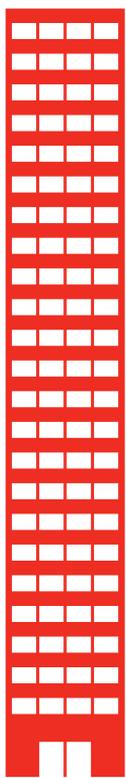


A toolkit for
high rise
green living



green
alliance...



**A
BETTER
PLACE
TO
LIVE**



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What is this toolkit for?

This toolkit is to help residents of tower blocks across the UK make their high rise homes greener, better places to live.

Living close together means that heating can be used more efficiently, shared green spaces and vegetable gardens can be established, waste can be minimised through efficient reuse and recycling systems, and it can be easy to walk, cycle and access public transport. If where you live doesn't yet offer these benefits, this toolkit will help you to take action to realise the potential.

Some ideas require changes to buildings, which can't be made by residents alone, but residents could encourage their building managers to make these improvements. Other actions are low cost, can be led by individuals or residents' groups, and only require modest effort to achieve.

This toolkit aims to:

- explore the issues and suggest ideas for green living in high rise blocks
- show the possibilities with inspiring examples
- provide information about funding and support

For more information and advice, including how to bring groups together to discuss issues effectively, go to: www.green-alliance.org.uk/towerblocks

Why take action on the environment?

There are many reasons why you might want to improve where you live, and lots of potential benefits too.

The actions in this toolkit could lead to:

- warmer homes
- lower energy bills
- lower water bills
- stronger communities
- greener, more attractive neighbourhoods
- better, healthier transport options
- a healthier local environment
- access to cheaper fresh fruit and vegetables through local food growing
- less crime and anti-social behaviour

Actions can have longer term, wider benefits too, such as:

- reducing carbon emissions, helping to fight climate change
- making the most of natural resources through recycling and reusing materials that might otherwise have been wasted
- reducing the likelihood of droughts and water shortages
- creating a more pleasant environment for future generations

High rise inspiration

PETRA's tenant power

The Parkhill Estate Tenants and Residents Association, or PETRA, in Havering, London became a **Tenant Management Organisation** in 2003, taking over housing management services of their three blocks from Havering Council.

A money saving estate

There were major concerns about the blocks, including unreliable lifts and door entry systems and poor internal decorations in communal areas. Each flat was only partially double-glazed and repairs took a long time.

Tackling these concerns was the first priority, but then they decided to keep improving their environment in other ways.

Their biggest venture has been the **Money Saving Estate project**, aiming to transform the estate into a 'Beacon for Social Housing' through energy saving. An **initial energy audit** of the estate showed up problems that

many tower blocks will recognise:

- Serious heat loss in winter through single glazed windows
- Communal lighting on 24/7 all year round
- Large uninsulated roof areas on all three blocks (making top floor flats very hard to heat)
- Extractor fans in bathrooms and toilets running 24/7 all year round
- Uninsulated cavity walls in the kitchens and bedrooms
- Cavity walls with defective trays allowing rain to penetrate flats
- Residents on the most expensive energy tariffs using card or key meters
- Low use of energy efficient light bulbs or other energy saving measures

Taking action

Working with an energy adviser, **residents created an action plan** which included:



- _Asking the council to replace single glazed windows
- _Insulating cavity walls
- _Fixing cavity trays
- _Replacing the communal lighting fittings with low energy LED lighting and motion sensors so they are only on when necessary
- _Replacing, upgrading and insulating roofs
- _Installing solar photovoltaic panels on the roof to reduce the costs of communal lighting
- _Providing energy saving advice

Well supported

The work has been funded in part by a grant from the Department of Energy and Climate Change's

Local Energy Assessment Fund.

They were also supported by Carbon Leapfrog, an agency that offers free advice to communities.

The plans are well underway. Havering Council has agreed to

replace the windows, insulate the cavity walls, upgrade the lighting, replace all the front doors and frames, and insulate and reroof all three blocks. They are also tackling card meters and fuel poverty issues. Solar panels will be a priority once the new roofs are installed.

Strong resident involvement and the skills and resources they have developed through managing the estate since 2003 are behind their progress and ambitious plans.

[For more information on how to set up a Tenant Management Organisation see the National Federation of Tenant Management Organisations \[www.nftmo.com\]\(http://www.nftmo.com\)](#)

How to start and encourage others to get involved

To start the ball rolling, you need to work out what the issues are in your estate or block, and what people care about most.

You could work with your existing residents' group or organise a meeting about it for residents that are interested.

It can be difficult to know where to start, but there's plenty of advice available on how to go about it.

This toolkit provides lists of questions that could be used to kickstart your discussion.

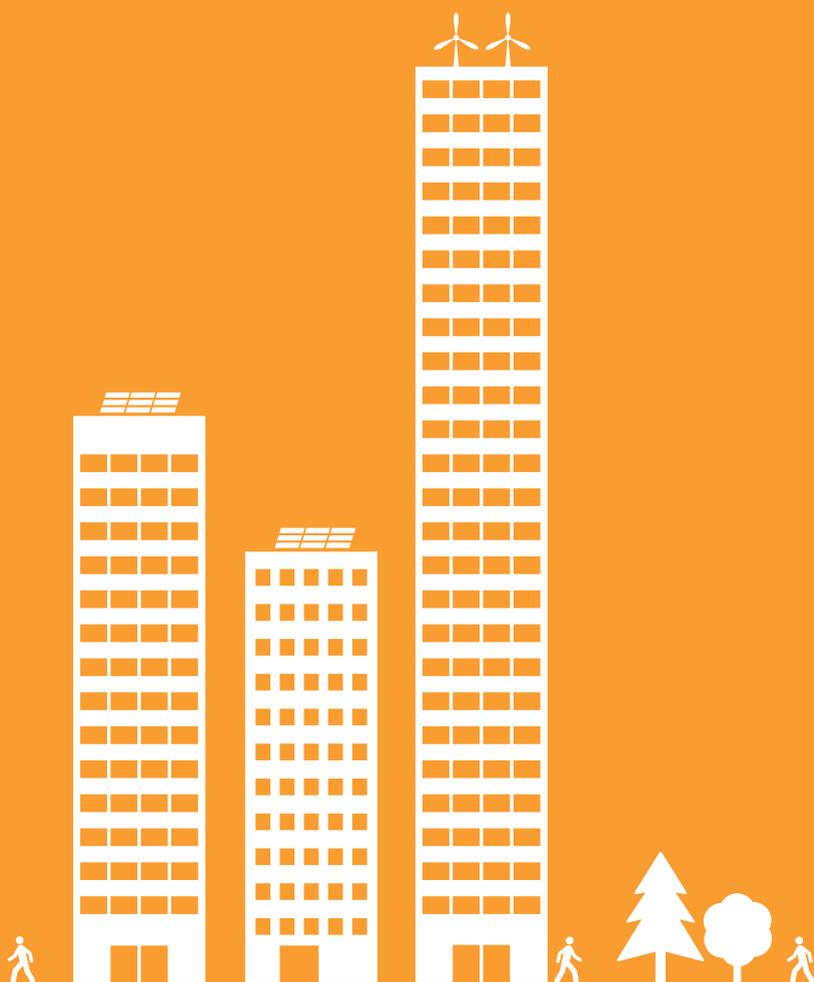
On our website you will find additional resources with tips on how to bring people together and how to use your meetings to come up with a plan of action.

