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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Seventy-sixth Meeting
Montreal, 9-13 May 2016

WORLD BANK's WORK PROGRAMME FOR 2016

COMMENTS AND RECOMMENDATION OF THE FUND SECRETARIAT

1. The World Bank is requesting approval from the Executive Committee of US \$247,500 for its 2016 work programme, plus agency support costs of US \$19,525 listed in Table 1. The submission is attached to the present document.

Table 1: World Bank's work programme for 2016

Country	Activity/Project	Amount Requested (US \$)	Amount Recommended (US \$)
SECTION A: ACTIVITIES RECOMMENDED FOR BLANKET APPROVAL			
A1: Technical assistance for preparation for surveys of ODS alternatives			
Jordan	Preparation of a survey on ODS alternatives	110,000	110,000
Agency support costs (9 per cent for technical assistance):		9,900	9,900
Total for A1		119,900	119,900
SECTION B: ACTIVITIES RECOMMENDED FOR INDIVIDUAL CONSIDERATION			
B1: Project preparation			
Argentina	Preparation for HCFC phase-out investment activities (stage II) (foam sector)	137,500	0
Agency support costs (7 per cent for project preparation)		9,625	0
Total for B1:		147,125	0
Total for A and B		267,025	119,900

SECTION A: ACTIVITIES RECOMMENDED FOR BLANKET APPROVAL

A1: Technical assistance for preparation for surveys of ODS alternatives

Jordan: Technical assistance for preparation of national surveys on ODS alternatives: US \$110,000

Project description

2. The World Bank has submitted a request to conduct a national survey on alternatives to ODS in response to paragraph 4 of decision XXVI/9¹, for Jordan. The objective of the survey would be to assist the country to better understand their consumption trends for non-ODS alternatives, and their distribution by sector and subsector.

Secretariat's comments

3. The Secretariat noted that the funding request is in line with decision 74/53(d) and included the endorsement letter from the Government of Jordan. The Secretariat advised the World Bank that the funding request will be recommended for blanket approval on the understanding that the final report of the survey of ODS alternatives in Jordan would be available by the end of 2016 for the Secretariat's analysis in line with decision 74/53.

Secretariat's recommendation

4. The Secretariat recommends blanket approval of the request for a national survey of ODS alternatives in Jordan, and at the level of funding indicated in Table 1 of this document, on the understanding that the final report of the survey would be submitted to the Secretariat no later than 1 January 2017.

¹ The Parties to the Montreal Protocol decided *inter alia* "to request the Executive Committee of the Multilateral Fund to consider providing additional funding to conduct inventories or surveys on alternatives to ozone-depleting substances in interested parties operating under paragraph 1 of Article 5 upon their request".

SECTION B: ACTIVITIES RECOMMENDED FOR INDIVIDUAL CONSIDERATION

B1: Preparation for HCFC phase-out investment projects (stage II)

Argentina: Preparation for HCFC phase-out investment activities (stage II) (foam sector): US \$137,500

Project description

5. The World Bank, on behalf of the Government of Argentina, has submitted a request for the preparation of HCFC phase-out investment activities for the foam sector as a component of the stage II of the HCFC phase-out management plan (HPMP) at the funding level as shown in Table 1.

Secretariat's comments

6. The Secretariat reviewed this request in line with the guidelines for funding preparation of stage II of the HPMPs for Article 5 countries contained in decision 71/42. The Secretariat noted that the World Bank is only a cooperating agency for HPMP implementation (i.e. UNIDO is the lead agency), and that the funding is being submitted as a single component (by the World Bank as a cooperating agency) without the funding request for the preparation of the overall stage II of the HPMP for Argentina, that will be submitted at a future meeting of the Executive Committee by UNIDO as the lead implementing agency. The submission did not provide information on the overall progress of HPMP implementation for Argentina to demonstrate that substantial progress in the implementation of stage I of the HPMP had been achieved (as required by the guidelines); but only on the foam sector which has not yet been addressed.

