

Asia's first offshore Lidar deployment

We are delighted to announce that SgurrEnergy has been commissioned by Hong Kong Electric Company to deploy Asia's first Lidar device for capturing wind speed and directional data in an offshore environment.

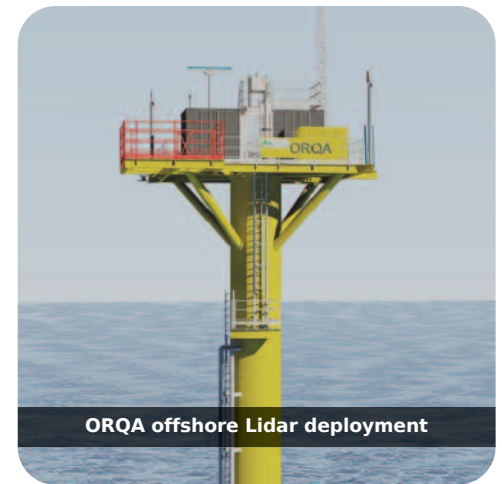
This large scale project represents Asia's first Offshore Risk Quantification Analysis deployment (ORQA). ORQA is the latest technology data monitoring equipment designed specifically to capture a full meteorological, environmental, wave and tidal picture of offshore conditions and will be used to inform planning and construction phases for the proposed offshore wind energy project which will be located off Lamma Island, Hong Kong.

ORQA is a versatile solution which provides developers with a single turn-key option for advanced data collection and consequently

risk quantification of offshore development. The deployment will incorporate SgurrEnergy's Galion Lidar, a 2nd generation laser based device, for capturing wind speed and directional data.

Offshore deployments in wind energy present a set of challenges which the Galion Lidar is uniquely equipped to meet. Galion is able to acquire measurements inaccessible to other devices in terms of vertical profiling, immediately above the platform and in acquisition of hub height wind speed data at multiple proposed turbine locations, within the Galion's 4 km range. Galion deployment can significantly reduce costs associated with offshore measurements by met mast methods. SgurrEnergy's technical director Ian Irvine added, "The Galion deployment offshore is an extremely exciting advancement for the offshore wind market and enhances our

industry leading position in development of wind Lidars for offshore applications."



ORQA offshore Lidar deployment



Galion rental
3 weeks for
the price of 2

See back page for more details

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World's first incentive for renewable heat

Details of the long awaited renewable heat incentive (RHI) were finally released in March.

Similar to the Feed in Tariff (FiT), this incentive uses a long term fixed tariff approach to provide confidence to investors. The UK is the first country in the world to adopt a scheme of this type for heat and its introduction is a strong statement of the Government's commitment to the renewable heat industry. David Menmuir from SgurrEnergy's Bioenergy team commented, "Policy makers have clearly taken on comments made during the consultation process and we welcome the fact that emphasis has moved towards supporting larger, more efficient, biomass installations."

SgurrEnergy has a track record in industrial biomass heat and power projects and can provide support during all stages of development and construction. In addition, our engineers

can offer advice and services relating to biogas, heat pumps and solar thermal installations. If you are considering how you might benefit from the RHI scheme, or want to find out more about developing your bioenergy potential, contact the team on **+44 141 227 1700** today.



An exciting new incentive in renewable heat



Sgurr (pronounced Skoor) Scottish Gaelic meaning peak, pinnacle or summit. We are very proud of our Scottish roots and our reputation for engineering excellence.

SgurrEnergy in South Africa

SgurrEnergy has recently been appointed to provide Owner's Engineer services for the proposed Umoya Hopefield wind farm site in South Africa. The site, which may be up to 100MW in capacity, is located near the town of Hopefield in the Western Cape Province, approximately 140km north of Cape Town. Currently there are only a few installed wind turbines in South Africa; however, with a prospective installed capacity of approximately 9GW, it is a country with great potential for the wind energy market. This is reflected by the impetus provided by the South African government's Renewable Energy Feed-in Tariff 1 (REFIT 1) programme, which will provide a feed-in tariff to kick-start the development of just over 1GW of renewables, 700MW of which would be in onshore wind. Further REFIT programmes are planned to achieve an installed onshore

wind renewables capacity of circa 3GW by 2020 and ultimately some 9GW by 2030. SgurrEnergy's scope of work for the Umoya Hopefield project is split into three phases: development, construction and operations and maintenance. The project is currently in the early stages of development and selection of a wind turbine generator (WTG) supplier to work with pre-appointed balance of plant contractors is underway. Provided that the site is awarded a Power Purchase Agreement (PPA) under the REFIT programme, it is hoped that financial close will be achieved by the end of 2011. Project manager Charlie Briggs commented, "SgurrEnergy is delighted to be involved in this exciting wind farm development at a time when the South African wind energy market is showing what promises to be great potential."