At the end of this toolkit we provide a list of places where you can find information about support and funding options.

A tall, multi-story brick apartment building with a grid of windows. A large green circle is overlaid on the center of the building, containing the word "GO" in white, bold, sans-serif capital letters. The scene is set outdoors with a clear blue sky, green trees in the foreground, and a street with a few cars and a parking sign visible at the bottom left.

GO

Energy



High rise living ought to be energy efficient. Homes are close together so heat can be shared throughout the building and effective communal heating systems can be used. The expansive roofs and walls of tower blocks are also perfect for some forms of renewable energy such as small wind turbines and solar panels.

Three good reasons to tackle energy:

Money

In most homes the more energy we use the more we pay. As fuel prices rise we are spending more and more on energy: research by uSwitch has found that the average energy bill has increased by 125 per cent in the past six years. It makes sense to save energy to save money, either as an individual or by working together with your neighbours to bring your communal bills down.

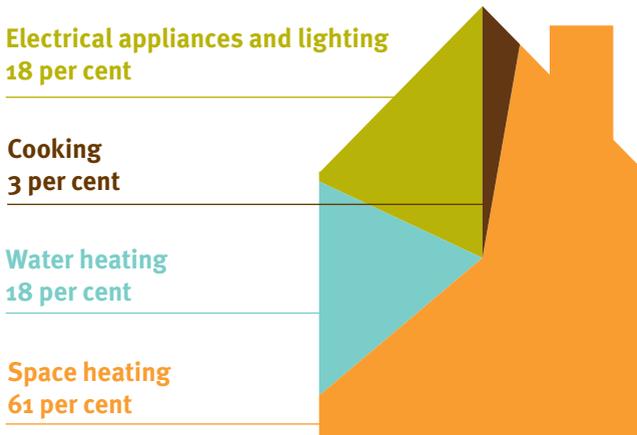
Health

Preventing cold, draughty homes does more than just increase comfort; it can improve your health too. In cold, draughty homes children are more likely to suffer respiratory problems like asthma and develop mental illness, and older people are more at risk of death and illness from heart and respiratory diseases.

Climate change

We need to reduce the likelihood of extreme weather events, like drought and storms and other environmental impacts caused by climate change. The energy we use in our homes causes almost a quarter of the UK's carbon dioxide emissions (one of the most abundant greenhouse gases). By saving energy we can help to reduce the effects of climate change.

How we use energy in a typical home



The tower block challenge

Saving energy can save money. But it isn't always that simple in a tower block. Because energy bills are often communal, one person's efforts to save energy doesn't reduce their bill if their neighbours aren't being efficient too. So saving energy has to be done collectively to see real cost savings.

It is often not possible, or may be more expensive, to insulate flats individually, compared to doing the whole block at once. You might have no control over your temperature settings or when heating is turned on and off. And, if you rent, your appliances may have been bought by the landlord, so you have no control over their efficiency and quality.

With so many shared issues and opportunities to improve, it makes sense for neighbours to work together to save energy.

Energy questions

- Does each flat have its own heating system? (ie a boiler or storage heater)
- Is the heating system the most efficient available, and is it properly maintained?
- If flats don't have their own heating system, do they have individual heating controls?
- Do the heating controls work properly and are residents given clear guidance on how to use them?
- Are the flats well insulated?
- Are your homes warm or draughty?
- Is any kind of renewable technology used to generate your energy?
- Are your appliances energy efficient?

Energy

What you can do

At no cost

In your home

- Turn off lights and appliances when not in use.
- Turn heating thermostat down by one degree and ensure it is less than 21°C.
- Turn heating down or off when it gets hot rather than opening windows.
- Check hot water thermostat is set to a comfortable temperature (60°C is a recommended and safe level).
- Move furniture away from radiators to allow heat to circulate.
- Draw curtains or close blinds in the evening, and tuck them behind radiators.
- Make someone the household 'energy champion' to remind everyone to turn lights and equipment off.
- Use lids on pans when cooking and only boil the amount of water you need in the kettle.
- Air dry clothes if possible, rather than using tumble dryers or radiators, which blocks heat.

What you could ask your building manager to do

- Switch lights in communal areas like hallways onto timer or motion sensor switches.
- Turn heating thermostats down by one degree if heating controls are centralised, ensuring it is less than 21°C.
- Turn heating down or off in communal spaces when it is hot instead of opening windows.
- Check that thermostats for hot water are set to a comfortable temperature (60°C is a recommended and safe level).
- Install smart meters in all flats to monitor energy use (this should be possible in the next couple of years and would involve the energy company).
- Switch to a 'green energy' tariff for electricity.

