



***Greener homes
Greener lives***
Improving communities through sustainability

Sustainability Framework

November 2022

[wheatley-group.com](https://www.wheatley-group.com)

Sustainability has always been at the heart of Making Homes and Lives Better. This Sustainability Framework, our first, provides a platform for the actions we will take to play our part in helping to address the climate crisis, both at a national level and, as importantly, within our homes and local communities

While we have a contribution to make in achieving a broad range of sustainability objectives, we need to focus our efforts, priorities and investments in areas where we can, and must, have greatest impact. As such, our focus, in order of priority, will be:

reducing emissions from our existing homes; building new homes that are energy efficient and do not rely on fossil fuel for heating; and ensuring we minimise the impact of our business operations on the environment, including being carbon neutral by 2026.

All other aspects of our business will make a supporting contribution.

Our overarching outcomes will be:

Existing homes

Achieve EESSH2 target by end 2031/32 (and have over 60% of RSL properties at EPC B by end 2027/28)

Net-Zero emissions from all properties where technically feasible by end 2043

New Homes

All properties at minimum of EPC B and with Net-Zero heating systems in line with planning timescales (no approvals with fossil fuel after 2024)

Business operations

Carbon neutral by end 2026 including decarbonised fleet where feasible, and use of green electricity

Supporting contributors

Build understanding and support action including among staff and communities to address climate emergency

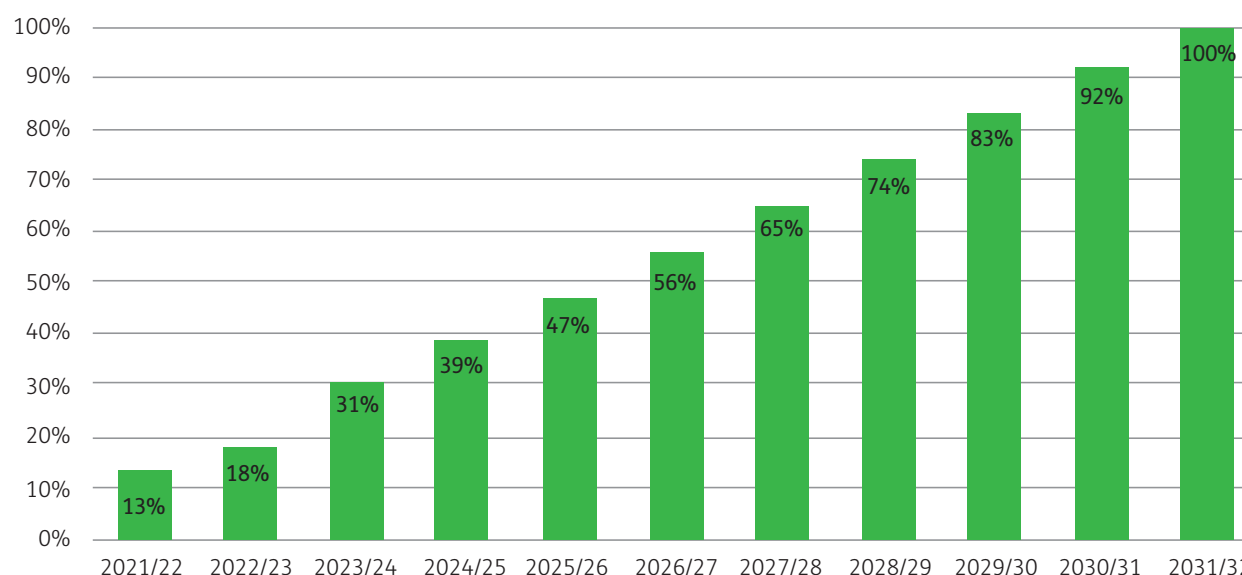
Progress towards these outcomes, and other objectives and targets defined through this framework and included in the supporting Action Plan that we are developing, will be monitored through a sustainability performance measurement framework that will be embedded in Board and Executive Team reporting. This measurement framework will be added to our established Group-wide reporting mechanisms. We will also prepare a progress report each year to the Wheatley Board which will be reviewed in advance by our expert Pathway to Net Zero Advisory Group.

Our existing stock

We have invested significantly in improving our stock, including its energy efficiency. Here we go further and set an aspiration to have Net-Zero direct emissions from heating our homes by 2043. Initially our priority will be improving the fabric of our homes. In doing this, our aim will be to meet Scottish Government's targets. Our initial target, which will be refined once the EESSH2 review is complete, will be to improve the energy performance ratings of our homes to EPC B, where it is technically and economically possible, by March 2032.

We intend to make progress to this target as follows:

Proportion of properties (where feasible) at EPC B



Heating systems

Improving the fabric of our buildings alone will not achieve Net-Zero. We will also need to replace heating systems that rely on natural gas and other fossil fuels with zero-carbon alternatives. Changes that do this, must improve affordability of heat for our customers and help address fuel poverty. We do not believe there is a one size fits all solution to this challenge. As such we expect to deploy various current and future approaches, with heat networks including where these are shared with others, individual heat pumps,

local generation, smart controls and future technological innovations all having a part to play.

New homes

We will also be raising the bar on the sustainability of the new homes we build. We are already going over and above current Building Standards, to deliver progressive energy and carbon reduction targets, as well as exceeding sustainability and environmental targets. We continue to push ahead in a range of key areas like zero direct emissions heating

systems, a fabric first approach, ensuring homes have at least an EPC of B, embracing 20-minute neighbourhoods in our urban areas and piloting modern methods of construction, including closed panel systems and modular construction.

Close working with our suppliers will be essential as we look to the market to develop innovative construction solutions and more modern methods. We will encourage this through productive working relationships with our contractors, that give them the confidence

and incentive to work in new ways. This will help us balance the twin requirements to maximise the number of homes we can afford to build with the increased costs that come from ensuring they are highly environmentally sustainable.

Our business operations

We have already committed to being carbon neutral in our corporate estate by 2026. This framework reinforces this, including through our commitment to using only renewable electricity by the end of 2025 and transition to a carbon neutral fleet, where possible no later than 2026. This new fleet will help ensure emissions from our neighbourhood and environmental services are minimised. We will also aim to continue making a positive contribution in our communities, including through looking to increase cycle infrastructure, EV chargers and green spaces which meet the aspirations of our communities and where there is suitable funding available.

Making the change

This framework recognises that our aim of Net-Zero will take much more than initiatives and targets. It will also require change in how we think and act, and our behaviours each day to ensure alignment with sustainability objectives. Having informed and empowered staff and communities, making their own

decisions on how to reduce their negative impact on the environment will be at the heart of achieving this.

Balancing reducing emissions and reaching Net-Zero with other priorities such as ensuring our rents continue to be affordable, our services are exceptional, and our investment in homes meets the needs of customers, is essential. As is continuing to build new homes which meet housing demand and ensuring the long-term stability of our business. To achieve this balance, our investment in reducing emissions will be integrated as part of our business planning and phased to ensure we spend what we can afford and leverage the external funding – both public and private – which will be needed to improve energy efficiency and achieve Net-Zero.

In setting out this sustainability framework, we are also clear on what must not change – namely our commitment to excellent services, affordable rents and meeting the needs of the people we work for.

Continued development

Our aim through our first sustainability framework is to:

- define where we will focus and our initial priorities and actions;
- integrate our many activities which

contribute to sustainability and build a platform for further development;

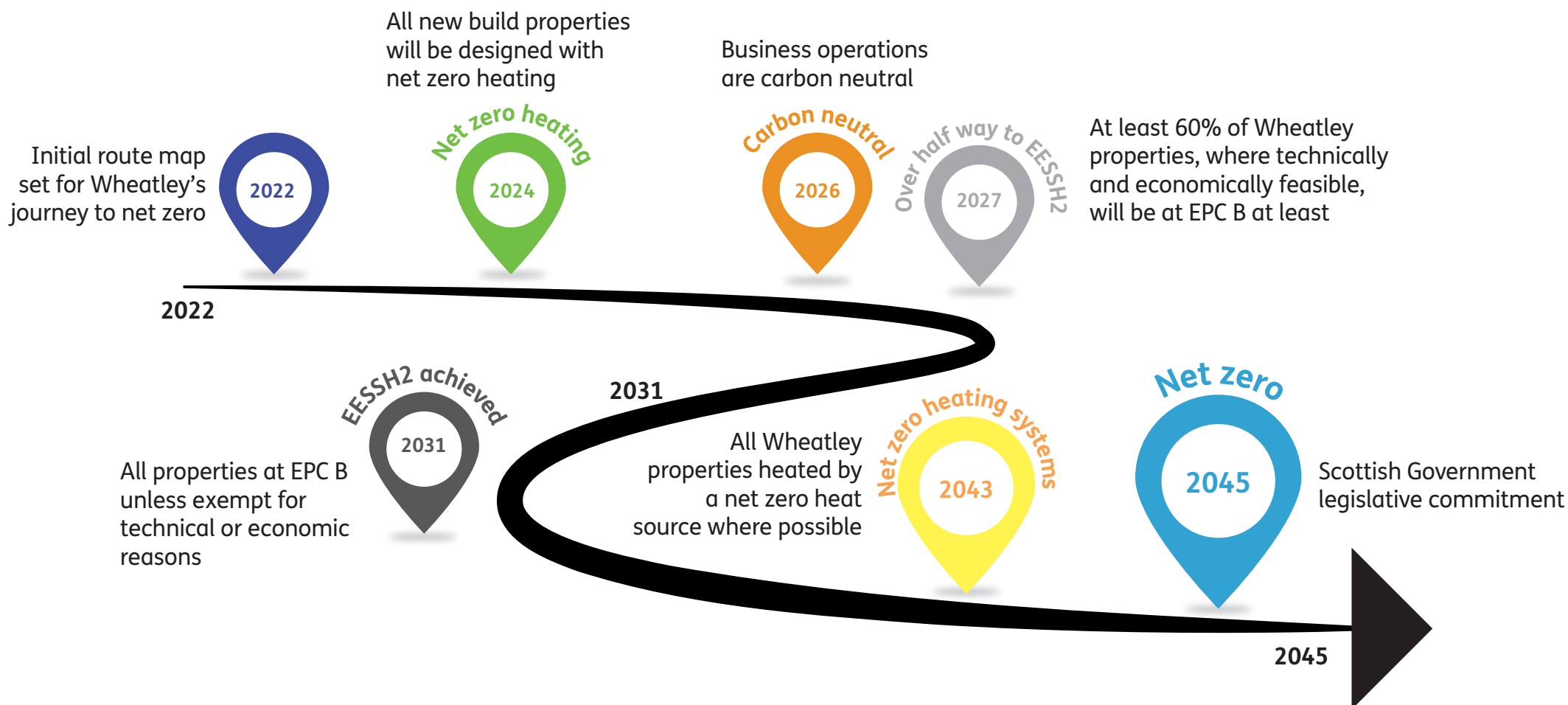
- and build momentum for a journey which will ultimately lead to Net-Zero.

