

**NOPIU was organized all awareness activities.**

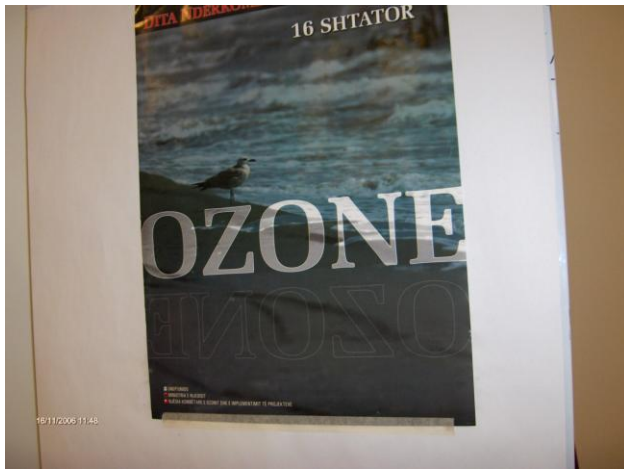
**1.** Very important are the activities for International Ozone Day, 16 September  
Follow show photos from International Ozone Day 2007 year, which belong to with  
20<sup>th</sup> anniversary of Montreal Protocol.



In this event delivered some folders and T – shirt for Ozone ( in photo )



An International Ozone Day, 16 September 2006 activity.



An International Ozone Day, 16 September 2004 activity.



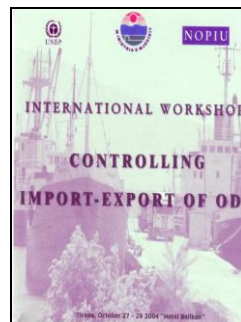
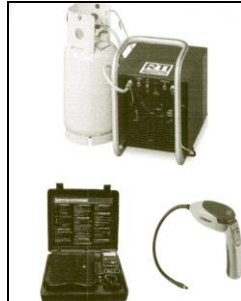
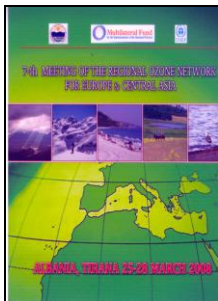
2. Publication of some books and magazines for Ozone problems and preparation of CD for all workshops which organized from NOPIU. Follow can get the photos for:

- **Books and Magazines**





• CD



3. Publication of some articles in Albanian Environment Magazine, a period magazine of Ministry of Environment, Forest and Waters Administration.

## Article 1

- **The Actual Situation in Albania and National Ozone Depleting Substances, Phase-Out Plan.**

*Prepared by Gazmend Gjyli , NOPIU, Albania.*

Albania is a small country in the South-East Europe located in the West of Balkans Peninsula of about 30 thousand square kilometers squared between mountains and the Adriatic Sea with a population of around 3,500,000 inhabitants.

Albania has never produced ODS. These substances have always been imported. Before 1990 Albania was isolated country with totally state-controlled economy, import and distribution of goods and materials. Breakdown of totalitarian regime and reopening the borders have dramatically changed the patterns of consumption of both the ODS-using equipments and the ODS-s themselves.

Albania ratified the Vienna Convention on Protection of the Ozone Layer and the consolidated text of the Montreal Protocol (including the London, Copenhagen and Montreal Amendments) on October, 1999.