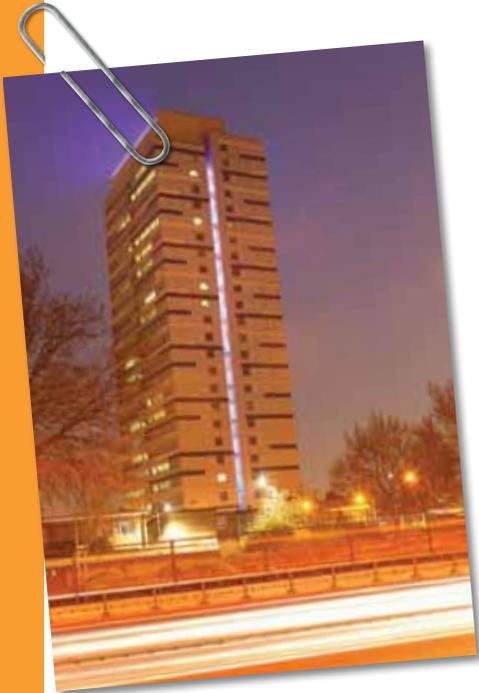
At some cost

- Install panels behind radiators to reflect heat back into the room (available from DIY stores).
- Fill gaps around window-frames and doors with a draught-excluder.
- Replace old light bulbs with energy-saving ones.
- Put an insulating jacket around the hot water tank (available from DIY stores).
- Check energy ratings on new appliances and choose the most efficient (those with an A+++ rating use the least energy).
- Replace old curtains and blinds with those designed to keep the heat in.



- Improve the insulation of the building.
- Replace leaky windows with double or triple-glazing.
- Give residents individual heating controls in their flats.
- Install solar panels on the roof of the building.
- Ensure new appliances purchased are the most energy efficient.
- In common areas, and if purchasing is communal, replace curtains and blinds with those designed to keep heat in.

High rise inspiration Creating a warm glow in Canning Town



Ferrier Point is a 23-storey tower block in Canning Town, London. It was refurbished as part of a broader regeneration project. To improve warmth, the whole block was clad in **external insulation and triple glazed windows** were installed.

In addition, about half of the building was covered in **electricity generating photovoltaic cells**. These now power all the building's

communal electricity use.

The project received £1.7 million from the Greater London Authority and £100,000 from the Department for Energy and Climate Change's **low carbon buildings programme**. The rest of the cost was met by the local council.

Clever planning meant less disruption for residents. The contractors, Rydon, reduced the time they spent inside each flat by carrying out works simultaneously, such as fitting new windows on the outside of the block, and removing the old ones from the inside at the same time new kitchens and bathrooms were fitted. Empty flats in the block were used as temporary homes for residents whose flats were being worked on.

High rise inspiration

A woodchip heating system in Greater Manchester

The Lancashire Hill Estate in Heaton Norris is managed by Stockport Homes. The residents now receive 80 per cent of their primary heating and hot water from a **new biomass communal boiler** that runs on wood chips.

The system produces 75 per cent less carbon dioxide per year than the old gas district heating system. Similar schemes are planned in nearby estates as part of a wider

transition from gas to renewables.

Building managers had also previously updated insulation and windows. Residents have **better heating controls and warmer homes** as a result.

The project was backed up with **energy efficiency advice** delivered by trained staff helping residents to understand their use of energy better.



Where to get help on energy

Energy Saving Trust has ideas and practical advice on how to save energy at home (try their water and energy use calculator to see how much you currently use)

Direct.gov.uk is a government website which gives advice on energy saving and generation

Which? shows you how to run an energy saving home

The Centre for Sustainable Energy, the Transition Network and Project Dirt provide information on draught-busting

Energy companies can help customers to reduce energy use and some run special energy saving schemes

Find full contact information for these organisations and more links at www.green-alliance.org.uk/towerblocks

Waste



Recycling and reusing products avoids needlessly wasting resources and saves money too. Given the number of people living in high rise housing, better systems for recycling and collecting food waste could help local authorities improve recycling significantly and ensure all residents can benefit from the service. Vacant flats or garages provide opportunities for reuse spaces, where unwanted items can be made available without having to travel to the nearest shops.

Why it's good to reuse and recycle:

Cost

Many things we buy end up thrown away rather than repaired. Reusing and repairing things rather than buying new helps household budgets go further. Buying pre-used items, from ebay or charity shops, is often cheaper, whilst using local schemes offering unwanted items, like Freecycle, means you can access some items for nothing.

Resources

Recycling just one Sunday newspaper every month for a year saves a full-grown tree from being cut down. Recycling is particularly important for some rare materials and minerals where there are only limited supplies left in the world, such as the rare earth metals used in mobile phones.

Energy

Saving energy is one of the most important benefits of recycling. Although recycling used materials and processing them for reuse uses energy, it's still much less than the energy used to process the materials into products the first time round. And saving energy saves money too of course.

Health

Many of the chemicals released from waste, leaking from landfills and from burning waste in incinerators, are linked to health impacts ranging from asthma to cancer. Dumping less waste protects our communities and families from these health threats.

Waste overload

We produce more than 300 million tonnes of waste every year in the UK. That's enough to fill London's Royal Albert Hall every two hours. Most of this waste ends up as landfill, dumped in large holes in the ground. Once full, a landfill site is covered over and the materials in it are buried. The space we have available for new landfill sites in the UK is now almost used up.

Climate change

Food and garden waste thrown into landfill sites with other rubbish generates methane as it decomposes, which is one of the major gases causing global warming. If it is composted instead, this organic matter breaks down more naturally, with water and air, without giving off harmful methane. It also provides free compost to improve the soil and feed plants.

The tower block challenge

There are various options for recycling in tower blocks. You may share recycling facilities at ground level or have chutes on each floor, or even doorstep collections.

But the way waste collection services are run means that the services are often poor or, in some cases, are not there at all. This means that you may not have the same opportunity to recycle as those living in street properties.

Working together with your local authority and housing provider to change this, you could start to benefit from recycling services while making a real difference to the environmental impact of your block.



Waste questions

- If recycling is collected from individual flats, are the containers big enough?
- If it is not collected from your flat, do you know where it is collected from?
- If recycling bins are communal, are they in a convenient and secure place; and are they big enough and collected often enough?
- Is there a working chute system for recycling?
- Do you know what can be recycled?
- Do recycling bins get contaminated with other waste, and is there any dumping around the bins?
- Is correct use of the bins enforced?
- Are there any reuse schemes in your block, or locally, for items like furniture, appliances and clothes?
- Is your food waste collected or is there somewhere to make compost?