We know that that this framework is only a first step and that it cannot provide all the answers or a defined route map to Net-Zero. However, it does define our ambition and the actions we will take based on what we know now. As such, the framework will evolve as policy and technology develops. Benchmarking, aligning with sustainability standards as they mature and external validation will also help ensure we have an informed approach to future development and priorities.

We will periodically review and update this Framework to ensure we maximise our positive impact, and remain on track as we get closer to realising our ambition of Net-Zero. The first of these reviews and updates will take place towards the end of next year (2023/24) following the completion of Scottish Government's EESSH2 review.

Our route-map

For now, our route map to Net-Zero as follows:



Structure of this framework

The remainder of this framework is structured as follows:

Section 1	The climate emergency	Page 7	Here we set out the policy context that will direct our sustainability actions and the drivers for change we need to respond to
Section 2	Strategic approach	Page 11	Outlines our primary focus, from a sustainability perspective, and supporting contributors
Section 3	Our existing homes	Page 14	Includes details of current energy performance, our future ambition, and the approach – based on archetype segmentation and decarbonising heating systems
Section 4	Our new homes	Page 21	Sets out the standards we will aim to achieve, including in building sustainable communities and considering embodied carbon and payback as part of regeneration opportunities
Section 5	Our business operations	Page 27	Detail how we will reach carbon neutral in our corporate activities, including how we will align our funding and procurement activities
Section 6	Our supporting contributors	Page 33	Spans all other aspects of our business and our suppliers to ensure we maximise impact
Section 7	Delivering on our framework	Page 37	Provides a brief overview of our strategy

Section 1: The Climate Emergency

The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet and ensure all people enjoy peace and prosperity.

The 17 Global Goals are integrated – they recognise that action in one area will affect outcomes in others, and development must balance social, economic and environmental sustainability.

More detail on the Global Goals can be found at **Sustainable Development Goals | United Nations**. We believe our approach to Making Homes and Lives Better aligns with the aspirations that have shaped the Global Goals.

The Global Goals are driving global and public policy on sustainability and, while not all are directly applicable to us and this framework, many are. As such, they provide context for this sustainability framework.





National and local policy context

In 2019, the Scottish Government declared a climate emergency with a target for Net-Zero greenhouse emissions by 2045. It also sets the policy context for Scottish Government strategies which have a direct impact on our priorities and how we operate. Housing to 2040 aims for 'affordable warmth and zero emission homes'. Further details are provided in the Scottish Government's Heat in Buildings Strategy, including the timeline for compliance with regulatory standards on the following page.

Extract from Scottish Government's Heat in Buildings Strategy, 2021

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Private rented housing (PRS)	Consult and legislation				Minimum EPC C with all new tenancies			All to comply																	
Owner occupier	Consult and legislation				At trigger point buildings required to:achieve a good level of energy efficiency to EPC C rating (where not technically feasible/ cost-effective, minimum levels of Fabric Energy Performance of walls, roof and windows to be met)									All to comply*											
Owner occupier and PRS					(Subject to technological developments and decisions by the UK Government in reserved areas) phase out the need to install new or replacement fossil fuel boilers, in off gas from 2025 and in on gas areas from 2030, and install a zero emission heating supply such as electricity, heat network, or over time potentially 100% hydrogen to allow time for gas grid to decarbonise																				All to comply*
Social Housing	EESHS 2	Review	Standard requiring a good level of energy efficiency , equivalent to EPC B where technically feasible and cost effective									All to comply													
Multi tenure/ Mixed use	Consult and legislation				Standard requiring a good level of energy efficiency, equivalent to EPC B where technically feasible and cost effective																				All to comply*
					(Within scope of devolved powers) installation of zero emission heating system such as electricity, heat network, or over time potentially 100% hydrogen to allow time for gas grid to decarbonise																				
Non domestic buildings	Consult and legislation				More challenging energy improvement targets to reduce demand for heat and ensure zero emissions heat supply to apply at trigger points																				All to comply*
Public sector buildings	Application and roll out of Net Zero Carbon Public Buildings standard for new and major refurbished buildings development and consultation on a series of phased targets starting in 2024 for all cubically-owned buildings to meet zero emission heating requirements, with a backstop of 2038 (for the most difficult buildings like hospitals)																								

* Backstops could be set earlier for example for zones for zero emissions heating.

† All new buildings includes domestic and non-domestic buildings.

†† In advance of requiring zero emissions heating, the Scottish Government consulted in July 2021 on an interim change to Building Regulations standard 6.1

From 2022 this would reduce the emission target rate for new building, in anticipation of the further tightening in 2024. consult.gov.scot/local-government-and-communities/building-

Our response

We recognise that sustainability is not only about meeting targets or even reducing emissions – it is about changing lives and communities for the better, as illustrated by the Global Goals and our established commitment to Making Homes and Lives Better. The Scottish Government define this as a just transition. This is one that supports a Net-Zero and climate resilient economy in a way that delivers fairness and tackles inequality and injustice, through delivering the outcome of ‘a fairer, greener future for all’ and the process which is undertaken in partnership with those impacted by the transition to Net-Zero. For us, a just transition will be one where: our investment in reducing emissions from our buildings and their heating systems makes warmth more affordable for customers and helps reduce fuel poverty;

- our investment to reach Net-Zero does not unfairly disadvantage those least able to afford it i.e. our tenants - through increased rents, reduced service or lower investment in other areas;
- our contribution through Better Homes, Better Lives is not compromised through additional sustainability-related objectives;
- our communities benefit from ‘Green Jobs’ including through
 - our repairs and investment delivery joint venture with Glasgow City Council, City

Building (Glasgow) LLP and our in-house repairs services,

- staff being upskilled to meet future need and access opportunities including in renewable energy infrastructure installation and maintenance, modern construction methods and retro-fit;
- customers having access to the training, skills and support needed to build the skills and experience required for jobs in the future
- and our communities and staff are engaged, including through having access to training initiatives and resources, to build understanding and make active contributions through shaping our sustainability delivery priorities and undertaking local initiatives.

Our partners in key local authorities where we operate have also made clear their policy commitment to Net-Zero, with the City of Edinburgh Council declaring a climate emergency in 2019 and committing to work towards a target of Net-Zero emissions by 2030 for both city and corporate emissions. The Sustainable Glasgow Partnership aims to position Glasgow as a leading city in the development of the green and wider circular economy and supports the city’s ambition of becoming Net-Zero Carbon by 2030. We share the commitment of these key partners and will continue to work with them to maximise

impact in addressing the climate emergency.

Achieving Net-Zero will be challenging. It will require technological solutions, external funding, support from Government, and new relationships including with innovative suppliers and those with expertise in decarbonisation. Our relationships and conversations will also develop to one where sustainability and contribution to Net-Zero are a particular focus. We also need to better understand the impact we have on the environment, including how we measure this across our business activities and our supply chains. Furthermore, sustainability consideration needs to be at the core of our decision-making and the conversations we have with our communities, including tenants, people we work for and staff.





We are already well aligned with the Global Goals, although we have not necessarily developed our priorities and approaches with this specifically in mind. Instead, we have focused on priorities closer to home through our mission of Making Homes and Lives Better. To deliver our sustainability ambition and to understand the positive impact we make to the Global Goals we will create a line of sight between these and each part of our business that has a role to play. We will do this by setting out the outcomes we expect the targets to deliver and the frameworks by which we will measure success. Our primary focus will be on the following three key parts of our business:

- our existing homes;
- our new homes;
- and our business operations, including procurement, finance/treasury, IT, people, and facilities.

