



NORWICH City Council

Committee Name: Climate and environment emergency executive panel

Committee Date: 19/10/2021

Report Title: Retrofitting Work in Norwich

Portfolio: Councillor Hampton, Cabinet member for climate change and digital inclusion

Report from: Head of strategy and transformation

Wards: All Wards

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Purpose

To give an overview of the retrofitting funding being accessed by the council in 2021/2022.

Recommendation:

It is recommended that the committee note the work being done on retrofitting in Norwich

Policy Framework

The Council has three corporate priorities, which are:

- People living well
- Great neighbourhoods, housing and environment
- Inclusive economy

This report meets the Great neighbourhoods, housing and environment corporate priority

This report addresses 'Improve the quality and safety of private sector housing' strategic action in the Corporate Plan

This report helps to meet the housing, regeneration and development objective of the COVID-19 Recovery Plan

Report Details

1. As a council we recognise that retrofitting existing homes is one of the key ways carbon emissions can be reduced in housing.
2. Heating and hot water for UK homes make up 25% of total energy use and 15% of greenhouse gas emissions. In Norwich the domestic sphere makes up 38% of our carbon emissions. Although this is broader than just heating and hot water, we know that space heating is profoundly influenced by outside temperature, and a well-insulated home has a much lower energy need.
3. Improving housing in the city is a key strategic action in both our Corporate Plan and Environmental Strategy and forms part of our ambitious net zero target.
4. As a key provider of housing in the city we have a substantial ongoing programme of investment in our own housing stock which includes investment in fabric insulation, new windows and doors. Although, regrettably, with the removal of grant assisted funding less homes have been able to benefit from the installation of loft and cavity wall insulation, boilers and controls and external wall insulation.
5. Looking further afield central government currently aim to upgrade as many fuel poor homes as is reasonably practicable to EPC Band C by the end of 2030.
6. However, only around 30% of homes in the UK overall, fuel poor or not, currently meet EPC band C.
7. We have estimated that, if we were to retrofit all homes below C in Norwich with just wall and loft insulation, this would cost £295 - £511 million in total. Energiesprong, a whole house approach which would deliver far higher energy savings, would cost £1.5 million million with a 40 year payback. Solar PV systems on all eligible homes would cost £238 million with a 17 – 24 year payback.
8. Overall the Committee on Fuel Poverty estimates there is a funding gap of £17.1 billion to meet the 2030 target.
9. Furthermore, at the current rate of installation, the charity National Energy Action has estimated it will take 96 years to properly insulate all the current fuel poor homes in the UK. Installation of loft and wall insulation is at just 5% of peak market delivery in 2012.
10. Clearly central government ambition is not matched by the funding made available to local government.
11. The lack of long term funding acts as one of the major barriers to retrofitting. Without a long term commitment many schemes have to focus on individual measures rather than a whole house approach which can deliver higher savings. It also harms the long term sustainability of local supply chains as

installers are reluctant to hire and train new members of staff, just to have to lose them once funding ends.

12. Nevertheless, as an authority, we continue to take advantage of as much funding as we can to help improve the housing stock in the city.
13. Over recent weeks we have also seen energy prices rise rapidly, hitting a ten year high, which will impact both those in fuel poverty and energy inefficient homes the hardest. 1.9 million homes have had their energy suppliers go bust this year. COVID – 19 and Brexit also continue to have an impact, particularly in driving up both the scarcity and prices of manufacturing materials.
14. Norwich City Council has a strong history of investing in their stock, with our council housing having an average SAP rating of 70.9 (EPC Band C), which is much higher than both the national average and the private stock in Norwich.
15. Our investment portfolio includes renewable technologies in our stock, as outlined below:

Renewable technologies in council stock

Applied Renewable Technologies	Total Installations to date	What the technology does
Photovoltaics	139	Free electrical power from the sun
Solar Thermal	8	Free hot water from the sun
Voltage Optimisation	363	Lowers domestic electrical consumption
Air source heat pump	2	Creates energy efficient central heating
Loft insulation (over 200mm)	6220	Helps to stop warmth escaping through the loft
External Wall Insulation	426 installed, 472 programmed	Helps to stop warmth escaping through the walls of a house, where there is no cavity in pre 1920's houses
Gas condensing boilers	10846	Energy efficient gas fired central heating boilers
Thermal dynamic hot water systems	547	Provides very low cost, energy efficient 24 hour a day, every day, hot water.

16. Additionally Norwich City Council has committed to installing a Water Source Heat Pump System (WSHP) at Barnards Yard, which will utilise water as a renewable energy source by deriving heat from the adjacent River Wensum. The new system will provide space and hot water heating to 85 dwellings from this renewable source. This will replace a natural gas based heating system. The new system will be electrically powered and all electricity used on this development will be generated from a renewable source via our ESPO energy procurement. This system is expected to produce 4.71Kw's of heat for every 1Kw of electricity purchased and will therefore provide significant reductions in CO2 emissions per annum. Compared to the existing gas fired system it is anticipated that annually 270 tonnes approx of carbon will not be emitted into the atmosphere - which equates to the work 12,857 fully grown trees would absorb every year. Overall this scheme equates to almost 150,000 m3 of carbon reduction per annum.

