted and illegal RACHP imports and have you made use of the tool? If not, why not?

Ghana is registered with iPIC and plans to use the tool to further raise awareness of Ghana's laws affecting RACHP imports. Nonetheless, Ghana is concerned that, although iPIC is a useful tool to help communicate Ghana's actions, and help facilitate related trade in low-GWP and high efficiency RACHP products and equipment, iPIC alone is insufficient to provide vulnerable, refrigerant using countries such as Ghana with information on what high-GWP, low-efficiency RACHP products and equipment are being shipped to Ghana from what jurisdictions. Ghana needs exporting countries to share the burden in resolving the dumping and related information sharing issue.

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Decision XXXIV/4: For Reference

Decision XXXIV/4: Illegal import of certain refrigeration, air-conditioning and heat pump products and equipment

1. To invite parties that have restricted the manufacture and/or import of certain refrigeration, air-conditioning and heat pump products and equipment containing or relying on controlled substances, including with respect to energy efficiency, and that do not want to receive such products and equipment from other parties against payment or free of charge, to submit to the Secretariat by 1 May 2023 the information listed below:
 - a. The types of products and equipment concerned, including their codes in the Harmonized Commodity Description and Coding System, where applicable;
 - b. The specific domestic restrictions on the controlled substances (i.e., maximum global warming potential of HFCs permitted to be used) for each category of product and equipment;
 - c. The minimum energy efficiency performance standard permitted under domestic legislation for each category of product and equipment;
 - d. Any attempted illegal imports of such restricted products and equipment to their countries;
2. To consider this issue at the Thirty-Fifth Meeting of the Parties and include the item on the agenda of the forty-fifth meeting of the Open-ended Working Group, taking into account the information requested in paragraph 1 above.