**Table 1** : Consumption of ODS in 2001, ODP tons

	refrigeration				mobile air-conditioning	solvents	Total ODP tons	ODP
	domestic	commercial	industrial (storage)	transport				
ANNEX A								
Group I								
CFC-12	52,8	8.9	0.99	1.32	3.9	0.0	68	1.000
CFC-115	0.1	0.5	0.2	0.0	0.0	0.0	0.8	0.600
<b>Total for Annex A</b>	<b>52,9</b>	<b>9,4</b>	<b>1,19</b>	<b>1,32</b>	<b>3,9</b>	<b>0,0</b>	<b>68,8</b>	
ANNEX B								
Group II								
Carbon tetrachloride	0.0	0.0	0.0	0.0	0.0	1,16	1,16	1.100
Group III								
Methyl chloroform	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.100
<b>Total for Annex B</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1,66</b>	<b>1,66</b>	
ANNEX C								
Group I								
HCFC-22	0.4	0.4	0.2	0.0	0.0	0.0	0.9	0.055
<b>Total for Annex C</b>	<b>0.4</b>	<b>0.4</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.9</b>	
<b>Total</b>	<b>53,3</b>	<b>9,8</b>	<b>1,39</b>	<b>1,32</b>	<b>3,9</b>	<b>1,66</b>	<b>71,4</b>	

## **The ODS Consumption**

The main sectors that consume ODS in Albania can be divided in seven main groups:

- ✓ Domestic Refrigerators
- ✓ Industrial Refrigerators
- ✓ Commercial Freezers
- ✓ Refrigerator Trucks
- ✓ Air-Conditioners
- ✓ Refrigeration and Air Conditioning Services (workshops)Cleaning

### **Domestic Refrigerators**

There is no production of domestic refrigerators in Albania. Domestic refrigerators have been scarce and highly demanded good some 10 years ago. Total amount of domestic refrigerators in 1990 do not exceed 100000. Correspondingly the import of refrigerators during the years of transition was large ( equaling annually to 80-90% of the number of domestic refrigerators in 1990).

It is evaluated that the number of domestic refrigerators in Albania up to the year 2001 is 728000. Most of them are second hand domestic refrigerators imported from Europe because of the low prices of them. Almost all of them are considered to use R-12. Most of them are 10-15 years old. The annual rate of their repairing is evaluated to be no less than 33%. The data for the number of domestic refrigerators is taken from the survey done by the Institute of Statistics on household equipment used in Albania.

### **Industrial Refrigerators**

Industrial refrigeration in Albania is represented by refrigeration of meat and fish, beer and juice production, dairies and cold chambers in the respective factories.

In the past industrial refrigeration have been represented mostly by large units operating on ammonia (currently totally out of operation) and smaller units filled by CFC-12 and continuously being re-filled do to constant leakages. Some of those exist up to now and are responsible for the amount of CFC-12 used in industrial refrigeration. The new industrial refrigerators are often imported from Europe and are operating mostly on R-22.

The amount of CFC-12 installed in some of the operating units is substantial. Only two industrial refrigerators in Tirana are declared to contain about 500 kg of installed CFC-12 each .Total amount of installed CFC-12 in industrial refrigerators equals to 3.65 tons.

The information gathered on number of industrial refrigerators speaks about the existence of 360 units in total in Albania.

### **Commercial Refrigerators**

Many second –hand refrigerators from all over Europe represent this category of refrigerators used mainly in the shops, markets, café, bars, restaurants etc. It is identified that almost half of them are using R-12. The others are using R-22 and R-502.

### **Refrigerator Trucks.**

They are numbered to be around 400 units using almost totally R-12.

### **Domestic air conditioning**

These devices are mostly imported, installed and maintained by branches of well-known companies like Toshiba, Carrier etc. they use almost totally R-22 and have qualified technicians to install and repair them.

### **Refrigeration and air conditioning services (workshops).**

About 196 refrigeration and air-conditioning service workshops are being declared to conduct this kind of business. One of the main users of R-12 are services of mainly domestic refrigerators were these refrigerators are gathered to repair and fill with ODS, especially R-12.

These workshops are identified in number and according to different district of Albania.

### **Oxygen Factory of the Metallurgical Complex of Elbasan**

During the process of data collection on ODS consumers in Albania, it was identified that one Oxygen Factory of the Metallurgical Complex of Elbasan, consumes regularly carbon tetrachloride. CTC is used to clean the cylinders of oxygen compressors before filling them with oxygen produced in this factory.

