

# targeting strategy for domestic energy efficiency Wandsworth

action plan to address domestic energy  
efficiency locally.

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# Introduction

This report is a detailed analysis of the potential for domestic energy efficiency installations in Wandsworth, and has been completed in partnership with Wandsworth Borough Council as part of the Energy Saving Trust Hotspots Innovation Programme.

The report provides a profile of the neighbourhoods in the borough where there is most potential for the installation of domestic energy efficiency measures by residents. It is the aim of the report to provide a framework for the coordinated promotion of energy efficiency measures in the borough.

In particular, the report identifies 'HotSpots' for energy efficiency targeting. These are areas where the promotion of energy efficiency measures will be most effective.

## Background: the Hotspots project

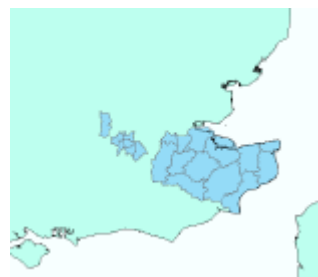
The report has been completed as part of the Hotspots project. The project is a partnership of organisations in South West London and Kent with an interest in domestic energy efficiency. The project is designed to bring together the large amount of data that has been collected about domestic energy efficiency in order to target the promotion of energy efficiency measures to residents.

Many organisations in the public sector have responsibilities and commitments to facilitate energy efficiency improvements in domestic homes. Key among these organisations are Local Authorities, regional Energy Efficiency Advice Centres, Energy Suppliers, and the Energy Saving Trust. These organisations typically also collect data to provide tailored advice to householders, or to measure progress towards HECA and other statutory targets. However, the data has typically not been used to target the installation of measures in households.

the Energy Saving Trust. The project is part-funded by the Energy Saving Trust until 2006, and aims to provide a framework which the project partners can use for the coordination of the facilitation of energy efficiency improvements in domestic homes.

## Project partners

The project is led by Creative Environmental Networks and the London Borough of Hillingdon, and receives core funding from the Energy Saving Trust. Creative Environmental Networks is a not for profit environmental company that runs the two regional Energy Efficiency Advice Centres in South West London and Kent.



The following organisations are project partners. The project covers the area of the 20 Local Authority partners below.

- Ashford Borough Council
- Canterbury City Council
- Creative Environmental Networks
- London Borough of Croydon
- Dartford Borough Council
- Energy Saving Trust
- Gravesham Borough council
- Kent Energy Centre
- Royal Borough of Kingston upon Thames
- London Borough of Hillingdon
- Maidstone Borough Council
- Medway Council
- London Borough of Merton
- Royal Borough of Richmond upon Thames
- Sevenoaks Borough Council
- Shepway Borough Council
- London Borough of Sutton
- Swale Borough Council
- Thanet Borough Council
- Tonbridge and Malling Borough Council
- Tunbridge Wells Borough Council
- London Borough of Wandsworth

# Analysis

The analysis below uses existing datasets to determine the areas of Wandsworth where there is maximum potential for the uptake by householders of domestic energy efficiency measures.

## Summary

The first part of the analysis aims to find the areas of the borough where the domestic housing has high potential for energy efficiency improvements. The analysis has focussed on loft and cavity wall insulation potential (see section 2.1.2).

The analysis has only been possible where there is sufficient Home Energy data coverage, so before the analysis was started the data coverage was investigated (see section 2.2).

The analysis concluded that in Wandsworth the data coverage is fairly poor: there is sufficient data to conduct a meaningful analysis at ward level, but not for an analysis at census output area level. A census output area is a sub-ward classification, containing approx. 60-200 households as illustrated in Figure 1. Of the 20 boroughs involved in the HotSpots project only 9 have sufficient data for the more detailed study. (Appendix 1 contains suggestions for future

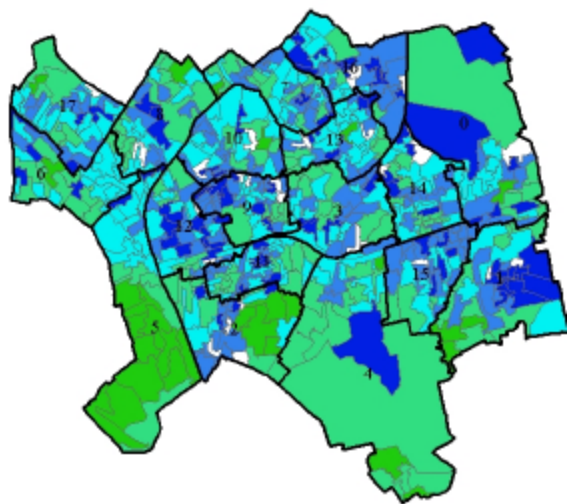


Figure 1: A census output area analysis of LB Sutton, a HotSpots borough with very good data coverage. The figure shows the power of g

demographic data has been used to target the 'able to pay'. We are aiming to target residents with the aim of maximum uptake of energy efficiency measures, so we should seek:

- householders who own or who are buying their home
- householders who have significant disposable income
- householders who live in houses rather than flats.

