



# Environmental Sustainability Strategy

2023-26

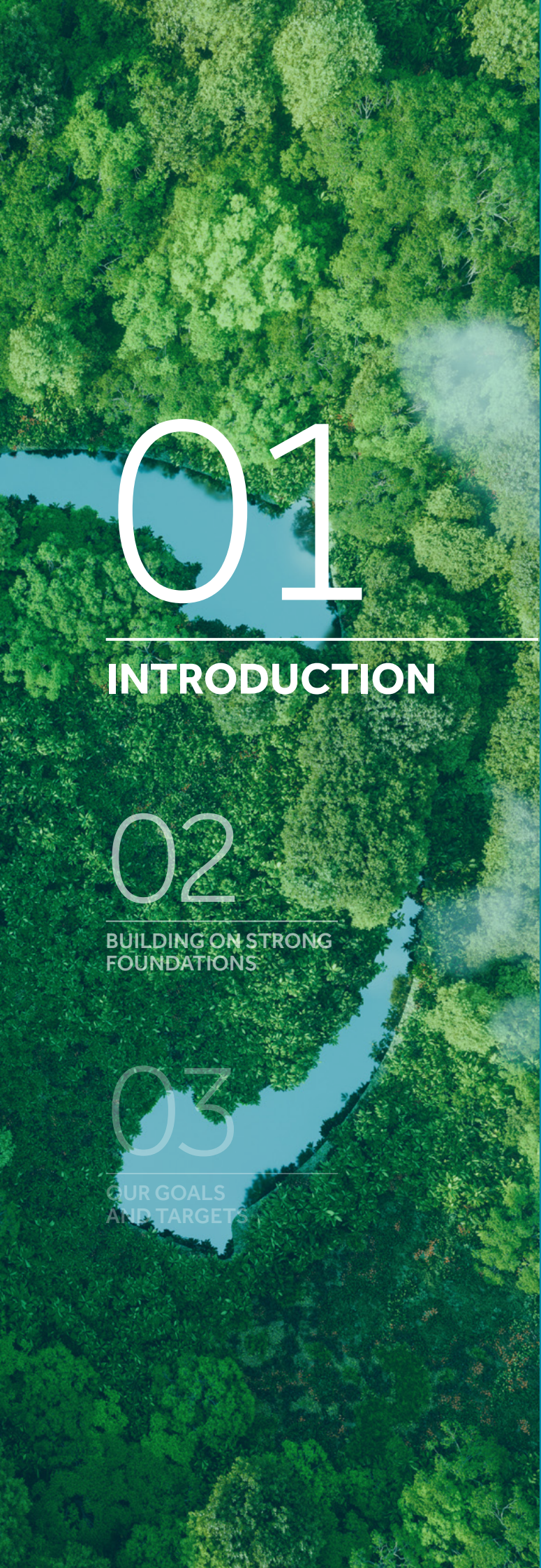




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# 01

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## INTRODUCTION

# 02

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BUILDING ON STRONG  
FOUNDATIONS

# 03

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OUR GOALS  
AND TARGETS

## From Chief Executive

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We've a responsibility to understand the impact our organisation has on the environment and ensure we contribute towards a sustainable world. Our residents, employees, investors and other key stakeholders rightly expect us to play an important role in dealing with environmental challenges. We're stepping up with an ambitious vision and plan.

Throughout this strategy, we're committed to providing sustainable and affordable homes, that residents can live, work and rest in. This strategy highlights the need for integrated solutions that balance the dimensions of sustainability, paving the way for a harmonious future for people and our planet, not only for the present but for generations to come.

Environmental focus remains strong for the country. ESG finance continues to drive improvements in the sector with banks requiring deeper environmental performance metrics for loans.

Following our merger, we're stronger together. This applies to our financial strength, our commitment to being a preferred employer and landlord, and better places us in a position to maximise access to funding opportunities.

We've made great progress so far towards improving the quality of our homes.

We'll continue to meet these challenges through measured improvements, co-creating with our residents and colleagues and collaborating with others inside and outside the housing sector to meet the sustainability challenges ahead.



**Paul Hackett CBE**  
Chief Executive Southern Housing



# About this strategy

Southern Housing has a proud history, stretching back to the early 20th century. In 1901, we were established to provide homes for the working poor in London. Over 120 years later, our social purpose remains. Today, we own and manage over 78,000 homes, serving 167,000 residents across London, the South East, the Midlands and the Isle of Wight.

Our merger in 2022 saw us expand and deepen ties in our communities. We've a denser footprint and we're a bigger strategic presence in more local authorities. With this growth, we're able to increase our social impact further, from developing new homes for those in housing need or investing in the health, wealth and wellbeing of our residents.

Our size also brings us greater responsibility with regard to climate change. This is the defining challenge of our generation and we have a duty to meet it.

The UK government has declared a climate emergency, recognising the urgent need to reduce greenhouse gas emissions and transition to a sustainable, low carbon economy. In 2019, the UK became the first major economy to legislate for net zero greenhouse gas emissions by 2050.

