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EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL Forty-seventh Meeting Montreal, 21-25 November 2005

### Addendum

## PROJECT PROPOSALS: CHILLER DEMONSTRATION PROJECTS

This addendum is issued to:

- **Replace** paragraph 6 in document UNEP/OzL.Pro/ExCom/47/21 with attached paragraphs 6 to 32; and
- Add project cover sheets contained in pages 8 to 14 of this addendum.

Pre-session documents of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol are without prejudice to any decision that the Executive Committee might take following issue of the document.

- 6. The project proposals submitted vary widely in their characteristics. The Secretariat evaluated the different proposals by using criteria from decision 46/33, the methodology proposed in that decision, and other information which seemed relevant, as described below. For the purpose of gathering experience and allowing evaluation of both project proposals as well as the methodologies defined in decision 46/33, this documents contains an overview and evaluation of all proposals submitted. Contrary to common practice, even proposals which have not complied fully with the criteria set by the Executive Committee are discussed. In order to allow a quick overview over the characteristics of the projects, an evaluation template incorporating the criteria set by the Executive Committee has been developed. This template contains all of the relevant characteristics of the project proposals, as well as the results of evaluations carried out and the assessment of the Secretariat.
- 7. Since recommendations for approval are related to the experience gained during project preparation, recommendations for decisions are not part of this document. With these characteristics, this document forms a basis for the discussions in document UNEP/OzL.Pro/ExCom/47/20. Document UNEP/OzL.Pro/ExCom/47/20 therefore also contains the recommendations regarding the submissions.

## **EVALUATION PROCESS, COST AND INDICATORS**

- 8. The evaluation process took into account the information provided by the Implementing Agencies, experience gathered in previous projects, outcomes of a workshop at the World Bank funded through decision 46/33, discussions with the GEF Secretariat, and information from the Ozone Secretariat. The costs have been discussed with the agencies in two independent steps, establishing recommendable funding levels, and the indicators as defined in decision 46/33 have also been assessed. In addition, a number of details from each project proposal have been discussed with the relevant agencies.
- 9. The Secretariat's mandate for evaluation of the project costs is based on the requirements in decision 46/33, specifically:
  - (a) The relevant decisions of the Executive Committee:
  - (b) Cost justification;
  - (c) Total funding per chiller, taking into account relevant national and local conditions, to be determined by an accessible mathematical and business model and the annual return on investment,
  - (d) The maximum Multilateral Fund grant for a particular country, established at US \$1,000,000
- 10. The need for cost justification has lead to a harmonisation of chiller replacement costs in the different proposals. For the typical chiller with a capacity between 300 TR (Tons of Refrigeration, equivalent to 1050 kW) and 400 TR (equivalent to 1400 kW), costs of US \$180,000 were used. The agencies agreed to the Secretariat using these figures for most cases, the only exceptions being two industrial applications in Romania and Croatia. In these

cases, specially-designed refrigeration equipment using chiller technology is being used, leading to higher replacement costs by a factor of 3. These systems have a refrigerant filling of 20 tons of CFC which, as pointed out by UNIDO, is up to 50 times higher than that of a normal chiller. For this type of rare applications, the proposed costs and refrigerant filling is actually not unusual. The Secretariat pointed out however that this type of industrial applications which belong to the industrial applications sub-sector, might not be covered by the mandate given through decision 45/4, establishing the funding window for chillers.

- 11. The non-investment costs requested in the different proposals were substantial, accompanied by little information and with little basis for factual review. It was agreed with the agencies to limit the non-investment component to 15% of the project budget for a single country and 20% for a regional project, pending the availability of much greater information regarding the importance and costs of the activities requested.
- 12. The calculation of the total of savings uses, as requested in decision 46/33, a mathematical and business model on the basis of discount rates. The document 46/37 contained a description of the respective model from the World Bank, which was based on a detailed study investigating barriers for chiller replacement in an Article 5 Country. The study and the paper concluded that a calculation of savings over 5 years with a discount rate of 30% will take sufficiently into account the related interest, risks and still provide a sufficient incentive for conversion. A discount rate of 30% and savings of five years result in today's value of savings to be approximately 50% lower than the sum of the annual savings. This is seen as advantageous for the chiller owner. The Secretariat used for the assessment of costs for the submissions to this meeting the approach and parameters as described in the document 46/37.
- 13. As indicated in paragraph 7, project funding modalities vary widely, while endeavouring to comply with the objective of responding to the Executive Committees criteria. In order to facilitate comparison of funding requirements and evaluation against the criteria on an equitable basis, the Secretariat has standardized the presentation of each funding request using the following procedure:
  - (a) The external resources offered are in several cases proposed for use on activities outside the MLF project, such as additional non-investment activities, purchase costs related to operational savings not covered by the project funds and, in some cases, support costs if not foreseen separately. The respective amounts were deducted, and an adjusted level of external resources was established.
  - (b) The maximum funding per chiller through this project was determined taking into account the costs of a chiller, and the annual energy costs before and after a conversion.
  - (c) The total project cost was determined by adding to the non-investment costs the number of chillers to be converted and the requested funding per chiller, or the maximum funding per investment threshold, whatever was lower. The total project cost is the Multilateral Fund grant plus the adjusted level of external resources. The MLF contribution was determined by subtracting the adjusted level of external resources from the total project cost.

