

Annual Progress Report

Date: February 1, 2011

Country: Kyrgyz Republic

Implementing agency: UNEP

National coordination agency: Ozone Center

Project title: Institutional Strengthening Project for the Montreal Protocol Implementation in the Kyrgyz Republic

Period covered: 1 January – December 31, 2010

1. Status of implementation of the activities

1.1. Realization of awareness raising campaign covering public and industrial sector on danger posed by ODS

In March 2010 a website www.ecacool.org, where the information on the protection of the ozone layer is available, was established and put into effect.

- On the 8th of September the Ozone Center organized a briefing on topic: “2010 – the year of final CFCs phase out in the Kyrgyz Republic”. It was devoted to The International Day of Ozone Protection.

The representatives of mass media, print media, TV, radio, and environmental NGOs were invited for the participation in the briefing. The detailed information on the work done by The Ozone Center for the period 2002-2010 was provided during the activity. An important aspect of the briefing was discussion of methods and ways of informing the public through the media. Journalists were able to replenish their store of knowledge for future creation in of the articles, broadcasts and reports on the above mentioned topics. 20 persons attended at the briefing.

For the reporting period of time the following literature was issued:

- The manual "Ozone layer of the Earth", Bekbolotova A.K., in Russian and Kyrgyz, 600 copies;
- "Questions and answers about the ozone layer" Ilyasov Sh.A., in Russian, 500 copies;
- "Saving the ozone. Climate change. Energy Efficiency. "translation and editing Ilyasov Sh.A., in Russian, 500 copies;
- Recommendations for implementation of State control of import / export of ODS and products containing them for the customs and environmental officials in Russian and Kyrgyz, 1000 copies;
- Guidelines on the replacement of gallons in the fire-extinguishing systems for ozone-safety alternatives " in Russian, 300 copies;
- Brochure " Depletion of the ozone layer and climate changing impact on the human " in Russian and Kyrgyz, 1000 copies;
- Educational package for secondary schools "Handbook for teachers: Ozzy Ozone" in Russian, 2300 copies;
- Educational package for secondary schools "Handbook for Pupils": Ozzy Ozone "in Russian, 2700 copies;
- “Ozone layer depletion”, Sakbaeva Z.I. in Kyrgyz language, 500 copies;
- Poster "Safety First: The potential negative effects of solar ultraviolet radiation on human health" in Russian, 1000 copies;
- The brochure "Ozone Action: Exit from labyrinth", 250 copies;

- The brochure "Vital Ozone graphics. Linkage with climate ", 250 copies;
- "Green Customs: A Guide on Multilateral Environmental Agreements", 4000 copies;
- Educational and cognitive game "Protect yourself from the sun" in Russian and Kyrgyz languages, 1000 copies;
- The brochure "What you need to know about the inhalation therapy of chronic respiratory diseases", 300 copies;
- Department of Journalism of Kyrgyz - Russian Slavic University, on the financial support of the Ozone Center issued a special 4th-issue of the student newspaper "The Ozone Reporter, 2,500 copies;
- In the September issue of the newspaper "Vitrina" was issued a module "16 September - International Day of the Ozone Layer Protection", circulation 20,000.

The information on the project activity was located in the major mass media of the Republic:

- 21.01.2010, the news agency akipress.kg – Information about the workshop "New technologies of inhalation treatment for chronic respiratory diseases and protection of the ozone layer";
- 21.01.2010, the news agency akipress.kg, «New equipment is handed to Asthma Club in Bishkek»;
- 21.01.2010, Radio station "Kabarlar": "Inhalation therapy of chronic respiratory diseases and protection of the ozone layer";
- 22.03.2010, the newspaper "Vecherny Bishkek", interview with the head of the Ozone Center Amanaliev M.K., author: Choi M.;
- 10.05.2010, TV EITR, broadcast Demilge: "The ozone layer and UV radiation";
- 21.05.2010, Public TV and Radio company, broadcast "Zamana": information about the ozone layer and UV radiation;
- The quarterly issue of the magazine "Science and technology" - Articles: " Protection of the ozone-saving the Earth ", " Regional Monitoring of the solar UV radiation in Kyrgyzstan ", author: Bekbolotova A.K.;
- A collection "Scientific potential of youth - the future of Kyrgyzstan", Bishkek, 2010; article: "Changes of ultraviolet level in spring in Bishkek", "What is the global solar UV index;
- 12.07.2010, the newspaper " Vecherny Bishkek", the article "Index of UV radiation in Kyrgyzstan", author: M. Choi;
- 14.07.2010, the newspaper "Slovo Kyrgyzstana", the article "Ozone holes - Terrestrial trouble", author: Shepelenko A.I;
- www.24.kg Article "By 2025 the level of greenhouse gases in the atmosphere over the Kyrgyzstan will come to nothing " Sh. Ilyasov (08/09/2010);
- www.akipress.kg Article "Kyrgyzstan has implemented the Country Programme on the Ozone Layer Protection" (08/09/2010);
- www.caresd.net Article "The Ozone Center of Kyrgyz Republic organized a briefing for journalists and NGOs “2010 – the year of CFC phase out in Kyrgyz Republic” (09/09/2010);
- www.ekois.net Article "The Ozone Center held a briefing devoted to International day of ozone layer protection”, (09/09/2010);
- TV-channel Anten TV – News - reportage from the promotional event location, dedicated to The International Day of the Ozone Layer Protection in Issyk Kul State University named after. K. Tynystanov, in Russian and Kyrgyz languages, (17/09/2010);
- Regional TV broadcast “Issyk-Kul TV” - "Ala-Too aymaktary" - report from the promotion event location, dedicated to The International Day of the Ozone Layer Protection in Issyk Kul State University named after. K. Tynystanov, in Kyrgyz language (16/09/2010);

