Executive **15 December 2020**

Report of the Interim Director of Place

Portfolio of the Executive Member for Housing and Safer Neighbourhoods

Council Housing Energy Retrofit Programme

Summary

1. In March 2019, the Council declared a climate emergency in response to global warming and the United Nations' Intergovernmental Panel on Climate Change report. In response the council set an ambition for York to be carbon neutral by 2030.

2. A third of York's carbon emissions are created by domestic energy consumption. With the vast majority of York's housing in the year 2030 already being in existence, we cannot meet our carbon reduction ambition without a programme of retrofitting energy efficiency measures for all housing in the city.

3. This report outlines the issues and challenges for landlords, homeowners and tenants in decarbonising their homes. It sets out the need for investment, skills and training and supply chain development to deliver carbon neutrality and proposes options for the retrofit of the council's own housing stock.

4. Executive have previously approved a Housing Revenue Account (HRA) budget to deliver energy saving measures within our council housing stock. This consists of an initial capital budget of £1m followed by a further allocation of £250k pa for four years. This paper outlines options for the use of that funding to support the council's carbon reduction ambition.

5. The HRA has been investing in our council housing stock for a number of years, installing double glazing, loft and cavity wall insulation and new boilers. However, despite these works, around a third of council homes have an Energy Performance Certificate (EPC) rating of D or below. A higher EPC C rating is recognised by the government as the minimum

standard which all homes should aim to achieve. This report outlines the investment options to support improvements within our harder to treat homes. In these homes, simple measures either cannot be delivered or are not sufficient to bring the homes to the standard needed to meet the city's carbon saving ambitions. As well as helping to meet our carbon neutral ambitions and reducing fuel poverty, this investment will increase both the value and expected lifespan of our homes, reducing costs in the longer term. Improving the energy efficiency of our homes will improve thermal comfort and reduce utility bills for our residents as well as supporting the creation of green jobs.

6. This report has been referred to the Housing and Safer Neighbourhoods Scrutiny Committee for pre decision scrutiny to inform the decisions of Executive.

Recommendations

7. Executive are asked to :-

a) Consider the outcomes of the pre decision scrutiny undertaken at the Housing and Safer Neighbourhoods Scrutiny Committee
b) Agree the objectives of the Council Housing Retrofit programme
c) Consider the options analysis set out in this report and select a preferred option to allocate the agreed capital budget.
d) To incorporate the ambitions for carbon neutrality into the Housing Asset Strategy and plans
e) To explore funding and investment models to support the decarbonisation of council and private homes in York and to bring back a further report setting out proposals to the Executive
f) To delegate to the Assistant Director of Housing and Community Safety in consultation with the Executive Member for Housing and Safer Neighbourhoods the authority to apply for grant opportunities to further support our residents to access their own energy saving grants.

Reason: To improve the energy performance of some of our poorer performing council houses to both reduce residents' energy bills and to support our ambition of York being carbon neutral by 2030, whilst also taking the first steps in creating a pipeline of retrofit work in York which will support skills development and new green jobs.

Background

Achieving Domestic Carbon neutrality

8. There are around 85,000 households in York. Less than 0.5% of these have an Energy Performance Certificate (EPC) rating of A and over 35%

are rated D to G. This is seen across homeowner, private rented sector and social housing sectors. Around one third of the council's c7500 homes are EPC rated D to F. These poorly performing homes contribute significantly to the carbon emissions of the city. The vast majority of existing homes will be in place in 2030 and significantly beyond that. Nationally it is thought that more than 80% of homes that will exist in 2050 have already been built. It is clear that an approach to retrofitting homes across York and within all tenures is essential in order to meet our carbon saving targets.

9. With a third of York's carbon emissions created by our homes, it is vital that emissions are reduced in order for York to achieve carbon neutral status. As a city we need to take bold and positive steps forward, supporting the action on climate change. Despite our council housing stock performing a little better than the private rented sector at the moment, we are a long way short of where we need to be, with regulation change likely to require improvements across the sector.