We believe that sustainability is the holistic link underpinning the connection of environmental, social, and economic wellbeing. Achieving true sustainability involves considering the long-term effects of our actions in everything we do. By adopting sustainable practices, we not only safeguard our residents, mitigate climate change, and preserve biodiversity but also promote social equity, health, and wellbeing while fostering economic resilience and innovation.

Our environmental sustainability strategy sets out our long-term vision to achieve net zero by 2050 as well as our more detailed plans over the next three years, aligned with science-based targets across carbon, water, waste, transport, materials, overheating, flooding, and biodiversity. It covers all areas of our business with specific ambitious plans to reduce our environmental impact for our residents, our staff, and our planet.

This aligns with our organisational Strategic Plan, recently approved by our Board, our Asset Management Strategy, and Social Impact Statement to ensure that all objectives interrelate and support one another.



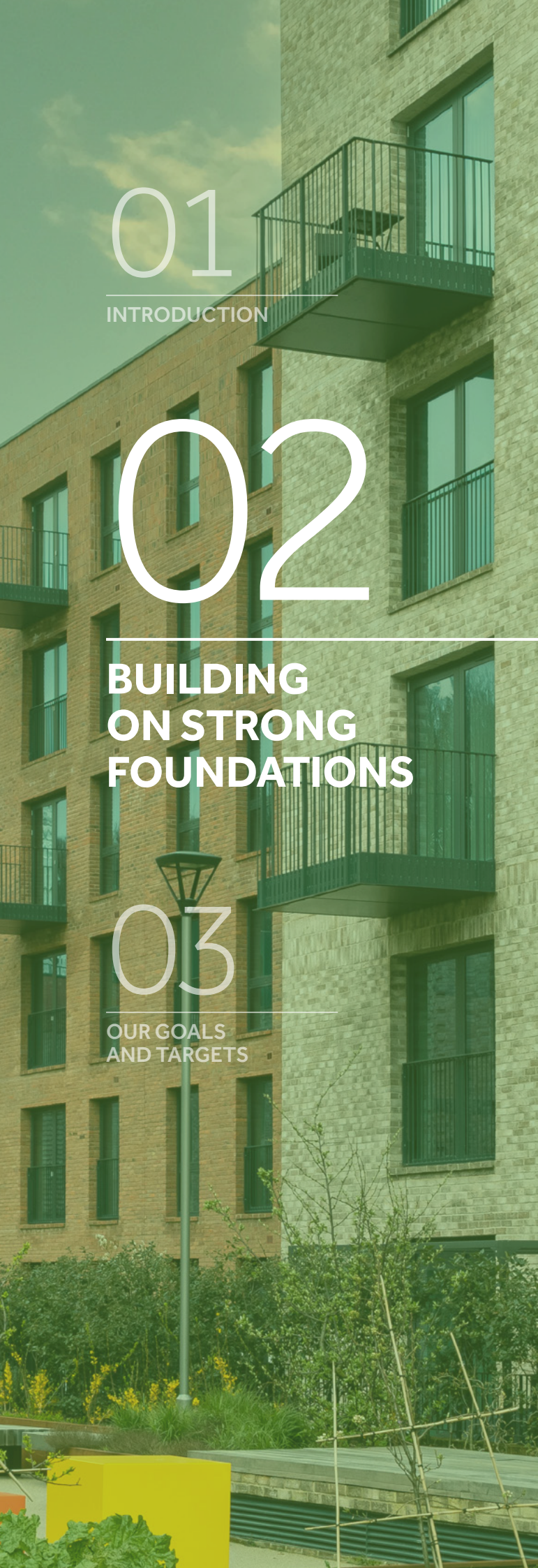
# Aligning with our corporate objectives

Our Strategic Plan 2023-2026 sets out our ambitions and vision to create communities where everyone has a safe home, in a place where they're proud to live.

## Our Objectives 2023-26



<sup>1</sup> Where cost effective and practical



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OUR GOALS  
AND TARGETS

# Achievements to date



74%

Homes at  
EPC C and  
above



97%

New homes  
at EPC B  
and above

85%

Maintenance  
contractors using  
eco-friendly products  
and agents

8

Goals aligned with  
United Nations  
Sustainable  
Development  
Goals



1 NO  
POVERTY



7 AFFORDABLE AND  
CLEAN ENERGY



3 GOOD HEALTH  
AND WELL-BEING



10 REDUCED  
INEQUALITIES



8 DECENT WORK AND  
ECONOMIC GROWTH



11 SUSTAINABLE CITIES  
AND COMMUNITIES



12 RESPONSIBLE  
CONSUMPTION  
AND PRODUCTION



13 CLIMATE  
ACTION



£12.5m

Funding secured for  
decarbonisation since 2019



22,000

Communal lights surveyed  
across 400 of our most energy  
consuming sites to develop a  
carbon reduction plan

## REDUCED

Our scope 1, scope 2 and scope 3  
greenhouse gas emissions



**SHIFT  
GOLD  
STATUS**

Five years running

3,500

Homes improved with energy  
efficient measures last year



**LANDLORD  
OF THE YEAR**

At the 2022 Energy  
Efficiency Awards

£300m

Issued as our first  
sustainable bond.  
Spend is committed to  
social and sustainable  
projects

1,000+

Residents benefited from bespoke energy  
advice and winter warmer packs in the  
last five years

## Project Renew

In recent years we've undertaken a number of pilot projects ahead of rolling out more ambitious retrofit programmes in line with our targets to upgrade all homes to EPC C by 2030. The combination of measures are designed for each home and for "project renew" which focused on 47 homes across Kent and Sussex a mixture of the following measures were delivered to the delight of our residents in these homes.

