

Subject:	Housing action towards Carbon Neutral 2030		
Date of Meeting:	20 January 2021		
Report of:	Interim Executive Director Housing, Neighbourhoods and Communities		
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Ward(s) affected:	All		

FOR GENERAL RELEASE**1. PURPOSE OF REPORT AND POLICY CONTEXT**

- 1.1 This report outlines the current activity, plans and ambition for Housing to contribute to making the city Carbon Neutral by 2030.

2. RECOMMENDATIONS:

That Housing Committee

- 2.1 notes the content of the report
- 2.2 approves the draft Housing Revenue Account Carbon Neutral Strategic Action Plan 2021-2025 in Appendix 1
- 2.3 agrees that a detailed costed retrofit plan, that includes revising Energy Performance Certificate targets for Council homes in line with the commitment to net zero carbon emissions by 2030, be brought to Housing Committee in October/November 2021, in time for this to inform the budget setting process for 2022/23
- 2.4 commits to identifying resources from the Housing Revenue Account needed for reduction in carbon emissions from council homes to assist in achieving a carbon neutral city by 2030 and notes that Housing Revenue Account reserves towards this are being built up as part of the budget-setting process, subject to approval by Policy & Resources Committee.

3. CONTEXT/ BACKGROUND INFORMATION

- 3.1 The current Housing Revenue Account (HRA) Energy Strategy was agreed at Housing & New Homes Committee in January 2018. The strategy's overarching aim was to reduce fuel poverty but recognised the 'Energy Trilemma'; the challenge referring to Carbon emissions; Security of supply; and the Cost of energy. The strategy recognises that by mitigating fuel poverty through energy efficiency, it will subsequently improve security of supply and reduce Carbon emissions.
- 3.2 At the time the current strategy was developed the focus of the ambition was on the targets set by the Fuel Poverty (England) regulations 2014 that stated that households deemed to be in fuel poverty should have an Energy Performance Certificate (EPC) - minimum 'C' rated property by 2030. An EPC gives a property an energy efficiency rating from A (most efficient) to G (least efficient). Therefore, the main focus in the strategy was to improve all HRA properties, where practicable, to a minimum EPC-C rating by 2030.
- 3.3 Since the strategy was approved the ambitions of the Council have changed, a Climate Emergency was declared in December 2018 alongside an ambition for the City to be Carbon Neutral by 2030. The council's corporate plan - Our plan 2020 to 2023 - A fairer city, a sustainable future – sets out a series of priorities, including to take all action required to make our city carbon neutral by 2030.
- 3.4 The Housing Committee Work Plan identifies a number of actions under the headline 'Achieving carbon reductions and sustainability in housing including address fuel poverty' that this report relates to, primarily to; 'Develop an action plan to set out how we will work collaboratively to ensure housing contributes to making the city carbon neutral by 2030.'
- 3.5 To achieve the ambition of reducing carbon emissions from housing the Council can fulfil a number of roles, the most important element of which is the retrofit, i.e. to carrying out of multiple energy upgrades of a home all at once, of existing council housing stock. The UK Green Building Council (UKGBC) recognises in its [Retrofit Playbook¹](#) that retrofit at scale is neither a responsibility nor challenge that local authorities can or should be tackling alone. Local authorities will have a range of resource and capacity constraints. UKGBC identified a spectrum of activities that local authorities can engage with and outlines a number of different roles that they can play. This report will focus on the role of 'Delivering deep retrofit on social housing'. By focussing on this role however the Council will still stimulate the other key activities and roles of;
- Facilitation
 - Marketing and Communication
 - Coordination
 - Being a Trusted Partner
 - Supporting the Growth of local skills and supply chain

¹ UK Green Building Council – Retrofit Playbook <https://www.ukgbc.org/ukgbc-work/driving-retrofit-of-existing-homes/>

