RETROFIT RECIPE

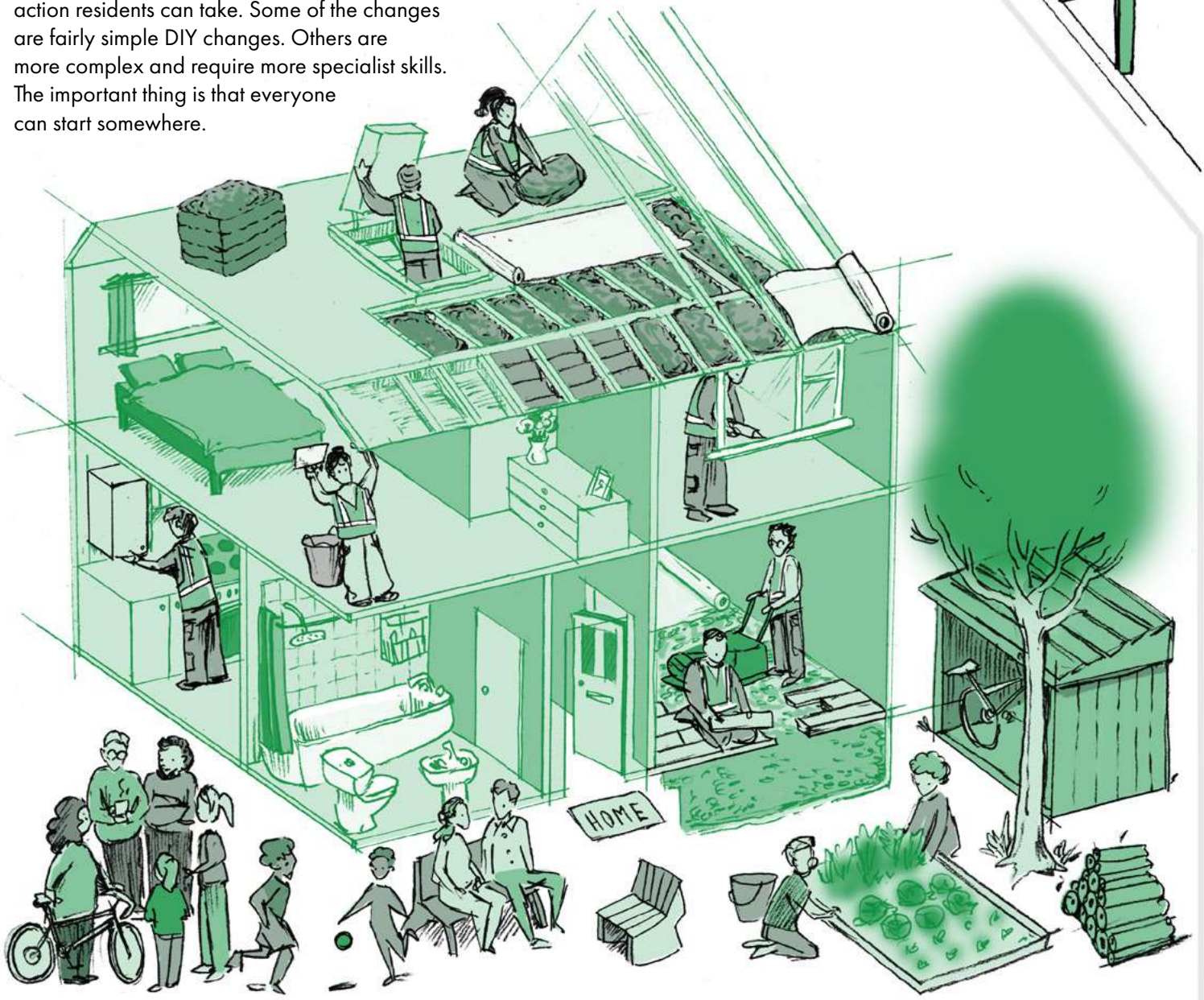
Summer 2026 has already broken heatwave records. Climate change means this summer is expected to be the coolest summer we will experience for the rest of our lives.

How to keep our homes cool in summer and warm in winter has never felt more urgent. And for our homes on Andover Road, it is especially important. Because of their age, how they were built, and years of poor insulation, our homes take more energy to heat and power than the UK average. More energy means higher bills.

The Neighbourhood Retrofit Recipe is a practical guide for improving and future-proofing the particular type of homes found on Andover Road and our wider neighbourhood. The Recipe has been co-designed with neighbours on Andover Road working with designers, architects, engineers and a team from local community organisations WeCanMake and Knowle West Media Centre.

WeCanMake have set up a Neighbourhood Trade Crew and trained local residents and trades in the Recipe. This means we know that the Recipe works in action and can create future facing jobs for local people.

This zine shares the Recipe and guides what practical action residents can take. Some of the changes are fairly simple DIY changes. Others are more complex and require more specialist skills. The important thing is that everyone can start somewhere.



CONTENTS

BACK TO THE FUTURE

WHAT MADE A GOOD HOME 100 YEARS AGO?

The homes on Andover Road were built between 1925 and 1935 by the council in response to the nationwide housing shortage after the First World War and following clearance of overcrowded slum housing in the city centre. These new homes were designed to be "homes fit for heroes".

Like other suburban council-built estates built across England, our neighbourhood was influence by the design principles of the Garden Cities Movement which proposed that new homes and settlements should combine the best features of town and country living.

BUILT ON GARDEN CITY PRINCIPLES

KEY FEATURES INCLUDE:

- Wide streets to create a sense of space
- Scullery downstairs, three bedrooms upstairs
- Front gardens with privet hedges to create privacy
- Big back gardens for growing food
- The luxury of an indoor toilet
- Open fireplaces in the living room and bedrooms for heating
- Hot water heated in a 'copper' in the scullery.

WHAT ARE THE HOMES LIKE TO LIVE IN NOW?

Over the last 100 years
many of the homes have been modified
and adapted in response to changes in our lifestyles.

As the homes continue to age, combined with new needs and patterns of living, and new demands created by a changing climate, how do these homes support people to live well now and for future generations?

To answer this question, over twelve months, six families on Andover Road had their homes carefully surveyed and monitored. The aim was to build up a rich picture of how the homes are working now, and what families need from their homes to live healthily and happily.

INVESTIGATING THE HOMES AS THEY ARE NOW:

Resident Interviews:
People are experts in their own homes with lots of knowhow about how they work and what could make them better.

Building condition surveys:
To understand how the homes were built, and assess their structural integrity and overall health, including walls, roof, doors, windows, and cladding.

Airtightness Tests:
Also known as "blower door tests," these measure how many draughts and uncontrolled air leaks exist in the structure of the home.

Acoustic Tests:
To measure how well walls and floors block noise.

Energy Use:
Collecting gas and electricity meter readings to understand how much energy the homes use.

Laser Surveys:
To create 3D drawings of the homes, helping to understand the internal space and plan any changes.

Thermal Imaging:
Uses an infrared camera to create colour-coded maps of surface temperatures of homes, making it easy to see where heat escapes in winter or enters in summer and spot hidden air leaks, poor insulation, and damp spots.

Carbon Dioxide Readings:
To measure how healthy the indoor air quality is, if ventilation needs to be improved.

