

Helping create a better future

Our guide to more sustainable living



When you choose Berkeley, you've already chosen to live more sustainably

The Berkeley Group is one of the country's leading sustainable developers. We're in the business of placemaking, which means we build neighbourhoods and communities as well as beautiful homes. And sustainability is at the core of everything we do, from the design of the homes and communities we build, to the way we run our business.

When you buy a new home from Berkeley, you'll be able to share in our commitment to environmental responsibility by taking advantage of the range of features we provide to help you reduce your environmental impact. We hope your new home might also inspire you to make a few lifestyle changes that, as well as reducing your impact even further, could also make you healthier and save you money.



Rob Perrins
Group Managing Director

We can't predict the future, but we are committed to it through Our Vision

Over the years, the Berkeley Group has won many prestigious awards for the quality, design and sustainability of its developments. Our Vision is Berkeley's plan for the business, designed to raise our standards higher still.

Our goal is to be a world class company creating successful, sustainable places where people aspire to live. Our Vision is divided into five areas where we want our performance to be outstanding.

We have made a number of commitments in each of these areas that apply across the whole of our business. These commitments ensure that we provide a consistently high level of service to our customers and that we develop fantastic homes in amazing places, whilst at the same time taking our responsibilities towards the environment, the workforce and the communities in which we work very seriously.

The five key components of Our Vision are:

Customers

Providing exceptional service to all of our customers and putting them at the heart of our decisions.

Homes

Developing individually designed, high quality homes with low environmental impact.

Places

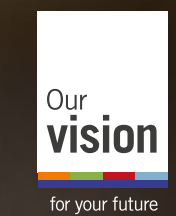
Creating great places where residents enjoy a good quality of life, now and in the future.

Operations

Making the right long-term decisions whilst running the business efficiently and working with our supply chain.

Our People

Developing a highly skilled workforce who operate in a safe and supportive working environment and contribute to wider society.



Designed for Life

With Berkeley you can live more sustainably without compromising your lifestyle. All of our developments are 'designed for life' which means that they have been designed and built to the highest standards of sustainability and include many features that enable you to carry on the good work.

This guide explains some of the measures that Berkeley has taken, through Our Vision, to ensure that the homes and places we create make it easy for residents to live a sustainable lifestyle. At the back of this guide you will find an insert which tells you about the specific sustainability features included in your development.

Preserving the planet for future generations is in our own hands

Sustainability is all about doing things in a way that meets our own needs but doesn't stop people in the future meeting their needs as well. The way we treat the environment is important to sustainability because everything we need for our survival and wellbeing depends, directly or indirectly, on the environment.

The biggest threat to our environment comes from climate change caused by human activity. Climate change is happening because of an increase in the amount of greenhouse gases, including carbon dioxide, which we are putting into our atmosphere. These greenhouse gases trap heat from the sun, causing our climate to warm up.

This warming effect creates lots of other problems, such as rising sea levels and more extreme weather

events such as droughts and flooding. These then have further knock-on effects for the habitats of plants and animals, for our global and national economies, on food and water availability and on rates of disease.

However, sustainability is not just about preventing climate change. We use huge amounts of natural resources, create large amounts of waste and are having a significant impact on the biodiversity of the planet. If we continue in this way,

we'll make further problems for ourselves in the future. We need to find ways of living and working that reduce our impact whilst maintaining our quality of life. It is important that we adapt to these extreme weathers and consider the future climate in the design of new homes and developments.

key fact:

Since 1993 sea levels have been rising by around **3mm** a year, significantly higher than the average during the previous half century¹

1 IPCC Fourth Assessment Report: Climate Change 2007 (AR4)

Energy has a cost that goes far beyond our utility bills

We use energy in our homes for heating, hot water, lighting, and to power appliances like our fridges, washing machines, televisions and kettles. This energy usually comes into our homes as electricity or gas. As well as costing money on our fuel bills, using electricity or gas generates carbon dioxide emissions.

key fact:

27% of the UK's carbon emissions
come from energy use in homes²

² National Atmospheric Emissions Inventory: Emissions of the
basket of 6 Kyoto GHGs according to Devolved Administrations (2010)

We can all put a bit more effort into saving energy

We need to use energy in our homes to allow us to live comfortably. However there are lots of simple things we can do to help reduce the amount we use.

