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Capital Programme Investment to Improve Energy Efficiency in Council Housing Stock

Date: March 2022

Report of: Head of Strategy & Investment

Report to: Scrutiny Board (Environment, Housing and Communities)

Will the decision be open for call in? ☒Yes ☐No

Does the report contain confidential or exempt information? ☐Yes ☒No

What is this report about?

Including how it contributes to the city and council's ambitions

- To provide continued assurance to scrutiny board that the climate emergency agenda is a key priority in investment to the council housing estate.
- To provide an update on the 5-year investment programme including specific projects that will contribute to improving energy efficiency and decarbonising council housing.

Recommendations

To note the contents of this report

Background – Investment Context

Leeds City Council owns over 54,000 homes in the city comprising of:

- High Rise flats
- Medium/low rise flats and maisonettes
- Traditional build housing including back to backs
- System Built houses

The council invests over £80m annually in its housing portfolio primarily through the Housing Revenue Account (HRA). The capital programme delivers a range of projects including fire safety, H&S, energy efficiency and lifecycle replacement.

There are several drivers underpinning the current investment programme, including:

- Addressing historic under-investment in high rise buildings
- Prioritising properties with low EPC ratings, obsolete heating systems, and health & safety issues (worst-first)
- Properties requiring lifecycle replacement, urgent repairs (fabric-first)
- Properties that meet criteria for external funding/inward investment
- Homes in priority neighbourhoods (fuel poverty, health and wellbeing)

There is a five-year commitment to increasing the investment in renewable technologies which will improve the thermal efficiency of homes, decrease carbon emissions, and reduce fuel poverty. The investment also aims to bring about a regenerative effect, extending work to include the immediate environment to improve the perception of place and community.

1.1 Overview of the decarbonisation projects

Table A – Retrofit projects that will increase thermal efficiency of low performing properties

Decarbonisation Investment	Complete	On Site	Pipeline	In Planning			Households
Project Name	**20/21**	**21/22**	**22/23**	**23/24**	**24/25**	**2025+**	
Shakespeares Project							297
GSHP Ph1 (Heights East & West)							120
GSHP Ph2 (Westerly Rise & Croft)							92
Roofing							471
Air Source Heat Pumps							14
Westons							20
Roxby Close Thermal Efficiency							60
District Heating Network - Leeds Pipes							1,200
GSHP Ph3 (Queenswoods)							92
GSHP Ph4 (Rycrofts)							274
Holtdales							190
TIBB							750
Lovells & Moor Grange Court Project							357
Parkways Thermal Efficiency Work							273
Fitting the Future							160
Marlborough Thermal Efficiency							99
District Heating Clusters							1,483
GSHP Phase 5							1,366
Lincoln Green High-rise project							480
Lincoln Green Maisonettes							60
Marlborough Estate Phase 2							56
Cavity & Loft Insulation							4,000
Back to Back Insulation Phase 2							650
Total Households							**12,564**

1.2 Decarbonisation of High-Rise Buildings

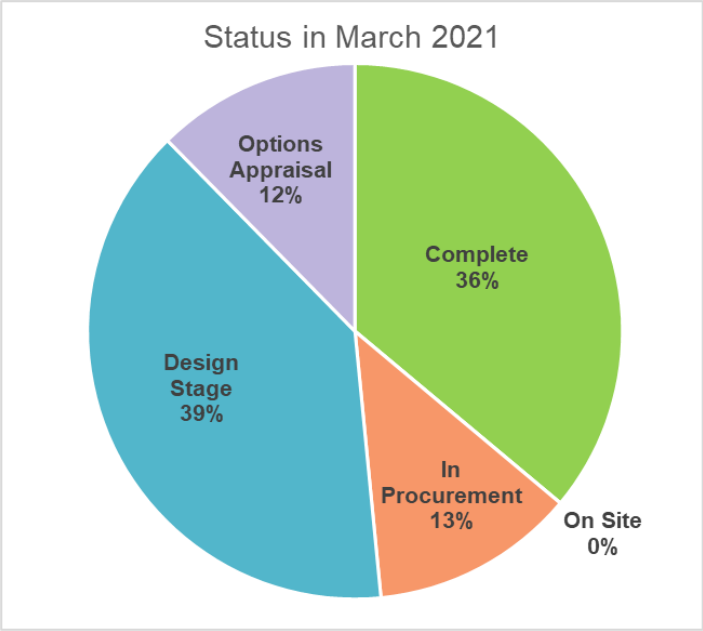
Housing Leeds strategy to decarbonise high-rise buildings has a two-pronged approach. Firstly, by renewing obsolete heating systems with renewable technology. Secondly, to prevent heat loss through installation of a range of energy efficiency measures including external wall insulation (EWI), new roofing and roof insulation, upgrading windows and doors.

