Mayor of London

London Heat Map +

Heat Mapping Study - London Borough of Bromley

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Executive Summary

The aim of the London Heat Map and the Heat Map Reports is to identify opportunities for decentralised energy networks in London. This process is part of the Mayor of London's drive to deliver 25% of London's energy through decentralised energy (DE) by 2025.

Arup has been commissioned by the Greater London Authority to complete the London Heat Map and provide each of the Boroughs remaining from the DEMaP programme with a report outlining their potential opportunities for DE; the London Borough of Bromley (LBB) is one such Borough.

The heat load and supply data used for the London Heat Map has been sourced by LBB and supplemented by additional data available through publically available central databases. From this, Arup have performed a high level mapping study to identify clusters where potential opportunities for decentralised energy networks may exist.

The dispersed nature of the heat loads limits the opportunities for decentralised energy networks in the Borough. The study has identified one potential heat cluster in Bromley Town Centre. This heat cluster contains four buildings with large heat loads:

- Bromley Civic Centre
- Ravensbourne School
- Widmore Centre
- Pavilion Leisure Centre

These four buildings consume approximately 7,852 MWh/yr of fuel for heating. The location of schools, shops and other commercial enterprises within the cluster suggest that there are other heat loads which could become part of a decentralised energy network. However, fuel consumption data for these buildings is currently unavailable.

Furthermore, the Bromley Town Centre Area Action Plan identifies a number of development sites within / adjacent to this cluster which could potentially contribute to the decentralised energy network.

Further to the findings of the heat mapping study, it is recommended that LBB consider other decentralised energy interventions (solar thermal, biomass boiler, ground source heat pumps etc) that are better suited to suburban regions with sparsely spread energy loads. A more detailed renewable and low carbon energy resource study would be required to identify and analyse the potential for any such programmes of work within the Borough.

1 Introduction

The London Heat Map was developed through the London Development Agency's (LDA) Decentralised Energy Master Planning (DEMaP) programme in 2009 – 2010 with the aim of providing information about heat loads in London to help identify opportunities for decentralised energy.

In November 2011, the Greater London Authority (GLA) commissioned Arup to complete the London Heat Mapping exercise with the following tasks;

- to carry out heat mapping for the remaining ten London Boroughs and therefore provide a consistent London Heat Map
- to provide each of these remaining Boroughs with a report outlining potential opportunities for DE

This report outlines the potential opportunities for DE in the London Borough of Bromley. To compile it, Arup consultant engineers worked in partnership with the London Borough of Bromley to carry out the data collection and opportunity analysis.

This report sets out the methodology employed for the heat mapping process and presents the findings of potential decentralised energy opportunity within the London Borough of Bromley.

The data collected from the London Borough of Bromley has also been uploaded onto the online interactive GIS London Heat Map (www.londonheatmap.org.uk).

For the purposes of this report, the term decentralised energy schemes is used with specific reference to district heating network.

2 Background

Energy generated by centralised power stations and transmitted through the national grid can be highly inefficient and wasteful. One of the Mayor's top priorities for reducing London's CO_2 emissions is to reduce the capital's reliance on centralised power stations. This means increasing the use of local, low carbon energy supplies through decentralised energy systems.

In 2010, residential, commercial and public sector buildings represented over 40% of UK greenhouse gas emissions[1]; reducing the carbon content of the heat and electricity supplied to these buildings is clearly a vital undertaking in efforts to mitigate climate change.

2.1 Decentralised Energy and District Heating

In broad terms, DE is the local or sub-regional supply of energy from a local source, known as the Energy Centre (EC), to local end users via a network. In the case of heat supply, the network is known as a District Heating (DH) network. The EC normally hosts one or more Combined Heat and Power (CHP) units as well as back-up boilers and thermal stores.

[1] Building Britain: The path to sustainable growth for the built environment (2012). Aldersgate Group.