What we do

Our homes are designed to use less energy and include high levels of insulation, low energy lighting and efficient heating systems. Many of our homes are also supplied with renewable energy from solar photovoltaic panels, solar thermal panels, air or ground source heat pumps, or biomass boilers.

Where we provide appliances in our homes, we use models that have high efficiency ratings under the EU Energy Labelling Scheme.

What you can do

Could your home be a little bit cooler?

Your thermostat controls the temperature in your home. Do you know where it is and how it works? It's also well worth thinking about how warm you want your home to be. Turning the temperature down by 1 degree can save up to 10% on your energy bill. Could you be just as comfortable at a lower temperature and wearing an extra layer of clothing?

Fill it up before you switch it on

Washing machines and dishwashers use more energy by doing two half loads than one full load. Try and wait until you have a full load before turning on your machine.

It's all on the label

Look out for the EU Energy Label when you buy new household appliances. Fridges, freezers, dishwashers, light bulbs, televisions and washing machines are just some of the products that must have the label displayed.

The label rates products from dark green (most efficient) to red (least efficient). The label also shows total energy consumption and provides other information relevant to that product, such as water consumption and noise levels for washing machines, and screen size for televisions.

Products in the darkest green category are the most energy efficient. Dark green-rated products use less energy and help you to lower your energy bills and CO₂ emissions. In the past, the top label was always an 'A' but now it might sometimes be an A+, A++ or an A+++.

Think about using an economy setting

If you are running a wash, select the low temperature or economy setting on the appliance. Many washing detergents work just as effectively at 30 degrees. This can also shorten the washing cycle and is less damaging to fabrics.

Remember to switch off lights you're not using and don't leave appliances on standby

This is one of the simplest and most effective actions you can take. Turn off lights when you leave a room or go out of the house. Most appliances use energy even when they are in standby mode, so turn them off at the main switch to save more energy.

Have you heard about Earth Hour?

This is a worldwide collective initiative where individuals or organisations make a pledge to change their lifestyles or behaviour to be more planet-friendly. It could be anything from turning off your heating or air conditioning for an hour, deciding to eat less meat, to going paperless in the office; it's all about small changes creating a big difference. For more information see www.earthhour.org.

Only need a cupful?

It takes a large amount of energy to bring water to the boil. Only filling the kettle up with as much water as you need could save around £8 in energy bills a year³.

key fact:

Switching appliances off rather than leaving them on standby could save between **£50** and **£90** a year⁴

³ Energy Saving Trust, based on an average electricity tariff of 15.32p/kWh
⁴ Energy Saving Trust: Powering The Nation (2012)



While waste volumes keep on growing, the space we have to put it stays the same size

Households in the UK produce just over 23 million tonnes of waste per year, equivalent to 449 kg per person⁵. Only around 41% of this is recycled – 43% is sent to landfill. This is a problem because we have a finite amount of landfill space in the UK. Recent estimates have suggested there is only around eight years of capacity left in our landfill sites⁶.

key fact:

Every hour in Britain we throw away enough rubbish to fill the Royal Albert Hall⁷

5 http://webarchive.nationalarchives.gov.uk/20130123162956/http://www.defra.gov.uk/statistics/files/mwb201011_statsrelease_v2.pdf

6 www.environment-agency.gov.uk/research/library/data/142511.aspx

7 www.guardian.co.uk/environment/2007/jun/11/waste.recycling

It's worth giving a bit more thought to rubbish

We must find ways to reduce the amount of waste we produce, reuse and recycle more, and find alternative ways of disposing of the remainder.

What we do

We provide recycling facilities to all of our homes. This will normally be a compartmentalised bin in the kitchen for you to segregate your waste and space outside for all of the recycling bins that are provided by your local council.

What you can do

Avoid buying products with excessive packaging

Fruit and vegetables don't need to be wrapped in protective packaging as long as you are careful when you transport them home. You'll quickly forget how nice a product's packaging looks on the shop shelf once you've opened it and put all of the plastic in the bin.