- 3.6 As the council manages its own housing stock, it is well placed to deliver retrofit which will in turn stimulate local supply chains and growth of local skills. Through the above, using the council's trusted partner status, facilitating, coordinating and use of marketing and communication channels there is an opportunity for significant stimulus to the private sector and other organisations, such as local Community Energy groups, to deliver retrofit across all tenures. The position on non-Council owned housing is considered at 3.14 below.
- 3.7 The above opportunity to grow skills and local jobs translates well to the Council's own in-house repairs and maintenance service. Opportunities to develop staff, support apprenticeships and ultimately jobs will be explored alongside the development of programmes for delivery. This is vital also in terms of the ongoing maintenance of 'new' technologies and systems in the council stock.
- 3.8 The focus of this report is the HRA housing stock, as this is where the council has the greatest opportunity to improve homes, reduce carbon and tackle fuel poverty. Combined, carbon emissions from all domestic properties contribute 40% of the city's total emissions, approximately 11% of these emissions (from domestic properties) are from the 11,500 council housing tenants and 2,500 leaseholders. The current average SAP rating of the HRA housing stock is 67.5, a high EPC band D.
- 3.9 The approach will be reflected and embedded in the new HRA Asset Management Strategy which is currently being developed, future action will align to the objectives of this wider strategy. It will also align with the approach for our New Homes outlined in the proposed Housing Supply Sustainability Policy being considered at this Committee, officers already work collaboratively across teams to share learning and help inform the approaches to both new build and retrofit.
- 3.10 The Draft HRA Strategic Carbon Neutral Action Plan 2021-2025 in Appendix 1 outlines further work required to develop more detailed plans for a retrofit programme for HRA stock. It also outlines some key deliverables during this period outlined in the table below.

Deliverable	When
Recruitment of additional resource into the HRA Housing Sustainability Team	March 2021 – June 2021
Procure and start delivery of Solar PV programme	March 2021 – December 2023 (further solar PV programme 2023-2026 if approved)
Procurement of consultancy to deliver asset analysis, feasibility studies and business case options for retrofit programme	May 2021 – August 2021
Review strategy for heating and hot water delivery for HRA (including assessment of pilots)	June 2021 – October 2021

Report back to Housing Committee with detailed and costed retrofit programme to inform budget setting	October - November 2021
Procurement and mobilisation of new contract(s) for heating and hot water installation, servicing and maintenance	November 2021 – March 2023
Delivery of programmes and retrofit housing stock	May 2022 onwards

3.11 The switch away from a fossil-fuel based economy will be challenging and retrofit presents a number of specific challenges including; supply chain capacity, skills, cost, disruption and technical feasibility across a range of property types. Where the council cannot meet zero emissions in existing stock offsetting will be considered through local partnerships wherever possible. Further consideration around this will be outlined in the forthcoming Asset Management Strategy.

3.12 Whilst the council is responsible for the energy efficiency of building fabric of council properties, it is rarely **directly** responsible for emissions. Working with residents to reduce emissions is key to successful outcomes. Engaging with residents throughout will be vital and supporting residents to adapt and change behaviour where required will be incorporated into retrofit programmes.

3.13 Housing service achievements and current activity

Solar PV – There are currently 405 solar PV installs on HRA properties with a generation capacity of nearly 1.2 MWp². In 2019, these arrays avoided 145tCO₂e being emitted from HRA assets.

Housing Committee approved a further solar PV install programme in June 2020, the first of up to 1,000 new installs will start in 2021. The estimated CO₂ savings associated with this are estimated to be 600tCO₂ p.a.

The Council is also a partner in the EU funded **Solarise** project to pilot 3 new approaches to installing solar PV on communal roofs to provide a direct benefit to residents. One of the pilots has already led to the planned roll out of the ‘block tariff’ model to a pipeline New Homes for Neighbourhoods project.

Solar Thermal – There are currently 6 solar thermal systems attached to HRA communal heating systems across the city.

Gas boiler replacement programme – The gas boiler replacement programme upgrades old inefficient boilers to A rated efficient boilers. Although this is not a viable long-term plan for achieving zero carbon ambitions, there have been significant carbon savings associated with this programme. The council will be reviewing this programme over the next 2 years to transition to other sources of

² MWp Megawatts-Peak used to describe the rated power output of solar power systems, which would be achieved under ideal conditions

providing heat and hot water where possible. A new contract for heating and hot water, reflecting this, will be in place from April 2023 onwards. The service has limited new gas connections in existing stock and new builds.

