

ENVIROMENTAL MANAGEMENT STRATEGY 2021 – 2024

Contents

1.	EXECUTIVE SUMMARY	4
1.1	Strategic Objectives	5
2.	BLACK COUNTRY HOUSING GROUP	5
2.1	Our Assests and Customers	5
2.2.	. Facts and Performance	5
2.3	Existing Stock and Energy Efficiently	6
3.	BACKGROUND	6
3.1	UK Carbon Targets and Energy Performance	6
3.2	Fuel Poverty	6
4.	CARBON REDUCTION AND CLEAN GROWTH	7
4.1	Our Targets and Timeline	7
4.2	Our Delivery Approach	7
4.3	Stock Condition Surveys and Energy Management	8
4.4	Asset Management Strategy	8
4.5	Funding and Financial Implications Financial Modelling	9
5.	SUSTAINABLE ASSETS AND INNOVATION	
5.1	Investment in Existing Stock	
5.2	New Homes	
5.3	Modern Methods of Construction	11
5.4	Decarbonise of Heating	11
5.5	Innovation	11
5.6	Water	11
6.	ORGANISATIONAL SUSTAINABILITY	
6.1	Business Operation	
6.2	Procurement and Supply Chain	
6.3	Green Energy and Communal Heating	13
6.4	Waste Management	13
7.	ENVIRONMENT AND THE COMMUNITY	14
7.1	Green Spaces	14
7.2	Community Involvement and Awareness	14

8.	MONITORING AND REPORTING	.14
APP	ENDIX 1 - ENVIRONMENTAL DELIVERY PLAN	.15

1. EXECUTIVE SUMMARY

The Environmental Management Strategy sets out how BCHG will implement its approach to energy and environmental management. It gives key strategic objectives and performance targets, setting out how we intend to manage these and monitor on an on-going basis.

The Housing sector currently faces a number of economic, political, and environmental challenges around Climate Change, the reduction of carbon emissions, and fuel poverty that have informed this strategy and the development of our Environmental Delivery Plan *(Appendix 1).*

Our overall aim is to deliver sustainable, affordable and efficient homes, understanding the impact that energy costs and environmental issues have on our customers. BCHG clearly sets out its commitment to reducing utility costs by investing in its assets to bring all homes to a minimum standard of energy efficiency and performance.

We have developed a road map that sets out our journey for achieving the Governments energy efficiency and carbon reduction targets in the most efficient and cost effective way, not only reducing the impact on the environment but making our business operations and homes more sustainable.

This strategy sets out our aim to establish a baseline position for performance of our homes developing clear targets to monitor and measure energy performance improvements. It defines our initial approach that will integrate energy and environmental assessments into future stock condition programmes.

To support our strategic aims BCHG, in partnership with other Matrix members will appoint Savills to develop a Zero Carbon Strategy and Energy Standard that will further inform our 30-year capital investment plan, estimate fuel cost savings and set our approach to carbon reductions. It is recognised, that to achieve our ambitions and targets it is essential that BCHG take advantage of funding initiatives in particularly the Green Homes Grant recently unveiled by Government.

This strategy reflects our aim to demonstrate continual improvement and our desire to embrace innovation. Whilst it sets a clear direction and commitment for the future, it is also intended to facilitate flexibility in order to allow us to adapt to future changes and take advantage of possible opportunities.

This document also links to other areas of our business and aligns with other BCHG publications, which include the following;

- Asset Management Strategy
- BCHG's Business Plan
- BCHG's Strategic Plan 2020-2023

The Strategy will be reviewed in Quarter 2, 2021 and will include the full results of BCHG's stock condition programme and the outcome of the work completed by Savills.

The culture of BCHG will be an essential ingredient for the success of this strategy with environmental thinking integrated into all that we do. Leadership from BCHG Board and the Leadership team is essential for this to be successful.

Delivering this strategy ahead of the required technological innovations needed may be a challenge especially with regard to affordability.

This is a long-term undertaking. Momentum is building on new technologies (such as heat pumps) and economic stimulus (such as a future Social Housing Decarbonisation Fund). The right solutions for us will become clearer and we will develop a detailed roadmap. However, the strategy sets out our goal to deliver net-zero carbon on or before 2050 and where possible we will endeavour to stay ahead of national goals in delivering this strategy.

1.1 Strategic Objectives

The following four themes (figure 1) summarise our objectives and targets that we aim to achieve over the next three years and beyond. These have also been incorporated into the Environmental Delivery Plan (Appendix 1).

