

Brighton & Hove City Council

Housing Committee

Agenda Item 10

Subject: Carbon Reduction in Housing

Date of meeting: 22 June 2022

Report of: Executive Director Housing, Neighbourhoods and Communities

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Ward(s) affected: All

For general release

1. Purpose of the report and policy context

1.1 In 2018 the City Council declared a climate and bio-diversity emergency. We have an ambition for the city to be Carbon Neutral by 2030 with a corporate wide Carbon Neutral 2030 Programme in place to support this. As part of our plans to become a more sustainable City, we will:

- become a carbon neutral city by 2030
- create and improve public open spaces
- reduce, re-use and recycle
- develop an active and sustainable travel network
- promote and protect biodiversity.

1.2 The report provides an update to Committee on progress in Housing to support the council's ambition to be Carbon Neutral by 2030, and details current projects and future plans to reduce carbon whilst supporting residents to afford energy bills.

2. Recommendations

2.1 That Committee note progress and planned action with regard to carbon reductions in housing.

2.2 That Committee notes expenditure of up to £50,000 as the council's financial contribution toward costs of the work of the Retrofit Taskforce to Deliver Zero Carbon Homes as outlined in paragraphs 3.11 to 3.13.

3. Context and background information

Council Housing

3.1 The council has historically invested in its housing stock as part of the Decent Homes programme. There has been significant investment in upgrading gas boilers to A rated appliances (99% of stock are A-rated) and over 400 solar PV systems are installed across the stock. We confirm correct installation of

our boilers and in order to maintain an A rating, all our boilers are serviced and maintained in accordance with the manufacture's specifications. Efficiency is confirmed at every service visit. There have been incremental improvements to the average SAP ratings of its properties (Average SAP rating 68.2 March 2022). SAP is the Standard Assessment Procedure, the calculation that is required in order to produce an Energy Performance Certificate (EPC). A SAP calculation indicates a score from 1 to 100+ for the annual energy cost based on the elements of structure and the heating and hot water system.

- 3.2 In April 2022 a new Sustainability & Energy Team was created in the Housing Investment and Asset Management Service. Additional resource has been allocated to the new team and recruitment to key posts is underway to take forward a range of Sustainability and Energy projects across the Council housing stock. A focus of the new team will be ensuring that the energy data we hold regarding our own housing is more accurate and fully reflects all the improvements made, a review of our EPC assessment processes and data is underway.
- 3.3 In addition to the above internal review, energy modelling software is being procured to better inform the Energy Plan for Council Housing. This will allow us to model feasible measures and the potential impacts of certain measures on EPC ratings, CO2 savings and residents' energy bills, an area of particular concern given current energy price rises. We will focus and prioritise the modelling and programmes reflected in the Energy Plan on the worst performing properties, specifically those EPC rated D to F.
- 3.4 The HRA Energy Plan will be an iterative document with short to medium term goals as part of the longer-term objective of contributing to being carbon neutral by 2030. The updated plan will be presented to Housing Committee in Autumn 2022. For the 2022-23 financial year the following areas will be focused on in the plan:
 - Procuring energy modelling software to develop detailed programmes of work and specific measures which also allows full scrutiny of the data we hold and other available data.
 - A Solar PV programme was agreed at Housing Committee in June 2020 for up to 1000 homes, with an ambition for a further 1500 installations pending further approval, delivery of this programme is planned to begin in 2022-23 financial year. Separately, the SOLARISE project has piloted ways that we can increase the benefit of solar PV to residents in communal blocks, we will explore how we can apply these models more broadly across our housing.
 - As agreed at January Housing Committee the procurement of a new heating and hot water contract offering low/zero carbon options from 2023 onwards is underway. We have already installed over 20 Air Source Heat Pumps (ASHP) in our existing housing stock with plans for up to 100 more installations in 2022-23.

