

London and South-East Home Insulation Partnership



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Summary

- Overview of the South East
- HESS overview
- CESP potential in the South East
- Area based insulation – examples
- Area based insulation potential in SE
- Next steps
- The Energy Saving Trust as a catalyst

South East overview



South East key facts 1

Geographic

- 7 county authorities (Buckinghamshire, Hampshire, Oxfordshire, Kent, Surrey, East and West Sussex) and 12 metropolitan/unitary authorities.
- 7 Cities.
- 74 Local Authorities - 19 county and unitary authorities and 55 districts.
- Borders 5 other regions (London, East of England, South West, East Midlands, West Midlands)

Demographic

- 8.23 million people (largest region)
- 3.57 million households (largest region), of which 75 per cent are owner occupied.
- Higher population than Wales, Scotland and Northern Ireland combined.
- 19,200 km² (3rd largest region)

London and South East LA's

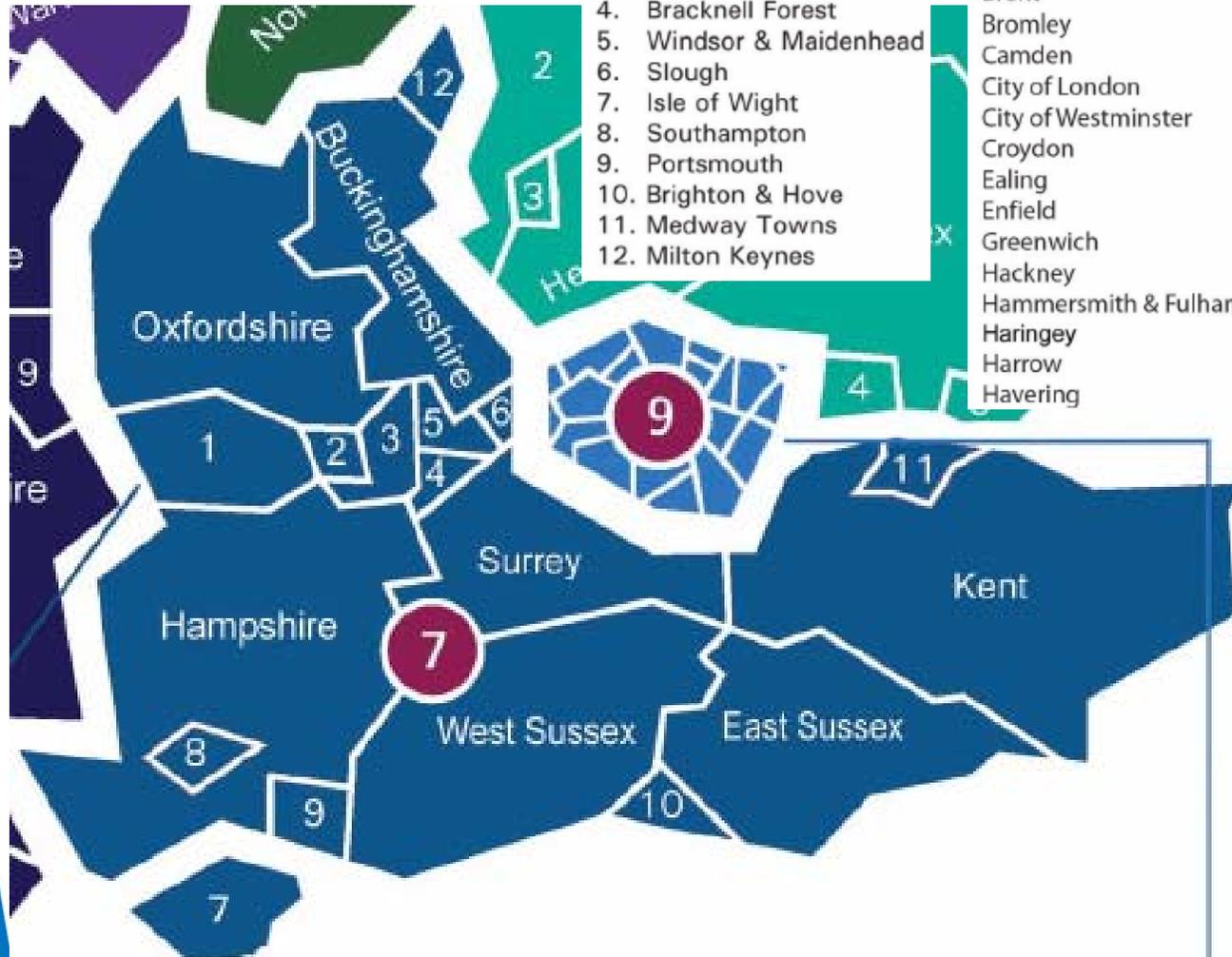
7 South East

1. Newbury
2. Reading
3. Wokingham
4. Bracknell Forest
5. Windsor & Maidenhead
6. Slough
7. Isle of Wight
8. Southampton
9. Portsmouth
10. Brighton & Hove
11. Medway Towns
12. Milton Keynes

9 London

- Barking & Dagenham
- Barnet
- Bexley
- Brent
- Bromley
- Camden
- City of London
- City of Westminster
- Croydon
- Ealing
- Enfield
- Greenwich
- Hackney
- Hammersmith & Fulham
- Haringey
- Harrow
- Havering

- Hillingdon
- Hounslow
- Islington
- Kensington & Chelsea
- Kingston upon Thames
- Lambeth
- Lewisham
- Merton
- Newham
- Redbridge
- Richmond upon Thames
- Southwark
- Sutton
- Tower Hamlets
- Waltham Forest
- Wandsworth



South East key facts 2

Economic

- £166bn Gross Value Added (GVA) in 2005; 15.3% of total UK GVA in 2003
- 4.4 million jobs provided by the South East economy
- 78.4 per cent employment rate is the highest of any region
- South East economy can be categorised as being advanced, high cost, high income, broadly based and service oriented.
- 20 Universities and other Higher Education Institutes with a campus in the region, together with 71 Further Education Colleges

South East key facts 3

Environmental

- 67.5 million tonnes of carbon dioxide per year (largest emitting region) in 2005