The main outcomes we will look to achieve in each of these areas through this sustainability framework are:

	Existing homes	New homes	Business operations
Global Goals	3. Good health and wellbeing 6. Clean water and sanitation 7. Affordable clean energy 11. Sustainable cities and communities 13. Climate action	6. Clean water and sanitation 7. Affordable and clean energy 11. Sustainable cities and communities 13. Climate action	4. Quality education 5. Gender equality 10. Reduce inequalities 12. Responsible consumption and production 13. Climate action
Outcomes	<p>Our homes meet regulatory requirements and Net-Zero by 2043.</p> <p>We have at least 40,000 homes (over 60% of properties) at EPC B by 2027/28 – an increase of almost 50% points on current levels, and all homes at required level by the end of 2031/32.</p> <p>We will have specific investment plans for our main property archetypes to improve energy efficiency.</p> <p>The low carbon heating systems we introduce will not only reduce emissions, but also fuel poverty.</p>	<p>Our homes will take an ambitious fabric-first approach with zero emission heating systems which deliver the best outcomes for our customers.</p> <p>We will pilot modern methods of construction.</p>	<p>We will be Net-Zero in our business operations by 2026.</p> <p>Our people will have the knowledge they need to lead in sustainability.</p> <p>Reducing emissions and our impact on the planet will inform our decisions and actions. We will raise grant and loan funding to support required sustainability related investment.</p> <p>Our staff and communities have the knowledge and support they need to make a positive contribution in address the climate emergency.</p>

Our primary focus will be supplemented by **supporting contributions** including:

- our neighbourhood and environmental operations;
- our housing operations;
- our care operations;
- our Wheatley Foundation;
- and our third parties and suppliers.

Key outcomes for our supporting contributors will include

Supporting contributors	Global Goals	Key outcome
Neighbourhood and environmental operations	11. Sustainable cities and communities 13. Climate action	Our communities will include environments that enhance the value for people who live there and have a positive impact on sustainability.
Housing operations	1. No poverty 2. Zero hunger 3. Good health and wellbeing	We will continue our focus on Better Lives; reducing hunger, poverty, and lack of affordable warmth.
Wheatley Foundation	1. No poverty 3. Good health and wellbeing 4. Quality education	We will help people out of poverty, improve wellbeing and support educational initiatives, particularly for younger children.
Care operations	3. Good health and wellbeing	We will continue to ensure our care provision creates sustainable health and well-being improvements, enhances community engagement and creates informal support networks which enable people to stay well and in their own homes.
Third party suppliers	12. Responsible consumption and production	We will increasingly use our leverage to reduce emissions in our supply chain.

Section 3: Our existing homes

OUR KEY ACTIONS

- Develop archetype segment investment plans for our stock
 - Pilot approach in 2022
 - Full approach in place 2023
 - Embed in our asset investment planning from 2023
- Create a policy that sets out how we will assess properties where it will be economically and technical feasible to achieve EPC B in 2023
- Work with third parties to leverage external funding on an ongoing basis
- Ensure all Lowther Homes properties are at EPC C by end of 2024
- Continue to roll out Connected Response
- Develop a strategy for our distributed heat systems and networks by end 2023/24
- Ensure our heat networks operate with at least 60% network efficiency by 2025



The Scottish Government is planning to develop the EESSH2 requirement, so it more closely aligns with achieving Net-Zero and wider environmental considerations. Irrespective of the detail of this policy update, which is expected in 2023, investment to improve the fabric and energy performance of our existing homes will be essential. For now, the Scottish Government has indicated that:

‘While the review is underway the current EESSH2 2025 and 2032 milestones will be put on hold temporarily to ensure that any investment is targeted toward long-term solutions that deliver Net-Zero and support the eradication of fuel poverty. Whilst the review is underway, social landlords should continue to invest in energy efficiency measures to help reduce running costs, and in zero emissions heating systems where appropriate’.

Organisation	EPC B	EPC C	EPC D
Stonewater	5.8%	59.6%	33.3%
Clarion	3.2%	29.3%	35.1%
Optivo	7.5%	63.2%	27.5%
Sanctuary	60%		40%
Platform	34.0%	38.0%	23.0%
Wheatley	13.9%	76.0%	10.1%

Source: Others, published ESG reports 2020/21

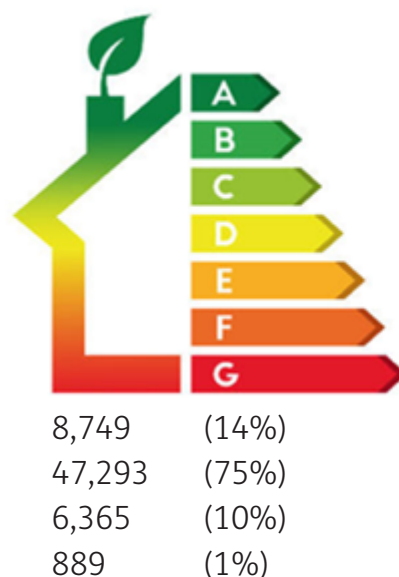
The energy efficiency of our Registered Social Landlord (RSL) homes is good relative to our peers, reflecting the investment we have made over the past decade and more. Currently, we estimate around 200,000 tonnes of CO₂ is produced each year from our homes. Reducing the emissions from our homes to Net-Zero by 2042/43 – three years earlier than the Scottish Government’s target for ‘almost all’ housing is the key objective from this framework. We will do this through initially investing in the fabric of our properties and then through low and zero emission heating systems.

Our priorities in doing this will be to:

- make sure all applicable policy and regulatory requirements, including revised EESSH2, are met;
- ensure all properties meet required energy-performance ratings, unless not technically feasible or cost effective;
- to have defined criteria for assessing where it is not cost-effective or technically feasible for a property to achieve a required energy efficiency;
- have defined energy input levels our properties / archetypes;
- migrate existing heating systems to low and zero carbon alternatives and make use of modern control systems to reduce emissions, where cost effective for installation and ongoing heating bills and where technically

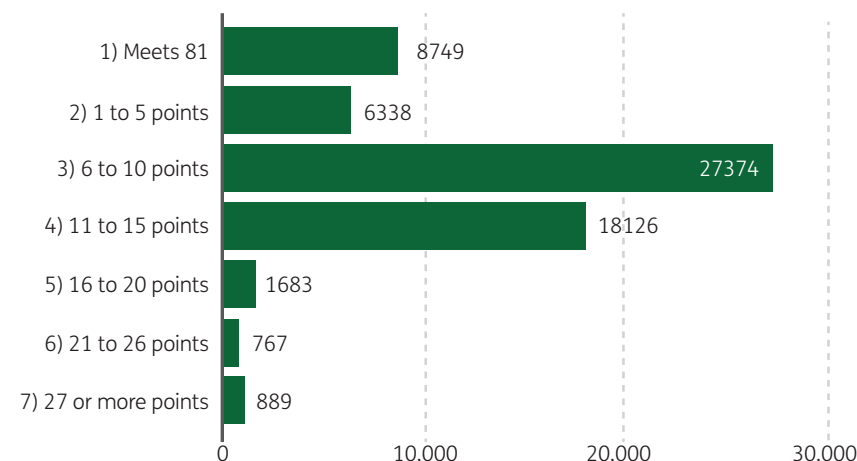
feasible;

- reduce the risk of fuel poverty through our investment in heating systems and not prioritise reducing emission over affordability for customers;
- prioritise long-lasting, robust and sustainably sourced materials, and introduce traceability for materials used in our repairs and investment service;
- and operate our district heating systems to maximise performance efficiency and on a financial breakeven basis.



Our existing properties

Group-wide we have an extensive mix of properties that have been built at various periods since the beginning of the last century. Overall energy performance and the distance to travel in terms of meeting the EESSH 2 requirement, as currently articulated, of EPC B for our Group RSL properties, where economically and technically feasible, is as follows:



There is, as might be expected, variability across Group partners with Wheatley Homes South – given its historic investment and stock portfolio – having furthest to travel. There is also variability depending on when properties were built, the timing of external wall insulation (where applicable), investment to date and the property archetype, as well as the heating system that is used. As part of our fabric-first approach to improving energy performance, unique energy-efficiency investment solutions will be established for different combinations of build period, archetype, EWI and heating system. These ‘archetype segment solutions’ will provide us with investment packages tailored to reflect the variation in current energy performance in our stock due to archetype/heating system/build year.

Our analysis shows we have approximately 75 archetype segments across our stock, with the main ones in terms of units, where work is needed to reach at least EPC B (81 SAP points) shown opposite.

Year	Architype	EWI		
		EWI Post 2000 (number of units)	EWI Pre-2000 (number of units)	No EWI (number of units)
Pre-1919	Tenements			1150
1919 to 1944	Houses	2878		
	Houses - 4inBlk	3345		
	Tenements	2462		
1945 to 1964	Houses	3300		1864
	Tenements	5385	1710	
	MSFs	2633		
1965 to 1982	Houses	1442		
	Houses - 4inBlk			1606
	Tenements	3399		
	MSFs	7693		

Developing tailored solutions for each archetype segment will take time. We will start by piloting the approach with priorities agreed in discussion with the experts on our Pathway to Net-zero Advisory Group. Provided the pilot is a success, we will scale the approach, focusing initially on the priority areas identified above.

