

Report

on activities of Ozone Center of Kyrgyzstan in 2020 on realization of HCFC phase out management plan (phase II) in the Kyrgyz Republic for 2015-2020

The program on phase-out of ozone depleting substances for 2016-2020 (Phase 2) is aimed at meeting the requirements of the Montreal Protocol on Substances that Deplete the Ozone Layer. The Kyrgyz Republic is a party of the Protocol in accordance with the Law of the Kyrgyz Republic "On the Ratification of the Vienna Convention for the Protection of the Ozone Layer and Montreal Protocol on Substances, that Deplete the Ozone Layer". The program provides complete phase out of consumption (production, export and import) of all ozone depleting substances (ODS) in the territory of the Kyrgyz Republic by 2020. The program includes the following activities:

Action Plan for realization of the Program

No	Actions	Schedule	Responsible actors
1.	Improvement of the legal and regulatory framework for ODS control	2016-2020	State Inspectorate for Environmental and Technical Safety (SIETS) State Agency on Environment Protection and Forestry (SAEPF)
2.	Raising public awareness	Constantly	Ministry of Education and Science (MES), Ministry of Health (MH), SAEPF
3.	Monitoring of ODS handling	2016-2020	SAEPF
4.	Training of representatives of authorized state bodies (customs and border services, financial police and ecological and technical inspectorate)	2016-2020	SAEPF, State Custom Service (SCS), State Border Service (SBS), State Service Against Economic Crimes (SSAEC), State Inspectorate for Environmental and Technical Safety (SIETS)
5.	Training and certification of technicians on maintenance of refrigeration equipment	2016-2020	SIETS, MES, SAEPF
6.	Training of students from universities and educational organizations of secondary and primary education to prepare specialists for refrigeration and treatment industries	2016-2020	MES
7.	Recovery and recycling of refrigerants	2016-2020	SIETS, SAEPF
8.	Support local industrial sector in reducing the use of HCFCs	2016-2020	SIETS, SAEPF
9.	Regular reporting on the management of ODS to the Secretariat of the Montreal Protocol, the Multilateral Fund for the Montreal Protocol, UNEP, UNDP	Annually	SAEPF

Improvement of the legal and regulatory framework for ODS control

The Resolution of the Government of the Kyrgyz Republic No. 230 of April 30, 2020 "On Amending the Resolution of the Government of the Kyrgyz Republic" On Approval of the Regulation

on State Regulation of Import and Export of Ozone-Depleting Substances and Products Containing Them ” September 19, 2009 No. 594 was adopted.

On June 4, 2020, after three readings, the Jogorku Kenesh of the Kyrgyz Republic adopted the draft law “On ratification of the amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, adopted in Kigali, Republic of Rwanda, on October 15, 2016”.

A project proposal has been developed and submitted to the Multilateral Fund for the third tranche of the HCFC phase-out management plan (HPMP) for Kyrgyzstan to meet the requirements of the Montreal Protocol on Substances that Deplete the Ozone Layer. On June 16, 2020, the Multilateral Fund at the 85th meeting of the Executive Committee approved the allocation of the third final tranche to Kyrgyzstan.

The Government of the Kyrgyz Republic has get a draft resolution “On priority measures to implement the Law of the Kyrgyz Republic” On the ratification of the amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, adopted in the city of Kigali, Republic of Rwanda, October 15, 2016 “dated July 7, 2020 No. 74”, containing regulations on licensing of HFCs in Kyrgyzstan.

The draft Resolution of the Government of Kyrgyz Republic on amendments to the Law of the Kyrgyz Republic “On the Permit and Licensing System” regarding the introduction of hydrofluorocarbons into the Unified List of Goods, to which non-tariff regulation measures are applied in trade with third countries as approved by the Decision of the Board of the Eurasian Economic Commission No. 30 on April 21, 2015, was introduced for consideration to the Government of the Kyrgyz Republic.

Draft decision of the Board of the Eurasian Economic Commission on the inclusion of hydrofluorocarbons in the Unified List of Goods to which non-tariff regulation measures are applied in trade with third countries, approved by the Decision of the Board of the Eurasian Economic Commission No. 30 dated April 21, 2015 and the draft Regulation on the import into the customs territory of the Eurasian Economic Union and the export of ozone-depleting substances, hydrofluorocarbons and products containing ozone-depleting substances and hydrofluorocarbons from the customs territory of the Eurasian Economic Union has been submitted for consideration by the EAEC Board.

The draft Resolution of the Government of Kyrgyz Republic on amendments to the Law of the Kyrgyz Republic “On the Permit and Licensing System” in terms of introducing measures to regulate the import, export of goods in respect of which temporary licensing is established and the draft Resolution of the Government of Kyrgyz Republic “On the introduction of temporary licensing of the import and export of hydrofluorocarbons and products containing them” were introduced for consideration by the Government of the Kyrgyz Republic.

The draft Order of the Government of the Kyrgyz Republic on priority measures to implement the amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, adopted in the city of Kigali, Republic of Rwanda, on October 15, 2016, was submitted for consideration by the Government of the Kyrgyz Republic.

Training and certification of technicians on maintenance of refrigeration equipment

During the reporting period, the following workshops for refrigeration experts were held in the framework of the HCFC phase-out management plan (HPMP).

No.	Place	Data	Number of participants
1	Bishkek	27-31 st of January 2020	27
2	Osh	4 th of March 2020	22
3	Jalal-Abad	5 th of March 2020	20
4	Bishkek	2 nd of June 2020	19
5	Bishkek	10 th of June 2020	17
6	Bishkek	18 th of June 2020	15
7	Cholpon-Ata	29 th of June 2020	28
8	Jalal-Abad	23 rd September 2020	12
9	Osh	22 nd September 2020	15
10	Osh	24 th September 2020	12
11	Osh	25 th September 2020	13
12	Cholpon-Ata	1 st of October 2020	14
13	Cholpon-Ata	3 rd of October 2020	14
14	Naryn	3 rd of November 2020	20
15	Bishkek	11 th of November 2020	17
16	Karakol	1 st of December 2020	14
17	Karakol	4 th of December 2020	12
18	Osh	15 th of December 2020	19
19	Jalal-Abad	16 th of December 2020	22
20	Osh	18 th of December 2020	21

On January 27-31, 2020, in Bishkek, the courses "Electrical Mechanic for Repair and Maintenance of Refrigeration Equipment and Air Conditioning Systems" took place. 27 young refrigeration technicians were trained and got certificates. The training included the following topics: Main components used in the refrigeration system, their role and importance in preventing refrigerant leakage; Use of appropriate tables and diagrams, and their interpretation in the context of indirect leak tests; Environmental impact of refrigerants and related environmental standards; Check before starting the work, after long time, after maintenance or repair (intervention), or during operation; Environmentally friendly treatment of the system and the refrigerant during installation, operation, maintenance and recovery; installation, commissioning and maintenance of an air and water cooled evaporator.

