

20 November 2013		ITEM: 5
Housing Overview and Scrutiny Committee		
Update on Retrofit Thermal Efficiency Programme and Damp and Mould Reduction in Council Homes		
Report of: Councillor Val Morris-Cook, Portfolio Holder for Housing		
Wards and communities affected: All	Key Decision: Key	
Accountable Head of Service: Kathryn Adedeji, Head of Housing, Investment and Development.		
Accountable Director: Barbara Brownlee, Director of Housing		
This report is Public		
Purpose of Report: This report provides an update progress made on the Thermal Efficiency retrofit programme along with actions taken to eradicate Damp, Condensation and associated Mould as part of the Council Transforming Homes five year capital programme.		

EXECUTIVE SUMMARY

This report covers two of the three strands of the Council's Transforming Homes programme being undertaken over the next five years. These are a major retrofit thermal efficiency programme and actions being taken to eradicate damp, condensation and associated mould growth. It outlines the progress being made through the integration of both of these strands into this programme.

The report provides a comprehensive overview of the current approach to improving warmth and comfort in people's homes, reducing levels of fuel poverty and tackling damp, condensation and associated mould growth. The range of measures will tackle the following key priorities:

- Reduce fuel poverty,
- Reduce levels of damp, condensation and associated mould
- Reduce the repair costs of damp, condensation and associated mould
- Increase levels of comfort and satisfaction in homes.

The retrofit programme of thermal efficiency measures whilst largely focussed on council homes will offer private households the opportunity to buy into the programme at heavily subsidised costs. Information is provided on the nature, scope and extent of the thermal efficiency retrofitting works. This includes the numbers of

council properties scheduled to benefit from retrofit measures and how this will in part address residents who are currently living in fuel poverty

This programme has been made possible by the Council successfully securing multi million pound funding under ECO. The costs for phase one of the retrofit programme is estimated 5.5m, circa 70% of which will be funded through ECO. Phase one covers all eligible homes in the year one of the capital programme and will see over 700 homes benefit from retrofit measures. Pre mobilisation on phase one is scheduled to commence this month.

In addition to these confirmed sums an in principle agreement covering all other eligible homes in Council stock could see a further investment currently estimated at 5m secured, however this further sum is subject to review based on changes to the Energy company obligation.

The report also provides an overview of work underway to robustly tackle damp, condensation and associated mould growth, which has been informed by continued engagement with residents. Some of the damp, condensation and mould measures are:

- Increasing ventilation in homes.
- Damp-proofing remedial works.
- A range of thermal efficiency measures as part of capital programme.
- Bio-treatments.
- Providing information to tenants to reduce likelihood of condensation, damp and mould
- Setting up of an operational working group across the Council which includes partner agencies and tenants to establish work streams that straddle the range of physical works through to information giving

In addition to the improvements to the physical condition of homes and associated health benefits, the programmes have been designed to have a strong emphasis on supporting local employment and training opportunities. The contractual process has been utilised as a vehicle for levering-in additional economic gains to the borough. Liaison and close working with the Housing Investment Forum has ensured that this wider programme of work is underpinned by a tenant-lead approach at all stages.

1. RECOMMENDATIONS:

- 1.1 To note the multi million pound funding agreement in place to support delivery of thermal efficiency retrofit.**
- 1.2 Note the progress made in agreeing a programme to tackle damp and mould in Council homes.**
- 1.3 Note the findings of the Green Study and the steps taken to incorporate the findings into the housing capital programme.**

1.4 Note the reduction in fuel poverty and other additional ancillary benefits of improving the thermal efficiency of Council homes in Thurrock including benefits to private homes.

2. INTRODUCTION AND BACKGROUND:

- 2.1 The Transforming homes programme under its Beyond Decency strand already has within it a number of measures that will improve the energy efficiency of homes, including but not limited to roof insulation, boiler replacement, and window replacements. The additional funding levered-in via the Energy Company Obligation will now maximise this programme by extending both the range of measures applicable and the number of properties able to benefit from the programme. The measures and improvement packages agreed will significantly contribute ensuring properties achieve a SAP 80 standard which is the proxy for affordable warmth.
- 2.2 A recently commissioned Green Study identified estimated fuel costs to heat different types on homes within the Council stock. This information together with Government estimates from a 2011 report which identifies levels of fuel poor households has allowed us to have a better understanding of the nature and extent of fuel poverty in the borough. The programme targets limited resources at those homes in areas and building types that are estimated to be in fuel poverty. The prioritising and scheduling of capital and retrofitting works at these homes has seen the Council getting maximum value for every pound spent on thermal efficient measures in Council homes.
- 2.3 Linked to the issue of thermal efficiency is that of condensation and damp and mould in Thurrock's housing. The suite of measures being undertaken to improve thermal efficiency will have a significant impact on this issue; allied with an information programme to address behavioural changes there is likely to be significant improvements and increased levels of comfort for those tenants affected by condensation and damp and mould in Thurrock's homes.