Information from the archetype segment energy-efficiency solutions will inform our future investment plans. These plans will be developed alongside wider stock-related investment priorities to ensure we maintain the value of our asset and deliver value for customers. Wherever possible, energy-efficiency works of a similar type, in defined geographic areas, will be delivered in programmes to ensure value for money. Priorities for energy-efficiency related investment will be driven by a mix of greatest impact in improving energy performance rating and reducing the required energy to warm the home. We will also, as we are doing now, adopt whole house improvement approaches which dramatically improve energy performance and value for customers. When doing this, we will include a zero-carbon heating solution to future-proof for our Net-Zero objective. Overall, we will aim to have over 40,000 properties (more than 60% of our properties) to EPC B by the end of 2027/28 and

to reach the revised EESSH 2 target – based on current understanding of timescales – by end 2031/32.

Lowther Homes

Energy-efficiency requirements in the Private Rented Sector (PRS) and Mid-Market Rent (MMR) differ from those for social housing stock. The key initial requirements are set out below:

- minimum EPC C for all new tenancies by end 2024;
- and all at EPC C by end 2028.

At present 94.5% of Lowther Homes stock is EPC C or above, with c.100 properties below this level. As with our social stock, archetype and property specific plans will be developed for the required works.

Beyond the EPC C requirements, PRS landlords like Lowther Homes are unlikely to be able to install replacement gas heating systems from 2030 and will instead be required to install zero emissions systems. We will meet all necessary requirements ahead of deadlines.



Heating systems

It is important to recognise we will not reach our Net-Zero ambition through fabric-first investment works alone. We will also need to address carbon emission from the heating systems in our homes. Summary information on our current heating systems is set out below:

Heating type	Number of units
Individual gas boilers	70%
Electric storage heating	15%
District Heating Networks (gas, ASHP, biomass)	5%
Gas-fired communal boiler (heat with rent)	4%
Air source heat pump	3%
Connected Response (electric storage controls)	2%
Ground source heat pump	0.5%
Oil/Other	0.5%

Decarbonisation of the natural gas network, or a suitable alternative to gas boilers in individual homes, will be essential in reducing our CO2 emissions. At present, suitable and affordable alternative approaches to replace natural gas are not available although alternatives, including hydrogen, microwave heating and individual or distributed ground/air source heat network and are at various stages of development from already deployed and operational to conceptual. Our initial priorities will be:

- preparing for the planned introduction of 20% hydrogen blend in the existing natural gas supply in, if current estimates prove correct, 2028;
- installing zero emission heating systems where these bring benefits, including reduced energy costs for our customers;
- developing our operating and delivery model for our heat networks, and collaborating with partners on future network development
- and optimising the efficiency with which current systems operate through enhanced control and management systems (for example Connected Response).

Installing zero emission systems

We already have some experience in low and zero carbon heating systems with air-source, ground source, biofuel and solar PV in use in parts of the Group. These systems have been

deployed at different times over the years and have recently been evaluated to understand their impact, especially from the customer perspective. In general, zero emission systems such as heat pumps were seen as beneficial by customers with the value increased when there is local generating and storage capacity – such as solar PV and battery, and where there is informed support to help the customer get the most from the system.

Going forward we will continue to design and install heat pumps and other applicable systems where they fit well with customer circumstances and make a positive contribution to reducing energy costs and fuel poverty.

Heat networks

We already have a significant number of customers connected to district and communal heating systems. However, development and deployment of these systems has taken place over many years, on a standalone system basis rather than as part of a wider heat network strategy. Going forward we will develop our heat strategy which will include options for upgrading and decarbonising existing systems including heat with rent, the role heat networks and wider local generation could play, whether current operating arrangements for our district heating

systems are as effective as they might and the extent to which alternative operating and asset ownership model might deliver better business and customer outcomes including Net-Zero. In parallel with developing our strategy, we will work with partners including local authorities through their local heat and energy strategies (LHEES) to develop opportunities to make use of heat networks. We see heat networks as offering the potential for effective Net-Zero solutions that meet our needs and those of our customers. Where applicable we will lead on developing heat networks including working with others to undertake joint development to maximise usage of any infrastructure we are looking to put in place.

Optimising efficiency

We have made significant progress in reducing demand for electricity through investing in the Connected Response smart control system, which is estimated to lead to up to a 20% reduction in energy consumption, mostly achieved by removing the need for supplementary heating from expensive secondary heaters as well as avoiding over-purchase of energy. This, coupled with the general move to 'green' electricity through replacing fossil fuels in the production process with wind and other renewable sources, should eliminate carbon from this heating source in the medium term. In the short term – next two



to three years – we will continue investing in Connect Response to help customers reduce demand, save money and have greater control over their heating.

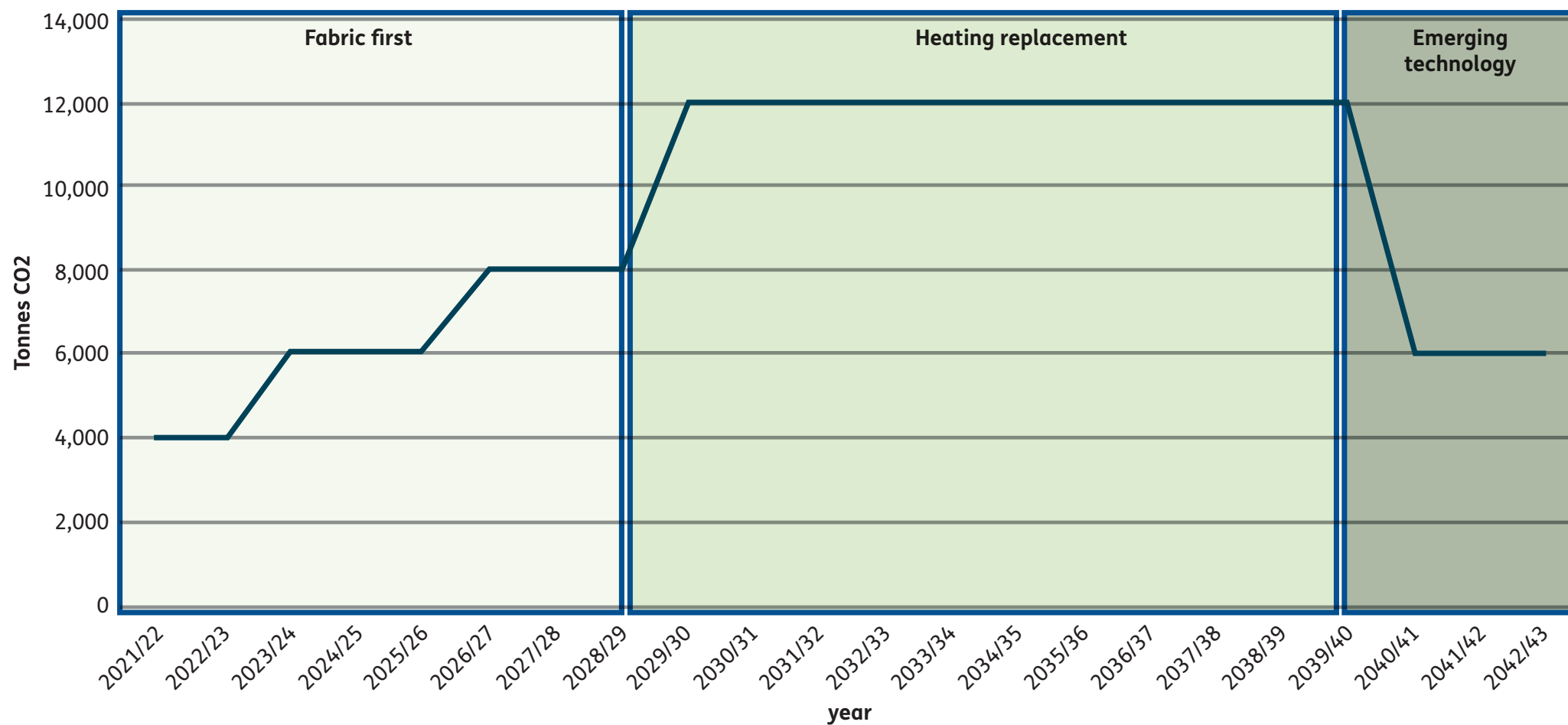
Significant gains can also be made in reducing carbon emissions and fuel consumption from our heat networks through better control systems. Preliminary analysis suggests many heat networks only operate on average at 30% efficiency because they are designed to meet heat demand on the coldest day and not controlled dynamically to reflect lower demand at other times. This results in an over-delivery of heat resulting in poor efficiency. Introducing dynamic control systems is

expected to reduce the required energy used by these systems by up to 50% with no noticeable difference in thermal comfort for customers. We will fully scope these solutions and develop the business and environmental case for their introduction.

Resetting our carbon reduction target

Currently we have set a target of reducing CO₂ emissions from our homes by 4000 tonnes a year. To reach Net-Zero we will need to increase this rate of improvement. The chart below resets our targets to achieve this aim. Our delivery plan will be updated accordingly.

Target CO2 reduction from properties



Section 4: Our new homes



OUR KEY ACTIONS

- Our new-build homes will meet the planning requirements in relation to no fossil fuel;
- We will size our solar PV systems to generate sufficient electricity to mitigate high cost of operating some systems;
- Our large scale regeneration proposals will include an assessment of 'carbon payback'
- We will explore the implications of design for deconstruction and look to incorporate requirements for this as part of future new-build standards;
- We will pilot modern methods of construction;
- Our new homes will be at least EPC B.