### Measures installed

- ✓ Smart ventilation
- ✓ High performance windows
- ✓ Chimney balloons for draughtproofing
- ✓ High performance external doors
- ✓ Extractor fans
- ✓ Hot water tank insulation
- ✓ Hot water tank thermostat
- ✓ Door undercut ventilation
- ✓ LED lighting
- ✓ Loft insulation
- ✓ Roof insulation

### Satisfaction survey results to date:

Average satisfaction with attitude of contractor

**8.7/10**



Average satisfaction with time to complete work

**8.9/10**



Average satisfaction on quality of work

**9.1/10**



Overall satisfaction

**9.2/10**



### Comments from residents

"Very happy with the work which was carried out very professionally done"

"Contractors couldn't be better absolutely brilliant"

"Great communication throughout"

"Early on the day and was finished very promptly and completed all tidy and clean"

"Made sure everything was clean and tidy before leaving"

"Communication excellent"

# Resident Involvement

At every level of the organisation, our residents work alongside us as one team, from strategic decision making to day-to-day services. They influence policies and strategies, monitor our performance, and help shape the services we deliver.

Our residents have been an important part of our sustainability journey, sharing their views and being recognised for the environmental work they do in our communities.

-  Earth month – online campaign focusing on carbon footprint, biodiversity, energy and waste
-  Planted 500 trees in collaboration with residents and Swale Borough Council
-  Contributed to a family fun day with Kent residents
-  Seven resident sustainability champions
-  Two residents recognised for their contribution to sustainable living at the 2023 Unlock Net Zero Awards
-  Co-creating our direction with residents in person and online
-  Multiple litter picks in various neighbourhoods



# Our approach

This strategy has been co-created with residents and staff; we've undertaken surveys and workshops to gather insight which has informed this strategy.

Our approach considers the wider environmental sustainability topics spanning across the whole organisation. It also supports our social impact statement in making a positive social change and creating opportunities for residents and communities to fulfil their potential.

Together, through our environmental sustainability strategy and social impact statement, we'll improve our residents' finances, employment prospects and wellbeing.

Our environmental sustainability strategy focuses on six key themes:

- Knowing our homes and our wider environmental impact
- Affordable warmth and carbon reduction
- Climate resilience and adaptation
- Nature and green spaces
- Energy and heat networks
- Awareness and reducing consumption.

These themes include our approach to meeting sustainability legislation. Targets within this strategy will be reviewed annually and revised in line with changes to regulations, innovations and science backed metrics.



The targets to 2026 are outlined in this strategy to provide focus for the next 3 years, whilst we also have a look ahead to 2050 regularly refreshing our longer term vision and roadmaps such as for retrofitting all of our homes to meet net zero carbon by 2050

## Pathway to 2050

### Progress so far By 2023

- Retrofit assessed over 2,000 homes
- Awarded SHIFT Gold for 5th year
- Asset Management Strategy 2023-2026
- Upskilling colleagues for PAS3025 certification
- Appointed two providers of PAS 2035 services
- Appointed three Retrofit Installers
- Established energy data gap
- Merged energy data sets across both legacy organisations.
- Established a full retrofit delivery team
- Developed our resident engagement and communication plan.

### Now Planning

- New Southern Housing Environmental Sustainability Strategy
- Delivering fabric first retrofit programmes under SHDF
- Continue to build our skills base and improve data and modelling
- Defining our approach to retrofitting blocks.
- Regularly review the costs for retrofit delivery and update our long term cost assumptions
- Identify sources of internal and external funding
- Ongoing EPC update and SCS programme to plug energy data gap
- Identifying innovation measures such as Q-Bot under floor insulation
- Establishing ECO4 delivery partners
- Continue archotyping across all homes to develop a cost per property profile.

75% of homes at least EPC Band C by 2025

### By 2025 Build up capacity

- Focus on priority geographic areas and property archetypes
- Scale up the delivery of retrofit programmes
- Secure internal resource capacity and capability
- Procure longer term partnering contracts
- Secure additional resources from external providers
- Continue to upskill internal staff
- Plan aligned transition for electric heating.

### By 2030 Realignment

- Evaluate actual energy performance of retrofitted homes
- Understand technology innovations
- Decide on the approach for procurement long term
- Update the retrofit plan for lessons learned
- Update the retrofit plan for government policy developments and funding schemes
- Update assumptions in the Long Term Financial Plan
- Roll out electric heating and renewables.