TACKLING FUEL POVERTY

- 2.4 The government has recently set out the new definition of fuel poverty which it intends to adopt under the Low Income High Costs (LIHC) framework¹. The August 2013 statistics release reflects this new definition. Under the new definition, a household is said to be in fuel poverty if:
- Their income is below the poverty line (taking into account energy costs); and
 - Their energy costs are higher than is typical for their household type.
- 2.5 The model also now defines a fuel poverty 'gap'. This is the difference between a household's modelled bill and what their bill would need to be for them to no longer be fuel poor. The purpose of the fuel poverty 'gap' is to measure the severity of the problem faced by fuel poor households. Under

¹ Fuel Poverty: A Framework for Future Action, Dept for Energy and Climate Change, July 2013

this new approach there are therefore twin indicators of the ‘extent’ and ‘depth’ of fuel poverty.

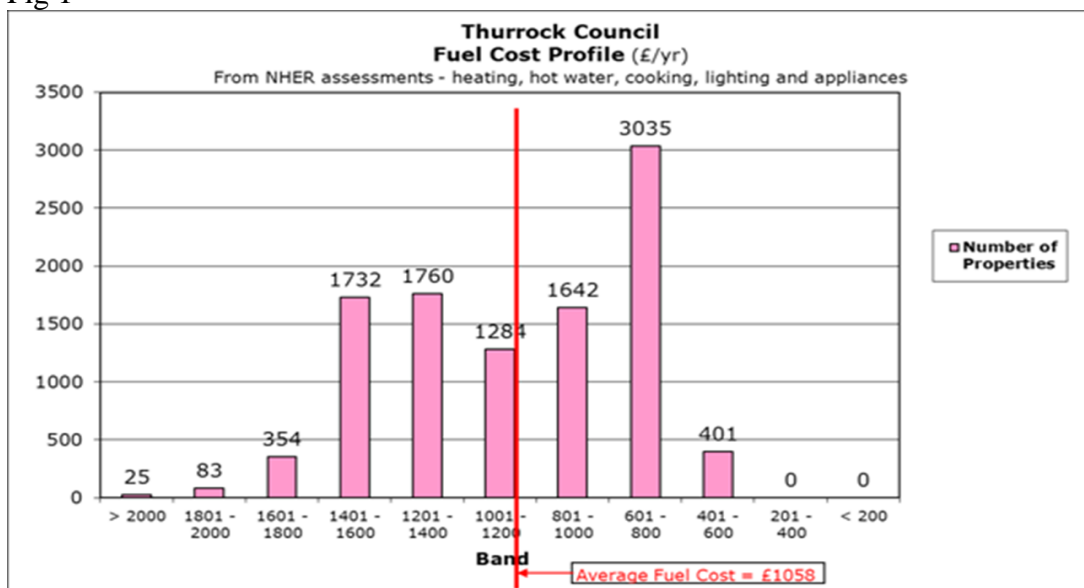
2.6 Statistics are also available for a new “10 per cent definition”. Under this, a household is said to be fuel poor if it needs to spend more than 10% of its income on fuel to maintain a satisfactory heating regime (usually 21 degrees for the main living area, and 18 degrees for other occupied rooms).

In essence, the key drivers behind fuel poverty are:

- The energy efficiency of the property (and therefore, the energy required to heat and power the home)
- The cost of energy
- Household income

2.7 Data from the Government² indicates that of all households in Thurrock 8.2 per cent are in Fuel Poverty. The diagram below is taken from Thurrock’s Green Study on its properties and illustrates that 5,238 households within the Council stock are likely to be paying in excess of the national average cost of energy (£1,058 in 2011). See Fig 1 below:

Fig 1



2.8 Further data obtained from the Green Study indicates a wide variance in the energy performance of Council homes. Based on standardised assessments it was estimated that whilst some homes were well insulated and resulted in tenants paying relatively low fuel bills, others were extremely poorly insulated and it was estimated tenants would have been paying in excess of £2,000 per annum for fuel. This estimate was based upon 2011 figures. This figure equates to 51% of Thurrock Council homes.