Don't forget your bags

Supermarkets give away about 8 billion plastic bags each year⁸. The vast majority of these go straight in the bin when you get home. However, you can help to prevent this build up of discarded plastic by bringing your own bags every time you shop. Nowadays shops are starting to charge for their plastic bags, so bringing your own may also save you money.

Are you wasting too much food?

We waste £12 billion a year on food which we buy and then just throw away, costing the average family £50⁹ a month. Very often trips to the supermarket result in impulse purchases that we don't end up eating or using. Before you go, make a list of products, meals and ingredients that you need to help stop you being swayed by special offers.

Storing food in the right way can help it stay fresh for longer. Freezers are a good way to make the most of your food. Learn more about how you can get the best from your freezer at www.lovefoodhatewaste.com.

People very often get confused by the date labels that are on food. Food can be edible for much longer than you think. Find out what they mean at www.lovefoodhatewaste.com.

Consider recycling

Most local councils have kerbside collection schemes for recyclable waste. Different councils collect different materials, although most collect cans, glass and paper.

Make sure you encourage everyone in your house to think whether items can be reused or recycled before they're thrown away. Learn what can and can't be recycled and what the recycling labels

mean at www.recyclenow.com. If your council doesn't collect the items that you want to recycle, check whether you can take them to your local supermarket or council recycling centre.

8 www.wrap.org.uk/sites/files/wrap/Carrier%20Bag%20Results.pdf

9 <http://england.lovefoodhatewaste.com/node/2472>

10 www.recyclenow.com/why_recycling_matters/why_it_matters

key fact:

Recycling helps to save energy and also reduces our greenhouse gas emissions. Current UK recycling is estimated to save more than **18 million tonnes** of CO₂ a year – equivalent to taking 5 million cars off the road¹⁰

key fact:

The average person in England and Wales uses **150 litres** of water a day – nearly 50% more than 25 years ago¹¹

Water, the most important resource on Earth

Although it appears that we get plenty of rain in the UK, parts of the country actually get less rainfall per person than many Mediterranean countries. The news is regularly filled with stories about flooding, but water from intense periods of rainfall is very often hard to capture and isn't sufficient to top up our stores.

¹¹ www.environment-agency.gov.uk/homeandleisure/beinggreen/117266.aspx

Drop by drop, we can all make a difference in water conservation

By 2020, an increasing population and household growth will mean the total demand for water is likely to be around 5% higher than today, meaning we would need an extra 800 million litres of water per day¹².

Our water supplies are also under pressure from climate change. Predictions of rising temperatures and drier summers mean that we can expect to experience higher water demand with increased risk of drought. If we take too much water from our rivers and groundwater, we run the risk of damaging the health of the environment and its ability to support fish and other wildlife.

Because of all of this, we need to find ways of using water much more efficiently and sustainably if we are to continue to enjoy high standards and constant supply.

What we do

We design all of our new homes to be water efficient. This means that the taps and showers we provide are fitted with devices that make sure their flow is no more than it needs to be. All toilets have a part-flush option and where we provide appliances, they are selected for their water efficiency as well as their energy efficiency.

We also install rainwater harvesting systems so that rain falling on roofs can be reused. On individual houses, water butts may be provided and on apartment schemes, the water may be used in development landscaping or water features.

What you can do

Please turn off the tap

Lots of people leave the tap running when brushing their teeth, shaving, washing hands, or rinsing dishes. Turning the tap off is easy to do and can save up to 6 litres of water per minute. You can wash vegetables and fruit in a bowl rather than under a running tap. The water collected might even be used for watering pot plants.

Run your washing machine and dishwasher with full loads

We've already given you this tip to help save energy. However it's a double win as it will also save water as well.

Why not start your own hosepipe ban?

A hosepipe uses more water in just 30 minutes than the average family uses in a day, so try and avoid using one wherever possible.

