

Knowledge Transfer Partnerships

KTP BENEFITS

Knowledge Transfer Partnerships are designed to benefit everyone involved

- 🔄 Businesses will acquire new knowledge and expertise
- 🔄 KTP Associates will gain business-based experience and personal and professional development opportunities
- 🔄 Universities, colleges or research organisations will bring their experience to enhance the business relevance of their research and teaching

Knowledge Transfer Partnerships

Accelerating business innovation; a Technology Strategy Board programme

<http://www.ktponline.org.uk>

SOLARCENTURY HOLDINGS LTD KTP FINDS SUCCESS IN THE SUN

ABOUT THIS CASE STUDY

Solarcentury Holdings Ltd partnered the University of Reading for this Knowledge Transfer Partnership (KTP). The project was to spearhead research and development activities to result in new solar-powered products and services such as building cladding and roofing tiles.

ABOUT THE SPONSOR

The Technology Strategy Board is a business-led organisation established by the Government. Its mission is to accelerate research into, and development and exploitation of, technology and innovation for the benefit of UK business - building economic growth and quality of life.

FAST FACTS

- 🔄 KTP initiated the research and development of two new products
- 🔄 Increased company's annual turnover by about £500,000
- 🔄 Enhanced the company's knowledge, equipment and project management
- 🔄 Opened up new markets within the construction industry
- 🔄 Catalyst for numerous collaborative MSc projects about photovoltaic technologies
- 🔄 Qualifications and career development for the Associate

The Company



“The KTP provided a dedicated person to help us develop an award winning product. The collaboration gave us access to resources and skills which we did not have in the company and enabled us to move forward quickly.”

Dr Daniel Davies, Chief Technical Officer, Solarcentury Holdings Ltd.

Solarcentury Holdings Ltd is a leading UK solar solutions company that works directly with architects, engineers and developers to deliver large-scale renewable energy solutions for producing electricity and heating water. The company also provides a network of recommended installers for home owners.

ABOUT THE PROJECT

Solarcentury approached the University of Reading for the partnership. The aim was to launch a new product development team and find opportunities during the design and supply of photovoltaic installations which could be translated into new products and services for a growing UK solar market.

BENEFITS

The KTP project enabled the Associate to work entirely on the development of new products and to draw on the experience of engineers, project managers and installers as well as the specialist technology, materials and design knowledge of the University partner.

The project successfully developed two new products: C21 solar electric roof tile and a mounting system for the Sanyo Photovoltaic Module. KTP has provided a solid grounding for second-generation versions and provided a competitive edge for Solarcentury.

Structured project management and the upgrading of CAD software has helped

to provide best practice standards for the company. In addition, the Associate has undertaken research into conventional roof coverings and provided a detailed understanding of how these products function when integrated with photovoltaic products.

Taking this wider construction approach has facilitated product testing with the Building Research Establishment and enhanced the profile of the company with other construction-focused organisations. This recognition, allied to knowledge of its new products, has helped Solarcentury to make a strategic shift into the construction industry. It is now recognised by housing developers as a photovoltaic specialist providing

low risk photovoltaic products with a familiar installation method. This has grown sales and given the company an advantage over its solar technology competitors.

RESULTS

- ☞ KTP has helped design, develop and launch two new products
- ☞ The company's annual turnover has increased by about £500,000
- ☞ Pre-tax profit of about £150,000 has been generated for the company
- ☞ Enhanced company's knowledge, equipment and project management
- ☞ Opened up new market within the construction industry

The Associate

“KTP opened up unique opportunities for me to work in a commercial environment within my chosen technical field.”

Martyn Berry, KTP Associate

The Associate successfully researched and developed building cladding and roofing products which utilise solar technology to provide power for buildings.

BENEFITS

The Associate has achieved specialist training in business, management, finance and technical skills which, coupled with project experience, has also advanced his interpersonal skills.

Extending the Associate's technical skills has helped him to take a lead on key product developments and gain experience of taking the company into new market areas. As a result of the success of this KTP project, the Associate was employed by the company and has become an authority on photovoltaic roof tiles and other photovoltaic integration methods.

RESULTS

- ☞ KTP has provided personal development and career planning opportunities
- ☞ Enhanced technical, commercial and research skills
- ☞ Achieved status of Chartered Professional Engineer
- ☞ Completion of NVQ Level 4 and prospect of becoming a Chartered Manager
- ☞ Responsible for key product developments
- ☞ Associate took up post of Design and Development Engineer at the company

The Academic Partner



The University of Reading

“The collaboration with the company has proved to be very useful to us in demonstrating the value of our work on renewable energy technologies.”

Dr David Fulford, Head of Energy Group, the University of Reading

The University of Reading has benefited from the exposure to commercial product development which has informed new research, academic papers, teaching and course material.

BENEFITS

The KTP partnership has created opportunities for various MSc projects; one about the generation performance of C21 names the university as its inventor. A published paper about this project was presented at the PV industry's key academic conference in Paris, 2004. Solarcentury has provided technical and commercial case study material to support the MSc. MSc students also helped the Associate to test out novel features or verify claims associated with new products. The work with KTP has raised the academic profile of the University of Reading.

RESULTS

- ☞ KTP involvement has raised the Energy Group's profile
- ☞ Extensive experience of commercial product development for staff and students
- ☞ Generated new course material and teaching opportunities
- ☞ Provided collaborative MSc projects and a PhD about the latest photovoltaic technologies
- ☞ A second KTP project is planned into photovoltaic powered street furniture