Carbon Reduction & Clean Growth	Sustainable Development & Innovation	
Improve the environmental performance of our new & existing homes and operations. Reduce our impact on the environment through reduced CO2 emissions, understanding and managing our energy.	Continue to explore new technologies and approaches to future proofing our assets and achieve sustainability. Implement new ways of delivering improved and more efficient services for our customers.	
Organisational Sustainability	Environment & the Community	
Enable and encourage sustainable working and travel practices among our customers and our colleagues. Promote community involvement and environmental awareness into our practices.	Deliver sustainable services and demonstrate the organisation's commitment to the improving the environment. Procure our energy costs effectively and manage our energy contracts efficiently to deliver savings.	

Figure 1

2. BLACK COUNTRY HOUSING GROUP

2.1 Our Assets and Customers

BCHG manages 2,171 properties and care bed spaces across the Midlands region with 1,983 properties and bed spaces owned and 188 shared owners/leaseholders. Our stock is; 97% mains network gas heating and 3% electric heating. The majority of our accommodation was built in the last 40 years (74%), with 17% built before 1950.

The majority of properties (53%) are houses, and flats make up 32% of our stock. The communal nature of 389 pf our units mean that for the purpose of planning energy improvements, our homes (e.g. flats in residential blocks) are not assessed in isolation but as a scheme.

Around 20% of our properties are used as care and support units. Over 75% of our customers are characterised by low income, economic inactivity, disability, vulnerability and isolation in some of the most disadvantaged communities in the Midlands. The Strategy takes into account the increased risk of fuel poverty that our customers face.

2.2. Facts and Performance

The table below (figure 2) sets out a summary of key facts and modelling taken from the baseline information provided our Energy Performance Certificates database.

2171 Homes Owned and managed	£474	SAP 73.3 Ave energy performance of our homes
1.9 Tonnes (Per Year)	1.9 Tonnes (Per Year)	7035 KWH
Ave annual carbon dioxide (C02)	re annual carbon dioxide (C02)	Ave annual heat demand of our
emission of our homes	emission of our homes	homes

Note: Results are calculated using EPC estimated data.

Figure 2

2.3 Existing Stock and Energy Efficiently

The energy efficiency and performance of dwellings are recorded in the Energy Performance Certificate (EPC) and is calculated using the Standard Assessment Procedure (SAP). The higher the SAP rating, the lower the fuel costs lower the associated emissions of carbon dioxide.

Figure 3 sets out the percentage of BCHG properties in each EPC band. The average SAP rating of English and Wales dwellings is 60 points. The average household produces 6 tonnes of CO2 every year.

EPC Bands					
(% BCHG Homes achieve)					
Score/Band No Units % Units					
(92 to 100)	Α	4	0.33%		
(81 to 91) B 307 25.39%					
(69 to 80)	С	565	46.73%		
(55 to 68)	D	286	23.66%		
(39 to 54)	Е	43	3.56%		
(21 to 38)	F	4	0.33%		
(1 to 20)	G	0	0%		
Figure 3					

The average SAP rating for a BCHG home is 73 points, with the

majority of our properties (72%) achieve an EPC band C or above. Our new homes (built within the last 10 years) have an average SAP rating of 83 points and are rated under Band B. There are BCHG 616 properties that do not have a current survey. These will be completed in year 1 of this strategy.

3. BACKGROUND

3.1 UK Carbon Targets and Energy Performance

Residential homes account for 15% or 69.1m tonnes of the UK carbon emission. The UK government has set a legally binding target to bring all Greenhouse gas emissions to net-zero by 2050 across all sectors. The housing sector will play an important role in contributing to achieving these targets and tackling climate change.

The Government 'Clean Growth Strategy' sets out how the UK will deliver carbon reduction targets. It sets a target that all fuel poor homes should be upgraded to Energy Performance Certificate (EPC) Band C by 2030, with an aspiration for as many homes as possible to be EPC Band C by 2035 where practical, cost-effective and affordable. Currently only around 30% of homes in the UK meet EPC band C.

Our strategy sets out our objectives and delivery plan for improving the efficiency of homes by 2030 and our initial approach for achieving long-term sustainable investment of our assets to meet the carbon reduction target by 2050.