Housing to 2040 sets out ambitious targets for the delivery of new homes which are fit for the future and do not need to be retrofitted later to achieve zero emissions.

The Scottish Government is developing regulations which will require new buildings consented from 2024 to use zero direct emissions heating and will aim for all new homes delivered by RSLs and local authorities to be zero emissions homes by 2026. This will mean accelerating the introduction of zero emissions heating systems ahead of the 2024 regulations coming into force.

Alongside this, energy standards were reviewed through the building regulations in 2021/22 to deliver an improved standard under Section 6. This improved standard results in a 32% reduction in operational carbon emissions for new homes. A further review will be undertaken in 2024 to deliver improvements in energy efficiency and emissions reductions in new-build homes. This will contribute to removing poor energy efficiency as a driver of fuel poverty and make homes more affordable to heat.

A new Zero Emissions New-Build Affordable Homes Strategy is expected to be developed by Scottish Government which will focus on greater use of offsite construction, informed

by the findings of the Edinburgh Demonstrator project. Across Group we already make use of offsite manufactured open and closed panel systems with projects for modular housing also being considered. We will continue to explore offsite opportunities and its ability to deliver against our programme ambitions as the market matures. This will include working in partnership with Glasgow City Council (GCC) to pilot modular construction at a site in the city.



NPF4

The Draft Fourth National Planning Framework (Draft NPF4) sets out the Scottish Government's priorities and policies for the planning system up to 2045 and how the

approach to planning and development will help to achieve a Net-Zero, sustainable Scotland by 2045. The Framework intends to support the creation of sustainable places, where we reduce emissions and restore and better connect biodiversity; liveable places, where we can live better, healthier lives; productive places, where we have a greener, fairer, and more inclusive wellbeing economy; and distinctive places, where we recognise and work with our assets.

In particular, the draft Framework intends to:

- encourage low and zero-carbon design and energy efficiency, reduce the need to travel unsustainably, and diversify and expand renewable energy generation as well as securing positive effects for biodiversity, creating and strengthening nature networks and investing in nature-based solutions;
- create places with good-quality homes close to local facilities and services by applying the concept of 20-minute neighbourhoods or other local planning requirements in our urban areas and similarly in rural areas ensuring people can live well in places they choose;
- reshape city and town centres by re-using vacant and derelict land and buildings;
- limit urban expansion where brownfield, vacant and derelict land and buildings can be used more efficiently;

- enable more people to live and remain in rural and island areas;
- improve green infrastructure to bring nature into our towns and cities;
- ensure a Just Transition to a Net-Zero economy;
- develop a coherent strategy for the Central Belt Urban Area which focuses on climate change, responds to the challenges of the Covid-19 pandemic and tackles inequalities;
- and in the south of Scotland, the Framework intends to create a low-carbon network of towns, support sustainable development and decarbonise connectivity.

NPF4 will drive significant change in national policy and our approach to new homes. The Framework remains in draft at present, and we will continue to engage in consultation through representative bodies such as Homes for Scotland and the Scottish Federation of Housing Associations.

Grant benchmark

The grant benchmark level for new-build homes was reviewed in 2021. As part of this review, additional grant was allocated to sustainable features in new homes. However, the grant review was undertaken prior to the significant inflationary price increases which have been seen over the later part of 2021 and into 2022. Although the grant benchmark



is expected to be reviewed on an annual basis, there remains significant cost pressures in the delivery of new-build homes to new standards. We will continue to engage with Local Authorities and Scottish Government in relation to grant availability to support the ambitions set out in this framework.

Reducing emissions

Achieving zero emissions from buildings by 2045 will require vision and determination.

Scottish Government has set itself a legally binding challenge to have met 75% of this target by 2030.

Our aim is to build up to 10,000 homes as part of our commitment to Housing to 2040, during the transition to net zero, solutions for sustainability – built into each home – will be essential in not only playing our part in meeting legal obligations, but also in ensuring better outcomes for customers and communities.

We, as historically one of the largest builders of social housing in the UK, are in a unique position to push the sector forward and embed innovation as standard.

Setting minimum targets for development energy performance and carbon reduction is the task of Scottish Government Building Standards, however we can, and will, choose to go beyond the minimum in a range of areas. In doing this, we need to make trade-offs which will be compounded, especially in the early years of implementing this framework, by continuing volatility in prices of materials and commodities. By adopting enhanced design and specification standards, we are part of a movement across the construction industry. However, there is a recognition of risk as ‘first mover’ in terms of long-term reliability

of technologies and an increasing imposition upon householders to continually manage technologies within their homes. Our approach is to consistently reduce the energy demand input to a home through fabric thermal efficiency, design detailing and build quality.

Close working with our suppliers will be essential as we look to the market to develop innovative construction solutions and more modern methods. We will encourage this through deep and productive working relationships with our contractors, that give them the confidence and incentive to work in new ways.

Moving beyond compliance with standards

Over the duration of our Contractor Framework, up to 2027, we will move ahead of minimum compliance with standards and develop our solutions to achieve not only Section 6 (to meet progressive energy and carbon targets) and Section 7 (sustainability and environmental impact of buildings) of the Building Regulations, but also push ahead in a range of key areas.

We will continue to flex our approach to new-build delivery in line with building standards’ aspirations and review of the grant benchmark level, ensuring our new homes deliver a Just Transition for our customers. We will also

work with our Section 75 partners to influence designs to meet this common approach.

Limiting energy input directly supports our wider ambitions to reduce the cost of living and support communities. It also helps drive down emissions arising from use within a home. We recognise government policy is working to decarbonise the sources of energy upstream. From 2024, the Scottish Government New-Build Heat Standard will require only heating systems which produce zero direct emissions at the point of use. This relates to individual dwelling heating systems as well as district heating networks. When designing homes, we must be conscious of the affordability and usability of heating systems for residents. In terms of affordability, we have experience that points to a need to include sufficient electricity generation to reduce the need for householders to buy from the grid. This is of particular note in relation to stand-alone heat pump systems for properties, where careful consideration of total energy demand needs to be balanced with the cost of energy purchase. We have developed a solar photovoltaic client requirement which will ensure individual arrays are sized to maximise output – rather than merely meet the minimum for a pass on a certificate calculation.

District heating networks

We expect continued growth in our development of district heating networks (DHNs). Going forward we will only build new systems which are zero emissions and ensure best value for tenants through requiring a minimum network performance of 60% – targeting higher whenever possible. As district heating networks increasingly become a mainstay of how our homes are heated, we will work with partners, including City Building, to ensure the operational and maintenance expertise that is needed for these networks is available.

New build design

Addressing the carbon impact of our new homes begins with energy use for heating and appliances, often referred to as ‘operational carbon,’ but also includes those emissions arising from how we construct homes, so called ‘embodied carbon’.

We will set a target for the embodied carbon of our new-build as a practical step towards the national long-term goal of Net-Zero by 2045. As a first step towards sensibly reducing the impact of resources which go into a building (not just the emissions from running it) we will use recommended guidance from Scotland and UK Governments. Minimising the impact of this embodied carbon when a property is

at end of life will also be key. We will explore design for deconstruction principles and, where appropriate, look to incorporate these in our specification when practically possible. In doing this, we will push our developers and their supply chain, while also recognising the challenge of bringing forward viable developments in the current financial and operating climate.



Modern Methods of Construction

In delivering maximum efficiency for our core programme, we will make more use of 'Modern Methods of Construction' (MMC), enabling a high degree of precision in terms of thermal performance, speed of construction and optimal use of materials. Within our Construction Contractor Framework, we provide clarity on the minimum definition of MMC in which we specifically mean the off-site fabrications of pre-insulated closed panel systems to enable clear pricing. Our funders are increasingly supportive of using homes constructed via MMC as security of their loans.

Brownfield development and regeneration

Being mindful of the need to preserve land quality and the Sustainable Development Goal around loss of habitat; we will ensure our programme is delivered through the regeneration of brownfield sites wherever possible. In doing this, we will look to support from partners in remediating land, where applicable. Where regeneration involves the large scale demolition of existing properties, we will require a positive carbon reduction return before a project proceeds. This assessment of carbon reduction return will be similar to the Internal Rate of Return (IRR) we assess when considering financial viability and will take account of embodied and other carbon associated with the proposed

demolition, as well as the impact that retrofitting would have on the building and also the carbon emissions from the proposed 'replacement' building. Initially a maximum required carbon reduction return period will be set. This will be reviewed and refined based on project experience and expert input, and aim to ensure a positive contribution to our net-zero ambition.

Vibrant communities

To improve local infrastructure and quality of life outcomes, all of our sites in urban areas will meet Scottish Government's '20-minute neighbourhoods' planning objective and other related local variations, as we create places which are designed to enable residents to meet their day-to-day needs within their local area. In rural areas we will develop sites where people want to live and can live well. We will continue to support the development of cycling through the provision of suitable storage infrastructure, and look to ensure there is adequate provision of charging infrastructure for electric vehicles as part of our developments. We will also use our influence and relationships to encourage high quality, reliable public transport in our communities and look to work with others where possible to support and develop local shops and services.





To promote the health of the internal environment of homes, we will pay special attention to ventilation and air quality and take account of the materials we build with and the impact these have. In particular, in relation to compounds and chemical release we will work with contractors and suppliers to remove the presence of VOCs (volatile organic compounds), solvents and off-gassing.