- Newspaper "Vechernyi Bishkek", Article "Zone of healthy ozone", author: Choi M. 16/09/2010);
- Newspaper "Argumenty i Fauty", the article "Kyrgyzstan watches the Ozone Layer Protection" author: Studenikina A. (22/10/2010).

1.2. Dissemination of information related to new technologies and ODS alternatives

In the framework of TPMP project in the direction of MDI containing CFC, phase-out, dissemination of information about new technologies and ODS substitution was carried out through the asthma clubs establishment:

January 21, 2010 in the conference hall of special clinic of the Kyrgyz Republic (Bishkek) with the participation of the President of the Kyrgyz Thoracic Society, Head of the Department of Pulmonology and Allergology, M. D., Professor T.M. Sooronbaev, director of special clinic, M.D., professor Sagymbaev M.A., Head of the Ozone Unit Amanaliev M.K. an asthma Club was opened. During the opening modern equipment (spirometer, peak flow meter, nebulizer, computer office equipment and educational materials) was handed to the Club.

Also a workshop "New inhalation technologies for chronic respiratory diseases treatment and ozone layer protection" was held for doctors. 38 people attended the workshop. During the workshop the issues of the ozone layer, its protective role, problems of ozone depletion, increased ultraviolet radiation (UV) effects and contemporary approaches of human protection against the harmful effects of UV were discussed.

During the first half of 2010 the issues regarding dissemination of information about new technologies and substitution of ODS in other areas were worked out at a time of business travels of Ozone Center assistants Myrsaliev N.S., Ilyasov Sh.A. and national consultants Zhumaliyev J., V. Garifulin to all regions of the Republic.

1.3 Collection and processing of data (ODS consumption).

The monitoring of the activities within the TPMP is still ongoing. National consultants, under the supervision of the Ozone Centre is responsible for the continuous follow-up of the activities.

During the reporting period, national consultants realized missions for checking activity of the recycling centers:

- January 25-28, 2010, national consultants Zh.O. Zhumaliev and V.K. Garifulin realized missions to the districts of Osh region for the purpose of monitoring activity carrying out;
- August 8-14, 2010, districts of Issyk Kul and Naryn regions, consultants Zh.O. Zhumaliev and U. Musabaev;
- August 22-28, 2010, districts of Chui and Talas regions, consultants Zh.O. Zhumaliev and U. Musabaev;
- December 19-26, 2010, districts of Osh and Jalalabat regions, consultants Zh.O. Zhumaliev and U. Musabaev

Amount of recycled CFC-12 for the reporting period (2010) is 1,939 kg., including 707 kg. of purified.

For the whole period of the project realization - 17,831 kg of R-12 were recycled and 6,455 kg purified.

Annual data of recycled and purified CFCs-12 is presented as following:

	Recycled (kg)	Purified (kg)
Year	CFC-12	CFC-12
2003	750	0
2004	2864,6	1101,9
2005	3930,8	1501,4
2006	1569,8	1013,7
2007	1900	588
2008	2142,8	700
2009	2734	843
2010	1939	707
Total amount	17831,0	6455,0

Table of recycled and purified CFC-12 for the period of 2010

№	Equipment transfer date	Equipment recipient	Quantity and type of equipment		Amount of recovered R-12	Including recycled (purified) R-12
			Recovery device for refrigerants TX-200	Handle recovery pump		
1	2008	Vocational school № 3	1			
2	2008	Kyrgyz State Technical University	1			
3	2009	Vocational school № 94		1		
4	2009	Vocational school № 6 at		1		
5	05.06.2003	PB Sheremetiev S.M.	1			
6	05.06.2003	PB Sorokin A.E.	1		33	
7	05.06.2003	PB Garifulin R.G.		1	73	
8	05.06.2003	Ltd. "Technichesky tsentr"	1	1	235	187
9	05.06.2003	JSC "Kyrgyztorhtechnika"	17	1	250	169
10	13.06.2003	Ltd. "NIS"	1		89	35
11	14.06.2003	Ltd. "Ayaz"		2	26	15
12	13.06.2003	PB Kudabaev T.R.	1		144	85

