



Project Summary

Hogsara island demonstration project

HISP

Action Line: Cost-effective supply of renewable energies

Contract Type: Specific targeted research projects

Activity area: Wind Energy

Coordinator:

Organisation: Hafmex Windforce Oy
Luoteisrinne 5
02271 Espoo
Finland

Contact Person: [Kalevi HAUVONEN](#)

Project details

| | | | |
|-----------------------------|------------------|---------------------------|------------|
| Reference: | Wind/503811/2003 | Start Date: | 26/04/2004 |
| Status: | Execution | End Date: | 25/04/2006 |
| Project Cost (€): | 6.187.575 | Duration (months): | 27 |
| Project Funding (€): | 1.697.000 | | |

Summary

The objective of the project is to gain experience and to build up a track record of small wind farm with multi megawatt wind turbines built on island, to demonstrate high availability and to verify the low cost foundation desing with as little alteration on the nature and inhabitants of the islands as possible. The electrical conversion system will be designed for a cluster of turbines in order to minimise the number of components and to optimise costs thus contributing to the objectives mentioned. The power quality will be according to international standards with controllable reactive power in order to improve the (sometimes) weaks grids. Voltage dips will not lead to turbine shut down, a valuable asset for the utilities. Innovations of the project are integrated inverter system and new foundation technology, which contribute to the activity areas of this project.

The archipelago area of Southwest Finland has thousands of small islands and islets while wind conditions are close to an offshore site. This so called semi-offshore site creates possibilities for large wind power exploitation as long as specific needs of archipelago is taken into account. The public attitudes are main issue when exploiting wind power in a sensitive environment. The objective is to study the attitudes and possible changes in them during and after construction and to teach different aspects of wind power to public and give them an opportunity to visit a real-life wind farm.



Partners

| | | |
|---|--|----|
| 1 | Hafmex Windforce Oy | FI |
| 2 | HARAKOSAN | NL |
| 3 | Zephyros B.V. | NL |
| 4 | ABB Switzelland Ltd | CH |
| 5 | OÜ Roheline Ring | EE |
| 6 | VTT Technical Research Centre of Finland | FI |