10. The UK Committee on Climate Change highlights that the most effective approach to decarbonising our homes is through:-

- Fabric improvements
- Use of energy efficient appliances
- Behaviour change
- Smarter heating controls
- Low-carbon heating
- Renewable generation and energy storage.

It is vital that the fabric of buildings are improved first in order to maximise carbon savings and reduce fuel costs. Switching to low-carbon heating can add costs to residents' utility bills if the thermal performance of the house is not improved first.

Reducing Fuel Poverty

11. As well as tackling the climate emergency, this investment into our housing stock will also bring significant benefits for our residents. Insulating our homes and reducing draughts will reduce utility bills and the occurrences of fuel poverty. Fuel poverty is driven by three main factors: household income, the cost of energy and the energy efficiency of the home. It is the cost of energy and the efficiency of our homes that this report is seeking to tackle.

12. Public Health England and the Institute of Health Equity outline the impact of cold homes on the health and wellbeing of residents. Cold homes are known to affect and exacerbate a range of health problems including respiratory problems, circulatory problems and increased risk of poor mental health. Nationally, estimates suggest that some 10% of excess winter deaths are directly attributable to fuel poverty and a fifth of excess winter deaths are attributable to the coldest quarter of homes. Cold homes can also affect wider determinants of health, such as educational performance among children and young people, as well as work absences. Tackling fuel poverty and cold home-related health problems is important for improving health outcomes and reducing inequalities in health in York.

Responding to Evolving Government Policy

13. The Government has committed to a roadmap to carbon neutrality by 2050 and has recently announced future changes to planning policies and grant funding schemes to kick-start domestic retrofit.
In terms of grant schemes:
- £2bn of funding for private home owners (Green Homes Grant)
- £50m for Social Housing Demonstrator projects
- Manifesto commitment of £3.8bn on Social Housing Decarbonisation Fund
- Regional schemes- Energy Accelerator Programme through WYCA, providing technical expertise to local authorities
- YNYER LEP carbon abatement pathways and carbon negative region work includes substantial retrofit focused elements
- The York and N Yorkshire Devolution bid includes a £20m revenue ask for a Local Carbon Skills Programme to support businesses with a regional and national hub to up-skill the existing workforce, returners and jobseekers in vocational low-carbon skills
- Local Authority Delivery (LAD) scheme, funding provided to local authorities to then distribute as grants to support energy retrofit works

14. There is a clear government intention to improve the EPC rating of housing in this country. The government's ten point plan for the 'Green Industrial Revolution' includes making homes greener, warmer and more energy efficient. At present the government are consulting on a document that will mandate all homes within the private rented sector to achieve an EPC C rating as a minimum by 2028. It is likely that the social rented sector will be required to follow suit at some stage. CYC have responded positively to the ambition set out in this consultation.

15. Though the timescales for implementation of these policies are still subject to confirmation, the general direction of travel is clear, that through policy mandate and financial incentives there will be a gradual move to incentivise all landlords and home owners towards carbon neutrality by 2050. The city has outlined its intention to be ahead of this timeline. If it is to do so then it follows that it must also be ahead of the curve in seeking ways to make progress.

16. Many of the easy and cheaper ways of reducing carbon emissions within our council homes, such as loft and cavity wall insulation and double glazing, have already been undertaken over the last 10-20 years. As these measures have been installed and the number of households able to benefit from them shrinks, harder to treat homes which require more difficult improvements must become our focus.

17. There are housing archetypes that, due to their construction, are more difficult to improve, for example housing without wall cavities, non-traditional forms of construction such as steel frame homes, or flats where a single dwelling cannot be upgraded in isolation. These archetypes need a bespoke approach requiring specialist knowledge.

18. In these kinds of properties retrofit measures to achieve a good level of energy efficiency (EPC C) are more expensive. In the private sector the government has recognised this challenge and introduced the Green Homes Grant which supports homeowners to invest in the fabric of their home utilising grant funding which varies depending on household income.

