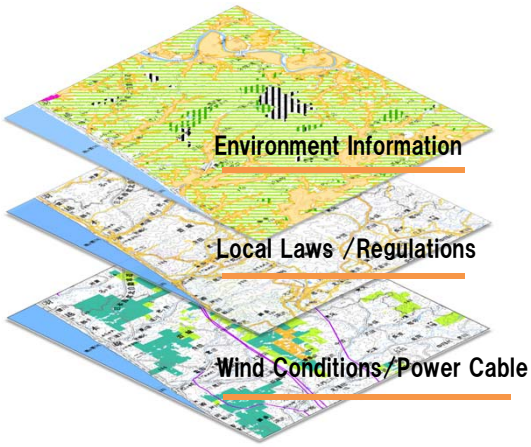
アジア航測株式会社
ASIA AIR SURVEY CO.,LTD.

We Support Wind Energy Development !

Location-Desktop Study

Exploring the most appropriate site using GIS

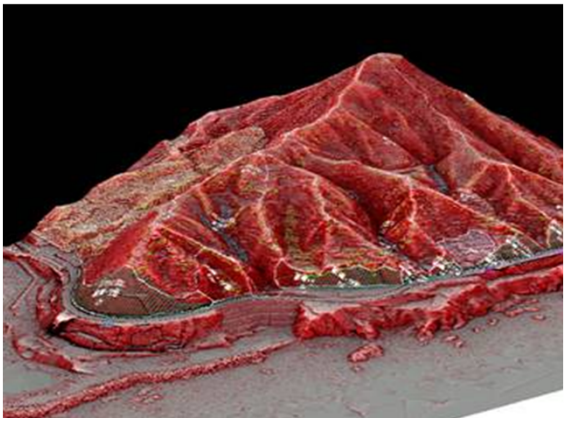
Analyzing the business potential, environmental impact, and local regulations are key factors for planning the wind power project and finding the potential land. Moreover, the cooperation of the local government is necessary and indispensable to advance the business smoothly.
Based on the nationwide network Asia Air Survey provides the screening survey and analysis services to find potential and candidate site by utilizing GIS database with the valuable information about the local site. We also support information-gathering activity for local laws and regulations list and arrange the licensing procedure and permitting process to construct the wind mill.



Organizing & analyzing local information

Basic Design

Providing accurate geospatial information


3D Red Relief Image Map Based on LiDAR data

When the potential site is determined, precise digital topographic map is important to review efficiently for the basis design such as the windmill distribution, the route of the installation, and facilities arrangement. Geospatial information significantly helps the windmill installation, civil engineering works, landscape reviewing and local ecosystems analyzing.
We own and operate a fleet of aircraft, installed LiDAR sensor system, to provide accurate geospatial information for customers.

Environment Assessment

Services based on long-standing experience

Environmental assessment is strongly required for the wind power generation facilities of 10,000kW or more by the environmental impact assessment law into effect in April of 2013.
We have a long standing experience, knowledge and knowhow in the field of the wind power project., and provide strong support for the communication with local communities to conclude agreement, government approvals, noise survey/prediction, rare bird survey and protection measures, landscape planning and environmental impact assessment procedure.


Landscape review using 3D model

Installation Flow Chart - Wind Farm

		We can Support !
STEP1 Location Survey	• Research for potential site and collect wind conditions • Investigation of geographic condition (natural and social condition) • Designing wind farm size	■Find potential sites & conduct local survey ・Screening laws and regulations info using GIS ・Confirmation of land owner information ・Collect land classification, power cable route information
STEP2 Wind Condition Survey	• Wind condition survey • Estimate wind conditions quality and power generation capacity • Reviewing the outline of economic performance	Organizing the wind condition survey project for collect the wind speed, shear and local information with our partner company
STEP3 Basic Design	• Designing the windmill placement • Select windmill size and type • Planning the financial arrangements	■Acquisition of precise geospatial data ・Provide LiDAR/Aerial survey service ・Create precise contour map ⇒Essential information for the basic design ・Provide the data for turbulent flow analysis (topographical relief, tree height etc)
STEP4 Negotiations	• Negotiation with electric power company for transmission line systems and buying and selling of electric power .	Organizing the consultation with concerned parties in collaboration with our partner company.
STEP5 Government Approvals	• Environmental assessment(noise pollution, low frequency sound, landscape, indigene) • Forest Act ,Agricultural Land Act, Act for Improvement of Agricultural Promotion Areas, Building Standard Law, Civil Aeronautics Act, Seacoast Law etc	■Documentation for government approvals and licenses and pre-discussion with party involved ■Environmental assessment ⇒ AAS has many licensed engineers with long standing experience, knowledge and knowhow
STEP6 Execution Design	• Field and geological survey • Facility design, construction design, execution scheme, and transportation plan	■Propose and provide the most effective field and geological survey ■Planning and designing for the civil engineering and utility constriction in collaboration with our partner company.
STEP7 Construction work	• Material transportation • Civil engineering , facility/electric construction • Test operation and inspection	Organizing the construction contractor for the civil engineering, electric power distribution, building, facilities etc.
STEP8 Operation & Maintenance	• Monitoring the operating condition • Maintenance check of facilities	Organizing the operation & maintenance contractor for monitoring the operation and maintenance.

■Past performance

2012	Ministry of Environment	"Basic information maintenance of environmental assessment for wind power model project"
2012	Kanagawa Prefecture	"Exploration of the potential site for the wind power"
2011-2012	Ministry of Environment	"Study of basic zoning information on renewable energy"
2011-2012	Ministry of Environment	"Technological development concerning the wind farm to minimize and avoid the noise pollution"
2011	Ministry of Environment	"Urgent consultation for renewable energy projects" (preparation for environmental considerations report)
2011	Ministry of Environment	"Study for basic environmental information maintenance methods regarding the wind farm"
2011	Ministry of Environment	"Proactive case study for environmental impact assessment regarding the wind farm"
2010-2011	Ministry of Environment	"Study of potential for the introduction of renewable energy"

ECO FIRST
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