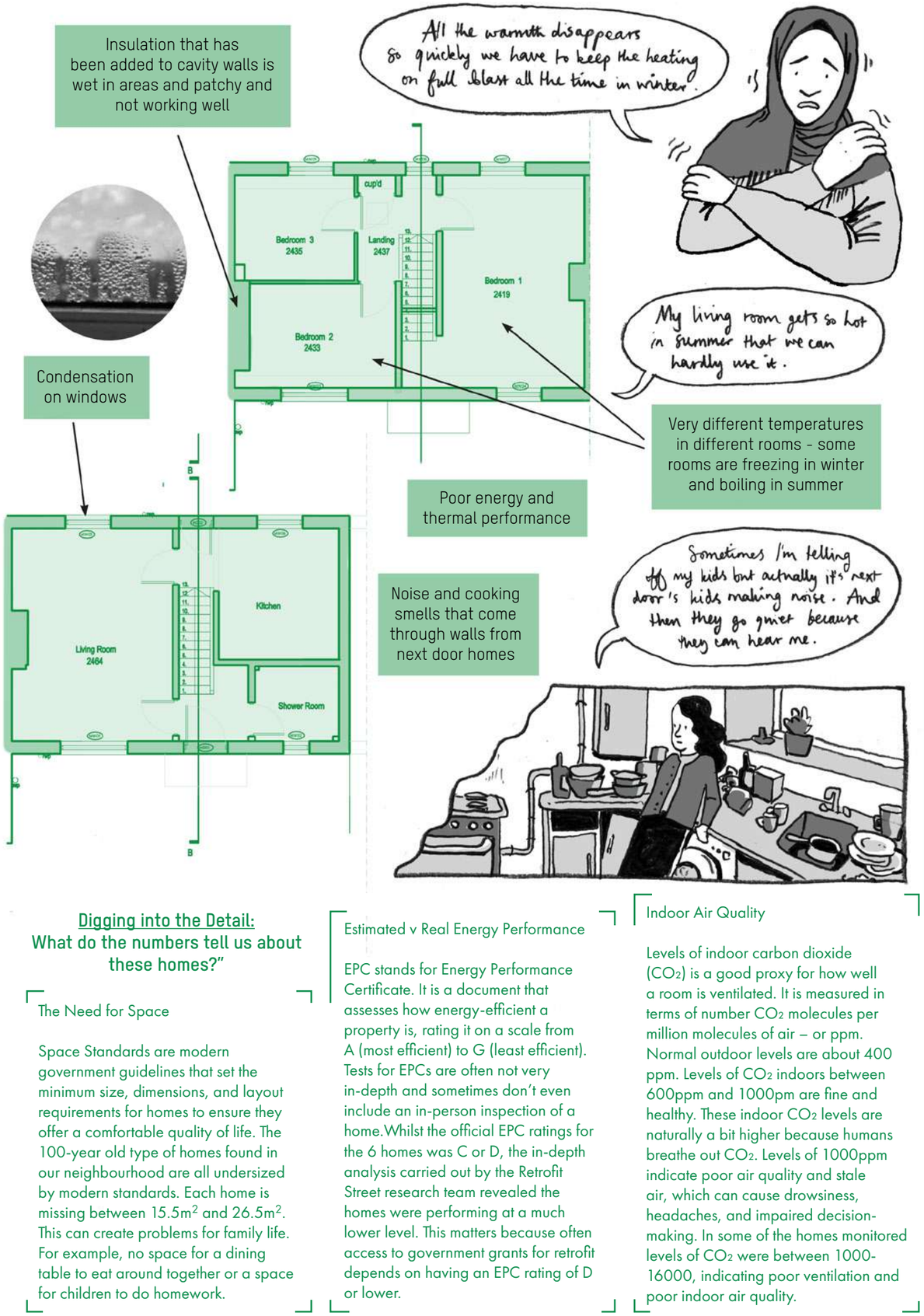
DIAGNOSIS: WHAT DID WE FIND?

Studying the six homes in depth identified a common set of issues, including a lack of space and storage, energy use, indoor air quality and struggles to keep rooms warm in winter and cool in summer. With all 5000 homes built across the neighbourhood built with the same materials and the same type of design, it is likely that many families are experiencing similar issues.

5000 similar homes across our neighbourhood

15000 similar homes across Bristol

1.1 million similar homes across England



Digging into the Detail: What do the numbers tell us about these homes?"

The Need for Space

Space Standards are modern government guidelines that set the minimum size, dimensions, and layout requirements for homes to ensure they offer a comfortable quality of life. The 100-year old type of homes found in our neighbourhood are all undersized by modern standards. Each home is missing between 15.5m^2 and 26.5m^2. This can create problems for family life. For example, no space for a dining table to eat around together or a space for children to do homework.

Estimated v Real Energy Performance

EPC stands for Energy Performance Certificate. It is a document that assesses how energy-efficient a property is, rating it on a scale from A (most efficient) to G (least efficient). Tests for EPCs are often not very in-depth and sometimes don't even include an in-person inspection of a home.Whilst the official EPC ratings for the 6 homes was C or D, the in-depth analysis carried out by the Retrofit Street research team revealed the homes were performing at a much lower level. This matters because often access to government grants for retrofit depends on having an EPC rating of D or lower.

Indoor Air Quality

Levels of indoor carbon dioxide (CO_2) is a good proxy for how well a room is ventilated. It is measured in terms of number CO_2 molecules per million molecules of air – or ppm. Normal outdoor levels are about 400 ppm. Levels of CO_2 indoors between 600ppm and 1000pm are fine and healthy. These indoor CO_2 levels are naturally a bit higher because humans breathe out CO_2. Levels of 1000ppm indicate poor air quality and stale air, which can cause drowsiness, headaches, and impaired decision-making. In some of the homes monitored levels of CO_2 were between 1000-16000, indicating poor ventilation and poor indoor air quality.

Our Neighbourhood RETROFIT RECIPE

The aim of the Neighbourhood Retrofit Recipe is to help local people confidently make their homes and streets work better for their families, their neighbours, and the planet. We're flipping the idea of 'retrofit' feeling complicated and lonely. It could be straight forward and joyful!

Standard approaches to retrofit tend to focus just on insulation and energy. Both are really important, but on their own don't necessarily make a home a healthier or happier place to live. Co-designed with residents, the Neighbourhood Recipe takes an expanded approach to retrofit and includes 5 key ingredients.

From a vast array of possible measures and materials you could improve your home with, the Retrofit Recipe distills this down into the key ones that the team of neighbours, designers, architects, and researchers identified as most suitable and could make the biggest difference for these types of homes.