19. The Green Homes Grant has been extended by a further year (to March 2022) to support the development of skills in the sector and confidence in the supply chain to invest, reducing the average cost of installation over time.

20. In addition to the Green Homes Programme, the government is seeking to stimulate the supply chain to deliver innovation in home energy efficiency. Funding streams coming forwards include the Whole House Retrofit Competition and the Social Housing Decarbonisation Fund.

Scaling up carbon reduction

21. A suite of complementary approaches will be required if we are to achieve the step change needed to achieve domestic carbon reduction targets. Research estimates that the cost of decarbonising the UK's social housing stock is around £104bn. Clearly, this cannot be funded by Local Authorities alone; a range of new funding models are required. For

example, schemes are being trialled in the UK that incorporate cost recovery mechanisms – providing both a utility bill reduction to the tenants and a return on investment for landlords. This could involve upfront investment by the council or others. One such example of investment by others is through home comfort plans, where the utility company invests in energy performance on the basis that the resident pays a fixed monthly bill regardless of usage. This approach provides an incentive for the utility company to reduce the demand for domestic energy. Creating a clear approach and delivery strategy for utilising investment models in York is vital and will be an important element of developing a Retrofit Strategy for York.

22. In order to support the development of suitable expertise in the supply chain, the Government held a Skills Training Competition, running from 23rd September 2020 to 14th October 2020[1]. Given the shorter timescale prior to the extension to March 2022, this was aimed at providers who already deliver short course training in the relevant fields. It will establish a national skills training offer, including online content, leading to the required certification.

23. Locally, there is interest from the LEP and Construction Industry Training Board in such provision, and it is an emerging theme for our City Skills Board to explore. Training would need to be able to support companies and microbusinesses already in the construction trades, but lacking the right certification and quality standards. It could also provide an entry route for people new to business, retraining for those seeking new avenues of work, and a pathway into work for our young people

The Council's Housing Stock

24. The Council owned housing stock comprises of approximately 7,500 properties (around 9% of all York homes) and contributes an estimated 3% to the CO_2e emissions for the city of York.[2] There are also an estimated 9% of our residents living in fuel poverty.[3]

25. The stock condition survey of council homes (August 2019) indicated that whilst the overall average EPC score for York's council homes is 'C', approximately one third (2,400) have an energy efficiency performance rating of EPC D and 90 are at EPC E or F. These homes are generally poor at retaining heat contributing to the city's carbon emissions and fuel poverty. Table 1 below shows the numbers of each property archetype

[1] See https://www.gov.uk/government/publications/green-homes-grant-skills-training-competition
[2] A Net Zero Carbon Roadmap for York (2020), A. Gouldson et al.
[3] https://www.gov.uk/government/statistics/sub-regional-fuel-poverty-data-2019

for our council housing stock. Archetypes with an average SAP value of 69 are below EPC 'C.

MRA Ref	Archetype Name	Avg. SAP value	Avg. CO2 rate (tons)	Avg. energy usage (kj)	Avg. lighting costs (£)	Avg. space heating costs (£)	Avg. water heating costs (£)	CYC Stock	% of Stock
1.	Pre-1945 small terrace houses	68.59	41.07	234.06	61.19	522.46	111.36	522	6.2%
2.	Pre-1945 large terrace/semi-detached houses	69.48	39.66	225.66	60.11	524.15	109.72	225	2.77%
3.	All other pre-1945 houses	68.80	39.22	224.02	66.85	579.41	115.18	937	11.53%
4.	1945-64 small terrace houses	70.66	38.08	216.58	57.43	493.53	110.06	196	2.41%
5.	1945-64 large terrace/semi-detached/detached houses	71.17	36.31	206.60	67.98	542.07	114.41	794	9.77%
6.	1965-74 houses	69.52	40.51	230.39	59.43	501.13	102.85	103	1.27%
7.	Post 1974 houses	73.95	32.35	183.74	57.66	475.35	117.12	302	3.72%
8.	Non-traditional houses	68.69	39.30	224.09	70.43	585.16	114.45	577	7.10%
9.	Pre-1945 low rise (1-2 storey) flats	70.10	44.33	253.24	36.63	357.99	90.21	493	6.93%
10.	Post-1945 low rise (1-2 storey) flats	71.11	39.78	227.33	47.70	356.88	102.30	1557	22.30%
11.	Medium rise (3-5 storey) flats	72.84	37.69	214.81	44.84	333.91	95.96	1396	19.91%
12.	Bungalows	67.61	46.59	266.29	45.37	486.12	95.39	474	5.86%
Overall		70.61	39.41	224.82	54.00	444.73	104.86		

