

Update on the Implementation of the Montreal Protocol Sharing Successful Practices, Challenges and Needs – MONGOLIA

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Overview of HPMP Achievements in 2017-2018 Mongolia

Stage	Status	Will / has enabled country to *	Baseline consumption is 1.4 ODP Tonnes <i>Ref: UNEP/OzL.Pro/ExCom/71/64</i>	Consumption in 2017 is equivalent to 42 % of baseline consumption <i>*Ref: UNEP/OzL.Pro/ExCom/77/56</i>
HPMP Stage I (2011-2020)	Ongoing	Meet 35% reduction from the baseline by 2020 (year)	0.54 ODP Tonnes were agreed to be phased-out under the investment project <i>Ref: UNEP/OzL.Pro/ExCom/63/60</i>	
HPMP Stage II (2020-2030)	Preparation Not Started	Meet 97.5% reduction from the baseline by 2030 (year)	Consumption in 2017 as reported under Article 7 is 0.589 ODP Tonnes	

Gender Mainstreaming

Currently, the NOA has total of 4 staffs including the senior HPMP officer and 3 of them are female. There is not any specific approach for gender mainstreaming.

Overview of the Implementation of the Enabling Activities in Mongolia

Ratification Status: To facilitate ratification process of the Kigali Amendment, Mongolia is implementing the Enabling Activities project in the country.

Enabling Activities Project: Project funding: 85,500 USD, Implementing Agencies: UNEP and the Government of Mongolia, represented by National Ozone Authority

- **Main Enabling Activity project components and implementation progress**

Component 1: Facilitate early Ratification of the Kigali Amendment - Have translated the KA into Mongolian language and prepared the draft laws.

Component 2: Establishing the foundation for the introduction of HFC alternatives - Recruited experts who will conduct the country assessment for HFC phase-down in Mongolia and needs assessment for RAC servicing sector in Mongolia. Initial meetings held by NOU on EE and KA .

Component 3: Article 4B licensing & Reporting – Approved the regulation which controls the HFCs and their alternatives

- **The ODS Regulation approved in September 2018, which covers all substances controlled under the MP including HFCs, HFC blends, Natural refrigerants, hydrocarbons, Blends containing hydrocarbon or ether. According to the provision 25.2 of the Law on Air of Mongolia, quantity of ODSs and other alternative substances that will be imported in a following year have to be approved by a decree of Minister of Environment and Tourism. Therefore this includes HFCs.**
- **The NOA organized total of 6 seminars for stakeholders to introduce the amended regulation (No.277 of 2018) and total of 180 people participated in these seminars.**

Overview of the Implementation of the Enabling Activities in Mongolia

- The above mentioned regulation No.277 will become the base for ratification of the Kigali Amendment since it regulates import of not only ODSs but also, HFCs, HFC blends and other alternative substances with low or zero GWP.
- The Ministry of Justice and Home Affairs (MoJHA) required the socio-economic and ecological assessment on the Kigali Amendment to ratify. Therefore, an expert, who was recruited by the NOA, conducted the assessment.

Achievements in Policies and Regulations Related to HCFC Phase-out

Policy / Regulation Type	Yes / No / Not applicable	Under which regulatory and institutional framework?
Ban of Manufacturing HCFC-based equipment or products	No	
Ban on Manufacture of Foam using HCFCs	No, only import of foam manufacturing equipment based on HCFC-22 and HCFC-141b is banned.	Government resolution No.54 of 2001 The “List of goods prohibited from crossing the national border of Mongolia” amended by the Government resolution No.378 of 2014
Ban on Import of HCFC-based equipment or products	<p>1) Prohibited from importing or introducing to the market production lines, products used in the process and any other technologies that contain HCFCs. Enforcement date: after January 2020</p> <p>Foam manufacturing equipment based on HCFC-22 and HCFC-141b is banned from crossing the national border (import and export) Enforcement date: 2014</p>	<p>1) Government resolution No.277 of 2018 Approval of the regulation and lists Annex 1: “Regulation to issue import, sale and use license for ODS and other alternative substances, and equipment containing them” Annex 2: “List of ODS”</p> <p>2) Foam manufacturing equipment based on HCFC-22 and HCFC-141b was added to the “List of goods prohibited from crossing the national border of Mongolia” by the government resolution No.378 of 2014</p>