- 22.5 million tonnes of domestic carbon dioxide per year (largest emitting region) in 2003
- Ecological footprint of 5.99 global hectares per capita - highest in the UK
- 15 local Authorities have signed up to National Indicator 186, with the remaining 4 having signed up to NI185. In addition 5 have signed to NI187 and 6 to NI188
- 6,500 square kilometres of the region are designated as Areas of Outstanding Natural Beauty

Social

- 580,000 households in fuel poverty in 2004
- Hastings, Brighton & Hove, Southampton and Medway all featuring amongst the more deprived districts in England, on a range of measures

HESS context



Home Energy Saving Strategy (HESS)

The Heat and Energy Saving Strategy Consultation sets out the Government's long term vision for reducing emissions of carbon dioxide from buildings. The overall vision is for carbon dioxide emissions from buildings to be approaching zero by 2050. In the domestic sector, the strategy aims to achieve a;

- 30% reduction in domestic emissions by 2020 and a
- greater than 80% reduction in domestic emissions by 2050 (from 2006 levels).

The proposals contained in the consultation aim to ensure that:

- All lofts and cavity walls will be filled where possible by 2015.
- All homes should receive a 'whole-house' package by 2030 including all cost effective energy saving measures plus renewable heat and electricity measures as appropriate

CESP



Community Energy Saving Programme (CESP)

- This is a £350m programme which will run from autumn 2009 to December 2012 and will be regulated by Ofgem. It will aim to reach approx **90,000 households**, through about **100 schemes**. The projects will be focus on **deprived areas**, and must work intensively within communities and take a **whole-house approach** to improvements. Deprived areas are defined as those in the lowest 10% of the Index of Multiple Deprivation's income domain (or the bottom 15% in Scotland and Wales) – this covers approx 2.5m households.
- These areas are expected to have a high proportion of people living in hard to treat home and in fuel poverty, and will be tackled in a **house-by-house, street-by-street** method. All housing tenures, included private rented and social housing will be tackled, to give a 'whole community' feel to the project.