- An options appraisal for low/zero heating and hot water at communal blocks in north Whitehawk currently served by gas is underway, this will lead to 265 flats moving from gas to low carbon individual heating and hot water over the next 2-3 years. We will aim to accelerate this programme where we are able to, subject to feasibility and resident consultation. The project would significantly reduce carbon emissions and give residents greater personal control over the heating and hot water.
- Further options appraisals on two other communal gas heating systems to be upgraded to low carbon sources will be completed this year. We have 32 communal systems. Communal systems will be assessed for bespoke low carbon solutions over the coming years. Priority is based on a condition report traffic light system based upon carbon emissions, age and condition. The two options appraisals concern Elwyn Jones Court (seniors housing) and Manoj House (council owned emergency accommodation). Ground Source Heat Pumps will be considered as part of options appraisals but are not currently a preferred option for these two sites.
- Aligning the planned solar PV and ASHP installations, where feasible, and supplementing these measures with insulation and energy efficient lighting to maximise carbon and energy bill savings.

3.5 We are developing a new Asset Management Strategy in the current (22/23) financial year. Delivering carbon reductions will be a key priority in the Strategy. Helping residents to live in well insulated, efficiently heated, healthy homes remains a key long-term commitment, particularly in light of the current cost of living crisis. Consistent positive progress has been achieved, with national Standard Assessment Procedure (SAP) energy rating performance monitoring being used to benchmark these improvements. However, we recognise that more needs to be done. Key investment that contribute to further reductions include, good quality new doors, windows, insulation, heating upgrades and renewable energy where appropriate. We will also consider embedded carbon costs of such investments and longevity of usage.

3.6 Circular economy and recycling of materials is also a key area of consideration. Working in collaboration with residents we will review how the Housing Repairs & Maintenance service can enhance preventative works, such as improving maintenance of windows and doors and proactive gutter clearances, to reduce the need for capital works replacement programmes. In reviewing our material supply chain, we are seeking to increase current recycling rates of materials in the service. For example, our service is working to reclaim and reuse good quality roof tiles, sourced from planned roof replacements to provide the service with a stock of tiles for future repairs.

3.7 As well reducing carbon emissions from our homes, we will also work towards achieving net zero carbon emissions from activities directly related to delivering our service. This will include reducing carbon emitted by our vehicle fleet. The Housing Repairs & Maintenance service are now using 7 electric powered vehicles (3 electric vans and 4 electric cars) to provide services to residents. One of these vehicles has participated in the Innovate UK project, trialing lamp post vehicle chargers, situated in close proximity to

the homes of repairs operatives, allowing vehicles to charge outside of normal operating hours to ensure optimum use during the working day. Two electric bikes are also used in the service as a further example of how we are seeking to embed sustainable travel and transport.

- 3.8 In addition, we are planning for installation of electric vehicle (EV) charging points in appropriate locations. We have installed 4 charge points at the Housing Centre and are working to install more electric charging points on Housing land with the use of the Carbon Neutral Fund. We continue to work with the Corporate fleet team to test new sustainable powered vehicles coming to the market. We are committed to making our fleet more sustainable by moving towards hybrid, electric or hydrogen vehicles, as well as looking to reduce the length and number of vehicle trips across the city to complete repairs.
- 3.9 We have embedded sustainability principles through our sustainable procurement policy, monitoring and encouraging our contractors to maximise opportunities to reduce their carbon emissions. We will expand these principles to the re-procurement of our materials supply chain when this commences later in the year, including provisions in the specification for providers to be located in the city and near our housing stock.
- 3.10 In addition to our own modelling and planning work we are working collaboratively with neighbouring authorities where we can. This includes with local partners on a 'Retrofit Taskforce to Deliver Zero Carbon Homes.' within the Greater Brighton region led by Lewes District Council and the University of Brighton.
- 3.11 The 'Retrofit Taskforce' promotes sub-regional working to seek the best solutions toward delivering the decarbonisation of council owned housing stock. The aim is to achieve this through analysis of stock types (archetypes) to consider the impact and cost of applying a menu of decarbonisation measures through an assessment of 10 main types of housing. Scenarios are modelled across stock types to provide evidence of carbon impact, household fuel costs and implementation costs. Costs to landlord, energy cost for tenants and whole life carbon costs are the key metrics. Modelling and building assessments include impacts of different levels of intervention ranging from minimum, through medium to deep, with measures ranging from replacement lighting, windows and doors, through to solar PV, wall, roof and suspended floor insulation, and replacing of heating systems.
- 3.12 The analysis provides evidence to inform investment strategies to decarbonise council homes, support potential cross borough working on procurement to drive value for money and dialogue with Government to support potential sub-regional funding bids. The potential benefits of joint working are also envisaged to be:
 - Setting new standards for materials and work practices across the sub-regional area.
 - Providing certainty to allow for the longer-term development of skills and economic benefits.