Waste

What you can do

As an individual

At no cost

- Use council recycling facilities and learn what can be recycled.
- Support local charity shops, furniture reuse projects, recycling initiatives and electrical repair schemes by donating your unwanted items that could be of use to someone else.
- Find out about local food waste and composting projects.
- Join a local swapping or sharing scheme such as Streetbank or Ecomodo.
- Hold a 'swap' party where residents can bring along items they no longer want.

What you could ask your building manager or local authority to do

- Set up an on site reuse centre, or a regular time where residents can donate and swap items.
- Set up a communal hire store for tools that residents may only need to use occasionally eg drills etc.
- Provide good information for residents about what can be recycled, how to get bulky item collections, etc.



At some cost

- Buy reusable products wherever possible such as refillable ink cartridges or rechargeable batteries, and buy recycled content products eg paper.
- Consider second hand goods when you need something, eg from charity shops, ebay or Pre-loved.
- When doing DIY, why not hire equipment you only use occasionally rather than buying it?



- Work with your local council to introduce a food waste composting scheme or set up one for residents to use on a communal garden.
- Ensure there are sufficient recycling collection facilities and that contamination is prevented.
- Ensure regular collections to avoid bins overflowing.
- If recycling bins are not used regularly, discuss how their location or security might be improved.

High rise inspiration

Rolling out recycling and food waste collection in Hackney

Despite 50 per cent of Hackney's homes being high rise, the majority of residents benefit from a recycling service.

With funding from the London Waste and Recycling Board's (LWARB) **Flats Recycling Programme**, high rise homes have also been given **reusable recycling bags** for storing and transporting their recycling to communal bins. To make it as easy as possible, both the bins and bags are clearly labelled with what materials can be recycled. The bins are in a convenient location, emptied weekly, and have locked lids with slots to deposit recycling, to avoid contamination with general rubbish.

Some high rise properties also have a **food waste service**, which has recently been expanded thanks to the Flats Recycling Programme. Here, residents have been given a small kitchen caddy and compostable liners, and the food waste is then put into food waste bins situated next to the recycling bins. These are emptied twice weekly and the **compost is used on**



Hackney's green spaces, returning the benefits to the local community. With additional funding, Hackney Council would like to roll out food waste collection to all high rise properties so that all residents have access to these opportunities.

Communicating and engaging with residents is a big part of the success of these services. This includes door to door visits, events, leaflets and letters keeping residents informed about the services.

Over 11,000 tonnes of dry recycling has been collected since 2010 and in that same period **654 tonnes of food waste** has been collected that would have otherwise gone to landfill.

Where to get help on waste

Recycle Now has advice about what can be recycled in your area and where to take bigger items

Love Food Hate Waste has simple tips on how to reduce food waste

Freecycle and Freegle are online networks where you can list items you no longer want or ask for items you want, all free and for collection locally

Ecomodo and Streetbank lend and borrow tools and other items locally

Keep Britain Tidy campaigns against litter, dog fouling, fly-posting, fly-tipping

WRAP helps businesses and individuals reduce waste and packaging, and use resources in a more efficient way

Waste Watch advises on waste and recycling, including RecycleZone, for children and teachers

Furniture Re-use Network helps you to find out where locally to donate furniture, or find an item

Compareandshare lists all sharing websites (updated every five minutes)

Find full contact information for these organisations and more links at www.green-alliance.org.uk/towerblocks

Transport



Making local trips by bike, walking or using public transport instead of using a car, is good for your health, your pocket and the environment. It should be easy for everyone, including tower block residents, to choose between these different transport options. The area around blocks can be designed to encourage these choices, with well signed and lit cycling and walking routes, and public transport nearby. Unused car parking spaces could be used for extra recycling bins, as a safe place to store bikes, or converted to a community garden. And if you do need to drive, car sharing schemes could be used instead.

Some good reasons to get out of the car:

Health

Walking and cycling help to build exercise into daily routines. They improve the condition of your heart and lungs and work the muscles of the lower body. Fewer cars on the road also mean less air pollution.

Cost

With the rising price of petrol, the cost of car travel has risen by almost three times the rate of inflation. Motorists now face annual average costs of nearly £6,700 to run a new vehicle. That's around £129 per week and over £1,500 per year more than it cost in 2007.

Speed

In congested urban areas driving can actually be the slowest way to get around. Travelling by foot, bike or public transport often beats the car.

Pollution

A quarter of greenhouse gas emissions produced in the UK come from transport, mainly from the millions of cars we drive around. Driving less would help to reduce this and would make the air in our towns and cities cleaner.



The tower block challenge

Choosing greener transport options isn't always easy for people living in tower blocks. Your block may be on the edge of an urban area where there is limited access to public transport.

If walking and cycling routes to and from the local shops are not clearly signed and well lit you may feel they are not safe to use, especially at night.

Finding secure and convenient bike storage may also be an issue, especially with the limitations of space and getting the bike up to your flat.

But there are improvements that can be made to overcome these problems, that make it easier to choose not to drive and that will create a much more pleasant environment to live and travel in.



Transport questions

- Can you reach local shops and other amenities easily and safely by foot or by bike?
 - Is there adequate and safe provision for bike storage?
 - Are there good public transport routes nearby providing easy access to local amenities?
 - Are the routes to public transport and local shops well lit, properly signposted and safe to use?
 - Is there unused car parking space that could be used for a community garden or other shared use?
- 

Transport

What you can do

As an individual

At no cost

- Make shorter journeys on foot or by bike whenever you can.
- Find out if you could use public transport services more effectively (eg do you know all the local routes and if there are any special discounts?).

What you could ask your building manager or local authority to do

- Start a car sharing scheme for residents, for events, school or work travel.
- Produce a simple map for residents, especially for new arrivals, with details of local amenities and transport facilities.



At some cost

- Invest in bikes for family members.
 - If you only need a car from time to time, join a local car sharing scheme, such as Whipcar or Zipcar, which can be a cheaper alternative to owning one.
 - If there is one, you could use a local bike hire scheme.
-
- Provide safe storage for bikes or at a minimum install fixed bike stands.
 - Liaise with the local council about improving public transport provision and the potential to alter bus routes to make them more convenient for residents.
 - Improve pedestrian routes to public transport and local amenities, eg lighting, signage and security, so people are happy to use them.
 - Remove unused car parking spaces and designate them for other uses such as a community garden, bike storage or recycling bins.