- 14. For the projects submitted, the related values can be found in the project evaluation sheets at the end of this document, under "Final project cost".
- 15. Decision 46/33 specified a number of indicators. The related information for all projects submitted is again displayed in the project evaluation sheets at the end of this document.
- 16. In order to assess the importance of the chiller sector for the CFC consumption in the country, the number of chillers was multiplied by the annual leakage per chiller. The leakage per chiller can be very low, down to around 1 kg/year in well maintained equipment. The report of the TEAP chiller task force established an average leakage per chiller in Article 5 countries of 75 kg. Using this average figure as a basis for the importance of the chiller sectors provides equity between the proposals and avoids rewarding maintenance at a level considerably below average.
- 17. The project evaluation sheet contains a number of quantitative indicators, such as:
  - (a) The number of chillers to be replaced or converted as part of the project.
  - (b) The share of the chiller replacement cost to be covered by the beneficiary
  - (c) The total number of chillers in the country and the share in the consumption of the country represented by these chillers on the basis of the latest data reported under Article 7
  - (d) The source, probability and share of external resources, the latter on the basis of the adjusted level of external resources.
- 18. In order to allow a comparison of the probability of external resources, the probability has been expressed by asking the agencies to specify into which of the following groups the proposed co-funding would fit. In case of intended GEF contributions, matters were discussed directly with the GEF Secretariat. A status update would be provided by the Secretariat during the meeting if further information is forthcoming.

Group	Explanation			
I	External resources approved			
II	External resources available and accessible, application submitted: IIa: Indication			
	of favourable status; IIb: No indication			
III	External resources available and accessible, no application submitted yet. IIIa:			
	Indication of favourable opportunities; IIIb: No indication provided			
IV	External resources available, accessibility unclear, no application submitted yet			
V	Uncertain availability or accessibility of external resources, no application			
	submitted yet			
VI	No external resources foreseen			

- 19. Since UNIDO proposes to use exclusively funds from counterparts for the proposals in Eastern Europe and West Asia, this methodology could not be applied for these projects.
- 20. Four qualitative indicators are shown, as defined in decision 46/33:
  - (a) ODS phase-out legislation is enacted and enforced

- (b) A general strategy for the phase-out of all chillers in the country has been provided
- (c) Possible interlinkage of the project with the existing phase-out plan
- (d) Was the possibility used to request a revolving fund for regional projects?
- 21. The evaluation sheet includes a brief description of the methodology proposed. As per decision 46/33, the methodology is supposed to allow replication in other countries to demonstrate the feasibility of and modalities for replacing centrifugal chillers in the future through use of resources external to the Multilateral Fund.

