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Report of Housing Leeds

Report to the Director of Resources and Housing

Date: 19th February 2020

Subject: Housing Leeds Air Source Heat Pump Scheme

Are specific electoral wards affected? If yes, name(s) of ward(s):	☐ Yes	☒ No
Has consultation been carried out?	☐ Yes	☐ No
Are there implications for equality and diversity and cohesion and integration?	☒ Yes	☐ No
Will the decision be open for call-in?	☒ Yes	☐ No
Does the report contain confidential or exempt information? If relevant, access to information procedure rule number: Appendix number:	☐ Yes	☒ No

Summary

1. Main issues

- Heating a home directly with electricity is expensive and can rely on obsolete, difficult to control technologies, such as storage heaters.
- Housing Leeds has approximately 500 low rise homes which are over 23m from a gas mains, and therefore ineligible for a gas mains connection grant. Housing Leeds also has around 800 medium rise properties which are unsuitable for gas central heating.
- Housing Leeds has a long standing programme which has seen this type of electric storage and warm air heating progressively replaced, usually with gas central heating, which is cheaper to run and easier to control.
- The declaration of the climate emergency in March 2019, together with progressive decarbonisation of the electricity grid means that gas central heating is no longer the automatic choice to provide sustainable domestic heating, even though it is still cost effective to install and run.

2. Best Council Plan Implications (click here for the latest version of the Best Council Plan)

- Housing – the project will help to tackle fuel poverty in the area, by providing residents with more affordable heating which is easier to control and use. The project will also help to ensure that the housing in the area is of the right quality by replacing expensive and difficult to use electric heating systems.

- Health and Wellbeing - the project will help to reduce health inequalities and improve the health of the poorest fastest by making it easier for people to keep warm and healthy in their own homes, particularly as 78% of residents fall within the 10% area of highest multiple deprivation within the country. This will particularly help residents suffering from illnesses such as respiratory and cardio-vascular conditions that are exacerbated by cold living conditions.
- Safe and Strong Communities – by helping people to heat their homes more cost effectively, the project will help those residents who are suffering financial hardship and struggling to pay their fuel bills.

3. Resource Implications

- The cost of installing a traditional gas central heating system in a property is around £2,000 per property, whereas our project partners Daikin, who have undertaken some initial assessments of Housing Leeds' properties, have concluded that the installation of air source heat pump systems in Housing Leeds properties will cost an average of £8,357 per property. This has resulted in them not being a cost-effective alternative to a traditional boiler. This project will use a combination of Renewable Heat Incentive (RHI) and Warm Homes Funding (WHF) to bring the outstanding cost of installing air source heat pump systems in 100 Housing Leeds owned properties to £2,000 per system. This will result in an outstanding cost of £200,000 that will need to be met from the Housing Revenue Account (HRA), similar to the cost that would be required install traditional gas central heating in those properties.
- The domestic RHI is paid back over a 7 year period once the air source heat pump has been installed. From our initial modelling, we estimate that the 100 properties will generate around £400,000 RHI funding over the 7 year period. This means that Housing Leeds will have to provide £400,000 up front capital costs towards the installation, which will be paid back by the RHI over 7 years.
- The Council has successfully applied for £235,700 of Warm Homes Funding, which will cover the remaining £2,357 cost per property outstanding.

Recommendations

a) The Director of Resources and Housing is requested to approve Leeds City Council entering into a grant agreement with the National Grid Warm Homes Fund to draw down and spend £235,700 grant funding on the installation of air source heat pump heating systems in 100 properties.

b) The Director of Resources and Housing is requested to inject £235,700 of National Grid Warm Homes Funding into the capital programme towards the cost of installation in council owned homes.

c) The Director of Resources and Housing is requested to authorise the initial expenditure of £400,000 of Housing Leeds funding, to be repaid over 7 years from the Renewable Heat Incentive (RHI) fund.

d) The Director of Resources & Housing authorises expenditure of £200,000 from the existing capital programme.

e) The Director of Resources and Housing is requested to authorise total expenditure of £835,700 on the installation of air source heat pump heating systems in 100 council owned homes.

1. Purpose of this report

1.1 To enable Leeds City Council to draw down on £235,000 of grant funding, together with £400,000 of RHI funding for the purpose of installing air source heat pump heating systems in homes that are not suitable for mains gas.

2. Background information

2.1 Leeds City Council has worked with partners for many years to replace expensive to run and difficult to use electric heating systems. This has usually involved the extension of gas mains and installation of traditional gas central heating, given that such systems are comparatively cheap to install and run, and easy to control.