INSULATE & VENTILATE

To keep homes warm in winter and cool in summer, prevent draughts and ensure fresh air for people whilst preventing mould and damp. To be considered as the priority, alongside these other measures:

ROOM TO GROW

Layout, storage and spatial changes so homes can better support how families live over time, as some space changes may impact fabric and ventilation measures

EVERY STREET A POWER STATION

Swapping how a home is heated and powered, from fossil fuels (such as gas and oil) to renewable sources (such as heat pumps and solar)

SPACE FOR NATURE

Trees and planting make space for nature and the 'more than human' in gardens and streets. Trees can provide natural solar shading keeping homes cool in summer

PEOPLE FIRST RETROFIT

Perhaps the most important ingredient of all: restitching the social fabric between neighbours, so people feel connected through everyday neighbourliness, helping us all feel safe, that we belong, and can ask for a helping hand (or a cup of sugar!) if needed

LIGHTER TOUCH

INSULATE & VENTILATE

- Loft Insulation (ensuring there is ventilation to the loft space)
- Insulation over loft hatch
- Insulation to the dropped eaves
- Blocking up gaps and unused openings in the external walls
- Draughtproofing around doors and windows
- Blocking up open chimneys

- Opening all 'trickle vents'
- Install extractor fans with constant extract function and humidity control in bathrooms and kitchens

ROOM TO GROW

- Built in storage under stairs
- Built in storage in bedrooms
- Accessible loft storage and platform

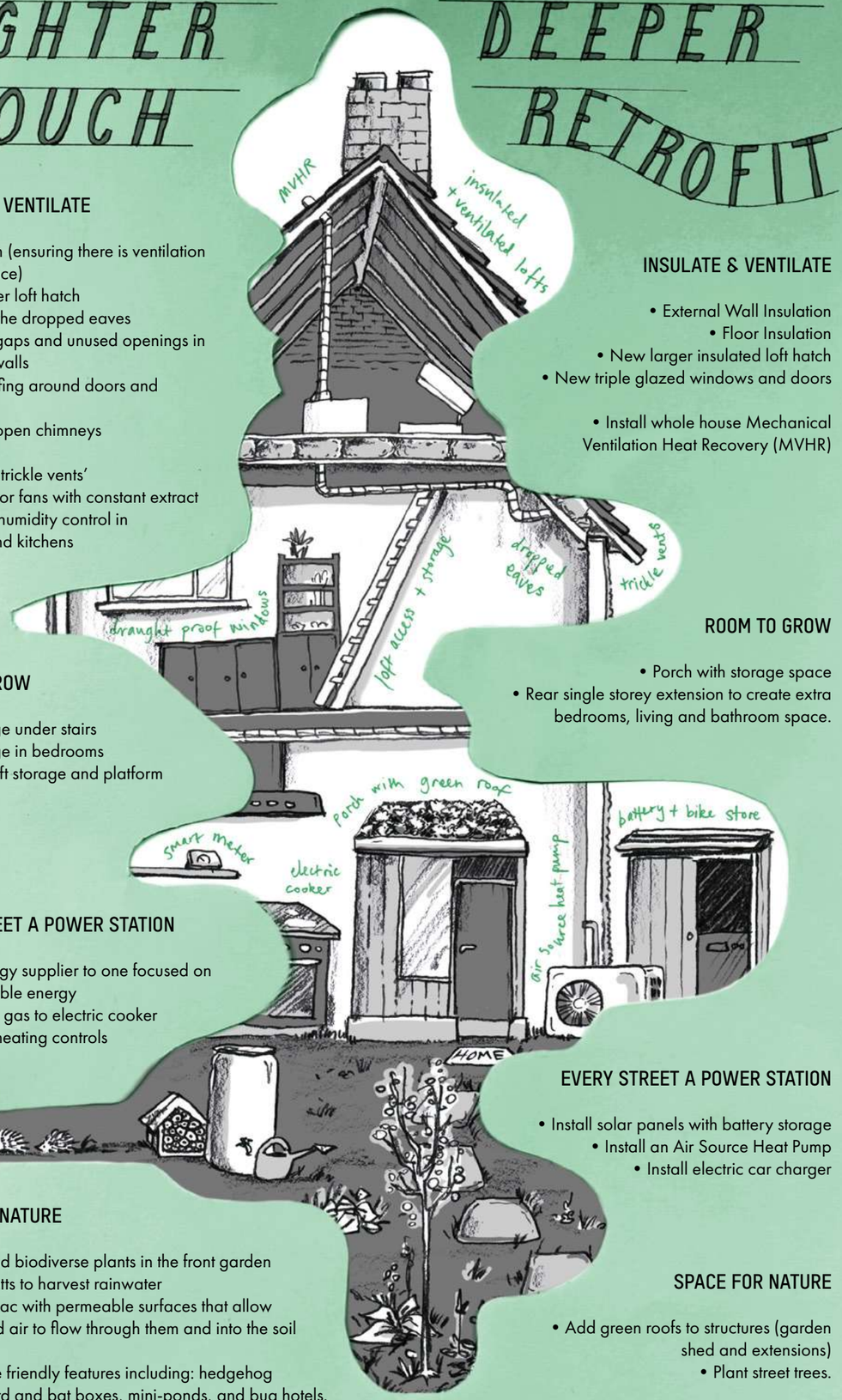
EVERY STREET A POWER STATION

- Change energy supplier to one focused on using renewable energy
- Change from gas to electric cooker
- Install smart heating controls

SPACE FOR NATURE

- Plant trees and biodiverse plants in the front garden
- Use water butts to harvest rainwater
- Replace tarmac with permeable surfaces that allow rainwater and air to flow through them and into the soil below
- Install wildlife friendly features including: hedgehog highways, bird and bat boxes, mini-ponds, and bug hotels.

DEEPER RETROFIT



INSULATE & VENTILATE

- External Wall Insulation
- Floor Insulation
- New larger insulated loft hatch
- New triple glazed windows and doors

- Install whole house Mechanical Ventilation Heat Recovery (MVHR)

ROOM TO GROW

- Porch with storage space
- Rear single storey extension to create extra bedrooms, living and bathroom space.

EVERY STREET A POWER STATION

- Install solar panels with battery storage
- Install an Air Source Heat Pump
- Install electric car charger

SPACE FOR NATURE

- Add green roofs to structures (garden shed and extensions)
- Plant street trees.

MATERIALS

Traditional construction relies heavily on materials like steel, concrete, and plastic that require vast amounts of energy and fossil fuels to extract, manufacture, and transport from around the world. Construction is a big emitter of greenhouse gases, accounting for a staggering 37% of global greenhouse emissions such as CO_2!

It doesn't have to be this way. Homegrown natural materials offer a low carbon alternative and also help grow local jobs, with local suppliers and producers of materials like hemp, timber, flax, and straw available.

"It's nice using different natural materials and having experiences with those. I think I would suggest natural materials to customers for insulation and things — it's better than your fibreglass. It's the way forward really."

- Lee, Andover Road resident, part of the Neighbourhood Trade Crew and runs a construction company

For example, Rockwool is a commonly used insulation material. It's made from melting rock in giant furnaces. It is very high-carbon to make – every tonne of Rockwool creates over two tonnes of CO_2. It's also nasty to handle and special clothing needs to be worn to install it as insulation.

The Neighbourhood Retrofit Recipe uses a palette of natural materials and products that have all been tested and certified for quality and performance. Look out for these marks/certificates:

BBA British Board of Agrément

Installation Assurance Authority – Right first time

MADE IN BRITAIN Northern Ireland

BDA Agrément

Qualitymark protection

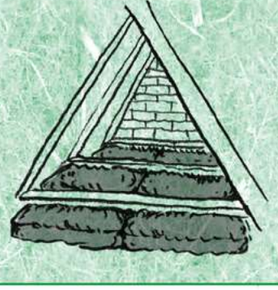
LIFE CYCLE OF HEMP INSULATION:

Hemp is a homegrown natural alternative. It takes 4 months to grow a crop in the UK, then it can be harvested and turned into high-performing insulation. It's very low-carbon because it absorbs CO_2 as part of its growing process – in fact for every tonne of hemp insulation nearly 2 tonnes of CO_2 gets used and safely stored up in the hemp itself. As an insulation material it is safe and soft to touch and even smells nice!