#### OVERVIEW OF THE RESULTS OF THE PROJECT EVALUATION PROCESS

- 22. The project proposals have all been evaluated in detail. A number of technical and cost issues have been clarified. The following paragraphs provide a general overview of the similarities and differences in the different projects.
- 23. A number of countries have a high share of CFC consumption for chillers as a percentage of their most recent CFC consumption. Eight of the countries with funding requests have a share of more than 3 % of the chiller consumption, Indonesia has 1.4%, and the remaining eight countries have a consumption at or below 1%.
- 24. The maximum total funding per chiller was determined as the share of the chiller cost that could not be recovered by savings according to a mathematical and business model. Since this takes into account local conditions such as annual operating hours and electricity costs, the results differ from country to country between US \$62,000 and more than US \$130,000. Not all countries utilized this funding level to the fullest extent.
- 25. The level and source of probable financial resources outside the Multilateral Fund to be utilized for the project was one of the indicators to be evaluated. The evaluation shows that the level of external resources in the project varies from 20.1% to 90.1%. The external resources for the project in Bahrain were meant to cover the share of the savings in the chiller purchase costs, i.e. non fundable costs, as a priority, and to utilize the remainder as external resource share of the fundable costs. Since the overall level of external resources was insufficient to cover the savings, this project as submitted has actually no external resources, and also no viable financial basis.
- 26. Decision 46/33 defined four regions, and indicated a preference for equitable distribution throughout the regions. In the past, chiller demonstration projects had been funded in all four regions. For this meeting, UNIDO had indicated they would submit two or more projects in Africa, but subsequently failed to do so. With that, there continues to be only one (previously approved) project in Africa.
- 27. The quantitative indicators of the projects showed that all countries involved in the projects have fulfilled the funding precondition of ODS phase-out legislation enacted and enforced. None of the projects spelled out a clear inter-linkage between the chiller demonstration

project and an existing National Phase-Out Plan or Terminal Phase-Out Plan, and none of the three regional/global projects requested a revolving fund on a regional basis.

- 28. Most projects fulfilled the requirement for inclusion of a general strategy for managing the entire CFC chiller sub-sector including the cost-effective use and/or disposal of CFCs recovered from chillers in the countries concerned. Exceptions to the rule were the regional projects in West Asia and Eastern Europe. UNIDO, being the implementing agency for both projects, indicated that such a strategy could in their view only be developed after the demonstration projects have been completed. It should be noted, though, that the other five submissions included strategies, in several cases very elaborate ones, to manage the entire subsector.
- 29. One of the objectives of the chillers programme as stated in Decision 46/33 was to "demonstrate the feasibility of and modality for replacing centrifugal chiller in the future through use of resources external to the Multilateral Fund". However, two of the projects, one from Eastern Europe and the other from West Asia proposed to use as resources external to the Multilateral Fund, contributions exclusively from the owners of the existing installation, with no funding from any third party. It was not clear whether this resulted from inadequate understanding of the intent of the decision of the Executive Committee because the feasibility of leveraging external funding to finance chiller replacement constituted a crucial part of the demonstration projects and these two projects as designed would not achieve any of that effect. In contrast, the chiller owners of the projects from Colombia and Brazil offered to cover costs beyond the savings without claiming the additional funding as external sources.
- 30. Decision 46/33 also refers to the replacement of chillers, not retrofitting. The project proposals from Syria and Cuba include, in part, chiller retrofits. The proposed retrofits achieve the primary requirement of the project, namely CFC phase-out. The retrofits also appear to be cost effective, particularly in the Cuba example, where significant energy savings have been identified. However, in view of the requirements of decision 46/33 and noting that there are well-established technical and cost factors favouring chiller replacement, the provision of funding for retrofits has been raised as a policy issue in the accompanying policy document, UNEP/OzL.Pro/ExCom/47/20.
- 31. Taking into account the results of the evaluation presented in excerpts above, and not taking into account the issue of external resources insofar as it relates to other funding mechanisms, the Secretariat believes that the status of project development allows consideration of fund approval for the Global chiller project, as well as the projects in Brazil, Colombia and the regional project in the Caribbean. Since the Executive Committee might wish to weigh the indicators or establish ceilings, and in view of the issue of external resources discussed in document UNEP/OzL.Pro/ExCom/47/20, no recommendation can be given in this document.
- 32. The projects in Eastern Europe and West Asia have shown the need for further efforts in a number of areas. In case of West Asia, the external resources offered have been tied to the part of the chiller purchase costs related to operational savings due to energy efficiency gains and therefore not covered by the project funds. It turned out that the operational savings were higher than the external resources offered, thus there was no sound financial basis for projects in each of both countries. The short time available and religious holidays in both countries did not allow discussing a possible increase in external funds in time for the finalisation of this document. In both West Asia and Eastern Europe, the precondition of the submission of a general strategy for

the management of CFC consumption in the entire sub-sector has not been fulfilled. The level of external resources is also low in Eastern Europe, and their source, from the chiller owners themselves, does not provide demonstration of a potentially sustainable source of funding for future conversions in these countries. Therefore, the Executive Committee might consider requesting the agency to submit improved versions of these projects to the next meeting of the Executive Committee.