2.2 In March 2018, Leeds City Council declared a climate emergency which means that the council has to consider the impact of works on the city's carbon emissions. The progressive de-carbonisation of the electricity grid over the past two decades means that carbon emissions generated from the use of methane gas to heat homes need to be considered in this context.

2.3 Traditional gas central heating is still the most cost effective form of heating to install, however whilst low carbon alternatives such as air source heat pumps cost considerably more, the Renewable Heat Incentive (RHI) and grant funding from Leeds City council's successful bid to the National Grid Warm Homes Fund can help to bring the installation cost closer to the cost of installing a traditional gas central heating system.

3. Main issues

3.1 Housing Leeds owns around 500 low rise properties that are over 23m from a gas mains and therefore too far to be connected through a gas connection grant, together with around 800 properties in medium rise flats, which aren't suitable for mains gas. Many of these properties rely on expensive to run and difficult to control heating systems such as electric storage heaters and on –peak electric heaters.

3.2 As part of the Housing Leeds Investment Strategy 2016-24, Housing Leeds plans to spend £74m on heating and renewable energy schemes within their housing stock, including through their ongoing programme to install gas mains and gas central heating in all-electric properties.

3.3 Leeds City Council have developed a funding model which will use National Grid Warm Homes Funding and the Renewable Heat Incentive (RHI) to install air source heat pumps in 100 council owned properties at a unit capital cost to the council that will be similar to the cost of installing gas central heating systems.

3.4 As part of this process, Leeds City Council submitted a successful bid to the National Grid Warm Homes Fund for £235,700 towards the cost of installing air source heat pumps in 100 properties in low income areas.

3.5 Housing Leeds Housing Revenue Account (HRA) will provide the remaining £600,000 towards the cost of these installations, with £400,000 of this cost being claimed back through the Renewable Heat Incentive (RHI).

3.6 The installation works will be undertaken through the Better Homes Yorkshire programme.

3.7 The National Grid Warm Homes Funding is directed at fuel poor homes, therefore the installations will take place in areas that are within the 25% most deprived nationally.

4. Corporate considerations

4.1 Consultation and engagement

4.1.1 The Leeds Affordable Warmth Partnership has been briefed on the project

4.1.2 The Executive Member for Housing Leeds has been consulted on the capital programme. Because this is a citywide initiative there has been no direct consultation with Ward Members.

4.2 Equality and diversity / cohesion and integration

4.2.1 An EDCI Screening has been undertaken.

4.3 Council policies and the Best Council Plan

4.3.1 The project will support the following priorities of the Best Council Plan 2018/19-2020/21:

4.3.1.1 Housing – the project will help to tackle fuel poverty in the area, by providing residents with more affordable heating which is easier to control and use. The project will also help to ensure that the housing in the area is of the right quality by replacing expensive and difficult to use electric heating systems.

4.3.1.2 Health and Wellbeing – the project will help to reduce health inequalities and improve the health of the poorest fastest by making it easier for people to keep warm and healthy in their own homes, particularly as 78% of residents fall within the 10% area of highest multiple deprivation within the country. This will particularly help residents suffering from illnesses such as respiratory and cardio-vascular conditions that are exacerbated by cold living conditions.

4.3.1.3 Safe and Strong Communities – by helping people to heat their homes more cost effectively, the project will help those residents who are suffering financial hardship and struggling to pay their fuel bills.

4.3.2 The project will help Leeds to achieve the aims of the Affordable Warmth Strategy 2017-30, to increase the average SAP rating of housing in Leeds to band C by 2020 and to ensure that no properties are below band E by 2030.

4.3.3 The project will support the Leeds Health and Wellbeing Strategy 2016-2021 to ensure that Leeds houses are affordable, warm, secure and support independent living

<u>Climate Emergency</u>

4.3.4 The project will help to alleviate the climate emergency by replacing heating that provides 100% of its heat from generated electricity, with air source heat pumps which use around a third of the electricity used by traditional electrical heating systems, to harness latent heat in the atmosphere to heat the home. Although this project will be installed in properties which would be impractical to heat using mains gas, the intention is to test the technology for wider use within Leeds' housing stock.