### **Foams**

The results of the data survey indicated that no foam production in Albania is using ODS. Some flexible foam factories were identified but they do not use ODS. The two main factories use water and Methyl Chloride as blowing agent. There are some factories producing polystyrene foam as isolation material but none of them use ODS as blowing agent

### **Fumigation**

Before 1990 CCl<sub>4</sub> has been used for disinfestations of animals in the farms and Methyl Bromide for soil fumigation in greenhouses and for tobacco processing. But from 1990-2000 the import and use of Methyl Bromide is not in use now. Reviving agriculture is now looking for the other alternatives.

The main end-users of ODS in Albania seems to be the domestic refrigeration sector. This sector uses almost totally R-12.

### **Forecast Consumption**

On this basis, the forecast for unconstrained consumption of the ODS of Annex A (ODP tonnes) is given in Table 2

Substance	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
CFC-12	61.6	68.0	72.8	76.1	78.2	79.5	80.4	80.9	81.4	81.6	81.8
CFC-115	0.76	0.77	0.79	0.80	0.82	0.83	0.85	0.87	0.88	0.90	0.92
<b>Total for Annex A</b>	<b>62.4</b>	<b>68.8</b>	<b>73.6</b>	<b>76.9</b>	<b>79.0</b>	<b>80.3</b>	<b>81.3</b>	<b>81.8</b>	<b>82.3</b>	<b>82.5</b>	<b>82.7</b>

The analysis suggested that Albania has no possibility to comply with freeze and intermediate Montreal Protocol targets (2005 and 2007 targets), but could comply with final target of complete phase out if an integrated approach will be implemented including sound policy, institutional, legal, investment and non investment measures.

Albania started the cooperation with UNEP & UNIDO. The Country Programme was finalized at the end of 2001.

The 14 – th meeting of the parties have note that Albania ratified the M.P on October 1999 and the country is classified as a party operating under article 5 of the protocol. The Government of Albania is in non –compliance with the M.P.

The Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol approved Albania’s National Ozone-Depleting Substances Phase-Out Plan (NPOP) through its Decision 39/43.

The Executive Committee has also noted that pursuant to Decision XIV/18, Albania has submitted to the Ozone Secretariat for the consideration by the Implementation Committee a terminal phase-out plan that would achieve compliance CFC freeze in 2005 and the 50% reduction in 2006.

In order to provide immediate assistance to facilitate a return to compliance; and without prejudice to the operations of the Montreal Protocol’s mechanism dealing with non-compliance, on an exceptional basis , the Executive Committee has entered into an Agreement with the Government of Albania with respect to the complete phase-out of the ozone depleting substances (ODS) of Annex A Group I , Annex B Group II and Annex E used in Albania.

Albania agrees to phase out the production and consumption of all controlled uses of all ODS in accordance with the annual consumption limits set out in Table 3.

**Table3 : Annual consumption limits for ODS in Albania**

<i>Year</i>	<b>ODP tones</b>
2003	68.0
2004	61.2
2005	36.2
2006	15.2
2007	6.2
2008	2.2
2009	0

Subject to compliance by Albania with its obligations set out in this Agreement, the Executive Committee agrees in principle to provide a total of US \$ 653,125, excluding agency support costs and funding for Institutional Strengthening, as the total funding for Albania for the complete phase out of production and consumption of all ODS, in accordance with the funding disbursement schedule presented in Table 4.

As a part of the NPOP, the Executive Committee approved found for, the following sub-projects:

Programme Management and Auditing , at cost 16068 US \$ (UNIDO )

Training of Customs Officers in Monitoring of ODS, at cost US \$ 35700 ( UNEP )

Training of Trainers in Good Practices of Refrigeration, at cost of US \$ 82425 (UNEP)

Refrigerant Recovery and Recycling network, at a cost of US \$ 100000 (UNIDO)

Conversion of Cleaning Installation from carbon tetrachloride to tetrachloroethylene at Energy Combinat , Elbasan , at a cost of US \$ 45000 (UNIDO )

Awareness Workshop to Prevent the Introduction of Methyl Bromide, at a cost of US \$ 20000

(UNIDO)

#### **Implementation Schedule for the NPOP and performance targets.**

Table 4 shows a summary of the performance targets, indicators of achievements and fund disbursement schedule for the whole NPOP for the period 2003-2010.