Achievements in Policies and Regulations Related to HCFC Phase-out

Policy / Regulation Type	Yes / No / Not applicable	Under which regulatory and institutional framework?
Ban on Import of Pre-blended polyol containing HCFCs	No	
RAC Technician Certification	<p>Not included in the TVET system of Mongolia. There is a training center under the Mongolian HVAC-R Association, the “Master skills”, which issues qualification certificate for the participants.</p> <p style="color: red;">The Assessment center of TVET will organize the first Recognition of Prior Learning (RPL) Assessment of RAC technicians on 25 February 2019. Total of 30 technicians will be assessed and the Mongolian HVAC-R Association and the NOA will cooperate in the assessment procedure.</p>	
Safety standards Fiscal Incentive/Disincentive Policy Others	<p>The following standards are under translation:</p> <p>ISO 817:2014 Refrigerants - Designation and safety classification</p> <p>ISO 5149:2014 (Part 1 to 4) Refrigerating systems and heat pumps - Safety and environmental requirements</p>	

Achievements in Policies and Regulations Related to HCFC Phase-out

Policy / Regulation Type	Yes / No / Not applicable	Under which regulatory and institutional framework?
Fiscal Incentive/Disincentive Policy	<p>Yes</p> <p>1) Refrigerating equipment containing R-290, R-32, R-152a and R-744, and heat pump for geothermal heat are included in the “list of techniques and equipment that use natural resources efficiently, help reducing environment pollution and waste, and don’t have adverse impact on nature”. The income resulted from sale of these techniques and equipment is exempted from income tax.</p> <p>2) Air-conditioning equipment (with 8415.10.00 and 8415.81.00 HS code) was included in the “list of air-purifying equipment and energy-efficient heating equipment” that is exempted from Customs duties and VAT</p>	<p>1) the Law on corporate income tax of Mongolia. The list of these techniques and equipment was approved by the Government resolution No.303 in 2013.</p> <p>2) the Law on Exemptions from Customs duties and Law on Exemptions from VAT of Mongolia, approved in January 12, 2018. The list of these equipment was approved by the Government resolution No.157 in May 30, 2018.</p>
Others	<p>Refrigeration and air-conditioning sub-committee is planned to be established under the National Committee of Electrotechnology.</p> <p>The sub-committee can help to accelerate any works/process related to development and adoption of standards related to the RAC servicing sector.</p>	<p>Mongolian Agency for Standardization and Metrology (MASM).</p>

Achievements in Policies and Regulations Related to HCFC Phase-out

Policy / Regulation Type	Yes / No / Not applicable	Under which regulatory and institutional framework?
Others	<p>The NOA submitted the recommendations developed by the UN Environment to the Ministry of Construction and Urban Development for the “Construction strategy for 2018-2028”.</p> <p>The bill of the strategy was submitted to the Government of Mongolia on 23 January 2019.</p>	The Ministry of Construction and Urban Development

Capacity Building Activities under HPMP

		Cumulative achievements until 2017	Achievements in 2018	Planned in 2019 & 2020
Customs and Enforcement Officers Training	No. of Customs Training Workshops Organized	14	-	
	Number of Participants	423	-	Total of 50 participants are planned to be trained in 2019
	Who trains them (institution)?	National ozone authority, the General Customs Administration of Mongolia and Master trainers		
	Main components covered under Customs & Enforcement Training	Ozone layer depletion, Ozone depleting substances, Montreal Protocol, Amendments, important decisions of the Parties, Phase-down of HCFCs, roles and responsibilities of enforcement officers regarding Montreal Protocol implementation, national policies, licensing system for ODSs import, illegal trade, safety of ODSs etc.		
RAC Technicians Training	No. of Training Workshops Organized	16	5+1	
	Number of Participants	195	61+26=87 including the Train the trainers workshop	
	Who trains them (institution)?	"Master skills" training center, Institute of Technology, UNEP		
	Scope of the RAC Training Workshops	Montreal protocol, national policies, standards, ODSs and alternatives to ODSs, safe handling of refrigerants, Good Practice in a RAC servicing sector		

