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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
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flexible foam at Esfanj Jajerood foam company

refrigeration equipment at Sanaye Boroudati Maleki

PROJECT PROPOSALS: IRAN

This document consists of the comments and recommendations of the Fund Secretariat on the following project proposals:

Conversion of the use of CFC to LCD in the manufacture of

Phasing out of ODS in the manufacture of flexible slab stock foam

through the use of liquid CO2 blowing technology at Abre Shomal

Foam:

 Co. Conversion from CFC-11 to water-blown technology in the manufacture of flexible molded polyurethane foam at Sandalisazi Esfanje Ghalebi Iran 	UNDP
Refrigeration:	
• Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at Alireza Abdolrezazadeh Co.	UNDP
• Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial	UNDP
 refrigeration equipment at Havasaz Manufacturing & Industrial Co. Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial 	UNDP

•	Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at Sarma Fan Co.	UNDP
•	Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at the Abbaspour Company, Iran	UNIDO
•	Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at the Darvish Mohamad Nazari company, Iran (Jahan Nama)	UNIDO
•	Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of domestic and commercial refrigeration equipment at the Alborz Neishabour	UNIDO
•	Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of domestic refrigeration equipment at the Ariz Pooyaye Sanat, Iran (Ariz Co.)	UNIDO
•	Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of domestic refrigeration equipment at the Borna Sanat Arak	UNIDO
•	Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of domestic refrigeration equipment at the Yaghoubali Bazdid Vahdati, Iran (Isun Co.)	UNIDO
•	Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of commecial refrigeration equipment at the Sard Va Garm Iran	UNIDO
•	Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at the Sardintous Co.	UNIDO
•	Conversion from CFC-11 to HCF-141b and CFC-12 to HFC-134a technology in the manufacture of domestic and commercial refrigeration equipment at the Bouran Saz Karaj, Iran (Kohsar Co.)	UNIDO
•	Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of domestic and commercial refrigeration equipment at the Moradi company	UNIDO
•	Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at the Sherkate Taavoni 435, Iran (Khorsandi Co)	UNIDO
•	Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at the Sarma Gostar Co.	UNIDO
•	Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of domestic and commercial refrigeration equipment at Sain Electric Co.	UNDP
•	Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment and rigid foam at Mehran Sard Co.	UNDP

Conversion from CFC-11 to HCFC-141b technology and from **UNDP** CFC-12 to HFC-134a technology in the manufacture of domestic and commercial refrigeration equipment at Ghotb Jonoub Industrial Group Conversion from CFC-11 to HCFC-141b technology and from **UNDP** CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment and rigid foam at Tehran Sardsazi Industrial Co. Conversion from CFC-11 to HCFC-141b technology and from **UNDP** CFC-12 to HFC-134a technology in the manufacture of domestic refrigerators at Garm Iran Co. **UNDP** Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of domestic refrigerators at Parto Shiva Sanaat

SECTOR: Foam ODS use in sector (2000): 1,520 ODP tonnes

Sub-sector cost-effectiveness thresholds: Flexible US \$ 6.23 /kg

Integral skin US \$ 16.86 /kg

Project Titles:

(a) Conversion of the use of CFC to LCD in the manufacture of flexible foam at Esfanj Jajerood foam company

- (b) Phasing out of ODS in the manufacture of flexible slab stock foam through the use of liquid CO2 blowing technology at Abre Shomal Co.
- (c) Conversion from CFC-11 to water-blown technology in the manufacture of flexible molded polyurethane foam at Sandalisazi Esfanje Ghalebi Iran

Project Data	Flexible slabstock	Flexible slabstock	Integral skin	
	Esfanj	Abre Shomal	Sandalisazi	
Enterprise consumption (ODP tonnes)		90.40	22.40	
Project impact (ODP tonnes)	89.00	90.40	22.40	
Project duration (months)	16	18	30	
Initial amount requested (US \$)	499,299	552,148	199,820	
Final project cost (US \$):				
Incremental capital cost (a)	618,000	600,000	72,000	
Contingency cost (b)	56,800	47,500	7,200	
Incremental operating cost (c)	-175,501	-145,352	109,620	
Total project cost (a+b+c)	499,299	502,148	188,820	
Local ownership (%)	100%	100%	100%	
Export component (%)	0%	0%	0%	
Amount requested (US \$)	499,299	502,148	188,820	
Cost effectiveness (US \$/kg.)	5.63	5.55	8.43	
Counterpart funding confirmed?		Yes		
National coordinating agency	·	Department of Environm	ent	
Implementing agency	Germany	UNIDO UNDP		

Secretariat's Recommendations	
Amount recommended (US \$)	188,820
Project impact (ODP tonnes)	22.40
Cost effectiveness (US \$/kg)	8.43
Implementing agency support cost (US \$)	24,547
Total cost to Multilateral Fund (US \$)	213,367

PROJECT DESCRIPTION

Sector background

- Latest available total ODS consumption (2000)	5,693.30 ODP tonnes
- Baseline consumption of Annex A Group I substances (CFCs)	4,571.70 ODP tonnes
- Consumption of Annex A Group I substances for the year 2000	4,156.50 ODP tonnes
- Baseline consumption of CFCs in foam sector	2,400.00 ODP tonnes
- Consumption of CFCs in foam sector in 2000	1,520.00 ODP tonnes
- Funds approved for investment projects in foam sector as of end of July 2001	US \$ 8,429,179
 Quantity of CFC to be phased out in investment projects in foam sector as of end of July 2001 	1,986.10 ODP tonnes
- Quantity of CFC phased out from approved investment projects in the foam sector as of end of July 2001 (including CFC phased out in projects not yet reported as completed)	1,200.00 ODP tonnes
- Quantity of CFCs in approved ongoing investment projects in the foam sector as of end of July 2001	786.1 ODP tonnes
- Quantity of CFCs remaining to be phased out in the foam sector as of end of July 2001	733.9 ODP tonnes
- Quantity of CFCs to be phased out in investment projects being submitted to the 35 th ExCom (December 2001).	201.8 ODP tonnes
- Quantity of CFCs remaining to be phased out in the foam sector by the end of 2001	532.1 ODP tonnes

Flexible Slabstock Foam

Abre Shomal and Esfanj Jajerood

1. Abre Shomal and Esfanj Jajerood consumed 90.4 tonnes and 89 tonnes of CFC-11 in 2000 respectively in the production of slabstock foam for mattresses and furniture applications using a 1975 PLA-MA and a 1987 locally-made continuos block foam machines respectively. The companies will convert their production to the use of liquid carbon dioxide technology. The total incremental capital cost of conversion for Abre Shomal including 10% contingency amounts to US \$697,500 which includes US \$330,000 for the LCD system, US \$205,000 for other aincillary facilities, US \$50,000 as technology license fee and US \$45,000 for trials, technology transfer and training. The total incremental capital cost of Jajerood amounts to US \$674,000, including US \$478,000 for LCD system with ancillary facilities, US \$50,000 for technology transfer fee and US \$90,000 for trials, training and technology support. Incremental operating savings of US \$145,352 and US \$175,501 are realized in the Abre Shomal and Esfanj Jajerood projects respectively. The total project costs are US \$552,148 and US \$499,299

respectively. The Abre Shomal project is expected to be completed in 1 year and 6 months, while Esfanj Jajerood will be completed in 1 year and 4 months.