Table 4: Summary of the performance targets, indicators of achievements and fund disbursement schedule

<b>Year</b>	<b>Perform ance target (ODP/to nnes)</b>	<b>Consumption allowed under Montreal Protocol</b>	<b><i>Indicators of achievement</i></b>	<b>Disburse ment (in US\$)</b>
2003	68.0	41.4	<ul style="list-style-type: none"> <li>▪ National Ozone Unit and Implementation Plan Unit in place</li> <li>▪ Data collection system in place</li> <li>▪ ODS related legislation in place and being reinforced</li> <li>▪ Licensing system in place and import quotas established</li> <li>▪ Legislation launching workshop held</li> <li>▪ Phase I of custom training completed</li> <li>▪ Code on Good practices developed</li> <li>▪ Phase I of refrigeration training completed</li> <li>▪ Methyl Bromide workshop held</li> <li>▪ Monitoring system including Regional Environment Inspectors in</li> </ul>	299133

<b>Year</b>	<b>Performance target (ODP/tonnes)</b>	<b>Consumption allowed under Montreal Protocol</b>	<b>Indicators of achievement</b>	<b>Disbursement (in US\$)</b>
			place	
2004	61.2	41.4	<ul style="list-style-type: none"> <li>▪ Follow up workshop on legislation held Phase II of custom training completed. 70 custom officers trained .Phase II of refrigeration training completed: 620 refrigeration technicians trained and certified Association of refrigeration technicians created</li> <li>▪ Beneficiaries of R&amp;R equipment identified</li> <li>▪ R&amp;R equipment imported and distributed</li> <li>▪ R&amp;R workshop held</li> <li>▪ Conversion project in solvents completed</li> </ul>	172322
2005	36,2	20.7	<ul style="list-style-type: none"> <li>▪ Follow up workshop on legislation held Custom Training on ODS included as part of the Custom Department periodic training</li> <li>▪ IPU report on feedback on ODS imports from entry points vs. ODS use in the field</li> <li>▪ Good Practices training included in State University curricula</li> <li>▪ R&amp;R project completed</li> <li>▪ End users project started</li> </ul>	72322
2006	15,2	20.7	<ul style="list-style-type: none"> <li>▪ Follow up workshop on legislation held IPU report on monitoring of impact of good practices</li> <li>▪ R&amp;R network operating</li> </ul>	42322
2007	6,2	6.2	<ul style="list-style-type: none"> <li>▪ Follow up workshop on legislation held IPU report on monitoring of impact of good practices</li> <li>▪ IPU report on feedback on ODS imports from entry points vs. ODS use in the field</li> <li>▪ R&amp;R network operating</li> <li>▪ End-users project completed</li> </ul>	22322
2008	2,2	6.2	<ul style="list-style-type: none"> <li>▪ Follow up workshop on legislation held IPU report on monitoring of</li> </ul>	22322

<b>Year</b>	<b>Performance target (ODP/tonnes)</b>	<b>Consumption allowed under Montreal Protocol</b>	<b>Indicators of achievement</b>	<b>Disbursement (in US\$)</b>
			<ul style="list-style-type: none"> <li>▪ impact of good practices</li> <li>▪ R&amp;R network operating</li> </ul>	
2009	0	6.2	<ul style="list-style-type: none"> <li>▪ Follow up workshop on legislation held IPU report on feedback on ODS imports from entry points vs. ODS use in the field</li> <li>▪ R&amp;R network operating</li> </ul>	22322
2010	0	0	<ul style="list-style-type: none"> <li>▪ Follow up workshop on legislation held</li> <li>▪ R&amp;R network operating</li> </ul>	0

From Table 4 it is evident that Albania will not be in the position to comply with the reduction level of 50% by 2005. Since implementation started in 2003, it is impossible to achieve a reduction in consumption of about 48 tons (actual consumption in early 2003 is 68 ODP tones and according to the Montreal Protocol the consumption in Albania in 2005 should be 20 ODP tones).