Take a shower rather than a bath, but don't stay in there for too long

A quick shower typically uses much less water than a bath and is an easy way to save water. However lingering in the shower undoes all of the good work. Showers use between 7 and 10 litres of water per minute so if you stay in there for more than 10 minutes you may not be saving water at all.

waterwise

Advice approved and endorsed by Waterwise

key fact:

If the entire adult population of England and Wales remembered to turn off the tap while brushing their teeth, we could save 180 million litres a day – enough to supply nearly **500,000** homes¹³

¹² www.environment-agency.gov.uk/homeandleisure/beinggreen/117266.aspx

¹³ www.waterwise.org.uk/pages/fun-facts.html

On the road to greener forms of transport

Transport accounts for around 25% of the UK's greenhouse gas emissions and the vast majority of these emissions come from road transport. Road vehicles can also impact on the local environment through particulate emissions, noise and congestion.

key fact:

The **good news** is that CO₂ emissions from transport are now beginning to fall, and are at their lowest level since 1992¹⁴

¹⁴ Department of Energy and Climate Change, 2011 UK Greenhouse Gas Emissions

We don't have to give up our cars, but there are plenty of greener alternatives

There are plenty of alternatives to using the car to get around that are far less polluting, healthy and cheap. In London and other major cities they can also be quicker too.

What we do

You will find cycle storage on all of our developments and many are located close to excellent public transport links. We also design facilities into all homes to allow you to set up a home office and avoid the commute by working from home. On developments where there are extensive car parking facilities for residents, we make sure that we provide at least one electric car charging point.

What you can do

Consider going by public transport

Buses and trains are far less polluting than the equivalent journey if everyone was to take a car. In London, Transport for London's Journey Planner (www.journeyplanner.tfl.gov.uk) is a good way to work out the quickest route to your destination by public transport. If you are planning a longer trip, try the Transport Direct Route Planner (www.transportdirect.info).

Walk it or bike it instead?

Cycling and walking are great ways of keeping fit and healthy, cost far less than a car journey or trip by public transport and can be very quick.

Join a car club

Car clubs give you access to a car if you need it, without actually having to own one. They can be good value compared to car ownership and are useful if public transport can meet most of your needs but you need to make the occasional car journey. Zipcar and City Car Club are two of the bigger operators (www.zipcar.com) (www.citycarclub.co.uk).

Could you be a greener driver?

If you do drive, there are plenty of things you can do to drive more efficiently and reduce your fuel consumption.

Smarter driving could save between £300 and £350 a year on fuel costs¹⁵. Turning off your engine in stationary traffic, closing windows at higher speeds, shifting to higher gears earlier and avoiding unnecessary braking and acceleration are all good ways of reducing fuel consumption. For more tips, visit: www.energysavingtrust.org.uk/Travel/Driving.



¹⁵ Based on an average petrol price of 139.2p/litre and diesel price of 143.49p/litre; correct as of December 2012 and valid for 2013

¹⁶ www.carbonbrief.org/media/148355/130111_media_factsheet_2013.pdf

Cycle-friendly routes feature on many Berkeley developments.

key fact:

Walking or cycling your children to and from school each day instead of driving could save around **£230** on fuel and **380kg** of CO₂ emissions each year¹⁶

Biodiversity begins in your own back garden

Although we may not often appreciate it, the natural world provides us with many of the things that sustain our lives. Foods, textiles, timber, fuel and medicines are all derived from nature. Natural systems help regulate our climate, control floods and pollinate crops.

key facts:

Worldwide, honey bees account for **80%** of all insect pollination and are essential to the production of fruit and vegetable crops¹⁷

Global wildlife populations have declined on average by **52%** in **40 years**¹⁸

¹⁷ Carreck N. and Williams I. (1998) The Economic Value of Bees in the UK; Bee World 79 (3), 115-123

¹⁸ WWF's Living Planet report 2014
http://wwf.panda.org/about_our_earth/all_publications/living_planet_report/

Nature sometimes needs a little help from humans

Put simply, reduced biodiversity means millions of people face a future where food supplies are more vulnerable to pests and disease, and one in which fresh water is in irregular or short supply.

On the other hand, preserving the natural environment and enhancing biodiversity can provide us with enjoyment and recreational opportunities in parks, gardens and open spaces. It is therefore vital that we do all we can to protect and enhance biodiversity.

What we do

On all new developments we consult an ecologist to provide advice and guidance on how we can protect ecology. As a result, the landscaping we create for our developments, as well as looking beautiful, actually supports more biodiversity. We also install living roofs on all suitable apartment roof spaces, which provide additional habitat for animals and plants.