All homes at EPC Band C by 2030

All homes are net zero carbon 2050

### By 2050 Full roll out

- Rollout the investment programme to have all properties retrofitted by 2050.



02

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BUILDING ON STRONG  
FOUNDATIONS

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**OUR GOALS  
AND TARGETS**

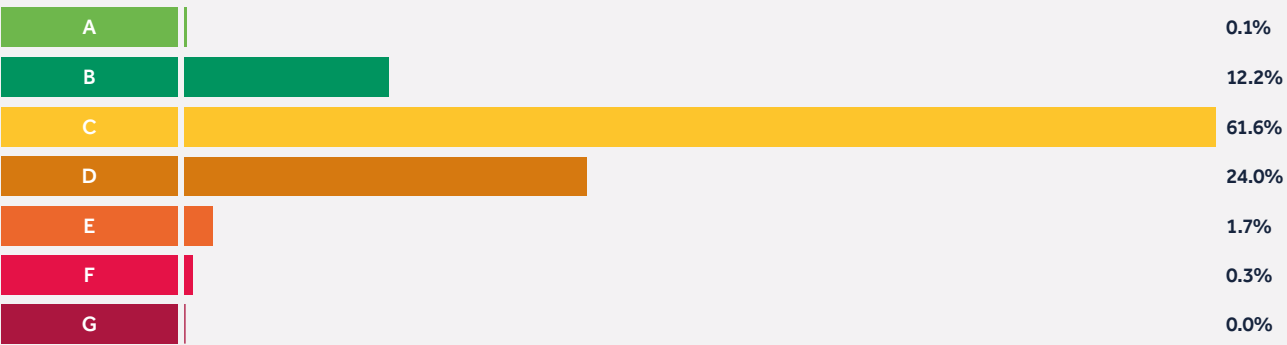
## KNOWING OUR HOMES AND ENVIRONMENTAL IMPACT OF OUR WIDER ORGANISATION

It's important for us to understand the performance of our homes and our wider organisation, so we have a baseline and transparent methodology to measure improvements. We're undertaking regular stock condition surveys and for 71% of our homes we have recent surveys under 5 years old. As part of our preparations, we've already completed retrofit assessments on more than 2,000 homes to understand the measures we'll need to install, the cost and the impact of retrofit works. With this strategy we are outlining our plans to further improve the quality of our data. We'll continue to adopt the SHIFT methodology to measure our sustainability performance and benchmark against the sector. We'll publish our performance through multiple channels, for our residents and stakeholders, that are easy to read and jargon free.



| OBJECTIVE                                                                                                                                 | WHAT WE'LL ACHIEVE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>We will know the energy performance of all our homes, offices and commercial accommodation.</p>                                        | <ul style="list-style-type: none"> <li>✓ All our accessible homes will have a SAP score that is less than five years old by 2025</li> <li>✓ All office and commercial properties in our ownership will have up to date EPCs less than five years old by 2024</li> <li>✓ All key worker and student accommodation in our ownership will have energy data less than five years old by 2024</li> <li>✓ We'll model most effective and efficient measures to achieve best energy efficiency improvements in line with our wider investment programmes for all our homes. This includes a review of all our property archetypes across our homes to inform long term retrofit plans</li> <li>✓ We'll continue to capture carbon emission data and conduct an energy efficient review of our student and key worker portfolio to devise carbon reduction plans by 2025</li> <li>✓ We'll update our energy data bi-annually to track our direction of travel, and implement our data improvement plan which tells us which of our assets need what level of energy data.</li> </ul> |
| <p>We'll measure our organisational environmental performance and reduce our carbon footprint.</p>                                        | <ul style="list-style-type: none"> <li>✓ We'll include our environmental performance in our Annual Report as required by the mandatory Streamlined Energy and Carbon Reporting Regulations 2018</li> <li>✓ We'll carry out annual sustainability audits with biggest supply chain partners and demonstrate improvements</li> <li>✓ We'll continue to strengthen our capture of scope 1, 2 and 3 emissions data, specifically that of our maintenance activities.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <p>We'll achieve a GOLD standard as measured through the SHIFT methodology to ensure that we are on track with Science Based Targets.</p> | <ul style="list-style-type: none"> <li>✓ Alignment of methodology for measuring our environmental performance with the SHIFT standards, which also allows benchmarking with peers.</li> <li>✓ The standardisation and amalgamation of datasets from our legacy organisations.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <p>Evidence our commitments towards UNSDG through Environmental, Social and Governance reporting</p>                                      | <ul style="list-style-type: none"> <li>✓ We'll produce an annual report evidencing our commitments and performance against environmental, social and governance goals</li> <li>✓ We'll work with other key stakeholders and partners in the sector to strengthen the transparency and integrity of the ESG reporting through the Sustainability Reporting Standards.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

EPC ratings of Southern Housing homes



Each year we're increasing and improving our emissions data, by focusing on the areas of highest risk/impact to Southern Housing and areas we can influence. We recognise the impact our supply chain has on the local and global environment, from the stationery we buy, to the homes we build. We carry out an annual Sustainability Audit with our top 100 suppliers to measure and monitor carbon emissions in our supply chain. By measuring our Scope 3 emissions, alongside Scope 1 and 2, we can target actions to influence the reduction of carbon emissions.