SE key most deprived LSOA's

| Local Authority Name | LSOA ward | Income Score | Rank of Income Score (where 1 is most deprived) | Lower Super Output Area (LSOA) |
|----------------------|-------------------------|--------------|---|--------------------------------|
| Hastings | Baird | 0.55 | 243 | E01020972 |
| Brighton and Hove | East Brighton | 0.52 | 375 | E01016865 |
| Thanet | Margate Central | 0.52 | 396 | E01024678 |
| Hastings | Tressell | 0.51 | 447 | E01021015 |
| Brighton and Hove | East Brighton | 0.49 | 655 | E01016866 |
| Portsmouth | Charles Dickens | 0.48 | 740 | E01017040 |
| Thanet | Cliftonville West | 0.47 | 783 | E01024658 |
| Maidstone | High Street | 0.46 | 873 | E01024374 |
| Thanet | Cliftonville West | 0.46 | 890 | E01024657 |
| Swale | Sheerness West | 0.46 | 941 | E01024614 |
| Brighton and Hove | East Brighton | 0.46 | 943 | E01016868 |
| Brighton and Hove | Moulsecoomb & Bevendean | 0.46 | 948 | E01016908 |
| Southampton | Woolston | 0.46 | 951 | E01017281 |
| Milton Keynes | Woughton | 0.46 | 955 | E01016842 |

SE councils with the most CESP eligible LSOA's

| South East Council | No of LSOA's in council |
|---------------------------|--------------------------------|
| Brighton & Hove | 15 |
| Thanet | 13 |
| Portsmouth | 10 |
| Hastings | 9 |
| Southampton | 8 |
| Milton Keynes | 6 |
| Swale | 6 |
| Medway | 6 |
| Shepway | 4 |

South East Plan Key Diagram



Key (relevant policies)

- 1 2** Sub-regional Strategy Area
 - 1 South Hampshire
 - 2 Sussex Coast
 - 3 East Kent and Ashford
 - 4 Kent Thames Gateway
 - 5 London Fringe
 - 6 Western Corridor and Blackwater Valley
 - 7 Central Oxfordshire
 - 8 Milton Keynes and Aylesbury Vale
 - 9 Gatwick Area
- Growth Area
- Growth Point
- Strategic Development Area
- Diamond for Investment & Growth
- Green Belt (SP5)
- New Forest National Park (CI)
- River Thames (C7)
- Regional Spoke (T8)
- Regional Hub (SP2)
- Centre of Significant Change (TC1)
- Primary Regional Centre (TC1)
- Secondary Regional Centre (TC1)
- International Hub Airport (T9)
- Regionally Significant Airport (T9)
- Nationally Significant Airport (T9)
- Gateway Port (T10)
- Regionally Significant Port (T10)
- International Gateway
- CTRL
- Urban Centre in adjacent region
- Regional Boundary

