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Report of Director of Environment and Neighbourhoods

Report to Executive Board

Date: 12th December 2012

Subject: Green Deal – Leeds City Region project

Are specific electoral Wards affected? If relevant, name(s) of Ward(s):	☐ Yes	⊠ No
Are there implications for equality and diversity and cohesion and integration?	⊠ Yes	☐ No
Is the decision eligible for Call-In?	⊠ Yes	☐ No
Does the report contain confidential or exempt information? If relevant, Access to Information Procedure Rule number: 10.4 (3) Appendix number: 3	⊠ Yes	□ No

Summary of main issues

- The government has fundamentally changed the way that energy efficiency improvements are funded, with Green Deal loans and ECO subsidies the only incentives available from April 2013.
- 2. To continue to improve the energy efficiency of the Leeds housing stock and to reduce energy costs to our residents will require us to change the way that we deliver services locally to take advantage of the new opportunities.
- 3. There is a strong rationale for collective working across Leeds City Region, in order to create economies of scale and efficiencies.
- 4. The business case for a collaborative procurement process across LCR to secure a lead delivery partner is persuasive and the financial model that underpins it is sound.
- 5. The Council and other LCR authorities now have significant experience of delivering large scale energy efficiency projects, recently through projects commissioned through the DEEP framework including Wrap Up Leeds and £2.6m of Green Deal Demonstrator programmes. This experience will be applied to this programme.
- 6. The costs, (c£1.75m of unrecoverable revenue investment for scheme establishment and c£59m of capital investment) are structured so that risks are minimised and the full level of Prudential Borrowing will be asset matched, to

- reduce the risks of bad debt. There is the potential to attract match funding of around £22m from utilities' ECO funding. There is also potential to generate c£4.5m revenue from the capital committed to the loans fund, to cover administration costs or provide additional support for low income and vulnerable people, in order to reduce health inequalities.
- 7. In order to provide momentum and encourage other authorities to participate, one LCR authority needs to act as an anchor authority, to lead the procurement work. Leeds, as the largest authority with significant experience of running large and complex procurements, is best placed to perform this role.

Recommendations

- 8. To endorse the LCR business case, subject to endorsement by LCR Leaders on the 6th of December.
- 9. To promote the use of the LCR Investment Fund to provide the initial c£1.75m of revenue expenditure required to procure a Green Deal partner and subsequently to provide up to c£59m of capital investment for loans.
- 10. To provide assurance that if the LCR Investment Fund is not available for either the revenue or capital requirements, that Leeds City Council will contribute a share of the investment needed, subject to other participating authorities also committing a share of the investment. This will be clarified in the further Executive Board paper described in recommendation 7.
- 11. To agree that Leeds should continue to be the anchor authority for the forthcoming procurement.
- 12. To commit a minimum of Leeds 6,000 homes to the procurement exercise, subject to other LCR authorities committing a further 6,000 properties.
- 13. To encourage other LCR authorities to sign a Memorandum of Understanding committing them to this collective approach.
- 14. To receive a further report in late spring, to update Executive Board on learning from the Green Deal Demonstrator, progress with the LCR Investment Fund, progress with sign up of LCR authorities to a joint procurement and establishing a detailed and fully costed procurement timetable.

1 Purpose of this report

- 1.1 To update the Executive Board on the Leeds City Region business case for the long-term delivery of the Green Deal, for which Leeds City Council acted as the anchor authority.
- 1.2 To seek authority to commit £1.75m of revenue from the LCR Investment Fund, or to share this amongst LCR authorities (requiring £437k from Leeds City Council reserves), to procure a framework of Green Deal providers.
- 1.3 To seek authority to commit £59m of Prudential Borrowing from the LCR Investment Fund, or to share this amongst LCR authorities (requiring £10-£30m of Leeds City Council Prudential Borrowing), to create a local Green Deal loan fund.

2 Background information

- 2.1 Leeds City Council aims to develop the low carbon economy in order to meet a 40% CO₂ reduction target, secure high quality jobs and reduce energy costs to both domestic and non-domestic sectors. To help deliver this, an ELENA funding application for low carbon energy infrastructure is under development and Wrap Up Leeds is installing thousands of energy efficiency measures into the housing stock.
- 2.2 The Council currently attracts millions of pounds of utility obligations per year, which currently provide subsidies for three broad categories: geographic areas of intense deprivation; people in receipt of passport benefits and homes that require cost-effective loft and cavity wall insulation.
- 2.3 However, the recently launched Green Deal has fundamentally changed the way that energy efficiency measures are funded, requiring us to also make significant changes to the way that we promote energy efficiency locally.

The Green Deal and ECO

- 2.4 The Green Deal operates by providing energy efficiency and other works at no upfront cost to the householder. The works are instead financed through a loan which is paid back through savings on the householders' fuel bill.
- 2.5 A 'Golden Rule' applies whereby the loan repayments will not exceed what the homeowner would have paid in energy costs, if no measures had been installed. The loan is repayable with interest at a rate which will be set nationally and is expected to be c7.5%.
- 2.6 Standardised Green Deal Assessments are used to identify the works required, the works eligible for Green Deal finance, to confirm compliance with the Golden Rule. Where works do not meet the Golden Rule, a subsidy from ECO will be applied (see 2.7 below) or the householder can choose to contribute capital.

- 2.7 Once work is completed, the Green Deal charge is attached to the electricity meter and collected over the life of the measure (typically 10 to 25 years). If the resident subsequently moves house, the charge remains with the property so future residents who benefit from the energy efficiency improvements also have responsibility for paying for the measures. The charge may be repaid early, otherwise it remains with the electricity meter and is transferred if a householder changes supplier.
- In addition to the Green Deal loans, government has legislated to require utilities to deliver the Energy Company Obligation (ECO). This is split into three distinct areas: Affordable Warmth ECO (AW ECO); Carbon Saving Communities ECO (CSC ECO) and Carbon Saving ECO (CS ECO).
- 2.9 Affordable Warmth ECO provides funding for a wide range of heating and insulation measures to private tenants and homeowners in receipt of certain passport benefits. Carbon Saving Community ECO provides funding for certain insulation measures to properties of any tenure within the most deprived 15% of lower level super output areas across England and Wales. Carbon Saving ECO provides funding to properties of any tenure for a very small number of expensive energy efficiency measures, including solid wall insulation, narrow cavity insulation and room in roof insulation, in order to ensure that the measures meet the Green Deal Golden Rule.
- 2.10 The new ECO funding regime is likely to drive demand for solid wall, narrow cavities and attic rooms insulation. Energy companies are interested in long term partnerships with local authorities to use our local knowledge and our trusted brand in order to deliver their commitments. This could create a long-term sustainable insulation industry which can invest in training for stable and skilled employment.