## AFFORDABLE WARMTH AND CARBON REDUCTION

It's essential that our net zero vision by 2050 is reached through incremental and measured steppingstones. Energy consumed in our homes is a major contributor of our carbon emissions. Our retrofit roadmap sets out high level objectives that will help us gain incremental improvements, and our fabric-first approach ensures reduction of energy demand. Our office and commercial operations and fleet also contribute to our carbon emissions, and we're committed to reducing these to meet our 2050 goal.



| OBJECTIVE                                                                                               | WHAT WE'LL ACHIEVE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| We will continue to improve the energy performance of all our homes and offices                         | <ul style="list-style-type: none"> <li>✓ All our homes will be EPC C by 2030, where practical, cost effective and affordable<sup>2</sup></li> <li>✓ All our offices and commercial properties will be EPC C by 2027 and EPC B by 2030</li> <li>✓ All our new homes will be built to SAP 85 or above (equivalent to EPC Band B)</li> <li>✓ We're undertaking research to develop an ambitious strategy to start delivering net zero new build homes from 2030, as measured by London Energy Transformation Initiative standards</li> <li>✓ We will update our Retrofit Roadmap on a regular basis</li> <li>✓ We will maximise impact of our investment through aligning retrofit works with void and maintenance, planned investment and fire safety works</li> <li>✓ We've been successful in applying for grant funding for feasibility studies, and works to our homes and heat networks in recent years. We will continue to maximise our total spend on energy efficiency measures via external grant funding.</li> </ul> |
| We will plan for the transition to an all-electric fleet, used by our direct labour operatives, by 2030 | <ul style="list-style-type: none"> <li>✓ We'll pilot EV fleet and charging infrastructure across office locations by the end of 2025 in line with our office rationalisation and agile working plans</li> <li>✓ We'll pilot EV fleet and charging infrastructure across our key worker, student accommodation and care homes by 2026</li> <li>✓ We'll develop plans to scale up EVCP infrastructure to support the transition to electric fleet by 2030.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Continue to reduce greenhouse gas emissions across all our operations                                   | <ul style="list-style-type: none"> <li>✓ We'll work with our supply chain to reduce emissions from our maintenance activity to CO<sub>2</sub> emissions/per homes managed by 2026</li> <li>✓ We'll reduce emissions from our offices by 2026</li> <li>✓ We'll require our maintenance suppliers to use responsibly sourced materials by 2026</li> <li>✓ We will increase responsibly sourced office goods by the end of 2026</li> <li>✓ We'll update Sustainable Procurement Principles and apply these to all our procurement activity</li> <li>✓ We'll assess the viability and consider install options of PV, battery storage and LED lighting across our largest offices.</li> </ul>                                                                                                                                                                                                                                                                                                                                     |
| Evidence our commitments towards UNSDG through Environmental, Social and Governance reporting           | <ul style="list-style-type: none"> <li>✓ We'll produce an annual report evidencing our commitments and performance against environmental, social and governance goals</li> <li>✓ We'll work with other key stakeholders and partners in the sector to strengthen the transparency and integrity of the ESG reporting through the Sustainability Reporting Standards.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

<sup>2</sup> We are aware of properties where upgrades will be very challenging particularly for homes in conservation areas. This is in line with government policy documents such as the Green Growth Strategy which recognises this:

"We want all fuel poor homes to be upgraded to Energy Performance Certificate (EPC) Band C by 2030 and our aspiration is for as many homes as possible to be EPC Band C by 2035 where practical, cost-effective and affordable"



**It's important that we have a good understanding of the different architypes in our regions to plan the most efficient route to net zero carbon by 2050.**

Over recent years we've carried out multiple pilot retrofit programmes to build up the knowledge of our homes and how they perform, along with suitable measures that are bespoke to those homes. Every home is different and therefore requires an in-depth energy assessment to identify what work is needed to improve their energy efficiency.



These solid wall homes (above, left and right) received external wall insulation, triple glazed windows, new roofing, loft insulation and solar panels.



These bungalows (above, far left and left) needed different measures and received cavity wall insulation, loft insulation, air source heat pumps and solar panels to improve their energy efficiency.

# CLIMATE RESILIENCE AND ADAPTATION

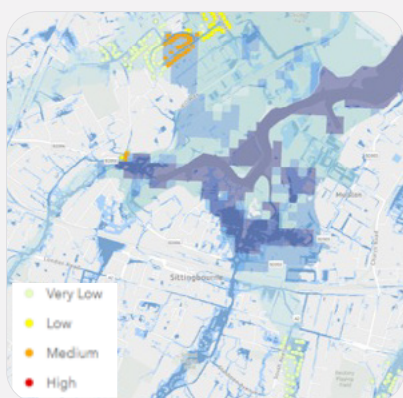
Strengthening our resilience to climate change is not only important for the wellbeing of our residents, but also a critical step towards creating adaptive environments. As the impacts of climate change intensify, integrating flood and overheating resilience and adaptation measures not only safeguards our homes and communities, but also supports equitable solutions for a sustainable future.