On March 4-5, 2020, in the cities of Osh and Jalal-Abad workshops on the recovery and recycling of refrigerants and best practices for the safe maintenance of refrigeration equipment in the Kyrgyz Republic were held. The workshops addressed the issues of introducing alternative technologies to replace HCFCs and HFCs refrigerants in Kyrgyzstan and applying green technologies in refrigeration equipment and air conditioners. The participants were given the basic requirements of the Interstate Standard EN 378. Refrigeration systems and heat pumps, as well as the minimum set of tools for a refrigeration technician. Topics covered include retrofitting existing systems to alternative low-GWP refrigerants; Refrigerant recovery and recirculation machine maintenance; Refrigerant Recovery Economics and Service Best Practices. Special equipment was distributed to refrigeration technicians in Osh and Jalal-Abad regions.

On June 2, 2020, a workshop “Energy Efficiency in the Design of Building Ventilation and Air-Conditioning Systems” was held in Bishkek. The workshop included the following topics: Climate Change and the Kigali Amendment to the Montreal Protocol; Overview of alternatives to HCFC refrigerants in refrigeration and air conditioning sector; Ventilation and air conditioning systems; The installation of air conditioners and split systems; Energy Efficiency in the RAC sector; Design of ventilation systems and air conditioning using AutoCAD; Overview of the technical characteristics of climate equipment; Features of control and operation of climatic equipment. 19 people attended the workshop.

On June 10, 2020, a workshop on best practices for the safe maintenance of refrigeration equipment in the Kyrgyz Republic was held in Bishkek. At the beginning of the workshop, the problems of global warming and stratospheric ozone depletion were considered, the goals of the Kigali Amendment to the Montreal Protocol were discussed. The workshop participants were told about the handling of HCFC, HFC and HC refrigerants, and about the necessary information about alternative refrigerants: availability, ozone depletion potential, compatibility of the compressor and existing components of the refrigeration system, compatibility with oils, global warming potential. The issues of safety transportation and storage of refrigerants; Recovery, clean and flush the system, purge and test for blockage, refrigerant charging, system performance testing were considered. 17 people attended the workshop. At the workshop, 10 sets of special equipment for beginner refrigeration technicians were distributed.

On June 18, 2020, a workshop on best practices for the safe maintenance of refrigeration equipment in the Kyrgyz Republic was held in Bishkek. The workshop covered topics such as: Climate Change and the Kigali Amendment to the Montreal Protocol; Alternative technologies for HCFC and HFC refrigerants. Application of energy efficient green technologies in the refrigeration sector; Interstate standard EN 378; Best practice in the repair, installation and assembly of refrigeration equipment; Minimum requirements for the skills and knowledge of applicants for obtaining a certificate, as well as what tools a refrigeration technician must have when working with refrigeration equipment.. The workshop was attended by 15 people. During the workshop, 11 sets of special equipment for beginner refrigeration technicians were handed over.

On June 29, 2020, a workshop on the recovery and recycling of refrigerants and best practices for the safe maintenance of refrigeration equipment in the Kyrgyz Republic was held in Cholpon-Ata city. This workshop covered topics such as policy measures to achieve the goals and commitments of the Kigali Amendment, and climate change and its implications for Kyrgyzstan. It was told about the certification system for specialists and enterprises of refrigeration equipment. Described in detail the methods of recovery and recycling of refrigerants, tools and equipment for the maintenance and repair of RAC; Safe handling of HCFC/HFC and natural refrigerants; Refrigerant recovery and recirculation machine wiring diagrams; Recharging refrigeration equipment. The requirements of labor protection and safety measures during the installation, operation and repair of refrigeration equipment were considered. 28 people attended the workshop.

On September 22, 2020, a workshop on the introduction of best practices for servicing refrigeration equipment in the Kyrgyz Republic was held in Osh city for refrigeration technicians. The workshop covered topics such as ozone layer protection, the Kigali Amendment to the Montreal Protocol, safety issues in the maintenance, repair and installation of refrigeration equipment; Systematic control, repair and maintenance of refrigeration equipment to ensure the operability of refrigeration equipment and to prevent refrigerant emissions into the atmosphere.

On September 24, 2020, a workshop on the recovery and recycling of refrigerants in the Kyrgyz Republic was held in the city of Osh. This workshop covered the following topics: Montreal Protocol on Substances that Deplete the Ozone Layer. Kigali Amendment and energy efficiency issues, schedules of HFC phase down; Refrigerant recovery and recycling methods; Tools and equipment for maintenance and repair of RAC; Techniques for working with tools during recovery, repair, retrofit of refrigeration systems. Thermodynamic diagrams of refrigerants and refrigeration cycles. Operating parameters of various types of refrigeration units. Practical exercises were conducted on the recovery and recycling of refrigerants using a refrigerant recovery machine, during which it was clearly demonstrated the connection diagrams and features of refrigerant recovery. At the workshop, refrigerant recovery and recycling machines were distributed to organizations that service and repair RAC systems.

On September 23, 2020 in Jalal-Abad city and **on September 25, 2020** in Osh city, a workshops on the recovery and recycling of refrigerants and best practices for safe servicing of refrigeration equipment were held, refrigeration technicians from the southern regions of the country attended the workshops. During the workshop, the audience was told about the current situation in the refrigeration sector of the Kyrgyz Republic and changes in the international arena in this sector, about the Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer. The requirements of labor protection and safety measures during the installation, operation, repair and disposal of refrigeration equipment, the Norms governing the activities of the refrigeration industry, including the protection of atmospheric air and the ozone layer, were considered in detail. It was talked about the rules for storing refrigerants, labeling of products and equipment containing HCFCs, HFCs and HCs, Methods for recovering and recycling refrigerants, as well as about the economics of the benefits of refrigerant recovery. The workshop in the city of Osh was attended by 13 people and in the city of Jalal-Abad - 12 people.

On October 1, 2020, a workshop on the recovery and recycling of refrigeration equipment refrigerants in the Kyrgyz Republic was held in Cholpon-Ata city. The participants of the workshop were given information about the Montreal Protocol on Substances that Deplete the Ozone Layer and the Kigali Amendment, issues of energy efficiency of refrigeration equipment, schedules for HFC phase down were considered. The following topics are covered: Methods for recovering and recycling refrigerants; Safe handling of HCFC/HFC refrigerants and safe maintenance of RAC systems; Features and principles of operation of the vacuum pump and filling machine; Refrigerant recovery and recirculation machine wiring diagrams; The economic effect of refrigerant recovery and reuse. During the practical exercises participants learnt how to use the refrigerants recovery and recycling machine, how to connect it to RAC and other features of refrigerant recovery. At the workshop, refrigerant recovery and recycling machines were distributed to organizations that service and repair RAC.

On October 3, 2020, a workshop on the implementation of best practices for servicing refrigeration equipment in the Kyrgyz Republic was held in Cholpon-Ata city for refrigeration technicians in the Issyk-Kul region. The workshop covered topics such as ozone layer protection, the State HCFC phase-out program, the Kigali Amendment to the Montreal Protocol, the use of HFCs in various industries, alternatives to HFCs, and modern refrigeration technologies that run on natural refrigerants. They spoke in detail about the certification system for refrigeration technicians in Kyrgyzstan, as well as best practices for servicing, repairing and installing refrigeration and climate control equipment and safe handling of flammable refrigerants.

On November 3, 2020, a workshop on the implementation of best practices for servicing refrigeration equipment in the Kyrgyz Republic for refrigeration technicians in the city of Naryn was held in Naryn city. At the workshop, it was described in detail about the Kigali Amendment to the Montreal Protocol, and what changes are expected in the RAC sector, in connection with the HFCs phase down and the introduction of natural refrigerants. The participants learned what the minimum technical requirements are for obtaining a certificate and admission to the work for refrigeration technicians, as well as the organization of systematic control, repair and maintenance of refrigeration equipment and best practices for the operation, installation, maintenance of refrigeration equipment.