- The potential for creating a trusted brand and products for that can be accessed by the private housing sector.

3.13 As outlined in report recommendation 2.2, Lewes District Council have sought financial contributions from participating Greater Brighton Economic Board partners relative to their housing stock. The financial contribution includes toward costs of combined research, to extend in depth analysis on archetypes to Brighton & Hove stock such as high-rise buildings, supply chain development and development of funding bids. This will be funded from the HRA Sustainability and Retrofit Reserve and more details are included under the Financial Implications at Paragraph 7.

Private sector housing

3.14 At Budget Council February 2021 it was agreed to expand the warmer homes initiative through provision of an additional financing budget to lever in capital investment, increasing the total programme to £5.200m. As part of the initiative, it is intended to develop a 'Warmer Homes Scheme' for private housing. AECOM Consultancy support has been commissioned to research is similar schemes elsewhere, carry out a baseline assessment of property types and energy performance in Brighton & Hove to develop a targeted scheme and options around delivery models. Initial information arising from the baseline stock assessment element of this study is attached in Appendix 1. This includes information on: property type and build form; breakdown of properties by construction age band; most common heating fuel type in Brighton & Hove; an assessment of key EPC property elements against a scale ranging from 'Very Poor' to Very Good'; The total percentage of properties that EPC recommended measures have been recommended for; percentage of properties by EPC bands, property type; percentage of properties currently in each EPC band by construction age; EPC bands of the most common archetypes, based on property type, build form, construction age and main heating fuel; data coverage, properties with EPC data and subject to analysis against those without.

3.15 The Council was part of a successful consortium bid for the governments 'Sustainable Warmth' competition to fund improvements to private sector homes for households with low income and low EPC rated homes. Led by Portsmouth City Council and Agility Eco the 'Warmer Homes Programme' was launched in May 2022 and will run until March 2023. The funding can provide up to either £10,000 or £25,000 of funding to eligible households for energy improvements to their homes.

3.16 We are awaiting the outcome of a bid for funding from the Department for Business, Energy, and Industrial Strategy (BEIS) to assist with the implementation of the Energy Efficiency (Private Rented Property) (England and Wales) Regulations 2015. This will enhance our efforts for enforcement going forward. A resource for enforcement of the standards has been recruited to in the Private Sector Housing Team in the meantime and work has begun on identifying properties and communicating with landlords.

