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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Thirty-ninth Meeting
Montreal, 2-4 April 2003

PROJECT PROPOSAL: KENYA

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

Solvent

- Conversion of TCA based cleaning process to non-ODS alternatives at the Kenya Power and Lighting Company Germany

**PROJECT EVALUATION SHEET
KENYA**

SECTOR: Solvent ODS use in sector (2002): 5.8 ODP tonnes

Sub-sector cost-effectiveness thresholds: n/a

Project Title:

- (a) Conversion of TCA based cleaning process to non-ODS alternatives at the Kenya Power and Lighting Company

Project Data	
Enterprise consumption (ODP tonnes)	1.93
Project impact (ODP tonnes)	1.93
Project duration (months)	18
Initial amount requested (US \$)	112,000
Final project cost (US \$):	
Incremental capital cost (a)	85,800
Contingency cost (b)	
Incremental operating cost (c)	
Total project cost (a+b+c)	85,800
Local ownership (%)	100%
Export component (%)	0%
Amount requested (US \$)	85,800
Cost effectiveness (US \$/kg.)	44.46
Counterpart funding confirmed?	
National coordinating agency	National Ozone Unit
Implementing agency	Germany

<i>Secretariat's Recommendations</i>	
Amount recommended (US \$)	
Project impact (ODP tonnes)	
Cost effectiveness (US \$/kg)	
Implementing agency support cost (US \$)	
Total cost to Multilateral Fund (US \$)	

PROJECT DESCRIPTION

1. The government of Germany has submitted a proposal to phase out the consumption of 1.93 ODP tonnes of TCA (19.3 metric tonnes) used by the Kenya Power and Lighting Company in its six maintenance workshops for metal cleaning. Currently cleaning takes place by dipping in open tanks, by hand-wiping and in some cases by high pressure spray. As well as TCA, the enterprise also uses about 8 metric tonnes per year of white-spirit (a flammable petroleum-based solvent) in a similar way. It is proposed that the TCA be replaced by a hydrocarbon-based solvent selected after completion of trials to be provided for under the project. The white-spirit will continue to be used. The replacement solvent will have similar toxicity to TCA but will be also be flammable. Under the project, the workshops will be provided with new tanks with self closing lids, in case of fire; with ventilation to prevent the build up of flammable vapours and with additional storage facilities for the new flammable solvent. In the project originally submitted, US \$70,000 was proposed to provide the new equipment in six workshops, US \$10,000 for site improvements (including ventilation) and US \$32,000 for trials, trials chemicals and training, for a total project cost of US \$112,000. The cost effectiveness as submitted was US \$58/kg. Operating costs arising from the increased cost of the replacement solvent would be met by the enterprise.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

Sector profile

2. During preparation of the project, it was ascertained from discussions with importers that the consumption of ODS in the solvent sector in Kenya was between four and seven ODP tonnes (4-7 metric tonnes). Almost all of this consumption was said to be TCA with very little consumption of the other chemicals used in the solvent sector (CTC or CFC-113). At the time of submission of the project, the latest data reported by the Government of Kenya indicated TCA consumption of 0.8 ODP tonnes in 2001 and 0.9 ODP tonnes in 2000. Subsequently, on 4 March 2002, the Government of Kenya provided revised data to the Fund Secretariat and the Ozone Secretariat on progress with implementation of its country programme, indicating that TCA consumption in 2002 was 5.84 ODP tonnes.

3. The baseline for TCA consumption in Kenya is 1.1 ODP tonnes and the 2005 compliance level is 0.77 ODP tonnes. On the basis of its newly reported consumption, following implementation of this project, Kenya will need to reduce its TCA consumption by an additional 3.1 ODP tonnes to meet the 2005 control measure. Because it was based on a lower level of reported consumption, the rolling three year phase-out plan 2003-2005 does not make provision for funding for this phase-out.

4. Conversely, for CTC, the phase-out plan makes provision for funding of a phase-out of 56 ODP tonnes to meet the 2005 control measure for CTC. Since Kenya's CTC consumption has been revised downwards to 0.5 ODP tonnes, Kenya will not require the assistance in this sector programmed in the phase-out plan.

COMMENTS

5. Noting that the enterprise already used flammable chemicals, the Secretariat advised the Government of Germany that any costs associated with provision of safety measures for the flammable solvents currently in use were not eligible for funding. Noting that there was little equipment in the baseline, and the new solvents would have similar toxicity to the baseline, the Secretariat pointed out that costs for environmental measures would not be incremental. The Secretariat also sought clarification about the level of costs required for trials and training. Finally the Secretariat noted that although cost effectiveness thresholds were not applicable to projects from LVC countries, the level of US \$58/kg was substantially above the threshold for TCA projects of US \$38.5/kg and well above the level of costs now being approved in the sub-sector.

6. The Government of Germany advised that provision had not been made for augmentation of facilities or equipment associated with the existing use of white spirit, but nonetheless re-examined proposed cost in the light of the Secretariat's comments. Overall, the quantity of flammable solvents use would increase from some 8 tonnes to 27 tonnes. This requires that the enterprise is better equipped to store and use these increased amounts. The equipment costs arose from the need to have some specific equipment provided for in all the enterprise's workshops. The trials were needed to validate the cleaning process before a decision on the alternative hydrocarbon-based substance was taken.

7. In the light of the above, the Government of Germany revised the project and reached agreement with the Secretariat on a project budget of US \$85,800, comprising incremental capital costs of US \$25,800 for trials and training and US \$60,000 for equipment and site improvements. The cost effectiveness is US \$44.46/kg.

8. The Fund Secretariat is seeking clarification from the Government of Kenya that revised consumption levels reported for TCA and CTC represent ceilings from which the consumption in this and any other approved projects will be deducted.

RECOMMENDATION

9. There are no outstanding cost or eligibility issues. However the Fund Secretariat recommends individual consideration of the above project proposal pending the outcome of the clarification on TCA and CTC consumption sought from the Government of Kenya.