CHP is the simultaneous generation of heat and power in a more efficient way than if the two forms of energy would have been produced separately. Heat is recovered from the power generation process and is typically supplied in the form of hot water.

DE will play a key role in developing a more sustainable, secure and cost-effective energy supply for London, and help target a number of important problems such as climate change and fuel poverty.

2.2 The history of heat mapping: DEMap

The Mayor of London set a target to supply a quarter of London's energy from decentralised sources by 2025.

To this end, the DEMaP (Decentralised Energy Master Planning) programme was introduced by the London Development Agency[2] (LDA) in 2009. The LDA allocated nearly £5 million towards decentralised energy over four years from 2009, with additional support made available through the JESSICA (Joint European Support for Sustainable Investment in City Areas) fund to unlock the development of decentralised energy in London.

The DEMaP programme was developed to enable boroughs to identify opportunities for decentralised energy, and to develop the capacity to realise those opportunities. This was based on a trajectory of work packages, broken down into three phases, from initial capacity building through to feasibility study and project delivery. The heat mapping exercise was originally carried out during the first phase.

The London Heat Map was developed as part of DEMaP to help address the lack of information and certainty surrounding London's heat loads. It is intended to be used by policy and decision-makers to help identify opportunities for DE in their area and to develop new decentralised energy schemes and enable the market to make informed investment decisions without risking significant development costs.

The first round of heat mapping collected data from 23 London boroughs. This data was used to populate the London Heat Map (Figure 1).

[2] The functions of the London Development Agency are being folded in the Greater London Authority as a result of the government announcement in June 2010 that all Regional Development Agencies be abolished by March 2012.

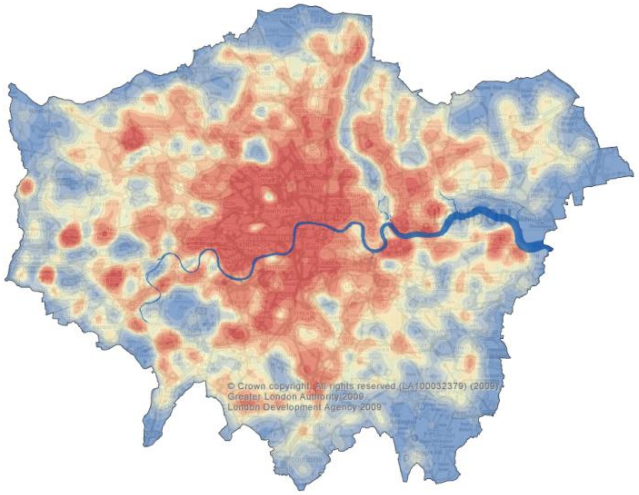

Figure 1: The London Heat Map, as viewable at www.londonheatmap.org.uk

The second round of heat mapping has been undertaken by the GLA in November 2011 and the remaining ten boroughs were invited to participate in order to complete the heat map for the entirety of the Greater London area.

The aims of the heat mapping exercise are:

- To identify potential opportunity areas for the development of decentralised energy networks across London, and
- To provide an evidence base for local authority and GLA planning policies requirements for connections to district heating networks.

The image below illustrates the status of heat mapping in London Boroughs. Those in red have completed Heat Mapping and the data results are available on the Heat Map website, along with a report of the opportunity area (www.londonheatmap.org.uk). Boroughs highlighted in yellow have provided data which was uploaded to the London Heat Map having completed independent data collection and mapping exercises. The Boroughs highlighted in blue are part of the final tranche of heat mapping currently underway.