- 3.17 As outlined in the Private Sector Housing Update report to March Housing Committee, Minimum Energy Efficiency Standard Regulation compliance work has started. The Council's website has been updated with this information in addition to sending out information via social media channels. Procedures have been set up including joint processes with Trading Standards. Data has been obtained from the National Energy Performance Certificates and Exemptions databases on properties with F and G rated properties (approx. 3000 properties), cross referenced with information on property owners from Council Tax records. The council have sent out information letters to landlords who we consider may be non-compliant advising them of their obligations under the regulations and possible future actions. We are prioritising areas with the most MEES non-compliance and fuel poverty. However, we will eventually cover the whole city. So far, the responses have been positive. There is also information on our website. There is planned approach to contact remaining landlords in addition to responding to enquiries subsequently generated.
- 3.18 Solar Together Sussex the collective purchasing scheme for Solar PV systems and batteries, for Sussex local authorities, completed a second auction in the Autumn of 2021 with over 7000 households across Sussex registering an interest in the scheme. To date the scheme has achieved:
- 2020 scheme – 76 solar PV systems, 6 retrofit batteries
 - 2021 scheme (as of April 2022) – 42 PV systems installed, 65 installs booked in with customer, 16 still to survey. We have also had 53 households request quotes for an EV charger installation which we might offer in the future.
- A decision about a third scheme this Autumn will need to be taken in the next few months, this will include a lessons learnt exercise.
- 3.19 The Local Energy Advice Partnership (LEAP) programme has operated throughout 2021-22, and delivered energy advice to 138 households, delivering a range of measures with an estimated lifetime CO2 saving of over 93 tCO2. And lifetime bill savings of over £23,500.00. Information regarding LEAP is published on the council website and through their own promotional materials. We also promote LEAP through the fuel poverty steering group and our local network of advice providers in the city.
- 3.20 It was agreed at November 2021 Housing Committee to increase both the total funding and individual grant limit for the Disabled Facilities Grant (DFG) Warm Safe Homes Grants, the team continues to work with contractors and local partners to identify households that would benefit from the greater flexibility this affords in terms of measures that could be installed. A total of 59 Warm Safe Homes Grants were completed in the 2021-22 financial year amounting to a total spend of £274,002.83, the average being £4,644.12 per approved grant.

4. Analysis and consideration of alternative options

- 4.1 Officers are considering a range of options to assist the Council in meeting its commitment to become carbon neutral and are working alongside key partners locally and across the region. This is a particularly important workstream for the housing service and further specialist expertise will be used to formulate, review and evaluate a range of options as these programmes are developed and evolve over time in addition to the additional resource described in 3.2.

5. Community engagement and consultation

- 5.1 Officers will work with the Community Engagement Team and the 'Home' Service Improvement Group in the coming months to review the revised Energy Plan prior to presentation to committee. We will also engage with residents on how we may best support energy saving opportunities in their own home such as their use of appliances, including heating systems.
- 5.2 Residents will be engaged using the existing processes on specific works, this includes early engagement with tenants and leaseholders around works proposed for their homes in order that they have the opportunity to consider and influence proposals from the outset. In addition, leaseholders will be consulted in line with statutory leaseholder consultation processes.
- 5.3 Resident liaison resources will be used on specific projects, in particular where new technologies are being introduced. Behaviour change advice and support will be embedded into retrofit programmes, this will be supported initially by existing internal expertise and resource within the Tenancy Sustainment Team. Additional resource will be built into projects and programmes as required.

6. Conclusion

- 6.1 Becoming Carbon Neutral by 2030 is a significant challenge, requiring significant resource investment and ongoing work with residents to achieve the ambition.
- 6.2 The recent rise in energy prices and the general cost of living crisis are further evidence of the need to ensure that the actions are taken in partnership with residents to try and avoid inadvertent consequences of significantly increased fuel bills or residents not being able to affordably heat their homes.

7. Financial implications

- 7.1 The HRA Capital Investment Programme 2022/23 includes the following Sustainability and Carbon Reduction programmes:

	2022/23	2023/24	2024/25	
Scheme	£'000	£'000	£'000	Description
Domestic/Communal Heating Improvements	2,200	2,200	2,200	Efficient and modern replacement heating systems improve thermal comfort, reduce carbon emissions and resident fuel costs.
Energy Efficiency and Low carbon heating	1,357	1,500	3,000	This programme will help take up a range of opportunities to further improve the energy rating of our homes and to identify projects that will help move towards zero carbon from our service delivery activities by 2030.
Solar Panels Programme	900	1,500	1,200	Policy & Resources Committee approved a budget of £1.750m for the delivery of 500 solar panels split evenly over 2021/22 and 2022/23. The delivery has been profiled to deliver the original 500 by 2023/24 as well as making provision for a further 500 solar panels at a cost of £1.750m to be delivered as part of this programme between 2023/24 and 2024/25, the additional investment will require further committee approval. A project manager has also been included as part of this at an estimated cost of £0.050m per annum
Total 22/23	4,457	5,200	6,400	

