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EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL Thirty-fifth Meeting Montreal, 5-7 December 2001

# PROJECT PROPOSAL: BRAZIL

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

# **Refrigeration:**

• Umbrella project for two enterprises converting from CFC-11 to HCFC-141b and from CFC-12 to HFC-134a at Argi and Hornburg

**UNIDO** 

# PROJECT EVALUATION SHEET BRAZIL

SECTOR: Refrigeration ODS use in sector (2000): 7,272 ODP tonnes

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

Foam: rigid US \$7.83/kg

# Project Titles:

(a) Umbrella project for two enterprises converting from CFC-11 to HCFC-141b and from CFC-12 to HFC-134a at Argi and Hornburg

Project Data	Multiple-subsectors		
	Argi and Hornburg		
Enterprise consumption (ODP tonnes)	11.73		
Project impact (ODP tonnes)	11.21		
Project duration (months)	28		
Initial amount requested (US \$)	108,579		
Final project cost (US \$):			
Incremental capital cost (a)	86,204		
Contingency cost (b)	8,620		
Incremental operating cost (c)	13,226		
Total project cost (a+b+c)	108,050		
Local ownership (%)	100%		
Export component (%)	0%		
Amount requested (US \$)	108,050		
Cost effectiveness (US \$/kg.)	9.64		
Counterpart funding confirmed?	Yes		
National coordinating agency	PROZON		
Implementing agency	UNIDO		

Secretariat's Recommendations	
Amount recommended (US \$)	108,050
Project impact (ODP tonnes)	11.21
Cost effectiveness (US \$/kg)	9.64
Implementing agency support cost (US \$)	14,047
Total cost to Multilateral Fund (US \$)	122,097

#### PROJECT DESCRIPTION

# Sector Background

Latest available total ODS consumption (2000)*	11,109.55 ODP tonnes
Baseline consumption of Annex A Group I substances (CFCs)	10,525.80 ODP tonnes
Consumption of Annex A Group I substances for the year 1999	11,612.00 ODP tonnes
Baseline consumption of CFCs in refrigeration sector	N.A. ODP tonnes
Consumption of CFCs in refrigeration sector in 2000	7,272.00 ODP tonnes
Funds approved for investment projects in refrigeration sector as of end of 2000	US\$16,444,242.00
Quantity of CFC to be phased out in investment projects in refrigeration sector as of end of 2000	2,401.54 ODP tonnes

<sup>\*</sup> Based on data submitted to the Fund Secretariat by the Government of Brazil on 1 May 2001.

- 1. The total ODS consumption in the refrigeration sector for the year 2000, according to the Government of Brazil, was 7,272 ODP tonnes, including 812 ODP tonnes used for manufacturing new equipment and 6,460 ODP tonnes used for servicing.
- 2. The Executive Committee has approved about US \$16,444,242 for 35 projects to phase out 2401.54 ODP tonnes of CFC for enterprises manufacturing refrigeration equipment in the refrigeration sector.

#### Argi and Hornburg

- 3. The umbrella project for two companies Argi and Hornburg is submitted by UNIDO. The two enterprises consume 8.73 ODP tonnes of CFC-11 and 2.875 ODP tonnes of CFC-12 (in 2000) in the manufacture of commercial refrigeration equipment. The enterprises manufacture refrigerated trucks 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.
- 4. The total phase out of 11.6 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 foaming machines will be replaced by new low-pressure dispensers. Both enterprises will require provision of industrial or portable charging units, retrofit of existing vacuum pumps and leak detectors suitable for HFC-134a duty. Other costs include engineering and commissioning at Hornburg. Incremental operating costs are requested by Hornburg for one year duration reflecting the higher cost of chemicals and components.
- 5. In accordance with decisions of the Executive Committee on the use of HCFCs, the letter of transmittal from the Government of Brazil endorsing the use of HCFC-141b by the companies is attached.

# SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

#### **COMMENTS**

6. Both companies are involved in production of refrigerated trucks and insulation panels for refrigerated compartments installed on these trucks. The Secretariat discussed with UNIDO application of Decision 31/45 in these two proposals following the guidelines for the sub-sector for assembly, installation and charging of refrigeration equipment. Incremental operating costs (IOC) associated with production of refrigerated trucks in Hornburg (refrigerant part) were recognised as ineligible for funding. IOC for the foam part is requested for two years.

### RECOMMENDATIONS

7. The Secretariat recommends blanket approval of the project at the funding level indicated below.

	Project Title	Project	Support Cost	Implementing
		Funding (US\$)	(US\$)	Agency
(a)	Umbrella project for two enterprises converting from CFC-11	108,050	14,047	UNIDO
	to HCFC-141b and from CFC-12 to HFC-134a at Argi and			
	Hornburg			

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# MINISTRY OF ENVIRONMENT BRAZIL

TO:

Mr. Tamás Gróf

Head, Refrigeration Industries Unit

Montreal Protocol Branch

Organization:

UNIDO

FAX Number

43-1-21346-4714

DATE: 08/10/2001

FROM:

Mr. Fernando Vasconcelos de Araújo

Brazilian Ozonc Unit

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N° of PAGES:

(including this one)

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#### **MESSAGE**

Dear Mr. Tamás Gróf,

In reference to the project submissions to the 35th ExCom Meeting of the Multilateral Fund for the Implementation of the Montreal Protocol, I authorize you to submit for approval the investment project document to the companies: ARGI and HORNBURG.

In line with the Decision 27/13 of the Executive Committee and in recognition of Article 2F of the Montreal Protocol, the Government of Brazil:

- 1. Verifies that it has reviewed the specific situation involved at the enterprises presented above as well as its commitments under the Article 2F;
- 2. States that, based on prevailing circumstances at the said enterprises, at present time the conversion of these enterprises requires the use of HCFC-141b for the interim period as stipulated in the Montreal Protocol;
- 3. Confirms that the Government and the recipient enterprises understood that no funding would be available from Multilateral Fund for the conversion from HCFCs for the said enterprises whenever such conversion to other alternatives will be required.

Best regards.

Fernando Vasconcelos de Araújo

Manager

Brazilian Ozone Unit Ministry of Environment

Brazil