What you can do

Encourage wildlife in your garden

If you are lucky enough to have your own garden, there are plenty of ways to help enhance biodiversity. Putting out food and water for birds, planting native trees and flowers or composting are just a few of the ideas you could consider. For more ideas visit: www.rhs.org.uk/Gardening/Sustainable-gardening/Wildlife-and-the-gardener/Attracting-wildlife-to-your-garden.

Show your support for conservation

There are a wide variety of organisations that do conservation work or help wildlife. Why not consider supporting a large organisation like the World Wildlife Fund (WWF) that tackles various environmental and conservation efforts, or, if a particular issue sparks your interest, find ways to support it.

key fact:

A recent study of biodiversity revealed **6 times** more birds in urban gardens than in the nation as a whole¹⁹

¹⁹ Fuller RA, Tratalos J, Gaston KJ (2009) How many birds are there in a city of half a million people? Diversity and Distributions 15: 328–337.

Purchaser power is all about making the right choices

The choices we make when buying foods and other products can have a significant effect on the environment. For example, many of the foods that we eat are now shipped or flown long distances before arriving at our local supermarket. Choosing these foods means that we are indirectly generating additional carbon dioxide emissions.

key fact:

Britain has over **1,200** native apple varieties but **only 31%** of the eating apples sold in the UK are home-grown²⁰

20 <http://www.ifrac.uk/info/society/spotlight/apples.htm>



Remember to check the label and the origin

There are many sustainable choices we can make when we shop. To help us make the right choices, there are a range of sustainable products and food brands covering everything from timber to fish, tea and coffee. There are also a few basic facts we should all be aware of to help make us more informed consumers.

What we do

We have policies in place that commit us to using only timber from legal, sustainable sources. We also have a preference for using environmentally-sustainable materials that are ethically sourced.

What you can do

Choose sustainable fish if you can
Fish stocks in the world's oceans are under huge pressure from unsustainable fishing methods. They are the species that has seen

the greatest decline in the last 40 years. When buying fish choose sustainably sourced fish and look for products that are labelled with the Marine Stewardship Council or the Pole-and-Line caught label. The Marine Conservation Society (MCS) can help you to make an informed choice (www.goodfishguide.co.uk).

If buying fish from a counter ask the person from whom you buy fish where and how their fish is caught – if they can't tell you or if you are not completely satisfied with their answer, don't buy the fish.

In general, bottom trawling and pair trawling are the least sustainable fishing methods. Line-caught fish are a far better alternative.

Go for the Fairtrade option

The Fairtrade mark is a registered certification label for products sourced from producers in developing countries. For a product to display the label it must meet a set of international Fairtrade standards which guarantee that a minimum price for the product is paid to the producers. There are thousands of products that

have the Fairtrade mark, ranging from coffee and tea to cotton and flowers.

Look for certified timber and timber products

There is a huge global demand for wood, paper and wood products that is putting the world's forests under pressure. Forests are also being cleared to make way for plantations such as oil palm, for farms, or simply to use the wood as fuel. Every two seconds, an area of forest the size of a football pitch is lost due to logging or destructive practices. Some 72% of

Indonesia's forest landscapes and 15% of the Amazon's have already been lost forever²¹. You can check that the wood and wood products that you buy are from well-managed forests by looking out for the Forest Stewardship Council (FSC) or Programme for the Endorsement of Forest Certification (PEFC) labels.

If possible, buy local and seasonal food

The production and transportation of food is responsible for a large proportion of the world's carbon emissions.

Buying local and seasonal food helps support local producers while also decreasing your carbon footprint. Often locally-produced and seasonal foods give the added benefits of tasting better and having better nutritional value.

You can find out which foods are in season by visiting: www.eatseasonably.co.uk. Buying food from farmers' markets is a good way of supporting the local economy. A number of websites have lists of local markets including: www.lfm.org.uk or www.bigbarn.co.uk.

21 www.greenpeace.org/international/en/campaigns/forests/threats/
22 www.fairtrade.org.uk

key fact:
26% of all Fairtrade products are sold in the UK. Every day we eat 3.1 million Fairtrade bananas²²



Sustainably sourced sardines

What makes a vibrant, sustainable community?