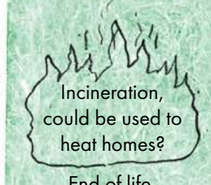
Hemp planted and grown, harvested just 4 - 5 months later!

Plant processed separating fibre from stalk, baled and shipped to mill

Fibre opened and blended, low heat applied. Products cut, stacked and packaged



Product installed in lofts

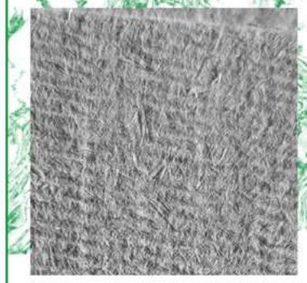


Incineration, could be used to heat homes?

End of life

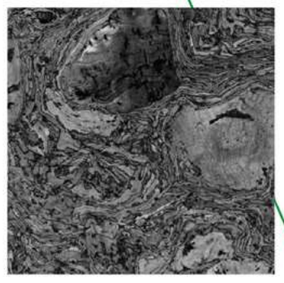
Lasts for 100+ YEARS!

MATTER



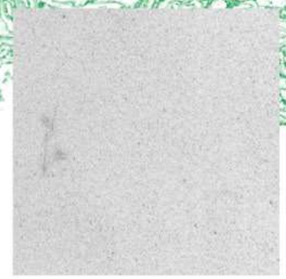
WOOD FIBRE

Used inside and outside (external and internal wall insulation, loft, floors), mainly grown and manufactured in Northern Europe. Co-product of the timber industry.



CORK

An almost magical material that is naturally fire resistant and water resistant, it can be used for external and internal wall insulation, and for flooring and wall finishes. Soft to walk on and touch, and plates don't break if dropped on a cork floor! Largely produced in Spain and Portugal, from carefully stripping the outer bark from living trees, which naturally regenerates every 9-12 years. The trees are unharmed, living up to 250 years old.

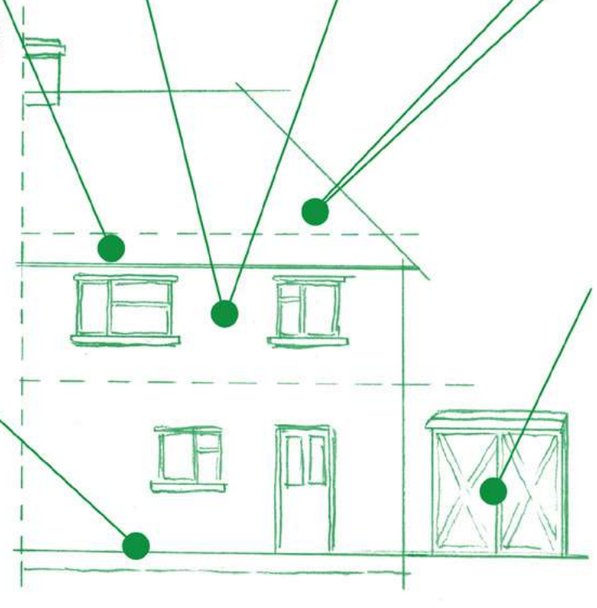


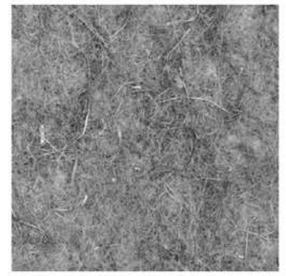
LIME

Is made from raw stone that is made into a powder and then blended with sand and water to make a paste to plaster walls and ceilings with – both for internal and external use. Sourced and made in the UK, there are lots of colours and textures available.

NATURAL PAINTS

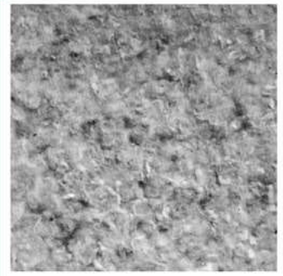
Available in many colours, they reduce dust and allergen build ups. No/low VOCs, odour free, and free of harmful emissions – great for healthy indoor air quality.





HEMP

Used for insulation inside only (loft, walls, floors). Can be UK grown, with a fast growing/harvest cycle of just 4-5 months.



SHEEP'S WOOL

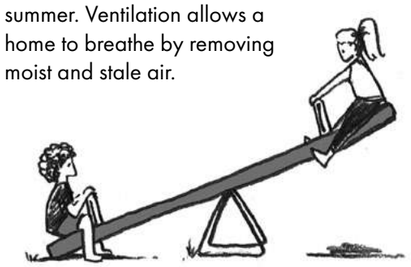
Can be produced in the UK, with a large potential in Wales. Co-product of sheep farming. Widely available for loft insulation.

NATURAL TIMBERS

Homegrown wood such as ash, sycamore, sweet chestnut, and birch are great for internal fittings and furniture including floors and shelving. Homegrown hardwoods such as larch and spruce are great for external uses including cladding, such as on bin and bike stores.

INSULATE AND VENTILATE

Insulation + ventilation need to go hand in hand. Insulation keeps a home warm in winter and cool in summer. Ventilation allows a home to breathe by removing moist and stale air.



INSULATE LOFTS AND LOFT HATCHES

We used hemp and wood fibre insulation with layers of breathable membrane. Timber boarding over the top means the loft space can be used for storage.

DRAFT PROOF WINDOWS AND DOORS

or replace end-of-life doors and windows with insulated doors and triple-glazed windows.

INSULATE THE EAVES

to fill the "cold spot" gap between the wall and the ceiling.

INSULATE THE EXTERNAL WALLS

This insulates the home and using natural materials means the building can still breathe.

HOW IS HEAT LOST IN A HOME?

INSULATE UNDER THE GROUND FLOOR

adding a layer of insulation between your warm home and the cold ground.

INSULATE

VENTILATE

VENTILATE AND INSULATE

OPEN WINDOWS WHEN POSSIBLE

Opening windows - particularly at night - "purges" the home, providing fresh air and cooling the home.

TRICKLE VENTS

are controlled gaps in windows that allow air to flow in and out even when the windows arent open. Make sure any new windows have trickle vents, and when draft-proofing existing windows, make sure they are open and unblocked.

INSTALL EXTRACTOR FANS

in the rooms that produce heat and moisture - i.e. kitchens and bathrooms.

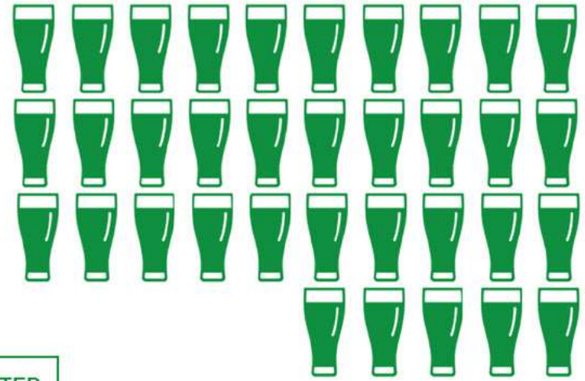
INSTALL A MECHANICAL VENTILATION HEAT RECOVERY SYSTEM (MVHR)

This is a whole home ventilation system that extracts stale moist air from the home and brings in fresh, filtered air.