Barriers and solutions to the Green Deal

- 2.11 The government expectation was that private companies would provide capital for loans, but as yet this has not happened and government is unwilling to put significant public finance into the loan scheme. A partnership of companies interested in delivering the Green Deal has established The Green Deal Finance Company which aims to plug this gap, initially through loans from the Green Investment Bank and longer term, through bonds. Although The Green Deal Finance Company plans to make its first loan by end of January 2013, there are many issues yet to resolve, including new loan systems to develop, state aid clearance and most importantly lack of medium to long-term loan capital.
- 2.12 Left to the market, there is also the concern that Green Deal providers will 'cherry pick' affluent early adopters and are not incentivised to deliver social or economic benefits into the region.
- 2.13 In order to tackle these two barriers, Birmingham City Council took a cabinet decision in Sept 2010 to prudentially borrow £75m to provide loan capital to develop a local Green Deal scheme. This was justified through likely savings to householders and the ability to create jobs and training

opportunities in the city. Birmingham has been working on this for over 2 years and have just announced that they have appointed Carillion Energy Services as their Green Deal delivery partner, following OJEU procurement.

Leeds City Council and Leeds City Region approach

- 2.14 Leeds City Region leaders took a decision in February 2012 to develop a business case for LCR authorities to follow a similar path. The LCR appointed Marksman Consulting LLP early in the summer to advise on a suitable business case.
- 2.15 The objective of the business case is to assess how the Green Deal can realise significant long-term investment in order to boost economic development and local jobs through the green economy, whilst bringing social benefits by helping to address fuel poverty, reduce health inequalities and tackle related socio-economic deprivation.
- 2.16 Leeds City Region has recently negotiated a City Deal for Leeds with the Government, part of which focuses on the low carbon economy. In October, Executive Board approved Leeds' participation in a Green Deal Demonstrator project which is designed to test many of the aspects and processes of the full Green Deal, including the use of loan finance.
- 2.17 The current Green Deal Demonstrator project will give us valuable insights into consumer reaction to the Green Deal and allow identification of issues that we can resolve as part of the procurement.
- 2.18 The October Executive Board paper also committed to bringing a more detailed paper regarding the Leeds City Region proposal to the December Executive Board following discussions with all Leeds City Region Leaders on 6th December

3 Main issues

3.1 Government changes to funding arrangements for domestic energy efficiency means that business as usual is not an option. Without a new approach, there is a significant risk that the progress towards carbon reduction and fuel poverty alleviation in Leeds and the wider City Region will stall, with a consequent reduction in green jobs and training opportunities.

Leeds City Region Business Case

3.2 The LCR Green Deal business case considered the different models of how a local authority or group of local authorities can work with a Green Deal Provider to achieve sufficient ECO subsidy from the energy suppliers to fund a coordinated approach to alleviating fuel poverty and tackling the most energy inefficient homes. The main options considered were:

No	Title of Option	Assessment and Reason for Selection / Rejection
1	Local authority as Promoter requires local authorities to adopt a low-key role promoting the Green Deal as a concept, supported by a number of private sector Green Deal Providers.	Rejected. This is seen as being too unambitious to provide confidence that LCR carbon reduction, fuel poverty alleviation and job creation aspirations would be achieved.
2	A Producer/Provider model is based on an organisation such as a local authority undertaking all the marketing; producing 'hot' leads; and undertaking Green Deal surveys. A partner Green Deal Provider then simply installs measures.	Rejected. This split of responsibility is costly as a new Green Deal marketing team would need to be created and the split between the two functions of marketing and installation may cause conflict between the marketer and delivery partner.
3	Local authority as Partner to a Provider involves a private sector delivery company being contracted to deliver the programme, including lead generation, assessment and installation. The local authorities provide the loan finance via a finance vehicle, in order to keep the loan book off balance sheet. The delivery partner needs to be a company of sufficient size and experience to be able to underwrite the risks of mis-selling, poor installations or failure to collect the payments due.	Preferred. This model allows the LCR Councils to be ambitious and define the key outcomes in the procurement documents. Committing capital to the loans fund will allow us to influence scheme design and delivery. Whilst all Councils would want to assist with marketing the initiative, the risk of dispute is significantly reduced by making the delivery partner responsible for lead generation.

- 3.3 The LCR Green Deal business case covered:
 - An assessment of the current position in Leeds and the wider LCR;
 - Demand and housing stock analysis;
 - Review of operational models most suited to the local situation;
 - Review and recommendations for legal, financial and procurement approaches;
 - Involvement of other LCR authorities;
 - Quantification of outcomes (jobs, GVA, carbon savings);
 - Presentation and refinement of recommended model.
- 3.4 The full business case is available as a background document and the key elements are summarised below in the remainder of this section.

Current Position in Leeds and the wider City Region

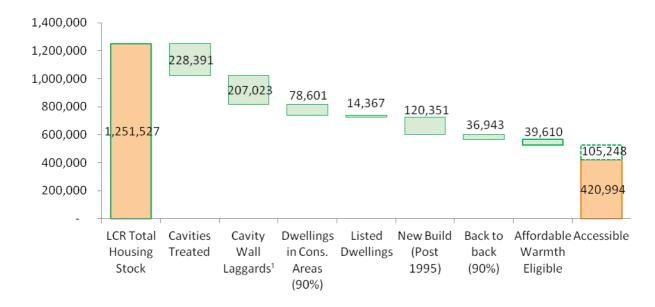
3.5 Leeds and the wider City Region have a strong history of delivering large scale energy efficiency programmes. Kirklees pioneered provision of free loft and cavity wall insulation through their Warmzone programme. Since then, Bradford has successfully worked on Community Warmth and in

- Leeds almost 10,000 cavities and lofts have been insulated in less than a year by Wrap Up Leeds.
- 3.6 Many authorities have also begun to deliver measures to hard-to-treat properties (typically solid-wall and system built houses) with utility CESP funding. This has required authorities to start developing solutions to external wall insulation, both for system built properties and more traditional red-brick Victorian terraces.
- 3.7 These disparate initiatives have recently been brought together by the establishment of the LCR Domestic Energy Efficiency Programme (DEEP) framework. This is based on the principles of whole-house retrofit and the development of the local SME supply chain to ensure that investment in low carbon technologies helps to create sustainable jobs and economic benefit to the people of the Leeds City Region.
- 3.8 This collaboration has been successfully used to draw down £2.6m of DECC funding for the Green Deal Demonstrator across five LCR authorities.
- 2005 and 2020 and to eradicate fuel poverty by 2016. Many LCR authorities share similar carbon reduction and fuel poverty targets which require high and sustained levels of home insulation over a long period of time. Initial modelling indicates that to meet carbon reduction targets, LCR will need to improve 275,000 365,000 homes by 2020, requiring over 70,000 homes to be retrofitted per year from 2018 to 2020.
- 3.10 The LCR Green Deal programme is therefore a logical extension of this work, generating economies of scale across the whole of the LCR and efficiencies by collaborating to share the workload.