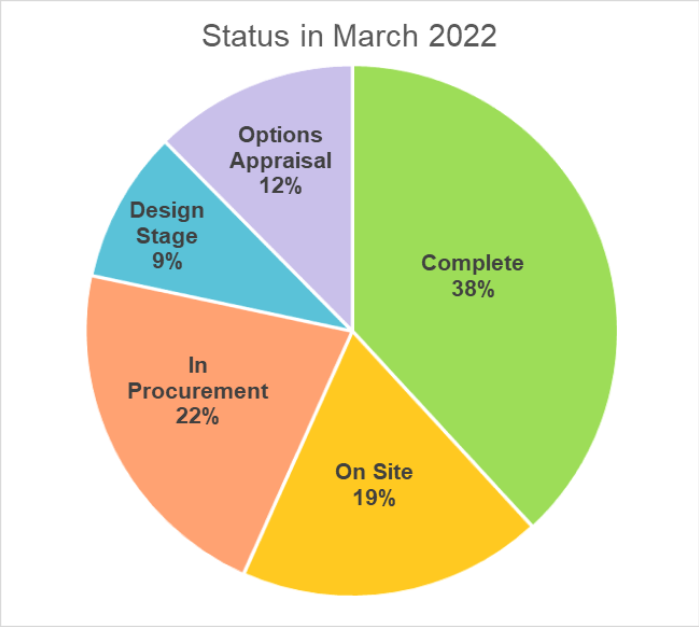
Renewable Heating

The HRA has a portfolio of 105 high rise buildings, 8 of which are heated by gas. Of the remaining 97 buildings, 37 have had renewable heating installed and 60 have electric storage heating. See appendix 6 for feedback on ground source heat pumps from residents.

There are 18 high rise buildings where work is currently on site to install renewable heating; these will be completed by June 2022 and the Council will then have 55 high rise buildings with renewable heating installed. A further 30 are at procurement or design stage.

Table B – The installation of renewable heating systems to high rise buildings by status





*Of the 19% currently on-site (18 HRB's) a further 10 will be completed by end of April 2022

Thermal Efficiency Projects

There are several projects to prevent heat loss in high-rise buildings within the current 5-year investment plan. Table C captures the different stages including Design, Pipeline, On-Site and Completed.

Table C – Thermal efficiency projects in high-rise buildings

High Rise	Complete	On Site	Pipeline	In Planning			Households
Project Name	**20/21**	**21/22**	**22/23**	**23/24**	**24/25**	**2025+**	
Shakespeares Project							297
Roofing							471
Roxby Close Project							60
Lovells & Moor Grange Court Project							357
Parkways Project							273
Marlborough Project							99
Lincoln Green High-rise Project							480
Total Households							**2,037**

Roxby Close Improvement Project

Status: Completed

The £2.0m Roxby Close project has recently completed, improving 60 flats with measures including concrete repairs, external wall insulation, and balcony replacements. Roxby Close is situated in the Lincoln Green area of the Burmantofts ward, a priority neighbourhood area close to the city centre.

It is one of nine high rise buildings in this locality and the ambition is to extend the work to the remaining buildings including the adjacent maisonettes. See appendix 1 for photographs and appendix 5 for tenant testimonials.

Lovells and Moor Grange Court Improvement Project

Status: Design/Pipeline

This project will improve four high rise building including three Lovells in Little London and Moor Grange Court in Kirkstall. The scope of works will include external wall insulation (EWI), concrete repairs and new roofs, installing 729 energy efficiency measures to 357 homes. The project cost will be part- funded through £6.0m of SHDF Wave1.This project will improve the thermal comfort of residents and provide better value heating as well having a regenerative impact to the buildings and local area. Work is due to start in May 2022 and complete in March 2023. See appendix 2 for visuals.

Parkways Improvement Project (PIP)

Status: Design/Pipeline

This project will improve the thermal efficiency of three high rise buildings in the Killingbeck & Seacroft ward. The scope includes EWI, concrete repairs, and new roofs, and residents will benefit from improved thermal comfort which will help support better value heating to properties. The investment will include 564 energy efficiency measures installations to 273 flats that will improve the fabric and aesthetics of the buildings and the perception of the local area. It is part funded by £3.6m of SHDF Wave 1 grant and will commence on-site in April 2022 and complete in March 2023.