High rise inspiration

Encouraging walking and cycling in east London



Previously described as “bleak, unsafe and empty”, **Radnor Street Gardens and the streets around it** in the St Luke’s area of London, EC1 were transformed over two years, between 2007 and 2009; the gardens are now an attractive small park with redesigned landscaping, planting, seating and stimulating play opportunities.

The work was carried out by Islington Council working with EC1 New Deal for Communities (NDC) on a programme of **improving local streets, parks and open spaces on council housing estates** in the area.

Radnor Street Gardens is a small green space surrounded

by high rise blocks of flats. Before the transformation it had only been used by dog walkers, while moving vehicles and parked cars on the surrounding streets discouraged local residents from walking in the area.

The new design included clear sight lines and a safe pedestrian route through the park, linking the area to local amenities.

Improvements to the surrounding streets **reduced traffic, parked cars and included some shared surfaces.**

The impact of vehicles on the estates was also reduced and together these improvements have **encouraged residents to lead more active lives and interact more with their neighbours.** This has been further reinforced on some of the estates which have also been re-landscaped, some with allotments for residents.

A neat idea for storing bikes



Residents were involved at all stages of the design and implementation of this work, playing a key role in its success. Design teams were appointed for each project; they **worked closely with residents**, built consensus and communicated ideas and solutions that were new to residents while also ensuring that the end result was of a high quality.

When Radnor Street Gardens reopened a local resident said "it's created an instant community", while the headmistress of the primary school on Radnor Street said "I have watched the transformation of EC1 and seen the impact on our children and their families. It's unusual in this day and age to see children playing outside, but EC1 now feels safe and it feels good".

Secure, robust **bicycle lockers** have been introduced on housing estates in Bermondsey, London, including some at the base of tower blocks. Residents pay just **£35 per year** to use the lockers, which are managed and maintained by the company BikeAway. These were installed as part of **Southwark Council's 'Cleaner, Greener, Safer' scheme** where local residents can suggest ideas to improve their area. Councillors provide funding and support for the best ideas. **There are over 1,500 lockers of this type across London, with around 85 per cent of them being used.**

Where to get help on transport

Sustaining Tower Blocks gives advice on secure bike storage

Sustrans is a great source of information about cycling, including lots of on and off-road routes for all abilities

Living Streets works to create safe, attractive and effective public spaces for all. Its Walking and Work initiative is an online hub to support people in fitting walking into their weekly routine

Walk It is a website giving route maps for walking between any two points, including details like journey time and calorie burn

Cycle to work scheme enables you to purchase bikes tax free via your employer

Campaign for Better Transport has local groups working to tackle local transport problems

Whipcar, Zipcar and compareandshare are car share schemes.

Find full contact information for these organisations and more links at www.green-alliance.org.uk/towerblocks

Green spaces



Most tower blocks have some communal space around them and the buildings also offer unique opportunities, with multiple balconies and large expanses of wall space. Shared green space can be kept as a wildlife-friendly space, managed as a community garden, run as an allotment, or developed into a children's play area. Using these spaces for growing plants and creating green oases can benefit the whole community and the environment. This is one area where the actions of residents can have a visible, positive impact in a relatively short period of time.

The benefits of getting green fingered

Community

Working on a communal gardening project gives neighbours a chance to get to know each other better while working as a team, reducing isolation and increasing self-confidence and esteem.

Health

Spending time outside in green spaces and growing plants is good for you, improving both physical and mental health. Gardening provides exercise, particularly for the heart and lungs, and it improves strength, endurance and flexibility. Exercising in the open air helps to stimulate appetite, improve sleep, reduce stress and lower blood pressure.

Skills

Learning gardening and other new skills can help employment prospects.

Environment

Green spaces make harsh urban environments more attractive and welcoming; they improve air quality and provide important habitats for birds, insects and butterflies.

Diet

Growing your own food is a direct and cheap source of fresh fruit and vegetables, and helps to contribute towards a healthy diet.

Neighbourhood

Well-kept green spaces make a neighbourhood look and feel better overall. Clever planting can also help reduce the wind tunnelling effect created by tall buildings.

The tower block challenge

While you are likely to have some kind of communal green or open space around your block, it may not be well used or loved as no one feels it belongs to them. It may suffer from misuse or damage by other residents or the public, and attract anti-social behaviour. In some cases it may end up being locked in an attempt to stop this.

Working with your building manager, there's a lot you can do to turn outside spaces into relaxing green places for you and your neighbours to enjoy.



Green spaces questions

- How are existing communal or green spaces used?
 - How would current users feel about changes being made?
 - Is there an area that could be used but inaccessible, eg a green space that remains locked?
 - Is there unused space that could be converted into a garden or allotment?
 - Is there anyone in the community who already has gardening or growing expertise to share?
 - Is there a place to store tools and equipment safely?
 - Is there access to an outside water supply?
- 

Green spaces

What you can do

At no cost

As an individual

- Find out about existing local community gardening, food growing or composting schemes you could join.
- If one doesn't already exist, join together with other like-minded residents to campaign for and set up a community garden.
- Help to keep local green spaces looking good by reporting fly-tipping, littering, abandoned cars, dumped household and electrical goods. Most councils have a hotline or email address.
- Make the most of local parks and green spaces, many have regular activities and facilities such as sports, classes or gardening groups where you could develop your skills.

What you could ask your building manager to do

- Find out whether any unused or locked green space can be made available and accessible to residents.
- Arrange a 'green up & clean up' event to clear up litter locally or to improve a neglected open space.
- Organise activities for residents: such visit to a city farm or community food growing project, or an organised course or skill-sharing day.
- Arrange a plant or seed swap, spare seed give-away or sale/exchange of locally produced items.

At some cost

- If you have a balcony, turn it into a mini garden by growing vegetables and flowers. You can do it cheaply by reusing containers for growing, such as old buckets or plastic boxes and sharing and swapping seeds and plants with neighbours.



- Create wildlife-friendly spaces on your estate eg put up bird boxes and bird feeders, plant shrubs and containers to attract bees and insects.
- Enable the creation of a community garden on shared grounds and publicise drop-in days where people can join in.
- Consider including a 'green wall' (where plants are grown vertically) in any new development planned for the site.