		Cumulative achievements until 2017	Achievements in 2018	Planned in 2019 & 2020
Other Capacity Building/ Awareness Activity	Activity	No. of Participants / Major Outcome		
	Study tour in Japan The objective of the study-tour was to enhance monitoring capacity of the Mongolian HVAC-R Association and the Customs General Administration regarding ODSs and alternative substances.	5 participants. The participants get introduced to Japanese laws and regulations concerning use and management of fluorocarbons; manufacturing, servicing, recycling, and disposal of refrigerating and air-conditioning equipment; automatization of tall building air-conditioning system and its servicing; energy efficiency, recovery and recycling of refrigerants; risk assessment of using flammable refrigerants in building air-conditioning; and their method and experience for organization of training programs for RAC servicing technicians.		
	Total of 3 “Regional Workshop on Good Practices and Flammable Refrigerants for Master Trainers from SA and SEA Networks” were held on 06-09 NOV 2017, 04-07 DEC 2017 and 04-07 DEC 2018 in Guangzhou/ PR of China	Total of 4 people participated in 3 separate training workshops.		
	“Train the trainer workshop on good practices in handling R-32 and R-290 based split air conditioner and heat pump” was held on 05-07 June 2018 in Ulaanbaatar.	26 technicians participated. It was the first training on use of flammable refrigerants that was held in Mongolia.		
	“National stakeholders consultation on certification system for refrigeration and air conditioning servicing sector technicians” was held on 08 June 2018 in Ulaanbaatar.	53 people participated. The importance and needs of certification system for RAC servicing sector technicians were discussed.		

Investment Conversion Projects under HPMP

Sector	Selected Alternatives to HCFCs	Enterprises Converted in HPMP Stage-I		Enterprise to be converted in HPMP Stage-II	
		No. Completed	Any ongoing	On-going	Under Plan
Foam	HFC-152a, CO ₂	2			
Air-conditioning					+ Air-conditioning systems in large buildings, mining sites, etc.
Refrigeration					+ Production lines of large manufacturing plants, large cold storages, supermarkets, etc.
Solvent					
Others					

User Incentives/ Recycling & Reclamation activities under HPMP

Activity	Status (On-going / Not Yet Started / Not applicable)	Details	
End-user retrofit or replacement	NA	Alternatives Used	Is it Retrofitting or Replacement?
		*details on type of equipment, the amount of incentive	
Reclamation & Recycle Facility	NA	* Details of location ,numbers etc...	
Others	NA		

Mechanisms for monitoring, reporting, verification and enforcement system for sustaining the Montreal Protocol achievements

1. Which mechanism?	The Customs Verification
<p>How did you implement? Key Features ensuring its effectiveness.</p>	<ul style="list-style-type: none"> • The provision No.25.1 of the Law on Air states that a state administrated central organization shall set the amount of ODSs and other alternative substances, and equipment containing them that will be imported in the following calendar year. Based on this approved amount, the NOA of Mongolia issues import, sale and use license to enterprises on ODSs and other alternative substances and equipment containing them. The regulation overseeing this procedure was updated in September 05, 2018. (Government resolution No.277 of 2018) • In January of every year, the Customs organization reports to the MET/NOA on the total of amount/number of ODSs and other alternative substances, and equipment containing them that were imported to Mongolia in previous year (sorted by enterprise/importer name).
<p>Who is Leading agency?</p>	<p>Ministry of Environment and Tourism / National Ozone Authority</p>
<p>Any other agencies involved? Please specify.</p>	<p>Mongolian Customs General Administration, Mongolian HVAC-R Association</p>
<p>Any specific tips, lessons learned to share with other NOUs</p>	