For every intervention to improve the insulation and fabric of a home, it's important to balance this with thinking about ventilation and how the home breathes in a managed and healthy way. Think about it like balanceing a see-saw!

WHY IS THIS SO IMPORTANT?

An average family of four creates **35 pints** of moisture every day through routine activities, such as having a shower and drying clothes. If left unmanaged, this moisture can create excess humidity, leading to condensation, peeling paint, dampness, and mould. Insulating without balancing with ventilation can make this problem worse because there's no way for moist and stale air to escape.



LIGHTER TOUCH

DEEPER RETROFIT

Using breathable, natural materials - like swapping standard cement with **lime render** and using **natural fibre insulation** such as **hemp, cork**, and **wood fibre** - ensures a building remains structurally durable and free from the hidden mould that causes poor indoor air quality.

"Before, I could hear my neighbours talk like they were in the same room with me. Now with loft insulation there's less noise, and its keeping the heat in."

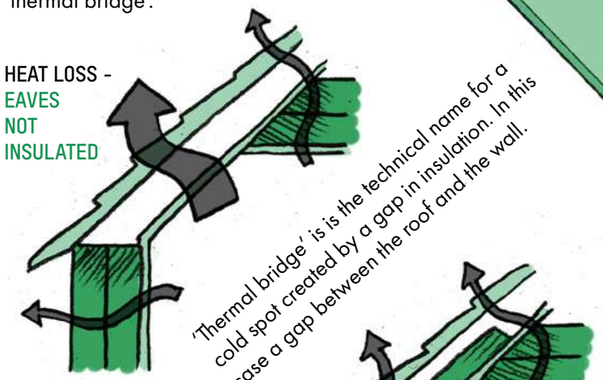
— Jas, resident

DROPPED EAVES

Got mould on that slopey bit in the bedroom that you can't decide is wall or ceiling?

Whatever you try, the mould just won't go away?

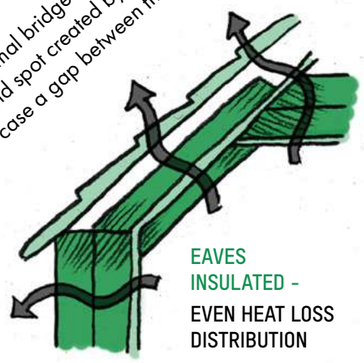
You're not the only one! It's a common problem across lots of the homes in our neighbourhood... and the problem is a 'thermal bridge'.



HEAT LOSS - EAVES NOT INSULATED

'Thermal bridge' is is the technical name for a cold spot created by a gap in insulation. In this case a gap between the roof and the wall.

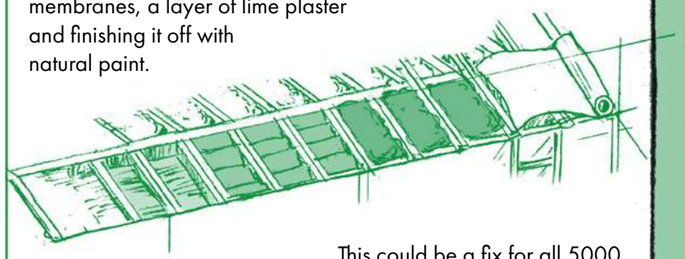
This creates a sharp difference in temperature on the internal slope - ideal conditions for mould to grow.



EAVES INSULATED - EVEN HEAT LOSS DISTRIBUTION

The good news? Designers and engineers at University of Bath and your friendly Neighbourhood Trade Crew have worked out how to fix it.

The fix combines stripping back a couple of layers of roof tiles on the outside and inserting hemp insulation. And on the inside inserting some nice firm wood fibre insulation, breathable membranes, a layer of lime plaster and finishing it off with natural paint.



This could be a fix for all 5000 homes accross the neighbourhood, and the other 10,000 homes accross the city! Goodbye mouldy bedrooms!

The dropped eaves are a tricky place to access because the roof heights are so low – a deliberate design choice from 100 years ago to make the homes look "cottagey".

This has meant that while people have over the years been able to add insulation to lofts and between the walls, this slopey bit has often been missed.

A full design detail to fix this eaves problem is available from the WeCanMake Neighbourhood Trade Crew and will form part of a technical "pattern book" of all the measures in Retrofit Recipe. This will be available Autumn 2026.

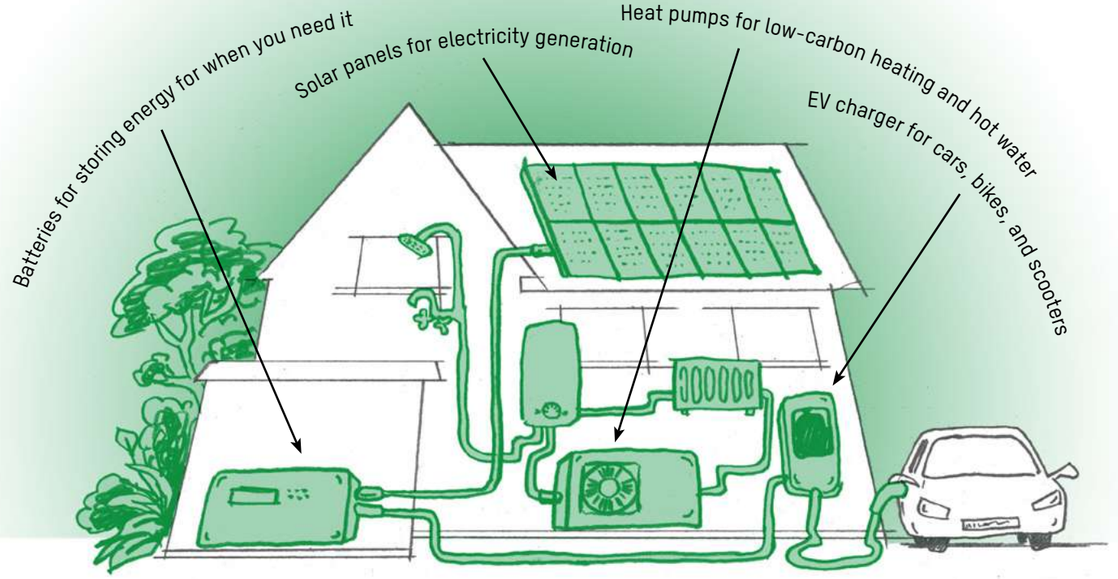
EVERY STREET A POWER STATION*

*shout-out to artists Hilary Powell and Dan Edelstyn who first coined this phrase on their street in Walthamstow: power.film/pages/about

The way our homes are powered now is highly centralised and relies on climate-harming fossil fuels such as gas and oil.

The transition to cleaner and greener renewable power sources – such as heat pumps and solar – offers a way to decentralise how we power and heat our homes. More than just a technical upgrade, it's also an opportunity to redistribute resources and decision-making power to households and communities. Every home or street could become its own power station.

