

# Delivering good and advanced practice in sustainable development in Brighton & Hove

See end of this document for Eco Open Houses information and Sustainability Checklist statistics

## Jubilee Library, Brighton

Passive design, rainwater harvesting, sustainable materials, low energy.

Winner of a number of awards, including the 2005 Prime Minister's Better Public Building.

Developer	Brighton & Hove City Council in association with the Miller Group
Architect	Bennetts Associates and LCE Architects
Planning application	BH2001/00843
Status	Completed in 2005



## Royal Alexandra Children's Hospital, Brighton

Achieved NHS NEAT Excellent rating. Winner of 2008 Prime Minister's Better Public Building Award.

Developer	Brighton & Sussex University Hospitals NHS Trust
Architect	BDP
Planning application	BH2003/03499
Status	Completed in 2007

Images from BDP.com





## City Point, Brighton

Two hundred and forty seven houses and flats, training centre and retail units, including Sainsburys. EcoHomes and BREEAM 'Excellent' rating at design stage.

Developer	Barratt Southern Counties
Architect	Chetwoods Architects
Planning application	BH2001/01811
Status	Completed in 2005



## One Brighton



Zero carbon, zero waste development composed of 172 residential units. Sixth floor allotments, onsite composting facilities, biomass facilities and PV arrays.

Winner of the 2009 Sustainable Communities RTPI award.

Developer	BioRegional Quintain and Crest Nicholson
Architect	Feilden Clegg Bradley Architects
Planning application	BH2006/01761
Status	Completed in 2010





## Gladstone Row, Brighton



Thirty one town houses and commercial offices. EcoHomes and BREEAM 'Excellent' rating at design stage.

Developer	QED
Architect	WCEC Architecture
Planning application	BH2006/01430
Status	Completed in 2008

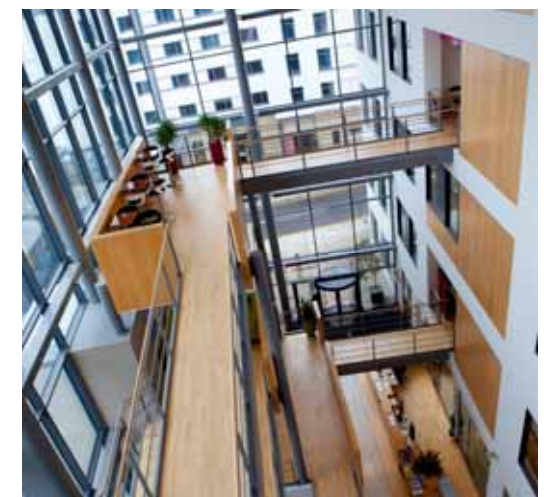


## Bellerbys College, Brighton

Language school. BREEAM 'Very Good' rating at design stage. Brown roofs.

Developer	Pinnacle (Brighton)
Architect	Architecture PLB
Planning application	BH2004/01236
Status	Completed in 2007

Images from bellerbys.com



## Jurys Inn Hotel, Brighton

BREEAM 'Excellent' rating at Design and Post Construction stages.

Developer	Jurys Doyle Hotel Group
Architect	Scott Brownrigg
Planning application	BH2005/05142
Status	Completed in 2009





## Earthship, Stanmer Park, Brighton



Community centre: zero carbon, zero waste, water neutral and sustainable materials.

Developer	Low Carbon Trust
Architect	Mike R
Planning application	BH2001/00481
Status	Completed in 2007



## Hollingdean Materials Recovery Facility and Waste Transfer Station, Brighton

BREEAM Excellent. rating. Includes use of rainwater harvesting; PV; water consumption reduction methods.

Developer	Veolia E S South Downs
Architect	S'pace Architectes Associes
Planning application	BH2006/00900
Status	Completed in 2008



## The Level Café, Brighton

New park café and public toilets. Advanced thermal performance. Green roof, Photovoltaic panels, solar hot water panels, air source heat pump. Rainwater harvesting for WC flushing.