Flying the flag for wind development

Building on success in China

SgurrEnergy's Beijing office continues its development with a move to new offices in the Chaoyang District. Founded in 2006 and registered as a Wholly Owned Foreign Enterprise (WOFE) since 2009, Feng Neng Sgurr (Beijing) serves the growing renewable sector in China and acts as a focal point for delivery of services across Asia. The latest news from our Beijing office is our recent appointment as the independent technical consultant for a WTG manufacturer's Initial Public Offering (IPO) activity. Appointed by a major investment bank, our work will include the detailed assessment of a WTG, the performance of its installed fleet of WTG's across China and the future products currently in development at its Research and Development Centre.



Our new offices in Beijing

Health and safety for UK offshore wind turbines

SgurrEnergy is supporting Spanish turbine manufacturer Gamesa with the development of its range of offshore wind turbines.

Gamesa's offshore wind strategy includes the launch of a 5MW WTG, to be followed by a planned launch of a 6 - 7MW machine. As part of ensuring that their designs meet market requirements, Gamesa have employed SgurrEnergy to help them understand the Safety, Health and Environmental requirements of WTG's for the UK offshore wind market. In addition to providing a detailed report into these requirements, SgurrEnergy engineers Alistair Duff and David Malcolm travelled to Madrid to deliver their findings in a workshop to Gamesa's offshore design team.

Following the workshop, Gamesa's senior engineering project manager, Juan Moya Garcia, commented, "Both the report and the workshop were exactly what we needed. I am very satisfied with the results and I see there are real opportunities for collaboration between our companies in offshore wind health & safety." SgurrEnergy has since been appointed to assist with hazard identification and safety risk assessment for these WTG technologies and associated projects, including their

deployment, operation and maintenance offshore. SgurrEnergy has extensive experience of offshore wind engineering and is pleased to be able to apply this knowledge to assist the development of the next generation of offshore WTG's. Mechanical engineering team leader John Simmons adds, "Up-scaling technology and safety improvement are key to the expansion of offshore wind into deeper water and more exposed sites. This is an exciting time at SgurrEnergy as we bring a combination of our wide industry experience, analytical capabilities and responsive approach, to work with the wind industry to create well engineered, innovative and practical solutions that are both safe and cost-effective".



Gamesa's G10X 4.5MW turbine will provide the platform for the company's 5MW offshore turbine.

Taking wind power accreditation to the next level



SgurrEnergy is delighted to be the second company in Europe to achieve UKAS accreditation to ISO17025 for wind turbine power curve measurement. This

accreditation has been awarded in recognition of our adherence to stringent UKAS standards and is built on our significant track record of power curve measurement. SgurrEnergy has conducted power curve measurements for a wide range of clients and recent assignments include a

number of large UK wind farms such as Black Law (124MW) and Whitelee (322MW), as well as on international sites in India, Chile and Norway.

SgurrEnergy prides itself on being a leading consultancy advocating new technologies and their application in wind measurement. As such, we are playing a vital role in the development of the application of cutting edge Lidar technology for measuring wind turbine power curves. Our technical development consultant, Peter Clive is leading the International Electrotechnical Commission (IEC) sub-group which is developing guidance for remote sensing

within the power curve measurement standard.

Our experience in power curve testing and measurement is complemented by our expertise in analysing the operational performance of wind farms. Much of this analysis is undertaken using our groundbreaking SgurrTrend analysis software, helping owners and operators optimise the performance of their assets. Our accreditation to UKAS ISO17025 comes as a great endorsement of our capabilities in wind measurement, an area of expertise in which we continue to be a forerunner in the industry.

Environmental capability boosted by key project wins

SgurrEnergy's drive to offer an increased range of environmental services has recently been boosted by some key project wins both in the UK and abroad. We are currently managing the Environmental Impact Assessment (EIA) for a 6 turbine community wind farm development in the Western Isles. This exciting project seeks to use the development as an opportunity to provide a significant income stream for the community and also to improve public access by providing cycle tracks and footpaths linking Stornoway with the site and its historic features. The anticipated planning submission date for this project is May 2011. We are expecting to commence the EIAs for a further two sites in the south of England in 2011, with an additional two sites coming online later in the year. SgurrEnergy will manage the EIAs for all sites and provide additional planning support. We are also providing EIA services on another wind farm in the south of England – Shepham wind farm in East Sussex.

