

The BedZED project in London, completed in 2002, is a zero energy housing development with 99 homes, office space for 100 people and community facilities. It is the UK's largest mixed use sustainable community.

The development is designed to meet all of its energy needs from renewable energy generated on site. There are 777 m² of solar panels, and a combined heat and power plant fuelled by woodchips from waste timber that would otherwise be sent to landfill. The iconic wind cowls provide wind-powered ventilation, so that the heat from air exiting the buildings is recycled.

BedZED uses plethora of energy saving and water saving designs. The houses face south to take advantage of solar gain, are triple glazed, and have high thermal insulation. The buildings are fitted with energy efficient appliances, dual flush toilets and low flow taps. Rainwater, and grey water from kitchens and bathrooms is processed in a bio membrane reactor and used for toilet flushing. The development has seen an 81% reduction in energy use for heating, a 45% reduction in electricity use and a 58% reduction in water use compared to the local average.

BedZED is designed to be energy efficient and help people make sustainable choices, but the project developers have also worked with residents to look at lifestyles and help residents maximise the green living potential of the development. The community has an organic box scheme, whereby boxes of local organic food are delivered to residents at regular intervals; facilities, training and equipment are provided to residents to encourage them to grow their own food in the community's onsite garden and mini allotment. In order to reduce household waste, the houses have segregated under-sink bins and there is a community composting scheme and a swap shop was set up for residents when they first moved in.

The development is well served with public transport links, has secure parking for bikes and its own car club. It also has a number of onsite facilities, such as a 5-a-side football pitch, a dance studio, nursery, and a multi-use centre, to reduce the need to travel. BedZED has a 64% reduction in car use compared to the national average.

<http://greennewdeal.eu/> – 26/06/2011