Integral Skin

Sandalisazi Estafaj-E-Ghalebi Iran

2. Sandalisazi consumed 22.4 ODP tonnes of CFC-11 in 2000. The enterprise manufactures flexible polyurethane moulded foam for automotive and furniture applications. It currently operates two low-pressure dispensers installed in 1975 and 1994. The enterprise will phase out the use of CFC-11 by converting to water-blown technology. The total incremental capital cost of the project is US \$ 82,000, covering the retrofit of the existing low-pressure dispensers, mould heating system, mould upgradation, trials, technical assistance and training. Incremental operating cost of US \$109,620 is requested. The project is expected to be completed in 2 years, and 6 months.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

Flexible Slabstock Foam

LCD Technology

Abre Shomal (UNIDO), Esfanj Jajerood (Germany - GTZ)

Technology license fee

- 3. The Secretariat discussed with the implementing agencies (GTZ and UNIDO) the issue of continued payment by the Multilateral Fund of the technology license fee given that over US \$2.5 million has already been allocated for payment of the use of the technology. The consensus was that the license fee could be eliminated within the context of a review of the technology as well as the guidelines which were adopted on a trial basis. The issue is elaborated in the Overview of issues identified during project review.
- 4. The breakdown of the costs of the projects is as follows:

Project	Incremental Capital Cost US \$	Incremental Operating Savings US \$	Total Project Cost US \$	License Fee US \$	Grant Total US \$
Abre Shomal	649,500	(145,352)	502,148	50,000	552,148
Esfanj Jajerood	624,800	(175,501)	449,299	50,000	499,299

5. The projects are submitted for individual consideration on account of the issue raised above.

Integral Skin

6. The Secretariat and UNDP agreed on the cost of the Sandalisazi project as US \$188,820 following review of the costs of trials and technical assistance.

RECOMMENDATIONS

7. The Fund Secretariat recommends blanked approval of the Sandalisazi Esfanje Ghalebi Iran project with the level of funding and associated support cost as indicated below

	Project Title	Project Funding (US\$)	* *	Implementing Agency
(c)	Conversion from CFC-11 to water-blown technology in the	,	24,547	UNDP
	manufacture of flexible molded polyurethane foam at			
	Sandalisazi Esfanje Ghalebi Iran			

SECTOR: Refrigeration ODS use in sector (2000): 5,693 ODP tonnes

Sub-sector cost-effectiveness thresholds: Commercial US \$15.21/kg

Domestic US \$13.76/kg Rigid Foam US \$7.83/kg

Project Titles:

(a) Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at Alireza Abdolrezazadeh Co.

- (b) Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at Havasaz Manufacturing & Industrial Co.
- (c) Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at Sanaye Boroudati Maleki
- (d) Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at Sarma Fan Co.

Project Data	Commercial	Domestic/ Rigid Foam				
	Alireza	Havasaz	Sanaye Boroudati	Sarma Fan		
Enterprise consumption (ODP tonnes)	8.12	26.21	19.03	22.04		
Project impact (ODP tonnes)	7.67	24.50	17.88	20.84		
Project duration (months)	30	30	30	30		
Initial amount requested (US \$)	116,646	252,294	215,052	270,824		
Final project cost (US \$):						
Incremental capital cost (a)	110,000	225,500	201,000	214,000		
Contingency cost (b)	11,000	22,550	20,100	21,400		
Incremental operating cost (c)	66,280	45,129	65,613	80,817		
Total project cost (a+b+c)	187,280	293,179	286,713	316,217		
Local ownership (%)	100%	100%	100%	100%		
Export component (%)	0%	0%	0%	0%		
Amount requested (US \$)	116,646	252,294	215,052	267,075		
Cost effectiveness (US \$/kg.)	15.21	10.30	12.03	12.82		
Counterpart funding confirmed?	Yes	Yes	Yes	Yes		
National coordinating agency	Ozone Layer	Depart	artment of Environment			
	Protection Center					
Implementing agency		UNDF	NDP			

Secretariat's Recommendations				
Amount recommended (US \$)	116,646	252,294	215,052	267,075
Project impact (ODP tonnes)	7.67	24.50	17.88	20.84
Cost effectiveness (US \$/kg)	15.21	10.30	12.03	12.82
Implementing agency support cost (US \$)	15,164	32,798	27,957	34,720
Total cost to Multilateral Fund (US \$)	131,810	285,092	243,009	301,795

SECTOR: Refrigeration ODS use in sector (2000): 5,693 ODP tonnes

Sub-sector cost-effectiveness thresholds: Commercial US \$15.21/kg

Domestic US \$13.76/kg Rigid Foam US \$7.83/kg

Project Titles:

(e) Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at the Abbaspour Company, Iran

- (f) Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at the Darvish Mohamad Nazari company, Iran (Jahan Nama)
- (g) Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of domestic and commercial refrigeration equipment at the Alborz Neishabour
- (h) Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of domestic refrigeration equipment at the Ariz Pooyaye Sanat, Iran (Ariz Co.)
- (i) Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of domestic refrigeration equipment at the Borna Sanat Arak
- (j) Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of domestic refrigeration equipment at the Yaghoubali Bazdid Vahdati, Iran (Isun Co.)

Project Data	Commercial		Commercial/ Domestic		Domestic	
	Abbaspour	Jahan Nama	Alborz Neishabour	Ariz	Borna Sanat Arak	Isun
Enterprise consumption (ODP tonnes)	10.14	9.67	16.61	7.87	8.31	10.85
Project impact (ODP tonnes)	9.73	9.28	15.96	7.57	8.00	10.47
Project duration (months)	28	28	28	28	28	28
Initial amount requested (US \$)	144,506	139,160	200,669	86,365	108,238	131,605
Final project cost (US \$):						
Incremental capital cost (a)	114,000	114,000	157,500	72,000	97,000	114,000
Contingency cost (b)	10,400	5,200	14,750	6,200	2,350	5,200
Incremental operating cost (c)	19,806	20,770	17,419	8,165	8,888	12,405
Total project cost (a+b+c)	144,206	139,970	189,669	86,365	108,238	131,605
Local ownership (%)	100%	100%	100%	100%	100%	100%
Export component (%)	0%	0%	0%	0%	0%	0%
Amount requested (US \$)	144,206	139,970	189,669	86,365	108,238	131,605
Cost effectiveness (US \$/kg.)	14.83	15.08	11.88	11.40	13.52	12.56
Counterpart funding confirmed?	Yes	Yes	Yes	Yes	Yes	Yes
National coordinating agency	Department of Environment					
Implementing agency			UNIDO			

Secretariat's Recommendations						
Amount recommended (US \$)	144,206	139,970	189,669	86,365	108,238	131,605
Project impact (ODP tonnes)	9.73	9.28	15.96	7.57	8.00	10.47
Cost effectiveness (US \$/kg)	14.83	15.08	11.88	11.40	13.52	12.56
Implementing agency support cost (US \$)	18,747	18,196	24,657	11,227	14,071	17,109
Total cost to Multilateral Fund (US \$)	162,953	158,166	214,326	97,592	122,309	148,714

SECTOR: Refrigeration ODS use in sector (2000): 5,693 ODP tonnes

Sub-sector cost-effectiveness thresholds: Commercial US \$15.21/kg

Domestic US \$13.76/kg Rigid Foam US \$7.83/kg

Project Titles:

(k) Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at the Sard Va Garm Iran

- (l) Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at the Sardintous Co.
- (m) Conversion from CFC-11 to HCF-141b and CFC-12 to HFC-134a technology in the manufacture of domestic and commercial refrigeration equipment at the Bouran Saz Karaj, Iran (Kohsar Co.)
- (n) Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of domestic and commercial refrigeration equipment at the Moradi company
- (o) Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at the Sherkate Taavoni 435, Iran (Khorsandi Co)
- (p) Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at the Sarma Gostar Co.