Developer	Brighton & Hove City Council
Architect	Knox Bhavan Architects
Planning application	BH2011/02555
Status	Completed in 2013



## Diggers Self-Build, Brighton

Nine houses. Segal prefab timber panel system, green roofs, renewable materials and minimal point-foundations. Winner of the 1994 Environmental Care and 1997 RIBA Housing Design Awards.

Developer

Architect Archtype

Planning application Brighton Borough Council  
90/1189F/CD

Status Completed in 1994



## Hedgehog Self Build, Brighton



Ten houses: Segal timber frame method, passive solar design, green roofs, sustainable materials, water conservation and levels of insulation exceeding Building Regulations. Winner of 2001 Civic Trust Environment Award.

Developer Hedgehog Housing Co-op

Architect Robin Hillier (Archtype)

Planning application Brighton Borough Council  
96/0500FP

Status Completed in 2000



## Hartington Road, Brighton



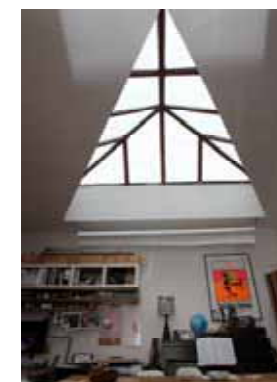
MVHR self-build approaching zero carbon. Passive solar design, mechanical ventilation with heat recovery, rainwater harvesting, solar thermal panels, timber frame, woodburning stove.

Owners Jason & Sarah Thawley

Architect Turner Associates

Planning application BH2007/04288

Status Completed in 2011





## Amex House, Brighton

Office development. BREEAM Very Good, 40% water; 27% CO<sub>2</sub>, 1,000 sqm green roof space and carbon compensation (heating for neighbouring school). PVs and gas CHP.

Developer	American Express
Architect	EPR Architects
Planning application	BH2009/01477
Status	Completed in 2013



## Varley Halls of Residence, Brighton

New accommodation for 564 students. BREEAM Excellent. Energy centre with Gas CHP. District Heating system throughout site and food growing facilities.

Developer	University of Brighton
Architect	
Planning application	BH2010/00235
Status	Completed in 2013



## Westergate House, Brighton

Office and industrial unit development. BREEAM 'Excellent. Wind turbine, ground source heat pumps and sun tubes, SUDs, green walls, solar thermal panels.

Developer	Brighton and Hove City Council
Architect	Hazle McCormack Young
Planning application	BH2004/00895
Status	Completed in 2005





## Smart House, Brighton



New single storey earth sheltered dwelling. Passive solar design, green roof, rainwater harvesting, PV and solar thermal panels, super insulation, thermal mass, under floor heating.

Developer	BoHo Green
Architect	Alan Phillips
Planning application	BH2005/05229
Status	Completed in 2006



## Yew Tree House, Brighton



New house. Performance beyond zero carbon: carbon negative. Passive solar design, airtight construction, high performance glazing, green roof, low water use, mechanical ventilation with heat recovery, PVs and solar thermal panels, rainwater harvesting, wood burning stove. Winner 2011 Federation of Master Builders Energy Efficiency Award.

Owners	Sue & Mick Paskins
Architect	Bill Dunster Architects
Planning application	BH2007/01924
Status	Completed in 2010





## Lloyd Close, Hove



House with biomass under floor heating, roof integrated PV and solar thermal array, automated underground pellet storage, sustainable materials and rainwater harvesting. Operational since 2010. Code level 5 in energy within overall high Code level 4. Winner 2011 RIBA Downland prize for sustainability.