² Ibid

- 2.9 One of the key outcomes from the principles agreed by Cabinet in January 2013 in report titled Establishing Principles for a Housing Capital programme was reducing levels of fuel poverty. As such the retrofit measures are targeted at 48% of Thurrock Council homes who are paying in excess of the median fuel bill (as illustrated above) and in bringing forward in the housing capital programme those homes which are the least energy efficient it is extremely likely that levels of fuel poverty will be reduced once the retrofit measures are implemented. This is because residents will need less energy to heat homes to the same temperatures.
- 2.10 The Department of Energy and Climate change – Fuel poverty a framework for future – outlines that fuel poverty is primarily driven by three different factors: household income, energy prices and the thermal efficiency of dwellings (in turn reflecting a whole range of dwelling characteristics). As a social Landlord the Council has the ability to have the biggest impact on the third factor as set out. On this basis we have adopted the ‘fabric first’ approach which both identifies those homes that are the most energy inefficient and then involves the building fabric being improved first in order to reduce heat losses. The building services are then improved in order to meet the reduced heat demand more efficiently, and finally the renewable energy systems are used to ‘top-up’ performance to the required standard. The measures in totality cover insulation (to walls, roofs and floors), new windows, heating and hot water systems and controls, ventilation systems, low energy lighting and renewable energy systems where feasible.

FUNDING

- 2.11 The Energy Company Obligation (ECO).ECO is a legal obligation on energy suppliers to improve the energy efficiency of domestic households. It is not a grant scheme but an obligation to ensure that carbon and cost savings are achieved. The savings are not location specific and are set out as yearly targets for the suppliers. ECO essentially replaces previous domestic energy efficiency programme known as CERT and CESP, both of which ended in 2012, and under which Thurrock secured minimal funding as a result of previous piecemeal approach to capital investment and delivery.
- 2.12 ECO is targeted to provide insulation and heating packages to low income and vulnerable households and insulation measures to low income communities. Under the obligation, energy suppliers are required to subsidise applicable measures in areas of low income selected by Government using the Indices of Multiple deprivation (IMD) in England, Scotland and Wales. Along with properties (regardless of location) that are defined as ‘hard-to-treat. These are generally properties that would not pass the golden rule under the green deal: i.e. the cost of efficiency measure are prohibitively expensive and exceed the maximum reduction in estimated fuel savings.
- 2.13 Analysis of Council stock information shows that at least 20% of homes within Thurrock are eligible for ECO funding, in determining the approach the requirement was for funding proposals to pay particular attention to those properties with very high levels of estimated fuel expenditure and to target

those in areas of lower super output areas. The Council's aim would be to achieve an average SAP rating of 80. As this was effectively a proxy for focusing on those homes most in need of the works.

- 2.14 Successfully evaluating the specific measures applicable to Council homes and negotiating an agreement with Energy Company has enabled the Council to move from a position that saw the HRA spend 600K to implement retrofit measures on 50 homes in 2012/13. To a position where an estimated 700 plus homes are set to undergo thermal efficiency measures at an estimated 5.5M cost of which an estimated 1.5M will be funded by the Council. Therefore in real terms as a result of securing external funding the Council is set to have thermal efficiency retrofit measures on 15 times as many properties for 3 times as much funding when compared to last year. With ECO funding seventy percent of thermal efficiency measures.
- 2.15 The current Energy company obligation is in place until March 2015. It is important to note the recent government announcement has indicated a possible 'roll back' of the Energy company obligation. The early work undertaken by Thurrock Council in negotiating and securing this funding means that we are unlikely to be affected by any changes as long as they are made to a post 2015 green funding arrangement.
- 2.16 As the Transforming homes programme is underway all thermal efficiency measures and other capital works will be carried out in the same time period, thus significantly improving the efficacy of spend and reducing time and disruption to tenants. Extensive administrative, mobilisation and procurement costs are stripped out from this model thus allowing for a greater number of properties to undergo works.

DAMP, CONDENSATION, AND MOULD

- 2.17 Resident feedback, and analysis of repairs demand and statistical information indicates that damp, mould and condensation have become key challenges within Thurrock Council's housing stock. Works carried out through the housing capital programme will have a considerable impact on tackling damp and mould in people's homes.
- 2.18 Analysis of repairs demand since January 13 has shown that a total of 759 properties have reported a Damp and/or Mould issue over the last 9 months. This equates to 7.4% of Thurrock Council's stock. These 759 properties have reported a total of 1,028 damp, condensation or mould associated repair orders in the same period:
- Tilbury had the highest number of properties affected by Damp and/or Mould followed by South Ockendon and Grays.
 - When the type of property affected by Damp and/or Mould was analysed the following was found;
 - House's made up the highest affected property type; 55.2% - which is 5.6% higher than their Stock Level.