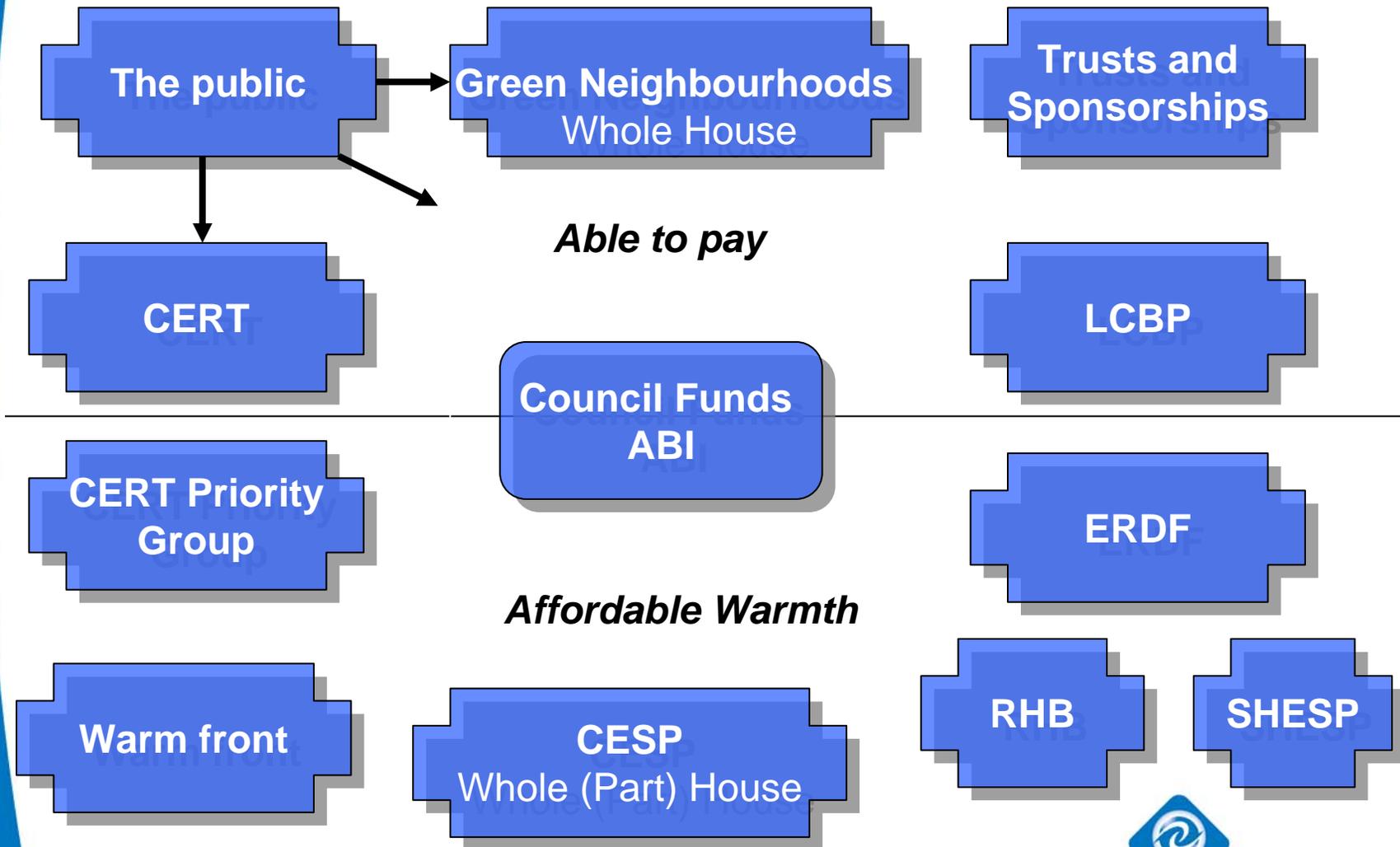
SE CESP potential

- There is concern that the South East may be neglected by energy suppliers under CESP, because it is the wealthiest region in the UK.
- Please note that there is significant poverty in the South East and we would encourage energy suppliers to consider the key towns where there is CESP potential. EST would be happy to talk to suppliers further on an individual basis if they would like assistance on working with local authorities in the region.

Area Based Insulation



Multiple funding sources for installations



Working with Warm Front / CERT

The Government's Warm Front scheme provides free insulation in England, for householders in receipt of certain benefits, who are over the age of 70, under 16, disabled or pregnant. The scheme has some built in limitations;

- It does not reach everyone who needs assistance; people who may be in fuel poverty (spend over 10% of their income on gas/electricity etc) may not be in receipt of benefits. With rising fuel prices this will become increasingly the case
- As the scheme is 'entitlement' based, it will by its nature result in a 'pepperpotting approach' where only certain houses get done and the opportunity to do adjacent properties are missed
- it is inefficient as non-area based approaches require more travel between jobs and time has to be spent confirming entitlement.
- Contractors can cherry pick 'good' areas with high levels of benefit entitlement and suitable properties this can be to the detriment of rural areas and London Boroughs, where the lack of suitable properties and the congestion charge make it an unattractive prospect (in 2007/08 only 11,000 grants were issued in the Greater London area the same as for Kirklees for the same period!)