Owners	Mark Pellant and Abby Tor
Architect	Koru Architects
Planning application	BH2006/03424
Status	Completed in 2010



## Whichelo Place, Brighton



New single storey house. Grey water system, green roof, enhanced fabric performance, sheep's wool insulation, solar thermal panels, timber frame and natural sustainable materials. Won a 'Green Apple Silver Award' in the 'National New Build Residential' category 2007

Owners	Alan Stone & Jackie Strube
Architect	Simon Watkins (ABIR Architects)
Planning application	BH2006/00190
Status	Completed in 2007





## Davigdor School, Brighton

BREEAM 'Very Good'. Two-storey extension. Solar panels and rainwater harvesting system.

Developer	Brighton & Hove City Council (BHCC)
Architect	BHCC Architecture team
Planning application	BH2008/02655
Status	Completed in 2009

Images from [davigdor.brighton-hove.sch.uk](http://davigdor.brighton-hove.sch.uk)



## Downsview Link College, Brighton

New sixth form building for Downsview students with sustainability features such as passive solar design, green roof, wind turbine, and rainwater harvesting system.

Developer	Brighton & Hove City Council (BHCC)
Architect	BHCC Architecture team
Planning application	BH2004/01573
Status	Completed in 2007





## Longhill School, Brighton

BREEAM 2008 'Very Good'. Five-storey link buildings. Ground source heat pump, solar thermal panels, rainwater harvesting and green roof.

Developer	Brighton & Hove City Council (BHCC)
Architect	BHCC Architecture team
Planning application	BH2009/00737
Status	Completed in 2010

Image on near right from longhill.org.uk



## Queens Park Primary School, Brighton

BREEAM 2008 'Very Good'. Two-storey link extension. Air Source heat pump and passive ventilation with green wall.

Developer	Brighton & Hove City Council (BHCC)
Architect	BHCC Architecture team
Planning application	BH2010/02364
Status	Completed in 2013





### Somerhill Junior School, Hove

BREEAM 2008 'Very Good'. Two-storey extension with air source heat pump, solar thermal panels, rainwater harvesting and passive ventilation.

Developer	Brighton & Hove City Council (BHCC)
Architect	BHCC Architecture team
Planning application	BH2009/02363
Status	Completed in 2013



### Balfour School, Brighton

BREEAM Very Good'. Ground source heat pump, solar panels and rainwater harvesting system.

Developer	Brighton & Hove City Council (BHCC)
Architect	BHCC Architecture team
Planning application	BH2008/02641
Status	Completed in 2009



### Westdene Primary School, Brighton

BREEAM 2008 'Very Good'. Two storey extension incorporating. Air source heat pump, rainwater harvesting, green roof and passive ventilation.

Developer	Brighton & Hove City Council (BHCC)
Architect	BHCC Architecture team
Planning applications	BH2010/01382
Status	Completed in 2013





### Somerset Point (right) & Wiltshire House (far right), Brighton.

Improvement to the building fabric of existing council housing. Extensive external wall insulation retrofit. Wall over cladding of high-rise blocks with a 'Permarock' cladding system will make homes cheaper to heat, lead to carbon reductions and lower maintenance requirements in the future.

Developer	Brighton & Hove City Council (BHCC) - Housing Asset & Sustainability team
Architect	Faithful Gould
Planning applications	BH2008/03813 and BH2008/03779
Status	Completed in 2010



### Hereford Court (right) and Kingfisher Court, Brighton.

Improvement to the building fabric of existing council housing. External wall over cladding and replacement of windows of high-rise blocks will make homes cheaper to heat, lead to carbon reductions and lower maintenance requirements in the future.

Developer	Brighton & Hove City Council (BHCC) - Housing Asset & Sustainability team
Architect	POD
Planning applications	BH2012/02426 and BH2011/02352
Status	Completed in 2013



### Community/Amex Stadium, Brighton

First building of its kind in the UK to achieve BREEAM rating. Nearly 18% carbon savings from low and zero carbon technologies.

Developer	Brighton & Hove Albion Football Club
Architect	KSS Design
Planning application	BH2008/02732
Status	Completed in 2011



### Brighton Aldridge Community Academy

New Academy complex. BREEAM excellent, woodchip boiler, solar thermal panels supplying hot water to the sports centre. Graduate PowerEd combined PV and micro wind turbine. Technologies used as curricular aids for understanding sustainability.