A Complete Home Renewable Energy Set-Up Typically Includes:

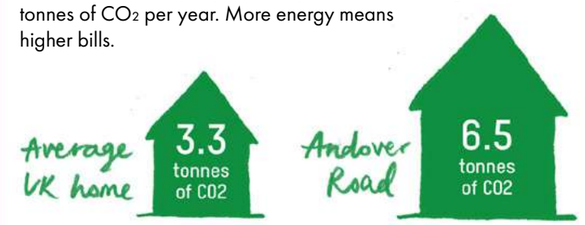


A set-up like this means that every home can generate, store, and manage its own energy supply. This means relying less on the centralised grid.

However, the type of homes on Andover Road typically use more energy to heat and power them than the UK average. This is because of poorer insulation and the poorer condition of the building fabric.

It is vital that before switching power supply to this kind of 'home renewable set-up' that the fabric of the home has been improved with the right level of insulation, draft proofing, and ventilation. The risk is otherwise that just putting in a heat pump without improving the fabric that people's fuel bills could increase.

Interwar council-built homes like the ones found on Andover Road generally take more energy to power and heat them than the average UK home, each home emitting between 3.5 and 6.5 tonnes of CO_2 per year, compared to the average of 3.3 tonnes of CO_2 per year. More energy means higher bills.



KEEP AN EYE OUT FOR THE NEXT RETROFIT ZINE

In the next Retrofit Street zine, we'll be deep diving into the renewable energy kit that really works for these types of homes. This will include unpacking "the just enough insulation" sweet spot, and options for sharing renewable energy kit with neighbours to make it more affordable and less daunting than working it out on your own.

ROOM TO GROW

Compared to the 1920s when the homes on Andover Road were first built, people live longer, families come in all sorts of shapes and sizes, working from home has become a thing, and many of us own a lot more stuff. How can a 100-year-old house keep up with how people want to live now?

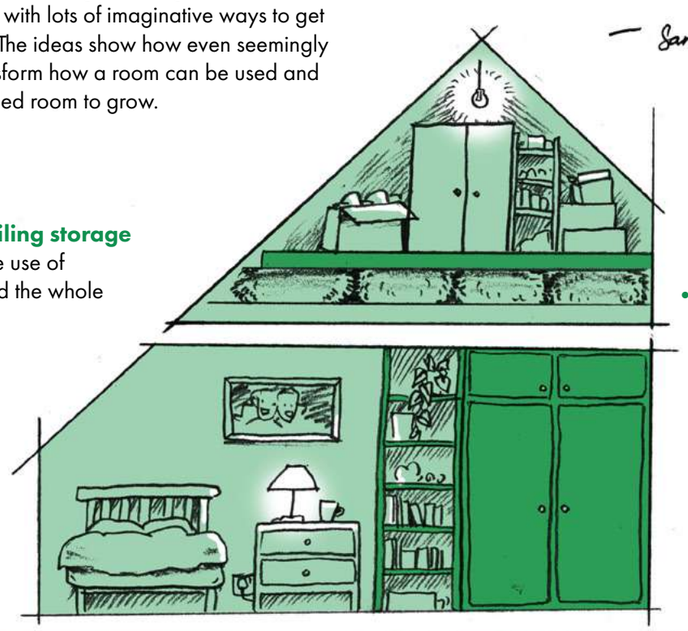
"I have 3 boys and you know boys like to play, jump, and they need space. And I don't have space. I would like another room, a dining room, so they can play, put their stuff there, place for a dining table."

— Samah, resident

Working with architects and designers, neighbours on Andover have come up with lots of imaginative ways to get more from their homes. The ideas show how even seemingly small changes can transform how a room can be used and create some much needed room to grow.

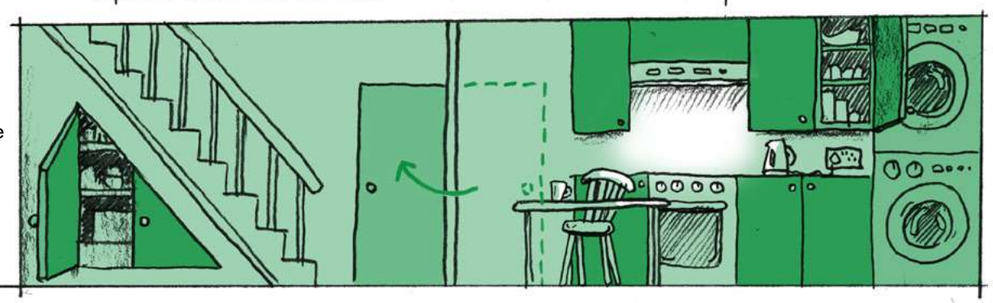
SMALL

- **Create floor-to-ceiling storage in bedrooms:** make use of awkward corners and the whole height of the room.
- **Switch the side a door hangs on:** this can change what's possible for the layout of a whole room, making space for a desk or dining room table.

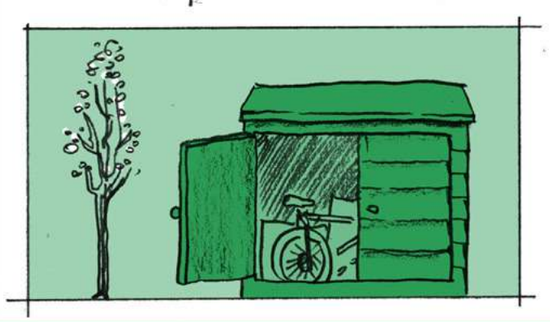


MEDIUM

- **Install loft platform:** a wooden platform over the insulation creates an ideal accessible storage zone – great for seasonal decorations!



- **Build in storage under the stairs:** make organised use of this wasted space



MEDIUM

- **Create some shed heaven:** big front and rear gardens can be used to create secure storage for bikes, pushchairs, pet supplies, and sports kit.
- **Smart kitchen moves:** putting in floor-to-ceiling storage, stacking washers & driers, and swapping gas for electric cookers can all save space and create new layout options.

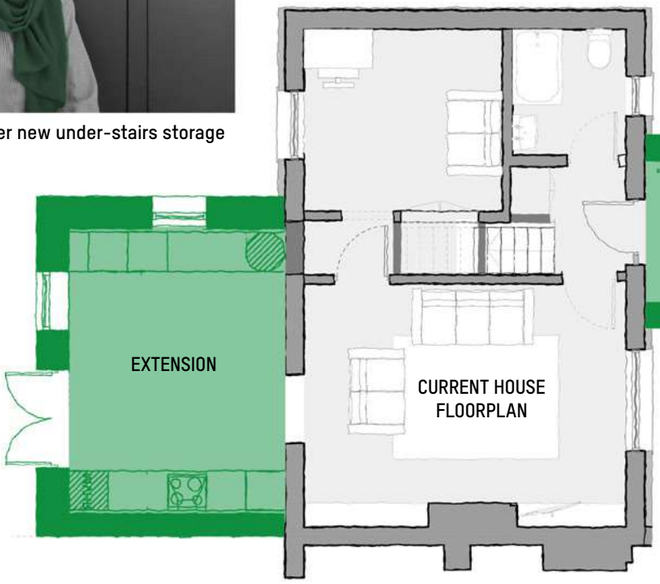
"A bit of extra storage. A bit of rethinking the layout. Suddenly my kitchen feels brand new. Now I even have space for a little seating area. It feels like a whole extra room of my own away from the kids. Game changer!"