3.2 Fuel Poverty

Fuel poverty is defined in the Warm Homes and Energy Conservation Act 2020 as a person or household living on lower income in a home, which cannot be kept warm at reasonable cost. Cold homes are linked to a wide range of health issues, from mental health to asthma and respiratory issues.

The Annual Fuel Poverty Statistics (DBEIS) state that in 2018 10.2 per cent of households in England (2.40 million households) were classed as fuel poor.

Fuel poverty remains a considerable concern for BCHG with only 62% of its customers classified as economically active and many other working households facing fuel poverty. This is compounded by rising domestic fuel prices, a backdrop of stagnating income, and means we anticipate high numbers of customers on a low income are facing fuel related debt or choosing not to heat their homes.

Fuel poverty status depends on the interaction of three key drivers; poor energy efficiency of a property, high-energy cost and low income. This strategy provides direction for reducing fuel poverty focusing on these key drivers. It outlines our approach and objectives to tackling fuel poverty, which include;

- Identifying, monitoring, and targeting fuel-poor households within our stock using existing data and updating customer profiling information. We intent to actively engage with customers on energy efficiently and costs in partnership with our Customer Relations and Social Business teams.
- Continue improve the thermal efficiency of our homes. We will be prioritising the most vulnerable and targeting those homes in potential fuel poverty within the first five years of our investment programme to achieve a minimum EPC rating of band C. We will seek out matched funding streams and new technologies to support this aim.
- Assisting customers to maximum household income, reducing costs through lower and affordable energy tariffs. We will be implementing a home energy efficiency scheme supported by campaigns to promote behavioural change and inform customers (see section 7.2).

4. CARBON REDUCTION AND CLEAN GROWTH

To enable BCHG to measure and monitor its carbon reduction and improvement in energy efficiency is a key priority is to establish and fully understand our current position with clear targets for improvement.

4.1 Our Targets and Timeline

BCHG aims to improve energy efficiency of all its properties but recognises that due to their age and construction, some will be challenging and require significant investment to bring them up to the standard. Our goal is to meet the targets set by Government by 2030 and 2050 outlined in the chart below (figure 4).

Develop cost modelling and net-zero carbon investment plan by <u>2021</u>	Pilot Investment (Phase 1 - initial & 2 larger pilot) Programmes <u>2021-23</u>	Review and agree long- term investment plan <u>2023/24</u>		
Implementation of long-term investment programme <u>2024></u>	Ensure all homes have EPC of above band D by <u>2023</u>	80% of homes to achieve an EPC band C or above by <u>2025</u>		
Achieve EPC band C (where possible) for vulnerable and fuel- poor homes by 2026	All our homes will achieve EPC band C or above by <u>2030</u>	Carbon Reduction Target 70>% by <u>2040</u>		
Net-zero Carbon Homes by 2050				

Figure 4

We will be developing a detailed road map for achieving these targets as part of our 30-year investment plan supported by Net-Zero Carbon Investment Modelling (NCIM) that would be completed by Savills. These modelling costs will be based on a reduction of Co2 emissions by 80% with the realistic assumptions that the remaining with be made up from decarbonisation of the grid and other allowable solutions. Where possible we will aim to not match but beat national timescales in this area.

4.2 Our Delivery Approach

We will undertake improvements to homes that will have the most significant impact on energy efficiently, the quality of life of customers and achieving carbon reductions targets in the most efficient and cost effective way. Our initial approach to the implementation of this strategy will be implementing a number of main aims for energy performance set out below and detailed within Environment Delivery Plan *(Appendix 1).*

We will;

- Review all existing energy performance and environmental data that we hold to ensure it is current and reflects the improvements and efficiencies made as part of our recent investment programmes.
- Establish a clear understanding of the performance of our properties and the short and long-term investment requirements and challenges to achieve net-zero carbon.
- Target the worst performing properties and those customers at greater risk and undertake investment to improve energy efficiency.
- Set clear future requirements to achieve EPC band C and carbon zero into our investment strategy.
- Implement phased pilot programmes of stock investment based on priorities within our stock condition surveys and NCIM. This will support with the validation of costs and long-term approach in achieving carbon reductions.
- Work in partnership with Matrix, WMCA, WMHAP and other key stakeholders to foster our learning culture and seek support for the delivery of this approach.
- Work through energy extra to reduce energy consumption and address fuel poverty for our residents.

4.3 Stock Condition Surveys and Energy Management

Our stock condition survey has previously focused on maintaining operational performance and meeting the Decent Homes Standard. Further work is to be undertaken by Savills and will incorporate an energy and environment assessment of our homes.