Developer	Brighton & Hove City Council
Architect	EDCO Design London
Planning application	BH2009/01729
Status	Completed in 2011



### The Keep, Woollards Field, Brighton

Historic Archive centre. BREEAM excellent with 70% score in energy and water sections. 300kW biomass boiler using local woodchip, green roof, 17sqm solar thermal, rainwater harvesting.

Developer	East Sussex County Council
Architect	Atkins
Planning application	BH2010/03259
Status	Completion expected 2013





## Open Market, Brighton

New market stalls and workshops, central square, public toilets and 87 flats. Code levels 3 (45%) and 4 (55%), PVs, air source heat pumps and good thermal fabric performance.

Developer	Hyde Newbuild
Architect	LCE Architects
Planning application	BH2010/03744
Status	Currently under construction



## Former Co-op Department Store London Road, Brighton

New accommodation for 351 students and retail. BREEAM Multi Residential Excellent (60% in energy and water sections). Original 1920s façade retained, PVs, 150 cycle spaces.

Developer	Watkin Jones & Co-op Group
Architect	O'Connell East Architects
Planning application	BH2012/02675
Status	Currently under construction



## Royal Alexandra Quarter, Brighton

Conversion of existing hospital building into 20 flats and construction of 99 new flats. EcoHomes for Refurbishment assessment and Code level 4. District heating system.

Developer	Taylor Wimpey
Architect	PRC Group
Planning application	BH2010/03379
Status	Currently under construction





### Brighton University, Cockcroft Building, Brighton

Installation of photovoltaic solar array to South West elevation. Largest PV installation in the city to date (43.9KWp).

Developer	Brighton University
Architect	Fraser Brown MacKenna Architects
Planning application	BH2011/02481
Status	Operational since 2012

Image by Murray Ballard



### Queen's Road, Brighton

An early, pre Feed in Tariff PV array 4.95kWp system made up of 30 (165W) panels designed to meet the power needs of the communal parts of block of 16 apartments.

Developer	Griston & Lahaise
Planning application	BH2004/03017
Status	Operational since 2006



### Brunswick Place, Hove

Consent obtained for 6 solar water heating panels (3 panels per building) to Two Grade II Listed Buildings.

Developer	
Architect	
Planning applications	BH2006/02390 and BH2006/02402.
Listed Building Consents:	BH2006/02391 and BH2006/02403
Status	Operational since 2006





## Vega, Hove

40 flats, medical centre and offices. 95% affordable rent, 5% market rent. Code level 4, communal residential heating micro CHP, air source heat pumps for non residential. Southern Housing Group won the BRE's 2007-13 Housing Association 'Most Code for Sustainable Homes' Award.

Developer	Southern Housing Group
Architect	Pollard Thomas Edwards Architects
Planning application	BH2011/00227
Status	Completed in 2013



## Pankhurst Avenue, Brighton

Demolition of former nurses' accommodation buildings and construction of 95 flats and community facility. Code level 4. Communal gas-fired heating system, PV panels, enhanced air tightness and fabric performance.

Developer	Southern Housing Group
Architect	Miller Bourne Architects
Planning application	BH2010/01054
Status	Currently under construction



### Maycroft Manor Care Home, Brighton

Residential care home for the elderly. BREEAM Multi-residential 'Excellent', communal heating using a biomass boiler.

Developer	Hallmark Care Homes
Architect	Scurr Architects
Planning application	BH2011/03358
Status	Currently under construction



### i-360 and West Pier Heritage Centre, Brighton

New tourist attraction, in the form of a 183 metre high spire and heritage centre. Wind turbine, rainwater harvesting system.

Developer	Marks Barfield
Architect	Marks Barfield
Planning application	BH2006/02369
Status	Currently under construction





## Site J, New England Quarter, Brighton

One hundred and forty seven residential units, office, hotel and retail. Greenway and square with lift and stair access to Brighton Station. Code level 4, BREEAM Office Excellent and BREEAM Hotel Very Good. Green walls, brown roofs, PVs and car club.