Demand and housing stock analysis

- 3.11 A critical element of the business case is to demonstrate that there is sufficient technical need for and likely customer demand for the Green Deal and ECO across the LCR.
- 3.12 Proving customer demand is not straightforward given the major change from a predominantly grant based regime to a loans based ones.
- 3.13 However, it is possible to use the extensive energy databases available across the City Region to identify an 'accessible market', defined as households that are likely to be technically suitable and potentially interested in the Green Deal. This is constructed by taking all the properties in the City Region and then subtracting those properties that have been fully insulated, are technically unsuitable, have significant planning/listing restrictions or would qualify for other sources of assistance. Additionally, due to the prevalence of free cavity wall offers across the City Region, the decision has been taken to remove 50% of the remaining cavity wall properties from this accessible market.

3.14 The diagram below shows the resulting accessible market for the LCR:

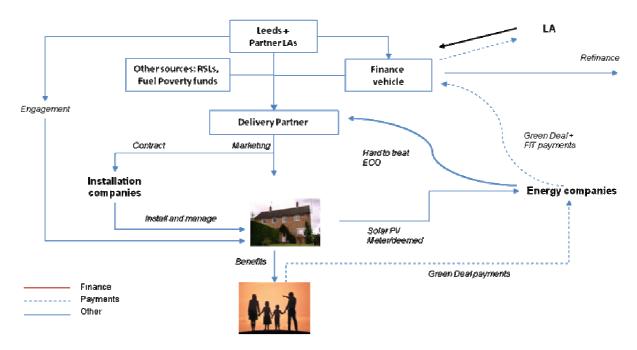


- 3.15 This analysis shows that of the 1.25m homes of all tenures in Leeds City Region, 420,000 can be considered to be the accessible market
- 3.16 Procurement advice and Marksman's soft-market testing indicate that a pathfinder programme of c12,000 properties over a 3 year period (representing c£80m of total investment) is required to attract strong interest from delivery partners. This represents just 2.8% of the homes within the accessible market.
- 3.17 A target of only 4,000 properties per annum from the total LCR stock of over 1.25m homes is still well short of the ambitious targets that LCR authorities have set for carbon reduction and fuel poverty alleviation. This target should therefore be seen as the minimum initial target in order to establish a scheme capable of delivering upwards of 20,000 properties per annum from year 4 onwards.

Operational models

3.18 The business case is centred on the use of the 'partner to a provider' model outlined in 3.2 above. The diagram below describes the expected relationships between the different parties involved with this model.

Base Case: Leeds and partner LAs operating model



- 3.19 The key roles that external bodies will play within this model are:
- 3.19.1 The **Delivery Partner** will have overall responsibility to set up and manage a programme that delivers improvements to 12,000 homes, including driving householder demand through a marketing campaign. This will include ensuring that installations are good value, bring maximum ECO contributions, include key sub-contractors (such as social housing providers' sub-contractors) within the contract and create local jobs wherever possible. They will need to be a private company with a strong balance sheet in order to offer long-term warranties on the equipment and its operation and to cover any liabilities in the case of mis-selling. They will also need to ensure that loan repayments are made over the long-term and ensure that it is possible to refinance the loan book, if required.
- 3.19.2 A finance vehicle (or special purpose vehicle) will be required from the start of the programme to aggregate and manage the involvement of finance from partner authorities. It will ensure that the funds are held off-balance sheet and will be responsible for drawing down loans and receiving loan repayments. There will be legal arrangements with local authorities and the Delivery Partner.
- 3.19.3 The **installation companies** will deliver the installation programme and maintain and repair the measures, including warranting the quality of workmanship to the Delivery Partner. They will need to be accredited Green Deal Installers but can be a range of organisations, including local SMEs. All would be expected to have presence within the LCR to ensure that our investment results in local job creation and wealth retention within the City Region.

- 3.19.4 The **energy companies** will, as a minimum, provide ECO investment to ensure that all measures meet the Golden Rule and will administer the Green Deal payments. Some energy companies may also want to become Delivery Partners or installers.
- 3.20 Within this model, there are potentially different roles for LCR authorities, depending on the level of ambition they have and their access to (or appetite for) Prudential Borrowing:
- 3.20.1 The **Anchor authority** provides momentum and leadership in order to get the partnership off the ground, including taking a lead on procurement. There is also the expectation that the anchor will commit a significant number of homes (and, if capital is not available from the LCR Investment Fund, Prudential Borrowing) for the first 3 years. It is proposed that Leeds City Council would act as the anchor.
- 3.20.2 **Investing authorities** also commit significant numbers of homes (and if capital is not available from the LCR Investment Fund, Prudential Borrowing) to the programme, in order to share the financial commitments and risks with the anchor. They have the same rights as the anchor to steer the programme.
- 3.20.3 **Promoting authorities** are those authorities that wish to benefit from the scheme and are prepared to commit homes to the procurement to help create critical mass, but are unable to commit Prudential Borrowing. These can still be part of the LCR scheme as non-investing partners, with finance provided either by investing authorities, or by The Green Deal Finance Company. A decision not to be an investing authority will mean no potential income stream and reduced influence over the procurement process.
- 3.21 The LCR is currently developing a Memorandum of Understanding, to confirm which authorities are going to commit homes to the LCR procurement, what roles they want to play and what their expectations are.

Financial, procurement and legal issues

Finance

- The business case is reliant on the creation of a sufficiently large local loans fund to kick-start the Green Deal in Leeds City Region. To treat 12,000 homes as proposed above will require c£59m of debt finance spread over three years, supported by c£22m of utilities' ECO funding.
- 3.23 In the absence of government loan finance and very limited capital to date from The Green Deal Finance Company, this is very likely to need to come from Prudential Borrowing or other local authority sources.
- 3.24 It has to be stressed that whilst this is a very significant requirement, there are a number of positive factors:
- 3.24.1 **The necessary investment is 'asset-matched'.** This means that Prudential Borrowing is only drawn down as properties are improved. The

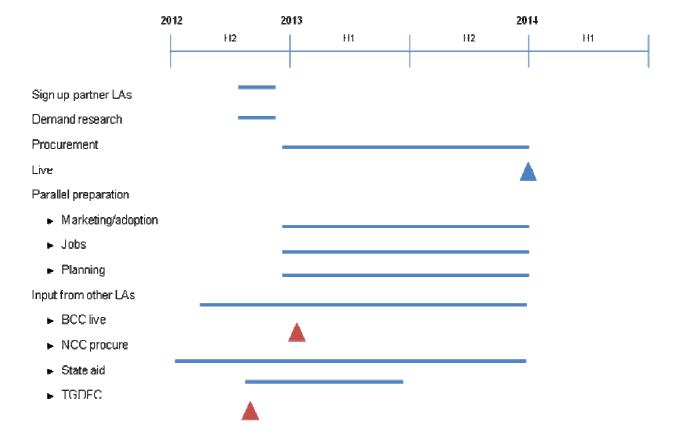
levels of borrowing are therefore directly proportional to benefit delivered. The loans are anticipated to have very low default rates (due to repayments through the electricity bill) and are repaid with interest, making them truly prudential.

