

# Appendix 6

## Proposed Energy Efficiency Strategy

### Oadby Wigston Borough Council



**Oadby and Wigston  
Borough Council**

**Report Prepared By:**

**Steve Sheldon – Low Carbon Expert Ltd**

**Date Finalised:**

**5 July 2016**

# EXECUTIVE SUMMARY

One of the Council's responsibilities is to manage the current housing stock of 1,236 units, which is made up of general needs housing and sheltered accommodation. In managing this stock, the Council needs to protect its long-term asset value, provide energy efficient homes for its tenants and ensure that its stock is sustainable for at least 30 years.

In consideration of this the Government have introduced new Fuel Poverty Regulations in 2014, which requires all rented homes in England to be rated with an Energy Performance Certificate (EPC) rating of Band C (Minimum SAP rating of 69) by 2030. With interim targets set: Band E by 2020 (minimum SAP 39) and Band D by 2025 (minimum SAP 55).

Against this backdrop, welfare reform brings with it the very real possibility that more of the Council's customers may fall into fuel poverty, increasing the importance of education and awareness on household energy management. It is also likely that changes to funding schemes may bring fresh opportunities for revenue generation, grant support, or partnership working. The Council must be ready to capitalise on these opportunities as well as to limit any future risks.

Rising fuel costs and household utility bills are a real and serious problem faced by millions of households in the UK today. It is a problem that leaves many facing difficult choices about where to spend their limited income and poses a risk to the business in respect of future rent collection and the condition of the Council's stock, if effective plans are not in place to tackle fuel and energy efficiency related matters.

This energy efficiency strategy is intended to help the progression from "Decent Homes" standards to create better homes for communities and the Council's business, by ensuring that energy efficiency investments are targeted and prioritised into those homes that need most help.

From a customer perspective the priorities are to:

- Significantly reduce fuel bills for residents living in the lowest energy efficiency rated properties
- Help to increase overall household disposable income
- Improve the fabric quality and thermal efficiency of poorly insulated homes
- Improve the internal environments of any fabric failing homes
- Provide the ability for everyone to have affordable warmth & promote behavioural change

From a business perspective the aims are to:

- Prioritise investments for those in the greatest need – supporting communities
- Protecting the commercial interests and future revenue streams of the Council
- Reduce future lifetime maintenance and investment cost liabilities
- Maximise external funding to support existing budgets
- Have intelligent business information to help make informed decisions



# BACKGROUND TO STRATEGY:

## High Level Background & Objectives:

Further to the introduction of the Fuel Poverty Regulations, in July 2014 the Government launched their new Fuel Poverty Strategy for England. The strategy stated that due to energy price rises, 10.4% (2.3 million house-holds) are in fuel poverty in England. Four main factors affecting levels of fuel poverty are highlighted:

- Low household incomes
- Low or poor energy efficient homes
- Low energy saving knowledge
- Low energy purchasing know-how

Those living in the least energy efficient properties may have to spend up to £1,700 extra a year to heat their home to a suitable temperature. Overall, rural areas have higher levels of fuel poverty than urban areas.

Typically these areas will include older, less energy efficient properties that have inefficient or older heating and hot water systems, or of solid wall construction (“Hard to Treat”).

SAP ratings are strongly influenced by the main fuel type used in a property, as these determine the costs of heating a fixed floor area. It follows that households with the more expensive heating systems such as electric storage heaters will have lower SAP ratings; while those with systems with less expensive running costs will have a higher SAP score.

Over the last 10 years we have seen a rise of over 160% in energy bills, a reduction in disposable income, rises in inflation and far reaching welfare reform. An ever-growing number of the Council’s customers are now affected by fuel poverty, impacting on their financial position and overall health and wellbeing.

While the reduced wholesale price of oil and gas may well result in lower bills in 2016, the longer-term price trend has been upwards. Over the last decade household energy prices roughly doubled, and some energy price experts such as Mark Todd, Energyhelpline.com, expect a return to rising prices in the next two or three years.