This data comes from the stock condition survey carried out by Michael Dyson Associates Ltd in August 2019.

26. Retrofitting the 2,400 homes with an EPC rating of D or below to higher levels of energy performance would save 2750 (tCO2), and result in total annual energy bill savings of £650k for those households. It will also take time and cost a considerable amount of money.

27. All repairs, maintenance and refurbishment of council housing stock is funded from the Housing Revenue Account (HRA), not the council's General Fund, with around £8m each year being spent on major repairs and refurbishments. The HRA investment plans are funded from housing rents and the benefits must therefore accrue to housing tenants. There are

currently around 2400 council homes with an EPC rating of D or below. If we were to bring all 2400 homes currently at EPC D-F up to a C rating, it is estimated that at current prices this would add a further £37m to the HRA's stock investment programme – a sum that cannot be achieved within existing budgets whilst continuing with our existing essential refurbishment programmes.

28. All investment in our stock increases its value and extends the homes' lifespan, creating long term savings. Investment in energy efficiency will also improve comfort and health for residents, reduce energy bills helping to tackle fuel poverty and help to kick-start a local retrofit economy, developing skills and supply chains and creating new green jobs.

29. A range of delivery strategies are needed to meet the energy efficiency challenge for our council homes. Our developing strategy is likely to include cost recovery routes alongside making the most of the grant funding opportunities that are now coming forwards. In order to progress our funding bids most successfully, to develop skills, processes and approaches and most effectively engage with our tenants, who are of course central to success, we need to get started, making optimal use of the available council resources.

30. In July 2019, the Executive's Interim Budget established a £1m budget to kick-start a council retrofit programme of increasing the energy efficiency of our housing stock. The February 2020 Budget allocated a further £250k pa in the HRA capital budget for 20/21, 21/22, 22/23, 23/24 bringing the total budget for the Council Housing Energy Retrofit Programme to £2m.

WYCA Energy Accelerator

31. The council have been successful in applying to the West Yorkshire Combined Authority's Energy Accelerator programme for support to provide up to 5% of our retrofit total project costs with in-kind technical support, advice and detailed specification.

32. Experts from the WYCA Energy Accelerator will support the council in identifying the homes that will be most suitable for the first phase of the programme, taking into account carbon emission savings, energy cost savings and fuel poverty, technical parameters, internal skills and access to expertise. The formal detailed submission to secure this support needs to be submitted in December for consideration by the WYCA Investment Committee.

Options

33. Decisions on how to secure maximum benefit from our HRA investment are complex against a fast changing policy backdrop. We cannot achieve our objectives in full with the current level of budget nor do we have the investment headroom or the supporting income streams to be able to achieve this through increased investment without significant innovation.

34. The long term picture needs to be a combination of
    - Early progress on decarbonisation of our current housing stock
    - Developing the skillset and level of expertise within the council
    - Developing models to deliver further investment for the entire stock
    - Positioning ourselves to secure external funding
    - Developing the skills within the local construction sector
    - Reducing unit cost by developing the supply chain
    - Identifying appropriate and affordable technical solutions for our most challenging housing archetypes

35. Below are a series of options of how to invest the agreed budget.

36. **Option 1 - Undertake the planning and strategic development first.** This would involve:
    - Identifying the most cost effective use of our capital funding
    - Developing investment models
    - Building capacity and skills within the construction sector and internally within the council
    - Applying for external funding opportunities to support our energy efficiency delivery strategy
    - Bringing a further report to Executive to define the programme before any works are carried out
    - Delaying physical retrofit works until a later stage