	3					
13	13.06.2003	PB Konnov Yu.S.	1		70	18
14	13.06.2003	Ltd. "Almas"	2		59	
15	14.06.2003	PB Mindubaev R.T.	2		258	91
16	14.06.2003	Private Company "Shoro"	1	1	32	
17	10.06.2003	Akhmedov A.A. (Kyzyl-Kiya)		1	15	
18	10.06.2003	PB Lukiyanchenko V.V.	1	1		
19	10.06.2003	JSC "Rembyttechnika" Jalalabat	1	2	42	7
20	11.06.2003	JSC "Oshtorgmontazh"	4	1	34	5
21	11.06.2003	JSC " Rembyttechnika"Osh		5	15	
22	01.10.2003	PB Usupov V.M.	1		43	
23	01.10.2003	PB Batenkov A.V.	1		62	18
24	08.10.2003	PB Manyurov T.L.	1		19	
25	08.10.2003	PB Vidiburenko Yu.D.	1		9	
26	08.10.2003	PB Manyurov D.T.		1	15	
27	08.10.2003	PB Razykov D.T.		1	10	
28	28.05.2004	PB Rahmatov S.O.		1	66	15
29	24.06.2004	PB Galler V.I.		1		
30	24.06.2004	PB Jumaliev S.S.		1	50	
31	21.06.2004	Ltd. "Titan-Yug-Service"		1	45	
32	20.10.2004	RPA«Ekoholod»		3	63	18
33	20.10.2004	PB Gorin V.M.	1			
34	20.10.2004	PB Jarabaev A.		1		
35	28.05.2005	Ltd. "S.B.T."		1	38	
36	24.12.2000	PB Orozaliev S.K.	1		125	32

	5					
37	24.12.200 5	PB Abdybek U.M.	1		37	12
38	25.12.200 5	PB Aitikeev R.B.		1	18	
Total:			43	30	1939	707

1.4 Facilitation and coordination of actions for elimination of consumption determined in the Country Programme.

Kyrgyz Republic will not issue permits to import CFC-12 in 2010. It is planned to develop the quota rules for ozone depleting substances (including HCFC) as new legal texts in 2011.

In the end of 2010, the experts of Ozone Center completed the development of two technical regulations with experts' support - "Technical regulations for the safe use of pesticides" and "Technical Regulations on the safety of refrigeration systems and equipment."

The technical regulations' drafts were addressed for consideration of the expert group on technical regulation under the Ministry of Economic Regulation.

Involvement of public structures

- In February 19- 20, 2010, under the Ozone Center support, the fourth congress of RPA "Ecoholod" was held in Osh in the conference hall "Farhad". The members of RPA "Ecoholod" and the representatives of stakeholders attended the meeting . In total, 46 specialists participated. One of the issues of the meeting was Public Awareness on the problems of ozone depletion and the consequences of excessive UV radiation effects. The Congress participants were given information books, publications, brochures of the Ozone Centre.
- In April 6, 2010, under support of the Ozone Centre, in the conference hall of hotel "Korund" in Bishkek The Second General Meeting of the Republican Public Association "Ecofum was held. The results of the association for 2008-2009 during it were discussed. Plans for future activities on public attention attraction to the problems of agricultural and industrial production storage, improvement of legislation, training and certification of fumigators. Totally 40 people attended the meeting. At the meeting, the participants were given informational books, publications, brochures of the Ozone Centre.

On the 26th of November 2010 a Meeting of the Interdepartmental Commission on ozone for coordination of activities related to the Country Program on ozone-depleting substances phase out implementation was held in Bishkek.

Agenda:

1. Progress Report of the Ozone Center on the Country Program on ozone-depleting substances phase out implementation for the period 2008-2010 (Stage 2).
2. Presentation of the Project "Preparation of HCFCs Project Management Plan" in the Kyrgyz Republic.
3. Recommendations development and resolutions adoption.

Resolutions and recommendations:

- The activity on the Country Program on ozone-depleting substances phase out implementation to be considered as "well-done"
- Approve the Draft of HCFCs Phase out Management Plan in the Kyrgyz Republic. To prepare a draft of the Country Program on ozone-depleting substances phase out and to submit it to the Government of the Republic for approval. To entrust the Ozone Center along with experts of State Agency for Environmental Protection and Forestry and Ministry of Economic Development to consider the issues on introduction of quotas and restrictions for import of chemicals which affect also on the climate change.
- Ozone Center to continue facilitation work in the training of refrigeration technicians and fumigators and the work on providing technical and institutional strengthening to RPAs "Ecoholod" and "Ecofum" and Non-Government Environment Organizations, included into the Public Awareness Program on ozone layer issues.
- Implementation of UNEP Initiative "Green Customs" to consider as priority the Centre's activities during a joint work with customs and environmental authorities.

1.5. Terminal CFC Phase-out Management Plan (TPMP)

With the assistance of Ozone center the group of 15 people to study in Moscow state university of applied bioengineering on specialty refrigeration, cryogenic technology and air conditioning technician was formed. All school leavers successfully took preliminary examinations and became students of government-financed study.

I. Training for Refrigeration Technicians in Good Practices

Use of blends for direct replacement of R-12 (drop-in) in refrigeration equipment

The main purpose of these workshops is to phase-out of CFC in sector of refrigeration equipment, through skilful servicing, recovery, recycling of R-12, R-22, use of blends as "Astron" and R-409a for direct replacement of R-12 (drop-in).