Targeting energy efficiency investments into the fuel poorest households will help residents to reduce their expenditure on fuel bills and facilitate affordable heating and hot water systems for all. Helping to reduce the impact on household fuel and utility bills for those that are most at risk, will also help the Council maintain a sustainable revenue stream and may help to reduce the risk of future rent default.



## OWBC APPROACH:

### Existing Stock Appraisal:

A review is being carried out of all the Council's current stock EPC's to ensure that planned investments are targeted at the least energy efficient properties and for those that are in greatest need of thermal improvements.

The development of this strategy is a direct response to the Government's introduction of new Fuel Poverty Regulations and minimum energy efficiency standards and a desire to help combat the hardship being suffered by residents, in relation to paying their future fuel bills.

A review is also taking place of planned investment works, to ensure that the most suitable technologies are being utilised to achieve the greatest fuel bill savings for residents, at the least cost to the Council and to ensure that investments are being targeted wisely. This will be achieved through tendering key energy efficiency works and aligning these to external funding where practical.

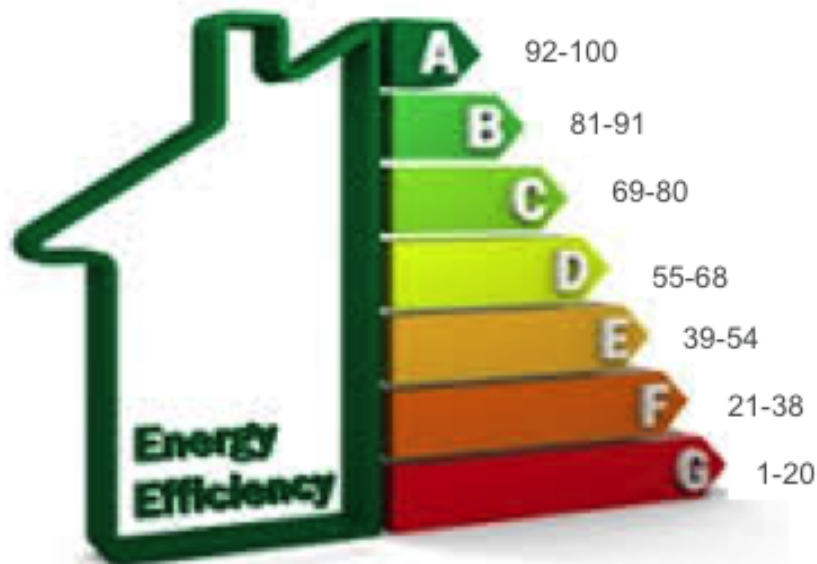
At the same time the priority will be to achieve the greatest increases in energy efficiency where practical in trying to meet the Government targets, and to ensure that vulnerable households are not neglected in future investment plans.

Work will be undertaken, utilising existing budgets and adopting a fabric first approach, essential for the longer-term revenue protection of the Council's assets, this in turn will enable the tackling of the "hardest to treat and hardest to heat" homes.

Where it proves impractical or too costly to improve homes to the required Government standards, consideration may need to consider whether it is cost effective to invest further in these homes and/or the potential for disposal.

### Current England & Wales EPC Bandings:

The following diagram depicts the current England and Wales Energy Efficiency ratings for domestic homes relative to a properties RdSAP value.



## OWBC Specific EPC Status:

Following a review of the Council's housing stock, there are 544 valid EPC's out of the total of 1,236 properties. This data has been extrapolated for the whole housing stock, and it is intended to undertake full EPC analysis of all of the stock for this strategy to be fully implemented and effective.

2016 EPC Position			
	Actual EPC's	Extrapolated	% of Stock
A	0	0	0
B	54	123	10%
C	303	688	55.7%
D	172	391	31.6%
E	13	30	2.4%
F	2	4	0.3%
G	0	0	0%
Totals	544	1,236	100%

## Energy Efficiency Review Outcomes:

Based on the energy efficiency information held at 25<sup>th</sup> May 2016, the average SAP ratings for all of the stock at is 70.86, this may go up or down once the extrapolated information is validated.

