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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Sixty-second Meeting
Montreal, 29 November - 3 December 2010

Addendum

PROJECT PROPOSAL: PHILIPPINES

This document is issued to:

- **Replace** paragraphs 16 and 17 **with** the following text:

16. Subsequent to the dispatch of the documentation for the 62nd Meeting, the Foam Sector Plan was further reviewed in light of UNIDO's responses to the issues raised on it, and additional information received on the baseline equipment of the enterprises surveyed during sector plan preparation. In a revised project proposal, UNIDO suggested converting only six foam enterprises with a total HCFC-141b consumption of 156.9 mt (17.3 ODP tonnes) to hydrocarbon-based technology, introducing the supercritical CO_2 technology at seven enterprises with a total consumption of 42.4 mt (4.7 ODP tonnes); and using water-blown technology for enterprises with foam equipment in the baseline and low levels of HCFC-141b consumption. The phase-out of HCFC-141b by some 47 foam producers without major equipment in their baseline will be achieved through a technical assistance programme.

16bis. In regard to the introduction of the supercritical CO_2 technology, the Secretariat pointed out that a demonstration project to validate the use of the technology in the manufacture of sprayed polyurethane rigid foam in Colombia was approved only at the 60th Meeting. The project will address a number of technical and cost-related issues, including technology transfer fees from the provider of the technology, which could only be assessed upon conversion. Furthermore, the detailed formulation and the drawing of equipment requirements will only be disclosed after the technology has been validated by the demonstration project. According to Achilles Co. (the technology provider in Japan), local equipment manufacturers would be able to make the equipment for the supercritical CO_2 technology with their guidance. Given the pending validation and formulations of the supercritical CO_2 technology for applications in Article 5 countries, the ongoing assessment of the required modifications to the baseline equipment and associated costs, and the unknown technology transfer fees, the Secretariat is unable to recommend this technology at this time. UNIDO responded by indicating that, as the technology supplier for the supercritical CO_2 technology is the same as for the demonstration project in Colombia, and as the Government of Japan has agreed to co-finance this project, it considered it an excellent opportunity to further demonstrate the viability of the technology, which has been successfully used in Japan for the last

10 years. The Government of Japan is willing to assist in the introduction of non-fluorocarbon foaming technologies, such as the supercritical CO_2-assisted water blowing technology and all-water blowing technology.

16ter. The cost for the conversion of the enterprises in the Foam Sector Plan, including a project management and monitoring component, is US $2,088,000 (i.e., US $1,770,650 for UNIDO and US $317,350 for the Government of Japan), after deducting the costs associated with three enterprises with a foreign capital component, having a combined ineligible consumption of 107.7 mt (11.8 ODP tonnes). Implementation of the project will result in the phase-out of 364.4 mt (40.1 ODP tonnes) of HCFC-141b by the end of 2014 (which includes the 107.7 mt ineligible for funding), representing the total HCFC-141b consumption used as a foam blowing agent in the Philippines.

Impact on climate

16quater. The introduction of the hydrocarbon and methyl formate technologies would avoid the emission into the atmosphere of 257,422 tons of CO_2-equivalent as shown in Table 3 below (this calculation is based on the GWP values of hydrocarbon and methyl formate blowing agents and their level of consumption before and after conversion).

Table 3. Impact on the climate

Substance	GWP	Metric ton/year	CO2-eq (metric ton/year)
Before conversion			
HCFC-141b	713	364.4	259,817
After conversion:			
Hydrocarbon	25	94.1	2,353
Supercritical CO_2	1	42.4	42
Total after conversion			2,395
Net impact			(257,422)

RECOMMENDATIONS

17. The Executive Committee might wish to consider the sector plan for phase-out of HCFC-141b in the Philippines in light of the Secretariat's comments contained in documents UNEP/OzL.Pro/ExCom/62/45 and Add.1.