Country	BRAZIL						
Project title Bilateral/ implementing age							
Demonstration project for integrated management of the centrifugal chiller sub-sector							
in Brazil, i	ocusing on application of energy-efficient CFC-free technologies for	UNDP					
replaceme	nt of CFC-based chillers						
Latest rep	orted consumption data for CFC						
	7 data as of 16.10.05 (ODP tonnes)	1870					
Project du	ration (months) once all funding components approved	36					
	ount requested (US \$):	1,000,000					
	Investment activites considered as part of project cost (US \$)	982,015					
	Non-investment activities considered as part of project cost (US \$)	187,800					
Final project cost	Implementation cost related to counterpart funding (US \$)	82,185					
ct	Total Project Cost (US \$) excl. support cost	1,252,000					
oje	Proposed level of external resources from third parties (US \$)	450,000					
pr	Activites not considered as project costs (US \$)	198,000					
nal	Support cost related to external resources from third parties (US \$)	17,640					
E	Adjusted level of external resources from third parties (US \$)	252,000					
	Cost of MLF funded component (US \$)	1,000,000					
	Number of chillers foreseen for conversion/replacement within the project	12					
	Proportion of counterpart funding to cost of replaced chillers	54.5%					
	, , , ,						
	Number of chillers in the country CFC consumption for chillers as share of most recent consumption (2004)	1250 5.0%					
	* * * *						
	Share of third-party external resources in project costs	20.1%					
20	Source and level of third-party external resources (co-funding)	GEF PDF: US \$250,000;					
ors		ESCO: US \$200,000					
[cat	Probability of third-party external resources (co-funding)	GEF: Group IIa;					
Indicators	MI E C 1' 1'11 ( )	ESCO: Group IV					
	MLF funding per chiller (average)	65,363					
	Total project funding per chiller (average)	81,835					
	Maximum funding per chiller (5 years, 30% discount rate, average)	91,418					
	Legislation enacted and enforced	yes					
	General strategy for phase-out of all chillers in the country	yes					
	Inter-linkage with existing phase-out plan	no					
	Request for revolving fund on a regional basis	no					
Brief description of methodology proposed	Analysis of annual cost, separate for public and pivate users. Calculation of incremental needs, basis financial break-even. Use of demonstration phase to develop programs for full conversion of market. 3-step process: 1) Information campaign regarding benefits and incentives; 2) Time-bound incentive to convert on break-even basis; 3) Offset risk, e.g. risk of insufficient energy savings. Detailed action plans, including exploration of performance contracts, tax incentives etc. during demonstration phase						
	grant (US \$):	1,000,000					
	grant (US \$): ting agency support cost (US \$):	75,000					
	of project to Multilateral Fund (US \$):	1,075,000					
	onitoring milestones included (Y/N):	yes					
	Secretariats recommendation: Approval						