— Jas, resident

Jas with her front garden bin and bike store

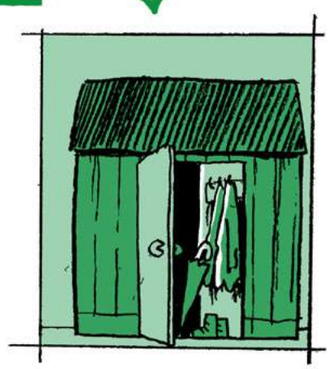
Samah with her new under-stairs storage

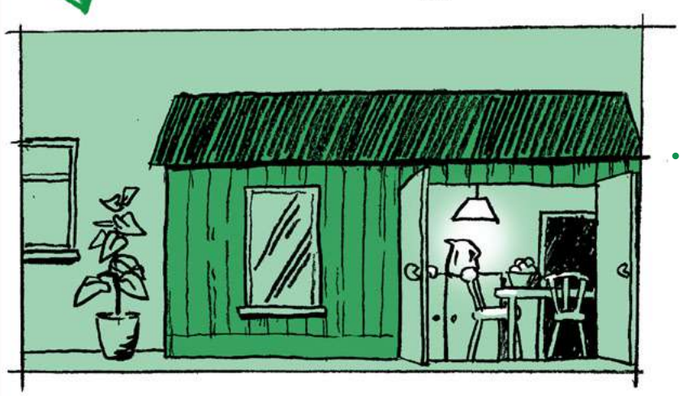
Rather than demolishing and starting again, enhancing the existing homes in these ways helps meet new needs in a way that doesn't waste carbon and doesn't distrupt family and community life.



LARGE

- **Build a porch**: to create secure storage and help stop drafts from the front door.





LARGE

- **Build an extension:** combining a single storey extension at the rear and reconfiguring some of the internal layout can transform the standard Andover Road 3-bedroom 1-bathroom home into a much more spacious 4/5-bedroom 2-bathroom home. Ideal for larger and multi-generational families who want to stay together and stay in their neighbourhood.

SPACE FOR NATURE

There are lots of fun and simple ways we can make our homes, streets and neighbourhoods better for nature and wildlife. What we do on our doorstep really matters because:

1 in 6 wild plants and animals in Britain are struggling to survive.

1/3 of front gardens in our neighbourhood have been lost to tarmac and parking.

Tree canopy coverage in our neighbourhood is just 18%! Far short of the minimum 30-40% tree canopy coverage needed to keep our homes, streets and shared spaces cool in a changing climate and rising temperatures.

Tree Coverage


Front Gardens

Nature is great for people - boosting our physical and mental health by lowering stress and alleviating anxiety and depression. And nature is great at fighting climate change by storing carbon, removing pollutants from the air, providing cooling shade, and preventing flooding.

"I get a real buzz knowing that my home is a good home for my family and a good home for swifts, butterflies and hedgehogs."

— Lee, resident

WeCanMake worked with a wildlife ecologist and neighbours on Andover Road to identify what kinds of wildlife lives locally. We found four endangered species and identified some simple actions we can take to help them thrive:

HEDGEHOGS

Did you know that the population of hedgehogs in the UK is declining? Despite this, many can be found in our neighbourhood, using alleyways to travel between gardens and green space at night time, in search of food and shelter.

- Leave a pile of wood in your garden to provide somewhere to hibernate over winter and a source of bugs to eat the rest of the year
- Work with your neighbours to make holes in fences between gardens at ground-level so hedgehogs can travel

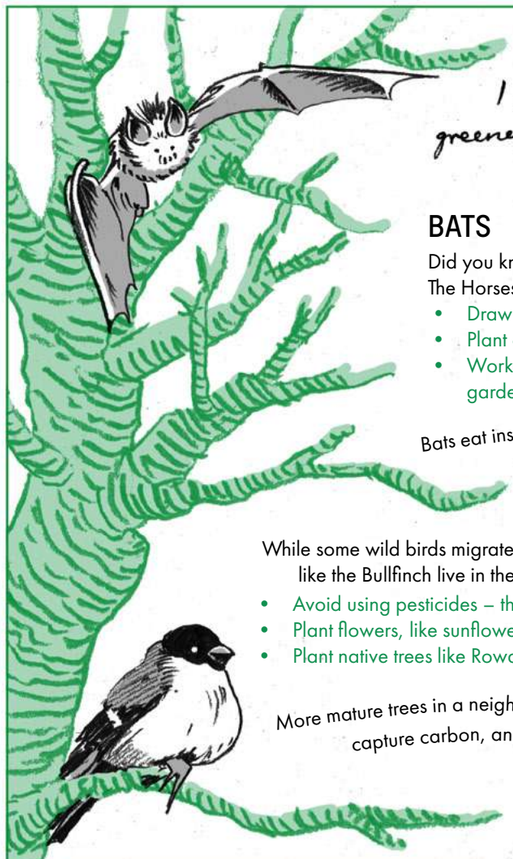
Hedgehogs eat plant-munching pests like slugs and snails, so your flowers will be less munched!

BUTTERFLIES

There are many endangered butterfly species in this neighbourhood, living in long grasses, feeding on nettles as caterpillars, and pollinating the native flowers of the Northern Slopes. The Small Blue is very rare but has been spotted fluttering around these green areas.

- Mow less and have a wild lawn – even small patches make a difference
- Scatter wildflower mix on gravel yards and carports. The flowers poke through and provide nectar.

Wildflowers also support bees and other insects which we rely on to pollinate our food.



"For me, nature is what makes a house a home. I love being able to look out my window and see greenery, see the birds, see the tree I helped plant."

— Jas, resident

BATS

Did you know that the Northern Slopes are home to some of the rarest bats in the UK? The Horseshoe Bat has been spotted hunting in its dark woodland.

- Draw curtains at night. Bats love the dark and will come to hunt for insects
- Plant climbers like honeysuckle and jasmine in the privet hedges to provide nectar
- Work with your neighbours to create a tree corridors where branches touch across garden boundaries and which help bats navigate in the dark.

Bats eat insects like midges and mosquitos, so you can sit out in your garden in the summer.