On November 11, 2020, a workshop on the recovery and recycling of refrigerant refrigerants in the Kyrgyz Republic was held in Bishkek. Topics covered at the workshop were: Global Climate Change and the Kigali Amendment to the Montreal Protocol; System of certification of specialists and enterprises working with refrigeration equipment. Detailed information on refrigerant recovery methods and safety measures, Safe handling of HCFC, HC and HFC refrigerants, Maintenance of the vacuum pump, charging station and refrigerant recovery and recycling machine were provided. The practical exercise showed how to use a modern refrigerant recovery and recovery machine. It was clearly shown how the equipment is connected to the cylinders and RAC system. At the workshop, refrigerant recovery and recovery machines were distributed to organizations that service and repair RAC systems. 21 people attended the workshop.

On December 1, 2020, in Karakol city, a workshop on the implementation of best practices for servicing refrigeration equipment in the Kyrgyz Republic was held for refrigeration technicians. The workshop covered topics, such as the Kigali Amendment and the schedule for HFCs phase-down in the world and in Kyrgyzstan; Alternative refrigerants and their thermodynamic properties; Safe handling of refrigerants during installation, maintenance and dismantling of refrigeration and climatic equipment. It was told about innovative technologies in the refrigeration and air conditioning sector; Best practices in installation and repair of refrigeration equipment and testing of systems. The participants were told about the certification system for refrigeration technicians in Kyrgyzstan. 14 people attended the workshop.

On December 4, 2020, a workshop on recovery and recycling of refrigerants in the Kyrgyz Republic was held in Karakol city for refrigeration technicians. The workshop covered the following topics: Protection of the ozone layer; Kigali Amendment and HFC phase-down schedule in Kyrgyzstan; Safety measures during installation, testing and repair of refrigeration equipment; Passive method of refrigerants recovery, overflow method, accelerated recovery using system compressor; Active method of refrigerants recovery using recovery machines and recovery machines with an oil separator. The participants were given detailed technical advices on refrigerant recycling and recovery. The workshop was attended by 12 people.

On December 15, 2020, a workshop on recovery and recycling of refrigerants in the Kyrgyz Republic for refrigeration technicians from Osh oblast was held in Osh city. 19 people attended the workshop. This workshop covered the following topics: Montreal Protocol on Substances that Deplete the Ozone Layer and Protection of the Ozone Layer; The Kigali Amendment and Climate Change; HFC phase down schedule in Kyrgyzstan; Passive and active methods of recovery and recycling of refrigerants. Safety precautions during the work and storage of refrigerants; Organization of work on repair and installation of refrigeration equipment. At the end of the workshop, practical exercise was conducted on the recovery, recycling and charging of refrigerants.

On December 16, 2020, in Jalal-Abad city a workshop on the recovery and recycling of refrigerants in the Kyrgyz Republic for refrigeration technicians in the Jalal-Abad region was held. The agenda of the workshop included the following topics: Montreal Protocol on Substances that Deplete the Ozone Layer, environmental problems of ozone layer protection and climate change; Schedule of HFC phase down in the world and in Kyrgyzstan, according to the Kigali amendment; Retrofitting existing systems to alternative low-GWP refrigerants and natural refrigerants; Refrigerant recovery and recycling methods. Refrigerant recovery and recycling machine maintenance; Compatibility of the alternative refrigerant with the compressor and existing refrigeration system components and oils; Contaminated refrigerant and features of the use of a refrigerant gas analyzer to determine its quality. Refrigeration technician certification according to EN13313.

On December 18, 2020, a workshop on recovery and recycling of refrigerants in the Kyrgyz Republic was held in Osh city for refrigeration technicians in Osh oblast. The workshop was attended by 19 people. This workshop covered the following topics: Protective role of stratospheric ozone; The Kigali Amendment to the Montreal Protocol and Energy Efficiency Issues in the RAC Sector; Efficiency and performance parameters of alternative refrigerants⁶ their toxicity, flammability, GWP and ODP; Prevention and detection of leakage of alternative refrigerants; Best Practices for maintenance and repair of refrigeration systems using alternative refrigerants; Improving energy efficiency parameters; Extensive information was given on the economic, environmental aspects of the use of natural refrigerants.;

Implementation of international standards for training specialists of RAC sector

On November 14, 2020, a workshop "International standards for the training of RAC technicians" was held in Bishkek. Representatives of universities, vocational schools and developers of education standards took part in the workshop. This workshop covered the following topics: Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer; Lower GWP HFC alternatives; The minimum technical requirements for the skills and knowledge of applicants for obtaining a certificate; Certification System for specialists and enterprises working with refrigeration equipment and air conditioners; Refrigeration systems and heat pumps. Competence of personnel according to EN 13313-2011. Participants discussed the issue of updating educational programs on RAC taking into account modern market requirements and the features natural refrigerants, since natural refrigerants are toxic, explosive and require additional skills from refrigeration technicians.

Conducting a workshop for representatives of the foam industry

On November 26, 2020 in Bishkek a workshop "Introduction of HCFC alternatives in the foam production industry in the Kyrgyz Republic" was held for representatives of the foam production industry from Chui oblast. The following topics were discussed at this workshop: State program ODS phase out in the Kyrgyz Republic; Climate Change and the Kigali Amendment to the Montreal Protocol; Alternative technologies for foam applications; Use of new technologies using ozone-friendly foaming agents; Methyl formate, methylal and HFC blowing agents used in the production of insulation foams. Rigid polyurethane foam. Construction sandwich panels. Spray polyurethane foam insulation. The workshop was attended by 17 people.

Training of representatives of authorized state bodies (customs and border services,

financial police and ecological and technical inspectorate)

From January 1 to July 1, 2020, 1 workshop “Energy Efficiency in Buildings and their Engineering Systems” was held as part of the HPMP project (HCFC Phase-Out Management Plan) and the State Program for the phasing out of ozone depleting substances in the Kyrgyz Republic for law enforcement officers.

No.	Place	Data	Number of participants
1	SIETS, Bishkek	26 th of February 2020	27

On February 26, 2020, a workshop “Energy Efficiency in Buildings and their Engineering Systems” was held for employees of the State Inspectorate on Environmental and Technical Safety (SIETS), who are responsible for monitoring over energy certification of buildings and periodically monitoring of the energy efficiency of boilers and building engineering systems. 27 people attended the workshop. The following topics were discussed: Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer; State program on phase out of ODS in the Kyrgyz Republic; Overview of alternative HCFC refrigerants for the refrigeration and air conditioning sector; Prohibition of ODS-containing products after the entry of Kyrgyzstan into the Customs Union and their Custom codes; State monitoring of ODS consumption in Kyrgyzstan; Interstate standard EN 378 Refrigeration and heat pumps. Safety and environmental requirements; New legislation of Kyrgyzstan in the field of energy efficiency in buildings; Energy Efficiency in RAC Sector and the Ozone Depleting Substances; State Program for the Period of 2016–2020. The workshop participants discussed the issues of the SIETS authority and the algorithm of actions under the new law “On the energy efficiency in buildings”. They discussed the issue of training inspectors on the energy efficiency in buildings and energy certification, the role of SIETS in conducting energy audits and certification of engineering equipment in buildings.