- 3.24.2 The investment can generate a margin. State Aid rules mean that any Prudential Borrowing would have to be loaned at the prevailing market rate, which is significantly higher than the rate that we can borrow at. The difference between these two rates has the potential to create a margin and hence revenue stream which can cover scheme administration costs or be used to provide additional support to vulnerable people. For example, if the City Region retains junior debt of 30% from an investment of £59m over 25 years, this would generate a margin of c£4.5m (in present terms). This revenue stream will grow in proportion to the amount loaned, the proportion of junior debt retained and the length of time the overall debt is retained for.
- 3.24.3 **The investment can be refinanced.** Upon reaching a certain size (c£5m) the senior debt element has the potential to be sold as bonds via a debt aggregator such as The Green Deal Finance Company.
- 3.24.4 The investment will come from a number of LCR authorities. The Council will only be responsible for borrowing for the properties assisted in the Leeds area. If the proposal to commit c6,000 homes is accepted, this would amount to just under £30m over 3 years.
- 3.24.5 It is possible that match funding could be secured from The Green Deal Finance Company. The business case recommended that we commit c30% of public finance, matched by 70% investment from The Green Deal Finance Company, which would reduce the need for Leeds City Council Prudential Borrowing to c£10m over 3 years, although the potential margin would also be reduced. The LCR is currently investigating this option directly with The Green Deal Finance Company.
- 3.25 Leeds City Region plans to create an Investment Fund for Infrastructure projects across the City Region. It will be created by pooling existing capital pots and aims to attract private capital in the medium term and then to recycle revenues back into the fund to reuse for additional investments. The Green Deal project is seen as an early project which could be suitable for funding from the Investment Fund as the loans to householders will be recovered over a period of time. It fulfils the desired outcomes of the fund to maximise GVA, create jobs and reduce carbon emissions. Price Waterhouse Coopers have been commissioned to design the operational arrangements for the fund and attract additional private investment.
- 3.26 The Green Deal Finance Company arrangements are now also slowly emerging as described in 2.11, with initial capital from the Green Investment Bank now agreed. The City Region is liaising directly with them to understand the options for using their systems to make sure our loans meet industry standards, investing directly with them or refinancing loans in future. There is the possibility that The Green Deal Finance Company will secure enough capital to remove the need for any local authority

- investment. Although this reduces the financial exposure to us, the lack of a margin and the weakened negotiating position during procurement means that this should be seen as an option of last resort.
- 3.27 Before the City Region, with Leeds as the anchor, decide to place any funds with The Green Deal Finance Company (or any other organisation) a further report will be brought to Executive Board detailing the options, risks and opportunities.

Procurement

- 3.28 Experience of procuring schemes of similar size indicates that an OJEU compliant tender will take in the region of 9-12 months and cost each company bidding around £1m.
- Therefore, in order to attract sufficient companies capable of managing a City Region wide Green Deal, it is critical to have a scheme of significant scale, hence the recommendation to guarantee a minimum contract value of about £80million (of which £22m will be from utilities' ECO).
- 3.30 The costs of running this procurement have been estimated to be no more than £1.75m, based on experience from PPPU, information from other authorities who have already procured a partner and soft market testing. The generous budget includes all activities involved with procurement including internal procurement and project management, OJEU Competitive Dialogue process, external experts, market research study, job creation study and post tender legal costs such as contracting. The procurement timescales and milestones are shown in the diagram below:



3.31 There are a number of different ways to split the procurement costs between participating LCR authorities. These are highlighted in the table below (the full table is shown in confidential appendix 3):

	Option 1. Costs equally divided	% of the l	Divided as a LCR private ock (1.01m)	Option 3. Divided by the number of houses each authority commits to procurement			
Local Authority	Cost per authority £,000s	Stock Cost per authority £,000s		Houses committed	Cost per authority £,000s		
Leeds	175	24.44%	437	6000	678		

- 3.32 The preferred approach is option 2, which recognises the level of potential work in each authority, without discincentivising authorities to commit an ambitious number of homes to the procurement. This will be discussed and agreed by LCR CEOs in November and Leaders in December.
- 3.33 In summary, the options open to the LCR to fund the initial procurement costs are:
- 3.33.1 **Option A.** Written off as a part of the project costs from the LCR Investment Fund/by individual local authorities;
- 3.33.2 **Option B.** Added to the Green Deal charge on a cost per house basis across the LCR and recovered over the period of the loan;
- 3.33.3 **Option C.** Use revenues generated by the loan fund to refund the procurement costs over time across the LCR.
- 3.34 Our preferred approach is option A. Option B has the disadvantage of increasing the cost to householders, which may reduce take up rates, which in turn would negatively impact on future revenue streams. Option C would reduce the revenue available for scheme administration or to support vulnerable householders. This will be discussed and agreed by LCR CEOs in November and Leaders in December.
- 3.35 It is essential that all the LCR authorities are named on the initial OJEU PIN so that private residents, housing associations and businesses based in the whole City Region can use the contract, once in place.

Legal

3.36 The business case has been reviewed by the legal team in the Council as it has been developed and no major concerns have been raised regarding the proposed model. There will need to be much greater legal input to the design of the MOU, the design of the tender documents and throughout the procurement and contracting phase. This has been budgeted for in the overall procurement costs.

Involvement of other local authorities

- 3.37 During business case development, LCR officers have engaged closely with key officers (particularly finance, housing and energy officers) from all the other LCR authorities. The aim of this has been to ensure that the business case has the support of all LCR authorities.
- 3.38 This engagement has culminated in papers being taken to LCR CEOs and Leaders in September, November and December, seeking formal endorsement of the approach.
- 3.39 All LCR authorities have expressed an ambition to commit houses to the procurement, totalling 8,200-10,800 homes (excluding Leeds). However, as the Memorandum of Understanding is still in draft, none have committed a specific number of homes or to finance the programme, if the LCR Investment Fund is not used. A draft Memorandum of Understanding will be presented to Chief Executives on 19th November which will detail the responsibilities, liabilities, roles of investing and non investing partners. Each individual LCR authority will then need to take a decision through their Executive Board to participate or not.

Outcomes

- 3.40 The LCR Green Deal programme is designed to deliver carbon reductions, tackle fuel poverty, increase GVA and create jobs locally. The Energy Saving Trust was commissioned by LCR to model these three factors and their work indicated that the initial three year programme will:
- 3.40.1 Reduce carbon dioxide emissions by over 19,000 tonnes pa;
- 3.40.2 Directly increase GVA by £21.7m and indirectly by £17.1m pa:
- 3.40.3 Sustain or create 314 direct jobs and 324 indirect jobs. Further analysis indicates that each job can be created at a cost of around £5,000, compared to an average cost of £33,000 for each Regional Growth Fund job created (NAO research).
- 3.41 Continuation to the planned 20,000 home pa programme will result in approximately double these outcomes each year.

Presentation of results to LCR

3.42 The full business case was presented to LCR CEOs on the 24th September, who requested that this be considered as part of the wider LCR proposals for an Investment Fund. LCR CEOs and Leaders are due to discuss the business case in November and December with a recommendation to endorse an initial funding contribution of c£75k from LCR reserves to commence procurement of a private sector partner, and prepare local authorities to commit funds (via Prudential Borrowing) to complete procurement and to allocate sufficient capital to enable provision of Green Deal loans. This will also detail the proposal for all authorities to sign a Memorandum of Understanding early in the new year to commit themselves to be investing or non investing authorities and to agree how the initial

procurement costs will be funded as described in sections 3.33-3.35. CEOs and Leaders will also consider the use of the LCR Investment Fund to finance loans when there is greater clarity over the Fund.