The UKGBC divides climate related risk into two categories:

- Chronic hazards: slow to progress and cover long term changes to hazards such as changes to temperature, wind, precipitation, and soil erosion.
- Acute hazards: extreme in nature, occur quickly, and can include hazards such as heatwaves, storms and blizzards, droughts, floods and subsidence.



| OBJECTIVE                                                                     | WHAT WE'LL ACHIEVE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| We will identify flood and overheating risk to understand mitigation measures | <ul style="list-style-type: none"> <li>✓ We'll develop an updated flood risk assessment and apply it to our homes, offices and commercial portfolio by 2025</li> <li>✓ We'll develop an internal flood resilience standard and overheating adaptation standard by the end of 2026</li> <li>✓ We'll carry out risk assessments and mitigation planning for homes at high risk of flooding</li> <li>✓ We'll carry out risk assessments and mitigation planning for homes at high risk of overheating</li> <li>✓ We'll carry out overheating assessments for blocks of flats across our heat network portfolio to understand mitigation measures.</li> </ul> |
| Our new homes will be built with climate resilience in mind                   | <ul style="list-style-type: none"> <li>✓ All new homes will be built in low flood risk areas</li> <li>✓ All new homes will address overheating risk factors in line with best practice guidance (CIBSE TM59 and TM52)</li> <li>✓ New build designs will consider adaptation measures such as shutters, insulation and biodiversity.</li> </ul>                                                                                                                                                                                                                                                                                                            |
| Engage with our residents on flood and overheating topics                     | <ul style="list-style-type: none"> <li>✓ We'll implement a flood alert system to inform residents when flooding may occur in their area</li> <li>✓ We'll provide advice about staying cool during hot months, via our website</li> <li>✓ We'll continue to build our in house services to respond to flood events that affect our residents</li> <li>✓ We'll ensure that residents know what to do in the event of a flood and have incident management plans in place</li> <li>✓ We'll continue to provide general advice and resources for our residents on our website.</li> </ul>                                                                     |



We use our Geographical Information System (GIS) to assess flood risk of our homes by combining our property portfolio with flood risk maps from the Environment Agency.

These assess the risk of flooding from rivers and the sea and surface water, taking into account flood defences and their condition (see map, left).

Overall, 93% of our homes are at low or no risk of fluvial or coastal flooding. And 91% of our homes are at low or no risk of surface water flooding. We've also signed up to a flood warning service, which provides tailored flood warning if any homes are at risk of surface water flooding in the next 24 hours.

All new homes undergo a CIBSE TM:59 overheating assessment at the planning stage and we make changes to the building fabric and layout where required. We undertake a full dynamic thermal model for each block including all communal areas, stair cores and entrance lobbies; plus a sample of rooms in homes.

## NATURE AND GREEN SPACES

Biodiversity is the term given for variety of all life on Earth. This includes animals, plants, fungi, and bacteria. It's important that we recognise the balance between nature and green spaces and the wellbeing of our residents and staff, because all these living things work together to create healthy environments, clean air, and fresh water.

Since monitoring began in the 1970s, 56% of our wild plants and animals have declined (source: Wildlife Trust). This comes partly down to loss of habitat as our wildlife is losing its home and sources of food and water. Urban development has increased, meaning there's less space for nature. Climate change is damaging the habitats that are left. This is not only critical for wildlife, but for us too. As a housing provider, we need a green infrastructure to help reduce overheating, prevent flooding and trees to help to reduce air and noise pollution

We're committed to increasing and protecting animals, plants, and their homes within our land ownership to support healthy and happy futures for us all. We're co-creating a biodiversity action plan with our residents and staff to capture our priorities into the plan.



| OBJECTIVE                                                                                                              | WHAT WE'LL ACHIEVE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| We'll develop and record our natural asset baseline                                                                    | <ul style="list-style-type: none"> <li>✓ We'll complete our natural asset audit by the end of 2025, using GIS and surveys to update our records of land and vegetation in our ownership</li> <li>✓ We'll create and enhance habitats specific to regions to support local flora and fauna and use GIS to record habitat creation and enhancement measures</li> <li>✓ We'll review and update our estate services procedures in line with the action plan and baseline</li> <li>✓ We'll publish and implement our biodiversity action plan</li> <li>✓ We'll review the use of chemicals in our services and operations that are detrimental to the environment and seek alternatives</li> <li>✓ We'll ensure at least 10% of biodiversity net gains is applied to all new builds from 2024.</li> </ul> |
| We'll raise skills and awareness across our organisation, and supply chain                                             | <ul style="list-style-type: none"> <li>✓ We'll develop a biodiversity working group across departments to ensure actions within the plan are delivered</li> <li>✓ We'll keep our leadership team and Board updated with progressions in the biodiversity landscape including our contribution as an organisation</li> <li>✓ We'll continue to partner with a supply chain who is committed to reducing their environmental impact</li> <li>✓ We'll ensure the link between wellbeing and biodiversity is understood across the organisation through planned activities and training opportunities</li> <li>✓ We'll promote campaigns throughout the year highlighting seasonal topics.</li> </ul>                                                                                                     |
| We'll increase resident engagement and participation on health and wellbeing topics related to nature and green spaces | <ul style="list-style-type: none"> <li>✓ We'll seek resident input when designing greens spaces in our new builds</li> <li>✓ We'll develop guidance for residents who don't have gardens so they are not excluded</li> <li>✓ We'll continue to invite our residents to community initiatives such as tree planting</li> <li>✓ We'll provide information on our internet and social media pages to keep our residents updated with local events and campaigns that they can join.</li> </ul>                                                                                                                                                                                                                                                                                                           |