7. The Secretariat was unable to review this request as it was not part of a complete submission for stage II of the HPMP, and requested the World Bank to defer the project to the 77th meeting when a comprehensive proposal to include the overarching strategy for the implementation of stage II of the HPMP would be submitted, taking into account all activities required for the country to meet compliance. The Secretariat also noted that the second tranche of stage I of the HPMP for Argentina was approved at the 74th meeting (May 2015), and that funding for the last tranche will be submitted in 2017.

8. The World Bank explained that this approval was necessary as consideration of investments in this sector had already been included in the Grant Agreement signed with the country, based on the World Bank rules and procedures, and that the Government of Argentina had confirmed the World Bank's continued participation in stage II of the HPMP as implementing agency for the foam sector.

9. After several discussions, the Secretariat concluded that this request must be submitted together with that for the preparation of the overarching strategy by the lead implementing agency, at a future meeting.

Secretariat's recommendation

10. The Fund Secretariat is recommending that the request for project preparation for the HCFC phase-out investment activities for Argentina (stage II) (foam sector) be submitted together with the project preparation request for stage II of the HCFC phase-out management plan for Argentina for consideration by the Executive Committee.

2016 BUSINESS PLAN
WORK PROGRAM AMENDMENT



WORLD BANK GROUP

WORLD BANK IMPLEMENTED
MONTREAL PROTOCOL OPERATIONS

Presented to the
76th Meeting of the Executive Committee
of the Multilateral Fund

14 March 2016

WORK PROGRAM FOR WORLD-BANK IMPLEMENTED MONTREAL PROTOCOL OPERATIONS

1. This proposed work program amendment for Bank-Implemented Montreal Protocol Operations is prepared on the basis of the 2016-2018 World Bank Business Plan which was approved by the Executive Committee at its 75th meeting.
2. The 2016-2018 World Bank Business Plan consists of investment and non-investment activities to assist Article 5 partner countries to meet their two HCFC reduction targets, the 2015 10% reduction and the 2020 35% reduction. The Business Plan includes, in addition to deliverables associated with previously approved and new investment activities, requests to extend support for implementation of existing institutional strengthening projects in two countries.
3. As part of the 2016-2018 Business Plan, the World Bank plans to submit new preparation fund requests for HCFC sector plans Stage II for Argentina, Jordan, and Thailand, including foam demonstration project for Thailand, and project proposals for Argentina, Argentina, Indonesia, Jordan, the Philippines, Thailand and Vietnam.

2016 Work Program – ExCom 76 Amendment

4. The proposed 2016 Work Program Amendment being submitted for consideration at the 76th Meeting of the Executive Committee, includes two funding requests. One activity in Argentina to prepare stage II HPMP (foam sector) in accordance with Executive Committee Decision 71/42(f). Another one for survey of ozone depleting substances (ODS) alternatives in Jordan in accordance with Executive Committee Decision 74/53(d).
5. The funding requested per activity is outlined in Table 1 below. Please refer to **Error! Reference source not found.** for the Stage II HCFC Foam Sector Plan preparation request for Argentina.

Table 1: Funding Requests Submitted for Consideration by the 76th Meeting of the Executive Committee

Country	Request (US\$)	Support Costs (US\$)	Duration	Description
Argentina	137,500	10,313	1 year	Project preparation for Stage II HPMP (foam sector) in accordance with ExCom Decision 71/42
Jordan	110,000	9,900	1 year	Preparation of an ODS Alternatives Survey in accordance with MOP Decision XXVI/9 and ExCom Decision 74/53
Total	247,500	20,213		

Annex I

Request for Project Preparation (PRP) for stage II PHMP (Foam Sector) in Argentina

1. Background

At the 19th Meetings of the Parties held in September 2007, the Parties agreed to accelerate the HCFC phase-out schedule. As an Article 5 country, Argentina was required to freeze the production and consumption of HCFCs at the average level of 2009 - 2010 (baseline) by 2013, to realize 10%, 35%, 67.5% reductions in 2015, 2020 and 2025, respectively, and achieve complete phase-out of HCFCs by 2030 with a 2.5% remaining allowed production and consumption of HCFCs to meet the residual demand in the servicing sector during the period of 2030 – 2040.