Outstanding issues for Leeds City Council

- 3.43 The involvement of key officers with the development of the business case means that the Council is now familiar, and comfortable, with the proposed delivery model, set-up costs, financial model, risk profile and procurement options. The two outstanding issues to now fully understand are how many other LCR authorities will ultimately participate and the likelihood of getting c6,000 Leeds households to sign up for Green Deal loans and ECO subsidies.
- 3.44 **Securing participation from LCR authorities.** Following agreement from LCR CEOs and Leaders on the preferred City Region approach, the Memorandum of Understanding will be finalised and circulated to all LCR authorities. Assuming that Executive Board agree that Leeds should be the anchor authority, this will lay out the expectations for other participating authorities (as described in sections 3.20.1 3.20.3) and request that all authorities secure commitment from their Executive Boards (or equivalent by March 2013 in order to allow the OJEU PIN to be issued. Signed MOUs will then be returned to LCR.
- 3.45 **Sign up rates in Leeds.** Leeds has undertaken some additional analysis (see Appendix 1) to help understand the implications of committing to include 6,000 properties to the LCR procurement. This is designed to offer some comfort that the projected number of household sign ups are achievable, although there are always risks with new programmes such as this.
- 3.46 Soft-market testing indicates that ECO, particularly CSC ECO, will be a very important driver for householder take up, as many previously expensive measures (such as solid wall insulation or narrow cavity insulation) will be heavily subsidised. Our analysis indicates that of the total Leeds housing stock of c320,000 properties, over 147,000 would be eligible for some form of ECO subsidy. Of these, almost 89,000 still require major insulation measures and over 33,000 of these are within the priority CSC ECO areas. Of these 33,000 properties, almost 6,500 solid walled or system built properties are owned by the ALMOs or housing associations. Even if only these properties take up measures, the business case would hold for Leeds.
- 3.47 Further analysis has been undertaken to try to allocate likely take up rates between the main property types in the city, erring on the side of caution. This indicates that 3,230 properties are almost certain to take up the Green Deal/ECO pathfinder and 3,580 additional properties have a strong likelihood of taking up measures, giving a total of 6,910 properties. Although another 6,230 properties are categorised as medium likelihood, As this is a conservative estimate of uptake rates, these have not been counted towards the total.

3.48 Without this programme, it is highly likely that utilities with significant amounts of ECO funding to invest will look for other authorities with more ambitious programmes to partner with. This would potentially have a very significant negative impact on the carbon reduction, fuel poverty alleviation and job creation aspirations within the City Region. Additionally, prolonged delays in establishing the LCR programme will mean that other authorities will be in a better place to secure the best contribution rates from authorities and the most proactive delivery partners.

4 Corporate Considerations

4.1 Consultation and Engagement

- 4.1.1 Leeds City Region Leaders discussed the principles of engaging with the Green Deal, together with options for delivering it in February 2012 leading to a request to develop this business case.
- 4.1.2 Subsequently, as the largest local authority, Leeds City Council volunteered to act as the anchor authority which has necessitated the involvement of officers from relevant sections throughout the business case development, in order to check and challenge the key assumptions and key decisions. This has included officers from Finance, Procurement, Legal, Regeneration, Housing (private sector and ALMOs, including a selected private landlord focus group), Energy, Planning, Highways, Children Services, Communications, Sustainable Development, Employment and Skills and Economic Development. The approach has also been discussed with the Home Energy Project Board, chaired by the Director of Environment and Neighbourhoods.
- 4.1.3 As described in 3.37 3.39 above, LCR officers have engaged with all LCR authorities throughout this process, to ensure that there is common understanding and agreement to the principles of the business case.
- 4.1.4 Finally, the approach has built on recent experience gained through delivering Wrap Up Leeds, CESP projects in New Wortley and Belinda Street, a narrow-cavity initiative and ongoing neighbourhood renewal work in the Cross Green area. The results of the Green Deal Demonstrator programme will also feed into the final design of the programme.
- 4.1.5 It is not appropriate to engage with residents until we have taken a decision to progress with the collective Leeds City Region Green Deal approach. However, once this decision has been taken, we will engage with residents to understand their specific needs and have included this within the overall procurement budget.

4.2 Equality and Diversity / Cohesion and Integration

4.2.1 Equality screening has been undertaken and has not identified any significant negative issues. Instead, it has indicated that by accessing ECO the programme will help to lift deprived individuals and communities out of fuel poverty, with consequent health and social benefits.

4.2.2 The Green Deal will target help at properties that have been excluded from previous incentive schemes such as CERT. The insulation measures (either loan or grant funded) will help residents to save energy and money and make their homes warmer and healthier. This will help to ensure that an offer for hard-to-treat properties is available to all over the longer term, to ensure equality of opportunity.

4.3 Council policies and City Priorities

- 4.3.1 The Vision for Leeds 2011 to 2030 acknowledges that climate change is one of the three major challenges that have emerged since the last Vision was published in 2004 and has a specific aim to ensure that "all homes are of a decent standard and everyone can afford to stay warm."
- 4.3.2 The Vision is supported by the City Priority Plan 2011 to 2015, which brings together a number of key four-year priorities that will help us deliver the 2030 Vision. It is supported by five separate action plans that address the five key themes. Of these, three contain priorities which this funding directly supports, namely:
- 4.3.3 Best city... for business:
 - Support the sustainable growth of the Leeds' economy.
 - Improve the environment through reduced carbon emissions.
- 4.3.4 Best city... to live:
 - Maximise regeneration investment to increase housing choice and affordability within sustainable neighbourhoods.
 - Improve housing conditions and energy efficiency.
- 4.3.5 Best city....for health and wellbeing:
 - Reducing inequalities in health, for example, people will not have poorer health because of where they live or how much money they have.
- 4.3.6 This work contributes to the Health and Wellbeing Strategy and the City Priority Plan by addressing the social, economic and environmental factors that affect people's health in Leeds, which cause some people to have poorer health than others. The City Priority Plan focuses on making sure that people who are the poorest improve their health the fastest through interventions to reduce difference in life expectancy by:
 - Addressing Excess winter deaths.
 - Reducing the number of people living in fuel poverty.
 - Increasing advice and support to minimise debt and maximise peoples income.