- 38.2% of properties were Solid Brick constructed with this construction type only making up 24% stock.

2.19 As a result of these findings the following initiatives are integrated into the capital programme and will significantly contribute towards reducing levels of damp, condensation and associated mould:

- Kitchen and bathroom replacements will include the provision for humidistat controlled mechanical extract systems which will ensure that these areas are vented properly.
- Under-performing boilers or complete heating systems will be replaced and thermostatic radiator valves will be replaced as part of this or as partial works. This will provide for fully controllable heating installations which will improve heat regulation thus reducing the risk of condensation.
- Where partial heating systems are replaced, radiators will be re-sited onto external walls wherever possible to prevent cold bridging.
- Replacement flat and pitched roofs will include the provision of insulation and vents to meet current building regulations and will improve the internal thermal environment where required.
- Stain-blocking and chemical cleaning will be carried out to remove existing infestations.
- New thermally efficient windows will be provided where the existing are sub-standard.
- In conjunction with the above, as part of the survey phase or as part of the handover packs, tenants will be advised of ways to reduce condensation in their homes.
- Where it is considered that the damp will not be remedied by the procedures outlined above or in extreme cases, a specialist survey will be commissioned to establish required works. This will be by a suitably qualified building surveying firm or damp specialist to ensure the quality of the advice. (Works arising out of this may include Tanking, chemically injected Damp Proof Membranes and the like).
- Insulation works to the walls of many properties which will prevent cold bridging which causes damp.

2.20 In addition there are a range of other initiatives which provide a holistic picture of the actions being undertaken across the spectrum to tackle damp, condensation and associated mould:

- **£2m capital programme on damp and mould:** As part of the £68m five-year capital programme, £2m has been specifically ring-fenced to tackle and eradicate damp and mould issues.
- **Damp Surveys on various archetypes:** This process was undertaken in response to tenants' complaints about damp and mould. This resulted in some properties being re-prioritised for damp remedial work and brought forward to earlier in the housing capital programme.

- **Other findings of damp survey:** The surveys have indicated that there is a broad spectrum of damp, condensation and mould issues within Council homes. On the one hand there are condensation issues which can be remedied by improved ventilation and on the other hand some properties appear to have extensive damp. There are a range of damp, condensation and associated mould issues which exist between these two extremes.
- 2.21 A pilot project on the Flowers Estate, South Ockendon had interesting and varied outcomes which will be taken forward as part of a work-stream under a 'Damp and Mould Working Group'. A key finding of the pilot was that a programme of servicing the Heat Recovery Units should form part of a comprehensive suite of measures to tackle damp condensation and mould.
- 2.22 The pilot, together with surveys undertaken in the wider housing stock identified the need for different types of interventions to remedy damp and condensation in council homes. On the one hand some damp and condensation issues were able to be addressed via the ongoing repairs and maintenance programme, and the provision of information. Other more significant issues would require more extensive intervention and this would be undertaken as part of the wider capital improvements.
- 2.23 In essence, the damp and condensation measures which are being undertaken by housing cover a range of preventative and remedial measures. They include the following:
- Increasing ventilation in homes.
 - Damp-proofing remedial works.
 - A range of thermal efficiency measures as part of capital programme.
 - Bio-treatments.
 - Providing information to tenants to reduce likelihood of condensation, damp and mould
 - Setting up of an operational working group across the Council which includes partner agencies and tenants to establish work streams that straddle the range of physical works through to information giving
- 2.24 The following remedial works have been undertaken since 1st January 2013:
- 119 Damp Surveys – 16% of affected properties
 - Bio treatment in 23% of affected properties
 - Damp proofing to 18% of affected properties
 - Full remedial damp works to 7 properties under the Capital Works Infill programme
 - The spend on Damp and/or Mould issues during the period 1st January 2013 to 9th September 2013 was £68K this is split by,
 - 52K on Responsive Repairs Contracts
 - 16K on Capital Works
- 2.25 Research and works carried out to date present a picture of varied and disparate damp, condensation and associated mould issues within Thurrock's

housing stock. This information supports the need for a programme of activity which includes local housing staff, our repairs partner currently Mears and contractors delivering the capital works programme. A robust programme of correct initial diagnosis, appropriate treatment at the earliest stage followed by a supported approach to behavioural changes is critical to halting the cycle of recurring damp, mould and condensation in many Council homes.