Census data has been used to produce this population / housing type / tenure analysis. It has then been used as an overlay for the home energy efficiency data: in this section the HotSpots tentatively identified in section 2.3 are confirmed or discarded based on the suitability of the population, housing type, and tenure.

The strategy is not designed to target fuel poverty, although it acknowledges that there is scope for a similar approach to target people who have to use a large proportion of their income to keep their homes sufficiently heated. We aim to publish a sister strategy designed to take this approach before the end of 2004.

### **2.1.1 Data sources**

The data analysis has made use of three main data sources. These are:

- Home Energy Check data, collected by the local Energy Efficiency Advice Centres and owned by the Energy Saving Trust; this data has only been available at ward level, but this may change in future editions of the strategy.
- Home Energy Survey data, collected by the Local Authorities in order to report on the energy efficiency of the borough to the government, and meet their Home Energy Conservation Act (HECA) responsibilities;
- Data from the 2001 Census, available from the Office for National Statistics.

There is potential for additional data to be integrated with the report. Additional Home Energy Survey and Home Energy Check data will increase the significance of the analysis. If original data can be incorporated from the Local Authority's Home Condition Survey this will also increase the significance of the analysis. We are working to progress this work and will aim

as investment measures, and promotion to householders will result in high takeup.

Measures such as efficient heating systems, double glazing, and solid wall insulation are all comparable with loft and cavity effective in terms of energy efficiency but are typically more expensive by a factor of 4-10. This makes them measures that should be installed during the normal course of household refurbishment and maintenance, rather than as an investment measures. Potential for installation of these measures has therefore been judged outside the scope of this study.

## **Data Coverage**

The Home Energy data coverage in Wandsworth is reasonably poor.

When the data was collated by ward, the 95% confidence intervals were calculated as being similar to or smaller than the size of the 10 category classification intervals used in the analysis below. However, only 9 of the census output areas in the borough had enough data for the confidence intervals to feasibly allow more than 2 category bands (a census output area is a sub-ward classification, containing approx. 60-200 households). For this reason analysis was not conducted at census output area level.

[Appendix 1 contains suggestions for future data gathering work to make the data coverage more uniform.]

## **Housing analysis by ward**

The ward level data analysis has been conducted using Home Energy Check data from the Energy Saving Trust and Home Energy Survey data, collected by the Local Authorities. The data is a compilation of data collected between 1999 and 2004.

### ***2.3.1 Cavity Wall insulation***

The map (figure 2) and table (table 1) overleaf show the proportion of unfilled cavity walls in Wandsworth by Ward.

The map shows that the cavity wall 'Hotspots' wards are concentrated in the west part of the borough, although there is not a particularly clear divide with the east of the borough.

