## CASE STUDY: Sheffield City College

Work on Sheffield City College has been completed, and the building has been hailed as one of the greenest in Yorkshire.

Construction company JF Finnegan handed over the complex in time to welcome 6,000 students for the 2010/11 academic year.

The purpose-built college has a range of sustainable technology features, including three 15-metre roof-mounted wind turbines.

Other features include large solar panels, a rainwater recycling system and green sedum roofs to encourage biodiversity. There is a balancing pond to channel water for reuse, natural ventilation of all rooms and an additional turbine at ground level to power the nursery building.

The college's wider sustainability strategy includes blending energy saving technology with recycling from existing sources. Some of the college's heating and hot water comes from Sheffield District Energy Network, which provides 140 buildings in the city with recycled low-carbon energy, generated from incinerated local waste. The college is also planting almost 100 trees, which are available for sponsorship.

Tom Charles, construction manager at JF Finnegan, says the building set a new benchmark for green construction. "Construction of a project of this scale and specification, incorporating the spectrum of sustainable features, is a major undertaking before you add the additional challenge of working around 6,000 students and 600 staff on site. We are proud that Sheffield is home to this outstanding educational facility, which has set the standard for sustainable educational development in the north of the country."

while others are awarded by default, such as when refrigerants aren't used," he says.

Bolton says that compliance with certain credits is more expensive than others and these should only be considered when aiming for a high rating.

He adds: "Energy is the highest-weighted section so credits here provide more points than those in water, which is the lowest-weighted section. Therefore, ensure you dedicate enough time to this section to enable you to reap the rewards."

Finally, Bolton emphasises that it is vital to have all parties involved when working on a new development.

"You will need the support of the design team for the development to successfully go through the BREEAM assessment, so getting them on board early is crucial. Similarly, if a contractor doesn't understand the requirements or reasons for the assessment this could jeopardise the rating.

"The best tip is to appoint an assessor early on. They will help you to ensure that all requirements are met and ensure the smooth running of the assessment process."

For those looking to secure new office premises with sound environmental credentials, Yorkshire offers several developments that have been built with energy efficiency in mind. These include the recently rebranded No1 Leeds, formerly known as Latitude Red, which has been rated as BREEAM excellent (see case study).

Developer Citu has completed the transformation of a rundown 1930s seasonal workers hostel in Leeds into low-carbon development Greenhouse.

The mixed-use scheme in Hunslet includes 15,000 sq ft of office space over four floors. The building uses technology including wind turbines, solar power and heat exchange systems to reduce the carbon footprint of tenants.

Duncan Senior, partner at property consultant WSB says: "Greenhouse will undoubtedly appeal to occupiers who are sensitive to environmental considerations who are looking to reduce their carbon footprint and energy costs, with the scheme capable of providing 60 per cent savings over conventional office space."

Scottish IT recruitment agency Head Resourcing has moved its newest branch into the BREEAM excellent rated Icon Business Centre in Leeds in a bid to significantly reduce the impact the business has on the environment. More than 25 per cent of the office is made from recycled products