In cooperation with the World Bank, one of the implementing agencies to the Multilateral Fund for the implementation of the Montreal Protocol, Argentina submitted a project to phase out HCFC-141b in the production of PU foam for domestic refrigerators at Mabe Argentina to the 66th ExCom meeting in July 2012 which was approved at the same meeting for a funding of US\$914,612 grant. The objective of the Mabe project is to phase out the use of 167.8 tons (19.5 ODP tons) of HCFC-141b in the polyurethane (PU) rigid insulation foam production for domestic refrigerators.

In the second stage (2016-2020), to continue the phase-out of HCFCs and achieve, at a minimum, the 2020 target of phasing out 35% of HCFC consumption from the baseline level, the foam sector plan is to be prepared, and will continue to organize the investment activities, policy development, and technical assistance (TA) activities. This document presents the intended coverage, time-lines and costs for the preparation for Stage II.

2. Sector Background and Coverage

2.1. Foam Sector Background

Argentina consumed 983 tons of HCFC-141b, HCFC-22, and HCFC-142b in the production of PU and XPS foam in 2010. The survey identified following the HCFC consumptions per application as shown in Table 1 below.

Table 1: Consumption of HCFC by Foam Applications, 2010 (MT)

Category	Application	HCFC-141b	HCFC-22	HCFC-142b	Total HCFCs	%
PU Insulation Foams	Domestic Appliances	240	-	-	240	24%
	Commercial refrigeration	54	-	-	54	5%
	Sandwich panels	282	-	-	282	29%
	Spray and pour in place	250	-	-	250	25%
	Box foaming	54	-	-	54	5%
	Doors insulation	30	-	-	30	3%

Category	Application	HCFC-141b	HCFC-22	HCFC-142b	Total HCFCs	%
PU Other Foams	Integral skin	7	-	-	7	1%
	Other	9	-	-	9	1%
XPS	Insulation boards	-	16	41	57	6%
Total		926	16	41	983	100%

Based on stage I HPMP, there are 600 foam producers in Argentina with the approximate distribution as shown in Table 2.

Table 2: Break-down of Foam Enterprises by their Consumption

Consumption (MT)	Number
>20	12
10-20	3
5-10	12
3-5	18
1-3	75
0.5-1	70
<0.5	176
<0.1	193

Stage I HPMP identified five system houses in Argentina: BASF Poliuretano, Huntsman, Dow, Ecopur and Quimica del Caucho (QdC).

2.2. Implementation Progress of Mabe Argentina project

As part of stage I HPMP for Argentina approved by the 66th ExCom, an investment project for Mabe Argentina was approved for a funding of US\$914,612 to phase out 167.8 tons (19.5 ODP tons) of HCFC-141b. Mabe manufactures domestic refrigerators and freezers using polyurethane rigid foam insulation with a production of ~250,000 units per year. Since the approval of the project in April 2012, Mabe had carried out the following activities:

- **Hydrocarbon storage and blending:** Installation of a horizontal cylindrical single compartment storage tank for hydrocarbons with a capacity of 30 m³ along with a blending station that included two tanks for cyclo-pentane and polyol, a pre-mixer and a buffer tank.
- **Replacing of foaming equipment:** Installation of two new high-pressure foam injection machines, one per line.
- **Installation of a safety control system and gas monitoring:** Installation of infrared sensors and alarm systems in the critical areas (storage and premixing, cabinet and door injection), a proper ventilation system, the retrofitting of the moulds/fixtures for cabinets and doors, the respective safety control panels for foaming lines to handle all the infrared sensors and suction points, anti-spark electric fans, leak detection sensors; a fire extinguishing system based on CO₂ and duly interfaced with the general system; the electric grounding of all equipment and the developing of proper safety procedures.