Based on the extrapolated data:

- 99.7% of all homes already meet the Governments 2020 target (only 4 homes do not currently meet this standard).
- 97.3% of all homes already meet the 2025 target (34 homes do not currently meet this standard) and
- 65.7% of all homes meets the 2030 target (425 homes do not currently meet this standard)

The Council are now well placed in meeting the Government's short to medium requirements in respect of energy efficiency and properties can now easily be identified which fall short of these targets, to ensure that future energy efficiency investments are prioritised to meet the strategic objectives.

Indeed all residents have access to gas and the Council has historically accessed some of the easier to install solutions (e.g. cavity wall and loft insulation, 'A' / 'A plus' rated boilers) and around 50 homes received photovoltaic (PV) panels. However this masks the more difficult issues that have most impact on customers fuel bills and remain to be addressed e.g. solid wall properties requiring external wall insulation.

Of the 425 homes that currently do not meet the 2030 standard, it is essential that investment plans are continually reviewed to ensure that annual investments are targeted at those properties falling short of the standards as well as achieving the fabric and revenue objectives set out in this strategy.

In consideration of this 148 solid wall properties have been identified that sit within this category, which would benefit both the Council and its tenants in meeting these objectives and should be prioritised within 2016/17 expenditure plans – see investment plan options below.

By tackling these properties as a priority, the Council will be able to maximise the funding benefits currently available, demonstrate compliance with the legislative energy efficiency targets and show real commitment to the investments being made into communities, to support the most vulnerable and fuel poor households.



## SPECIFIC INVESTMENT PLANS TO MEET OBJECTIVES:

### Quick Wins:

148 properties have been identified, within the existing stock (see appendix 1 for details) that are of solid wall construction, are the least thermally efficient and poorest SAP ratings within the stock, and would greatly benefit from an External Wall Insulation (EWI) programme of works. These properties represent 35% of the stock falling short of the 2030 target and would therefore greatly assist in meeting these longer-term targets and demonstrating good sound forward planning.

The other main reasons for targeting these properties now is that:

- The capital budgets are available 2016/17 to treat these homes (Circa £1.3m)
- External funding is available until Dec '16 to support this programme of works (Circa £70k)
- Tenants will be experiencing greater heat and energy loss in these properties
- Tenants will have the greatest potential to reduce their fuel bills
- Other investments into these homes will not be cost effective until thermal efficiency is improved
- They have the greatest potential for condensation and mould growth
- They have the potential to incorporate other complimentary energy efficiency measures
- Commitment to the community can be demonstrated in tackling fuel poverty
- This will support the " Fabric First" approach

We have undertaken preliminary planning enquiries and will be seeking to progress system designs for these properties to enable us to go to competitive tender, with approval being sought at the next committee meeting 5<sup>th</sup> July 2016.



### Other Energy Efficiency Improvement Works:

While undertaking these EWI works, efforts will be made to ensure that funding opportunities are maximised and cost effectiveness is achieved, by checking the status and condition of the loft insulation, heating and hot water appliances and any other low cost quick win measures that can be undertaken at the same time.

Having identified the stock that currently falls short of both the 2030 and interim targets, it will be essential to apply the same principles to future investment programmes by targeting expenditure into the least energy efficient stock, where practicable. This will be undertaken by cross-referencing current investment plans against the energy performance data that is held. This strategy will therefore work as an aide memoire for future energy efficiency investment planning, to ensure expenditure is going to those properties and people that need it most.

In addition to the quick wins and effective investment planning, the condition of the fabric status will be reviewed annually, which may be having an impact on the overall energy performance of a property and its life expectancy, which in turn may affect future revenue.

By having a fabric first approach as part of the energy efficiency strategy, such issues as customer complaints and costs associated with damp, mould, condensation will be tackled which will begin to deal with the root cause of the problems, providing assets fit for the future and reducing lifetime maintenance costs.