BULLFINCHES

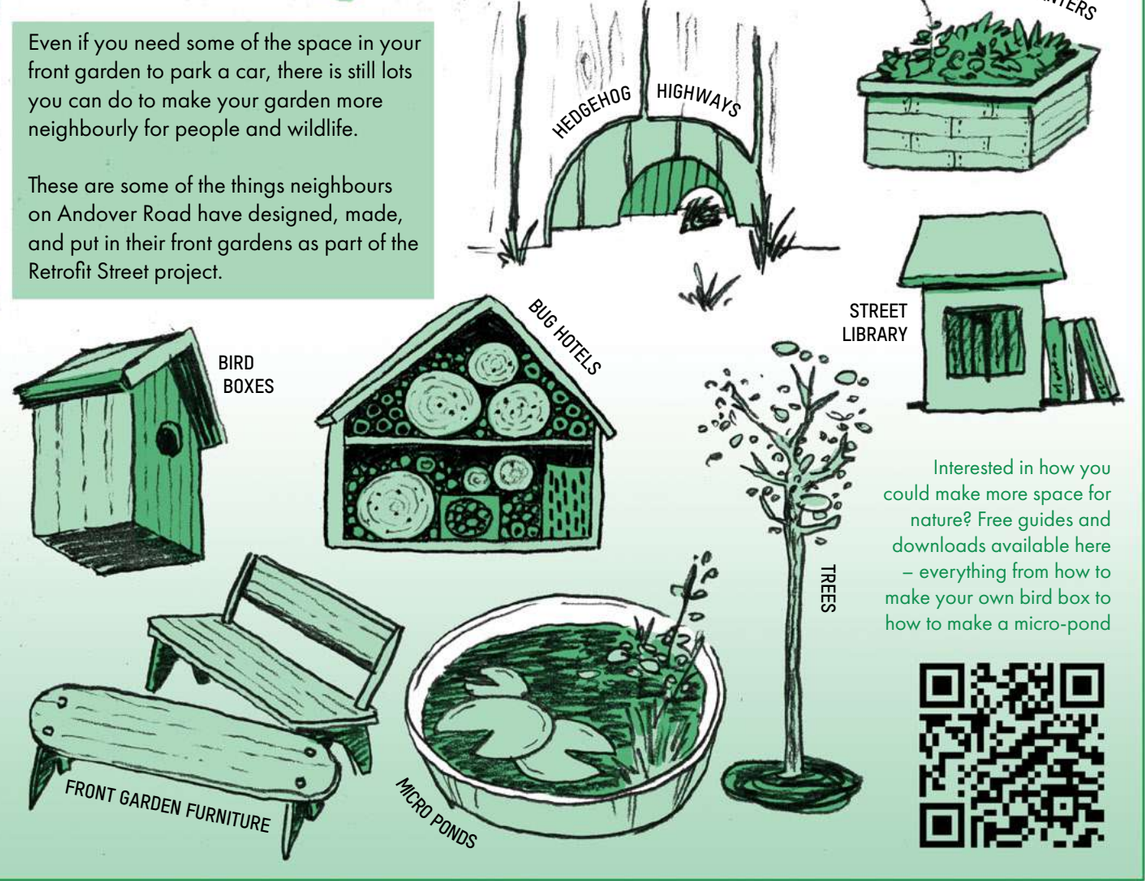
While some wild birds migrate across the globe to spend their summers on the Northern Slopes, other species like the Bullfinch live in the UK all year around, and rely on the local neighbourhood for food and shelter.

- Avoid using pesticides – the bullfinches love eating the insects!
- Plant flowers, like sunflowers and teasels, that have large seed heads that provide food all year round
- Plant native trees like Rowan, Hazel, and Blackthorn to provide year-round shelter and food.

More mature trees in a neighbourhood can help reduce flooding, pollution and heat, increase shade, capture carbon, and make them greener spaces, which is shown to improve health and wellbeing.

Even if you need some of the space in your front garden to park a car, there is still lots you can do to make your garden more neighbourly for people and wildlife.

These are some of the things neighbours on Andover Road have designed, made, and put in their front gardens as part of the Retrofit Street project.



Interested in how you could make more space for nature? Free guides and downloads available here – everything from how to make your own bird box to how to make a micro-pond

PEOPLE FIRST RETROFIT

There is lots of debate in retrofit about whether changes should be "fabric first" or "energy first".

What neighbours on Andover Road have shown is retrofit needs to be **people first**.

Neighbours have got to know each other through playing-out sessions on the street, community feasts at the allotment, winter warmers on street corners, by getting hands-on to learn new skills, and by making things and decisions together.

"I've learnt a lot — about how my house works and all sorts of technical things about natural materials. But the best thing about the retrofit project is how as neighbours we've gotten to know each other. We help each other out, the kids play together. It amazes me what a difference it's made to how I feel about my home, my family, where I live. I feel safer, more secure. Making my home feel like a space that represents me and using natural materials feels healing in so many ways. And you get this real sense of possibility. That we can make the changes we want — for our families, for our community — and we can do it ourselves."

— Jas, resident

Social connections between neighbours have been re-stitched, and with that curiosity, hope, and trust in what is possible to help make their homes, street, and neighbourhood better together – one insulated loft and birdbox at a time.

DIY TIPS #4

Extreme weather is becoming more frequent and intense across the UK because of climate change. Poorly insulated homes don't just leak heat when it's chilly, they let hot air in when temperatures rise. Heatwaves can make it tough for people, pets, and wildlife.

These are some simple and low-cost ways to keep cool in the heat.

HOW TO KEEP YOUR HOME COOL IN A HEATWAVE

(1) Open and close your windows at the right time

Open the windows – but only when it's cooler outside than in. As soon as it's hotter outside than inside shut those windows! And it's a good idea to draw the curtains too. At night, when the temperature dips – open up the windows and release the heat.

(2) Stick honeycomb packaging on the outside of your windows

Perforated materials are great because they keep the view. The structure of honeycombe paper packaging shades direct sun. It comes in handy rolls – white, brown, and black - and is easy to apply to the outside of windows with sticky tape.

Kit-list

- Honeycomb paper packaging
- Scissors
- Tape
- Step ladder

(3) Paint the outside of your windows with yoghurt

Yes really! Use a roller to apply on the outside. It dries quickly and after 30 seconds loses any smell. It leaves a finish like architectural glazing and scientists at Loughborough University have proven it can reduce the temperature inside by as much as 3.5 degrees. Plain Greek oat yogurt is best – it is lower carbon than yogurt made with cows milk and washes off easily when the heatwave is over.

Kit list:

- Plain oat yoghurt with fat content 10%+
- Paint roller
- Masking tape to get sharp lines
- Step-ladder
- Telescopic lens to reach higher windows
- Sponge to wipe off

(4) Plant trees

As a more permanent solution, the best trees to provide solar shading are deciduous trees which block the intense summer sun and shed their leaves in winter to let warm sunlight through. Good species for planting close to houses include Ornamental Pear known for non-invasive root system and dense foliage; and Silver Birch with their airy canopy that provides dappled summer shade.

Kit-list

- Tree suitable for planting in front gardens and close to the structure of a home.
- Spade, stake, string, and compost or top soil for planting.
- Clippers for pruning

(5) Water for Wildlife

During a heatwave, natural water sources can dry up quickly, making fresh water critical for wildlife such as birds, hedgehogs, and butterflies to drink, bathe, and regulate their body temperature. Set up multiple, easily accessible, and shallow water stations in your garden, and keep them topped up daily.

Credit and shout out to the folks at HeatWave Toolkit, who have lots of great tips and tricks for keeping cool when it heats up: **www.heatwavetoolkit.com**

Remember every home is different, so make sure you seek advice and permission where relevant.

We're putting together a technical guide for the improvements described in this Zine. This will be out in Autumn 2026 and will share the detail on:

- How you can make DIY retrofit changes to your home
- What retrofit works the Neighbourhood Trade Crew can help with on your home
- How to connect with other trusted trades to do retrofit works on your home

We're also sharing what we've learnt with Bristol City Council and how it could help with the housing maintenance and retrofit works they are planning for the area.

Over the summer and early autumn, WeCanMake is running some community workshops on options for renewable energy for homes on Andover Road. If you are interested in being involved, get in touch: **hello@wecanmake.org**

And to find out more about the Retrofit Street project in general, scan here:

wecanmake.notion.site/
retrofit-street

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