High rise inspiration

The Greening Brownfield project

Greening Brownfield is a **community garden and food growing co-op** on the Brownfield housing estate in Poplar, east London. Initiated and run entirely by residents, the garden is completely organic and run on permaculture principles, with a mixture of private and communal plots. It was established in 2010 on a disused tennis court.

The co-op runs drop-in events and encourages residents to

grow their own vegetables or help out on the community plot. They secured £1,000 of funding to create the garden from **Capital Growth**, a partnership initiative between London Food Link, the Mayor of London, and the Big Lottery's Local Food Fund. They have also been awarded a £3,000 grant from Groundwork London to buy **new play equipment** for children.



High rise inspiration

Veggies on the veranda



Veggies on the Veranda is a scheme run by Bedfordshire Pilgrims Housing Association (bpha) to help local residents transform their balconies or verandas into **small-scale havens for green growth**. It started with a group of residents expressing ambitions to convert a small green space at the base of their block into a vegetable garden. Tools for the project were supplied by bpha and, following its success, they went on to encourage other estates to use their own spaces for growing. They gave residents **starter kits** including plastic pots, compost, and salad and herb seeds. Members of the Community Development team also provided **advice and training**.

Planting days have helped to draw communities together; many residents had never met each other before despite living in the same building.

The days were also an opportunity to meet staff and give feedback on the scheme, allowing bpha to be more attentive to residents' needs.

A limited budget has prevented any major green redevelopment of their blocks, so bpha sees action on private spaces as the best way to improve the tower block environment.

Where to get help on green spaces

Federation of City Farms and Community Gardens gives information on setting up community gardens and food growing

Wildlife Trust has partnerships with schools and community groups working on green spaces, community gardens and estates

Green Space is a parks charity with information, toolkits and advice for community groups, and a channel for providing feedback to your local authority

Groundwork works on green space regeneration, as well as supporting many community landscape improvement schemes

Sustain provides information for community food growing projects and sustainable food sourcing

Trees for cities gives information on tree planting and growing food

Living Wall Art has examples of green walls (walls with plants on) and how to do it yourself

Food Co-op tells you how to set up a food co-op

The Big Dig Project provides training and advice to community food growing volunteers

The Conservation Volunteers has lots of community projects, including the 'green gym' where groups can improve their health and the environment at the same time

Find full contact information for these organisations and more links at www.green-alliance.org.uk/towerblocks

Water



Although the UK is a rainy country, water is a precious resource and not as abundant as you might think. The average person in the UK uses 145 litres of water a day, compared to Germany for example, where average usage is 127 litres per day. We use most of it for washing and toilet flushing, but it is also used for drinking, cooking, car washing and watering plants. We use almost 50 per cent more water than 25 years ago, partly because of power showers and use in household appliances.

Why save water?

Cost

It can save you money, if you have a water meter installed. Water bills are based on average household sizes and likely water use. For many households, particularly smaller ones, a water meter helps to reduce bills, as you only pay for the water you actually use. Having a meter also makes you more aware of how much water you use; meters have been shown to reduce water use by more than ten per cent.

Energy

Around a fifth of your energy bill is spent on heating water for cooking, washing and cleaning, so being careful about how much water you use also means you save energy. Over the course of the year, you could save as much as £100 off your energy bill. We also know that heating water in homes produces five per cent of UK greenhouse gas emissions.

Future supply

Reducing water use now can help maintain good supplies into the future. We're using more and more water every year and the Consumer Council for Water warns that, if nothing is done, demand may start to outstrip supply, which would mean enforcing restrictions on how much we use.

Environment

The water we use is collected from the local environment. If too much water is taken then local water sources and the wildlife that depends on them suffer. Habitats are diminished and wild fires become more likely as vegetation dries out.

How we use water in a typical home

Clothes washing

13 per cent

Running a modern washing machine = 60-80 litres

Washing up

8 per cent

Washing up in the sink = 6-8 litres
Running a modern dishwasher = 15 litres

Showers

12 per cent

Normal shower = 6-12 litres per minute
Power shower = 13-22 litres per minute

Outdoor use

7 per cent

Using a hosepipe = 550-1,000 litres per hour

Other

5 per cent

Drinking

4 per cent

Making food and drink = 6-10 litres

Baths and taps

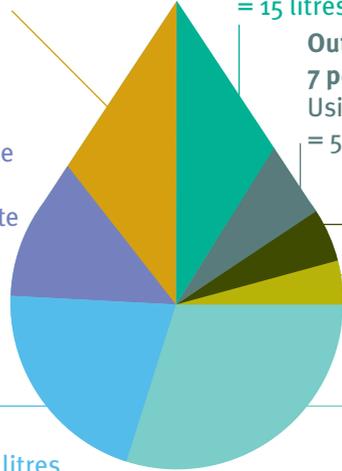
21 per cent

Running the tap = 8-12 litres per min
Having a bath = 75-90 litres

Toilet flushing

30 per cent

= 6-12 litres



The tower block challenge

As a tower block resident it might be hard to see the impact of how much water you use. You may not have a water meter and so your water bill won't change even if you do try to use less. And if your energy bill is part of your service charge it'll be hard to make the connection with hot water use too. The amount of water you use may also depend on appliances and bathroom fittings already installed by the landlord. However, there are still simple actions that you can take to reduce water use, to benefit you and the environment.

Water questions

- Are your water bills individual or part of your service charge?
 - Do you have a water meter or is it possible to get one installed?
 - Are your appliances (washing machine, dishwasher, showers) designed for water efficiency?
 - Does your toilet have a dual flush system so you can use less water if you want to?
 - Is there a system for collecting and recycling rainwater or grey water (water from baths and showers) for your block?
- 

Water

What you can do

At no cost

In your home

- Ask your water company for a water meter. If they can't install one they should still be able to give you a more accurate bill, which will help you to save money.
- Find out about home visits or advice from your water company to help you save water.
- Ask your water company about water saving measures, which they often provide for free, such as devices to put in your toilet tank or shower to reduce the water use.
- Take simple actions such as turning the tap off when brushing your teeth, taking shorter showers, using a washing up bowl or only doing full washing loads.

What you could ask your building manager to do

- Provide water efficiency information for residents.
- If individual flats can't have water meters, consider installing one for the whole block and divide the bill between residents.



At some cost

- When replacing appliances and fittings look for more water efficient designs, like dual flush toilets or more efficient showers.