Monitoring of ODS handling

In 2020, letters were sent to organizations using ODS, HFCs and natural refrigerants requesting reports on use of refrigerants in 2019. According to the results of the survey, a report was drawn up on the consumption of ODS, HFCs and natural refrigerants in Kyrgyzstan.

Recovery and recycling of refrigerants

At the end of 2020, data collection on the recycling and recovery of refrigerants was carried out. According to the monitoring results, the amount of HCFC-22 recovered was 1060 kg, including 115 kg purified. For the entire period of the project, the extracted CFC-12 (HCFC-22) **20803 (10202) kg, 6885 (933) kg** were purified. The table below summarizes the results of recovery and recycling of refrigerants for the entire period of Ozone Center operation.

Years	Recovered (kg)		Recycled (kg)	
	CFC-12	HCFC-22	CFC-12	HCFC -22
2003	750	0	0	0
2004	2864,6	0	1101,9	0
2005	3930,8	0	1501,4	0
2006	1569,8	0	1013,7	0
2007	1900	0	588	0
2008	2142,8	0	700	0
2009	2734	0	843	0
2010	1939	0	707	0
2011	896	0	187	0
2012	721	1109	83	162
2013	588	1517	54	228

2014	325	1158	45	78
2015	158	1255	27	50
2016	123	1420	22	69
2017	61	1004	12	52
2018	58	964	0	70
2019	0	1015	0	109
2020	0	1060	0	115
Total	20803	10202	6885	933

Support local industrial sector in reducing the use of HCFCs

In the framework of UNDP project phase out HCFCs in the Kyrgyz Republic (stage 2), tools and equipment were purchased for refrigeration technicians, training centers and professional lyceums. The main objectives of the purchase of tools and equipment are:

- capacity building of professional lyceums in training and education of refrigeration technicians;
- educational and technical capacity building of training centers for the training of refrigeration technicians;
- capacity building of refrigeration technicians to switch to alternative ozone-friendly technologies.

Currently, the handed out equipment and tools are used for their intended purpose, namely for training and certification of refrigeration technicians and improving the level of service, installation and repair of refrigeration equipment. The staff of the Ozone Center regularly monitors the use of handed out equipment and tools. The equipment should provide a significant incentive for the evolving of the refrigeration experts, who will also be familiar with the requirements of the Montreal Protocol on substances that deplete the ozone layer, and will achieve positive results in reducing HCFC consumption in the Kyrgyz Republic.

In January and February 2020, the purchase of refrigeration unit components (refrigerating chambers) for a demonstration project was conducted. Refrigerating chambers operating on natural refrigerants was assembled. For the refrigerating chambers, the following works were carried out - sheathing, insulation and installation of refrigeration units.

In 2020, a bid was held through UNDP for the purchase of special equipment to improve the technical capacity of the refrigeration and air conditioning equipment maintenance and repair sector for a total of US \$ 90,000. The list of equipment is presented below.

№ п/п	Наименование
1.	A RESERVOIR (GAS HOLDER) FOR STORING LIQUEFIED GAS WITH A VOLUME OF 4.5 M3 OR MORE
2.	TWO STAGE VACUUM PUMP
3.	REFRIGERANTS RECYCLING AND RECOVERY UNIT
4.	
5.	KIT SPARES FOR REFRIGERANT RECOVERY UNIT
6.	PORTABLE RECOVERY STATION
7.	
8.	SPARE KITS FOR PORTABLE RECOVERY STATION
9.	CYLINDER FOR REFRIGERANT WITH OFP
10.	CYLINDER FOR RECOVERY

In August 2020, a bid was held to purchase Free Cooling System from Barantech, Turkey, to control the air conditioning system. **In December 2020**, the equipment was purchased and transported to Kyrgyzstan. This system helps to reduce energy consumption at mobile stations. This equipment will be installed as demonstration projects to show mobile company specialists the benefits and cost-effectiveness these systems, since they reduce energy consumption.

FCS 190 Model C Specifications	Condition	Quantity
Inlet and outlet units	Yes	3
Remote control	Yes	3
Two air-conditioners control	Yes	3
Outdoor execution mode	Yes	3
Automatic opening and closure functions of jalousie	Yes	3
Cooling capacity ($\Delta T=7^{\circ}\text{C}$) (kW)	5,1	3
Specific cooling capacity ($\text{W}/^{\circ}\text{C}$)	732	3
Wind Capacity (Max. in) (m^3/h)	2145	3
Outdoor temperature ($^{\circ}\text{C}$)	($-40^{\circ}\text{C} / 60^{\circ}\text{C}$)	3
Rated Voltage (VDC)	-48	3
Input Power (W)	190	3
Air Cleaning Filter	G4	3
Net Weight (kg)	32	3
Dimensions (H x W x D):	550x540x500	
Warranty (Standard)	1 Years	
Instructions for the use and maintenance must be in Russian or English	Yes	

List of beginner refrigeration technicians, who received a set of equipment for servicing RAC systems in 2020

No.	Name	Work place	Place and date of handing out of equipment
1.	Kotelnikov Dmitry	PE, Bishkek	Bishkek, June 10, 2020
2.	Pidenin Nikolay	PE, Bishkek	Bishkek, June 10, 2020
3.	Rayysov Zhenishbek	PE, Bishkek	Bishkek, June 10, 2020
4.	Suyumbai Daniyar	PE, Bishkek	Bishkek, June 10, 2020
5.	Toktosunov Salamat	PE, Bishkek	Bishkek, June 10, 2020
6.	Yahyaev Nikolay	PE, Bishkek	Bishkek, June 10, 2020
7.	Zholchubekov Bolot	PE, Bishkek	Bishkek, June 10, 2020
8.	Ondobaev Azamat	PE, Bishkek	Bishkek, June 10, 2020