Supported by Savills we will combine existing EPC data with the stock condition survey to assess the magnitude of investment, the nature and timing of low carbon measures required to develop a Net-Zero Carbon Investment Strategy and Standard for BCHG.

Our approach will ensure that we focus on investing sooner rather than later in our homes taking an opportunity to move beyond traditional asset management and embed net-zero carbon into future stock investment strategies and asset management plans.

4.4 Asset Management Strategy

This strategy is aligned to our Asset Management Strategy and reiterates our approach taken as part of planned capital investment programme (e.g. lifecycle replacement of doors, windows, heating systems etc.) that is focused on thermal improvements and increasing SAP rating.

It also supports our stock appraisal model and future stock rationalisation, minimising the number of poorly performing homes. BCHG will ensure an ethical approach when appraising any stock that cannot economically be brought up to standard and will explore alternative partnership options and investment before potential disposal.

4.5 Funding and Financial Implications

Financial Modelling

We are committed to improve the energy efficiency of our homes and ensuring the long- term the financial resources required to achieve this.

Our current stock investment plan is based on standard lifecycle replacements with a total 30-year stock investment is £34,000,000 (average of £17,000 per unit). We will need to fully understand the financial implications following the work undertaken by Savills and will develop a revised capital investment strategy to achieve our net-zero targets.

Current sector research and estimations indicate an increase of between 20 to 40% of additional investment cost required over 30 years. These costs are based on a reduction of Co2 emissions by 80%.

Grant Funding

A significant amount of Government and partnership funding will be required in the housing sector to achieve the U.K's carbons targets and ensure affordability of investment plans and stock. It is essential that we take advantage of future Government initiatives and grant funding schemes to deliver our investment strategy and continue to improve energy efficiency, reduce heating costs and target stock where levels of fuel poverty are potentially at their highest.

The Green Homes Grant was announced by the Chancellor (July 2020), a £3bn green investment package with the aim of decarbonising homes and improving the least energy efficient social rented sector. BCHG aims to make use of as many funding opportunities as possible to help achieve its targets and support our customers, which may also include leaseholders and shareowners.

To support the delivery of our Investment Strategy we will;

- Investigate funding opportunities that target customers that are at the highest risk of fuel poverty and will reduce fuel costs for our customers.
- We will continue to source Government and external funding to address the challenges faced by the Housing Sector in achieving carbon targets.
- Incorporate a 30-year capital financial investment strategy into our current business plans to include modelling for 2030 and 2050 carbon reduction targets.

5. SUSTAINABLE ASSETS AND INNOVATION

We believe that sustainable homes should offer value for money and be affordable to heat. When investing in existing stock or designing new homes we will be adopting the 'fabric' first' approach supported by investment in new low carbon technologies.

5.1 Investment in Existing Stock

Depending on the dwelling type the Investment required to achieve our carbon reduction targets will vary significantly in relation to; property size, age and built type etc. The **potential** approach is based on costs per unit and can be summarised into three main categories and work required. Such work will always be kept under review within BCHG's business plan

Low Cost (1K – 15k)	Medium Cost	High Cost (25k – 40K)
Homes are relatively well insulated already (newer builds), minor fabric upgrades (where appropriate). Future options supporting decarbonisation of the grid.	Fabric first approach focusing on improving insulation and ventilation, then heat source exchange	Whole house retrofit with high level of insulation, good air tightness and ventilation with potential on-site energy production

5.2 New Homes

As part of BCHG's commitment to developing new housing, we will work with our development partners, Matrix, to make homes as sustainable as possible. Matrix currently works to a range of housing standards, which include Scheme Development Standards and Level 3 of the Code for Sustainable Homes.

We will be looking to future proof our new homes aiming to meet the high fabric standards and low carbon heating as a performance benchmark set out in the MHCLG Future Homes Standards for new builds. We also will ensure that our homes meet the future energy efficiency requirements for new homes set by Part L of the Building Regulations.

In preparing for future changes, we will be reviewing our current approach to development, and seeking opportunities to trial renewal low carbon heating technologies (i.e. heat pumps and district systems) where feasible and affordable into all future development programmes.

It may not be currently feasible to introduce low carbon heating for all new homes although consideration will be given to future requirements in the design. To ensure homes are future-proofed we ensure that the minimum standards for energy efficiency and fabric performance set out in the uplift to Part L and Part F of the Building Regulations (proposed in 2020) are implemented into the design stage of any new developments.

