

Building a Sustainable Future – Naturally

Energy efficiency will soon be a step closer following the launch of an important £1 million research project co-funded by the Technology Strategy Board and led by a consortium of industry experts to look at making building insulation products more efficient and affordable.

The consortium, led by Bangor University and including leading affordable housing contractor, Wates Living Space believe that real delivery on the Government target of Carbon Neutral buildings by 2016, will require dramatic improvements in our buildings. Amongst other things this means the use of better insulation and more sustainable materials that will provide solutions in both the new build and refurbishment sectors.

The project hopes to make natural insulation products more efficient and affordable by researching, amongst other things the adhesive (resin) that is used to bind fibres together and the manufacturing process itself. The project will apply a rigorous analysis to the task of designing a range of highly functional natural fibres (including hemp based products) relevant to the current and future needs of a more sustainable construction industry.

Dr Paul Fowler, Head of Welsh Institute for Natural Resources at Bangor University explains “We believe that the partners involved in the project can make a real step forward to getting UK grown hemp processed into fibre insulation here in the UK in the near future.”

Paul Davies, Sustainable Technologies Manager, Wates Living Space added “we are delighted to be a part of this important research, currently not enough attention is paid to the embodied carbon of materials. We hope that this project will lead to materials being selected based not only on monetary cost and performance but also their environmental cost.”

The other partners involved in the project are; Hemcore, Natural Building Technologies Ltd, Nonwovens Innovation & Research Institute Ltd, Plant Fibre Technology, Rachel Bevan Architects, SciTech Adhesives and the University of East London.

Editors Notes

The project is co-financed by The Technology Strategy Board. The Technology Strategy Board is a business-led executive non-departmental public body, established by the government. Its role is to promote and support research into, and development and exploitation of, technology and innovation for the benefit of UK business, in order to increase economic growth and improve the quality of life. It is sponsored by the Department for Innovation, Universities and Skills (DIUS). For further information please visit www.innovateuk.org.

The organisations involved in the consortium are:

- Nonwovens Innovation & Research Institute Ltd, an independent research organisation with specialism's in the textile industry. Contact Dr Andrew Hewitt. Tel. 0113 3433790.
- Hemcore Ltd, The only company processing hemp fibre in the UK.
- Natural Building Technologies Ltd, A leading supplier of natural building products in the UK.
- Plant Fibre Technology Ltd, Experts in the marketing and technical development of natural insulations. Contact: Gary Newman. Tel. 01248 388486
- Wates Living Space, Part of the family owned Wates Group, Wates Living Space is one of the UK's leading affordable housing contractors, working with RSLs and ALMOs we build or refurbish in the region of 20,000 homes for residents each year through the New Build and decent homes programme. www.wates.co.uk
- Rachel Bevan Architects and Consultants. Architects with many years experience of 'green building'.
- Sci-Tech Adhesive Systems. Manufacturers of specialist adhesives.
- University of East London (in conjunction with the Centre for Alternative Technology) with specialists in 'green building'.

For further information

The project is led by the Bio Composites Centre of Bangor University. Contact Ceri Loxton. Tel. 01248 383190.