There are many elements that make a sustainable community. High quality buildings, good transport services, low environmental impact, safety and security, access to green space and a thriving local economy are all important. People need access to jobs, healthcare, shops and other services. However, often it's the interaction between the people within the communities that makes the biggest difference.

key fact:
Over 85% of people say that good quality public space has a direct impact on their lives and the way that they feel each day²³

²³ <http://www.berkeleygroup.co.uk/media/pdf/k/7/berkeley-group-library-magazine-and-reports-placemaking-not-just-housebuilding.pdf>

It's about people as much as places

The relationships people form with their neighbours, or even local shopkeepers or postmen, are important in a well-functioning community. Places, events and activities that bring people together can foster a strong sense of solidarity and make people feel good about where they live.



What we do

We have developed our own system for measuring the social sustainability of our developments and we are applying this understanding to the design of new communities to ensure that the places we build are of the highest quality and help to promote a good quality of life, now and in the future.

When we plan new developments, we consult with a Crime Prevention Design Advisor or Police Architectural Liaison Officer to make sure we create a safe and secure place to live.

What you can do

Are there ways you could get involved?

You can contribute to or participate in your community in many ways. If you are a keen sportsperson, think about joining your local sports club. If sport isn't for you, keep an eye out for other local clubs that might interest you. The NHS Change4Life website (www.nhs.uk/Change4life) has

a search function that allows you to find things to do near to where you live.

Alternatively, you could also support organisations working in your local community by volunteering. Have a look at: www.do-it.org.uk to see if there are any exciting volunteering opportunities near to you.

Keep an eye out for other activities or events that are being organised in your local area and show your support for your community by going along. Your local council is a good source of information and most council websites have a list of upcoming events taking place in your local area.

key fact:

Wellbeing surveys show that over **79%** of people in Great Britain report medium or high satisfaction with their local area²⁴

²⁴ http://www.ons.gov.uk/ons/dcp171766_287415.pdf

Berkeley: placemaking, not just housebuilding

Berkeley is one of the UK's leading housebuilders, with a record of success that dates from 1976, but the scope of our business goes way beyond building houses and apartments. We call it placemaking.

As well as helping to tackle the shortage of good quality homes – a shortfall that is predicted to increase by 232,000 per year over the next 20 years – we also seek to create beautiful, successful places and, in doing, we are making a lasting contribution to the landscape and to the communities we help create.

How do we accomplish this?

Firstly, we acquire land in the right locations. Some 96% of our developments are on brownfield land, making new use of redundant sites. Then we develop schemes characterised by the quality of their design, public realm, transport links and access to jobs and amenities – the things we know people look for in a place to live.

This process depends on strong partnerships, and collaboration is key to our success. It helps us create high quality places that go on to become thriving communities. They can range in size from 20 homes near a market town to complex, mixed-use urban regeneration schemes with over 4,000 dwellings.

More than homes

Over the last five years, we have delivered 15,750 new homes. These include homes for people to buy, student housing and affordable homes. Providing homes for the UK's growing number of elderly citizens is also part of our business.

Our operations have a positive effect in many other ways.

Each home built by Berkeley sustains an average of five and a half jobs, and means that over the last five years our activities have resulted in the direct or indirect employment of 21,000 people.

We are a major contributor to 'UK plc'. In 2014 our contribution to economic activity totalled £5.5 billion, and between 2010 and 2014 we paid £1.6 billion in tax. Our homes, particularly in London, are increasingly sought after by overseas buyers, and have attracted £1.2 billion of international investment to the UK between 2010 and 2014, which supports employment, generates council tax and helps fund affordable homes.

We build more than new homes. Between 2010 and 2014 we also committed £300 million towards infrastructure, education, healthcare and communities. The results include building five new schools which will create 1,946 new school places.

And through our charitable initiative, the Berkeley Foundation, we are helping to improve the lives of young people and their communities in London and the South of England. Since the Berkeley Foundation's launch in March 2011, we have donated and committed £5 million to 60 charities and causes.

The insert enclosed tells you about sustainability features specific to your development.

Helping create a better future



Proud to be members of the Berkeley Group of companies

Berkeley
Designed for life

St Edward
Designed for life

St George
Designed for life

St James
Designed for life

St William
Designed for life



www.berkeleygroup.co.uk