- **Polyurethane system development and qualification:** The conduction of the required trials, training and refrigerators testing had been completed. Mabe had started to use cyclopentane as blowing agent in all models since April 8, 2015.
- **Comprehensive safety audit:** The conduction of a detailed safety audit of the whole process (European directive ATEX 94/9/EC) was conducted by Cannon and the issue of the respective certification.

3. Preparation of Foam Sector Plan

3.1. Objective

The objective of this assignment is to develop a Foam Sector Plan for Argentina to completely phase-out HCFCs in foam production by 2020. The plan will include individual investment projects for large and medium-size foam enterprises and umbrella type projects for small and micro-size enterprises with related technical assistance activities through foam system house. The plan will also include a Project Management Unit to implement a foam sector plan.

3.2. Scope of works

In order to properly develop the foam sector plan, the preparation work will mainly include the following activities:

- Review and assessment of the degree of validity of Stage I HPMP data in the foam sector as well as gaps that need to be filled since 2011 data collection;
- Data collection and validation on the consumption patterns by HCFC substance by the foam enterprises and subsector;
- Consideration of the range of non-ODS, technically proven, and commercially available alternatives, including climate-friendly alternatives to HCFCs; will supplement the requisite assessments at the sector, subsector level;
- Develop an integrated phase-out strategy for the foam sector, reduction schedule, implementation modality, policies framework, and technical assistance activities;
- Consultations with national stakeholders from public and private sector on survey results, replacement technologies, foam sector strategy, policy framework and measures, and secure stakeholders commitment;
- Determine the funding needed for a comprehensive foam sector plan, taking into account relevant ExCom policies and guidelines, and key sensitivity parameters;
- Prepare along with the eligible foam manufacturers the corresponding individual and umbrella type projects to ensure the achievement of the strategic goals;

4. Timelines for preparation

Overall time plan for implementation of the preparation project during the 12 months is given in the table below:

Activity	Q1	Q2	Q3	Q4
Inception meeting	X			
Collect current HCFCs consumption in the foam sector	X	X	X	

Stakeholder consultations on survey results and technology choices		X	X	
Stage II HPMP foam sector plan formulation		X	X	
Stakeholder consultations on strategy, policy framework and measures, and project and incremental costs			X	X
Preparation of the individual and umbrella type projects			X	X
Finalization of stage II HPMP foam sector plan				X

5. Project costs

During the preparation of HCFC phase-out investment activities for inclusion in stage I HPMP, the World Bank received two project preparation funding: \$30,000 (64th ExCom) and \$120,000 (65th ExCom). The World Bank utilized full amount of funding on project preparation from the first approval while disbursed \$11,439 from the second approval. The balance of \$108,561 was returned to the Multilateral Fund in December 2013. The initial survey identified large and medium-size foam enterprises, system houses and HCFC importers. However, there was not much information collected on the small and micro-size enterprises as stage I HPMP focused more on the larger enterprises. In addition, considering that the survey was carried out more than 4 years ago, there is a need to carry out a comprehensive survey in order to have the latest HCFC consumption by foam enterprises and subsector with additional emphasis on the small and micro-size foam enterprises.

Taking the above consideration that into account, the project preparation costs for sector projects can be given in the table below.

Particulars	Unit cost	Number	Value in USD
National consultant service (survey of foam sector, support in project preparation)	250	80	20,000
National consultant service (policy development)	400	20	8,000
International consultant service (alternative technology review, reduction schedule, cost calculation and project formulation)	700	50	35,000
Domestic travel for enterprise visits (for international and national consultants)	400	40	16,000
International travels and accommodation for International Consultant (10-day per trip)	10,000	2	20,000
Consultation workshops	8,000	2	16,000
Communication, interpretation, translation, printing, etc.	5,000	2	10,000
Sub-total			125,000
Contingency (10%)			12,500
Total			137,500