Project Data	Commercial		Commercial/Domestic		Commercial/Rigid Foam	
	Sard Va Garm	Sardintous	Kohsar	Moradi	Khorsandi	Sarma Gostar
Enterprise consumption (ODP tonnes)	8.68	10.70	9.97	6.60	5.64	9.75
Project impact (ODP tonnes)	8.39	10.28	9.63	6.38	5.40	9.25
Project duration (months)	28	28	28	28	28	28
Initial amount requested (US \$)	125,350	154,946	131,119	82,400	82,107	127,587
Final project cost (US \$):						
Incremental capital cost (a)	107,500	114,000	104,500	69,000	69,500	92,500
Contingency cost (b)	2,625	10,400	4,725	5,900	2,975	1,115
Incremental operating cost (c)	15,225	21,479	11,301	7,500	9,632	6,769
Total project cost (a+b+c)	125,350	145,879	120,526	82,400	82,107	100,384
Local ownership (%)	100%	100%	100%	100%	100%	100%
Export component (%)	0%	0%	0%	0%	0%	0%
Amount requested (US \$)	125,350	145,879	120,526	82,400	82,107	100,384
Cost effectiveness (US \$/kg.)	14.95	14.19	12.52	12.91	15.18	10.80
Counterpart funding confirmed?	Yes	Yes	Yes	Yes	Yes	Yes
National coordinating agency	Department of Environment					
Implementing agency			UNI	DO		

Secretariat's Recommendations						
Amount recommended (US \$)	125,350	145,879	120,526	82,400	82,107	100,384
Project impact (ODP tonnes)	8.39	10.28	9.63	6.38	5.40	9.25
Cost effectiveness (US \$/kg)	14.95	14.19	12.52	12.91	15.18	10.80
Implementing agency support cost (US \$)	16,296	18,964	15,668	10,712	10,674	13,050
Total cost to Multilateral Fund (US \$)	141,646	164,843	136,194	93,112	92,781	113,434

SECTOR: Refrigeration ODS use in sector (2000): 5,693 ODP tonnes

Sub-sector cost-effectiveness thresholds: Commercial US \$15.21/kg

Domestic US \$13.76/kg Rigid Foam US \$7.83/kg

Project Titles:

(q) Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of domestic and commercial refrigeration equipment at Sain Electric Co.

- (r) Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment and rigid foam at Mehran Sard Co.
- (s) Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of domestic and commercial refrigeration equipment at Ghotb Jonoub Industrial Group
- (t) Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment and rigid foam at Tehran Sardsazi Industrial Co.
- (u) Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of domestic refrigerators at Garm Iran Co.
- (v) Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of domestic refrigerators at Parto Shiva Sanaat

Project Data	Commercial /Domestic	Commercial /Domestic/	Commercial/ Rigid Foam		Domestic	
	Sain	Rigid Foam Mehran	Ghotb Sardsazi		Garm Iran	Parto
	Electric	Sard	Jonoub			Shiva
Enterprise consumption (ODP tonnes)	11.88	18.80	15.54	16.60	12.57	25.39
Project impact (ODP tonnes)	11.18	17.66	14.56	15.50	11.81	23.86
Project duration (months)	30	30	30	30	30	30
Initial amount requested (US \$)	154,716	147,940	170,125	126,569	162,437	303,198
Final project cost (US \$):						
Incremental capital cost (a)	117,000	131,000	200,000	122,500	118,000	213,500
Contingency cost (b)	11,700	13,100	20,000	12,250	11,800	21,350
Incremental operating cost (c)	25,174	41,134	37,324	35,468	23,647	49,098
Total project cost (a+b+c)	153,874	185,234	257,324	170,218	153,447	283,948
Local ownership (%)	100%	100%	100%	100%	100%	100%
Export component (%)	0%	0%	0%	0%	0%	0%
Amount requested (US \$)	152,024	144,715	170,125	125,244	153,447	283,948
Cost effectiveness (US \$/kg.)	13.60	8.20	11.68	8.08	13.00	11.90
Counterpart funding confirmed?	Yes	Yes	Yes	Yes	Yes	Yes
National coordinating agency	Department of Environment					
Implementing agency			UN	DP		

Secretariat's Recommendations						
Amount recommended (US \$)	152,024	144,715	170,125	125,244	153,447	283,948
Project impact (ODP tonnes)	11.18	17.66	14.56	15.50	11.81	23.86
Cost effectiveness (US \$/kg)	13.60	8.20	11.68	8.08	13.00	11.90
Implementing agency support cost (US \$)	19,763	18,813	22,116	16,282	19,948	36,913
Total cost to Multilateral Fund (US \$)	171,787	163,528	192,241	141,526	173,395	320,861

PROJECT DESCRIPTION

Sector Background

Latest available total ODS consumption (2000)	5,693.00 ODP tonnes
Baseline consumption of Annex A Group I substances (CFCs)	4,571.70 ODP tonnes
Consumption of Annex A Group I substances for the year 2000	4,156.00 ODP tonnes
Baseline consumption of CFCs in refrigeration sector	2,075.00 ODP tonnes
Consumption of CFCs in refrigeration sector in 2000	1,752.00 ODP tonnes
Funds approved for investment projects in refrigeration sector as of end of 2000	US \$25,700,000.00
Quantity of CFC to be phased out in investment projects in refrigeration sector as of end of 2000	2,445.00 ODP tonnes

- 8. In the domestic and commercial refrigeration sub-sectors, there are about 50 large and medium-sized manufacturers and many small-scale enterprises. The Executive Committee has approved about US \$27.7 million for 64 projects to phase out 2,445 ODP tonnes of CFC for enterprises manufacturing refrigeration equipment in the refrigeration sector.
- 9. The 2000 ODS consumption in the refrigeration sector was reported by the National Ozone Unit to be 1,752 ODP tonnes, including both manufacturing of new equipment and servicing. About 976.6 ODP tonnes will potentially be phased out through implementation of ongoing approved projects. This leaves 775.4 ODP tonnes still to be addressed. Of which, about 447 ODP tonnes is consumed by very small enterprises and in the servicing sector and will be addressed through the implementation of the RMP, currently under preparation by UNIDO. The Government of Iran has provided the Secretariat with the updated list of remaining enterprises indicating their production levels and ODS consumption. About 329 ODP tonnes will need to be phased out through implementation of investment projects in the refrigeration manufacturing sub-sector.