9.	Doran Ulukmyrza	PE, Bishkek	Bishkek, June 10, 2020
10.	Kubatbekov Talant	PE, Bishkek	Bishkek, June 10, 2020
11.	Ibraimkulov Nurbek	PE, Bishkek	Bishkek, June 19, 2020
12.	Raimberdiev Batyrally	PE, Bishkek	Bishkek, June 19, 2020
13.	Jabborov Nurullo	PE, Bishkek	Bishkek, June 19, 2020
14.	Jenishbek uulu Tynchtykbek	PE, Bishkek	Bishkek, June 19, 2020
15.	Mirtadzhiev Mirsaid	PE, Bishkek	Bishkek, June 19, 2020
16.	Abdyrasakov Islam	PE, Bishkek	Bishkek, June 19, 2020
17.	Sharsheev Misirbek	PE, Balykchy, Issyk-Kul oblast	Bishkek, June 19, 2020
18.	Turuzbekov Kairat	PE, Bishkek	Bishkek, June 19, 2020
19.	Chalbarakov Zhumabek	PE, Bishkek	Bishkek, June 19, 2020
20.	Mamazov Arafat	PE, Bishkek	Bishkek, June 19, 2020
21.	Dubskiy Dmitriy	PE, Bishkek	Bishkek, June 19, 2020
22.	Streltsov Artem	PE, Talas oblast	Cholpon-Ata, June 26, 2020
23.	Kumarbaev Ryskul	PE, Batken oblast.	Cholpon-Ata, June 26, 2020
24.	Bakalov Oleg	PE, Bishkek	Bishkek, September 16, 2020
25.	Madjanchinov Muhammed	PE, Naryn oblast	Bishkek, September 16, 2020
26.	Osmonov Aman	PE, Naryn oblast	Bishkek, September 16, 2020
27.	Hidriev Temirbek	PE, Bishkek	Bishkek, September 16, 2020
28.	Talipov Arsen	PE, Bishkek	Bishkek, September 16, 2020
29.	Mamedov Bahtiyar	PE, Chyi oblast	Bishkek, September 16, 2020
30.	Zhuraev Mannobzhan	PE, Osh	Osh, September 25, 2020
31.	Abdullaev Bayish	PE, Osh	Osh, September 25, 2020
32.	Mirtadjiev Mirsaid	PE, Osh	Osh, September 25, 2020
33.	Dzhumataev Bektur	PE, Bishkek	Bishkek, November 11, 2020
34.	Abdyjapar uulu Salamat	PE, Bishkek	Bishkek, November 11, 2020
35.	Maksatov Abyke	PE, Bishkek	Bishkek, November 11, 2020
36.	Mamatkerimov Elzar	PE, Jalal-Abad oblast	Bishkek, November 11, 2020
37.	Anarbek uulu Taalibek	PE, Bishkek	Bishkek, November 11, 2020

List of Recipients of refrigerant recovery machines in 2020

No.	Name	Work place	Place and date of handing out of equipment
1.	Sattarov Mars	PE, Batken oblast	Bishkek, March, 2020
2.	Zhuraev Mannobzhan	PE, Osh	Osh, September 24, 2020

3.	Abdullaev Bayish	PE, Osh	Osh, September 24, 2020
4.	Mirtadjiev Mirsaid	PE, Osh	Osh, September 24, 2020
5.	Rempromholod LLC	Bishkek	Bishkek, November 11, 2020
6.	Chargynov Mirlan	PE, Chyi oblast	Bishkek, November 11, 2020
7.	Sherkul uulu Shergazy	Bishkek	Bishkek, November 11, 2020
8.	Mamasaliev Tilekбай	PE, Cholpon-Ata	Cholpon-Ata, October 1 2020
9.	Zhetybaev Bakas	PE, Cholpon-Ata	October 1 2020

In 2020, in the framework of the project stimulation of end users to switch to alternatives of HCFCs and HFCs, negotiations were held with end users to replace refrigeration units operating on R22 with units, working on propane. Propane does not deplete the ozone layer and its GWP = 3. These units were handed over to end users for practical demonstration of the use of natural refrigerants in the commercial sector.

List of Recipients of condensing units operating on R290 (propane) in 2020

№	Ф.И.О.	Количество	Место работы	Место и дата выдачи оборудования
1.	Technical Center LLC Cholpon-Ata	10 pcs	Cholpon-Ata	Cholpon-Ata, September 15, 2020
2.	Begishev Ilya	4 pcs	PE, Osh	Osh, September 24, 2020
3.	Karimov Rasul	3 pcs	PE, Osh	Osh, September 24, 2020
4.	Abdusamatov Avaz	3 pcs	PE, Osh	Osh, September 24, 2020

On June 26, 2020, the annual 15th congress of specialists of the refrigeration industry of the Kyrgyz Republic was held, organized by the Ecoholod RPA with the support of the Ozone Center of Kyrgyzstan. During the congress, a report on the activities of Ecoholod RPA for 2019 was considered, a work plan for 2020 was outlined taking into account the recommendations of all participants. The following topics were discussed during the congress: Ratification of the Kigali Amendment to the Montreal Protocol by the Government of the Kyrgyz Republic and political measures to implement the goals and commitments of the Kigali Amendment; The role of the cold chain in the food industry and retailing; Modern refrigerants and compressor oils used in Kyrgyzstan; Control and supervision of refrigeration equipment by the State Inspectorate for Environmental and Technical Safety; HFC consumption trends in Kyrgyzstan. There was 28 participants and representatives from all 7 oblasts of Kyrgyzstan participated the congress.

Training of students from universities and educational organizations of secondary and primary educational organizations to prepare specialists for refrigeration and treatment industries

Since 2008, RPA Ecoholod together with the department Machines and Devices for Food Production at Kyrgyz State Technological University named after I. Razzakov have prepared mechanical engineers in the field of refrigeration and air conditioning. RPA Ecoholod educates electrical mechanics on refrigeration service at Professional Lyceums No.3, No.93, No.94 in Bishkek

and Professional Lyceum No.1 in Jalalabad and at the training center of RPA Ecoholod. These kind of activities are carried out with the direct participation of the members of the RPA Ecoholod Association.

According to the agreement between the Ozone Center, RPA Ecoholod and faculty Applied Biotechnologies (ABT), MGU in Moscow, 65 people from Kyrgyzstan entered to the faculty "Refrigeration Engineering" at the above-mentioned Russian university during last seven years. In 2020, 5 students graduated from "Refrigeration Engineering" faculty. Currently, all entrants are studying free of charge at the expense of the Russian Federation.

Number of prepared refrigeration technicians in 2019 for the refrigeration sector of the Kyrgyz Republic

	Educational organization	Number of prepared refrigeration technicians in 2017
1	RPA Ecoholod	27 electrical mechanics
2	KSTU n.a. I.Razzakov	no graduates
3	PL №3 Bishkek	50 electrical mechanics
4	PL №93 Bishkek	36 electrical mechanics
5	PL №94 Bishkek	34 electrical mechanics
6	PL №1 Jalalabad	no graduates
7	ABT MGU in Moscow	5 mechanical engineers
8	Tehnotreningcenter LLC	no graduates
9	PL at Kyrgyz-Uzbek University, Osh	43 electrical mechanics
	Total:	195 refrigeration technicians

Meeting of the Interagency Ozone Coordination Commission

In accordance with Paragraph 2 of the Resolution of the Government of the Kyrgyz Republic from July 29, 2016 No. 419 “On Approval of the Program for phase out of Ozone Depleting Substances for the Period 2016–2020 (Phase 3)”, in order to fulfill the obligations of the Kyrgyz Republic under the Montreal Protocol on Substances, that Deplete the Ozone Layer, in accordance with the Law of the Kyrgyz Republic “On the Protection of the Ozone Layer” and articles 10 and 17 of the constitutional Law of the Kyrgyz Republic “On the Government of the Kyrgyz Republic” the Government of The Kyrgyz Republic instructed the State Agency on Environment Protection and Forestry under the Government of the Kyrgyz Republic form an interagency coordinating committee on ozone for implementation of the Program.