Secretariats recommendation: Approval

## REGIONAL CARIBBEAN: DOMINICAN REPUBLIC, JAMAICA, TRINIDAD AND TOBAGO

Project title Bilateral/ implementing agency						
Region						
sector	UNDP					
for re						
		Dominican	Jamaica	Trinidad and		
			Jamaica			
Latest	t reported consumption data for CFC	Republic		Tobago		
	Article-7 data as of 16.10.05 (ODP tonnes)	266.488	16.2	35.003		
2004 F	Afticle-7 data as of 10.10.03 (ODI tollies)	200.466	10.2	33.003		
	ct duration (months) once all funding compor	ents approved:		36		
Initial	amount requested (US \$):			1,000,000		
	Investment activites considered as part of proje	ect cost (US \$)				
st	Non-investment activites considered as part of	project cost (US \$)		135,718		
Final project cost	Implementation cost related to counterpart fund	ding (US \$)		74,718		
ect	Total Project Cost (US \$) excl. support cost			1,690,000		
roj	Proposed level of external resources from third	parties (US \$)		1,160,000		
d b	Activites not considered as project costs (US \$	)		470,000		
ina	Support cost related to external resources from	third parties (US \$)		42,828		
Ŧ	Adjusted level of external resources from th	ird parties (US \$)		690,000		
	Cost of MLF funded component (US \$)			1,000,000		
	Number of chillers foreseen for					
	conversion/replacement within the project	2	10	2		
	Portion of counterpart funding to cost of replace	ed chillers		41.3%		
	Number of chillers in the country	4	30	3		
	CFC consumption for chillers as share of most					
	recent consumption (year)	0.1%	13.9%	0.6%		
	Share of third-party external resources in proje		EF MSP US \$1,000,00	40.8%		
	Source and level of third-party external					
70	resources (co-funding)	UI				
Indicators	Probability of third-party external resources					
ca	(co-funding)					
ndi	MLF funding per chiller (average)			62,534		
	Total project funding per chiller (average)  Maximum funding per chiller (5 years, 30%			105,683		
	· · · · · ·	131,795	99.658	121 705		
	discount rate, by country) Maximum funding per chiller (5 years, 30% dis		99,036	131,795 108,840		
	Legislation enacted and enforced		VAC	· · · · · · · · · · · · · · · · · · ·		
	General strategy for phase-out of all chillers in	yes	yes	yes		
	the country	yes	yes	yes		
	Inter-linkage with existing phase-out plan	no	no	no		
	meet minage with existing phase out plan	no	no	no		
	Request for revolving fund on a regional basis		no			
, p	· · · · ·		-			
Brief description of methodology proposed	Analysis of annual cost, separate for public and pivate users. Calculation of incremental needs, basis financial					
ion rop	break-even. Use of demonstration phase to dev					
lipi I	Information campaign regarding benefits and in					
SCI Ogy	basis; 3) Offset risk, e.g. risk of insufficient end					
f de dol	performance contracts, tax incentives etc Fund	~ .				
rie tho	othercaribbean countries, applying lessons lear					
B						
	1,000,000					
	ested grant (US \$): menting agency support cost (US \$):					
				75,000		
	cost of project to Multilateral Fund (US \$): ct monitoring milestones included (Y/N):			1,075,000		
Projec	yes					

Project monitoring milestones include Secretariats recommendation: Approval

<sup>\*</sup>Note: TTF, share of US \$160,000 in the project, is a UNDP internal fund and is not charged support cost

Country Project tit	COLUMBIA	Bilateral/ implementing agency				
Demonstr sub-secto	ration project for integrated management of the centrifugal chiller r in Colombia, focusing on application of energy-efficient CFC-free gies for replacement of CFC-based chillers	UNDP				
Latest re	ported consumption data for CFC					
A: Article	e-7 data as of 16.10.05 (ODP tonnes)	898.5				
Project d	uration (months) once all funding components approved	36				
	nount requested (US \$):	1,000,000				
	Investment activites considered as part of project cost (US \$)	1,425,941				
₩.	Non-investment activites considered as part of project cost (US \$)	255,750				
Final project cost	Implementation cost related to counterpart funding (US \$)	23,309				
ect	Total Project Cost (US \$) excl. support cost	1,705,000				
ĪŌ.	Proposed level of external resources from third parties (US \$)	1,000,000				
ll p	Activites not considered as project costs (US \$)	295,000				
ina	Support cost related to external resources from third parties (US \$)	50,760				
<u> </u>	Adjusted level of external resources from third parties (US \$)	705,000				
	Cost of MLF funded component (US \$)	1,000,000				
	Number of chillers foreseen for conversion/replacement within the	13				
	Proportion of counterpart funding to cost of replaced chillers	39.1%				
	Number of chillers in the country	58				
	CFC consumption for chillers as share of most recent consumption	0.5%				
	Share of third-party external resources in project costs	41.3%				
S	Source and level of third-party external resources (co-funding)	GEF MSP: US \$1,000,000				
Indicators	Probability of third-party external resources (co-funding)	GEF MSP: Group III				
dic	MLF funding per chiller (average)	64,333				
In	Total project funding per chiller (average)	109,688				
	Maximum funding per chiller (5 years, 30% discount rate, average)	154,300				
	Legislation enacted and enforced	yes				
	General strategy for phase-out of all chillers in the country	yes				
	Inter-linkage with existing phase-out plan	no				
	Request for revolving fund on a regional basis	no				
Brief description of methodology proposed	Reduction of tax part of purchase cost (upfront tax reduction (?)), utilisation for internal revolving fund, regional awareness and outreach activities as	~				
	d grant (US \$):	1,000,000				
	nting agency support cost (US \$):	75,000				
	t of project to Multilateral Fund (US \$):	1,075,000				
	nonitoring milestones included (Y/N):	yes				
Secretarists recommendation: Approval						

