

MADE

Blue Planet

**location: Chatterley Valley
Newcastle-under-Lyme**

Q: When is a shed not a shed? A: When it is a Blue Planet.

Large logistics buildings are a fact of modern life but Gazeley's Blue Planet scheme shows how these can also be beautiful and environmentally responsive. The project has recently received an 'Outstanding' BREEAM rating the first building to do so in the industrial and all building types category.

Introduction

The Blue Planet warehouse and offices is an ecologically driven development designed by Chetwoods Architects for Gazeley UK with support from Advantage West Midlands and Newcastle-under-Lyme Borough Council. The main building was finished in late 2008 though at the time of writing the extensive hard and soft landscaping was still incomplete.



Situated on 12.5 hectares of former colliery land at Lowlands Road in the Chatterley Valley in Staffordshire, approximately 3 miles north of the centre of Newcastle-under-Lyme close to junction 16 of the M6. The 36,000sq m Blue Planet building already exceeds the Governments Climate Change bill targets for 2020 and 2050. The performance figures are remarkable:

- Heating and power from renewable energy 100%
- Building lighting and power savings 49%
- Building and heating energy savings 68%
- Water savings 60%
- Total energy and water cost in use savings 39%

Design process

The development team who have worked on the project:

Construction value: £23m
Completion date: 31 December 2008
Client: Gazeley Properties
Main Contractor: McLaren Construction
Architect: Chetwoods Architects



Evaluation

The first thing to consider when visiting the project is the approach, Blue Planet is visible from both the elevated A500 dual carriageway and the west coast mainline that runs along the southwestern edge of the site but it is recommended to approach the site from the junction of the A500 with the A34, taking the Peacock Hay Road exit from the roundabout and descending into the Chatterley Valley. The large but sculptural building will emerge to your right. Close-by a more traditional warehouse is being erected on a neighbouring plot - and the contrast couldn't be more marked.

The most immediately arresting features are the sustainable timber clad office corner element and three rainwater collection scoops that end in the three pools in the sustainable garden. These three are distinct in character and are titled 'Education', 'Entertainment' and 'Recreation'. The building saves 60% of all water including 600,000 litres through rainwater recycling and a further 126,000 litres from other water saving devices. The three ponds lie in a community environmental park that provides an increased opportunity for ecological diversity as well as the potential for local provenance vegetation.

The development of the Blue Planet – which should more accurately be called the 'Green Planet' as it is predominantly coloured green as well as being extremely 'green' - was not based upon finding the cheapest development option but instead around the desire to create something that is both sustainable and special and this has been achieved. In this case it was made possible because of the enthusiastic support of the regional development agency, Advantage West Midlands. It is certainly too early to assess whether the project is successful in purely commercial terms but the building sits well in the landscape and really does show what *can* be done.

Key design features to look out for

- 15% Roof lights with Ethylene Tetra Fluoroethylene (ETFE) and implanted photovoltaics. This is a similar system to that used at the Beijing Olympics Water Cube and optimises natural daylight into the warehouse whilst at the same time minimising night time light pollution.
- On-site bio-fuel plant provides power and heat to the development.
- EnergiPanel wall to southern elevation allows for naturally heated air to be captured and used for internal heating
- Solar thermal hot water system preheats water for use in the offices.
- Under floor heating in the main warehouse
- Kinetic energy plates installed in the access road produce power when driven over by vehicles entering and leaving the site.
- Energy efficient T5 lighting in offices and T8 lighting to the warehouse linked to motion detectors
- Super air tightness and thermal efficiency 25% better than required
- Natural Ventilation in the offices
- Materials reused, recycled and local where possible, including office partitions and carpet tiles made using predominantly post-industrial waste.

Link and downloads

An excellent site specifically dealing with the development including a fly-through video: <http://www.gpark-blueplanet.com/>

The project architects: <http://www.chetwoods.com>

Contact for further information

For more information see <http://www.gpark-blueplanet.com/>