- Increasing the number of people to live safely in their own home.
- 4.3.7 Council priority 23 covers energy efficiency which this programme will help to deliver.
- 4.3.8 This work also contributes to the Leeds City Deal by:
 - Transforming the City Region job market, with a focus on NEETs;
 - Pooling investment across the City Region;
 - Moving to become an exemplar low carbon City Region.
- 4.3.9 In addition, the initiative meets many of the desires of the recently published Civic Enterprise:

Becoming Civic Entrepreneurs	Opportunity for action Whole place approach with involvement from all parts of
_	the economy
Stimulating jobs,	Critical part of Green Deal outcomes
homes and good	Use of LA funds to kick start programme and then private
growth	sector finance follows on
Establishing 21st	Low carbon energy
Century	Cheaper fuel bills
infrastructure	
Devising the new	LA are seen as trusted parties
social contract	Needs broad range of participants
	Strong role for neighbourhoods and community groups

4.4 Resources and value for money

- 4.4.1 The detailed financial model (including inputs and assumptions, cash flow, interest accruals etc) have been scrutinised in depth by the Council's Capital Finance team. The key conclusion from this work is that, notwithstanding the outstanding operational ECO and TGDFC arrangements, the financial model is considered to be sound. This was recently reported and endorsed by the West Yorkshire & York Chief Finance Officers Group and the North Yorkshire and Barnsley Chief Officers.
- 4.4.2 The only funds that will be at risk in the short term is the estimated £1.75m cost of procurement, shared across the City Region. The proposal is to either use resources from the LCR Investment Fund or to share costs between participating local authorities to undertake the procurement and to write off this investment.
- 4.4.3 Once a delivery partner has been procured, we would anticipate investing up to £59m across the City Region, either from local authority Prudential Borrowing or from the LCR Investment Fund, or a mix. This is described further in sections 3 22-3 27

- 4.4.4 This investment has the potential to generate a secure long-term revenue stream that could be used to cover administrative costs or to subsidise other sustainable energy investments. Alternatively, the investment mechanism will be designed to allow refinancing to allow the debt to be repaid early.
- 4.4.5 The investment would enable priority job creation, carbon reduction and fuel poverty alleviation outcomes to be delivered in the city at relatively low risk.

4.5 Legal Implications, Access to Information and Call In

- 4.5.1 Advice has been sought from both legal and procurement officers during the development of this proposal.
- 4.5.2 As described in section 3.36, there are no major legal concerns and a budget has been created to enable legal input to be provided throughout the proposed procurement process.
- 4.5.3 The recommended decisions are all open to Call In.
- 4.5.4 Appendix 3 has been marked as confidential under Access to Information Procedure Rules 10.4 (3) on the basis that it contains information related to the proposed share of procurement costs between Leeds City Region partner local authorities. It is in the public interest not to disclose this information at this stage as sensitive negotiations are taking place with all LCR partner authorities and disclosing information that relates to the financial or business affairs of other local authorities, at a time when all authorities face budget pressures, could upset these negotiations.

4.6 Risk Management

- 4.6.1 Corporate risk 24 is that 'Council does not meet CO₂ emissions reduction targets and improve home energy efficiency'. This programme will contribute towards mitigating both of these risks.
- 4.6.2 The programme does have a number of risks, the most significant of which are outlined in the table below, together with mitigating actions:

RISKS	MITIGATION
Unable to sign up 12,000 house holders	 Pay delivery partner on house delivered basis Finance capital as required Target early adopters who are positive about Green Deal Include public sector housing and non-housing assets in the first phases Carry out research during tender process to identify early adopters Use existing research to help mainstream demand
Mistakes made by installers in initial deliveries	 Anticipate mistakes and ensure Delivery Partner has appropriate processes in place to address these Apply learning from Wrap Up Leeds and CESP schemes
Changing government policy	Continue to liaise closely with government and other local authorities development similar Green Deal Schemes
Refinance risk – cannot refinance at required rate	Work with TGDFC from beginning
State aid	Birmingham will resolve this issue before LCR is significantly exposed to it
Income streams are delayed – impact on cash flow	Ensure appropriate terms with Delivery Partner
Increased default rate	Lay off to Delivery Partner
Upfront costs not paid from surplus generated over 25 years	Increase the junior debt layer
Whether the surplus can be used as an additional incentive to householders	State aid questionSurplus used to fund other initiatives
Is the 30% junior debt loss layer right	Address during procurement with Delivery Partner
Is the bond market sufficiently developed to take on the debt	TGDFC exposure with worse case for LCR authorities being loan book that makes a profit
Accounting treatment	Further work required but input can be taken from other local authorities using similar models
Competing capital priorities	 Asset liability matching programme that over time will pay for itself

4.6.3 The above table indicates that the business case has identified and developed mitigation measures for the principle risks. Risks will be monitored and updated throughout programme development and delivery.

5 Conclusions

- 5.1 Fundamental changes by government to how energy efficiency is incentivised, means that the Council will also need to significantly change its approach.
- 5.2 There is a strong rationale for collective working across Leeds City Region, in order to create economies of scale and efficiencies.
- 5.3 The business case for a collaborative procurement process across LCR to secure a lead delivery partner is persuasive and the financial model that underpins it is sound.
- The costs, although significant, are structured so that risks are minimised and the full level of Prudential Borrowing will be asset matched, to reduce the risks of bad debt. There is also the potential to earn revenue from the loans to cover administration costs or provide incentives for vulnerable people.
- In order to provide momentum and encourage other authorities to participate, one LCR authority needs to act as an anchor authority, to lead the procurement work. Leeds, as the largest authority with significant experience of running large and complex procurements, is best placed to perform this role.

6 Recommendations

- To endorse the LCR business case, subject to endorsement by LCR Leaders on the 6th of December.
- To promote the use of the LCR Investment Fund to provide the initial c£1.75m of revenue expenditure required to procure a Green Deal partner and subsequently to provide up to c£59m of capital investment for loans.
- 6.3 To provide assurance that if the LCR Investment Fund is not available for either the revenue or capital requirements, that Leeds City Council will contribute a share of the investment needed, subject to other participating authorities also committing a share of the investment. This will be clarified in the further Executive Board paper described in recommendation 7.
- To agree that Leeds should continue to be the anchor authority for the forthcoming procurement.
- To commit a minimum of Leeds 6,000 homes to the procurement exercise, subject to other LCR authorities committing a further 6,000 properties.
- To encourage other LCR authorities to sign a Memorandum of Understanding committing them to this collective approach.

6.7 To receive a further report in late spring, to update Executive Board on learning from the Green Deal Demonstrator, progress with the LCR Investment Fund, progress with sign up of LCR authorities to a joint procurement and establishing a detailed and fully costed procurement timetable.

7 Background documents¹

7.1 Leeds City Council Green Deal Business Case – Marksman Consulting, September 2012 (confidential under Access to Information Procedure Rule 10.4(3) to avoid prejudicing the commercial interests of the Council)

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¹ The background documents listed in this section are available to download from the Council's website, unless they contain confidential or exempt information. The list of background documents does not include published works.

