THINKING

Hammerson recognises the value of research to help us move forward in our sustainability objectives. As such, we have invested this year in projects which can deliver real outcomes for our business and value for our shareholders. Research topics fall under one of our five material issues: climate change and energy; resource use; community regeneration; supply chain and customers.

Russell Beresford
Project Manager

Carl Brooks
Sustainability Advisor

Hammerson worked with three universities in 2008 on projects designed to give students practical experience of solving business problems while assisting the Company with specific challenges, including optimising green roof use in development and improving environmental performance at WestQuay shopping centre in Southampton.

CASE STUDY
UNIVERSITY OF SHEFFIELD: GREEN ROOFS

Part of Hammerson's long-term development pipeline, Sevenstone Sheffield is a major retail and leisure project. During the design development of the SIP (Sustainability Implementation Plan) for Sevenstone, we determined that including green or brown roofs across as much of the project as possible would enhance the development. Reasons for incorporating a green roof in the design of a building include:

- Helping to insulate the building, so improving thermal performance.
- Acting as a temporary sponge during heavy rainfall, reducing runoff of water, and acting as a part of our Sustainable Urban Drainage system (SUDs).
- Providing habitat for birds and insects, so improving the biodiversity performance of the development.
- In the case of Sevenstone, a mixed-use project, including green roofs would also improve the appearance of the building to residential occupiers.

Initially the project design team were advised that including Green Roofs would be prohibitive both in terms of cost and the additional building structure density, due to the additional weight of the soil substrate. As a team, we chose to challenge this initial advice and sought further expert advice through the Green Roofs Centre, a centre of excellence based at Sheffield at Hallam University. Through a collaborative approach, a solution was found which proved to be extremely cost effective, enhanced biodiversity considerably, reduced the substrate thickness from 500 millimetres to 100 millimetres and reduced the need for storm water attenuation tanks. We are continuing our work with the university, with a view to providing them with 'live sites' for testing new species, an important part of their curriculum.

CASE STUDY
UNIVERSITY OF SOUTHAMPTON: IMPROVING ENVIRONMENTAL PERFORMANCE AT WESTQUAY

Postgraduate students studying for Masters degrees in Environmental Sciences at the University of Southampton were set the challenge of developing an environmental management system (EMS) and gaining international environmental management standard ISO 14001 for WestQuay.

Working in six small consultancy groups, 34 students assessed how WestQuay can best manage its facilities and systems to reduce its overall environmental impact, looking at factors ranging from waste and energy management to heating and lighting, lifts and escalators, public and retailer waste, car parking, service yards and loading bays. The centre already taps into the city's district heating scheme for heating and cooling services, so the challenge was to find innovative new ways to reduce consumption of resources.

In January, the six consultancy groups presented their findings to Hammerson and WestQuay senior management. One group, who had given themselves the title "PANASH" (pictured) was given the opportunity to develop their ideas into an environmental management system. University course director Simon Kemp will continue to work alongside Hammerson to assist in implementing the EMS and achieving the ISO 14001 standard.

In 2008, we also measured the carbon footprint for Westquay, Southampton. For Greenhouse Gases protocol scope 1 and 2 the total carbon footprint is 3,053 tonnes CO_2 but when we include scope 3 (visitor, supplier and staff transport) this rises to 72,487 tonnes CO_2, clearly highlighting the need to engage with all stakeholders on green travel plans. It is our intention to roll out footprinting across our portfolio in 2009.