We're developing our Biodiversity Action Plan. The first step is to undertake a natural asset audit using data stored in Geographical Information Systems (GIS), which shows that 12% of the land we own is classified as natural by the Ordnance Survey.

Over half of our grounds maintenance responsibilities are also mapped in our GIS, specifying the specific ground cover from grass to shrubbery to woodland. We're undertaking a tree survey, and so far, have mapped nearly 17,500 trees, collecting information on tree species age, structure and condition. We know improving and increasing biodiversity and open spaces and having access to community space is also important for residents. To support housing providers and residents enhance open spaces, we developed a Biodiversity Toolkit with the UK Centre of Ecology and Hydrology. We're currently consulting residents and other stakeholders to gain their insight in developing our Biodiversity Action Plan.

Mandatory biodiversity net gain (BNG) as set out in the Environment Act 2021 applies in England only by amending the Town & Country Planning Act (TCPA) and is expected to become law in 2023, following a consultation in 2022. In preparation, we commissioned a research report to analyse two current developments and assess what changes we'd need to make in order to meet the target 10% net gain in biodiversity. It highlighted the need to undertake BNG assessment early in the design process.



Proposed changes included installing green roofs, replacing ornamental planting with native scrub and replacing some mown lawns with ponds. As part of our Biodiversity Action Plan, we'll establish how we'll measure and monitor BNG on new schemes, once guidance is published.

At a local level, we've set up a number of nature and gardening projects with residents leading the way, and contractors providing funds and the labour. All projects aim to have a wide impact on the whole community, as well as improving biodiversity.



## HEAT NETWORKS AND ENERGY

We're working to improve the efficiency of our energy services and heat networks to ensure our residents have warm, comfortable homes with affordable energy bills.

We provide heating and hot water to around 11,000 homes via 160 heat networks. Where viable these 11,000 homes will have dedicated energy bills as required by the Heat Network Metering and Billing Regulations 2014. This method of charging will reduce carbon emissions and save residents money on their heating bills where they manage their usage.