Twenty-two refrigeration enterprises

- 10. Twenty-two domestic and commercial refrigeration projects for small- and medium-sized enterprises with similar backgrounds have been submitted for consideration at the 35th Meeting of the Executive Committee. Of these projects ten have been submitted by UNDP and twelve by UNIDO.
- 11. The 22 enterprises consume 223.94 ODP tonnes of CFC-11 and 74.49 ODP tonnes of CFC-12 (in 2000) in the manufacture of domestic and commercial refrigeration equipment. All of the enterprises manufacture similar equipment (refrigerators, domestic and commercial freezers, water coolers and refrigerator/freezer combo units), and operate low-pressure foam dispensers which are predominantly locally made, assorted foaming moulds and jigs, production and portable refrigerant charging machines, vacuum pumps and leak detectors in the baseline. In addition to low-pressure dispensers, Mehran Sard operates a mobile high-pressure foam dispenser in the baseline.

- 12. The total phase out of 273.8 ODP tonnes of CFC-11 and CFC-12 will be achieved by converting CFC-11 based technology to HCFC-141b as the foam blowing agent, and CFC-12 to HFC-134a as the refrigerant. Under the current projects, the existing low-pressure machines will be replaced by high-pressure dispensers at all the enterprises except Moradi, Pooyaye Sanat and Sherkate Tavoni, where they will be replaced by new low-pressure dispensers. All enterprises will require provision of industrial or portable charging units, new vacuum pumps and retrofitting of existing vacuum pumps and leak detectors suitable for HFC-134a duty. Other costs include re-design, testing, trials, technical assistance and training. Incremental operating costs are requested by the enterprises reflecting the higher cost of chemicals and an increase in foam density.
- 13. In accordance with decisions of the Executive Committee on the use of HCFCs, a letter of transmittal from the Government of Iran endorsing the use of HCF-141b by the companies is attached.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

- 14. About 776 ODP tonnes still need to be addressed in the refrigeration sector in Iran. About 447 ODP tonnes are consumed by servicing and small scale enterprises which will be addressed through RMP, currently under preparation by UNIDO. The balance of 329 ODP tonnes belongs to the manufacturing sub-sector. Implementation of projects submitted to the 35th Executive Committee meeting will lead to the phase out of 273 ODP tonnes with a balance of 56 ODP tonnes to be addressed at a later stage.
- 15. Each project proposal includes a request for technical assistance and training (for both foam and refrigerant parts), which amounts to US \$20,000 in UNDP projects and US \$10,000 per enterprise in UNIDO projects. The Secretariat requested explanations from UNDP regarding high costs of this project component. UNDP provided a breakdown of technical assistance and training costs. These costs are primarily associated with the services of international and local consultants.
- 16. Similarly, there is a difference in costs of trials between projects for individual enterprises (US \$10,000 per enterprise) and umbrella projects (US \$5,000 per enterprise). The Secretariat has requested detailed breakdown of costs of trials from UNDP. The information provided by UNDP in this regard indicated that some of the components included in the cost of trials constitute elements of capital cost which may or may not be eligible for funding.
- 17. The Secretariat discussed these issues with UNDP and agreed to eliminate cost components that are not associated with technical assistance, trials and testing, and to retain the cost components that are needed for the implementation of the projects.
- 18. The Secretariat has indicated to UNIDO that the cost of installation of foaming dispensers in Al-Borz, Sardin, Abbaspour and Darvish are not eligible for funding since this cost is included in the cost of equipment. Budgets were revised accordingly.

19. Sarma Gostar is involved in production of refrigerated trucks and insulation panels for refrigerated compartments installed on these trucks. The Secretariat and UNIDO agreed that Decision 31/45 on the guidelines for the sub-sector for assembly, installation and charging of refrigeration equipment should apply in this project. Incremental operating costs (IOC) associated with production of cold stores (refrigerant part) were recognised as ineligible for funding. The cost-effectiveness threshold of US \$7.83/kg ODP was applied to determine the level of eligible incremental costs for the rigid foam operations. The budget of the project was revised accordingly.

RECOMMENDATIONS

20. The Secretariat recommends blanket approval of the projects at the funding level indicated below.

	Project Title	Project	Support Cost	Implementing
		Funding (US\$)	(US\$)	Agency
(a)	Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at Alireza Abdolrezazadeh Co.		15,164	UNDP
(b)	Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at Havasaz Manufacturing & Industrial Co.		32,798	UNDP
(c)	Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at Sanaye Boroudati Maleki		27,957	UNDP
(d)	Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at Sarma Fan Co.		34,720	UNDP
(e)	Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at the Abbaspour Company, Iran	144,206	18,747	UNIDO
(f)	Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at the Darvish Mohamad Nazari company, Iran (Jahan Nama)		18,196	UNIDO
(g)	Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of domestic and commercial refrigeration equipment at the Alborz Neishabour	189,669	24,657	UNIDO
(h)	Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of domestic refrigeration equipment at the Ariz Pooyaye Sanat, Iran (Ariz Co.)	86,365	11,227	UNIDO
(i)	Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of domestic refrigeration equipment at the Borna Sanat Arak	108,238	14,071	UNIDO
(j)	Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of domestic refrigeration equipment at the Yaghoubali Bazdid Vahdati, Iran (Isun Co.)	131,605	17,109	UNIDO

(k)	Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of commecial refrigeration equipment at the Sard Va Garm Iran	· · · · · · · · · · · · · · · · · · ·	16,296	UNIDO
(1)	Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at the Sardintous Co.	145,879	18,964	UNIDO
(m)	Conversion from CFC-11 to HCF-141b and CFC-12 to HFC-134a technology in the manufacture of domestic and commercial refrigeration equipment at the Bouran Saz Karaj, Iran (Kohsar Co.)	120,526	15,668	UNIDO
(n)	Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC- 134a technology in the manufacture of domestic and commercial refrigeration equipment at the Moradi company	82,400	10,712	UNIDO
(0)	Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at the Sherkate Taavoni 435, Iran (Khorsandi Co)	82,107	10,674	UNIDO
(p)	Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at the Sarma Gostar Co.	100,384	13,050	UNIDO
(q)	Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of domestic and commercial refrigeration equipment at Sain Electric Co.		19,763	UNDP
(r)	Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment and rigid foam at Mehran Sard Co.		18,813	UNDP
(s)	Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of domestic and commercial refrigeration equipment at Ghotb Jonoub Industrial Group		22,116	UNDP
(t)	Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment and rigid foam at Tehran Sardsazi Industrial Co.		16,282	UNDP
(u)	Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of domestic refrigerators at Garm Iran Co.		19,948	UNDP
(v)	Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of domestic refrigerators at Parto Shiva Sanaat	283,948	36,913	UNDP

ROM : OZONE OFFICE(IRAN)

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35" Meeting of the Executive Committee of the Multilatural Fund for the Implantentation of the Moutreal Protocol

GOVERNMENT NOTE OF TRANSMITTAL OF INVESTMENT PROJECTS TO THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL

PROJECT(S) OF THE GOVERNMENT OF THE ISLAMIC REPUBLIC OF IRAN

The Government of the Islamic Republic of Iran requests UNDP to submit the project(s) listed in Table I below to the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol for consideration at its 35th Meeting.

Section I: ODS Consumption Data

- The ODS consumption figures of the projects has/have been validated by the National Ozone Unit (NOU).
- 2. The consumption data have been retained in the records of the NOU for reference and/or future verification.
- The Government has been advised by the NOU that the agreement to the projects
 indicates a commitment to ensure that the validated phase out figures were realized and
 yielded a sustained reduction from the 2000 consumption of 134.14 ODP tonnes for
 the refrigeration sector.