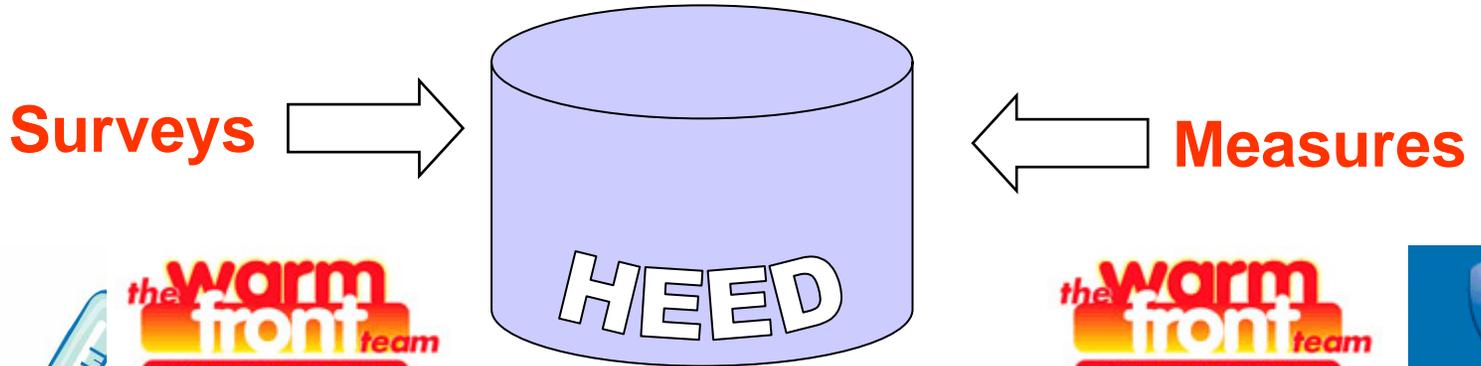
Solution; a summary of Area Based Insulation programme in Kirklees

- 50,000 CWI and loft measures available
- All completed in 3 years (2007 – 2010)
- Cost £20m
- Income - CERT (procured through tender) - £10m
- Kirklees Council contribution - £10m
- From Council's Capital programme budget
- 84 new installer jobs created plus 34 back office, support and training posts
- Installer opened new depot in Kirklees on back of contract
- Cost of additional prudential borrowing over 25 years = £800k/yr
- Council tax cost - £7/property/year for 25 years – 14p/week
- Average household saving - £200/yr
- Kirklees estimate 4.5 million tonnes of lifetime CO2 saved, which
- equates to £4.50/tCO2 saved

Summary of Area Based Insulation programme in Sheffield

- 23,000 CWI and loft measures
- To be completed in 3 years (2009 – 2012)
- Cost £7m
- Income - CERT (procured through tender) - £3.5m
- Sheffield Council contribution - £3.5m
- From Council's Capital programme budget
- Sheffield is not particularly putting up council tax to pay for this programme, instead using a variety of schemes, but overall from the capital programme
- Approximately 40 new installer, surveyor, back office, support and training posts
- Contract won by Eaga services (ex Milfold)

HEED; national Home Energy Efficiency Database at the Energy Saving Trust



- From Energy Audits or surveys undertaken on individual properties
- From recording energy efficiency measures that are installed in properties



HEED – sample loft insulation data

| All homes with less than 100mm loft | | | | | |
|-------------------------------------|--------------------------|------------------------|--------------------------------|--------------|---------|
| Location | No. of homes in location | No. of homes with data | No. of homes matching criteria | % Likelihood | Ranking |
| Medway | 107,287 | 10,223 | 4,506 | 44.10% | 1 |
| Bracknell Forest | 45,170 | 7,829 | 3,435 | 43.90% | 2 |
| Brighton and Hove | 111,961 | 7,601 | 3,316 | 43.60% | 3 |
| Epsom and Ewell | 29,798 | 2,119 | 916 | 43.20% | 4 |
| Thanet | 61,101 | 6,799 | 2,900 | 42.70% | 5 |
| Spelthorne | 40,396 | 2,199 | 924 | 42.00% | 6 |
| Fareham | 46,577 | 6,590 | 2,747 | 41.70% | 7 |
| Wokingham | 61,065 | 5,698 | 2,366 | 41.50% | 8 |
| Tandridge | 33,801 | 3,017 | 1,230 | 40.80% | 9 |
| Gravesham | 40,135 | 3,970 | 1,592 | 40.10% | 10 |
| Mole Valley | 35,999 | 3,207 | 1,272 | 39.70% | 11 |
| South Bucks | 27,083 | 998 | 395 | 39.60% | 12 |
| Cherwell | 57,527 | 5,810 | 2,298 | 39.60% | 13 |
| Guildford | 55,524 | 4,086 | 1,586 | 38.80% | 14 |
| Hastings | 39,028 | 4,501 | 1,716 | 38.10% | 15 |
| Waverley | 50,573 | 2,220 | 845 | 38.10% | 16 |
| Oxford | 55,987 | 4,849 | 1,839 | 37.90% | 17 |
| Lewes | 41,846 | 2,636 | 992 | 37.60% | 18 |
| Slough | 49,851 | 3,714 | 1,391 | 37.50% | 19 |
| Aylesbury Vale | 69,490 | 7,087 | 2,642 | 37.30% | 20 |
| Eastbourne | 44,928 | 4,432 | 1,652 | 37.30% | 21 |
| Horsham | 55,090 | 7,157 | 2,661 | 37.20% | 22 |
| Swale | 55,628 | 3,359 | 1,247 | 37.10% | 23 |
| Portsmouth | 85,652 | 9,285 | 3,440 | 37.00% | 24 |
| Hart | 36,242 | 3,755 | 1,381 | 36.80% | 25 |

