

## HOME GREEN HOME

Gallions Ecopark, Greenwich, London



Source: Gallions Ecopark

*With so much emphasis on the need to be more environmentally friendly, wouldn't it be good if our homes did some of the hard work for us? At Gallions Ecopark in Greenwich, south east London, they do.*

Gallions Ecopark consists of 39 two-, three- and four- bedroom affordable homes for rent and is designed to show how the latest ideas about sustainable, low-energy living can be put into practice. The scheme, completed in 2003, was inspired by the Dutch Green Financing Model (DGFM) used successfully by the Dutch Government to provide financial incentives for housing developers to use more environmentally-friendly methods. **The development achieved an 'Excellent' rating when assessed against BRE's Ecohomes Assessment Rating** (one of the most respected measures).

The houses at Gallions Ecopark have timber frames, high levels of insulation, double-glazed windows filled with argon gas, sunspaces (to heat air coming into the homes), gas condensing boilers, solar water heating, energy-efficient lighting, onsite recycling and underfloor heating. Water-saving features include water-efficient showers, spray taps, flow regulators and dual-flush toilets. Gallion has included greywater recycling – a term for water that can be reused, for example, in toilets and on gardens – in one of the homes to demonstrate potential additional water-saving features.

Rebecca Miller, Sustainability Manager at Gallions Ecopark, says that, "**Low-energy sustainable housing makes sense for our tenants. Lower energy consumption means that the Ecopark houses cost a lot less to run than conventional houses of the same size.**"

The results so far at Ecopark are impressive when compared with the UK averages for domestic energy and water consumption (as at end of 2003). **Houses at Ecopark use 45% less gas, 40% less electricity and 30% less water.** The carbon (CO<sub>2</sub>) emissions of the houses are 40% less, and Ecopark houses also have lower internal pollution levels because of the 'green' (Low Volatile Organic Compound) paint used throughout the scheme.

Annette, a mother of three, lives in a three-bedroom property with a sun space. She says, “Before we moved here we didn’t really think about the environment too much; we didn’t really recycle or anything. Since moving in, it’s much easier to be environmentally friendly because of the way the houses are built. **One of my favourite things about these houses is that they’re cheaper to run. Nearly every time the gas prices go up I get asked to be interviewed by journalists because living here means that these price hikes affect us less than everyone else.**”

Another tenant, Mrs Patel, was already aware about environmental issues so she was very pleased to move to the Ecopark. “We were thrilled when we found out that the house we were getting had been designed specifically to be environmentally friendly. Since moving in, there’s been quite a lot of support from the housing association. It also helps that they employed someone who just looks after sustainability aspects so we know we can contact her if we need more help or advice.”

Gallions Ecopark is continually looking for more ways of saving energy and helping the environment. One house from each of the four housing blocks has been installed with telemetric monitoring systems to measure the effects of the weather, energy use and conservation of water. The on-site display home (known as the ‘Naked House’) and visitors’ centre are valuable sources of information for organisations involved in the development, design and construction of buildings. The showcasing of how to make environmentally-friendly building a reality will also help to educate and inform the wider community about sustainable living and sustainable development.

### Facts

- In the UK, we emit an average of 9 tonnes of CO<sub>2</sub> per year per person. This compares to the global average of 4 tonnes and the Indian average of 1 tonne of CO<sub>2</sub> per year per person.
- On average, 58% of domestic energy use is used for space heating. (*Source: City and Guilds – Energy in the Home*)
- In an uninsulated house, an average of 35% of heat loss is through the walls, 25% through the roof and 15% through the floor. (*Source: City and Guilds – Energy in the Home*)
- A correctly-sized solar water heating system situated on a south-facing, unshaded roof will produce between 30-50% of a domestic properties hot water needs. (*Source: Energy Saving Trust*)

### Further Information

- The Beddington Zero Energy Development (BedZED) is the UK’s largest carbon-neutral eco-community. Visit them online at [www.peabody.org.uk/bedZED](http://www.peabody.org.uk/bedZED).
- The Hockerton Housing Project is the UK’s first earth sheltered, self-sufficient ecological housing development. Find out more at [www.hockertonhousingproject.org.uk](http://www.hockertonhousingproject.org.uk).
- To find out more about energy projects for your community, including funding support, training, contacts, advice and more case studies, contact the Community Action for Energy Team (CAfE) by telephone (08701 261 444) or email ([CAfE@est.org.uk](mailto:CAfE@est.org.uk)) or visit them online at [www.est.org.uk/cafe](http://www.est.org.uk/cafe).