- Install a water butt to collect rainwater for watering community gardens.
- When refurbishing, install more water-efficient appliances and fittings, like dual flush toilets and more efficient showers.
- Install a rainwater or greywater recycling system.

High rise inspiration Making savings in Surrey



Raven Housing Trust aimed to reduce water demand in its social housing through the **Preston water efficiency initiative**, in partnership with Waterwise, Sutton and East Surrey Water, the Environment Agency and Surrey County Council. The project began in 2008, and included converting single flush toilets to dual flush, and installing **low flow showers and spray taps**. A rainwater harvesting system was also installed to a block so that residents' toilets can be flushed without using water from the mains.

Residents were given advice on using water efficiently and a water efficiency education project was run at a local school. The initiative resulted in a **20 per cent a year saving** in residents' water use and, by 2011, the scheme had saved a massive 2.2 million litres of water and £16,000 in electricity and hot water costs.

They learnt from the project that talking to residents face to face was important, giving

them the opportunity to ask questions, feel involved and discuss ideas; this personal element was essential as, with fixed water bills, residents had no financial incentive to reduce their usage.

Building on this success, in 2010 Raven Housing Trust partnered with Sutton and East Surrey Water, Waterwise, Global Action Plan, the Environment Agency and Reigate and Banstead Council to deliver the **Tap into Savings programme**. Working with over 600 homes in Merstham and Redhill, including a number of tower blocks, the project aimed to **help residents save water, energy and money**. Home visits were carried out, during which free water and energy efficiency devices were fitted and advice was given. It had big benefits. An average **40 litres of water was saved per day by every home** visited. Another plus, revealed by a survey, was that the visits made people more environmentally aware overall.

High rise inspiration

Water efficiency in Westminster

Westminster City Council included **water efficiency measures as part of the broader retrofit** of Glastonbury House, a 22-storey tower block providing supported housing for the over 55s. The refurbishment was financed by Westminster City Council and its housing managers CityWest Homes.

The project, which was finished in April 2007, installed **dual flush WCs and spray taps** along with time switches on the bathroom water supply to prevent flooding, in case residents forget to switch taps off.

Rainwater harvesting and grey water recycling were installed, as well as a '**living roof**' of alpine sedum plants on the entrance canopy to reduce surface water run-off. The project has led to a 40 per cent reduction in water use in the block. To ensure its ongoing success, Westminster City Council has since **communicated regularly with residents** through seminars and workshops. This has helped the

local community to understand and appreciate the pilot project, and has encouraged residents to change their behaviours.

A key aspect of the refurbishment was that **disruption was minimised**. The elderly and vulnerable tenants were not obliged to evacuate before work could begin and each flat was vacated in turn for less than a month.



Where to get help on water

Waterwise offers handy tips on saving water around the home

Water guide provides advice on switching to a water meter

Energy Saving Trust also gives advice on saving water and where to go for more help

Consumer Council for Water gives water saving tips and has a water meter calculator to help you decide if this is the right option for you

Ofwat gives advice about water meters and the alternatives if your flat isn't eligible

Find full contact information for these organisations and more links at www.green-alliance.org.uk/towerblocks

Where to find funding and support

Inspired to start? This is what you need to begin making changes in and around your block:

1. The involvement of as many residents in the block as possible. The landlord is much more likely to listen if they know a lot of people are calling for change.
2. A clear plan of what you want to do and why.
3. Co-operation from staff who run the block and the council or housing association that owns the block. Before you start it will be important to talk with the building managers and find out what they think and if there are already any plans for change and development.

Some useful information sources to help get you started:

Shelter and the local Citizens Advice Bureau give advice on managing relationships with landlords and other housing issues

HouseMark works with tenants to empower them and help them to develop better relationships with landlords

Tenants and Residents' Organisations of England (TAROE) represents the interests of almost five million tenants and residents across the regulated housing sector, offering training, support and other services

National Federation of Tenant Management Organisations has information about tenant management organisations (TMOs) and how they can be formed

Community Matters is the national federation of community organisations, offering a wide range of resources and advice on developing and strengthening community organisations and on how to work with other agencies

Locality is a network for community-led organisations with resources on developing local projects and managing community assets

You can find full contact details for these organisations and more advice on getting people involved and action planning on our website at www.green-alliance.org.uk/towerblocks

Funding for community groups and activities

Below we have identified some funding opportunities available for the different areas covered.

	Energy	Waste	Transport	Green spaces	Water
National					
<p>Biffa Award Up to £50,000 for projects that improve community facilities and enhance biodiversity through the main grants programme, up to £5,000 to improve local amenities and encourage wildlife through the small grants programme.</p>	x			x	
<p>Big Lottery – Awards for All A small grants scheme making awards of between £300 and £10,000. It aims to help local communities to take part in sport and improve the local environment.</p>	x	x	x	x	
<p>Big Lottery – Reaching Communities Up to £500,000 available for new or existing projects that improve skills, enhance community cohesion, improve urban environments and create healthier, more active communities.</p>	x	x	x	x	
<p>Big Tree Plant Provides funding for tree planting in neighbourhoods.</p>				x	

	Energy	Waste	Transport	Green spaces	Water
<p>Community First Funding Running until March 2015, this £80 million programme is helping communities identify their strengths and local priorities to plan for their future and become more resilient. It will fund new and existing community groups under two programmes: the neighbourhood matched fund programme and the endowment match challenge.</p>	X	X	X	X	
<p>Community Foundations Charities across the UK dedicated to strengthening communities, funding projects focused on the environment, community development and more.</p>	X	X	X	X	
<p>Community Spaces Helps community groups in England create or improve green, open spaces to enhance people's quality of life. Applications close each year once the funding pot has been used.</p>				X	
<p>Co-operative Group walking buses If you live near a Co-operative Group store you may be eligible for a free walking bus package to help children walk to school with free high viz vests, etc.</p>			X		
<p>Design your neighbourhood Links community groups to local design partners that provide expertise in architecture, planning and/or urban design. Applications close each year once the funding has been used up.</p>	X			X	
<p>EDF Energy Green Fund Grants of up to 50 per cent of total project costs to a maximum of £30,000 (excluding VAT) are available for renewable energy projects.</p>	X				
<p>Enhancing Communities Programme (via SITA UK) Provides grants of up to £60,000 for projects that make physical improvements to community facilities. Applications are only accepted from projects which are within 3 miles of qualifying SITA UK waste processing sites.</p>	X			X	