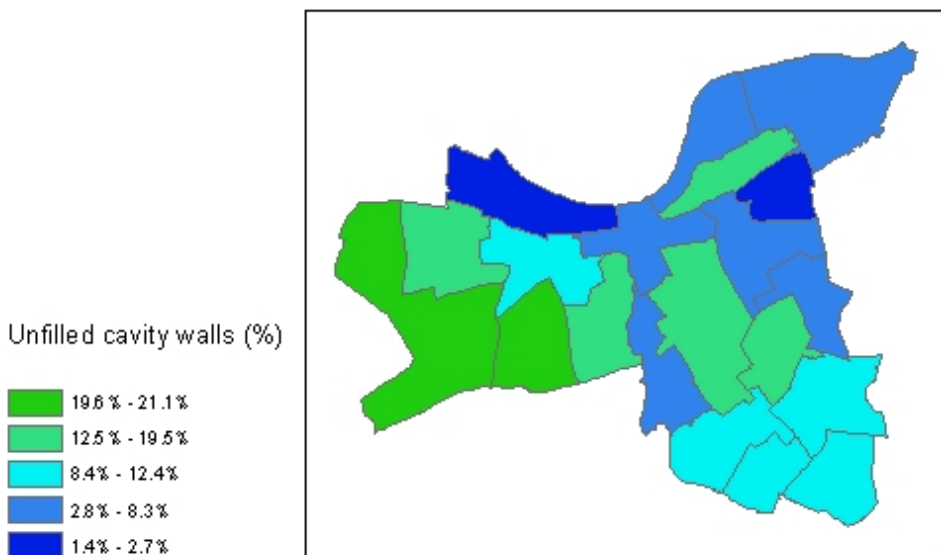


Figure 2: proportion of unfilled cavity walls in Wandsworth by ward

Table 1 shows more specifically that there is a low potential for cavity wall insulation in the various wards, as might be expected in a more urban borough. The potential varies from 1% to 21% unfilled cavity walls: this compares with a typical borough in the Hotspots project where the potential might vary from 5% potential to 40% potential. For this reason we have decided to allocate none of the wards cavity wall Hotspot status: the next section shows the unusually high potential in Wandsworth for loft insulation, and it seems logical to concentrate on the promotion of loft insulation.

(NB this conclusion is supported by the demographic analysis which showed that none of the wards had greater than 50% houses (rather than flats, as a proportion of all households) and that a typical ward had a proportion of nearer 20%.)

Ward Name	Housing with unfilled cavity walls



Fairfield Ward	8%
Queenstown Ward	8%
St. Mary's Park Ward	8%
Northcote Ward	7%
Earlsfield Ward	6%
Balham Ward	5%
Thamesfield Ward	2%
Shaftesbury Ward	1%

Table 1: proportion of unfi walls in Wandsworth by w

### 2.3.2 Loft Insulation

The map (figure 3) and table (table 2) show the proportion of completely uninsulated lofts in Wandsworth by Ward. The map shows that the uninsulated lofts have a pattern completely independent from the cavity wall insulation 'Hotspots'. In addition it shows that Wandsworth in general has very poorly insulated lofts, with one ward registering more than 27% uninsulated lofts.

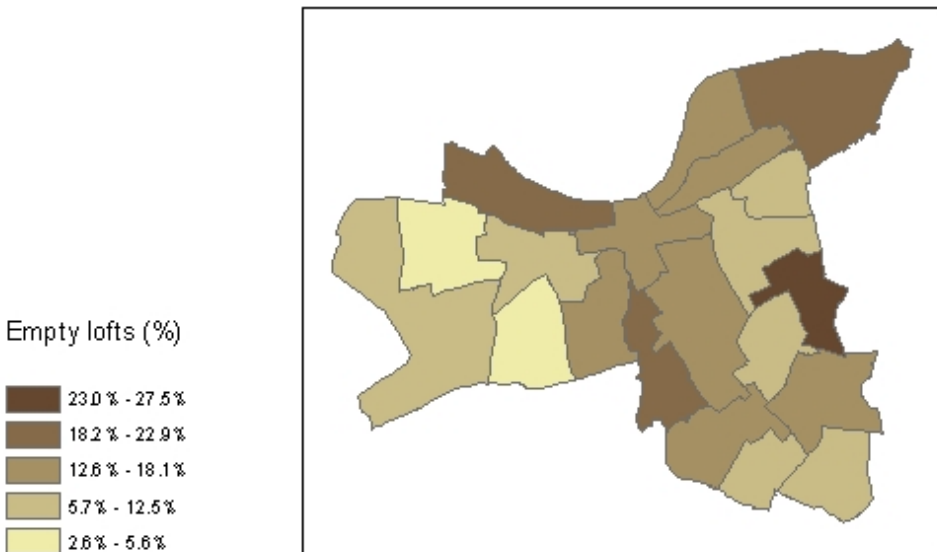


Figure 3: proportion of empty lofts

Ward Name	Housing with empty lofts
<b>Balham Ward</b>	<b>27%</b>
<b>Queenstown Ward</b>	<b>22%</b>
<b>Thamesfield Ward</b>	<b>21%</b>
<b>Earlsfield Ward</b>	<b>18%</b>
<b>Fairfield Ward</b>	<b>18%</b>
<b>Bedford Ward</b>	<b>16%</b>
Latchmere Ward	15%
Southfields Ward	15%
St. Mary's Park Ward	15%
Wandsworth Common Ward	15%
Tooting Ward	14%
Furzedown Ward	12%
Graveney Ward	11%
Nightingale Ward	11%
Northcote Ward	11%
Roehampton Ward	11%
East Putney Ward	10%
Shaftesbury Ward	10%
West Hill Ward	5%
West Putney Ward	2%

Table 2: proportion of empty lofts in Dartford by ward

Based on this data, the top 6 wards (those with potential of 15% or greater) are tentatively designated cavity wall 'Hotspots'.