Green infrastructure

Green Infrastructure is the use of natural systems in place of ‘man-made’ or hard-engineering alternatives as solutions for

managing the environment within and connecting to new developments. Adopting the use of Green Infrastructure is a key focus of the National Planning Framework; the objective being to provide a win-win of environmental quality with nature-based solutions. We have experience in delivering Green Infrastructure and were a principal contributor to Scottish Natural Heritage guidance on ‘Maximising the Benefits of Green Infrastructure in Social Housing.’ Perceived increase in costs is one of the recognised barriers to Green Infrastructure, although there are numerous case studies which demonstrate the longer-term savings

and benefits from reducing pollution, flood water attenuation, reducing overheating, carbon sequestration, increased wellbeing and supporting biodiversity to counteract this perception.

To make sure we have a greater emphasis on Green Infrastructure, we will train a member of staff to become accredited as a ‘Building with Nature (BwN)’ assessor. This will help ensure our new developments meet the BwN framework standards at design stage and the highest standards for wellbeing, water quality and wildlife resilience.

Section 5: Our Business operations

OUR KEY ACTIONS

- we will develop and implement our approach to achieving a carbon neutral fleet by end 2026;
- we will only use renewable electricity by end 2025 across the corporate estate;
- we will require our suppliers to provide a base line of the whole life carbon emissions associated with their products by 2024;
- we will look to identify and secure grant and loan funding necessary to support our journey to Net-Zero on an on-going basis;
- we will develop our data, and approaches to evaluating and piloting sustainability actions in 2023;
- we will report progress each year and develop a sustainability performance measurement framework in 2023;
- and we will support our staff and communities to contribute fully to sustainability objectives, with our engagement strategy in 2023.

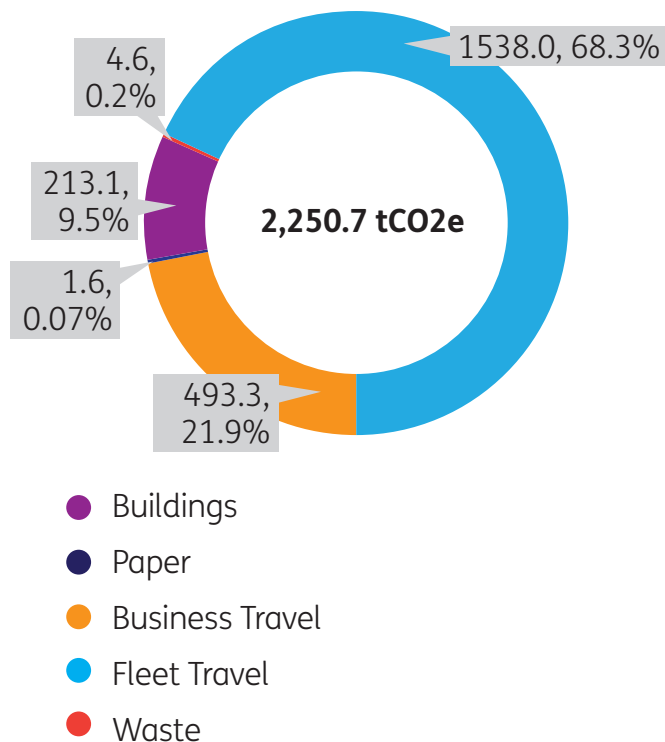
As a business we have set the target of being carbon neutral by 2026 across the corporate estate. Current estimates, which have been independently assessed by Planet Mark, a leader in providing sustainability certification for organisations and properties – is we produce around 2300 tonnes of Co2 a year. As such, the average CO2 per Wheatley employee is around 0.7 tonnes per year. This compares favourably to typical office-based employees who are estimated to average around three tonnes. The main contributors to these emissions are heating and travel, particularly from our fleet of vehicles which support our neighbourhood and environmental service.

Powering our fleet is the largest source of CO2 emissions. Our aim is to switch to carbon neutral fleet, where suitable electric and hydrogen fuelled vehicles exist (for example have sufficient gross vehicle weight and range to meet our business need), by the end of 2026. In advance of doing this, we will work to ensure there is suitable charging infrastructure, including at our depots and other corporate locations. We will also, where we have the ability to do so, deploy charging infrastructure in our communities, which will benefit our business operations, customers and the wider community in these locations. In advance of moving to a carbon neutral fleet, we will ensure all our vehicles – no matter which

part of the Group they operate – meet the applicable requirements for the Glasgow and Edinburgh Low Emission Zones which came into effect at the end of May 2022 and will be enforced from 1 June 2023 and 1 June 2024 respectively. We will also explore options for reducing emissions associated with staff travel, such as encouraging active travel, use of public transport and use of low emission vehicles and reducing air travel.

The electricity we consume accounts for more than half the emissions associated with our buildings. We aim to transition to ‘green’ electricity by 2025 across the corporate estate. Completely eliminating emissions from gas will be more challenging for the reasons discussed earlier in relation to the use of natural gas to heat our homes. We will explore the potential and economic viability of using ‘green’ gas which is covered by a ‘RGGO (Renewable Gas Guarantee of Origin)’. These products are relatively new to market, typically biogas or bio methane, and 100% renewable.

Carbon footprint by emission source for year ending 2022, tCO₂e



Note: Your carbon footprint is reported two ways; one is using the location based method of calculating Scope 2 electricity emissions and the other the market based method. A location-based method reflects the average emissions intensity of grids on which energy consumption occurs (using mostly grid-average emission factor data). A market-based method reflects emissions from electricity that companies have purposefully chosen (or their lack of choice).

Non-domestic buildings and Net-Zero

The Scottish Government is currently planning to consult on a new regulatory framework which will ensure all non-domestic building are Net-Zero by 2045. It will also require all publicly owned buildings to use Net-Zero heat sources by 2038. In advance, we will focus initially on optimising our corporate estate in line with our new operating model and improving the energy performance of our remaining estate through investing in our building fabric where feasible. This will include improving insulation and ventilation, measures to reduce energy consumption and steps to generate electricity locally. In doing this, we will look to reach EPC B for our corporate estate, where cost effective and technically feasible, no later than 2032.

Other aspects of business operations also contribute to emission. In recent times, we have taken significant steps in reducing emission from our IT infrastructure through adopting cloud hosted solutions which use significantly less power and natural resources than having our own server and other infrastructure. Over the next year, we will work with our key suppliers to document the progress made and develop insight on how emissions can be reduced yet further. We will also drive – in line with our digital strategy – a step change in our use of white mail with the aim of eradicating this, except where legally

necessary or requested by customers, by 2025. Our transition to paperless correspondence includes Lowther Homes moving to paperless billing and the introduction of an inbound mail scanning service, both of which are currently underway.

Our operating model

Our hybrid business model with its focus on serving customers in their homes and communities, and ensuring we are available when customers want us, also brings opportunities and benefits in reducing of emission. These benefits include lower energy requirements in our reshaped corporate estate as discussed above, more online working with less travel to and from work locations where it meets business and customer need, and less use of paper through increased digital interactions. Going forward, we will review the environmental benefits of our new business model, as part of a wider review which will help us tune the model to ensure it serves staff and customers to the best extent possible. This review will be conducted during 2023 to ensure our new model has had the opportunity to bed in fully post-pandemic.

We will also increasingly focus on minimising the waste we produce. This will build on the progress we have made in reusing furniture and other materials as part of our office

realignment programme, and the introduction and management of segregated waste. Our priorities will be to minimise consumption so there is no waste in the first place, followed by reduction, upcycling and recycling. To drive this, targets will be developed and monitored for every business function and reported annually. Our ambition in doing this will be to eliminate waste to landfill over the next five years.

Offsetting remaining carbon

Realistically we expect to reduce emissions from our business operations by around 75% through the actions we take. The remaining emission will be addressed through direct actions we take to offset them, including the contribution we make through tree planting, supporting wider decarbonation of vehicles through our EV charging network and promoting active travel through cycling infrastructure. The benefit of these actions, and other initiatives, will be quantified no later than 2024.

Governance and decision-making model

Sustainability considerations are already a feature of decision-making by Boards across our Group and we will strengthen this further by requiring alignment to this strategy where decisions are sought with investment of more than [£2 million] or where a change in established policies or practice is proposed. As

discussed earlier, we will include an evaluation of carbon payback in any regeneration proposal involving demolition. We will also report each year to Boards, including Wheatley Solutions and Group Board, on progress against this strategy and refresh the strategy itself when public policy becomes clearer. The first of these refreshes is expected to be in 2023 after updated guidance on EESSH2 is available from Scottish Government. We will also engage a third party to undertake a formal review of this sustainability framework in 2025 in advance of our next Group-wide framework.

New and reliable data will be essential in guiding progress and understanding our impact as we strive for Net-Zero and to understand our contribution in terms of the Global Goals. At present, data and standard approaches to measure the many different areas we will need to progress to deliver against this framework are limited. Where data and such measures exist, such as EPCs for energy performance of properties, we will use them, recognising their current limitations and the scope for future change.