Successful Practices for MP Implementation

<p>1. Which Practice?</p>	<p>Legalization of import, sale and use of ODSs and other alternative substances and equipment containing them</p>
<p>How does it contribute to the achievement of your project objectives and/or MP targets?</p>	<p>In 1999, the Government of Mongolia approved the National Programme for Protection of the Ozone Layer. To implement the National Programme and achieve Montreal Protocol obligations, the Mongolian government amended number of laws and lists and established licensing system for import, sale and use of ODSs and other alternative substances and equipment containing them.</p>
<p>What was the results/output?</p>	<p>Successfully phased out CFCs and in compliance with HCFCs phase out plan</p>
<p>How did you implement it?</p>	<p>Quota system for import of HCFCs and licensing system—<i>valid since Jan 2019</i> for import, sale and use of HCFCs and other alternative substances including HFCs, HFOs, HCs and other natural refrigerants, and equipment containing them.</p>
<p>Any specific tips, lessons learned to share with other NOUs</p>	<p>HCFCs import quota allocation is conducted by the Mongolian HVAC-R Association. This enhances and strengthens the cooperation between importers (enterprises), the Mongolian HVAC-R Association and the NOA.</p>

Successful Practices for MP Implementation

2. Which Practice?	Reporting system for importers
How does it contribute to the achievement of your project objectives and/or MP targets?	Enterprises, submitted request for an import license in that year, have to submit their annual report on amount of substances and equipment they imported, used, installed or/and serviced. Only those organizations which submitted their report can be included in the list of enterprises that can request for quota and an import license in the following year.
What was the results/output?	Better monitoring of the imported substances.
How did you implement it?	The report format was approved by the Environment and Tourism Minister's decree. When requesting quota, enterprises have to submit their annual report on amount of substances and equipment they imported, used, installed or/and serviced.
Any specific tips, lessons learned to share with other NOUs	We cross check the data of customs, allocated quota of the enterprises, and the enterprises' submitted report. If there is any difference in these data, we contact with the customs.

Challenges & priorities/needs

1. Which Challenge?	Outdated curriculum for RAC servicing sector technicians in the national education system (only in higher education system, there is no approved curriculum in TVET system)
How does the challenge affect the achievement of your project objectives and/or MP targets?	There is a gap in the capacity and competence of technicians working in RAC servicing sector in Mongolia. They have lack of knowledge on handling of alternative substances that are flammable, toxic or have high pressure. It slows down the usage of new alternative substances with low or zero GWP.
What is the reason for this challenge?	<p>Technology trends are changing rapidly. Therefore the contents of training programs should be changed accordingly. However, there is not even an approved curriculum in Mongolian TVET system for RAC technicians.</p> <p>To develop certification system for RAC servicing technicians, the corresponding occupational standard and curriculum should be developed. On this matter, the NOA sent an official letter to the Assessment Center of TVET asking to accelerate the certification of RAC technicians by developing an occupational standards and competence based curriculum. However, the Assessment Center of TVET responded that they don't have approved fund to do these.</p>

<p>What is the solution? How can it be addressed it?</p>	<p>Implementing Agency should support the occupational standard and curriculum developing organizations (industrial associations, technical and vocational educational institutes, the Ministry of Labour and Social Welfare) or organize consultation workshop for related professionals.</p>
<p>What is the priority for NOU to address this challenge? Which support Implementing Agencies can provide?</p>	<p>There is not any national occupational standard and curriculum related to RAC servicing sector technicians in TVET system of Mongolia. This causes a lack of qualified technicians have not been prepared in the field.</p> <p>UN Environment can submit proposal to UNESCO requesting them issue a recommendation to the relevant ministries indicating to include an occupational standard and curriculum related to RAC servicing technicians at the TVET level. As we understand, the UNESCO can give recommendations to the Ministry of Labour and Social Welfare that occupational standard and curriculum of occupations related to RAC technicians shall be developed as soon as possible.</p> <p>Also, it is better if UN Environment can provide financial support or a consultant for the relevant agency and/or association when once occupational standard and curriculum developing stage starts.</p>
<p>Any specific lessons learned? Any request for South-South cooperation?</p>	<p>Within the framework of South-South cooperation, organize training for RAC technicians in neighboring countries once a year to share and exchange experiences.</p>