Developer	Hyde Newbuild
Architect	Munkenbeck+Partners Urbanism
Planning application	BH2010/03999
Status	Residential block currently under construction.



## Park House, Hove

New five storey block of 71 flats. Code level 4. Roof mounted PV array and air source heat pumps for each unit; passive design measures; water efficiency; rainwater butts; use of sustainable materials; food growing areas; tree-planting; and composting provision.

Developer	Hyde Newbuild
Architect	Yelo Architects
Planning application	BH2012/00114
Status	Currently under construction





## Royal Sussex County Hospital, Brighton

Redevelopment of part of the existing hospital to accommodate centralised facilities and Level One Trauma Centre. BREEAM Excellent. Passive building design, centralised gas Combined Cooling, Heating and Power (CCHP) energy centre, 290sqm PV array, less than 60% of the available water credits within 2008 BREEAM, low impact materials, prefabrication construction method and green roofs. District heating to supply heat to existing buildings.

Developer	Brighton & Sussex University Hospitals NHS Trust
Architect	BDP
Planning application	BH2011/02886
Status	Approved in 2012

Images from BDP.com



## Sackville Estate, Hove

Mixed-use scheme with 92 zero carbon residential units and BREEAM Excellent rating (70% in energy and water sections) for non-residential elements. Communal heating.

Developer	Parkridge Developments
Architect	Mountford Pigott
Planning application	BH2009/00761
Status	Approved in 2009





## Block K, New England Quarter, Brighton

New offices and open space. BREEAM Excellent, rainwater/grey water recycling, green roof and walls

Developer	McAleer & Rushie Group
Architect	Urban Innovations
Planning application	BH2008/01148
Status	Currently under construction



## The Astoria, Brighton

New office block. 60% in energy and water sections within overall BREEAM Excellent. Innovative passive heating and cooling system using solar chimneys and an underground labyrinth for passive cooling.

Developer	H30 Media
Architect	Conran & Partners
Planning application	BH2010/03759
Status	Approved in 2012

Image from conranandpartners.com



## The Cliff, Roedean

New house. Code level 5. Solar hot water and PV. Advanced thermal performance including triple glazing. Sedum green roof. Highly water efficient, rainwater collection and composting.

Developer Sussex Transformations  
Architect Conran & Partners  
Planning application BH2011/03634  
Status Approved January 2012



## Dyke Road Avenue, Hove

New house Code level 5. Advanced thermal performance, photovoltaic and solar hot water. Rainwater harvesting system.

Owners Mr & Mrs S Hardman  
Architect Alan Phillips Architects  
Planning application BH2011/03093  
Status Currently under construction



## Redhill Close, Brighton

Outline application for 31 dwellings with public open space. Code level 4 houses and level 5 flats.

Developer Braybon Holdings  
Architect OSP Architecture  
Planning application BH2010/00692  
Status Approved July 2011

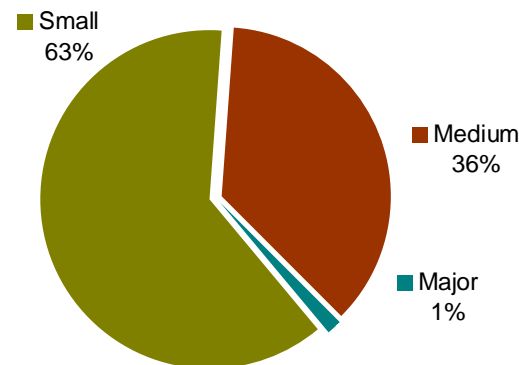




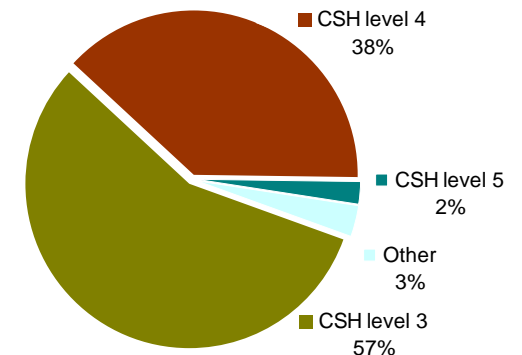
## 2011 Brighton & Hove Sustainability Checklist: summary of findings for approved applications for new homes (data recorded between 14 July 2011 and 4 June 2013)