On June 12, 2020, a meeting of the interagency coordination commission was held. At the meeting reports on the activities of the Ozone Center and legislative and political measures to implement the provisions of the Kigali Amendment to the Montreal Protocol were presented. Participants were told in detail about the Kigali Amendment and the need to develop a state program to implement the Amendment. The following issues and issues were discussed at this meeting:

- Features and timing of the introduction of HFCs licensing system in Kyrgyzstan;
- The problem of import and export of ODS within the Customs Union, and how different countries solve this problem.
- Informing the industrial sectors about what will happen after the ratification of Kigali Amendment, because this work will contribute to the implementation of measures under the state program, and prepare the industry for the phase down of HFCs.
- Development of legislation on HFCs, revision of the current laws on ODS and inclusion of fluorinated gases. The question was raised about the inclusion of PFCs in the legislation.
- Issue of training specialists: Since the new alternatives to HFCs - ammonia, propane, isobutane,

carbon dioxide, are associated with technical safety, fire safety, explosion safety and toxicity. The issue of training specialists on how to handle natural refrigerants was discussed.

- The question of the size of customs duties and payments for HFCs. Do they need to be introduced as in Europe?

- The issue of introducing new technologies, possible investment projects, demonstration projects to create sustainable cold chains in Kyrgyzstan.

It was decided to train customs, border officers and SIETS employees, and possibility to conduct training on ODS and HFCs for these bodies with the issuance of certificates.

It was said about the need to develop short-term strategies on the basis of a government decree, which will describe the roles of each state body, Ministry of economy, environmental organizations, and after that this strategy will send to the organizations that are part of the Interagency Ozone Coordination Commission for considering and adoption .

Conducting a campaign to raise public awareness

Activities dedicated to the celebration of September 16, World Ozone Day were organized and conducted. Posters with the motto “Ozone for life, 35 years of the ozone layer protection” and information brochures “Protection from harmful UV” and “Montreal Protocol and the protection of human health”, and the brochure “Current state of the ozone layer”, the posters “Safety is on the first place” in Russian and Kyrgyz languages.

On September 16, 2020, in Bishkek, a workshop for teachers of gymnasium No. 69 and a secondary school in the village of Budenovka, Chui region was held. During the workshop, lecturers spoke in detail about the protection of the ozone layer and the Montreal Protocol on Substances that Deplete the Ozone Layer, energy efficiency in the refrigeration sector, 17 Sustainable Development Goals (SDGs), SDG12: responsible consumption and production, sustainable consumption of products containing ozone-depleting substances, the role and importance of the sustainable cold chain in the food industry and trade for the preservation of food. The following information materials were distributed to the participants: posters “Behavior lines for sustainable development” on Russian and Kyrgyz languages, “Safety is on the first place” on Russian and Kyrgyz languages, “World ozone Day”, brochure “Current state of the ozone layer”, “Protection from harmful UV” and “Montreal Protocol and human health”. 20 teachers took part in the workshop.

On September 17, 2020, the Ozone Unit organized a workshop at the Institute of Innovative Professions in honor of the International Day for the Preservation of the Ozone Layer. Representatives of NOU made presentations about the State Program on phase-out of ODS in Kyrgyzstan and achievements in the scientific study of the atmosphere and the ozone layer at the Issyk-Kul OMD scientific station, the Montreal Protocol, its history and current achievements, the Kigali Amendment and the schedule for phasing down HFCs in Kyrgyzstan and the world. Posters “Sustainable Development Goals and the Montreal Protocol on Substances that Deplete the Ozone Layer”, “Safety in on the First Place”, brochure “The Current State of the Ozone Layer” were distributed to participants. 20 participants, including associate professors and professors of the Institute of Innovative Professions, attended the event.

On September 15, 2020 at the Kyrgyz State University of Geology, Mining and Development of Natural Resources named after U.Asanalieva a workshop on the theme "September 16 International Day for the Preservation of the Ozone Layer" was held, dedicated to World Ozone Day. The purpose of this workshop was to raise awareness among ecology teachers on the protection of the ozone layer, biological diversity, the importance of the ozone layer and the consequences of solar ultraviolet radiation

on the human body after the depletion of stratospheric ozone. 9 teachers took part in the event. Posters “Sustainable Development Goals and the Montreal Protocol”, “World Ozone Day”, “Safety is on the First Place” and brochures “Protecting Against Harmful UV”, “The current state of the ozone layer” and “Montreal Protocol and Human Health” were handed out.

On September 17, 2020, NOU organized a workshop at the vocational lyceum No. 93 in Bishkek. NOU representatives spoke about the Montreal Protocol, its history and the Kigali Amendment, and the schedule of HFC consumption phase down. They also explained about the ozone layer, its role for humans and the consequences of ozone layer depletion, and the problem of the climate change. At the end, posters “Sustainable Development Goals and the Montreal Protocol”, “World Ozone Day”, “Safety is on the First Place” and brochures “Protecting Against Harmful UV”, “The current state of the ozone layer” and “Montreal Protocol and Human Health” were handed out. 12 people attended the workshop. At the workshop, equipment for young refrigeration technicians was distributed.

On September 22, 2020, in Osh city, the Ozone Center of Kyrgyzstan and the State Agency for Environmental Protection and Forestry (SAEPF) organized a workshop for teachers from various schools in Osh city. The main topics of the workshop were “Ozone Layer Protection and the Montreal Protocol on Substances that Deplete the Ozone Layer”, “Energy Efficiency in the Refrigeration Sector”, “SDG 12: Responsible Consumption and Production. Global Search for Sustainable Schools”, “Sustainable Consumption of Products containing Ozone Depleting Substances”, “The Role of Cold Chain in Food Processing and Trade”. The teachers were given posters “Sustainable development goals and Montreal Protocol on Substances Depleting the Ozone Layer”, “Behavior lines for sustainable development” on Russian and Kyrgyz languages, “Safety is on the first place” on Russian and Kyrgyz languages, “World ozone Day” and brochures “Protecting Against Harmful UV”, “The current state of the ozone layer” and “Montreal Protocol and Human Health”. 25 teachers from different schools attended the workshop.

On September 29, 2020, in the Bakai-Ata village, Talas oblast, a workshop for school teachers in honor of September 16 World Ozone Day was held. The workshop was organized jointly with the SAEPF. The main topics of the workshop were: Protection of the ozone layer and the Montreal Protocol on Substances that Deplete the Ozone Layer, it was told about the harm of UV to human, protection against harmful UV; Identification of ODS and their use; Energy efficiency in the refrigeration sector; Sustainable consumption of products containing ODS; Disposal of refrigerants and refrigeration equipment; The role of the cold chain in providing food to the world. Topics like SDG 12: Responsible Consumption and Production and A global search for sustainable schools were detailed. Posters “Sustainable development goals and Montreal Protocol on Substances Depleting the Ozone Layer”, “Behavior lines for sustainable development” on Russian and Kyrgyz languages, “Safety is on the first place” on Russian and Kyrgyz languages, “World ozone Day” and brochures “Protecting Against Harmful UV”, “The current state of the ozone layer” and “Montreal Protocol and Human Health” were distributed to the participants. 20 teachers attended the workshop.

October 2, 2020 NOU of Kyrgyzstan together with the State Agency for Environmental Protection and Forestry organized a workshop in the village of Kazan-Kuygan for teachers of the Naryn region. The main topics of the workshop were: “Ozone Layer Protection and the Montreal Protocol on Substances that Deplete the Ozone Layer”, “Energy Efficiency in the Refrigeration Sector”, “SDG12: Responsible Consumption and Production. Global Search for Sustainable Schools”, “Sustainable Consumption of Products containing Ozone Depleting Substances”, “The Importance of the Sustainable Cold Chain in Food Processing and Trade”. Posters “Sustainable development goals and Montreal Protocol on Substances Depleting the Ozone Layer”, “Behavior lines for sustainable development” on

Russian and Kyrgyz languages, “Safety is on the first place” on Russian and Kyrgyz languages, “World ozone Day” and brochures “Protecting Against Harmful UV”, "The current state of the ozone layer" and “Montreal Protocol and Human Health” were distributed to the participants. 16 teachers attended the workshop.