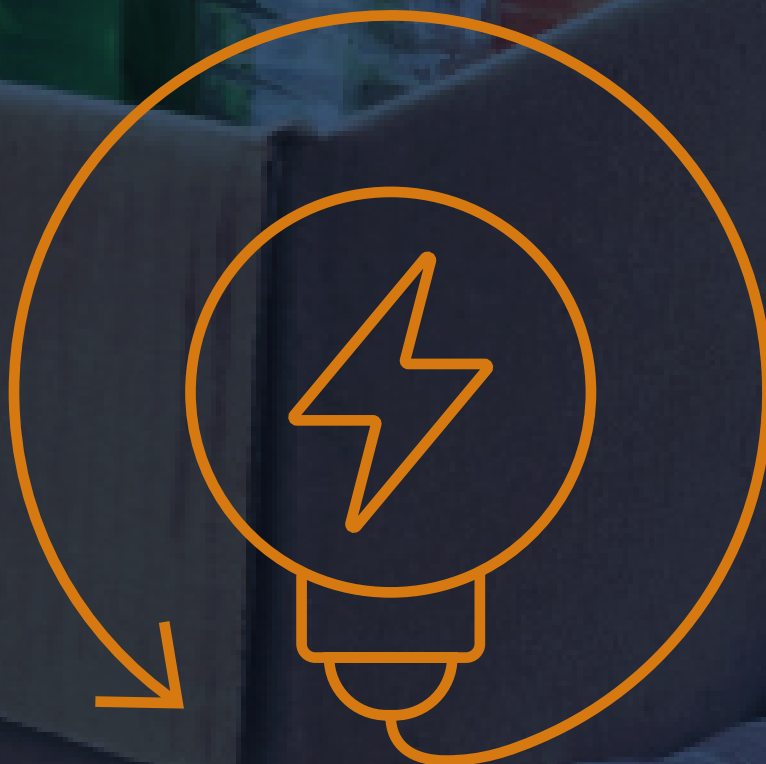


| OBJECTIVE                                                                                                                                                                  | WHAT WE'LL ACHIEVE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Improving efficiencies of our heat networks in line with the Heat Network Metering and Billing Regulations 2014, and the incoming Heat Network Market Framework (due 2025) | <ul style="list-style-type: none"> <li>✓ We'll carry out efficiency review of all heat networks including control settings, boilers, pumps and bypass valves</li> <li>✓ We'll continue to deliver compliancy under Heat Metering and Billing regulations</li> <li>✓ We'll conduct a regulation readiness review focusing on our service quality, performance and decarbonisation planning</li> <li>✓ We'll capture the heat consumption of all our heat network residents on key metrics</li> <li>✓ We'll explore zoning opportunities with strategic partners</li> <li>✓ We'll ensure new heat networks support the incoming Future Homes Standard (due 2025) so that new buildings can run on lowcarbon heating.</li> </ul> |
| Achieving Net Zero Carbon across our heat networks                                                                                                                         | <ul style="list-style-type: none"> <li>✓ We'll develop a heat network decarbonisation roadmap detailing our targets between now and 2050</li> <li>✓ We'll regularly review and update our ER's to ensure system specification is correct at the outset</li> <li>✓ We'll conduct net zero surveys across all our heat networks by 2025 to identify measures</li> <li>✓ We'll develop a data improvement plan.</li> </ul>                                                                                                                                                                                                                                                                                                       |
| Reduce energy consumption across our property portfolio                                                                                                                    | <ul style="list-style-type: none"> <li>✓ We'll collate energy usage and spend across our students and key worker accommodation, and develop reduction strategies</li> <li>✓ We'll consolidate utility contracts and seek improved value for money</li> <li>✓ We'll explore ISO50001 / 14001 to support in achieving reduction plans</li> <li>✓ We'll implement an LED lighting programme across our communal areas</li> <li>✓ We'll conduct solar feasibility surveys across our student and key worker sites</li> <li>✓ We'll carry out a pilot solar PV install programme to homes where fabric first measures do not achieve EPC C results.</li> </ul>                                                                     |

## AWARENESS AND REDUCING CONSUMPTION

We want to empower our residents, staff, and our supply chain to commit to reducing their environmental impact. We know that one person alone cannot change the world, but together we can make a difference. That's why we'll support in the awareness of individual environmental footprints and ways that it can be reduced.

We'll focus on four reduction categories: waste, water, energy and pollutants. We'll develop targeted campaigns throughout the course of this strategy and combine our results into annual carbon reporting and ESG publications.



| OBJECTIVE                                                                                            | WHAT WE'LL ACHIEVE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reducing water use across our homes, offices and commercial portfolio through a water reduction plan | <ul style="list-style-type: none"> <li>✓ We'll review the viability of water meters in our homes and offices to capture better consumption data</li> <li>✓ We'll aim to help residents reduce their water consumption to 139.6 litres per person per day by 2026</li> <li>✓ We'll install a water meter and water saving devices in all our new builds</li> <li>✓ We'll aim to reduce our water consumption to 15.65 cubic meters per employee per year by 2026</li> <li>✓ We'll continue to provide information on water efficiency across our internet and social media pages for residents, key workers and students.</li> </ul>                                                                                                                                                                                                                            |
| Reducing waste in our homes, offices and commercial portfolio                                        | <ul style="list-style-type: none"> <li>✓ We'll aim to install smart meter technology in all voids from 2025.</li> <li>✓ All new homes will have internal recycling facilities</li> <li>✓ We'll divert 89% of our office waste from landfill by 2026</li> <li>✓ We'll run annual recycling campaigns to help residents, key workers and students reduce their waste</li> <li>✓ We'll raise awareness of the consequences of fly-tipping through various campaigns</li> <li>✓ We'll develop a re-use policy across our key worker and student accommodation portfolio to ensure furniture and white goods are re-used where appropriate during refurbishments.</li> </ul>                                                                                                                                                                                        |
| Reducing energy usage in our homes, offices and commercial portfolio                                 | <ul style="list-style-type: none"> <li>✓ We'll install a smart meter in all voids so residents can track and manage their energy usage</li> <li>✓ We'll provide an energy advice service available to all our residents</li> <li>✓ We'll provide seasonal energy-saving guidance through our website, social media pages and through podcasts and live Q&amp;A sessions to residents, key workers and students</li> <li>✓ We'll continue to build our team of resident sustainability champions to help share their experience and encourage other residents</li> <li>✓ We'll review usage and occupancy at our offices and develop energy reduction campaigns with staff.</li> </ul>                                                                                                                                                                          |
| Reducing pollutants in our homes, offices and commercial portfolio                                   | <ul style="list-style-type: none"> <li>✓ We'll provide cycle racks in all our new homes and provide address specific transport advice in all new tenancy packs</li> <li>✓ We'll use our website, and social media platforms to promote sustainable transport options</li> <li>✓ We'll develop an internal sustainable travel plan to reduce our business mileage to 4.5kg co2 emissions/per home managed by the end of 2026</li> <li>✓ We'll roll out carbon literacy training to all employees by 2026</li> <li>✓ By the end of 2024, we'll review cleaning supplies across our offices and operations to ensure that they are not causing harm to the environment</li> <li>✓ We'll review our office plastic use and develop a reduction plan</li> <li>✓ We'll signpost residents to available advice via our webpage and social media platforms.</li> </ul> |