Table 1: Projects Submitted to the 35th Moeting of the Executive Committee by UNDP

Project Title/Sector	Type of ODS	Consumption (ODP Tonnes) , (2000)	Amount to be Phased Out (ODP Tonnes), (2003)
Refrigeration Capter		THE RESIDENCE PROPERTY.	
Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of domestic and commercial refrigeration at the Parto Shiva Sanaat Co., Iran —dom ref.	CFC-12	25.39	23.86
Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of commercial of igeration at the Havasaz Manufacturing & Industrial Co., Iran / comm ref-Rigid Foams.	CFC-11 & CFC 12	26.21	24.50
Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of domestic refrigeration at the Garm Iran Co., Iran / dom ref.	CFC-11 & CFC-12	12.57	11.81
Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of domestic and commercial	CFC-11 CFC-12	15.54	14.56

35th Meeting of the Executive Committee of the Multilutoral Fund for the Implementation of the Montreal Protocol

	<u> </u>		
refrigeration at the Ghoth Jonoub Industrial			
Group, Iran / dom-comm ref.			
Conversion from CFC-11 to HCFC-141b and	CFC-11	19.03	17.88
CFC-12 to HFC-134a technology in the	å&.		
manufacture of commercial refrigeration at the	CFC-12		
Sanaye Boroudati Maleki , Iran / comm			
Rigid Foams.		Ī	
Conversion from CFC-11 to HCFC-141b and	CFC-TI	18.80	17.66
CFC-12 to HFC-134a technology in the	&		
manufacture of commercial refrigoration at the	CFC-12		
Mehran Sard Co., Iran / comm ref - Rigid Foams	0.0.12		
Conversion from CFC-11 to HCFC-141b and	CFC-11	16.60	15.50
CFC-12 to HFC-134a technology in the	&	1	15.50
manufacture of domestic and commercial	ČFC-12	}	
refrigeration at the Tehran Surdauzi Industrial			
Co., Iran / comm ref Rigid Foams			
Total	T 17 - 17 - 17 - 17 - 17 - 17 - 17 - 17	134.14	125.77

Section II: Other Relevant Actions Arising from Decision 33/2

- 4. It is understood that, in accordance with the relevant guidelines, the funding received for a project would be partly or fully returned to the Multilateral Fund in cases where technology was changed during implementation of the project without informing the Fund Secretariat and without approval by the Executive Committee;
- 5. The National Ozone Unit undertakes to monitor closely, in cooperation with customs authorities and the environmental protection authorities, the importation and use of CFCs and to combine this monitoring with occasional unscheduled visits to importers and recipient manufacturing companies to check invoices and storage areas for unauthorized use of CFCs.
- 6. The National Ozone Unit will cooperate with the relevant implementing agencies to conduct safety inspections where applicable and keep reports on incidences of fires resulting from conversion projects.

Section III: Projects Requiring the Use of HCFCs for Conversion

- 7. In line with Decision 27/13 of the Executive Committee and in recognition of Article 2F of the Montreal Protocol, the Government
 - (i) has reviewed the specific situations involved with the projects; Parto Shiva Sanaat Co., Havasaz Manufacturing & Industrial Co., Garm Iran Co., Ghoth Jonoub Industrial Co., Sanaye Boroudati Maleki Co., Mehran Sard Co., Tehran Surdsazi Industrial Co. as well as its HCFC commitments under Article 2F; and

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35th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol

(ii) has nonetheless determined that, at the present time, the projects needed to use IICFCs for an interim period with the understanding that no funding would be available for the future conversion from HCFCs for the companies involved.

Name and signat	ture of responsible Officer:	
	Fercidoun Rostami (Rosland
Designation:		Date: 12 october 2001
	Manager Of Ozone Protection Office Department of Environment Islamic Republic of Iran	
Telephone:	n · · ·	
	(+9821) 8261116	Mercen
Fax;	(+9821) 8261117	
E-mail:	Ozone@ugcji.com	

35th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Mantreal Protocol

GOVERNMENT NOTE OF TRANSMITTAL OF INVESTMENT PROJECTS TO THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL

PROJECT(S) OF THE GOVERNMENT OF THE ISLAMIC REPUBLIC OF TRAN

The Government of the Islamic Republic of Iran requests UNDP to submit the project(s) listed in Table I below to the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol for consideration at its 35th Meeting.

Section I: ODS Consumption Data

- The ODS consumption figures of the projects has/have been validated by the National Ozone Unit (NOU).
- 2. The consumption data have been retained in the records of the NOU for reference and/or future verification.
- 3. The Government has been advised by the NOU that the agreement to the projects indicates a commitment to ensure that the validated phase out figures were realized and yielded a sustained reduction from the 2000 consumption of 64.08 ODP tonnes for the refrigeration sector.

Table 1: Projects Submitted to the 35th Mueting of the Executive Committee by UNDP

Project Title/Sector	Type of ODS	Consumption (ODP Tonnes) , (2000)	Amount to be Phased Out (ODP Tonnes), (2003)
Refrigeration Sector			(2003)
Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration at the Alireza Abdolrezazadeh Co., Iran / comm ref.	CFC-11	8.12	7.67
Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration at the Sarma Fan Co., Iran / comm ref.	CFC-12	22.04	20.84
Conversion from CFC-11 to HCFC-1416 and CFC-12 to HFC-134a technology in the manufacture of domestic and commercial refrigeration at the Sain Electric Co., Iran / dom - comm ref.	CFC-11 & CFC-12	11.88	11.18
Conversion from CFC-II to water blown technology in the manufacture of flexible molded polyurethane foam at the Sandalisazi Esfanje Chalebi Iran, Iran / Flexible Molded and Integral	CFC-11	22.40	22.40

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Other Relevant Actions Arising from Decision 33/2 Section II:

- It is understood that, in accordance with the relevant guidelines, the funding received 4. for a project would be partly or fully returned to the Multilateral Fund in cases where technology was changed during implementation of the project without informing the Fund Secretariat and without approval by the Executive Committee;
- The National Ozone Unit undertakes to monitor closely, in cooperation with customs 5. authorities and the environmental protection authorities, the importation and use of CFCs and to combine this monitoring with occasional unscheduled visits to importers and recipient manufacturing companies to check invoices and storage areas for unauthorized use of CFCs.
- The National Ozone Unit will cooperate with the relevant implementing agencies to conduct safety inspections where applicable and keep reports on incidences of fires resulting from conversion projects.

Section III: Projects Requiring the Use of HCFCs for Conversion

- In line with Decision 27/13 of the Executive Committee and in recognition of Article 7. 2F of the Montreal Protocol, the Government
 - has reviewed the specific cituations involved with the projects; Altress Abdolrezazadeh Co., Sarma Fan Co., Sain Electric Co., Sandallsazi Esfanje Ghalehi Iran Co de well as its HCFC commitments under Article 2F; and
 - (ii) has nonetheless determined that, at the present time, the projects needed to use HCFCs for an interim period with the understanding that no funding would be available for the future conversion from HCFCs for the companies involved.

the delication of Production I decrees the same	Fereidoun Rostami (Coshan	
	Tel cidokii Kontailli	Δ
Designation:	Date: 2 Jun Manager Of Ozone Protection Office Elepartment of Environment Islamic Republic of Iran	ne 2001
Telephone:	(+9821) 8261116	

COVERNMENT NOTE OF TRANSMITTAL OF INVESTMENT PROJECTS TO THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL

PROJECT(S) OF THE GOVERNMENT OF THE ISLAMIC REPUBLIC OF TRAN

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- 3. The Government has been advised by the NOU that the agreement to the projects indicates a commitment to ensure that the validated phase out figures were realized and yielded a sustained reduction from the 2000 consumption of 64.08 ODP tonnes for the refrigeration sector.

