

# T@W Good Practice Form

## *Setting*

**Title:** Mari Wind Farm Project  
**Country:** Republic of Cyprus  
**Location:** Southern coast of the Larnaca District  
**Start date:** Commissioning is planned for late 2007  
**End date:** 2014 (7 years crediting period)  
**Technology keyword(s):** Wind energy  
**Host sector:** Energy industries

## *General description*

**Summary:** This project is one of the two first registered CDM projects in an EU members state and the first small-scale CDM wind power project in Cyprus. The purpose of the Mari Wind Farm Project is producing renewable electricity from wind. The electricity will be fed into the National Grid of the Electricity Authority of Cyprus and sold on the basis of a Power Purchase Agreement to be concluded with the Transmission System Operator and the Electricity Authority of Cyprus.

**Aims:** This project will reduce CO<sub>2</sub>-emissions and other air pollutants by implementing of renewable energy technology and achieve the targets of the country's policy regarding the promotion and the use of renewable energies.

**Summary of Results:** The project activity will generate greenhouse gas (GHG) emission reductions of some 17,000 t CO<sub>2</sub>e per year by avoiding CO<sub>2</sub> emissions from electricity generation by oil-fired power plants.

**Planning Time:** Construction to start in early 2007.

**Operation Time:** The lifetime of the project activity is expected to be 21 years.

## *Technical details*

**Technical details:** The Mari Wind Farm Project will comprise the installation of 8 wind turbines with a capacity of 1.5 MW each, resulting in a total capacity of 12 MW.

## *Energy data*

**Energy data:** Installed capacity: 12 MW

**Energy saved/generated:** Energy production: 21 GWh/a

**Monitoring:** The project proponent will establish a control centre for project monitoring. The control centre will provide the operation reports of the project

activity in line with actual needs. The reports will record daily operation of the wind turbines, including operating periods, power generation, power delivered to the grid, equipment defects, etc.

## ***Environmental data***

### **Environmental data:**

An Environmental Impact Assessment approves that there will be no negative environmental impacts. The study examined physical, institutional, environmental and technical constraints, which could forbid the installation of wind turbines. Measurements of background noise at all the sites showed values between 31.8 to 51.7 dB(A) with Leq values in the range of 33 to 36 dB(A). All sites are beyond the recommended separation distance from dwellings. The wind park will be visible from the old Limassol road junction to the new EAC power station at Vasilicos as well as from the road to the industrial zone, but the latter is only used by very few passenger vehicles. View of the wind turbines from the Limassol - Nicosia highway is limited.

### **Project GHG-emissions:**

The project activity, being a zero-emission activity, does not cause any project emissions.

### **GHG-emission reductions: “EAU, CER, ERU, AAU”:**

17,000 tonnes CO<sub>2</sub>equivalent/year  
 Approx. 17,000 CER/year; i.e. approx. 119.000 CER in the first 7 years crediting period

### **Methodology:**

Approved baseline methodology ASM-1-D  
 “Renewable electricity generation for the grid”  
 (Version 09)

### **Baseline**

Electricity delivered to the grid by the project would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources. At the moment electricity in Cyprus is generated to 100 % from oil (Heavy Fuel Oil (HFO) and Diesel).

### **Monitoring:**

The project activity, being a zero-emission activity, does not cause any project emissions. Hence no data need to be covered to monitor the project emissions. The monitoring methodology only requires monitoring of the net electricity generation from the proposed project activity in order to calculate the baseline emissions. Data to recalculate the operating margin emission factor or the build margin emission factor are not needed, as both will be recalculated once at the beginning of each subsequent crediting period.

### **Contribution to Sustainable Development:**

An Environmental Impact Assessment acknowledges that the proposed project is characterized by its intensive ecological status as well as by its

educational value as a means of developing and shaping the consciousness of the citizens and the public opinion towards the Renewable Sources of Energy, and that it is fully compatible with the Government's policy concerning its international and European obligations and commitments.

This project helps to:

- reduce CO<sub>2</sub>-emissions and other air pollutants by implementing of renewable energy technology,
  - improve the infrastructure in the vicinity of the project, also in order to attract visitors for teaching purposes on environmental issues and to
  - create local employment during the construction and later for the maintenance and operation of the wind farm, thus building and strengthening local knowledge and experience in this new technology.
- Thus the project contributes to the sustainable development of the Cypriot power generation system.

### ***Economic data:***

**Economic data:**

IRR will be risen by approximately 1.77 %

**Financing:**

commercial financing (banks and investors)

### ***Additional Information***

**Printed or electronic reports or other literature available:**

Title: Project Design Document

Cost: -

Address for download of electronic document:

<http://cdm.unfccc.int/Projects/DB/TUEV-SUED1158659001.38/view.html>

**Project Website: -**

## Photo Library

Pictures: Source: Windtest Kaiser-Wilhelm-Koog GmbH, Germany



Wind farm site Mari:  
View to the North



Wind farm site Mari:  
View to the South

## Contact information

(to be duplicated for each contact for this project):

Type of Organisation: Developer / Operator of wind farms and other renewable energy installations

Technology keyword(s) specific to this organisation: CDM project proponent

Organisation / Agency: Wincono Cyprus Ltd.

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Description of the Organisation for inclusion in the database of Technology and Service Providers:

Project development and realisation of wind energy projects; commercial and technical (service and maintenance) operation of wind farms. The company is a Cypriot/German-joint venture with the German WINCONO group which realized and operates wind farms of some 100 MW in Germany.

Type of Organisation: service provider

Technology keyword(s) specific to this organisation: CDM project consultant

Organisation / Agency: FutureCamp GmbH

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Description of the Organisation for inclusion in the database of Technology and Service Providers:

Support of several JI- and CDM-projects at different stages as well as voluntary projects to compensate CO<sub>2</sub> emissions. Support of several GHG-projects since 2001 that follow the rules of the Kyoto-Protocol, the Marrakesh Accords and other decisions of the relevant bodies. Currently we are involved in the development of over 20 JI and CDM projects in various stages of development in the following countries and technology areas:

- Brazil, China, Cyprus, Ecuador, France, Germany, Poland, Romania, Sri Lanka

- Coal mine methane, district heating, efficiency improvement (power generation and use), fuel switch, land fill gas utilization, renewable energy (bio-fuels, biogas, biomass, geothermal and wind energy), transportation, waste management, waste water treatment

Extensive work in preparation and implementation of EU-ETS inside companies as well as in discussion rounds.

Please email filled out form (including pictures) to: [GP@setatwork.eu](mailto:GP@setatwork.eu).