A. Definition of the Project

A.1 Title	**Wind Powered Desalination in the Akfennhir Village**

A.2 Type of project	
Wind	X

A.3 Stakeholders	*Partners involved in the project activities:* Italian Ministry for the Environment and Territory(IMET) Centre de Développement des Energies Renouvelables (CDER) Moroccan National office of Potable Water (ONEP)

A.3 Location of the project	
City / Town / Village	*Akfennhir Village*
Brief description of the location	*Rural Village, by the Atlantic Coast*

A.4 Forecasted Planning for the project			
Status of the project	Phases	Status	Forecasted timing
	Idea / concept	☐	2005-2007
	Pre feasibility study		
	On going	X	
	Done	☐	

B. Stakeholders

B.1 Main promoters	
Name	***Italian Ministry for the Environment and Territory***
Type of organisation	Governmental
Address	Via C.Colombo, 44 00147 Roma - Italy
Contact person	Mr F.Presicce
Telephone/ fax	Tel: +39 06 57228162 Fax: +39 06 57228178
e-mail	presicce.francesco@minambiente.it
Name	***Centre de Développement des Energies Renouvelables (Morocco)***
Type of organisation	Governmental
Address	rue Mechaar Al Haram, Issil, Marrakech, Morocco
Contact person	Mr J.Cherkaoui, Mr.Bakri
Telephone/ fax	Tel: 0021244309814 Fax: 0021244309795
e-mail	cder@menara.ma
B.2 Other partners	
Name	***ONEP (Moroccan National office of potable water)***
Type of organisation	Public

C. Technical description of the project

C.1 Technical description of the project
The objective of the project is to provide the village of Akhfennir with potable water by desalination seawater by wind energy. The village Akhfennir is located in the South of Morocco on the Atlantic coast, about 100 kms in the south of Tan-Tan city.

The Preliminary study indicate that the south of Morocco is very windy with an average wind speed between 7 & 8.5 m/s at 10 meters. The annual average wind speed at 40 m in Tan-Tan city is about 6.82 m/s. The wind resources studies have started in the site of Akhfennir in the 1st February 2005.
Currently, the Akhfennir village is supplied in drinking water by trucks cisterns from the city of Tan-Tan situated about 100 kms with about 120 DH/m3 (11 Euro/ m3) because of the rarity of water in the wells of the region following the drought in the last years.
The project will permit introduction in Morocco of wind energy technology to produce electricity for desalination plant.

C.2 Photo/drawing of the project/building:

C.3 Typical indicators	Investment - euros	1,500,000
	Power installed - MW	To be defined
	Energy produced - MWh / year	To be defined
	Cost of energy produced from the project - euro cts/kWh	To be assessed

C.4 Detailed technical indicators	
M² installed	
Power per m²	
Delivered power	

D. GHG emissions: reduced / avoided

D.1 Type of GHG reduced or avoided	
CO_2	To be defined

D.2 Base line	
Description of the level of reference	-
Other elements	-

D.3 Total emission reduction per year	
In Tons CO² equivalent	To be defined

D.4 Estimated CER gains - thousand euros			
Estimated price (euros/t) - Tons CO_2 equivalent	3	5	10
Total estimated gain			

E. Financial aspects

E.1 Estimated costs - euros	
Total investment	1,500,000

F. Contribution of the project to sustainable development	
Natural environment	*Wind Energy diffusion will result in reduced impact on the natural environment from traditional energy sources;*
Social (employment, health, education, ...)	*-The project will improve, in a sustainable way, the life conditions of the rural population* *- opportunities of employment*
Economy (local, national, …)	*-Awareness of investors about the business opportunities related to the implementation of wind facilities for water supply* *-Local economy in the medium term, and national economy in the long term, may be impacted by diffusion of water supply through electricity from renewable energy sources*

G. Other relevant information	
List of available documents	-Annex to the MoU between IMET and CDER, referring to the Project; -Provisional Project Work Plan