Table 1: Projects Submitted to the 35th Moeting of the Executive Committee by UNDP

Project Title/Sector	Type of ODS	Consumption (ODP Tonnes) , (2000)	Amount to be Phased Out (ODP Tonnes), (2003)
Refrigeration Sector		,	
Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration at the Alireza Abdolrezazadeh Co., Iran / comm ref.	CFC-11	8.12	7.67
Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration at the Sarma Fan Co., Iran / comm ref.	CFC-12	22.04	20.84
Conversion from CFC-11 to HCFC-141b and CFC-12 to 11FC-134a technology in the manufacture of domestic and commercial refrigeration at the Sain Electric Co., Iran / dom - comm ref.	CFC-11 & CFC-12	11.88	11.18
Conversion from CFC-II to water blown technology in the manufacture of flexible molded polyurethane foam at the Sandalisazi Esfanje Ghalebi Iran, Iran / Flexible Molded and Integral	CFC-11	22.40	22.40

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		Total	and the second of the second s		64.08	61.73
Sec	tion II:	Other Relev	ant Actions Arisi	lng from D	ecision 33/2	
4.	ior tech	a project wou nolugy was ch	ld be partly or full anged during im	y returned : plementation	evant guidelines, the to the Multilateral Fu on of the project with coutive Committee;	end in cases who
5.	end end	orities and the	environmental p sine this monitorin sufacturing comp	rotection a or with occu	r closely, in cooperate the cooperate of	rtation and use
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Secti	ion III:	Projects Req	uiring the Use of	HCFCs fo	r Conversion	
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	(ii)	HCFCs for a		with the un	derstanding that no f PCs for the compan	unding would b
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Date:

Projects of the Government of the Islamic republic of Iran

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FROM : OZONE DEFICE(IRAN)

SEP. 25, 2001 2:02PM P 4 PHONE NO. : 009821 8261117



n. a	EE .
Ref:	Islamic Republic of Iran
Date:	Department of Environment
	Ozone Layer Protection Unit

In the name of God

35th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol

GOVERNMENT NOTE OF TRANSMITTAL OF INVESTMENT PROJECTS TO THE EUCUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL

PROJECT(5) OF THE GOVERNMENT OF THE ISLAMIC REPUBLIC OF IRAN

The Government of the Islamic Republic of Iran requests UNIDO to submit the project(s) listed in Tall le 1 below to the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Pix local for consideration at its 35th Meeting.

Section I: ODS Consumption Data

- 1. The ODS consumption figures of the projects has/have been validated by the National Ozone Unit (NOU).
- 2. The consumption data have been retained in the records of the NOU for reference and/or full re verification.
- 3. The Government has been advised by the NOU that the agreement to the projects includes a commitment to ensure that the validated phase out figures were realized and yielded a subtained reduction from the 2000 consumption of 28.86 ODP tonnes for the refrigeration sector.

Tal le 1: Projects Submitted to the 35th Meeting of the Executive Committee by UNIDO

Project little/Sector	Type of ODS	Consumption (ODP Tonnes), (2000)	Amount to be Phased Out (ODP Tonnes), (2003)
Refrigeration Sector			
Convey ion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a to the inclose in the manufacture of commercial refrigeration equipment at the "Abbaspour" company, Iran / Comm. Ref.	CFC-11 & CFC-12	10.14	9.73
Convention from CFC-11 to HCFC-141b and CFC-12 to HFC- 134a test mology in the manufacture of domestic refrigeration equipment at the Ariz Pooyaye Sanat, Iran. (Ariz Co.) / Dom. Ref.	CFC-11 & CFC-12	7.87	7.57

Projects of the Government of the Islamic republic of Iran	Date:	(Page 1 of 3)
Environmental Research Center, Pardissan Park Tehran IKAN Tel 9821-8261110 Fax: 9821-82		

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Date: Islamic Republic of Iran Department of Environment Ozone Layer Protection Unit

In the name of God

35th Meeting of the Executive Committee of the Multilatural Fund for the Implementation of the Montreal Protocol

Project Title/Sector	Type of ODS	Consumption (ODP Tonnes), (2000)	Amount to be Phased Out (ODP Tonnes), (2003)
Conversion from CFC-11 to HCFC-1410 and CFC-12 io HFC- 134a kst hnology in the manufacture of domestic refrigeration equipment at the Yaghoubali Bazdid Vahdati, Iran (Isun Co.) / Dom. Fe f.	CFC-11 & CFC-12	10.85	10.47
Total		28.86	27.77

Section II: Other Relevant Actions Arising from Decision 33/2

- 4. It is understood that, in accordance with the relevant guidelines, the funding received for a pm ect would be partly or fully returned to the Multilateral Fund in cases where technology was changed during implementation of the project without informing the Fund Secretariat and without approval by the Executive Committee;
- 5. The National Cizone Unit undertakes to monitor closely, in cooperation with customs authorities and the environmental protection authorities, the importation and use of CFCs and to combine this monitoring with occasional unscheduled visits to importers and recipient methodaturing companies to check invoices and storage areas for unauthorized use of CFCs.
- 6. The National Ozone Unit will cooperate with the relevant implementing agencies to contract safety inspections where applicable and keep reports on incidences of fires resulting from contraction projects.

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!! ojects of the Government of the Islamic republic of Iran	Date:	(Page 2 of 3)
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Environmental Research Center, Pardissan Park, Hemmat Highway, PO. Box 14665/159 Tehran.IRAN 7cl 9831-8261116 Fax: 9821-8261117 c.muil. Ozone@acctr.com FROM : DZONE OFFICE(IRAN)

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Ref:	Islamic Republic of Iran
Date:	Department of Environment
	Ozone Layer Protection Unit
In the name of God	

35th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol

Settion III: Projects Requiring the Use of HCFCs for Conversion

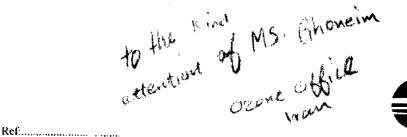
- In line with Decision 27/13 of the Executive Committee and in recognition of Article 2F of 7. the I fontreal Protocol, the Government
 - has reviewed the specific situations involved with the projects; Abbaspour Co., (i) Ariz Co., and Isun Co. as well as its HCFC commitments under Article 2F; and
 - has nonetheless determined that, at the present time, the projects needed to (ii) use HCFCs for an interim period with the understanding that no funding would be available for the future conversion from HCFCs for the companies involved.

Fill idoun Rostami F Kosland	
Diet gnation: Manager	Date: 25 Sep. 2001
Environmental Research Center, Pardissan Park, Hemmat Highw Ozone Layer Protection Unit	vey,
PO. Box 14665/159 Tehran - IRAN	
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Projects of the Government of the Islamic republic of Iran Date:	(Page 3 of 3

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Date:....