Country	CUBA			
Project titl	e	Bilateral/implementing agency		
Demonstr	ation project for integrated management of the centrifugal chiller sub-	•		
	Cuba, focusing on application of energy-efficient CFC-free technologies	Canada ai	nd UNDP	
for replac	ement of CFC-based chillers			
Latest ren	orted consumption data for CFC			
	-7 data as of 16.10.05 (ODP tonnes)		445.094	
	,	1		
	uration (months) once all funding components approved		36	
Initial am	ount requested (US \$):		1,000,000	
	Investment activites considered as part of project cost (US \$)		1,117,373	
st	Non-investment activites considered as part of project cost (US \$)		220,000	
Final project cost	Implementation cost related to counterpart funding (US \$)		57,105	
ject	Total Project Cost (US \$) excl. support cost		1,394,478	
roj	Proposed level of external resources from third parties (US \$)		890,000	
l p	Activites not considered as project costs (US \$)		431,070	
ji	Support cost related to external resources from third parties (US \$)		48,805	
	Adjusted level of external resources from third parties (US \$)		410,125	
	Cost of MLF funded component (US \$)		984,353	
	Number of chillers foreseen for conversion/replacement within the project		13	
	Portion of counterpart funding to cost of replaced chillers	-65		
	Number of chillers in the country		200	
	CFC consumption for chillers as share of most recent consumption (year)			
	Share of third-party external resources in project costs	29		
		Gov. of Canada: US \$850,000;		
	Source and level of third-party external resources (co-funding)	UNDP TTF: US \$40,000		
S	Probability of third-party external resources (co-funding)	Gov. of Canada: Group III;		
tor	1 Tobability of unitu-party external resources (co-funding)	UNDP TTF: Group II		
Indicators	MLF funding per chiller (replacement)		88,240	
[ud	Total project funding per chiller (replacement)	12		
	Maximum funding per chiller (5 years, 30% discount rate, replacement)		125,004	
	MLF funding per chiller (retrofit)		31,175	
	Total project funding per chiller (retrofit)	44		
	Maximum funding per chiller (2.5 years, 30% discount rate, retrofit)	4		
	Legislation enacted and enforced	yes		
	General strategy for phase-out of all chillers in the country	ye	S	
	Inter-linkage with existing phase-out plan	no		
	Request for revolving fund on a regional basis	no	)	
Grant project with cost sharing between Canada and UNDP, plus MLF component				
		Canada	UNDP	
	grant per agency (US \$):	787,482	196,871	
	l grant (total) (US \$):	984,		
	ting / bilateral agency support cost (US \$):	102,373	14,765	
	of project to Multilateral Fund (US \$):	1,086	,726	
	onitoring milestones included (Y/N):	ye	S	
Secretariat	s recommendation: Approval			

## REGIONAL WEST ASIA: BAHRAIN, SYRIA

Project title Bilateral/ implementing agency						
Demo	IDO					
Bahrain and Syria						
		Bahrain *	Syria			
Latest	Syria					
	Latest reported consumption data for CFC  2004 Article-7 data as of 16.10.05 (ODP tonnes)  64.8					
			928.268			
	t duration (months) once all funding components approved:		36			
Initial	amount requested (US \$):*		917,708			
	Investment activites considered as part of project cost (US \$)	not appliccable	not appliccable			
ost	Non-investment activites considered as part of project cost (US \$)**	not appliccable	not appliccable			
Final project cost	Implementation cost related to counterpart funding (US \$)	not appliccable	not appliccable			
jec	Total Project Cost (US \$) excl. support cost	not appliccable	not appliccable			
pro	Proposed level of external resources from third parties (US \$)	not appliccable	not appliccable			
[B]	Activites not considered as project costs (US \$)	not appliccable	not appliccable			
Fin	Support cost related to external resources from third parties (US \$)	not appliccable	not appliccable			
	Adjusted level of external resources from third parties (US \$)	not appliccable	not appliccable			
	Cost of MLF funded component (US \$)  Number of chillers foreseen for conversion/replacement within the	not appliccable	not appliccable			
		4	7			
	project Portion of counterpart funding to cost of replaced chillers	not applicable	not applicable			
	Number of chillers in the country	not appliccable 35	not appliccable			
	CFC consumption for chillers as share of most recent consumption	33	51			
	(2004)	4.1%	0.3%			
	Share of external resources in project costs (counterpart)	not appliccable	not appliccable			
			поі аррііссавіе			
SI	Source and level of external resources (counterpart)	not appliccable	not appliccable			
Indicators	Probability of external resources (counterpart)	not appliccable	not appliccable			
dic	MLF funding per chiller (average)	not appliccable	not appliccable			
l a	Total project funding per chiller (average)	not appliccable	not appliccable			
	Maximum funding per chiller (5 years, 30% discount rate, replacement)	52,091	111,804			
	MLF funding per chiller (retrofit)	not appliccable	not appliccable			
	Total project funding per chiller (retrofit)	not appliccable	not appliccable			
	Maximum funding per chiller (5 years, 30% discount rate, retrofit)	not appliccable	45,632			
	Legislation enacted and enforced	yes	yes			
	General strategy for phase-out of all chillers in the country	no	no			
	Inter-linkage with existing phase-out plan	no	no			
	Request for revolving fund on a regional basis	n	10			
Brief description of methodology proposed	Submitted as grant project, funds from owners (15%/25%), the remainder as contribution of MLF on capital cost plus all non-investment activities. Support costs calculated on basis of MLF contribution. UNIDO informed that a general strategy is to be developed only once the demonstration project is finished on the basis of experience gained.					
Reque	not appliccable					
Imple		not appliccable				
Total	not appliccable					
Projec	yes					
Secretariate recommendation: Not for consideration - for information purposes only						