Air Source Heat Pumps (ASHPs) – The HRA installed its first ASHP at Hampshire lodge community space in 2019 and have also recently completed an installation as a retrofit pilot in a house. Further ASHP's are being installed as part of the Hidden Homes programme. Officers will continue to look at opportunities to install and pilot these in different settings to inform a strategy for a larger roll out.

SHINE project – EU funded project ending in February 2021, has led to boiler enhancements, energy advice home visits and the installation of small energy saving measures. The project has led to the permanent recruitment of a dedicated ongoing resource to support behaviour change and give energy saving advice to council tenants.

The [Local Energy Advice Partnership](#)³ will continue to offer energy saving advice and small energy saving measures to residents.

3.10 Challenges

There are a number of challenges on the journey to being Carbon Neutral, that will be addressed in future action planning, some of these are highlighted below;

A reliance on natural gas to heat and provide hot water to homes. Transitioning to other forms of heating and hot water supply is a significant technical and financial challenge. At present there are approximately 10,000 gas boilers within the council housing stock and 32 communal gas systems (including district heating schemes). Decarbonising heating across the HRA will be a significant challenge over the next 10-20 years.

Addressing fuel poverty whilst reducing carbon in the interim/transition will prove to be a challenge on the basis of the cheaper unit cost of gas when compared to electricity.

Scale and sequencing - Moving from 'pilots' of new technology and approaches to a 'business as usual' approach will be a challenge. Technologies are developing rapidly and there will remain a need for continuity and consistency across our assets for servicing and maintenance.

Capital costs - likely to increase in the interim whilst the supply chain evolves and develops, for example the cost of an Air Source Heat Pump install and associated work i.e. possible need for larger radiators will be more costly than the current cost for gas boilers and a central heating system.

A **Fabric First** approach to reduce energy demand will involve the installation of external wall insulation at some sites.

³ <https://applyforleap.org.uk/>

Infrastructure – the electrification of heat (and transport) will add more pressure onto the national grid that may limit options in the short to medium term.

3.11 Next steps

The revised **Council Housing Asset Management Strategy** which is currently being developed will provide the overarching approach.

Asset data – the above challenges will need to be scoped out and described in more detail initially through a detailed assessment, to be carried out in 2021, of council housing stock and what measures and in what numbers may be applied to help move to being carbon neutral. To meet the long-term objectives viable solutions that are suitable for the different archetypes in a retrofit context need to be identified alongside establishing overall cost.

Officers are exploring a partnership that will allow the installation of monitoring equipment in a selection of homes, early in 2021, to allow modelling, with academic rigour and oversight, the best approach to a large scale retrofit programme.

The council will recruit **resources and engage specialist support** to assist with understanding the opportunities and challenges and to develop and action a more detailed delivery plan.

Engagement - Taking residents through this will be key, as described above the council is not directly responsible for the majority of carbon emissions from the housing stock. Initially officers will continue to consult with the Home Group Service Improvement Group regularly about the action plan as it evolves.

Ensure that the HRA Carbon Neutral Strategic Action Plan 2021-2030 aligns with the corporate **Carbon Neutral 2030 Programme**. Officers will collaborate to ensure that opportunities are maximised and risks mitigated.

Proposed Housing Supply Sustainability Policy - Ongoing collaboration with colleagues to inform the approach towards zero carbon new homes and for this workstream to influence the retro-fit agenda as appropriate. This will include ensuring new systems, materials and structure types used are suitably robust and maintainable; and the products e.g. heating and hot water systems align with those used in retrofit projects whilst supporting ongoing repair and maintenance strategies.

Further trials will be undertaken to ensure an economically viable solution is available for the replacement of individual gas boilers. Only proven technologies will be used in the journey towards decarbonisation. Where communal heating schemes exist, these will be treated on a case-by-case basis, as each system will have a different best solution.