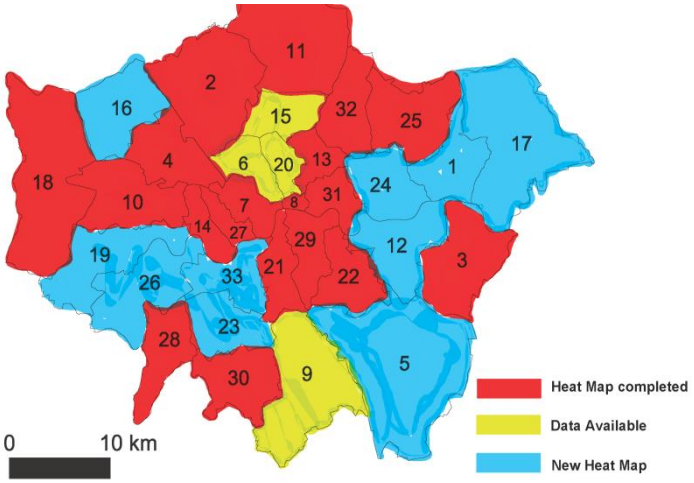

Figure 2: The Heat mapping status of London Boroughs.

Those remaining London Boroughs involved in the second round of completing the London Heat Map were:

1. London Borough of Barking and Dagenham
5. London Borough of Bromley
12. London Borough of Greenwich
16. London Borough of Harrow
17. London Borough of Havering
19. London Borough of Hounslow
23. London Borough of Merton
24. London Borough of Newham
26. London Borough of Richmond Upon Thames
33. London Borough of Wandsworth
7. City of Westminster

3 Policy Context

3.1 UK Climate Change Agenda

The UK Government has responded to the climate change agenda with a range of climate change legislation, targets and actions to reduce greenhouse gas emissions (GHG), including:

- Setting a national target of 80% reduction in annual GHG emissions compared to 1990 levels by 2050, with an interim target of 34% reduction by 2020
- Establishing the world's first national Climate Change Act to tackle the threat of climate change, and
- Introducing financial measures such as: the Renewables Obligation (RO); the Feed in Tariff (FIT); the Renewable Heat Incentive (RHI); and the Carbon Reduction Commitment (CRC).

Legislation is intended to support the transition to a low carbon economy – an economy that minimises environmental impact, is sustainable and limits GHG emissions. The national government's agenda is being taken forward by all the local authorities in the UK.

3.2 The London Plan

The London Plan 2011 sets out the spatial development strategy for London. Chapter 5 specifically addresses 'London's Response to Climate Change' and sets out the following policy requirements:

Policy 5.2 – *Minimising carbon dioxide emissions*

This policy sets out a range of CO_2 emission targets for new developments which must be achieved through a hierarchy of:

- Be lean: use less energy
- Be clean: supply energy efficiently
- Be green: use renewable energy

Policy 5.5 – *Decentralised energy networks*

- **Strategic:** The Mayor expects 25 per cent of the heat and power used in London to be generated through the use of localised decentralised energy systems by 2025. In order to achieve this target the Mayor prioritises the development of decentralised heating and cooling networks at the development and area wide levels, including larger scale heat transmission networks.
- **LDF preparation:** Within LDFs boroughs should develop policies and proposals to identify and establish decentralised energy network opportunities. As a minimum boroughs should:

  i. Identify opportunities for expanding existing networks and establishing new networks. Boroughs should use the London Heat Map tool and consider any new developments, planned major infrastructure works and energy supply opportunities which may arise

  ii. Develop energy master plans for specific decentralised energy opportunities which identify:

    i. major heat loads (including anchor heat loads, with particular reference to sites such as universities, hospitals and social housing)

    ii. major heat supply plant

    iii. possible opportunities to utilise energy from waste

    iv. possible heating and cooling network routes

    v. implementation options for delivering feasible projects, considering issues of procurement, funding and risk and the role of the public sector.

3.3 Borough Policy

The Council is currently preparing a Local Plan which will take on board the requirements of the National Planning Policy Framework (NPPF) and the London Plan and set local policies for the consideration of planning applications. The Heat Map will form part of the evidence base in considering any local policies or standards for sustainable design and construction and the development of local heat networks. The Area Action Plan for Bromley Town Centre was adopted in 2010 and the first development opportunities are beginning to come forward. There is a commitment to investigate the potential of the higher density development proposed in the Town Centre to accommodate a heat network and the information in Heat Map can be drawn down to a more detailed scale for this purpose..