DAMP, CONDENSATION AND MOULD: THE WAY FORWARD

- 2.26 Whilst a picture is presented of the actions currently being carried out to address condensation, damp and mould and we are able to base such activity on repairs data, survey results and resident feedback, addressing physical factors in reducing damp, condensation and mould issues, this will not provide a wholesale solution. In addition to the building fabric, there are other behavioural and lifestyle 'drivers' which can effect the growth of condensation and associated mould. These then can be exacerbated by poor ventilation within peoples' homes whilst reduced airflow throughout the dwelling will also encourage the growth of mould spores. It is also evident that as fuel bills rise so the tendency for tenants to seal air vents and hence reduce the flow of air in the home increases. This in turn becomes an additional factor in the increase in damp and mould growth within people's homes.
- 2.27 Improving the thermally efficiency should support a reduction in the incidences of behaviours which exacerbate damp and mould. Through the working group it is proposed that officers working with residents establish a refreshed information programme focussed on damp, condensation and associated mould to assist its reduction. A newly-designed leaflet together with supportive advice from housing staff and its contractors is the first proposed action on information from the group.
- 2.28 At the Housing Investment Forum held on the 17th September damp, condensation and mould was an agenda item and tenants were provided with a summary and update. This was followed by a multi-disciplinary 'Damp, Condensation and Mould' Project Group meeting in October 2013 where key actions and initiatives were discussed and agreed as part of a comprehensive action plan. Tenants are also part of this Project Group. Actions and updates will be reported back to the HIF at its next meeting at the end of October 2013.

3. ISSUES, OPTIONS AND ANALYSIS OF OPTIONS:

- 3.1 There are options available to the council regarding thermal retrofitting and tackling damp, condensation and mould: The first option is to continue to work to lever in external funds to provide as comprehensive solution as these funding streams allow to both improve the thermal efficiency of council homes and addressing damp, mould and condensation issues. At present approximately 70% of the funding required to undertake retrofit programme is to be provided through external funding. In addition to this officers are

currently exploring the possible use of EU structural funding as a potential additional funding source that may reduce the level of contribution required by the Council.

- 3.2 Addressing thermal inefficiency, damp, condensation and associated mould, is important as there are health implications for our tenants living in poor environmental conditions. In addition, poor thermal efficiency of our homes exacerbates fuel poverty. Not investing in thermal efficiency measures also erodes the integrity of the stock as an asset thus potentially undermining the integrity of the current business plan. Thermally inefficient homes also increase levels of discomfort and form a core percentage of complaints from our tenants.

4. REASONS FOR RECOMMENDATION:

- 4.1 We have developed viable good option for improving the thermal efficiency of our homes. It provides a common-sense approach to delivering on the recommendations made in the Green Study. Delivering a programme of improving the building fabric alongside one of maintenance and upkeep in the form of information and advice provides a long-term and sustainable approach to eradicating damp and mould problems within our homes. This approach also shields tenants from the harshest effects of the increasing rise of fuel prices. This approach also complements the current capital programme of works which covers the period 2013-2018. In integrating the retrofit programme with the current capital programme there is greater synergy in the delivery of both programmes and financial efficiencies gained in doing so.
- 4.2 The programme also includes support and advice to tenants addressing lifestyle and behavioural drivers. This approach targets resources on those homes with the most significant and persistent challenges. This approach complements the current capital programme of works which covers the period 2013-2018. In integrating the two programmes there is a greater synergy in the delivery of both programmes and financial efficiencies gained in doing so.

5. CONSULTATION (including Overview and Scrutiny, if applicable)

- 5.1 Consultation has taken place with residents at Housing Investment forum this is set to continue.

6. IMPACT ON CORPORATE POLICIES, PRIORITIES, PERFORMANCE AND COMMUNITY IMPACT

- 6.1 The outcome of this work will support wider local strategic priorities, including better health incomes, carbon reduction and improving the homes in both the private and public sector

7. IMPLICATIONS

7.1 Financial

Implications verified by: **Sean Clark**
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SClark@thurrock.gov.uk

Provision has been made to fund the recommended proposals in this report over the five years as part of the Transforming Homes programme.

7.2 Legal

Implications verified by: **Maria Oshunrinade**
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Installation and maintenance provisions under the Building Act should be applied.

7.3 Diversity and Equality

Implications verified by: **Samson DeAlyn**
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No Diversity implications noted in this report

7.4 Other implications

There are Health Impact Assessment, Sustainability, IT, Environmental

BACKGROUND PAPERS USED IN PREPARING THIS REPORT (include their location and identify whether any are exempt or protected by copyright):

- Department of Energy and Climate Change - Fuel poverty a framework for future action July 2013.

APPENDICES TO THIS REPORT:

- None

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