At the workshops special accent was made on questions of drop-in and retrofit of commercial and industrial refrigeration machines. During practical lessons, participants used equipment for recovery, cleaning, detection of refrigerant, quality of oil and direct replacement of R-12 to such blends as "Astron" and R-409a.

Natural refrigerants

The main purpose of these workshops is to phase-out of CFC in sector of refrigeration equipment, through skilful servicing, recovery, recycling of R-12, R-22, and use of natural refrigerants on a base of hydrocarbons - R-600, R-290, CO₂, R-744 and NH₃.

During practical lessons, participants used equipment for recovery, cleaning, charging the system with R-600a, detection of refrigerant, quality of oil.

For assistance in theoretical and practical parts of workshops the following persons were attracted: Dean of Moscow State University of Applied Biotechnology, professor, academician of IAR, Mr. B.S. Babakin., vice-rector on scientific work of Osh Technological University named after M.M. Adyshev, Mr. B.A. Toktoraliev, head of chair "Machines and food processing equipment" of Kyrgyz State Technical University named after I. Razzakov, Mr. B. K. Djunosov, and other specialists. Information about workshops was presented in mass-media.

Table of workshops on training refrigeration and air conditioning technicians

No.	Name of workshop	Date	Place	Number of participants
1	Good practices in servicing of refrigeration equipment	May 24-27, 2010	v. Aleksandrovka	21
2		June 21-24, 2010	Tokmok	23
3		October 4-8, 2010	Osh	34
4	Servicing of Mobile Air Conditioners	September 5-12, 2010	Cholpon-Ata/ Karakol	30/30

5	Recovery and recycling of refrigerants R12 and R22, during servicing of refrigeration equipment	January 13-15, 2010	v. Aleksandrovka	23
6		October 20-23, 2010	Karabalta	39
7		October 24-27, 2010	Tokmok	30

Upon completion of workshops all participants received certificates of participation.

Professional training and certification of refrigeration specialists

For training classes in the system of vocational training, national consultants developed scheme of demonstration stand, necessary for practical lessons. "Buudan-Holod-Service" Company produced four stands and they were passed to Vocational School No. 1, c/o Jalalabad, Vocational Schools No. 3, No. 93, c/o Bishkek. Separately, special stand of refrigeration machine for students studying "Refrigeration machines and systems of air conditioning" at Kyrgyz State Technical University was produced. Also 5 sets of tools and supplies were purchased for abovementioned educational institutions.

On a base of these educational institutions training classes were organized for preparation of regional specialists in modern practice of servicing refrigeration equipment.

43 beginner refrigeration technicians were trained at Vocational School No. 3, according to study program developed by RPA "Ecoholod" in cooperation with the State Agency of Vocational Training. The students successfully passed qualification exams and received state diplomas and certificates.

According to the agreement between the Ozone Center, RPA "Ecoholod" and MSU ABT (c/o Moscow), 9 persons from Kyrgyzstan were selected and admitted to the Moscow State University of Applied Biotechnology, faculty of refrigeration equipment.

9 refrigeration specialists from "Kyrgyztelecom" were trained in Intersectional Training Center of Gosgortehnadzor (40-hours training program). The students successfully passed qualification exams.

The Ozone Center passed to Vocational Schools No. 1 (Jalalabad), No. 3, No. 93, No. 94 (Bishkek) the following equipment and tools:

No.	Item	Quantity
1	Recovery machine (including 1 cylinder)	1
2	Cylinder for recovery with two connection pipes and overfilling protection device (30 lb.)	2
3	Service kit for recovery equipment: Two-valve collector, charging hoses (5 pieces), electronic scales for refrigerants, electronic halogen leak detector, thermometer (-10°C - 100°C), humidity indicator, pincers (2 pieces), device for replacement of charging valve, adapters (2 pieces)	1

4	Hand pump for recovery of refrigerants	1
5	Cylinder for refrigerants	3
6	Set of rolling for copper pipes	1
7	Pipe cutter for copper pipes	1
8	Solder for copper pipes	1
9	Soldering flux	1
10	Vacuum pump	1
11	Oxygen-propane torch	1
12	Tube bender	1
13	Charging pipes	10
14	Copper pipe d6	10
15	Infrared thermometer	1
16	Training stand (refrigeration machine)	1

Supply of demonstration equipment

In 2010 under TPMP Project the following servicing refrigeration equipment was received:

№	Name	Quantity
1	Automated recovery and recycling station for refrigerants: R410A, R22, R134a, R407C, R404A, R507A, with electronic scales up to 35 kg.	2
2	Portable device for regeneration of refrigerants: R410A, R22, R134a, R407C, R404A, R507A, with oilless compressor, and oil separator	2
3	Nitrogen kit. In case with cylinder (up to 1000 g.). For pressure test of the system and flushing of internal systems with nitrogen	2
5	Electronic leak detector with spare sensors	2
6	Tee extractor for manual execution of branches or flanges on rigid and annealed copper tubes (3/8 – 2.1/8")	2
8	Flaring and swaging tool for copper tubes 1/8" – 3/4"	2
9	Bending kit for tube O.D. 1/4" – 7/8"	2
10	Portable soldering unit for soldering iron, steel, tin, and nonferrous metals with brazing alloy	2
11	Propane charging adapter, for propane cylinders for Portable soldering unit (10.)	2
12	Oxygen charging adapter, for oxygen cylinders for Portable soldering unit (10.)	2
13	Portable electronic leak detector for hydrocarbons	2
14	Portable double-stage vacuum pump with connections tubes 1/4", 1/2" and 3/8".	2
15	Portable electronic sound level meter	2
17	Small multi-test-instrument for humidity, air-speed, light intensity and temperature.	2
19	Pipe-slice Tube Cutter, for copper tube cutting (1/2")	2
21	Capillary check-capillary-tube cleaning device	2
22	Multi-refrigerant analyzer for identifying of commonly used CFCs, HCFCs, HFCs and hydrocarbons (HC) 5 sets of filters	5