37. **Option 2 – Allocate our whole £2m approved capital budget on energy performance works on our worst performing homes.** This would involve:
    - Appyling to WYCA for Energy Accelerator support for a £2m investment programme
    - Starting the delivery of retrofit measures in summer 2021, with the initial £1m of works complete by the end of the financial year
    - Utilising the skillset provided by WYCA to undertake the works but reducing our capacity to invest once these works have been completed and reducing our potential to match fund other grant opportunities

38. **Option 3 - Commence decarbonisation work in tandem with strategy development work.** This would involve:
    - Applying to WYCA for Energy Accelerator support for a £1m investment programme
    - Starting the delivery of retrofit measures in summer 2021, with the works complete by the end of the financial year
    - Using the hands-on experience of retrofitting homes to start building capacity and skills within the construction sector and internally within the council
    - Develop longer term investment models, exploring opportunities for cost recovery approaches
    - Building capacity and skills within the construction sector and internally within the council
    - Applying for external funding opportunities to support our energy efficiency delivery strategy, with money available to provide required match funding
    - Bringing a further report to Executive to define a second phase programme, releasing the remaining budget and outlining alternative funding proposals

Option Appraisal

39. Option 1 provides a sound long term approach. It gives us the chance to review the fast changing policy position and to wait for the best opportunities to apply for grant funding. It would start to build capacity within the council but developing capacity in the local construction industry would be very challenging without a pipeline of work actually coming forward to make investment of money and/or time in this area worthwhile for contractors. It would also further delay taking action to tackle the climate emergency. It would reduce the opportunity for hands-on learning by not undertaking works in the short term. Whilst it would give us a strategy and approach for retrofit delivery in the future, we would not be able to demonstrate a track record of these works which may be a barrier to securing grant funding.

40. Option 2 would deliver the greatest energy saving in the short term. It is likely to reduce Co2 emissions by around 132 tonnes per annum, saving the residents who receive the works around £260 per year in heating costs. It would bring technical expertise into the council (to the value of £100k) to help develop our in house expertise. This approach would likely allow works to around 120 homes. These works would utilise a ‘fabric first’ approach to improve the EPC rating of these homes up to a C level. However, this approach would utilise all of the investment identified, reducing our ability to invest in more homes in the future and not taking

advantage of learning, maximising the long term impact of the skillset developed within the council and with partners, and reducing our ability to access further grant funding.

41. Option 3 looks to kick start our retrofit works in summer 2021 whilst also providing a longer term approach to deliver more works to more homes over the medium and longer term. This option would allow us to match fund grant opportunities and to approach applications with a clearly defined strategy whilst also having a track record of delivering works. We would be able to develop in house knowledge utilising WYCA expertise, support investment by our supply chains whilst learning lessons from the initial £1m investment. This option, if successfully delivered, would create much greater carbon savings than Option 2. This is the recommended option.

42. The above works would sit alongside existing work to reduce the carbon emissions from homes in York. This includes:
    - We have secured £40k from the LGA Housing Advisors Programme to work with skills providers and businesses to develop a programme which will share skills and knowledge around sustainable design and construction
    - We have in principle approval for WYCA funding for the Energy Accelerator Programme to bring the skills and expertise we need to deliver the Phase 1 retrofit works
    - We have submitted a LAD1b funding application to enable us to offer grants to home owners on low incomes to cover the entire cost of insulating rooms in the roof. This fund would also support internal staffing costs to administer these grants. We are preparing a LAD 2 funding application to be submitted early next year
    - We are exploring joint working with neighbouring authorities
    - We are exploring opportunities for knowledge sharing and advice with partners
    - We are delivering new homes through the Housing Delivery Programme which will be zero carbon in use, removing the need for any future energy retrofit works.