Secretariats recommendation: Not for consideration - for information purposes only

<sup>\*</sup> Both the project in Bahrain as well as in Syria are not admissable since the counterparts did not yet agree to cover the savings fully

# REGIONAL EASTERN EUROPE: CROATIA, FORMER YUGOSLAV REP. OF MACEDONIA, ROMANIA, SERBIA AND MONTENEGRO

Project title  SERBIA AND MONTENEGRO  Bilateral/ implementing agency						
Demonstration Project on the Replacement of CFC Centrifugal Chillers in Croatia,					UNIDO	
Serbia	and Montenegro, Romania and Macedonia		UN	шо		
		Croatia	Former Yugoslav Rep.of Macedonia	Romania	Serbia and Montenegro	
	reported consumption data for CFC	70 155	0.722	116 740	282.82	
2004 A	Article-7 data, as of 16.10.05 (ODP tonnes)	78.155	8.733	116.748	282.82	
Projec	et duration (months) once all funding compon	ents approve	d:		36	
Initial	amount requested (US \$):				2,442,000	
	Investment activites considered as part of proje				1,199,388	
st	Non-investment activites considered as part of	220,000				
00 1	Implementation cost related to counterpart fund	72,046				
Final project cost	Total Project Cost (US \$) excl. support cost				1,491,434	
roj	Proposed level of external resources from third				1,408,000	
al p	Activites not considered as project costs (US \$)				960,612	
Jin.	Support cost related to external resources from				31,213	
-	Adjusted level of external resources from thi	ird parties (U	S \$)		416,175	
	Cost of MLF funded component (US \$)	T	1		1,075,259	
	Number of chillers foreseen for	4	2	1	5	
	conversion/replacement within the project	1 1 11			11.50/	
	Portion of counterpart funding to cost of replac				44.5%	
	Number of chillers in the country*	38	23	7	34	
	CFC consumption for chillers as share of most	3.6%	19.8%	0.4%	0.9%	
	recent consumption (2004)					
	Share of external resources in project costs (cor	27.9%				
	Level of external resources (counterpart)				323,152	
Indicators	Probability of external resources (counterpart)			not appliccable		
cat	MLF funding per chiller (average)				72,059 99,949	
ndi	Total project funding per chiller (average) Maximum funding per chiller (5 year, 30%				99,949	
I	discount rate, by country)	104,630	131,240	62,106	91,257	
	Maximum funding per chiller (5 years, 30% dis			02,100	99,949	
			77,747			
	Legislation enacted and enforced	yes	yes	yes	yes	
	General strategy for phase-out of all chillers in					
	the country	no	no	no	no	
	Inter-linkage with existing phase-out plan	no	no	no	no	
	Request for revolving fund on a regional basis		no			
Submitted as grant project, funds from owners (40%) plus 60% contribution of MLF on capital cost properties. Support costs calculated on basis of MLF contribution. Owners portion pote financed through loan, probably to be repaid by energy savings. UNIDO informed that a general strate be developed only once the demonstration project is finished on the basis of experience gained.						
	sted grant (US \$):				1,075,259	
	Implementing agency support cost (US \$):					
	cost of project to Multilateral Fund (US \$):				80,644	
					1,155,904	
	et monitoring milestones included (Y/N):			I	10	