4 Decentralised Energy in London

Following on from the successful DEMaP programme, the GLA is committed to further strategic development and support to deliver more DE schemes within London, through the Decentralised Energy for London programme. Set up with €3.3m in funding, 90% of which was secured from the European Investment Bank's ELENA facility, the Mayor's Decentralised Energy for London programme will provide boroughs and other project sponsors with technical, financial and commercial assistance to develop and bring DE projects to market.

London has been home to DH networks for a number of years, with schemes in Whitehall, Pimlico, Barkantine and the City of London, to name but a few, set to be joined by many more in the near future. There will be a growth in interconnections between existing schemes, and the potential development of a number of high-capacity strategic networks, notably SELCHP, the London Thames Gateway Heat Network, and the Upper Lee Valley Strategic Heat Network transporting industrial volumes of waste heat from power stations over long distances, which could allow for truly significant carbon savings.

Existing schemes and those planned for future development are shown in the London "Vision Map" (Figure 3), or can be viewed in more detail on the London Heat Map's vision layer (www.londonheatmap.org.uk).

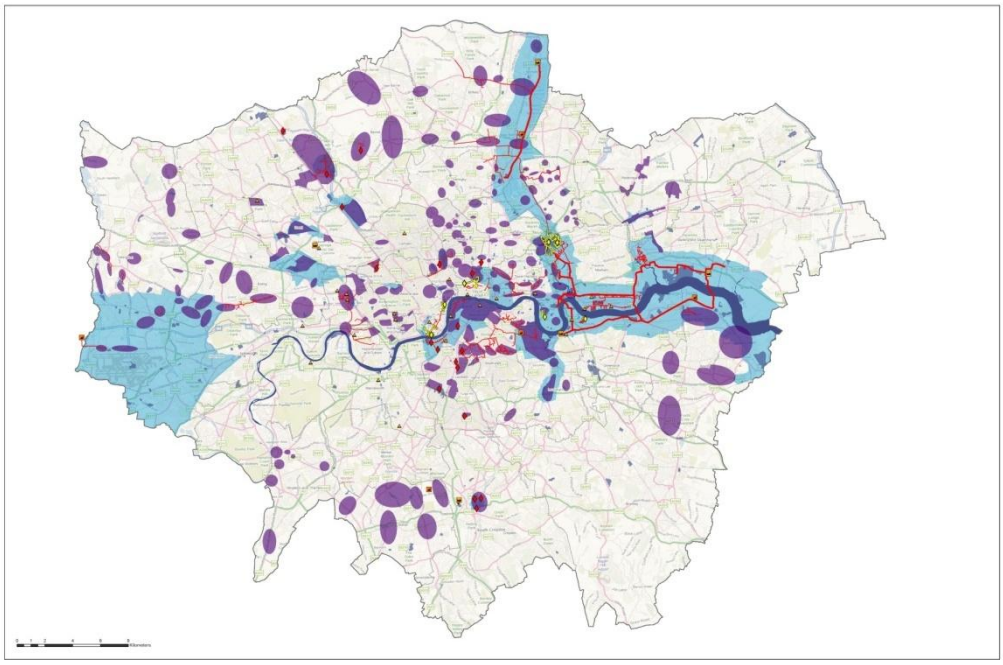

Figure 3: The London Vision Map

5 Methodology

The methodology for heat mapping was developed by Arup in conjunction with the LDA / GLA.

The heat mapping process identifies potential DE opportunities in each borough, and where relevant cross-borough opportunities. The process concludes with an implementation plan developed jointly with the London Borough of Bromley to identify how these opportunities could be progressed. The process consists of two main phases:

Phase 1: Data collection

This data collection should create a reliable database and identify:

- Major heat loads (existing and planned)
- Major heat supply plants (existing and planned)
- District Heating (DH) networks (existing and planned)

Phase 2: Identifying opportunities for potential DE schemes

This process includes the identification of 'clusters' of buildings and development areas that have the best potential for future DH networks and / or extending existing heat networks.