Consultation

43. As part of the production of this report and its recommendations, there has been discussion with the Housing and Safer Neighbourhoods scrutiny panel, CYC Climate Change Delivery Group, The Low Carbon Officer for York & North Yorkshire Local Enterprise Partnership, WYCA, Turner and Townsend lead for the Accelerator programme, CYC's Better Homes contractor, Housing Standards team, and the Home Energy Programme

Manager. The team will also work with other local authorities seeking to deliver the same ambitions.

44. A key factor in ensuring the success of the programme will be establishing support from our residents whose homes will receive energy improvement works. Some of these works can be disruptive and as such we will be engaging closely with our residents. We will help residents understand the long term benefits of the work, both in terms of energy savings and environmental impact whilst making it clear what this will mean in the short term in respect of what and how the works will be carried out.

45. To support this resident engagement the project team will work with the council's tenant engagement officers, to produce fact sheets, and newsletters, illustrating the benefits of the work, and how it will be carried out. We will also undertake briefing sessions, where we will not only address tenants' questions but also seek their input. We will also work with our communications team to establish a project communications plan, to ensure we provide frequent and relevant updates to residents. As with other major works on our properties, these works will only be carried out with the approval and agreement of the residents.

Council Plan

22. By assisting a significant reduction in carbon emissions from council homes, reducing the cost of residents energy bills, and improving the personal comfort provided by our homes; this proposal contributes to the Council Plan objectives of providing a 'Greener and Cleaner city' and 'Creating homes and world-class infrastructure'.

Implications

Financial

The supplementary budget approved £1m for additional energy efficiency works across council housing stock funded from the HRA working balance and the proposals in this report can be funded from this budget.

The HRA generates funds for structural maintenance through a depreciation charge of c £1,100 per property per annum. This gives a value of c £8.5m per annum for major repairs, modernisation and improvements including energy efficiency. External funding will be necessary to significantly enhance this programme. The allocation of such funds are considered as part of the annual budget process.

Human Resources (HR) - None

Equalities - See Annex 1

Legal

- Procurement: The procurement referred to will be carried out in accordance with the council's Contract Procedure Rules and the Pubic Contracts Regulations 2015 (PCRs), as appropriate.

- Grant Funding Agreement: It is noted that whilst the provision of the Support will be free of charge, the Funding Agreement with WYCA provides an ability for WYCA to reclaim its costs equivalent to the value of the support, along with an indemnity fee equal to 5% of the value of support allocated, if the European Investment Bank ('EIB') reclaims the value of the support from WYCA and an indemnity fee of 5%.

- It is also noted that the Funding Agreement with WYCA enables WYCA to claw back from the Council the costs incurred to date to provide the support together with any other liabilities incurred by WYCA (and/or the EIB) if the council does not comply with its obligations under the grant agreement, including where information required from the Council is late, incomplete, incorrect and/or not delivered in the format specified by WYCA.

Crime and Disorder - *None*

Information Technology (IT) *None*

Property - These are covered in the report

Other

Risk Management

23. The project contains a number of risks associated with the delivery of a significant amount of physical works.

The key risks are considered to be:

- Ineffective project management would prevent objectives being achieved;
- A lack of quality control on site could mean objectives aren't achieved as well as damaging relationships with our residents;
- Residents may not wish to have their homes upgraded
- Poor communication would undermine the longer term programme and create reputational damage; and

- If the council were to withdraw from the project subsequent to signing the funding agreement at Gateway 2 then WYCA could claw back the costs they have incurred, causing reputational damage and financial impact.

Contact Details

Author:

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Shaun Gibbons Head of Climate Change	**Report Approved** √ **Date** *4 December 2020*

Specialist Implications Officers:

Financial	Legal
Name Patrick Looker	Name Cathryn Moore
Title Finance Manager	Title Legal Manager – Projects

Wards Affected: **All** √

For further information please contact the author of the report

Background Papers:

- Emergency / Supplementary Budget 2019 – 20th July 2019
- Special Housing Revenue Account Budget Meeting 17th December 2019

Annexes

Annex 1 - Better Decision Making Tool

Glossary

HRA – Housing Revenue Account
LAD – Local Authority Delivery
WYCA - West Yorkshire Combined Authority