Our priority will be to develop a data, monitoring and sustainability performance measurement framework which will provide insight on the progress through this framework and ultimately assurance on our journey to





Net-Zero. This will build on the asset data we already hold, including detailed energy performance reporting for our properties and third-party assessments through organisations including Planet Mark, Keep Scotland Beautiful and Standard & Poor's. Our measurement framework will look to the principles in the new ISO Standard on Net-Zero and explore emerging areas, including large scale modelling of building related emissions, assessment of wider factors such as air quality, assessment of embodied Carbon and Scope 3 emissions. We will also look to better understand the impact of our actions from our customers' perspective through quantifying this in practical terms in areas such as reducing heating requirements, accessing green jobs and satisfaction with the local environment. As now, third party expertise, including through the Pathway to Net Zero Advisory Group, will be used to support development and provide independent assurance on validity.

This performance measurement framework will be discussed with Wheatley Solution Board in early 2023 before being rolled out Group-wide. Progress against targets in the sustainability performance management framework will be reported to Boards in the same way and at the same time as other key strategic Group-wide priorities.

As now we will continue with Environmental, Social and Governance (ESG) reporting alongside our annual report. We will also review and work with our auditors as wider sustainability and carbon emissions related reporting standards, such as the Taskforce for Climate-Related Financial Disclosures (TCFD), come into force, although it should be noted that our Group is currently out-of-scope for such financial reporting requirements.

Evaluating and piloting

In investing to achieve Net-Zero, we will take a balanced approach to the risks involved. This will include investing in established technologies and approaches, undertaking pilots and evaluations before making large scale commitments. To support this, we will develop evaluation frameworks which are clear on the outcomes we expect and which measure these both pre- and post-investment works. Sensor technology and the Internet of Things (IoT) will be deployed where appropriate to ensure we have access to real time data to inform decision-making and future action. We will also look to develop test beds – working in partnership with appropriate others where possible – that can be used to trial emerging technology. In doing this, we will simulate, wherever possible, real-world operating conditions using existing properties.

We will also, where appropriate, look to bring our extensive expertise to bear in helping to shape policy, priorities and approaches across the affordable housing sector, and be willing to trial and support development of innovative technologies where they have potential to accelerate our journey to Net-Zero. Here, as elsewhere, our approach will be guided by expert input, including from our recently established Pathway to Net-Zero Advisory Group.

Funding

Our initial estimates are around £400million of funding will be needed for the investment required in our existing homes to achieve EPC B – and that this figure could well double to reach Net-Zero. Furthermore, costs of Net-Zero heating systems for new-build properties are likely to increase the costs involved significantly. At present, a clear route to the required additional investment is not readily identifiable, although we are clear the burden of this investment must not be for tenants to carry.

For now, we will invest what we can within the financial envelope of our current business plan, while also working with Scottish Government to access available grant. We will also negotiate with lenders to allow a prudent level of increased borrowing for expenditure on

decarbonisation, provided our business plan supports it, and seek to raise funding through sustainability linked loans.

All funding on debt capital markets for the UK social housing market this year (2022) has been sustainability-linked. This market has changed substantially since 2019, when less than 10% of debt issuance included green or social impact measures. We anticipate all future funding, by way of Revolving Credit Facilities (RCFs), term loans, private placements or bond issuance will include Key Performance Indicators (KPI) linked to energy efficiency. Given our ambitions to deliver ‘Greener Homes, Greener Lives’, we are well-positioned to meet the financial market demand for sustainability-linked investment.

Our experience includes our existing £185m ‘Wheatley - Energy Efficient Housing in Scotland facilities’ from the European Investment Bank (EIB) and our most recent debt activity – the refinancing of a £100m Revolving Credit Facility with our syndicate banks and new lender, Barclays. These new RCFs are designated as “Sustainable Linked Loans” as they include KPIs which, if met, lead to a reduction in the loan margin. There are two measures linked to energy efficiency:

1. new homes to meet, or exceed, EPC Band B;
2. and monies spent on improving EPC rating

of existing homes to result in uplift to B (on a staggered basis).

More generally, the approach to reducing carbon emission, including the market for carbon trading is still evolving, and there is likely to be future innovation. With this in mind, we will explore possibilities such as how, if possible, investment in our properties to reduce household emissions could be used by third parties to offset the emissions they create in the course of their business.

Our people and communities

We recognise our staff and customers are our biggest asset in our journey to Net-Zero and the means through which our efforts can be multiplied via the contribution they make in wider society. To enable this, we will create annual learning opportunities for staff at all levels to inform actions they can take to improve their energy efficiency and make positive change to the environment. We will also provide similar programmes for our customers.

A network of sustainability champions will be put in place, drawing together staff of all levels from every part of the Group, to inform and share good practice and to embed sustainability and our required outcomes in all aspects of our operation. We will also include

sustainability responsibilities in the job outputs for our Directors and Managing Directors. Progress on delivering our sustainability objectives will be overseen by a Programme Board led by a Group Director involving every part of the business and guided by the Pathway to Net Zero Advisory Group in line with its terms of reference.

We know that, like any individual organisation, our contribution to the Global Goals will be marginal and progress will only come when there is alignment to these sustainability objectives. We will play our part in supporting and mobilising others through openly sharing our practice and the knowledge we develop where we can, and in championing the need for sustainability action. We will also work in partnership with others with a common purpose and play our full part in local and national outcomes to inform and deliver collaborative approaches, policy development and delivery and innovation.



Section 6: Our Supporting contributors

OUR KEY ACTIONS

- we will develop a land quality and adaption plan by 2025;
- we will promote biodiversity by seeing this as key aim in our land management;
- we will not use of pesticides or insecticides anywhere on our land or assets;
- we will not put waste to landfill, unless absolutely necessary;
- we will encourage our customers to reduce and recycle their household waste;
- we will evaluate the likely impact of climate change on our communities and develop mitigation strategies by 2026;
- our housing staff will develop the skills needed to support customers in making the most efficient use of low carbon heating systems by 2023;
- addressing the climate crisis will become an aim of Wheatley Foundation in 2023;
- and our repairs service, including City Building, will develop sustainability Action Plans in 2023.

Neighbourhood and environmental

We have consistently achieved a high standard of environmental quality. These standards are among the most important priorities for our communities, as a clean, well-maintained neighbourhood and environment is not only a reflection of the importance and care given to our shared spaces, but also a barometer in terms of a sense of pride in the places we identify with and call home.

We helped establish and fund the Stalled Spaces initiative, which grew to win international recognition and was adopted by Scottish Government for replication. It has provided funding and support for projects to turn vacant, derelict or underused land into community use within Glasgow. Half of these sites are located within the most deprived Scottish Index of Multiple Deprivation (SIMD) (the areas and a quarter of the sites are located within the Vacant and Derelict Land designation. We have also continued to invest in our environmental apprenticeship programme, to develop expertise within our organisation and embed sustainable land management across the wide array of urban, peri-urban and rural habitats we look after.

We have partnered with Keep Scotland Beautiful whom we commissioned to carry out audits of housing stock based on a variety of



environmental quality criteria, including waste management. From this, where recycling facilities are on offer, there was no consistency in the condition of bins and overall usage, and contamination was a recurring problem. This is exacerbated in some of our communities where waste uplift services, generally provided by local authority partners, have reduced to one visit every three weeks and through a lack of recycling opportunities. We will work to address this and encourage our customers to reduce their household waste as well as

support council services to tackle issues around contamination of bins through enhanced engagement with our customers and suitable advice, and where necessary, via action.

We will develop a land quality and environmental adaptation plan to provide measurable improvement in the quality of land and space, linked to known current and future climate change risks. Overlaying details we hold on air pollution, land contamination, soil erosion risk, flood risk, overheating and many other factors, we will chart the expected impacts for the areas we identify as likely to be worst impacted and invest in preventative adaptations which will mitigate the impact of climate change.

In recent years we have taken initial steps towards reappraising our environmental maintenance regimes to promote biodiversity by reducing unnecessary grass clearance. This was done **in consultation and agreement with local communities**. It is undoubtedly better for the whole habitat that land is maintained for all – not just for humans. We will move forward more positively with this approach, by identifying locations, with community engagement, that can be ‘set-aside’ for habitat or where cutting cycles are arranged to provide the most benefit to wildlife. This is not about cutting cost or

corners, as can sometimes be the concern. We have found with full and clear communication about the positive outcomes, these misgivings are routinely overcome.

In support of biodiversity and habitat protection, we will not use pesticides or insecticides anywhere on our land or assets. We will only use peat-free products. Where weed-suppressant is used, it will only be to the highest regulated standards, although we will seek to phase in sustainable alternatives as we continue to work closely with suppliers. In line with Scottish legislation banning some of the most damaging single use plastics (primarily focused on the catering industry), we will take our own steps to end our purchase of products which either in part or wholly include expanded polystyrene or which are solely intended as single use plastic items.

Housing operations

Our housing operations have Better Homes, Better Lives at their core. As such, contributing to the Global Goals is part of our organisational DNA and something we will always centre. We will continue to provide practical advice and support to our customers, including assistance to minimise fuel costs, through our energy advice services and to address hardship through benefits advice, furniture upcycling, access to food and financial assistance at

times of crisis. All of this and more will sit alongside our on-going commitment to keeping rents as affordable as we can.

Our housing operations teams have the benefit of in-depth knowledge of our customers and communities and will play a pivotal role in ensuring sustainability actions are embedded in everyday conversations and customer engagement. To support this, we will develop tailored training programmes for housing staff which will give them the expertise and confidence to engage customers in their communities on how to make local contributions towards improving the environment.