Use **PAS2035**⁴ to inform the approach and ensure that retrofit programmes are carried out to the highest standard, with a 'whole house' approach using a fabric first methodology.

⁴ PAS2035 [PAS 2035 Retrofitting dwellings for improved energy efficiency \(trustmark.org.uk\)](https://trustmark.org.uk/pas-2035-retrofitting-dwellings-for-improved-energy-efficiency)

Solar PV retrofit programme – the roll out of this programme will provide a platform to engage with residents in a conversation about zero carbon and other opportunities for improvements such as loft insulation top ups.

Attract **external funding** to support and accelerate projects aligned to the objectives, working with partners within the Greater Brighton area and more broadly across Sussex to bid for funds and carry out joint work. A zero carbon housing group is already established to look at these opportunities. Officers will also work with the Coast to Capital Local Enterprise Partnership and the wider Greater South East Energy Hub to create wider networks and access to technical expertise and support to deliver programmes and projects.

3.14 Private Sector Housing

3.15 Focus has been on HRA properties as this is where we have most control, however some current actions and opportunities are highlighted below that apply to private sector housing. Being the significantly larger housing sector, this is where the most significant carbon savings can be made however this is more reliant on national government regulation and funding to force or encourage private owner occupiers, private landlords and tenants to take action.

Current activity/opportunities

Solar Together Sussex - In response to the committee work plan action to 'Investigate and report the possibility of bulk buying PV panels and other energy saving resources', the Council has supported the Solar Together Sussex scheme, launched in September 2020. The scheme is a partnership of local authorities across Sussex with West Sussex County Council taking the lead role. The scheme's aim is to increase uptake of solar PV and battery storage for homeowners and landlords across the region with the aim of saving carbon and energy bills for residents. As part of the promotion of the scheme over 21,000 selected homes in Brighton & Hove received a direct mail promoting the scheme. The scheme has also been promoted by press release, Council websites and via social media channels. Residents were able to register for the scheme up to the 6th October 2020, after which an auction was held for pre-vetted installers to bid for the work. Residents then received a recommendation including a specification and cost of the equipment installed. Residents are then able to decide whether to accept the offer or not, those that do will be having their installations carried out by May 2021. With partners other collective buying of bulk purchase schemes for other renewable energy or energy efficiency measures options will be investigated as they arise. Such schemes require scale and in line with the Solar Together Sussex are best carried out on a regional level.

Warmer Sussex – The Council has supported the development of the Retrofitworks [Warmer Sussex](#)⁵ model for private sector households.

Signposting and promoting the availability of **Green Homes Grants**⁶

⁵ www.warmersussex.co.uk

⁶ Grants available to home owners and landlords towards the cost of energy efficiency home improvements [Help to save energy for private tenants and property owners \(brighton-hove.gov.uk\)](http://Help%20to%20save%20energy%20for%20private%20tenants%20and%20property%20owners%20(brighton-hove.gov.uk))

Warm Safe Homes Grants– Disabled Facilities Grant Housing Policy grants available for energy efficiency improvements to eligible households.

Local Energy Advice Partnership – programme entering 2nd year in Brighton & Hove can refer private households on for further support for measures.

Improving the Energy Performance of Privately Rented homes – standards are already applied in HMO licensing schemes. The Minimum Energy Efficiency Standards in private rented sector are currently under review⁷ future enforcement options of revised standards will be considered separately.

4. ANALYSIS & CONSIDERATION OF ANY ALTERNATIVE OPTIONS

- 4.1 As part of the initial assessment of assets and options for retrofit, alternative delivery models will be explored however the approach outlined above allows the Council to keep control of programmes and ensures consistent engagement with residents.
- 4.2 The council has a clear corporate priority to take all action required to make our city carbon neutral by 2030. This is also outlined in the Housing Committee Work Plan agreed by Housing Committee on Wednesday 18th September 2019.