1.3 Decarbonisation of Non-Traditional Housing

Housing Leeds strategy to decarbonise system-built properties (non-traditional properties) takes a holistic approach with the focus on undertaking a package of works to each property. There are 26 different archetypes within this category, the aim is to optimise energy efficiency and reduce heat loss. Most of these archetypes are challenging to treat as they are not suitable for traditional cavity wall insulation. The thermal efficiency of these properties is improved by installing external wall insulation which is a much more expensive and intrusive than cavity wall insulation.

There are several projects, at different stages, in the current programme, these are set out in table D below.

Table D - Thermal efficiency projects in non-traditional properties

Non-Traditional Archetypes	Complete	On Site	Pipeline	In Planning			Households
Project Name	**20/21**	**21/22**	**22/23**	**23/24**	**24/25**	**2025+**	
Air Source Heat Pumps							14
Westons							20
Holtdales							190
Fitting the Future							160
Lincoln Green Maisonettes							60
Marlborough Estate Phase 2							56
Cavity & Loft Insulation							4,000
Total Households							**4,500**

Holtdales Project

Status: On Site

This project will improve 190 system-build properties in the Adel and Wharfedale areas of Leeds. The package of measures is the most comprehensive of any project delivered by LCC, it includes Air source heat pumps, EWI, new roofs, ventilation, LED lighting, and smart heating controls, in total over 1,216 energy efficiency measures will be installed to homes. The project commenced in April 2021 and is due for completion by June 2022. £4.1m of grant funding has been secured through the SHDF Demonstrator fund. See Appendix 3 for visuals.

Fitting the Future Project

Status: In Procurement

The Fitting the Future project will improve 150 system-build properties in the Boggart Hill area of Leeds. The scope of work will include EWI to all homes, and Solar Photovoltaic Panels (Solar PV) to homes meeting the orientation and elevation requirements. Electric Vehicle (EV) charging points will also be installed to 50 of these properties. Tenants will benefit from improved thermal comfort and affordable warmth. This £4m project includes £2m of ERDF funding and will commence in July 2022 and must be completed by March 2023.

1.4 Decarbonisation of Traditional Build Housing

The TIBB project is currently underway to improve 750 back-to-back properties and a second project is in the planning phase to improve the remaining back-to-backs (650) in council ownership.

Table E - Thermal efficiency projects in traditional build properties

Traditional Archetypes	Complete	On Site	Pipeline	In Planning			Households
Project Name	**20/21**	**21/22**	**22/23**	**23/24**	**24/25**	**2025+**	
TIBB							750
Back to Back Insulation Phase 2							650
Total Households							**1,400**

TIBB Project (Transformational Insulation to back-to-backs)

Status: On Site

This project includes installation of external wall insulation, roof and bay replacements, new windows, and doors. It covers several areas across the city and will significantly enhance the thermal efficiency of 750 back-to-back homes. The project commenced in November 2021 and is due for completion at the end of March 2023. The total project value is £11.9m, funded by an HRA contribution of £6.6m and £5.3m from ERDF. See Appendix 4 for photographs.

1.5 Funding the Decarbonisation of Council Housing Assets

Decarbonising the Council's housing portfolio is an expensive undertaking and significant inward investment is required to enable the Council to deliver the renewable energy and thermal efficiency projects. Other priority workstream funded through the HRA programme include Health & Safety, statutory compliance, fire safety, and maintaining decency standards.

Since the March 2021 update to Scrutiny Board, the Council has successfully bid for £9.6m from Wave 1 of the Social Housing Decarbonisation Fund (SHDF), part of £3.8bn programme to improve the energy performance of social rented homes, taking a worst first, fabric first approach. The Lovells

& Moor Grange Court Improvement Project (LMIP) will receive grant funding of £6.0m and the Parkways Improvement Project (PIP) will receive £3.6m.

Details of the inward investment secured to date for decarbonisation projects is provided in Table F below.

Table F – Funding breakdown for Housing Decarbonisation Projects

Project Name	Funding £m			Project Status
	External	HRA	Total	
Leeds Pipes	7.0	13.7	20.7	Completed
Shakespeares EWI	0.7	3.8	4.6	Completed
Air Source Heat Pumps	0.2	0.1	0.2	Completed
Westons EWI	0.1	0.2	0.3	Completed
GSHP Phase 1*	2.1	0.0	2.1	Completed
GSHP Phase 2*	1.7	0.0	1.7	Completed
Holtdales	4.2	4.7	8.9	On Site
District Heating Clusters	7.4	16.8	24.2	On Site
TIBB	5.3	6.6	11.9	On Site
Lovells & Moor Grange Court	6.0	7.9	13.9	In Procurement
Parkways	3.6	5.4	9.0	In Procurement
Total External Funding	**38.2**	**59.1**	**97.3**	

*Initially funded by HRA. RHI income will be claimed over a 20-year period resulting in a net zero cost to the HRA.