Appendix 1 –Homes most likely to constitute the 6,000 target

- 1. The Fuelsavers team has undertaken some additional analysis to give confidence that the council can deliver a target of 2,000 homes per year over three years. This has been done using a different approach to that Marksman employed to identify the accessible market. Instead of using a top down approach, bottom up analysis of homes that we have a very high, high and medium confidence of actively taking up the Green Deal or ECO has been employed.
- 2. The analysis constitutes three main areas:
 - a. Areas that are eligible for CSC ECO funding;
 - b. People who are eligible for AW ECO funding;
 - c. Homes which are eligible for CS ECO funding.
- 3. The most complicated factor is that there is overlap between the three different ECO funding regimes. An attempt has been made to de-duplicate the lists.
- 4. This is also complicated by properties that have already been improved, or are likely to be improved between now and the launch of the scheme. Where we are aware of significant work that has been undertaken, or is planned, we have removed these properties from the accessible market and commented on this in the methodology below.
- 5. The following definitions have been used:
 - a. Very strong likelihood. This category is either for properties where the council or its partners have a high degree of control over the investment decision or where there is experience to suggest that the available incentive will make the offer so attractive that some people will definitely take up the offer.
 - b. **Strong likelihood**. This category is similar to the above where there is a good degree of control or the incentives are good. However, due to management capacity constraints or possible uncertainty over the attractiveness of the incentives, they are not seen as definite.
 - c. **Medium likelihood**. This should be seen as a stretch target, where with the right approach to management and promotion, these numbers could be secured.
 - d. All categories have been calculated separately, not cumulatively.
- 6. Table 1 below gives our current best estimate of the types of properties that will contribute to the total target of 6,000 homes.

Table 2 below, gives a more detailed breakdown of "Accessible Stock" by each element of ECO funding.

				Likelihood		
		Potential Accessible Stock	Very Strong	Strong	Medium	Remainder
	System Build	3,40	680	340	340	2,042
ALMO	Hi-Rise	1,650	80	170	170	1,230
	Solid Wall	2,700	260	260	520	1,660
	System Build	4,400	230	230	690	3,250
	Solid Wall		150	750	2250	
Private	Narrow Cavity	61,800	300	300	300	57,750
	Cavity	10,900	430	430	860	9,180
	Heating (Only)		300	300	300	
	Heating (with Ins)	-	300	300	300	-
Housing Association	Solid Wall	2,700	500	500	500	1200
		Total Properties	3,230	3,580	6,230	

Table 1. Approximate breakdown of ECO interventions to meet the 6,000 homes target.

Assumed take up rates

ALMO	System Build	20%, 10%, 10% of all ECO				
	Hi-Rise	5%, 10%, 10% of all ECO				
	Solid Wall	10%, 10%, 20% of all ECO				
	System Build	10%, 10%, 30% of all ECO				
	Solid Wall	1%, 5%, 15% of CSC ECO				
Private	Narrow Cavity	10%, 10%, 10% of all ECO				
	Cavity	5%, 5%, 10% in CSC ECO areas				
	Heating (Only)	c1% of heating market in total				
	Heating (with Ins)	c1% of heating market in total				
Housing Association	Solid Wall	Communication from Leeds Fed				

			ECO Eligible Elements						
	Carbon Saving	Х	X	Х			Х		1
	CSC		Х	Х	Х	Х]
	Aff. Warmth			Х		X	X	X	
	System Built	1,065 – 1,700	1,239 – 2,800	n/a	-	n/a	n/a	n/a	2,304 – 4,500
	Hi Rise	120 approx	1,669 approx	n/a	-	n/a	n/a	n/a	1,523 - 1,789
ALMO	Timber Frame	69	90	n/a	-	n/a	n/a	n/a	158
	Solid Brick	911	1,732	n/a	-	n/a	n/a	n/a	2,643
	Solid Stone	98	3	n/a	-	n/a	n/a	n/a	101
	Cavity	n/a	n/a	n/a	594	n/a	n/a	n/a	594
	Insulated (all)	n/a	n/a	n/a	28,078	n/a	n/a	n/a	28,078
	System Built	1,597	1,712	304	-	-	184	-	3,797
	Timber Frame	127	363	87	-	-	14	ı	592
Owner Occupier	Solid Brick	17,349	8,362	1,497	-	-	1,132	-	28,340
	Solid Stone	15,107	139	17	-	-	700	-	15,964
	Cavity	n/a	n/a	n/a	5,310	846	-	2,774	8,929
	Narrow Cavity								0
	Insulated (all)	n/a	n/a	n/a	13,327	1,650	-	4,834	19,811
	System Built	223	226	130	-	-	35	-	613
	Timber Frame	142	136	75	-	-	3	-	356
Private	Solid Brick	8,587	4,303	1,162	-	-	467	-	14,519
Rented	Solid Stone	2,610	89	11	-	-	245	-	2,955
	Cavity	n/a	n/a	n/a	1,077	414	-	470	1,960
	Insulated (all)	n/a	n/a	n/a	4,083	748	-	737	5,568
Housing Assoc.	System Built	39	54	n/a	-	n/a	n/a	n/a	92
	Timber Frame	32	22	n/a	-	n/a	n/a	n/a	54
	Solid Brick	747	1,775	n/a	-	n/a	n/a	n/a	2,522
	Solid Stone	176	28	n/a	-	n/a	n/a	n/a	204
	Cavity	n/a	n/a	n/a	423	n/a	n/a	n/a	423
	Insulated (all)	n/a	n/a	n/a	5,550	n/a	n/a	n/a	5,550
		48,999 – 49,634	21,942 – 23,502	3,282	58,443	3,657	2,781	8,814	

Table 2. – Calculated breakdown of ECO eligible elements, using EPC data.

NB: It is not possible to estimate the number of Narrow Cavity properties from the EPC data, as these will already be counted within the Solid Brick / Stone and Cavity wall types.

It is estimated that there are approx 3,000 narrow cavities, suitable for cavity bead insulation.

The number of uninsulated ALMO system build properties is also difficult to quantify, with the lower estimate calculated from the EPC analysis, and the higher figures from an ALMO/Strategic Landlord generated table (with areas totals extrapolated by System Build type/location).

Methodology notes

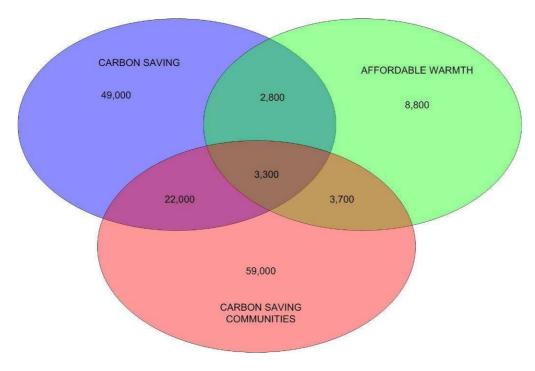
7. General

Energy Performance Certificate (EPC) data has been address matched to the Leeds BLPU and duplicate EPC data removed. Council Tax profiles generated for each Lower Layer Super Output Area (LSOA) for private sector and ALMO stock were then used to calculate a weighting factor for each EPC household, combined with a LSOA tenure weighting derived from the 2001 Census and EPC "transaction type". The resulting data was then checked against citywide tenure breakdown from the 2007 Stock Condition Survey.

