

Edinburgh engineers tipped for success

✘ A new Edinburgh specialist engineering company, which has attracted an impressive powerhouse list of board advisors, is being tipped for fast-track global success after being launched this week.

Xi Engineering Consultants has won £400,000 in investment and plans to advance Scotland's strength in the renewable sector through its pioneering developments in vibration technology.

Those credentials have helped the fledgling firm already secure interest from a host of blue chip clients, while also helping it to install a series of big names on its board.

They include former Defence Minister Adam Ingram and ex Lloyds TSB Director Manus Fullarton, while influencer Gordon Stewart, a former CEO of American consulting giant PRTM, the world's most successful operational strategy consultancy, has taken on the role of Chairman.

Dr Mark-Paul Buckingham, Managing Director of Xi Engineering, said: "We hope this serves as a flying start as well as a statement of intent. Not only do we have a pipeline of exciting projects, we've secured both private and public funding.

"This has been recognised by the the sheer calibre of those who have agreed to join our board. I'm both excited and grateful for that, as their wisdom and experience will be crucial to us as we achieve the growth we expect."

Based in Edinburgh, Xi Engineering brings together a team of world-renowned science and engineering experts who tackle problems caused by vibrations in a wide range of situations.

While most people recognise how vibration poses a risk to tall buildings, bridges and plane engines, specialists also work on less high-profile issues where vibration can affect buildings or structures near busy roads, rail lines or subways, disrupt sensitive factory or laboratory equipment and wreak havoc with marine structures.

The Xi Engineering team not only assess and measure problems, but develop bespoke solutions which can dramatically improve the lifespan of structures, reduce risks in a range of job functions and reduce noise problems – improvements which can save developers significant expenditure.

Already Xi Engineering has attracted worldwide attention for its work on wind turbines in South West Scotland, to prevent them interfering with the Eskdalemuir Seismic Array.

The array is one of 170 ultra-sensitive measurement centres across the globe set up to monitor for illegal nuclear testing and measurements can be affected by vibration-related noise from turbines.

Xi Engineering developed its Seismically Quiet Tower (SQT) hardware solution, which can be integrated when turbine towers are built, adapted for any tower height and power capacity and can even be retro-fitted to turbines already in operation.

With Scotland already being groomed as a global leader in wind, wave and tidal power for the future, Xi Engineering's work on large scale wind turbines. Experts from the firm were recently asked to speak in Rome at the INCE Wind Turbine 2011 Conference, where their scientific paper on reducing vibration with wind turbines was seen to be of international importance.

Xi Consulting also has similar expertise in marine energy projects. Currently all marine projects have to go through a rigorous Environmental Impact Assessment (EIA), so the firm is using its expertise to develop predictive modelling which could dramatically streamline and improve the process.

Consultants from the firm are also working on an impressive range of projects within the renewable energy sector in partnership with organisations such as Hammerfest Strom and AES.

Dr Buckingham said: “The company might be new, but we are certainly no overnight success. This is an object lesson in pulling together years of expertise and experience at the time when it is most needed.

“We are delighted that we may have an increasing role to play in helping Scotland develop engineering and scientific expertise in the global renewable energy industry sector. It is one of the most exciting sectors to be working in at the moment.”

Dr Buckingham and the founding team at Xi Engineering have already helped create another vibration-based business success story – Reactec Ltd. The Edinburgh-based firm developed the HAVmeter, which measures hand arm vibration.

HAVmeter is now widely used across UK to help workers who regularly use power tools –in construction, factory work, car maintenance, gardening and groundskeeping and a host of other professions – keep within safe exposure guidelines.

The bright orange device has proved popular with employers, who can ensure staff do not develop debilitating conditions like vibration white finger, protecting companies from future negligence claims or other related legal action.

The Board of Reactec recognised the growing demand for services beyond the HAVmeter business. To broaden the company’s reach, it formed Xi Engineering Consultants.

Xi Engineering has been created with £400,000 of investment from sources including the Government-backed Enterprise Investment Scheme, Archangel Informal Investments and Scottish Enterprise Co-Investment Fund. And with aggressive targets to

meet, the company expects to become a multi-million pound consultancy over the next few years.