Islamic Republic of Iran
Department of Environment
Ozone Layer Protection Unit

In the name of God

35th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol

GOVERNMENT NOTE OF TRANSMITTAL OF INVESTMENT PROJECTS TO THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL

PROJECT(S) OF THE GOVERNMENT OF THE ISLAMIC REPUBLIC OF IRAN

The Government of the Islamic Republic of Iran requests UNIDO to submit the project(s) listed in libble 1 below to the Executive Committee of the Multilateral Fund for the Implementation of the Montreal otocol for consideration at its 35th Meeting.

Section I: ODS Consumption Data

- 1. The ODS consumption figures of the projects has/have been validated by the National Ozone Unit (NOU).
- 2. The consumption data have been retained in the records of the NOU for reference and/or fulure verification.
- 3. The Government has been advised by the NOU that the agreement to the projects licates a commitment to ensure that the validated phase out figures were realized and yielded a stained reduction from the 2000 consumption of 43.61 ODP tonnes for the refrigeration sector.

ble 1: Projects Submitted to the 35th Meeting of the Executive Committee by UNIDO

Projec Title/Sector	Type of ODS	Consumption (ODP Tonnes), (2000)	Amount to be Phased Out (ODP Tonnes), (2003)
Refingeration Sector			
Conversion from CFC-11 to HCFC-141h and CFC-12 to HFC- 134# 12 thnology in the manufacture of domestic refrigeration equipment at the Boma Sanat Arak, Iran / Dom. Ref.	CFC-11 & CFC-12	8.31	8.0
Convertion from CFC-11 to HCFC-141b and CFC-12 to HFC- 134arts thrology in the manufacture of domestic and commercial refrigion ition equipment at the Alborz Neishabour, Iran / Dom Comm. Ref.	CFC-11 & CFC-12	16.59	15.96
Comes ion from CFC-11 to HCFC-141b and CFC-12 to HFC- 134a of thrology in the manufacture of domestic and commercial refrigestition equipment at the Bouran Saz Káraj., Iran. / Dom Comm. Ref.	CFC-11 & CFC-12	10.03	9.69

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Projects of the Government of the Islamic republic of Iran	Date:	(Page 1 of 3)

Environmental Research Center, Pardissan Park. Hemmat Highway, PO. Box 14665/159 Tehran.IRAN Tel 9821-8201116 Fax: 9821-8261117 e.mail: Ozone@accir.com TO : PHONE ~O. : 00431213464568

FROM : DZONE D'FICE(IRAN)

SEP.26.2001 11:45AM P 2 PHONE NO. : 009821 8261117



In the name of God

35th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol

Project "itle/Sector	Type of ODS	Consumption (ODP Tonnes), (2000)	Amount to be Phased Out (ODP Tonnes), (2003)
Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC- 134a less mology in the manufacture of commercial refrigeration equipment at Sard va Garm Iran, Iran, I Comm. Ref.	CFC-11 & CFC-12	8.68	8.39
Total		43.61	42.04

Settion II: Other Relevant Actions Arising from Decision 33/2

- 4. It is understood that, in accordance with the relevant guidelines, the funding received for a project would be partly or fully returned to the Multilateral Fund in cases where technology was charged during implementation of the project without informing the Fund Secretariat and without approval by the Executive Committee;
- 5. The National Ozone Unit undertakes to monitor closely, in cooperation with customs authorities and the environmental protection authorities, the importation and use of CFCs and to combine this monitoring with occasional unscheduled visits to importers and recipient man afacturing companies to check involces and storage areas for unauthorized use of CFCs.
- 6. The National Ozone Unit will cooperate with the relevant implementing agencies to computed safety inspections where applicable and keep reports on incidences of fires resulting from comparison projects.

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Environmental Research Center, Pardissan Park. Hemmat Highway, PO. Box 14665/159 Tehran.IRAN Tel 9821-8261116 Fax: 9821-8261117 e.mail: Ozone@accir.com PHONE NO.: 00431213464568

Ref:.....

Date;.....

SEP.26.2001 11:46AM P 3 PHONE NO. : 009821 8261117



Islamic Republic of Iran Department of Environment Ozone Layer Protection Unit

In the name of God

33" Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol

Section III: Projects Requiring the Use of HCFCs for Conversion

- In line with Decision 27/13 of the Executive Committee and in recognition of Article 2F of 7. in Montreal Protocol, the Government
 - has reviewed the specific situations involved with the projects; Borna Sanat (i) Arak, Alborz Neishabour, Bouran Saz Karaj and Sard va Garm Iran.. as well as its HCFC commitments under Article 2F; and
 - has nonetheless determined that, at the present time, the projects needed to (ii) use HCFCs for an interim period with the understanding that no funding would be available for the future conversion from HCFCs for the companies involved.

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SEP. 25. 2001 5:18PM P 3 PHONE NO. : 009821 8261117



Ref. 02/1462 Date 25 1/1/2

Islamic Republic of Iran Department of Environment Ozone Layer Protection Unit

In the name of God

35th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol

GOVERNMENT NOTE OF TRANSMITTAL OF INVESTMENT PROJECTS TO THE MELECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL

PROJECT(3) OF THE GOVERNMENT OF THE ISLAMIC REPUBLIC OF IRAN

The Government of the Islamic Republic of Iran requests UNIDO to submit the project(s) listed in Table 1 below to the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol for consideration at its 35th Meeting.

Hection I: ODS Consumption Data

- The ODS consumption figures of the projects has/have been validated by the National Ozone Unit (NOU).
- 2. The consumption data have been retained in the records of the NOU for reference and/or ill ure verification.
- 3. The Government has been advised by the NOU that the agreement to the projects dicates a commitment to ensure that the validated phase out figures were realized and yielded a distained reduction from the 2000 consumption of 9.66 ODP tonnes for the refrigeration sector.

Sable 1: Projects Submitted to the 35th Meeting of the Executive Committee by UNIDO

Project Title/Sector	Type of ODS	Consumption (ODP Tonnes), (2000)	Amount to be Phased Out (ODP Tonnes), (2003)
Religeration Sector			
Communication rsion from CFC-11 to HCFC-141b and CFC-12 to HFC-134; echnology in the manufacture of commercial refrigeration equipment at the Darvish Mohamad Nazari, Iran (Jahan Nama) /	CFC-11 & CFC-12	9.66	9.28
Contr.), Ref.		9.66	9.28

Projects of the Government of the Islamic republic of Iran	Date: (Page 1 of 3)	
Environmenta! Research Center, Pardissan Park. Her Tehran IRAN Tel 9821-8261116 Fax: 9821-8261	mmat Highway, PO. Box 14665/159 117 e.mail : Ozone@accir.com	-

PHONE NO. : 00431213464568

FROM : DZONE DIFFICE(IRAN)

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SEP.25.2001 5:17PM P 1 PHONE NO. : 009821 8261117



Islamic Republic of Iran Department of Environment Ozone Layer Protection Unit

In the name of God

35" Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol

Sultion II: Other Relevant Actions Arising from Decision 33/2

- 4. It is understood that, in accordance with the relevant guidelines, the funding received for a project would be partly or fully returned to the Multilateral Fund in cases where technology was an unged during implementation of the project without informing the Fund Secretariat and without approval by the Executive Committee;
- The National Ozone Unit undertakes to monitor closely, in cooperation with customs thorities and the environmental protection authorities, the importation and use of CFCs and to maintenance this monitoring with occasional unscheduled visits to importers and recipient manufacturing companies to check invoices and storage areas for unauthorized use of CFCs.
- 6. The National Ozone Unit will cooperate with the relevant implementing agencies to conduct safety inspections where applicable and keep reports on incidences of fires resulting from conversion projects.