Ensuring customers can make optimum and most efficient use of their heating systems is vitally important as we seek to reduce carbon emissions and eradicate fuel poverty. New zero emission heating systems tend to have different control panels and operating set-ups when compared to ‘traditional’ gas central heating. Our customers will be informed and supported to understand the most efficient way of managing the controls and system when they move into their new home and on an on-going basis as heating needs change throughout the seasons. To support this, we will train our housing staff in how to use different heating systems most effectively.



We also play our part in ensuring our neighbourhoods are sustainable including through having access to local services, public transport and amenities. Achieving this will help reduce emission through minimising the need to travel and offering a green option where travel is required. Our success in this area will require partnership working with others with common interest, use of our voice to advocate on behalf of our customers and communities and building capacity among our customers so they can demand the services they need in their community. We will also,

as we have done over the years, promote and take part in activities that have a positive community and sustainability impact including local growing initiatives, recycling, provision of local shop units and employability support and initiatives.

We will look to ensure there is funding, including through partners, to support community-led initiatives in areas, including community gardens and planting, rewilding where the community want this and sustainable landscape improvements.

Wheatley Foundation

Wheatley Foundation continues to focus its efforts in areas which directly align to the Global Goals, including to alleviate poverty and boost educational attainment in our communities. We will also explore the potential to build on the Foundation's core contribution to include additional activities which build awareness and encourage action to address the climate crisis.

Wheatley Care

Wheatley Care promotes the health and wellbeing of around 3500 each week across Scotland. We will continue to ensure our care provision creates sustainable health and wellbeing improvements, enhances community engagement and creates informal

support networks which enable people to stay well. Our success will be measured through monitoring and recording various KPIs, including 1. A reduction in hospital admissions; 2. A reduction in delayed discharge times; and 3. Increased customer use of commissioned support services enabling them to remain happy and healthy at home.

As part of its commitment to Group-wide sustainability aims, Wheatley Care will explore its operational delivery with a view to reducing carbon emissions and promoting sustainability through the way we work and the resources used. This will include:

- reinforcing our existing predominantly paperless approach;
- ensuring a significant level of training is facilitated via e-learning which, in turn, will reduce car use and use of public transport;
- and developing a mobile Care App which provides staff with an opportunity to access and update customer files in a more flexible way. This will reduce the need for staff travel and reduce the requirement for office space for staff members, resulting in a lower carbon footprint.

One innovation we are using in our outreach services is an increasing use of 'green' scheduling. This system considers staff home addresses and overlays this with customer locations, optimising the coverage to



purposefully reduce the travel requirements across our local authority areas, reducing inefficiency and reducing carbon emissions. We will continue to explore how this approach can provide an increased contribution to the aims of this framework.

Our suppliers including in house repairs providers

Our recently-approved sustainable procurement policy makes clear we will derive positive environmental impact from the £290m we spend each year on a goods, services and works. Minimising environment impact will become embedded in every purchasing decisions, in the same way that value for money, statutory compliance and risk management are today. We will expect our supply chain, including our City Building (Glasgow) joint venture, to rise to this challenge by ensuring they reduce emissions in their business and have the skills and solutions to deliver, maintain and repair low emission products and services.

We recognise our impact on our environment does not stop at the activities we undertake directly. The goods and services we procure and the processes that support manufacture and delivery also contribute to the climate crisis. As such, we have a duty to understand these wider emissions and act to minimise

them. We will do this through building our knowledge and expertise in this area and requiring suppliers to provide a base line of the whole life carbon emissions associated with their product or service.

Priorities will include reducing carbon emissions in our energy supplies, waste minimisation and increasing the use of recycled products and products derived from reclaimed or sustainable materials.

Repairs and investment works are areas of particularly significant spend and influence through our in-house and joint venture delivery model. As such, City Building Glasgow and our in-house repairs services will have a particular contribution to make in reducing emissions and supporting our journey to Net-Zero. This will include developing the skills needed for cost-effective delivery of required fabric-first investment and zero carbon heating systems, and on-going maintenance of these systems. It will also involve developing suitable processes and procedures to reduce minimise waste as part of investment and repairs work, and sourcing, through their supply chains, sustainable products. To bring this into focus, we will require our repairs and investment providers to develop their own sustainability plans no later than the end of Quarter 1 2023/24.

Section 7: Delivering on our framework

Key outcomes from our framework are summarised below.

Existing homes

Achieve EESSH2 target by end 2031/32
and Net-Zero by end 2043.

- develop archetype segment investment plans for our stock;
 - pilot approach in 2022
 - full approach in place 2023
 - embed in our asset investment planning from 2023.
- create a policy that sets out which properties will be economically and technical feasible to achieve EPC B in 2023;
- work with third parties to leverage external funding on an ongoing basis;
- ensure all Lowther Homes properties are at EPC C by end of 2024;
- continue to roll out Connected Response heating technology;
- develop a strategy for our distributed heat systems and networks by the end of 2023/24;
- and ensure our heat networks operate with at least 60% network efficiency by 2025.

New homes

All properties - EPC B and with
Net-Zero heating systems from
after 2024 planning change.

- our new-build homes will meet the planning requirements in relation to no fossil fuel;
 - We will size our solar PV systems to generate sufficient electricity to mitigate the high cost of operating some systems;
 - our large scale regeneration proposal will include an assessment of 'carbon payback';
 - We will explore the implications of design for deconstruction and look to incorporate requirements for this as part of future new-build standards;
- and our new homes will be EPC B.

Business operation
Carbon neutral by end 2026

- we will develop and implement our approach to achieving a carbon neutral fleet by end 2026;
- we will only use renewable electricity by the end 2025 across the corporate estate;
- we will require our suppliers to provide a base line of the whole life carbon emissions associated with their products by 2024;
- we will look to identify and secure grant and loan funding necessary to support our journey to Net-Zero on an on-going basis;
- we will develop our data and approaches to evaluating and piloting sustainability actions in 2023;
- we will report progress each year and develop a sustainability performance measurement framework in 2023;
- and we will support our staff and communities to contribute fully to sustainability objectives, with our engagement strategy in 2023.

Supporting contributors
Align with Global Goals and support action - staff and communities

- we will develop a land quality and adaption plan by 2025;
- we will promote biodiversity by seeing this as key aim in our land management;
- we will not use of pesticides or insecticides anywhere on our land or assets;
- we will not put waste to landfill, unless absolutely necessary;
- we will encourage our customers to reduce and recycle their household waste;
- we will evaluate the likely impact of climate change on our communities and develop mitigation strategies by 2026;
- our housing staff will develop the skills needed to support customers in making the most efficient use of low carbon heating systems by 2023;
- addressing the climate crisis will become an aim of Wheatley Foundation in 2023;
- our repairs service, including City Building (Glasgow) will develop sustainability Action Plans in 2023.

Customer engagement will be a core aspect of delivering the outcomes from this strategy. This will help shape approaches to ensure that we maximise customer, as well as sustainability, benefits, and that our sustainability ambition is not at odds with helping to address the many other challenges our customers face at this time. An Action Plan will sit alongside this framework to focus activities on achieving required outcomes. Actions in the plan are categorised as follows:

Priority 1: those that are necessary to meet a regulatory or other similar obligation

Priority 2: those with the potential to have a positive direct impact for customers in the short to medium term

Priority 3: wider aims and aspirations

This prioritisation will be used to inform any decisions that need to be made in allocating resources to support delivery of our sustainability aims given the current cost of living crisis and its impact on customers. Where prioritisation is necessary, our aim will be for any resulting changes to be to timing, rather than the scope, of our ambition.



Measuring progress

As discussed elsewhere progress through this framework and its supporting Action Plan, will be monitored through a sustainability performance measurement framework. This framework will be embedded in our Group and Executive Team performance reporting mechanisms to ensure appropriate oversight.

Key to this will be deploying robust and verified methods for measuring and monitoring key outcomes such as reducing carbon emissions

from our homes and in our business, progress to EESSH2, reducing the energy requirements from our homes and our journey to Net-Zero. In doing this we will ensure our approaches follow government and other applicable guidance where it exists, such as the recently published ISO Net-Zero Standards, and emerging good practice where it does not. Where possible we will look to automate capture of information such as through sensors to measure direct energy consumption and air quality, and embed relevant information and methodologies in our Group asset and other applicable systems.

We already compare our performance, in term of emissions from business operations, with other through our Planet Mark assessments, and will look to go further through seeking opportunities to test and refine subjecting our approach and the results we deliver through suitable benchmarking and external assessment

We will also, as now, ensure that all external sustainability related reporting - for example to the SHR, our funders and government is accurate, timely, in line with needs and supported by external validation where necessary or appropriate.

Behavioural change

Finally, we recognise that this Framework and the actions that will flow from it can only go part way to delivering on our sustainability objectives. For true success, and to play our part in making the difference we seek we need behaviours to change in society, and for our customers and staff to be engaged and playing their part. Plans including supporting learning and development, engaging stakeholder and communities and sharing good practice will all help contribute to the conditions we need for the change we seek, but on their own they will not be enough. Barriers to change including the adverse impact from the current cost of living crisis and the economic realities of zero carbon heating need to be addressed. Progress also needs to be boosted through incentivising 'green' options, ensuring necessary funding is available, supporting research, development and commercialisation of suitable products and more active participation to achieve sustainability goals.