4.4 Resources, procurement and value for money

4.4.1 The project to install air source heat pumps in 100 properties will involve Leeds City Council funding of £200,000 out of a total project value of £835,700. This is made up as follows:

£200,000	Leeds City Council (within existing capital programme)
£400,000	Renewable Heat Incentive (capital claimed back over 7 years)
£235,700	Warm Homes Fund (new injection grant)
£835,700	**Total**

4.4.2 This means that for every £1 spent by Leeds City Council, £3.17 of external funding will be brought into the city to improve the housing stock and alleviate fuel poverty.

4.4.3 Housing Leeds had originally identified and budgeted 100k for Air Source Heat Pumps from the capital programme 2020 / 21. This therefore is an increased step change from the original outline budget which will mean slipping a project to future years to accommodate this project.

4.4.4 Capital funding and cash flow.

Authority to Spend required for this Approval	TOTAL £000's	TO MARCH 2019 £000's	FORECAST 2019/20 £000's	2020/21 £000's	2021/22 £000's	2022-24 £000's
LAND (1)	0.0					
CONSTRUCTION (3)	0.0					
FURN & EQPT (5)	664.3			835.7	-57.1	-114.3
DESIGN FEES (6)	0.0					
OTHER COSTS (7)	0.0					
TOTALS	664.3	0.0	0.0	835.7	-57.1	-114.3

Total overall Funding (Including funding outside of the Programme)	TOTAL £000's	TO MARCH 2019 £000's	FORECAST 2019/20 £000's	2020/21 £000's	2021/22 £000's	2022-24 £000's
Warm Homes Fund	235.7			235.7		
Housing Leeds	200.0			200.0		
RHI	228.6			400.0	-57.1	-114.3
	0.0					
	0.0					
Total Funding	664.3	0.0	0.0	835.7	-57.1	-114.3
Balance / Shortfall =	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Revenue Effects

Any revenue implications will be provided for within existing directorate budgets. The Mechanical and Electrical team fully support the context and technology of this project and will manage the scheme through existing revenues.

4.5 Legal implications, access to information, and call-in

4.5.1 The project is a key decision, therefore we published notice of the decision on 8th November 2019, to be determined no earlier than 6th December 2019.

4.5.2 The decision is eligible for call-in.

4.5.3 The funding will be used to supplement the existing Housing Leeds capital programme, therefore there are no legal implications.

4.6 Risk management

4.6.1 The funding agreement has obligations around delivery of the works according to the delivery schedule and includes provision to reduce funding if we fall behind.

4.6.1.1 We have included more generous timings in our delivery schedule than on previous similar schemes.

4.6.1.2 There can be initial wariness from new technologies that can act as a barrier to installation. Engaging with people who are willing and have capacity is a risk. There will be a need to demonstrate after care and confidence to ensure that the resident is getting the full benefit from the system.

4.6.1.3 There is a risk that suitable tenancies may not be identified and therefore uptake may be low. To mitigate this we will establish a dedicated team to manage the customer experience and aftercare.

4.6.1.4 The timescales within the funding application are very challenging. (completion by November 2020) We will be holding monthly operation meetings between all parties involved in the scheme delivery (including funding partners) to report delivery at every stage.

4.6.1.5 The funding will be used to supplement existing council policies and will be drawn down on a quarterly basis as works are completed, therefore any risk to existing Council budgets is limited. There is a risk that the full drawdown of the funding may not be maximised if we under deliver the project.

5. Conclusions

5.1 The project will help to provide affordable warmth to council tenants who live in properties that would be impractical to connect to the mains gas network.

5.2 The project will provide low carbon heating systems that are equivalent to gas central heating in terms or running costs, controllability and installation costs.

5.3 The project will help to prove the viability and practicality of air source heat pump technology as a low carbon alternative to gas central heating.

6. Recommendations

6.1 The Director of Resources and Housing is requested to approve Leeds City Council entering into a grant agreement with the National Grid Warm Homes Fund to draw down and spend £235,700 grant funding on the installation of air source heat pump heating systems in 100 properties.

6.2 The Director of Resources and Housing is requested to inject £235,700 of National Grid Warm Homes Funding into the capital programme towards the cost of installation in council owned homes.

6.3 The Director of Resources and Housing is requested to authorise the initial expenditure of £400,000 of Housing Leeds funding, to be repaid over 7 years from the Renewable Heat Incentive (RHI) fund.

6.4 The Director of Resources & Housing authorises expenditure of £200,000 from the existing capital programme.

6.5 The Director of Resources and Housing is requested to authorise total expenditure of £835,700 on the installation of air source heat pump heating systems in 100 council owned homes.