	and other spare parts for each unit /	
23	Portable recovery machine suitable for multi-refrigerant use (commonly used CFCs, HCFCs, HFCs refrigerants, including blends such as R 410A).	10
24	Refrigeration toolkit including: Gauge manifold Leak detector Thermometer Digital vacuum gauge Electronic weighing scale Refrigeration tools Gas cylinder Sight glass Gloves and goggles	10

Training of Customs officers

After conduction of two main workshops in the north and south of the republic, taking into consideration the small number of participated customs officers from the regions, the Ozone Center had made a decision to conduct training workshops on-site. Participants of main workshops were attracted to work of these workshops. The agenda was specially developed, taking into consideration practical direction.

2010 г.

За 2010 г. проведено 9 обучающих семинаров в Чуйской, Ошской, Нарынской, Баткенской и Жалалабатской областях.

Table of workshops for training customs officers

No.	Name of event	Date	Place	Number of participants
1.	Regulation of ODS export/import	18-20.05.2010	Tokmok customs	42
2.		2-4.06.2010	Karabalta customs	38
3.		9-12.06.2010	Issyk-Kul customs	23
4.		6-10.07.2010	Talas customs	19
5.		12-16.07.2010	Naryn customs	32
6.		11.11.2010	Osh customs	34
7.		12.11.2010	Operative customs - South	23
8.		16.11.2010	Jalal-Abad customs	26
9.		7.11.2010	Batken customs	30

After completion of training, all participants received the training certificates.

To increase awareness of customs officials on other adopted environmental conventions and for the purpose of promotion of UNEP Green Customs Initiative, Ozone Centre held two regional workshops for customs officials in the north and south of the Republic.

The workshops were attended by the representatives of the State Agency for Environmental Protection and Forestry, Ministry of Economic Regulation, Ministry of Health, Ministry of Agriculture, Center for Standardization and Metrology.

Participants received certificates of participation.

The workshops lasted for 2 days and consisted of theoretical part and work in groups. The participants received the brochures, workbooks published by Ozone center. There were general discussions about positions of all international environmental agreements from the position of controlling by customs authorities with the assistance of interested state bodies.

Upon the results of the workshop the participants adopted the following recommendations:

- organize the development and publication of workbooks, recommendations, brochures, posters on international environmental agreements
- establish information exchange about environmental offences with Parties
- disseminate the experience of RILO to international environmental agreements
- UNEP to continue the organization and conduct of regional meetings with customs officers of definite countries on implementing international environmental agreements
- UNEP to continue to render material and technical assistance by providing with special equipment to customs and ecological services, which control goods regulated by international environmental agreements
- State agency on environmental protection and forestry with the Ministry of economic regulation to consider the issue of introduction of obligatory certification of refrigerating equipment and servicing

The participants expressed the following proposals:

- State agency on environmental protection and forestry to define the method of including the import to the wastes regulated by Basel convention (old automobile tires, electronics, clothes (second hand) and others). Is it necessary to issue a license for their import?
- State agency on environmental protection and forestry, Ministry of economic regulation, Ministry of Health, Ministry of agriculture need to submit the data about contact people to State customs office, who are responsible for realization of international environmental agreements
- State agency on environmental protection and forestry to establish close cooperation with responsible people in state monitoring structures by delimiting their functions at the borders
- regularly carry out detailed training workshops in customs authorities involving representatives of interested ministries and agencies on international environmental agreements
- State customs office to speed the making electronic database on substances regulated by international environmental agreements in ASTO
- establish carrying out joint inspections in field of customs clearance and terminals

1	UNEP Initiative	July 2-3, 2010	Conference-hall of State Customs Committee, Bishkek	40
2	“Green Customs”	December 25-26, 2010	Assembly hall of Osh Customs	30

Certification of refrigeration specialists

For training classes in the system of vocational training, national consultants developed scheme of demonstration stand, necessary for practical lessons. “Buudan-Holod-Service” Company produced four stands and they were passed to Vocational School No. 1, c/o Jalalabad, Vocational Schools No. 3, No. 93, c/o Bishkek. Separately, special stand of refrigeration machine for students studying “Refrigeration machines and systems of air conditioning” at Kyrgyz State Technical University was produced. Also 5 sets of tools and supplies were purchased for abovementioned educational institutions.

On a base of these educational institutions training classes were organized for preparation of regional specialists in modern practice of servicing refrigeration equipment.