## Funding Options & Opportunities:

An independent funding provider (Agility ECO) has been retained at no cost to the Council to maximise the current ECO (Energy Company Obligation) and secure funding to support the proposed EWI programme. Agility ECO costs are funded out of the carbon offset value delivered by the proposed EWI scheme.

After consideration of all OFGEM compliance and ECO lodgement costs, the EWI scheme alone, could net The Council in the region of £70,000 for the displacement of 3,200 Tonnes of CO<sub>2</sub>, this may be improved upon if other supportive measures are found while undertaking surveys to the properties.

Included within the funded compliance costs are pre and post EPC lodgements, which support the wider aims of the strategy and will therefore negate any future planned costs associated with achieving full EPC compliance for the stock. It is therefore considered that the true value of the carbon savings made on this scheme are in the region of £85,000 equating to £26.50 per carbon tonne offset, which fares considerably better than the £18/tonne currently being offered by the Energy Companies direct.

This represents better value for money given the risks associated with the ECO compliance requirements and the lack of in-house expertise and resource to administer these processes directly.

This funding relationship will also enable the Council to develop a greater understanding and potential for external funding, carbon trading mechanisms and support for future investment plans via implementation of energy efficiency strategic plans.

## Procurement of EWI Project:

We have reviewed the Council's contract procedure rules and given the value and specialist nature of the EWI works, we will be seeking 3 competitive tenders, via an exemption waiver, to enable us to expedite the tender and planning process and maximise the ECO funding opportunity that is currently available. It is proposed to appoint an external consultant to help with this procurement process, who has experience of the supply chain and system manufacturers. Work has begun, with a system designer to commence early archetype analysis, to ensure we meet the manufacturers product installation requirements to enable the Council to receive a 25-year product and system performance warranty via an approved contractor.

The approach to this project is being consolidated, incorporating other energy efficiency measures that have the potential to be funded to avoid future duplication of costs and asset administration. For example 7 of the properties proposed for EWI are due boiler replacements, which may attract external funding to support other planned programme of works costs.

Approval for this scheme will be sought in early July, with a proposed start in August 2016 and completion by March 2017.



# CONCLUSIONS & BENEFITS OF STRATEGY

Targeting energy efficiency expenditure into those properties that need it most enables the Council to deliver both client and customer (tenant) benefits, prioritised on the basis of the most vulnerable and at risk of high or excessive fuel bills.

In addition we will engage with a contractor, who has the experience of offering private homeowners an opportunity to buy into the scheme, with the aim of increasing project uptake to maximise the community benefits.

This strategy provides a clear process for the Asset Management Team, to ensure that any future planned spends is substantiated and is benefitting those who need it most by:

- Investing in our communities
- Significantly reducing tenants fuel bills for those paying the most
- Help to increase overall household disposable income
- Protect the commercial interests and future revenue streams of the Council
- Prioritising investments for those that need it most
- Providing affordable warmth and affordable living for all
- Improve the fabric quality and thermal efficiency of poorly insulated homes
- Maximise external funding to support existing budgets
- Protecting future assets and revenue streams
- Making substantial carbon savings that have a direct capital funding benefit
- Reduce future lifetime maintenance and investment cost liabilities
- Reducing customer complaints in relation to condensation and mould
- An opportunity to promote energy efficiency education and behavioural change
- Have intelligent business information to help make informed decisions





## **GLOSSARY OF TERMS:**

CO <sub>2</sub> :	Carbon Dioxide
ECO:	Energy Company Obligation
EPC:	Energy Performance Certificate
EWI:	External Wall Insulation
OFGEM:	Office of Gas and Electricity Markets
PV:	Photovoltaic (Solar PV)
RdSAP:	Reduced Data Standard Assessment Procedure*
SAP:	Standard Assessment Procedure*
UK:	United Kingdom

\* For the purposes of the Councils energy performance assessment RdSAP values are utilised and quoted in this report.

## **APPENDIX 1:**

(Address List of Proposed Solid Wall Properties Requiring EWI)