In 2020, the following literature was developed, published for technicians of the refrigeration sector and representatives of various organizations and government bodies:

1. Brochure “Real alternatives to hydrochlorofluorocarbons and hydrofluorocarbons” - 200 copies
2. Brochure “Legislative measures to reduce the consumption of hydrofluorocarbons in the Kyrgyz Republic” - 100 copies
3. The log book for refrigerants - 300 copies
4. Brochure “Modern air conditioners. Installation, operation and repair ”- 200 copies
5. Brochure "Automation of Refrigeration Units and Air Conditioning Systems" - 200 copies
6. Brochure “Guide for Industrial Refrigeration Systems” - 200 copies
7. Poster "Two-stage ammonia refrigeration unit" – 20 copies
8. Poster "Cascade ammonia-carbon dioxide refrigeration unit" – 20 copies
9. Poster “Ozone for life, 35 years of the ozone layer protection” – 20 copies
10. Brochure “Protection from harmful UV” – 200 copies
11. Brochure “Montreal Protocol and the protection of human health” – 200 copies
12. Brochure “Current state of the ozone layer” – 200 copies
13. Poster “Safety is on the first place” in Russian language – 200 copies
14. Poster “Safety is on the first place” in Kyrgyz language– 200 copies
15. Brochure “Rules of Safety for Refrigeration Systems Operating on Refrigerant R717 (Ammonia)” in Kyrgyz language – 100 copies
16. HVAC Systems Design Guide – 100 copies
17. Guidance on the use of propane as an alternative to HCFC 22 in refrigeration and air conditioning in Kyrgyz language – 100 copies
18. A practical guide for refrigeration and air conditioning technicians in Kyrgyz language – 100 copies
19. Poster “Green technologies for HFCs replacement” - 50 copies
20. Brochure “A practical guide to certification of refrigeration and air conditioning professionals” on Kyrgyz language – 150 copies
21. Brochure "In the footsteps of exploits" for RCYCET - 50 copies

List of official letters for the reporting period

1. Letter to the State Customs Service on reporting on the import of ODS and their substitutes HCFC HFCs and natural refrigerants for 2019
2. Letters to the organizations on reporting of ODS, HCFCs, HFCs and natural refrigerants and blowing agents import for 2019
3. A letter to the State Customs Service on the approval of new HS codes for ODS and HFCs in accordance with Resolution of the Government of the Kyrgyz republic No. 230, April 30, 2020.

4. A letter to the State Customs Service on the appointment of the training workshops on the import/export/transit of ODS and ODS containing equipment for the southern and northern regions of the country.
5. A letter to the State Inspectorate for Technical and Environmental Safety on the appointment of training workshops on energy efficiency of buildings and their engineering systems for the southern and northern regions of the country.
6. A letter to the State Inspectorate for Technical and Environmental Safety (SIETS) on the conduction of state control of the organization Riman LLC, which illegally imported ODS based blowing agents.
7. A letter to the State Service for Combating Economic Crimes on the conduction of a state audit of the organization Riman LLC, which illegally imported ODS based blowing agents.
8. Letter to the Ministry of Economy of the Kyrgyz Republic with a negative opinion on the draft Resolution of Government of The Kyrgyz republic on the new Regulation on the movement of ozone-depleting substances and products containing them, and accounting for ozone-depleting substances in the implementation of mutual trade of the member states of the Eurasian Economic Union.
9. Letters to the organizations Storozhenko PE, Buudan LLC, Biast LLC, PE Ovsyannikova , PE Podkopaev, Promkholod LLC, KaribeYug LLC, CJSC Shoro, Lotar LLC, Vinterlux LLC, Ntek LLC, PE Ovsyannikova, China Petrol Company Junda LLC, Grant Profit Group LLC, CJSC Arpa named after N. Urmanbetova, Riman Company LLC, Golden Drinks OJSC Samsung Service LLC, Oshtorgmontazh LLC and Rempromkholod LLC about reporting on the import of ODS, HCFCs, HFCs and natural refrigerants and blowing agents in 2020.

Regular reporting on the management of ODS to the Secretariat of the Montreal Protocol, the Multilateral Fund of the Montreal Protocol, UNEP, UNDP

Data on ODS consumption in 2019 were sent to the Multilateral Fund of the Montreal Protocol in June 2020. Reports on the activities of the Ozone Center were sent to the UNEP Division of Technology, Industry and Energy in January 2020. Reports on the progress of the implementation of the HPMP in 2020 and financial reports were sent to UNDP in January 2021.

The international cooperation

June 10, 2020 a webinar Alternative Refrigerants for High Ambient Temperature (HAT) Countries. Webinar gave the knowledge acquired from all relevant HAT assessment and research projects with an emphasis on the research projects conducted by UNEP/UNIDO in relation to the technical feasibility of alternatives to ensure safe deployment of alternative refrigerants.

June 19, 2020 the Eurasian Economic Union and ECA country-to-country online meeting⁶ where participants discussed the issue of introducing amendment to the title of the List D, as well as introduction of HFC-related control measures in those EEU member states that have already ratified the Kigali Amendment (Armenia and Kyrgyzstan).

June 26, 2020 Kigali in Action Webinar “Drive policy changes and transfer technology in support of sustainable solutions in refrigeration”. The topics discussed included World Refrigeration Day, the impact and importance of cooling, improving of energy efficiency to accelerate the climate benefits of the Kigali Amendment. Lessons learned from Enabling Activities and future activities to facilitate the HFC phase-down

June 26, 2020 Webinar about COLD CHAIN 4 LIFE. The participants learned about and discussed technology, food waste, health, environment and energy considerations associated with the Cold Chain and advocating for best practices in relation to technology selection, minimizing food waste

in the supply chain process, stimulate wise selection of technology, minimize leakage of refrigerants and maximizing energy efficiency and roles of different groups.

June 25 –July 8, 2020 Symposium/webinar “Heating and Cooling with Natural Refrigerants - a Way to Decarbonization”. The webinar included topics related to Heat Pumps and Challenges to Decarbonization and Current Trends in Refrigeration Technology. Participants learned about Energy Consumption in RAC, Calculation, Simulation and Application of Commercial and Light Industrial CO₂Heat Pumps and Hydrocarbon Heat Pumps for Light Industrial Applications. Special focus was on safety Aspects of Propane Heat Pumps for Residential and Commercial Application.

July 3, 2020 ECA country-to-country meeting on topic: Training and checklist for environmental inspectors and Albania’s experience in dealing with contaminated refrigerants

July 8, 2020 The 3rd ECA online meeting Labeling of refrigerant cylinders. Topics like F-gas Regulation requirements for labelling of products and equipment that contains F-gases, what information should the label content were presented and discussed. Participants learnt about the content of the label in line with the F-gas legislation, Directives of EU on transportable pressure equipment and other legislations.

