

BedZED Beddington Zero Energy Development

Hackbridge, Sutton, U.K.



Size: 100 Homes

Dates: 2000 – 2003

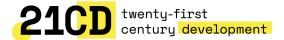
Project Team: Peabody Trust, BioRegional Development Group, Bill Dunster Architects

Photo from ZEDfactory.com

BedZED is a brownfield development that contains a mixed-use sustainable community with residential, office, and community spaces. It is a zero-carbon development that encourages a lifestyle dedicated to reducing electricity, heating, water, and fossil fuel transportation demands.

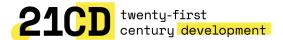
Goals & Strategies

🔊 Place	
Food	Goals: Promote a local food network.
	Strategies: Farmers market, walking distance to community garden.
Habitat	Goals: Increase biodiversity in the area.
	Strategies: Garden plots, balcony gardens, green roofs, reed wetland for wastewater filtration.
Transportation	Goals: 50% reduction in resident vehicle mileage.
	Strategies: Car sharing, bicycle infrastructure. Walking paths between units. Vehicle parking on the periphery. Proximity to public transportation.
🕅 Water	
Water	Goals: Hot water consumption reduced by 33%. Potable water consumption reduced by 33%. On-site water treatment.
	Strategies: Water-efficient appliances. Water meters that monitor consumption. Resident education. Biofiltration gardens that filter blackwater into greywater for use in non-potable applications.



4 Energy						
Energy	Goals: Zero-carbon development. 90% reduction in space heating needs. Generation of energy on site. Strategies: Passive solar heating. Passive ventilation and heat exchangers. District hot water. PV arrays. Energy efficient appliances. Monitored performance.					
	1ESS (Details not provided by researchers)					
Se Materials						
Embodied Energy & Carbon	Goals: Use low embodied energy materials and construction practices. Strategies: 52% of materials were sourced within 35 miles. 15% of construction materials were reclaimed or recycled products.					
Waste	Goals: 30% waste reduction. Strategies: Encourage recycling.					
Equity						
Neighborhood & Access	Goals: 25 – 50% affordable units. Strategies: Variety of housing options.					
Access to Nature	Goals: Goals not defined. Strategies: Outdoor spaces and gardens connected to homes. Outdoor seating area.					
Access to Community Services	Goals: Goals not defined. Strategies: Shared public square and sports fields. Community center, sports area.					
Beauty	(Details not provided by researchers)					

> See next page for Performance Levels achieved



Performance Levels Achieved:

	Standard	Good	Better	Living	Regenerative
Place					
Limits to Growth					
Food					
Habitat					
Transportation					
Water					
Energy					
Health + Happiness					
Civilized Environment					
Neighborhood Design					
Biophilia					
Resilient Connections					
Materials					
Material Plan					
Embodied Energy & Carbon					
Waste					
Equity					
Neighborhood & Access					
Access to Nature					
Access to Community Services					
Investment					
Beauty					
Beauty & Spirit	Not specified				
Inspiration					

Sources:

http://www.ecobicester.org.uk/cms/content/north-west-bicester#.XhZGfC2ZNUN *Note: This case study was developed using found information.

21st Century Development is a model for the creation of regenerative communities that strives to provide a healthy environment for all people and living systems now and in a dynamic future.

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