5. COMMUNITY ENGAGEMENT & CONSULTATION

- 5.1 Officers will work with the Community Engagement Team and the Home Service Improvement Group, specifically, to work on the strategic direction of the HRA Strategic Carbon Neutral Action Plan 2021-25.
- 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 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. The Property & Investment service will be providing additional support to residents on new technologies within the home.
- 5.4 Behaviour change advice and support will be embedded into retrofit programmes.

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 This report is the first update to Housing Committee providing an overview of investment and actions.

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https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/934534/prs-consultation-2020.pdf

7. FINANCIAL & OTHER IMPLICATIONS:

Financial Implications:

- 7.1 The report sets out the draft HRA Carbon Neutral Strategic Action Plan 2021-25. The HRA and Capital Investment Programme 2021/22 report (elsewhere on this agenda) includes proposals for 2 FTE to work on achieving this plan and also provides for £0.025m for expert consultancy to advise the council on the measures required to implement the carbon reduction and sustainability measures on council housing stock. The budget proposals also include a capital budget of £4.390m (a further provisional £7.700m for the following two years to 2023/24) for sustainability and carbon reduction measures including fitting of new efficient boilers, home energy efficiency works such as insulation, solar PV and a new ground source heat pump system at Elwyn Jones Court. The report also proposes to set up a reserve of £4.010m. This reserve will be used to start to fund the cost of delivering sustainability initiatives in the HRA in relation to the city's target of achieving zero carbon status by 2030 and retrofit work required on existing housing stock so that the focus of this strategy 'Delivering deep retrofit on social housing' can be planned.

Finance Officer Consulted: Monica Brooks

Date: 08/01/2020

Legal Implications:

- 7.2 There are no legal implications which need to be drawn to Members' attention arising from this report. Legal Services will provide advice as necessary as in connection with future projects and contracts.

Lawyer Consulted: Name Liz Woodley

Date: 22/12/2020

Equalities Implications:

- 7.3 An Equalities Impact Assessment has not been carried out at this stage. Assessments will be carried out alongside the development of detailed action plans and specific to planned projects.
- 7.4 Reducing energy bills will have a positive impact on fuel poverty which has a disproportionate impact on older people, people with disabilities and long-term health conditions. Plans to become carbon neutral must incorporate consideration of the impact on energy bills of residents.

Sustainability Implications:

- 7.5 Sustainability impacts are included throughout the main body of the report.

Brexit Implications:

- 7.6 The impacts of Brexit are unclear at this stage but will be factored into planning of projects and programmes, for example by taking account of potential

disruption to supply chains of materials and equipment when planning and sequencing works.

- 7.7 Information sharing is an important tool to support the improvement of new, more sustainable housing. Brexit impacts on the council's ability to effectively collaborate with European partners on sustainability measures via EU run projects, however, officers have existing contacts and networks which can be utilised. We are working closely with a range of UK partners to share learning and experience.
- 7.8 The ability to access funding through EU development programmes, to support innovative sustainable projects, will no longer be available, however, officers will identify and review any new funding opportunities available to support these projects.

Any Other Significant Implications:

Risk and Opportunity Management Implications:

- 7.9 Risk identification and mitigation will be factored into future action planning, the most significant risk at this stage is to not understand the best solutions for our housing stock and residents and make poor investments that do not meet expectations and may possibly hinder future opportunities. This is mitigated in the current draft action plan with an acknowledgment of the need to better understand our assets and the opportunities. There are significant wider opportunities provided through a large scale retrofit programme on our own housing stock, including the potential to develop local skills and create jobs, stimulate supply chains and investment into the city to retrofit all housing and commercial buildings.

Public Health Implications:

- 7.10 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.

Corporate / Citywide Implications:

- 7.11 As outlined above housing is a significant contributor to the city's total carbon emissions, addressing this supports the ambition of the city-wide Carbon Neutral 2030 programme. The wider positive outcomes from a large-scale retrofit programme will be felt across the city.

SUPPORTING DOCUMENTATION

Appendices:

1. Draft HRA Strategic Carbon Neutral Action Plan 2021-2025