All investment planning activity actively considers all externa funding streams (including future waves of SHDF, and ECO4), in order to alleviate pressure on the council's budgets.

What impact will this proposal have?

Wards Affected:

Have ward members been consulted? ☒Yes ☐No

2 Installation of renewable heating technologies including Ground Source, and Air Source Heat Pumps will support the decarbonisation of the council housing portfolio. A proactive programme to install a range of energy efficiency measures will improve thermal comfort and help to reduce fuel poverty, supporting Health and Wellbeing.

What consultation and engagement has taken place?

3 Residents are consulted at the appropriate point for each individual project.

The Executive member for Housing was consulted on the 2021/22 capital investment programme and is consulted on individual projects.

The nature in which government funding is made available and must be spent, creates a challenge for early consultation, notwithstanding this, every effort is made to engage with local members and affected residents at the earliest opportunity.

What are the resource implications?

4 The delivery of the projects is undertaken by the Strategy and Investment team within Housing Leeds. Some additional resources have been secured through government grants to increase resources for the team. The financing of projects is through a combination of HRA capital finance and government grants.

What are the legal implications?

5 There are no known legal implications of the work being undertaken.

What are the key risks and how are they being managed?

6 The following are the main risks associated with this programme of activity:

- Risk to inward funding if delivery timeframes are not met including supply chain issues.
  Mitigation - ongoing dialogue with contractors during procurement phase and through the contract management process to ensure early identification of potential supply chain issues. Other mitigating actions include bulk purchasing and re-design to widen the pool of potential suppliers. There is also regular communication with external funders is so that any issues can be discussed at an early stage.

- Risk of balancing other programme priorities including fire safety and H&S
  Mitigation – Regular monitoring of all projects using a risk-based approach. Quarterly updates to Capital Programme Board detailing operational and financial position on schemes. There is experienced leadership overseeing all capital programme functions and clear escalation processes, measurable work objectives and systems to measure and monitoring on-site progress.

- Risk of insufficient resourcing and skills to meet programme demands and expectations of stakeholders
  Mitigation – The team lost both capacity and experience through the Early Leavers Initiative and vacancy levels remained at 24% for over 12 months. The situation has improved significantly, recruitment has resulted in internal promotion and attracted external talent, building back capacity and capabilities to deliver an ambitious programme. The focus on creating a learning and development culture, and supporting professional development is encouraging staff retention. An additional 10% capacity was recently approved to enable government funded projects to be delivered within the requisite and challenging timeframes.

- Risk of the procurement process and market capacity to respond to timeframes stipulated in government grants
  Mitigation – The team is working closely with procurement specialists to ensure all options are explored to enable swift and compliant procurement including the use of established frameworks.
  The team will also continue to engage in dialogue with the Department for Business, Energy and Industrial Strategy (BEIS) on SHDF grant funding. Feedback was provided to BEIS on the challenges presented by the tight one-year timeframe to procure and deliver the Holtdales project which was part funded by SHDF Demonstrator grant. Although the one-year timeframe for SHDF Wave 1 funded projects is equally challenging, it was recently announced by BEIS that SHDF Wave 2 would have a three-year timeframe.

Does this proposal support the council's 3 Key Pillars?

☒Inclusive Growth ☒Health and Wellbeing ☒Climate Emergency

7 This programme will support all three of the Council's Key Pillars as detailed elsewhere in this report.

Options, timescales and measuring success

a) What other options were considered?

The declaration of a climate emergency in March 2019 means that maintaining the status quo is not an option.

We are responding with agility to the availability of government funding which has shortened timeframes and undertaking the programme of work over a longer timescale would reduce the Council's access to this external funding.

b) How will success be measured?

- Through robust monitoring of carbon savings in all housing retrofit schemes.
  - 13,356 tonnes per annum achieved in completed schemes
  - Anticipated 3,803 tonnes per annum in schemes currently on site
  - Ensure carbon savings is a key consideration in future schemes
- Improved health and wellbeing and customer satisfaction through better thermal comfort
- Improved affordable warmth and a reduction in fuel poverty
- Improved energy performance rating of council owned stock

c) What is the timetable for implementation?

8 This is a 5-year investment programme which commenced in 2020.

Appendices

9 The following appendices are attached with this report

a) Appendix 1 – Roxby Close photographs
b) Appendix 2 – Lovells & Moor Grange Court Project visuals
c) Appendix 3 – Holtdale Project photographs
d) Appendix 4 – TIBB Project photographs
e) Appendix 5 – Roxby Close feedback from residents
f) Appendix 6 – GSHP feedback from residents

Background papers

10 Report to March 2022 Executive Board – Capital Housing Investment Programme Update