43 beginner refrigeration technicians were trained at Vocational School No. 3, according to study program developed by RPA “Ecoholod” in cooperation with the State Agency of Vocational Training. The students successfully passed qualification exams and received state diplomas and certificates.

According to the agreement between the Ozone Center, RPA “Ecoholod” and MSU ABT (c/o Moscow), 14 persons from Kyrgyzstan were selected and admitted to the Moscow State University of Applied Biotechnology, faculty of refrigeration equipment.

9 refrigeration specialists from “Kyrgyztelecom” were trained in Intersectoral Training Center of Gosgortehnadzor (40-hours training program). The students successfully passed qualification exams.

Republic Public Association “Ecoholod” held the 4th congress in Osh city on the 20th of February in 2010. Republic Public Association “Ecoholod” members, who are the leading experts in refrigeration equipment servicing and stakeholders’ representatives of Kyrgyz Republic, took participation in the congress work.

The issues regarding directives’ implementation of Association activity for 2009, refrigeration industry part in Kyrgyz Republic economy, education and retraining of refrigeration equipment specialists, regulations on state specialists’ certification working with CFCs and natural refrigerants fulfillment, repair and start-up works tariffs in a sphere of refrigeration equipment agreement, international and national RACs links coordination and also Republic Public Association “Ecoholod” Internet website support were discussed during the congress work.

The following table contains the equipment purchased for RPA “Ecoholod” in 2010:

Table of equipment purchased for RPA “Ecoholod”

№	Name	Quantity
1	Projector screen	1
2	Landline phone apparatus “Sapatcom”	1
3	Railway 20 ft container	2
4	Fitting tool kit	1 set
5	Adjustable jack 3 tons	2
6	Electric arc welding machine DC	1 set
7	Semi-automatic electric arc welding machine	1 set
8	Gas-operated welding machine	1 set
9	Charging unit	1
10	Gasoline blow torch	1

11	Sharpener	1
12	Utility trailer	1
13	Jack hammer	1
14	Electrical screwdriver	1
15	Rope winch	1
16	Fire extinguishes	2
17	Insulating gloves	1 pair
18	Angle grinder	1
19	Welding helmet	1
20	Welding overall	1
21	Electrical cable 1×25 – 10 m and 4×6 – 10m	
22	Column speaker power-assisted with microphone	2
23	Notebook	1
24	Furniture: tables	2

Presentation of MDI strategy

The activities planned under this programme included meetings with importers to determine expected schedule for import substitution of CFC based MDI with their different alternatives, meetings with importers and selected representatives of the medical body to agree on possible measures and regulations for the MDI sector, finalization of individual or group agreements for an import substitution schedule, with importers and distributors, and organisation of meetings with experts of the Ministry of Health, Ministry of Ecology and Emergency Situations (i.e. NOU), in order to obtain more reliable data on MDIs and ensure a better control of this sector. MDI workshops were organized and conducted in 2010 (October -December).

During the workshops medical staffs, patients and NGOs' representatives took active participation. Seven new astma-clubs' offices were established in seven regions. Special medicals, literature, equipment were distributed among astma-clubs

Table of training workshops

№	Workshop “Inhalation therapy of chronic respiratory diseases and protection of the Ozone Layer”	Date	Number of participants
1.	Karakol, Regional hospital	October 21, 2010	37
2.	Naryn, Regional hospital	October 25, 2010	33
3.	Batken, Regional hospital - astma-club opening	December 1, 2010	28
4.	Osh, Regional hospital	December 2, 2010	45
5.	Jalalabad, Regional hospital - astma-club opening	December 4, 2010	30
6.	Talas, Regional hospital	December 10, 2010	34
7.	Bishkek, Regional hospital	December 22-24, 2010	147

Participants received certificates of participation.

1.6. Actions on HCFC

2010

Within the UNDP project KYR/PHA/55/PRP/20 framework the version of the Strategy on HCFC phase out (HPMP) from 2011 till 2025 based on successful experience of Kyrgyz Republic and other countries on ODS phase out was developed:

The base level is defined as an average level of HCFC consumption for 2009-2010 and is $(71,96 + 72,73)/2 = 72,345$ MT or 4,43 t considering ODP. Consumption for 2010 is a predictive estimate based on half a year consumption. The start year of the project is 2011.

In the framework of the project HCFCs consumption survey in the Republic was held together with UNDP International consultant Rick Cook. The project proposal draft of HCFCs phase out management plan (HPMP) is finished by the present and submitted to MLF ExCom.

In accordance with the technical requirements a temporary working group (TWG) consisting of: Myrsaliev N. Garifulin V.K., Toktosunova A.K., Jumaliyev J.O., Musabayev U. held the workshops on HCFC Phase out Management Plan (HCFC) in the Kyrgyz Republic with the assistance of the Ozone Centre of Kyrgyzstan.