It is acknowledged that this approach may increase costs and we will review our funding streams, treasury strategy and development parameters to ensure we deliver.

There will be an educational need for new technologies both for BCHG in installing and maintaining such equipment and for residents in their day-to-day use.

Figure 5

5.3 Modern Method of Construction

BCHG's aim is to use innovative construction methods, products and inventive use of traditional, natural and recycled materials to offer new ways to build sustainable and affordable homes.

Off-site modular production for construction will enable us to build higher quality homes with improved environmental performance whilst also reducing materials costs and wastage. BCHG are keen to invest in the development of modular homes supported our Matrix Partners, and LoCal Homes offsite manufacturing company.

We will:

- Undertake feasibility studies (on existing owned land) for options to develop new low carbon and sustainable homes in 2021/22.
- Incorporate timber frames and other sustainable materials into the design requirements of our future development programme.

5.4 Decarbonise of Heating

A key issue for BCHG is the need to decarbonise heat in our homes to achieve zero carbon. Heat is the largest source of UK greenhouse gas emission. The Government has emphasised the importance of decarbonising heating and is developing a clear framework and future initiatives to support low carbon heating technologies.

Over recent years, lower carbon technologies have provided an increasing proportion of our nation's heating. BCHG plans to invest resources in innovation on low carbon heating using air source and ground source heat pumps to ensure the transition to low carbon heating.

New low carbon and renewal technologies are continually being developed and our investment plans will be constantly reviewed to support this. We will ensure that any new technology has been market tested, scaled and future-proofed to deliver our targets within replacement lifecycle (e.g. domestic boilers and heating distribution systems within the next 15 years). We will;

- Ensure that all newly build BCHG homes by 2025 are not connected to the gas network and are provided with renewal heating system.
- Ensure that all new build homes are rated EPC A through fabric first design and efficient systems.
- To achieve carbon reductions in our existing stock we will define future delivery options including investment costs and timescales for replacement of gas heating systems (to renewable/low carbon technologies) as part of replacement cycle.

5.5 Innovation

BCHG is seeking to develop wider opportunities for sustainable housing by examining, piloting and introducing innovative approaches to;

- Renewable energy provision.
- Consideration of communal heating systems for future developments.

Technologies, such as hydrogen may have a role to play in heating systems of the future. We anticipate that heat pumps and heat networks will be the principal means of producing low-carbon heat for buildings therefore will be investigating opportunities and funding in these areas.

5.6 Water

89% of the total CO2 emissions is associated with water use in the home (by heating water), while 11% is associated with the emissions resulting from abstracting, conveying and treating domestic water outside the home.

Research by the University of York has identified that across England 63% of those in fuel poverty are also in water poverty, and 34% of those in water poverty are in fuel poverty.

We will help our residents to save water in three ways:

- procuring water-efficient devices for kitchen and bathroom refurbishment
- retrofitting water efficiency kit at key 'trigger points'
- providing advice on saving water when refurbishing or retrofitting

6. ORGANISATIONAL SUSTAINABILITY

6.1 Business Operation

We are committed to implementing sustainable practices and reducing our environment impact throughout the business believing that everyone within the organisation has a responsibility in their daily work activities. We will be identifying and analysing our energy consumption and the carbon emissions of our offices and work activities.

BCHG has recently reduced its office portfolio and now operates one recently refurbished main offices site in Blackheath and a smaller satellites office for the Homeforce team in Dudley. It also runs a small a fleet of diesel-powered commercial vehicles. We therefore have an opportunity to reduce our operational costs, carbon emissions and our impact upon the environment focusing a lot on our transport.

Working collaboratively with an external environmental partner we will be establishing our organisation's carbon footprint (CO2 emissions per year) and waste production. We will develop a carbon management plan that outlines our approach to reducing and offsetting carbon.