Projects of the Go	pernment of the Islamic republic of Iran	Date:	(Page 2 of 3)
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Environmental Research Center, Pardissan Park, Hemmat Highway, PO. Box 14665/159 Tehran, IRAN Tel 9821-8261116 Fax: 9821-8261117 e.mail: Ozone@acctr.com PHONE NO. : 00431213464568

FROM : CZONE CFFICE(1RAN)

SEP.25.2001 5:18PM P 2 PHONE NO. : 009821 8261117



Ozone Layer Protection Unit

Ref: CZ/10/2.
Date: 2.8 Sap 2001

In the name of God

35th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol

Section III: Projects Requiring the Use of HCFCs for Conversion

- 7. In line with Decision 27/13 of the Executive Committee and in recognition of Article 2F of he Montreal Protocol, the Government
 - (i) has reviewed the specific situations involved with the projects; as well as its HCFC commitments under Article 2F; and
 - (ii) has nonetheless determined that, at the present time, the projects needed to use HCFCs for an interim period with the understanding that no funding would be available for the future conversion from HCFCs for the companies involved.

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Designation: Mana	ger		The state of the s	Date: 25 Sep. 2001
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Projects of the G	overnment of the Islamic reput	iic of Iran I	Yate:	(Page 3 of

Tehran.IRAN Tel 9821-8261116 Fax: 9821-8261117 e.mail: Ozone@accir.com

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page 3

FO : PHONE NO. : 00431213464568

FROM : DZONE : FICE(1RAN)

SEP.25.2001 1:59PM P 1 PHONE NO.: 009821 8261117



	
Ref:	Islamic Republic of Iran
Date:	Department of Environment
Leate	Ozone Layer Protection Unit

In the name of God

35th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol

GOVERNMENT NOTE OF TRANSMITTAL OF INVESTMENT PROJECTS TO THE EMECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL

PROJECT(S) OF THE GOVERNMENT OF THE ISLAMIC REPUBLIC OF IRAN

The Government of the Islamic Republic of Iran requests UNIDO to submit the project(s) listed in Table 1 below to the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Project for consideration at its 35th Meeting.

Sultion I: ODS Consumption Data

- The ODS consumption figures of the projects has/have been validated by the National Ozone Unit (NOU).
- 2. The consumption data have been retained in the records of the NOU for reference and/or further verification.
- 3. The Government has been advised by the NOU that the agreement to the projects in ticates a commitment to ensure that the validated phase out figures were realized and yielded a substained reduction from the 2000 consumption of 33.50 ODP tonnes for the refrigeration sector.

I ple 1: Projects Submitted to the 35th Meeting of the Executive Committee by UNIDO

Proje∷ Title/Sector	Type of ODS	Consumption (ODP Tonnes), (2000)	Amount to be Phased Out (ODP Tonnes), (2003)
Religeration Sector			
Consideration from CFC-11 to HCFC-141b and CFC-12 to HFC- 134# Exhapped in the manufacture of commercial refrigeration equipment at the Sherkate Taavon 435, Iran (Khorsandi Co.) /	CFC-11 & CFC-12	5.64	5.4
Corner Ref. Corner sion from CFC-11 to HCFC-141b and CFC-12 to HFC- 134b Echnology in the manufacture of domestic and commercial refrige ation equipment at the "Moradi" Company, Iran / Dom.	CFC-11 & CFC-12	6.60	6.38
Commission from CFC-11 to HCF (>141b and CFC-12 to HFC- 134): echnology in the manufacture of commercial refrigeration equip nent at the Sardin Tous Co., Iran. / Comm. Ref.	CFC-11 & CFC-12	10.70	10.28

Pro	ects of the Government of the Islamic republic of Iran	Date:		(Page 1 of 3)
-	Costas Pardissan Park III	emmat His	hway, PO. Box 146	65/159
	Environmental Research Cemer, Farthson Fall RAN Tel 9821-8261116 Fax: 9821-826	1117 es	mail : Ozone@accir	com

TO: PHONE NO.: 00431213464568

FROM : OZONE (1FICE(1RAN)

SEP.25.2001 2:00PM P 2 PHONE NO. : 009821 8261117

Ref:	Islamic Republic of Iran
Date:	Department of Environment
	Ozone Layer Protection Unit

In the name of God

35th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol

Project 1':le/Sector	Type of ODS	Consumption (ODP Tonnes), (2000)	Amount to be Phased Out (ODP Tonnes), (2003)
Conversit in from CFC-11 to HCFC-141b and CFC-12 to HFC- 134a ter hipology in the manufacture of commercial refrigeration equipment at the Sarma Gostar Cc., Iran. / Comm. Ref.	CFC-11 & CFC-12	10.56	10.06
Total		33.50	32.12

Section II: Other Relevant Actions Arising from Decision 33/2

- 4. It is understood that, in accordance with the relevant guidelines, the funding received for a project would be partly or fully returned to the Multilateral Fund in cases where technology was charged during implementation of the project without informing the Fund Secretariat and without approval by the Executive Committee;
- 5. The National Ozone Unit undertakes to monitor closely, in cooperation with customs authorities and the environmental protection authorities, the importation and use of CFCs and to combine this monitoring with occasional unscheduled visits to importers and reciplent mail ufacturing companies to check invoices and storage areas for unauthorized use of CFCs.
- 6. The National Ozone Unit will cooperate with the relevant implementing agencies to correlact safety inspections where applicable and keep reports on incidences of fires resulting from corresion projects.

Projects of the Government of the Islamic republic of Iran Date:	(Page 2 01 3)
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Environmental Research Center, Pardissan Park, Hemmat Highway, PO. Box 14665/159 Tehran.IRAN Tel 9821-8261116 Fax: 9821-8261117 c.mail: Ozone@accir.com

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page 2

7.

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		Islamic Republic of Iran Department of Environment Ozone Layer Protection Unit
	In the name of God	
	of the Executive Committee of the Multilateral Fund for the	Implementation of the Montreal Protocol
35th Meesing	of the Executive Communication	
ection III:	Projects Requiring the Use of HCFCs	for Conversion
la lina	with Decision 27/13 of the Executive Committee a rotocol, the Government	and in recognition of Article 2F of
(i)	has reviewed the specific situations involved Moradi Co., Sardin Tous Co., and Sarr. commitments under Article 2F; and	ed with the projects; Khorsandi Co., na Gostar Co as well as its HCFC
(ii)	has nonetheless determined that, at the use HCFCs for an interim period with the be available for the future conversion from	present time, the projects needed to understanding that no funding would HCFCs for the companies involved.
ereidoun Ro	FICOSTAIN	Date: 25 Sep. 2001
	Environmental Research Center, Pardissan Park. Hen Ozone Layer Protection Unit PO. Box 14665/159	nmat Highway,
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Projects	Environnæntal Research Center, Pardissan Park. H Tehran IRAN Tel 9821-8261116 Fax: 9821-826	emmat Highway, PO. Box 14665/159 1117 e.mail : Ozone@accir.com