The main purpose of these workshops was to reduce HCFCs and HFCs consumption in the refrigeration sector of the Republic, and facilitation in meeting of ODS reduction and consumption termination schedule according to the obligations under the Montreal Protocol by means of:

- * Raise participants' awareness concerning the ozone layer depletion and its restoration measures;
- * Training the procedures, excluding refrigerants' emission into the atmosphere during technical and emergency maintenance of refrigeration equipment;
- * Improving practice of refrigeration servicing through recovery of HCFCs and HFCs in recycling centers;
- * The use of information concerning technologies, precluding the use of HCFCs during maintenance and recharging of current equipment;
- * Transfer of current refrigeration equipment to alternative technologies through retrofit and replacement;
- * Specialists awareness on selection and maintenance of cooling systems in accordance with:
 - Global trends in projection, manufacturing and refrigeration systems exploitation with the use of natural alternatives;
- Proper servicing method of equipment maintenance when release the refrigerant cooling systems prior to and during the charge to prevent leakage;
 - Proper and safe handling with refrigerants, especially when they are recovered from the recycling receptacle;

Previously, in accordance with technical requirements of UNDP, the working group members were sent to the country regions, where, together with refrigeration specialists they met chiefs of enterprises, private entrepreneurs, owners of refrigeration equipment and air conditioning systems in the following sectors:

1. Commercial refrigeration with capacity up to 3000 W
2. Commercial refrigeration with capacity over 3000 W
3. Industrial refrigeration and products processing and their long-term storage.
4. Stationary air conditioning

5. Automobile refrigerators
6. Solvents and aerosols
7. Manufacturing and installation of newly introduced and on-site rechargeable refrigeration equipment and air conditioning systems.

Presented during the workshops HPMP project of Kyrgyzstan was mainly adopted and the concept on HCFC phase out it embedded together with its all the activities of represented organizations, entrepreneurs and the public, was recommended by the workshop participants as a guide for further actions. HPMP contains the developed plan on HCFC phase out by 2025, not 2040 as previously provided. The management plan includes:

- a) national identities and priorities, national policy, strategy on development of refrigeration industry;
- b) proposal on introduction of facilitate measures for HPMP implementation;
- c) use the experience gained during the measures implementation provided in TPMP Plan and use all of its integration opportunities into ongoing project;

During the project's discussions unsolvable practical issues regarding the projects' full scale funding revealed. For example, the issue concerning the possibility of HCFCs – alternatives re-conversion of enterprises had previously converted from CFC-12 to HCFC-22 under RMP plan, remains unresolved.

The workshops' participants worked out the following recommendations for HCFC phase out measures implementation

- 1) Take into consideration specific capabilities of enterprises towards HCFC phase out.
- 2) Not to apply HCFCs when creating new enterprises or doing manufacture expansion.
- 3) Further HCFCs reduction in manufacturing and servicing sector by 10% in 2015 and by 35% in 2020, accordingly, to consider as possible.
- 4) To install the necessary collection system at HCFCs enterprises for the following purposes:
 - recovery and further appliance;
 - collection of nonrecoverable HCFC for the further destruction;
 - HCFC collection to create a stockpile for their future use in manufacturing until the equipment is out-of-date and depreciated.
- d) To analyze the costs, benefits and options for the conversion from HCFCs to HFCs or natural refrigerants at availability of technological capability and necessity.

1.7 Communication between Government and international organizations

Session meetings are conducted on regular basis with the Interdepartmental Governmental Ozone Committee for the purpose of work coordination on implementation of the State program on discontinuance of ODS application.

The Ozone Center had established and supports ties with the following organizations:

- Ozone Secretariat;
- UNON, Nairobi;
- UNEP DTIE, Paris;
- UNOPS-New-York;
- Local UNDP Office;
- UNIDO.

Ozone Center carries out its activities within the frames of UNEP and the Ministry of Emergency Situations of Kyrgyz Republic, as well as the State Agency on Environment Protection and Forestry under the Government of Kyrgyz Republic (in accordance with restructured Government). Ozone Center reports on its activities to the Ministry of Emergency Situations on quarterly basis, to the Government of Kyrgyz Republic on annual basis and to the Ozone Secretariat each 5-6 months. The Ministry of Emergency Situations of Kyrgyz Republic coordinates the activity of Ozone Center.

Within the frames of the Country program implementation on ODS phase-out in Kyrgyz Republic Ozone Center actively cooperates with the members of interdepartmental steering committee on Ozone. Good ties with the representatives of Ministry of Industry, Trade and Tourism, the State Custom inspection under the Government of Kyrgyz Republic.

Besides it, Ozone Center having conducted a research of the ODS market in the country, is closely cooperating with the private entities, which have relation to ODS production and provision of ODS-related services, educational institutes, preparing cadre for refrigerant industry.