Secretariats recommendation: Reconsider at future meeting \*Note: Croatia between 22 and 58

## GLOBAL, FOCUS CHINA, INDIA, INDONESIA, MALAYSIA, PHILIPPINES

Project title  Global Chiller Replacement Project					ateral/ implen World Bank	nenting agency	
Globa	1 Chiner Replacement 1 Toject	China	India	Indonesia	Malaysia	Philippines	
<b>T</b> 4 4	A LA C CEC	Cima	India	Indonesia	Maiaysia	1 milppines	
	t reported consumption data for CFC	17899.493	2241.6	3925.47	1128.543	1386.81	
A: Ar	ticle-7 data as of (ODP tonnes)	17899.493	2241.0	3923.47	1126.343	1360.61	
Projec	ct duration (months) once all funding compon	ents approve	ed:			86	
Initial	amount requested (US \$):					15,000,000	
	Investment activites considered as part of proje					137,000,000	
st	Non-investment activites considered as part of project cost					20,000,000	
Final project cost	Implementation cost related to counterpart fund	related to counterpart funding (US \$)			0		
ect	Total Project Cost (US \$) excl. support cost					157,000,000	
roj	Proposed level of external resources from third	parties (US			<u> </u>	152,000,000	
l b	Activites not considered as project costs (US \$)	)			<u> </u>	0	
Jing	Support cost related to external resources from	third parties			<u> </u>	n/a	
1 4	Adjusted level of external resources from the	ird parties				152,000,000	
	Cost of MLF funded component (US \$)*					5,000,000	
	Number of chillers foreseen for			up to 5000			
	conversion/replacement within the project			up to 3000			
	Portion of counterpart funding to cost of replac				r	ot appliccable	
	Number of chillers in the country	1404	1045	714	683	193	
	CFC consumption for chillers as share of most	0.6%	3.5%	1.4%	4.5%	1.0%	
	recent consumption (2004)						
	Share of third-party external resources in project	ct costs			<u>ı</u>		
so	Source and level of third-party external	GEF FS:	US \$70,000	,000; Carbon f	inance: US \$8	32,000,000	
Indicators	resources (co-funding)						
ica	Probability of third-party external resources (co-funding)	G	EF FS: Grou	ıp V; Carbon f	inance: Group	o V	
[lud	MLF funding per chiller (average)					3,950	
	Total project funding per chiller (average)				40 000 (avera	age, estimated)	
	Maximum funding per chiller (5a, 30%			n.a.	10,000 (4) C1	ige, estimated)	
	Legislation enacted and enforced	yes	yes	yes	yes	yes	
	General strategy for phase-out of all chillers in	<i>y</i> = 2.2	<i>J</i> = 2	,		J = 2	
	the country	yes	yes	yes	yes	yes	
	Inter-linkage with existing phase-out plan	no	no	no	no	no	
	Request for revolving fund on a regional basis						
		no	no	no	no	no	
f ed	The project will be orchestrated on a global base						
o u	interest in participating, for five countries data was submitted (the remaining six are Argentina, Jordan, Mexico,						
tio oro	Tunisia, Turkey and Venezuela). The design of the project will provide for later inclusion of any other Article 5						
crij gy ]	countries on demand, subject to funding availability, which will be allocated on a first-come, first-serve basis. The						
des	project will be co-financed by GEF grant, and Carbon Finance credits. The requested fu				-		
ef o	of grant funds to cover part of the cost of early replacement of CFC chillers and non-inv						
Brief description of methodology propose	global basis. A small window will be established to provide assistance to countries with smaller CFC centrifuga				centrifugal		
	chiller population.			1			
	ested grant (US \$):					5,000,000	
Imple	menting agency support cost (US \$):					375,000	
Total	cost of project to Multilateral Fund (US \$):					5,375,000	
Projec	Project monitoring milestones included (Y/N):			yes			

Secretariats recommendation: Reconsider at future meeting

<sup>\*</sup> MLF funding dependent on number of countries participating and fulfilling the relevant criteria at time of approval; presently 5 countries