HEED – sample cavity wall data

Number of homes with Unfilled Cavity Walls

| | Location | No. of homes in location | No. of homes with data | No. of homes matching criteria | Percentage |
|----|---------------------|--------------------------|------------------------|--------------------------------|------------|
| 1 | Winchester | 47,598 | 4,477 | 1,747 | 39.0% |
| 2 | New Forest | 78,522 | 8,481 | 2,954 | 34.8% |
| 3 | Portsmouth | 85,652 | 7,487 | 2,406 | 32.1% |
| 4 | South Bucks | 27,083 | 1,595 | 499 | 31.3% |
| 5 | Hart | 36,242 | 3,198 | 955 | 29.9% |
| 6 | East Hampshire | 47,377 | 4,629 | 1,362 | 29.4% |
| 7 | Eastleigh | 50,912 | 7,524 | 2,098 | 27.9% |
| 8 | Test Valley | 47,980 | 5,612 | 1,551 | 27.6% |
| 9 | Southampton | 98,016 | 7,480 | 2,046 | 27.4% |
| 10 | Fareham | 46,577 | 6,398 | 1,742 | 27.2% |
| 11 | Mid Sussex | 56,684 | 10,875 | 2,863 | 26.3% |
| 12 | Eastbourne | 44,928 | 3,751 | 979 | 26.1% |
| 13 | Wealden | 62,818 | 3,938 | 1,011 | 25.7% |
| 14 | Worthing | 47,044 | 6,572 | 1,668 | 25.4% |
| 15 | Rother | 42,565 | 2,778 | 703 | 25.3% |
| 16 | Isle of Wight | 65,346 | 5,541 | 1,398 | 25.2% |
| 17 | Gosport | 36,239 | 4,183 | 1,047 | 25.0% |
| 18 | Mole Valley | 35,999 | 2,850 | 698 | 24.5% |
| 19 | Vale of White Horse | 49,684 | 3,629 | 883 | 24.3% |
| 20 | Horsham | 55,090 | 6,144 | 1,483 | 24.1% |
| 21 | Havant | 52,098 | 6,300 | 1,509 | 24.0% |
| 22 | Surrey Heath | 34,485 | 3,298 | 788 | 23.9% |
| 23 | Wycombe | 68,011 | 6,998 | 1,670 | 23.9% |
| 24 | Adur | 27,148 | 3,980 | 943 | 23.7% |

SE insulation potential (from HEED)

| | |
|--|------------------|
| Total number of households | 3,570,000 |
| Total adult population | 8,230,000 |
| Wall Type | |
| Cavity Walls | 2,630,000 |
| - Filled | 1,144,000 |
| - Unfilled | 1,411,000 |
| Solid (assume all uninsulated) | 634,000 |
| Other - includes cavity walls which cannot be filled due to possible rain penetration | 131,000 |
| | |
| Loft Insulation | |
| Estimated no's of lofts | 2,900,000 |
| - Uninsulated | 59,000 |
| - 100mm or less | 1,967,000 |
| - Over 100mm | 877,000 |

Area Based Insulation (ABI) scheme - figures for the South East

Scale

- HEED data Estimates that there are **3,437,000** CWI and loft measures available (including 100mm or less of loft insulation currently)
- Total estimated ABI cost in SE **£1,344 m**, based on £450 per cavity wall and £350 per loft insulated
- Income - CERT requirement over 6 years - **£677m**
- Local authority contribution - **£677m**
- However, if CERT and bulk discount reduces cost of installations to £150 each, then LA funding required is only **£515 million**
- Funding sources would be mixed, but could potentially include council capital programme, housing programmes, Regional Housing Board, etc
- If necessary funding could come from Prudential borrowing as for Kirklees. This is seen as being most possible for a unitary authorities, but slightly more challenging for counties and district authorities.