SgurrEnergy's EIA team has also been boosted by news that one of our projects has been awarded full planning consent. Planning permission to erect five wind turbines near Gutcher in Yell, Shetland Isles was granted by Shetland Isles Council in April 2011. Further afield, SgurrEnergy, acting as Lender's environmental consultant, has recently provided environmental expertise for the Baicheng wind farm, China. We

undertook a site audit to review Phase 1 project performance to date and to assess compliance with international environmental standards. In addition we developed a series of actions to ensure the Borrower maintains Equator Principles as the current project becomes fully operational and to ensure a robust system of environmental and social management is in place for Phase 2 of the project.

These key project wins demonstrate SgurrEnergy's unique ability to deliver both environmental and technical consultancy services for wind energy projects worldwide. For more information on our EIA services contact the team on **+44 141 227 1700** today.



EIA for wind farm development

Latest events & exhibitions

SgurrEnergy's experienced consultants continue to increase international awareness of their renewable energy expertise through participation in many high profile industry events.

The company has recently exhibited and held podium spots at a number of events across Europe and Asia. EWEA 2011 in Brussels was a great show and the Galion Lidar demonstration model on the SgurrEnergy stand was a hot discussion topic amongst delegates. SgurrEnergy consultants also addressed audiences at Offshore Wind Power Development 2011 (Shanghai), Wind Turbine Noise 2011 (Rome), Scottish Renewables Forum Annual Conference (Glasgow) and at an Anaerobic Digestion seminar (Edinburgh).

We are looking forward to an exciting series of events this quarter with attendance at AWEA WindPower 2011 (Anaheim, California) where we will share a stand with Wood Group and JP Kenny, EnergyOcean International 2011 (Portland, Maine, USA) and key renewables finance forum, REFF Wall Street (New York). For details on events, please see the full listing on the back page.



SgurrEnergy at EWEA 2011





About SgurrEnergy

SgurrEnergy, a Wood Group company, is a leading independent engineering consultancy specialising in renewable energy. The team includes over 100 highly skilled professionals with hands on experience both in the UK and internationally. We provide full life cycle knowledge encompassing feasibility, design, development and implementation

services. This ensures successful project delivery in wide range of technologies including wind, bio-energy, wave, tidal, hydro and solar energy. Clients in the utilities, investment, manufacturing, construction, renewable energy development and government authority sectors have benefited significantly from our technical expertise.



Visit us

Event	Location	Date	Website
All Energy 2011	Aberdeen, UK	18 - 19th May	www.all-energy.co.uk
AWEA Wind Power 2011	Anaheim, USA	22 - 25th May	www.windpowerexpo.org
EnergyOcean International	Portland, Maine, USA	14 - 16th June	www.energyocean.com
REFF Wall Street 2011	New York, USA	29 - 30th June	www.refwallstreet.com

Galion rental fleet expands to North America

With expanding offices in Canada and the United States, SgurrEnergy is rolling out its Galion Lidar rental fleet into the North American market. To support this roll-out, SgurrEnergy recently held an in-house Galion Lidar training program at our Glasgow HQ. Renewable energy consultant Nick Capaldo, based in SgurrEnergy Vancouver, was in the UK as part of this program. His feedback was extremely positive, commenting, "Involvement in this training program has given me a valuable insight into what Galion Lidar can offer the North American market". With its 4km range, Galion Lidar allows visualisation of wind flow over large areas, giving the ability to assess wakes within a wind farm to previously unattainable degrees of precision. Galion Lidar is currently available for rental on short or long term deployment in Europe. With the investment in fully trained Lidar personnel in our overseas offices, SgurrEnergy is delighted to now offer Galion Lidar rental across North America. With Galion sales already mounting in

North and South America, a rental option gives wind farm developers and operators the opportunity to trial Galion for wind measurement campaigns. Rental rates incorporate full deployment, operation and maintenance of the Galion Lidar by SgurrEnergy engineers. Client demonstrations are also available by arrangement. For more information, email galion@sgurrenergy.com



Galion Lidar rental expands into the USA and Canada

Galion Lidar rental offer

We are delighted to announce the doubling of our UK Galion Lidar rental fleet from May 2011. In recognition of this exciting announcement, we want to offer you a fantastic discount for a limited time period only.

3 weeks Galion rental for the price of 2, on all orders received before 31st May*

Galion Lidar has many short duration applications for both wind farm developers and owners including:

- Wind measurement for noise impact assessments and FIT projects
- Wind flow model validations
- Assessment of operational assets

If you require help with your upcoming wind energy project or want to increase the return on investment (ROI) from your existing wind energy assets, to find out more information go to www.galionlidar.com or call us now to find out more details about this exciting rental offer.

* Terms and conditions apply, please contact us at: newsletter@sgurrenergy.com for details.

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