- 74 approved applications involving a total of 307 residential units.
- 19 (26%) applications approved involving listed and/or buildings in conservation area (or vicinity)
- If all units were constructed these would add 459.66 tonnes CO<sub>2</sub> to the city's current level of emissions.
- If all units were constructed to local standards planning policy would have helped save 21% of predicted carbon emissions from the proposed development (123.17 tonnes CO<sub>2</sub>).
- 87% applicants said low and zero carbon technologies were incorporated into their development technologies.

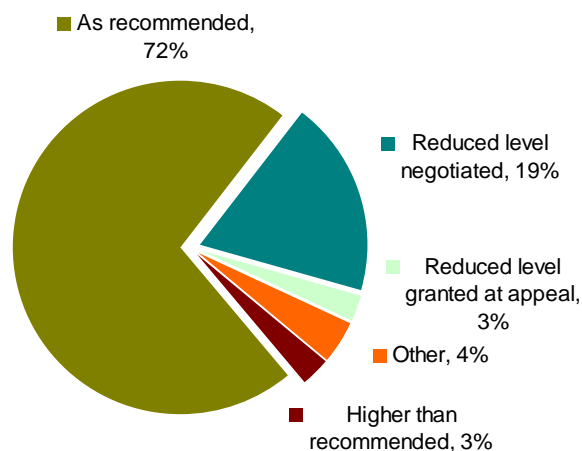
Applications by development size



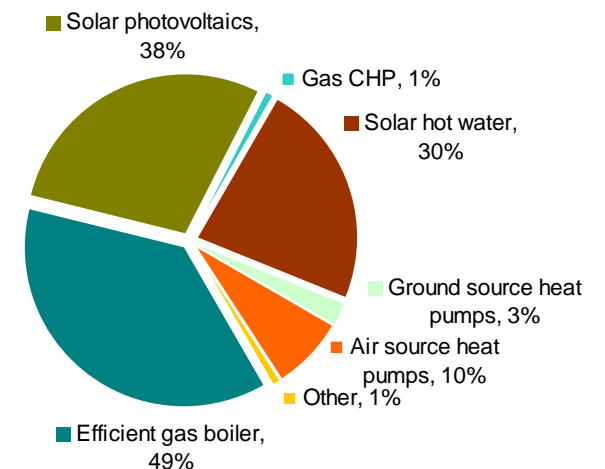
CSH units per level



Compliance with local standards as per SPD08



Number of applications in which low and zero carbon technologies were proposed.



## Eco Open Houses Brighton & Hove



- Free annual event delivered through a successful public and community sector partnership between the Low Carbon Trust, Brighton Permaculture Trust and Brighton & Hove City Council (Planning).
- The public is invited to visit local examples of successful retrofit and construction in existing and newly built housing.
- First event took place in 2008 involving 14 sites. In 2013, 20 sites were involved.
- Supported financially over the years by Energy Saving Trust, EU's Interreg IVA programme and ERDF.
- The event promotes best practice in a peer to peer setting, inspiring and enabling individuals to reduce energy and water use, carbon emissions and have a greener lifestyle.
- It promotes funding mechanisms and helps link local consumers with local suppliers, building capacity in the local sustainable construction sector, in particular small and medium sized businesses.
- Between 2008 and 2013, 8,500 people visited 'eco houses'. The Eco Open Houses database expands every year and currently includes 36 houses.