	Energy	Waste	Transport	Green spaces	Water
<p>Feed-in tariffs</p> <p>This scheme provides regular payments for renewable electricity generation (like solar panels and small wind turbines). You need to find the capital funding to install the measures in the first place, but would then get a regular income from the electricity they generate.</p>	X				
<p>Green Places Fund</p> <p>A new fund that provides support for projects that improve parks and green spaces including community activities, health and wellbeing initiatives, play and access to green environments.</p>				X	
<p>Landfill Communities Fund (LCF)</p> <p>Grants of £25-£40,000 are available to enhance play areas, restore footpaths and green spaces, protect natural habitats and improve community halls.</p>	X			X	
<p>National cycle training bursaries</p> <p>Up to £10,000 is available to train people to be cycle trainers.</p>			X		
<p>PURE One Destination Carbon Fund</p> <p>Up to £50,000 per project will be available at a competitively low interest rate to support renewable energy projects.</p>	X				
<p>Renewable Heat Incentive</p> <p>This government scheme covers renewable heat generation (such as that from heat pumps, biomass boilers and solar thermal panels). You need to find the capital funding to install the measures in the first place, but would then get a regular income from the renewable heat they generate. It is currently only available for commercial and public sector buildings but tower blocks with a communal heating system would qualify.</p>	X				

	Energy	Waste	Transport	Green spaces	Water
<p>Space for food growing: guide Aimed at community groups interested in food growing projects, published by the Department for Communities and Local Government, includes links to further advice and guidance and also to more detailed information on funding and established projects.</p>				X	
<p>Sustrans The website includes a list of useful links to cycling organisations and funding opportunities for local cycling projects.</p>			X		
<p>WREN Supports community, heritage and environmental projects close to landfill sites. Small grant programmes offer £2,000-£15,000 and main grant programmes offer £15,000-£50,000. Eligible organisations are environmental, voluntary, charitable, not-for-profit and community groups.</p>	X		X	X	
<p>Young Person's Volunteering Fund (SITA UK) Up to £10,000 is available for projects that involve young people in transforming community amenities and green spaces.</p>				X	
Regional					
<p>Cambridge Water Community Life Fund Grants of up to £3,000 given away every quarter for local groups and organisations trying to make a real difference to the communities around them. Includes support for environmental projects such as community gardens and wildflower meadows.</p>				X	X
<p>Capital Growth Offers practical help, grants, training and support to groups wanting to establish community food growing projects as well as advice to landowners.</p>				X	

	Energy	Waste	Transport	Green spaces	Water
<p>London Cycling Campaign Community Cycling Grant Programme Up to £5,000 is available for community groups helping Londoners to get cycling.</p>			X		
<p>LEEF: London Energy Efficiency Fund provides loans for refurbishing and improving public sector owned or occupied buildings in London (including social housing) to reduce energy and carbon dioxide emissions.</p>	X				
<p>Northumbrian Water and Essex and Suffolk Water Southern Community Fund Grants made to various charities and community groups throughout the area of supply, based on criteria such as health, education, environment and community links.</p>		X		X	X
<p>Southern Water Community Support Programme Grants of up to £200 to support community projects in the Southern Water region that seek to improve the local environment, including those that promote water efficiency.</p>				X	X
<p>South West Water grant Grants of up to £1,000 available for charitable organisations working to improve communities in the South West Water service area (mainly Devon and Cornwall) through sporting, cultural, educational, social or environmental activities.</p>				X	X
<p>Thames Water community investment Grants for organisations or projects in the Thames Water region where there is a good link to water and the environment (including improving open spaces) or water and healthy living.</p>				X	X

	Energy	Waste	Transport	Green spaces	Water
<p>Transform Up to £50,000 grants for community groups to transform unused, neglected and uninspiring sites throughout the London Olympic Boroughs (Hackney, Tower Hamlets, Waltham Forest, Greenwich, Newham and Barking and Dagenham) into community spaces, food growing sites, gardens, play spaces, arts areas.</p>		X		X	
<p>United Utilities Community Fund Grants of up to £500 for communities in areas disrupted by United Utilities infrastructure development work. This money is intended to be used by the community to make the area a better place to live, work and play.</p>			X	X	X
<p>Veolia Water Community Investment Fund Support for charities and organisations wishing to enhance local communities that are supplied by Veolia Water.</p>				X	X
<p>Wessex Water Watermark Award Grants of up to £1,500 to support community environmental projects located in the Wessex Water region. Every three months a special project receives the Wessex Watermark gold award worth £2,500.</p>			X	X	X
<p>Yorkshire Water Hull Community Fund A total of £50,000 is available to community projects in the Hull area, with individual grants on offer between £100 and £5,000. Applicants must demonstrate benefit to the local community.</p>				X	X

Other organisations that can help identify funding opportunities are the National Council for Voluntary Organisations (www.ncvo-vol.org.uk) and Funding Central (www.fundingcentral.org.uk)

Web links and full information are given on our website at www.green-alliance.org.uk/towerblocks

A better place to live **A toolkit for high rise green living**

by Rebekah Phillips, Hannah Kyrke-Smith
and Faye Scott

This toolkit has been produced as part of Green Alliance's Towering Ambitions project. We are grateful to the City Bridge Trust for funding this work.



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About Towering Ambitions

Green Alliance is a charity and independent think tank focused on ambitious leadership for the environment. Towering Ambitions is a project looking at the challenges that residents of tower blocks face in trying to live greener lifestyles. This toolkit is aimed at helping residents to take action. Our report, *Towering ambitions: transforming high rise housing into sustainable homes*, makes recommendations for policy makers to facilitate high rise green living.

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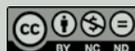
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This toolkit aims to help high rise residents take actions to make their homes better, greener places to live.

High rise homes and their surrounding areas offer unique potential for greener lifestyles and, for residents, the benefits of being green can be great: from warmer homes and lower bills to stronger communities and a healthier environment.

Inside you'll find:

- _ summaries of the main issues
- _ practical ideas for changes you can make, and those you can ask your building manager to help you with
- _ inspiring examples from around the UK
- _ information on funding and support