Benefits of Area Based Insulation (ABI) in the South East

- **Local Authority;** more likely to meet NI186 and NI187 carbon and fuel poverty targets + **boosted reputation.**
- **Social;**
 - assuming a 6 year programme to 2015 (fitting in with HESS); **3,400 new jobs** could be created for 6 years, including installer, back office, support and training posts.
 - Massive improvement in fuel poverty, with the more effective provision of affordable warmth
 - Reduction in sickness costs to NHS and PCT's, as homes become a healthier environment.
- **Financial;**
 - saving to residents of **£278 million per annum**
 - Significant increase in marginal disposal income, thereby boosting SE economy, whilst improving quality of life for residents.
- **Environmental;**
 - carbon savings of **1.2 million tonnes of CO2 per annum** or just under **2%** of SE regional emissions (6% of domestic).

Post Area Based Insulation programme

- During and after the six year programme from 2015, work would move from cavity and loft insulation onto solid wall insulation and renewable energy installations, ie using the bases that have been set up to undertake the initial insulation work.
- Funded from equity in private sector stock on an interest free loan basis, plus HCA and local authorities.
- Build towards the whole house approach
- Fits in with the HESS strategy

Next steps

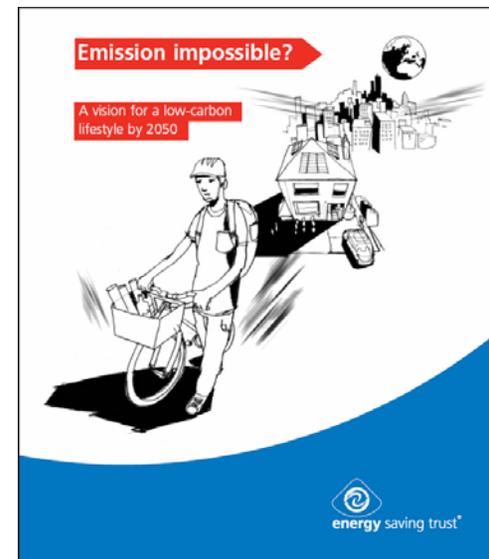
- Gain industry view...
- Energy suppliers question; *what funding potential can they support in the South East?*
- Installers question; *need to be able to expand the industry on a council by council basis; ie Kirklees, now Sheffield, next where? in London or the South east?*
- Take report to an appropriate senior grouping of key senior SE politicians to present and gain interest
- Continue to market the concept to individual local authorities.
- Develop a support package for LAs who wish to proceed with Area Based Insulation programme

Energy Saving Trust as a catalyst



Catalytic role of the Energy Saving Trust

- To provide free, impartial energy efficiency advice to residents
- To lead 60 million people to act on climate change
- Our vision for the future is that every home is a low carbon home and everybody leads a low carbon lifestyle, by;
 - *Taking energy saving decisions; behaviour*
 - *Buying the most energy-efficient products*
 - *Fitting homes with energy saving measures*
 - *Making sustainable travel choices*
 - *Choosing renewable energy*
 - *Conserving water*
 - *Reducing and recycling waste*
- To work with local authorities as a key route to achieving large-scale carbon savings through their position as community leaders – to act as a CATALYST for carbon reduction



Example catalyst; NI 186 toolkit

- Online resource to help local authorities address NI 186
- Gateway for local authorities to develop a strategic framework for action on climate change
- Links to other Energy Saving Trust resources and publications
- Live end of April 2009
- Accessible at: www.energysavingtrust.org.uk/NI186



Contacts

Energy Saving Trust website:

www.energysavingtrust.org.uk

Practical help service:

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