July 14–16, 2020 42nd Meeting of the Open-ended Working Group of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer (OEWG 42). Online technical meeting on replenishment of the Multilateral Fund was conducted and funding requirements for HFC production sector and HFC-23 mitigation were presented. Nominations for Critical Use Exemptions for Methyl Bromide for 2021 and 2022 were presented. Implementation of the Montreal Protocol for the period 2021–2023 was discussed.

July 15, 2020 Virtual Side Event: How can we successfully combine ODS phase-out and early actions on HFC? The speakers shared their experience from various activities such as hydrocarbon refrigerant production, trainings for technicians on the safe handling of natural refrigerants in Latin America and the Caribbean.

August 5, 2020 Awareness raising webinar “Scaling-up GCF projects on energy-efficient and climate-friendly cooling” by The Green Climate Fund and UNEP on the benefits of energy-efficient and climate-friendly cooling.

August 5, 2020 4th ECA online meeting, Topic: Gender Mainstreaming into the Montreal Protocol. The main focus was on woman from RAC sector and how to incorporate gender perspective into the Montreal Protocol projects, capabilities to facilitate gender mainstreaming into projects. Different speakers shared their ideas how to incorporate gender issues into the Montreal Protocol projects and start the activities for gender mainstreaming in their work.

September 9, 2020 5th ECA online meeting on Enabling activities and Kigali Amendment ratification. During the meeting Covid-19 situation in the ECA region, status of enabling activities for early ratification of the Kigali Amendment and Status of ratification, Prospects for HFC phase-down plan preparatory projects and Topics for future ECA online meetings were discussed. Countries reported on the status of Kigali Amendment ratification.

September 30, 2020 live webinar of GIZ Proklima and the Environmental Investigation Agency to exchange information on the current update of the standard IEC 60335-2-40, its technical implications and environmental consequences, climate-friendly cooling and safe use of hydrocarbon refrigerants in room air conditioners.

October 7, 2020 ECA online meeting on HFC policy and legislative measures focusing on the adoption of early HFC policy and legislative measures in Article 5 countries to meet the HFC freeze in 2024. Speakers shared information about Prospects of Article 5 countries meeting the HFC freeze in 2024, HFC policy, measures which worked best in the EU and recommended measures for early

implementation and legislative measures to facilitate the HFC freeze. Participant told about country feedbacks and measures implementing in their countries.

October 15, 23 2020 webinars on HFC licensing systems, in cooperation with the Ozone Secretariat and the National Ozone Units (NOUs) of Argentina and Tunisia. The webinars provided guidance to parties on the specific requirements in the field of import/export licenses applicable to them once they ratify the Kigali Amendment and first-hand experience from parties who have initiated or completed the development of their HFC licensing systems. An emphasis was on the legislation and policy measures, adaptation of the customs registry system and the process for developing an electronic licensing/permit system.

November 2, 2020 Montreal Protocol Eastern European group meeting to nominate candidates for positions in the relevant Montreal Protocol bodies

November 4, 2020 ECA meeting on collection and reporting of HFC data. The agenda included Ozone Secretariat's presentation on HFC data reporting, discussion on best practices in collecting and reporting HFC data and ensuring data reliability and topics for next ECA meetings

November 5, 2020 REHVA Brussels Summit online discussed solutions in the HVAC and building sector that faces the unprecedented challenge of the current pandemic with a focus on practical implementation and other topic was how EU policies support good quality energy renovation that delivers guaranteed performances also in terms of improved indoor climate quality.

November 12, 2020 Second Informal Meeting on the Budgets. The issues discussed include the following funding options for the Vienna Convention Trust Fund, Funding options for the Montreal Protocol Trust Fund, funding of additional meetings in and 2021 budgets.

November 23-27, 2020 The combined twelfth meeting of the Conference of the Parties to the Vienna Convention, part I, and the Thirty-Second Meeting of the Parties to the Montreal Protocol (COP12(I)/MOP32). Discussed topics include installing, operating and servicing RAC systems during Covid-19, Harmonized System (HS) codes for HFCs and pursuing the Cold Chain in short and Long-Term for Sustainable Development. The focus was on what the main challenges are and what can be done for sustainable Cold Chain implementation. There was Practical demonstration of the electronic licensing system for HFCs.

MOP32 addressed the issues like unspent funds under the Multilateral Fund from the current fiscal period to be used for funding projects and activities in the next triennium; nominations for critical-use exemptions for methyl bromide and compliance and reporting issues addressed by the Implementation Committee.

December 2, 2020 ECA roundtable discussion between countries on how to prepare for the HFC freeze and phase down and discussion on topics for next ECA meetings. Countries told about status of Kigali Amendment ratification and challenges and measures for HFC phase down.

December 9, 2020 Coordination meeting with Eurasian Customs Union countries on Kigali Amendment ratification for discussion between countries on how to prepare for the HFC freeze and phase-down and the establishment of the HFC import/export licensing systems that should be harmonized in-between the Eurasian Customs Union countries.

December 16, 2020 Centro Studi Galileo webinar on Future for the HVAC/R Sector and new technologies and refrigerants. Speakers reviewed the F-gas regulation, COVID-19 and vaccines distribution, certification for sanitizing and disinfecting HVAC/R systems, with particular attention on the involvement of refrigeration and the cold chain concerning COVID-19 vaccines distribution, in light of the ultra-low temperatures required for its storage and transportation.

January 20, 2021 ECA meeting on standards on flammable refrigerants, refrigerant specifications and technicians competencies. The agenda covered topics like Standards on refrigerant specifications, Climate relevance of the commercial refrigeration sector, flammable refrigerant charge limits in the commercial sector and certification and registration of RAC technicians.

In 2020, there was conducted updating and replenishment with thematic information the following sites: www.climate.kg; www.ozonecenter.kg; www.ecoholod.com.kg. These websites are regularly updated as soon as new information appears.

All activities carried out within the framework of the project were covered in the main mass media of the republic:

- “Ayil Demi” newspaper, No. 3 (141), May 2020, an article about experts of the refrigeration sector in Kyrgyzstan.
- <http://ekois.net/kyrgyzskaya-respublika-ratifikirovala-kigalijskuyu-popravku-k-monrealskomu-protokolu-po-veshhestvam-razrushayushhim-ozonovyj-sloj/>
- http://www.president.kg/ru/sobytiya/17068_ratificirovani_popravki_kmonrealskomu_p_rotokolu_poveshestvam_razrushayushim_ozonoviy_sloy
- <https://www.amcham.kg/юридические-новости-от-grata-international-июль-2020/>
- https://24.kg/obschestvo/165160_segodnya_vbishkeke_pogoda_meropriyatiya_datyi/
- <http://www.ecoholod.com.kg/?p=602>
- http://www.climate.kg/index.php?option=com_content&view=article&id=232%3A2020-09-11-06-09-14&catid=2%3A2012-06-07-00-42-07&Itemid=20&lang=ru
- http://www.inform.kg/ru/istoricheskie_dati/305
- <http://ekois.net/category/tematicheskie/ozonovyj-sloj>
- <https://www.kg.undp.org/content/kyrgyzstan/en/home/blog/2020/kyrgyzstan-beats-the-heat---ratification-of-the-kigali-amendment.html>
- <http://eco.akipress.org/news:1666850?from=portal&place=last&b=4>

Head of NOU

Mars Amanaliev