17. In 2010 our housing stock achieved the decent homes standard and we have independently developed the Norwich Standard – a commitment to ensure that no individual component goes beyond its life expectancy, for example, no kitchen will be older than 20 years, no bathroom older than 30 years and no boiler older than 15 years. Currently 98% of our properties meet this standard.
18. While being mindful of the challenging financial landscape we also have a robust programme of investment planned for housing stock in the city, having invested £129 million over the past six years. Our current HRA capital programme contains an £18.5 million commitment to maintaining and improving the condition of existing housing and £8.7 million to improve the use and management of existing stock, including improvements to communal areas and 790 new heating systems.
19. Improvement in the private sector will be key to realising improved carbon and fuel poverty reductions in the future – however this sector has seen significant cuts in government funding.
20. We have applied to a number of funding streams focused on retrofitting and improving energy efficiency in the city.
21. Overall, it represents over £4 million in potential funding for retrofitting and will save over 30,000 kg CO₂e in carbon due to improved energy efficiency of properties.
22. This includes both private sector and social stock improvements. Although our social stock is relatively well insulated, particularly when compared to the private sector, we still seek to take advantage of as many funding sources as possible.
23. We also continue to utilise other external sources of funding such as ECO, via our Cosy City programme: <http://www.cosycity.co.uk>. This helps eligible households access funding, mainly for loft and cavity wall insulation.

Measures delivered via Cosy City project:

GDAR and EPC assessments	350
SWI	68
Boiler replacements	72
Cavity wall and Loft insulation	270
Heating Upgrades	9
Boiler repairs	8
Small insulation measures	497
Total	1254

24. Norwich City Council became one of the first councils to ever run a collective solar scheme in May 2015 – installing nearly 8,000 panels through this scheme.

25. Furthermore the influence of this scheme meant more people were encouraged to invest in solar for their properties, even if they didn't join with Solar Together, with data showing an upturn in solar pv installations in September 2015.
26. Further schemes were held to help residents take advantage of the FIT scheme before it ended and another after the FIT scheme ended, which, for the first time, was able to offer battery storage to residents, with 1/3rd saving on the market price. Despite the FIT scheme ending, and our most recent scheme being impacted by COVID, we were still able to engage local residents and increase the amount of solar panels in the city.
27. Overall the scheme has invested £2.1 million in Norfolk and avoided 1,800 tonnes of CO2 by installing over 2 MW of power in the city of Norwich alone. Over 2,000 people have signed up to this scheme over the four auctions.
28. Furthermore, we worked with the Warm Home Fund to install over £1 million in improvements to properties at the Templemere estate, including significant amounts of loft and cavity wall insulation.
29. Please see below an overview of the funding we have bid for:

Category	Amount	Notes
Green Home Grants – Local Authority Delivery	£775,000	Currently delivering until end March 2022. Mix of private and social housing.
Public Sector Decarbonisation Scheme	£750,000	Has been used for the depot and City Hall retrofitting
Off gas funding (Templemere)	£1.1 million (£322,000 in new heating systems, £800,000 in mains gas installations)	Via the Warm Homes Fund partnership which we are part of.
ECO spend (previous 12 months)	£385,290	External grant to private homeowners facilitated by NCC. Mainly focused on loft and cavity wall insulation
Sustainable Warmth Competition	Approximately £2.8 million	Focused on improving low energy efficiency fuel poor homes. We are awaiting the outcome of our bid.
Social Housing Decarbonisation Fund	TBC	Specifically focused on social housing and we are hoping to deliver EWI and Wimpey homes. Currently in the bid writing process.

Financial and Resources

Any decision to reduce or increase resources or alternatively increase income must be made within the context of the council's stated priorities, as set out in its Corporate Plan 2019-22 and Budget.

1. There are no proposals in this report that would reduce or increase resource
2. All works are either externally funded or have already been budgeted in the HRA

Legal

3. Legal advice is always sought before any bid paperwork is completed and we ensure they meet all legal considerations and requirements

Statutory Considerations

Consideration	Details of any implications and proposed measures to address:
Equality and Diversity	N/A
Health, Social and Economic Impact	Retrofitting homes can help reduce fuel poverty in the city. Fuel poverty has many negative consequences - cold can exacerbate underlying health conditions such as respiratory and cardiovascular problems. Children who are living in cold homes are significantly more likely to suffer from chest problems, asthma and bronchitis. Cold homes can slow down recovery following discharge from hospital, when people are already at risk, and can lead to repeat admissions due to unsuitable housing.
Crime and Disorder	N/A
Children and Adults Safeguarding	N/A
Environmental Impact	Retrofitting houses is key to reducing carbon emissions from the private sector stock in Norwich.

Reasons for the decision/recommendation

4. To note the work being done on retrofitting in the city, particularly in the light of recent fuel price rises.

Appendices: N/A

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