We will;

- Identify the scale of our carbon footprint in order that we can look at a meaning full reduction our target.
- Join a benchmarking scheme such as SHIFT to measure our reduction in carbon emissions.
- Setup an Energy and Environmental Management Group for BCHG to lead on workplace environmental standards, initiatives for reducing fuel poverty and support strategies for improving the energy efficiency of homes. It will have oversight of the implementation of the Environment Delivery Plan (*Appendix 1*)
- Develop a travel management plan that sets actions for reducing business travel costs and emissions.
- Review opportunities for investing in electric vehicles and charging infrastructure at our schemes and office.
- Encourage and incentivise cycling to, from and at work, which may include making bikes available for staff to travel between offices and schemes.
- Invest in jobs and skills, creating green jobs in Homeforce and other parts of the business where opportunities arise
- Minimise the use of plastic and other harmful materials in our offices and work practices

6.2 Procurement and Supply Chain

We want to ensure that our commitment to reducing our environmental impact is delivered through

our supply chain by incorporating the principles of environmental management and sustainable sourcing into our procurement processes. We will;

- Review our procedures to make sure that we buy products, materials and services that do not have a negative impact on the environment, and that support our approach to sustainability.
- Ensure that our suppliers and contractors are accountable for their environmental performance and review our process to ensure that we adequately assess their performance.

6.3 Green Energy and Communal Heating

BCHG manages a number of schemes with communal heating and lighting, paying utilities in the region of £650k per year. Part of this cost is passed onto customers. There is a clear imperative for BCHG, both socially and financially, to do as much as we can to improve the energy efficiency of our homes and reduce the cost of utilities.

We will;

- Continue to procure our communal energy effectively and manage our energy contracts robustly in order to deliver savings for BCHG and our customers.
- Investigate opportunities to secure lower energy tariffs for our customers. This will include the procurement of an approved domestic energy supplier for customers taking advantage of group purchasing discounts and competitive pricing.
- Source renewable electric suppliers if it is available at the same price as nonrenewable. This will be specified during procurement process.
- Deliver a programme of landlord supply smart meter installations in partnership with our energy provider. This will help us to reduce estimated billing and monitor service charged energy more effectively.

6.4 Waste Management

We aim to manage other aspects of our environmental impact such as waste. Our overall aim is to reduce waste going to landfill, both from within the organisation, from our properties and sub-contractors.

We will look for opportunities to reduce waste and encourage recycling across the organisation and within our supply chain.

We will;

- Implement a benchmarking scheme for our offices (e.g. SHIFT) to measure our reduction in waste production.
- Incorporate the principles of environmental management, and responsible waste disposal into our procurement processes.
- Set clear targets and develop procedures to reduce waste production and move to a paperless office, ensuring our IT capability supports this.

7. ENVIRONMENT AND THE COMMUNITY

BCHG will continue to comply with environmental legislation and embed sustainable practices to ensure a positive impact on the environment, our homes and community. We aim to reduce our wider impact and will examine opportunities to improve the open spaces that we manage.

7.1 Green Spaces

Sympathetic management of green spaces on BCHG's land can help to improve the chances for wildlife, especially in urban areas having positive benefits local biodiversity and customers who can enjoy enhanced open spaces.

BCHG will carry out a green space survey undertaken with our new internal grounds maintenance team. The purpose of this exercise was to identify suitable green spaces across our schemes and make recommendations for environmental improvement including landscaping and planting of trees in line with the government's 25-year environmental plan.

We will;

- Consult further with customers regarding options for environmental improvements and proposed work at their schemes.
- Take opportunities to positively enhance open spaces for our resident and identify suitable open spaces to tree planting and landscaping to support decarbonisation.

7.2 Community Involvement and Awareness

Our aim is to embed environmental sustainability across the organisation and to customers by developing collaborative working arrangements and focusing on raising awareness and education.

In order to help increase awareness and engagement in environmental issues will make physical improvements to open spaces to help bring significant social and community benefits through engagement and participation.

We will;

- Positively influence our customers in relation to their energy costs and their environmental impact by supporting them to reduce their energy consumption, consider switching suppliers or review their current arrangements.
- Upskill our staff and train customers to become Green Inspectors at our homes and schemes to raise the awareness of environment, help manage open spaces and support in the development of improvements.

8. MONITORING AND REPORTING

The Strategy will be reviewed by the Executive team and any material changes brought to Group Board for approval. Changes in legislation or regulations affecting delivery will be incorporated and implemented. The review will include an assessment of on-going and emerging risks to ensure that BCHG's Group Board is fully aware of changes, which might adversely impact on the business.

