Satellite land cover mapping of Canada's forests

Description

A survey on users' requirements for wind energy resource data was hosted by GEOSS Energy Community of Practise (http://www.geoss-ecp.org/) web site during January 2007 to June 2007 and advertised by the members of the Wind Energy working group.

Questions were organised in 14 different groups related to affiliation, type of profession, use of data, Type of onshore and offshore data, temporal resolution of data, age of data, synthetic data, site or gridded data, spatial resolution, how the data are used, the satisfaction of the users about present situation, wind forecast needs and long term data sets issues.

60 answers were collected and analysed. They originate from USA, Germany, France, Denmark, Switzerland, Spain, United Kingdom, Belgium, Greece, The Netherlands, Nigeria, Australia, New Zealand, Lesotho, Portugal, Cyprus, Montserrat, Estonia, Serbia and Montenegro, Poland, Bulgaria, Finland. Anwers came from Consultants, Developers, Manufacturers, Engineering companies, Utility companies, Public research laboratories, Governmental / public agency / services, Private research laboratories, Universities, Non-governmental organizations or other promoters of wind energy:

Answers could be given from 0 (low) to 5 (high importance). Table 1 is an example of the answers collected through the survey. A report has been produced on the analysis of the survey by the wind energy working group of the Energy Community of Practices.

Use of data	Average	Number of answer > 3
Site selection	3.96	40
Feasibility study	4.25	45
Cost assessment	3.33	27
Investment decision	3.51	30
Wind integration study	3.38	28
Guarantee/certification/insurance	2.57	16
System design	3.08	21
Deployment	2.81	16
Plant operation	3.06	22
Grid operation	2.71	14
Plant maintenance	2.88	19
Plant decommissionning	1.85	4
Monitoring	3.41	26
Fault detection	2.63	14
Research/education/promotion	3.23	28
Policy making	2.48	12

Purpose of wind data use

Added Value

This user questionaire helped to identify user requirements in more detail and will help in defining the needs of Earth Observation for the Energy Societal Benefit Area.

Relevance to GEO

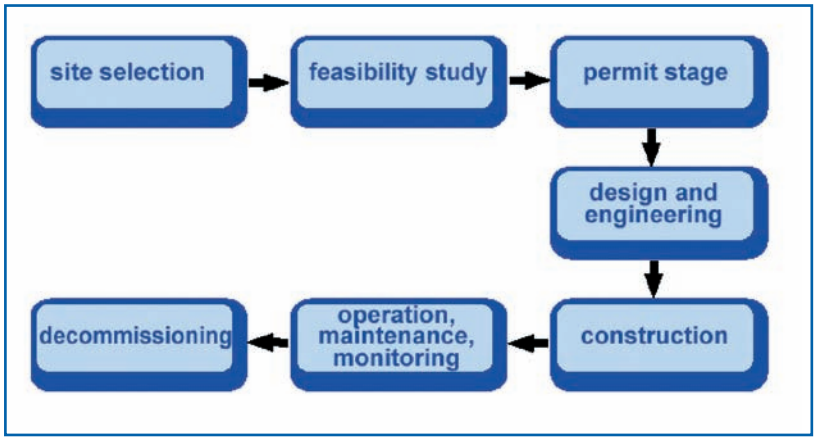
This activity contributes to EN-07-01 (Management of Energy Sources) as it supports the development of EO services for resource assessment, monitoring and forecast of the solar energy resource.

Participants

Most consortium members are contributing to GEOSS also via the Energy Community of Practise.
Leader: Ecole des Mines de Paris, F

Current Status and Next Steps

The questionaire is closed, a more detailed analysis is ongoing. Additional contact with the wind energy community will be achieved through individual interviews based on the needs of data for the complete life cycle of a wind farm as proposed in the following scheme.



Life cycle of an energy system