Additional data sets were added to the EPC household info, including:-

- Wrap Up Leeds cavity installs & cancellation data relating to wall type.
- Leeds private sector Stock Condition 2007 survey data (wall type & insulation)
- Known Warmfront jobs & known 'Warmfront eligible' households, plus probable Cavity Wall installs on the scheme.
- Partially complete Virtual desktop survey of CSC areas
- Fuelsavers grant claims data for ALMO properties where cavity insulation grant claimed under EEC and CERT
- Fuelsavers wall insulation data for ALMO properties from old KPI 63 reporting.
- ALMO System Build database
- NGN Gas Pipe data distance from GIS household centroid to nearest gas pipeline or IGT area.

The assembled data set, consisting of approx 104,000 records was then processed to identify which sample households were likely to be eligible for each element of ECO & totals calculated using the EPC weighting:-

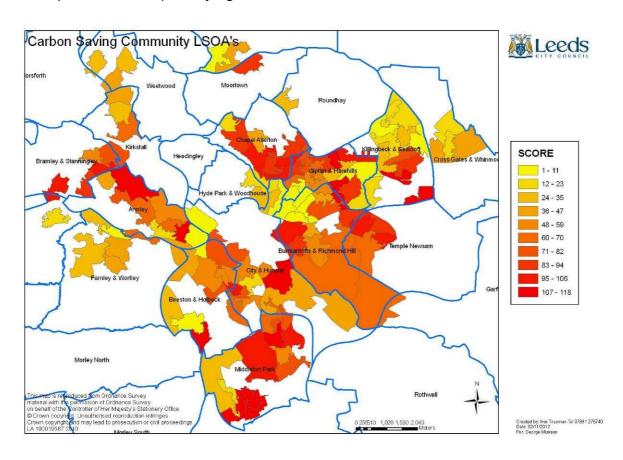


8. Carbon Saving Communities (CSC) ECO.

CSC eligible properties consist of properties in the lowest 15% of the Index of Multiple Deprivation (Income Domain). In Leeds 118 of the 476 LSOA's are eligible, however none of the 118 areas meet the "rural" requirement of the scheme. (15% of the energy companies CSC saving must be in "rural" LSOA's, where population is <10,000 per hectare.)

All tenures are eligible for CSC funding.

CSC eligible properties have been calculated using the EPC data. A ranking of areas has also been generated, based on the number of ALMO system built properties and DECC published fuel poverty figures.



9. Affordable Warmth ECO.

The Affordable Warmth ECO element is only applicable to owner occupiers and private rented properties, and households must be in receipt of one of the following benefits:-

- Pension Credit the Guaranteed Credit or Savings Credit element
- The support or work related element of income-related Employment and Support Allowance
- Child Tax Credit (income <£15,860)

- Working Tax Credit (income <£15,860 & either: a) responsible for a child under 16 (or 20 if in education/training); b) receive disabled worker or severe disability element; c) aged over 60.
- Income Support or income-based Jobseeker's Allowance & either: a)
 responsible for a child under 16 (or 20 if in education/training); b) receive
 disability or severe disability element of Child Tax Credit; c) receive the severe
 of enhanced element of Disability Premium; d) receive the higher or enhanced
 premium of Pensioner Premium

As a proxy for this, known Warmfront jobs, and recent Council produced benefits data sets have been used to identify non-ALMO benefit recipient households.

The number of Households benefiting from Warmfront has varied annually according to changes to the eligibility criteria.

Year	Households
2011-12	464
2010-11	2615
2009-10	2587
2008-09	4201

For the first half of 2012-13, 327 properties have benefited.

As the Affordable Warmth criteria is the same as the most recent Warmfront criteria, it may be best to assume that the number of Households benefiting citywide will be 500 – 600 per year.

From the EPC analysis, approx 50% of Affordable Warmth eligible households are not eligible for other ECO elements, so it is likely that heating work will be evenly split, with approx 300 receiving heating & wall insulation and 300 receiving heating only.

The 6,000 target needs to be calculated excluding the heating/insulation jobs, to avoid double counting.

10. ALMO Tower Blocks.

There are 108 multi-story blocks with 7,568 ALMO flats (and 27 private flats). Many of these have been partially insulated with ring-bound cavity fill, and some have had external cladding.

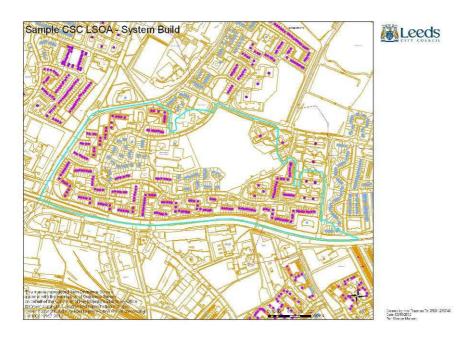
Blocks which are thought to have had either partial or full insulation have been counted as insulated and not included in the ECO analysis.

22 of the blocks (1,523 ALMO flats) do not appear to have any wall insulation and have been included in the ALMO System Built figures.

11. ALMO System Built.

The number of ALMO System Built properties requiring insulation has been estimated using the above EPC / install data.

The ALMO System Build database is also being used in conjunction with a desktop survey to help identify system build types for each of the 118 CSC LSOAs. This database identifies approx 60 different built types.



A recent analysis by Strategic Landlord indicated that there were 2,462 system built house/bungalows and 2,059 low/medium rise flats which would be suitable for external cladding. The total (4,521) is reasonably consistent with the EPC analysis (4,093).

12. Private System Built.

The EPC data suggests there are 4,410 system built properties in the private sector, which compares reasonably well with the figure derived from the 2007 Stock Condition Survey data (5,318).

According to the EPC data 77% of the system built properties are owner occupier, compared with 86% in the Stock Condition Survey data.

13. Housing Association Solid Walls.

The EPC data suggests that the number of uninsulated solid wall / system built housing association built properties is 2,818. This compares to 2,546 properties from the 2007 Stock Condition survey dataset.

In both calculations, 87 - 90% of the properties have solid brick walls.

14 Private Narrow Cavities

The Wrap Up Leeds cancellation data, and a virtual desktop survey of neighbouring properties has been used to estimate the number of narrow cavities. Extrapolating from the Wrap Up Leeds cancellation data suggests that there are approx 8,400 narrow cavities; but from the current bead scheme, it is likely that only about a third are suitable for cavity fill with polystyrene bonded bead.

i.e. roughly 3,000 suitable cavities.

15. Private Solid Walls.

The EPC data suggests that the number of private sector solid walls is 61,778 which compares well with the figure derived from the 2007 Stock Condition Survey data (61,486).

The owner occupier / private rented split in the two data sets also compare well with 68-72% of the solid wall properties being owner occupier.

There is however a difference in the split between solid brick and solid stone properties, with the EPC data suggesting 69% and the Stock Condition data suggesting 89% are Solid Brick. This discrepancy could be due to assumptions in apportioning the Stock Condition data to either "solid brick" or "solid stone" based on the wall width. (The Stock Condition data only specifies "mason single leaf / 9 inch solid & >9 inch solid").

Appendix 2 – EDCI Screening

EDCI screening

Appendix 3 – Confidential Information Relating to Procurement

EDCI screening