APPENDIX 1 ENVIRONMENTAL DELIVERY PLAN

1	Carbon Reduction and Clean Growth		2020/21	2021/22	2022/23+
1.1	Set targets to reduce carbon emissions	Develop a road map for achieving our carbon emission and clean growth targets (2025, 2030 & 2050).			
1.2	Review all existing energy performance	Review all existing energy performance and environmental data held			
1.3	Understanding our energy performance	Establish a clear understanding of energy performance and develop short and long-term investment plans.			
1.4	Target worst performing properties	Target energy improvements the worst performing properties and customers at greater risk.			
1.5	Identify fuel-poor household	Identify fuel-poor households within our stock updating resident profiling data. Actively engage with customers on energy efficiently and costs.			
1.6	Stock condition and energy management	Commission Savills to develop a Zero Carbon Investment Strategy.			
1.7	Funding customers (Fuel Poverty)	Investigate and deliver funding opportunities that target customers at risk of fuel poverty through energy extra or similar partnerships.			
1.8	Funding to achieve carbon targets	Source a variety of external funding initiatives to address the challenges faces by achieving carbon targets.			
1.9	Green Homes Grant Funding	Develop a programme of energy efficiency and source funding through the Government's Green Homes Grant.			
1.10	Phased pilot programmes of stock investment	Implement a phased pilot programmes of stock investment based on priorities set within our stock condition surveys & NCIM.			
2	Sustainable Assets & Innov	ation	2020/21	2021/22	2022/23+
2.1	Benchmark for new homes	Meet the low carbon benchmark set in the MHCLG Future Homes Standards for new builds.			
2.2	Development of modular homes	Undertaking feasibility studies (on existing land) to develop new low carbon and sustainable homes.			
2.3	Decarbonise of heating in our homes	Develop plans and investment costs for replacement to renewable technologies in our existing stock. Provide renewable heating in all new homes by 2025.			
2.4	Delivery of renewable/low carbon technologies	Define future delivery options including investment costs and timescales for replacement of gas heating systems (to renewable/low carbon technologies) as part of boiler replacement cycle.			
2.5	Housing scheme retrofit project	Undertaking feasibility study to identify a housing scheme that supports a retrofit project focusing on environmental sustainability. Include within future investment plans.			
2.6	Removal of Stored Hot Water Systems	Replace domestic hot water cylinders for stored water with efficient on demand type			

3	Organisational Sustainability		2020/21	2021/22	2022/23+
3.1	Establish the carbon footprint of business	Identify scale of our carbon footprint. Join a benchmarking scheme to measure carbon reduction.			
3.2	Setup Energy & Environment Group	Setup an Energy & Environment Mgt. Group to lead on workplace environmental standards and green initiatives.			
3.3	Develop a travel management plan	Develop a travel management plan that sets actions for reducing business travel costs and emissions. Review opportunities for investing in electric vehicles. Reduce office usage and continue agile working for new normal			
3.4	Incentivise activities for cycling	Encourage and incentivise cycling to work and to travel between offices and schemes.			
3.5	Procurement and supply chain	Review procedures to ensure we do not buy products and materials that have a negative environment impact			
3.6	Lower energy tariffs for customers	Investigate opportunities to secure lower energy tariffs for our customers.			
3.7	Landlord supply smart meters	Deliver a programme of landlord supply smart meter installations in partnership with our energy provider.			
3.8	Benchmarking scheme	Implement a benchmarking scheme for our offices (e.g. SHIFT) to measure our reduction in waste production and our reduction in carbon emissions			
3.9	Procurement Processes (Environment Mgt)	Incorporate the principles of environmental management and responsible waste disposal into our procurement processes.			
3.10	Waste reduction targets	Set clear targets and develop procedures to reduce waste production (move to a paperless office).			
3.11	Reduction of Paper Use	Reduce the use of paper and printing across BCHG by 50% in year 1, followed by a further 15% in both Year 2 & Year 3			
3.12	Electric Vehicle Charging Points	Installation of an electric charging point to all offices in year 1 and staffed schemes from year 2			
4	Environment and the Comm	nunity	2020/21	2021/22	2022/23+
4.1	Supporting customers (Fuel Poverty)	Assist customers to maximum household income, reducing costs through lower and affordable energy tariffs through a programme project.			
4.2	Consult with customers	Consult with customers regarding options for environmental improvements at their schemes.			
4.3	Enhancing our open spaces	Enhance open spaces identify suitable areas for tree planting and landscaping.			
4.4	Review grounds maintenance activities	Review and encourage sustainable practices with our grounds team.			
4.5	Green inspectors at our scheme	Train staff & customers to become Green inspectors to help manage open spaces.			