1.8 Information exchange

Contacts were established with similar projects offices in CIS countries:

- Uzbekistan: Main Division of Atmosphere Protection; The Committee for Nature Protection; Head of Division: Ms. Dotzenko N. – tel: 99871 1394823/1449116, Email: ozon@tkt.uz;
- Kazakhstan: Climate Change Coordination Center; Ms. V. Kryukova – tel: 3172 117170, Email: valentine@climate.kz;
- Armenia: Atmosphere and Soil protection division of the Ministry of Environment protection, Head of division, Mr. Asia Muradian, tel: (+374 10) 541182, Email: asozon@nature.am;
- Azerbaijan: Ozone and Climate Change Center of the Ministry of Ecology and Natural Resources, Head of Center: Mr. Maharram Mehtiev, tel: (+994)124388513, Email: aliyev@iglim.baku.az ;
- Byelorussia: the Ministry of Natural Resources and Environment Protection, Deputy Minister: Mr. ApatskiA., tel: (+375 17)2006691, Email: miproos@mail.belpak.by;
- Georgia: National Ozone Center: Head of office - Mr. Mikheil Tushishvili – tel/fax: (995 32) 333952, email: airdept@caucasus.net;
- Moldova: National Ozone Center; : Head of office - Mr. Amnatoly Tarita – tel: (+373 22) 226844, Email: environment@ozone.mldnet.com ;
- Tajikistan: National Ozone Center: : Head of office - Mr. Abdugarim Kurbanov – tel: (+992 372) 341204, Email: abdu_karim@rambler.ru ;
- Turkmenistan: National Ozone Center; : Head of office – Mr. Verveda V., tel: (+993 12) 357091, Email: vverveda@jinline.tm

For the purposes of strengthening of the national Ozone Offices capacities, the meetings of - Regional Network of Art. 5 Countries of Eastern Europe and Central Asia are held regularly. Joint Meeting of the Regional Ozone Networks for Europe & Central Asia (ECA) and South Asia (SA) took place in Istanbul, Turkey, 26-30 April 2010.

Goals of the regional meeting were:

- Discussion of new decisions of the meeting of parties and Executive Committee;
- Survey of status of obligation fulfillment, data submission and ratification
- Survey of network activity for 2009 and experience exchange between countries
- Adoption of meeting recommendations, chief targets of networks and work programs for 2010/2011;
- Public awareness raising on ozone layer protection through mass media;
- Carrying out bilateral consultations and meetings devoted to fulfill obligations with separate countries

The representatives of Ozone center and RPA "Ecoholod" participated at the meeting.

Thematic meeting on HPMP preparation & implementation for Russian speaking countries was carried out on 27- 28 July in Kishinev, Moldova with participation of representatives of Ozone centers. The goal of the meeting was to exchange information concerning different methods of network countries (Armenia, Georgia, Kyrgyzstan, Moldova, Turkmenistan) in developing HCFC phase out plan to meet requirements of Montreal Protocol. Other tasks of the meeting:

- Survey of the current process of HPMP development in region and facilitation in discussion HPMP components
- Support information exchange on existing regulation schemes
- Discussion of an issue about HCFC alternatives, minimize other impacts on environment including on climate problems
- Survey of measures on eliminating consumption in other sectors of HCFC consumption
- Assistance to brainstorm on ways how to use the joint financing of climatic advantages connected with HPMP implementation

During 2010 the representatives of Ozone Center took participation in the following events:

- Intergovernmental conference of High Level Task Group on the Global Framework for Climate Services organized by the World Meteorological Organization, 11-12 January, Geneva. The conference was held on advice of the 3rd World Climate Conference (WCC-3) with the mandate to approve the terms of reference and membership of the High Level Task Force on the Global Framework for Climate Services;
- Co joint extraordinary meeting of the Parties of Basel, Rotterdam and Stockholm Conventions that took place in Bali, Indonesia in the International Convention Centre in Nusa Dua, 22-24 February 2010. During the meeting with a topic on control of transmittal transition of hazardous wastes and their collection, prior informed consent procedure regarding defined hazardous chemicals and pesticides in the international trade and persistent organic pollutants the Decisions were made;
- Cojoint meeting of regional ozone networks of Southern Asia and Europe/Central Asia. Istanbul, Turkey, 26-30 April 2010;
- Training course for the representatives of member-countries of EU-TACIS Project "Support to the Implementation of the Kyoto Protocol in CIS countries"; members of the official delegations of the countries - "Copenhagen Agreement discussion, negotiations on a post-Kyoto - the most relevant issues for the participating countries" 8-9, June 2010, Bonn, Germany;

- Subject meeting on exchange experience on approach to develop plans for HCFCs replacement, Chisinau, Moldova, 27 - 28 July 2010;
- Sixth Ministerial Conference on Environment and Development in Asia and the Pacific, Astana, 27 September – 2 October 2010;
- Regional workshop “Green Customs” for ECA countries, Ashkhabad, Turkmenistan, 13-15 October 2010.
- Broker meeting of the 7th Framework Program for Research-Technological Development EU, 7-8 October 2010, Yerevan, Armenia;
- The first meeting of EU - Central Asia working group on environmental management and climate change, 26 October, 2010, Brussels, Belgium;
- Twenty-second meeting of the Parties to the Montreal Protocol on Substances Depleting the Ozone Layer , Bangkok , 8-12 November 2010 ;
- 16th Conference of the Parties to UNFCCC and MP, 29 November – 10 December 2010, Cancun, Mexico.

1.9 The need for Country Program Adjustments

At the present time there is a need to submit a new Country Program on HCFCs phase out for the consideration and adoption by the Government of Kyrgyz Republic.

Mars Amanaliev,

Head of the Ozone Center