On the basis of the information provided by 2005 Albania will achieve a reduction of more than 50% (from 68 to 36.2 ODP tons) in ODS consumption. However, in 2007, Albania will achieve a reduction of more than 90% of its current consumption. In addition, Albania will achieve a total phase out in 2008, ahead of the Montreal Protocol target.

#### **The impact of various activities on Phase-Out Plan.**

Table 5 shows the likely impact of different activities on the phase out of ODS during the implementation period of the NPOP, 2003-2010.

**Table 5:** The impact of different project proposals on ODP reduction (import quotas) during the period of implementation of the NPOP.

<b>Year Project</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Training of technicians</b>	6,8							
<b>Custom training &amp; licensing system</b>		3	3	3				
<b>Recovery &amp; Recycling</b>		20	10	2				
<b>Retrofitting</b>		2	5	4	4	2,2		
<b>Solvent Project</b>			3					
<b>Import quotas</b>	68	61,2	36,2	15,2	6,2	2,2	0	0

The Government of Albania is fully conscious of being in non-compliance with the M.P. and is committed to urgently undertaking all necessary steps to catch up with the Protocol's requirements. The Government will take steps as outlined in the Implementation Plan to minimize the extent and duration of the non-compliance and to achieve timely phase out of the ozone depleting substances controlled under the Protocol with the final aim of a complete phase out in 2008.

Institutional development, appropriate legal framework preparation and its implementation, capacity building to ensure data collection and monitoring of consumption of ODS, investment in relevant sectors, immediate introduction of import restrictions, intensive awareness rising and non investment related to training activities are the main components of the Government's strategy to achieve this aim.

The Government of Albania is elaborating the appropriate policies which are driven by the need to reduce demand for ODS. The relevant environmental legislation of Albania is represented by Environmental Protection Law adopted in 1993 and amended in 1998. The Air Protection Law was approved in 2002 and is in force. This law constitutes the legal basis for developing different regulations to limit the use of ODS and to achieving total phase out.

During this period the National Ozone Unit structure is completed and we are working to fulfil our duty in cooperation of the implementation agencies. To implement projects was proposed to create a National Ozone and Project Implementation Unit –NOPIU.

After the information process we are working now to prepare the ozone law.

We are working with general offices of customs and taxes for the ODS monitoring.

But to involve ozone regional inspectors in the monitoring process it need to begin the implementation of "Programme Management and Auditing".

The "Training of Customs Officers in Monitoring of ODS" and the "Training of Trainers in Good Practices of Refrigeration" draft-projects are prepare after strongly cooperation with UNEP specialist and now they are reedy to sign.

For the "Conversion of Cleaning Installation from Carbon Tetrachloride to Tetrachloroethylene at Energy Combinat, Elbasan" project was prepare the agenda and the visit in the place.

After the preparation of the National Plan for the public awareness some activities are develop as a poster for the ozone day and an article is during publishing process in one environmental magazine.

## **Article 2**

- **SOME PROJECTS FOR IMPLEMENTATION OF THE NATIONAL PHASE OUT PLAN IN ALBANIA**

**From Valbona PLAKU, NOPIU, 2004**

## **Article 3**

- **AN ANNUAL MEETING OF THE REGIONAL OZONE NETWORK FOR EUROPE & CENTRAL ASIA DEVELOPED IN ALBANIA**

**From Valbona PLAKU – NOPIU – May 2008**

#### **4. Prezantations in National and International Workshops**

You can find these presentations in our web site page.

#### **5. Television Programmes and Television Spotes**

- Awerensses spot in TV News 24.
- Programmes for Ozone was transmit:
- TV News 24 on 17.01.2007.
- TV Top Chanel on 30.01.2007.

You can find the part of TV programmes in our web site page.

**NOPIU, ALBANIA, OCTOBER 2008**