## Demographic analysis

The demographic analysis has been conducted to screen the hotspots identified in the previous sections for the purposes of targeting. The census in 2001 provides a huge variety of demographic information, including information about:

- economic activity of householders
- tenure of households
- type of household (ie houses or flats)

small number of houses rather than flats. This supports the decision made to allocate no cavity wall hotspots,

### **2.4.1 Analysis at ward level; confirmation of 'HotSpots'**

#### *Cavity wall Hotspots*

No tentative cavity wall hotspots were indentified, and the proportion of houses rather than flats is too low in all wards to have allowed confirmation if any had been allocated.

#### *Loft Insulation Hotspots*

All of the tentatively designated loft insulation 'HotSpot' wards have high owner occupancy, and income levels except Queenstown Ward which had owner occupancy of only 35%, so has not been confirmed as a HotSpot. The remaining five wards are all therefore confirmed as Hotspots.

<b>Ward Name</b>	<b>Housing with empty lofts</b>
<b><i>Balham Ward</i></b>	<b>27%</b>
<b><i>Thamesfield Ward</i></b>	<b>21%</b>
<b><i>Earlsfield Ward</i></b>	<b>18%</b>
<b><i>Fairfield Ward</i></b>	<b>18%</b>
<b><i>Bedford Ward</i></b>	<b>16%</b>

Table 7: loft insulation 'Hotspot' wards

## **Proposed action plan**

The Hotspots project has a publicity budget over 2 years to promote energy efficiency measures using the findings in each of the 20 partner Local Authorities. This budget will be divided as evenly as possible between the partner areas.

The action plan below indicates the activities that will be conducted under the Hotspots project. However, it is hoped that the project will provide a

As demonstrated in this report, the cavity wall insulation hotspots and the loft insulation hotspots are quite different. With this in mind we will be aiming for two discrete messages.

We will be aiming to support the brands currently existing (the Wandsworth council KASH scheme), but we are keen to use an attention grabbing message that links the local area directly. We propose a '(many people in XXX area) haven't got much upstairs' 'teaser' message for loft insulation, and a '(many people in XXX area) have got cavities?' 'teaser' message for cavity wall insulation.

### ***Activity 1: Press releases.***

We plan three press releases between October and December. These will be sent direct to local papers, and in partnership with Local Authority press officers.

We hope to be able to work with the councillors of Hotspot wards in press release related publicity activities.

### ***Activity 2: Direct mailings***

We plan to write to about 1250 households randomly selected from Hotspot wards in each borough. There would be potential to target additional households with Local Authority support.

### ***Activity 3: Street / outdoor posters***

We are planning two or three street / outdoor posters (to be displayed in bus shelters, shopping areas, etc) in hotspot areas. The poster design will be customised to suit the specific area where the poster is located. There would be potential for additional posters with Local Authority support.

### ***Activity 4: Targeting of discrete districts.***

We plan to distribute leaflets and small posters and through local distribution points (such as libraries, restaurants, shops) in Hotspot areas of the borough. The posters will be designed with the messages already described, and will be customised to the local area. If the distributions could be arranged by the Local Authority we could divert budget to other activities.

We have not got resources to distribute letters and leaflets to houses in

## **Appendix 1: Future work**

### **Additional data**

#### ***Additional data gathering***

Of the total 925 census output areas in Wandsworth, the average number of surveys per census output area is 4.8, with only 31 census output areas having more than 10 surveys: 10 surveys per census output area is a minimum for meaningful analysis. If future data gathering mailings were to concentrate on producing a uniform coverage at this level or higher, data analysis would be possible.

On request we can provide information that would be of assistance in securing uniform data coverage most efficiently, including mailing lists or lists of full postcodes of households to be targeted.

#### ***Home condition survey***

The Local Authority home condition survey includes information that could be used to increase the data resolution of future strategies. However, we have had compatibility problems with home condition survey databases. If we can access home condition survey data in a suitably compatible format we will incorporate it into the HotSpots project.

### **Evaluation and future strategy editions**

We are planning to publish a second HotSpots strategy in September 2005.

This will include any extra data that we can access in the meantime, and the strategy will also include an evaluation of the energy efficiency promotion outlined in section 3 for the winter of 2003 / 2004. This will give us a good indication of the effectiveness of the HotSpots approach, which may be modified based on the findings of this strategy.