7.2 As well as the specific schemes above, other parts of the HRA capital programme will also assist with carbon reduction, for example the programme for new windows and doors. The HRA also has a renewable Energy reserve of £0.150m and a Sustainability and Retrofit Reserve currently estimated to be £4.800m by 31/3/2023, (assuming a further contribution of £1.200m from the HRA is affordable during 2022/23). The cost the Brighton Retrofit Taskforce work and Warmer Homes Programme research and consultancy work, estimated at £0.050m, will be met from this reserve.

7.3 General Fund. Budget Council February 2020 agreed a budget of £2.600m towards a Brighton and Hove warmer homes investment capital fund

(providing grants for insulation and other carbon saving investments). Budget Council February 2021 agreed to allocate £0.200m in recurrent funding from 2021/22 to the financing costs budget to fund a further £2.600m capital resources through borrowing towards a Brighton and Hove Warmer Homes Investment Capital Fund, giving a total of £5.200m for Warmer Homes. £0.400m of this fund which has already been earmarked to expand the Warm Safe Homes Grant which is currently part of the Disabled Facilities Grant (DFG) Housing Policy. There is also £75,300 one-off funding available in 2022/23 for the revenue costs to support the implementation of a warmer homes scheme.

Name of finance officer consulted: Monica Brooks Date consulted
10/6/22

8. Legal implications

- 8.1 There are no significant legal implications to draw to the Committee's attention arising from this report.

Name of lawyer consulted: Liz Woodley Date consulted 31/05/22

9. Equalities implications

- 9.1 The transition to low/zero carbon housing has the potential to provide numerous benefits, however if not delivered with residents and in consideration of the impact on the end user it could be disproportionately impactful on some groups. The Committee on Fuel Poverty, an advisory Non-Departmental Public Body sponsored by the Department for Business, Energy & Industrial Strategy (BEIS) has identified the potential greater cost to the fuel poor of policy proposals intended to address Net Zero.
- 9.2 Fuel poverty can cause people to not adequately heat their home, the impacts of living in a cold home disproportionately impact on people with long term health conditions, disabilities, and older people.
- 9.3 Equalities impacts will be carried out on strategic decisions, major procurements, and specific projects to identify and mitigate impacts on specific groups. The potential equalities impacts will be reflected and mitigated through the HRA Energy Plan.

10. Sustainability implications

- 10.1 Sustainability implications are reflected throughout the report. Where programmes of work and specific projects are planned wider sustainability impacts and potential to increase benefits will be considered, for example reducing water use, opportunities to promote biodiversity and increasing availability of EV charging points on HRA land.
- 10.2 Carbon offsetting plans and opportunities will be developed, aligned to the wider Asset Management Strategy.

11. Other Implications

Social Value and procurement implications

- 11.1 The opportunity to deliver social value will be explored through all projects and programmes of work. This includes promoting local jobs and skills development, through local apprenticeship and training opportunities. The energy sector requires significant upskilling of existing trades and creation of new roles to increase the supply chain of jobs and businesses to meet the carbon neutral agenda.
- 11.2 Procurement of specific contracts will be assessed at Procurement Advisory Board, as appropriate, prior to any final decision at Housing Committee. These procurement activities will include the assessment of social value and sustainability impacts, all tenders will, as a minimum, be evaluated with a weighting of 10% for each element.

Public health implications:

- 11.3 Strategically addressing cold homes and fuel poverty in vulnerable groups will contribute to the prevention of ill health and excess winter deaths, reduce health and social inequalities, and improve wellbeing and quality of life. Supporting and enabling residents to pay less for their energy can contribute to tackling fuel poverty and cold homes.

Supporting Documentation

1. Appendices

1. Initial AECOM baseline stock assessment study findings.