5.1 Phase 1: Data Collection

The aim of Phase 1 is to populate the London Heat Map with data points from which the analysis in Phase 2 can take place. These data points should identify both existing and already planned heat loads, heat supply plants and district heating networks.

Some data points within the London Borough of Bromley already existed on the London Heat Map from the first round of heat mapping that took place under the DEMaP programme. The data for these points had been collected from central data bases such as the London Fire and Emergency Planning Authority (LFEPA) and the London Development Database 2004 (LDD).

To complete the dataset for the London Borough of Bromley, the borough was asked to source the data and verify that which was already in the London Heat Map. The following data locations were suggested to the borough to source the data:

- The former NI 185 register
- The Council's Property Services
- Specific borough documents (such as Asset Management Plans)
- Members of the borough Local Strategic Partnership
- Council's Planning Applications (for large scale applications)
- Council boiler replacement programme
- Private Landowners / Developers
- Other public sector bodies
- Display Energy Certificates (DEC)
- CRC Energy Efficiency data

The typologies used to define the heat loads in the London Heat Map are available in Appendix A2.

The inception meeting was held on Bromley Civic Centre on 09/01/2012. The following people from the London Borough of Bromley attended the meeting:

- Bob Clegg, Team Leader Residential Services
- Katie Ryde, Planning Policy Officer
- Audrey Nugent, Strategy Development Officer (Sustainability)
- Alastair Baillie, Environmental Development Manager
- John Osmer, Estates Manager, NHS Bromley
- Serena Kohler, Housing Enforcement Officer
- Gerry Kelly, Property Energy Manager

Following the meeting, the London Borough of Bromley carried out the data gathering exercise for heat mapping.

The full data set provided is available in Appendix A1

5.2 Phase 2: Identifying opportunities for potential

The aim of Phase 2 is to use the populated London Heat Map to identify opportunities for potential DH networks both within the London Borough of Bromley, and across borough borders.

To do this, the following factors were considered to identify clusters of buildings with the potential to form a DH network:

- The **physical proximity and heat load density** of buildings. This is important to identify high level cluster opportunities and to identify the scale of infrastructure required to meet the demand.
- The presence of **existing anchor loads** which could be able to trigger a DE network. An anchor load is a heat load that is large, has a relatively constant load profile and is therefore suitable for a long-term heat supply or purchase contract. Anchor loads are important as they reduce the risk associated with securing connection of multiple heat loads.
- The presence of **heat load diversity** throughout the buildings identified. Diversity is important to balance the overall load profile of the DH network and make more efficient use of the heat generation source.
- The presence of **planned developments**. This is important for a number of reasons, firstly that the network/parts of the network can be built out as part of the development, reducing the disruption specifically associated with the DH network. Secondly those buildings within the development can be required to connect through their planning consent, securing heat demand. Finally, the avoided costs of installing individual heat supply plant per unit instead of a smaller interface unit with communal heat off-take can improve the economic and financial viability of new schemes, and often results in additional floor space available to the developer.
- The presence of **publically owned buildings**. Public organisations can have policy objectives which may make them more likely to connect to DH networks, such as carbon reduction commitments and tackling fuel poverty.

Having a cluster of buildings which are characterised by as many of the above factors as possible is considered essential for a more efficient and cost effective DH network.

The identified clusters within the London Borough of Bromley were then visualised for this report using the London Heat Map data, along with the key reasons for their identification and the recommended next steps should the London Borough of Bromley wish to investigate the cluster opportunity further.

Where buildings within an identified cluster had no fuel consumption data, this has been calculated using recognised CIBSE heat consumption benchmarks for the building typology and the gross internal floor area of the building. In cases where the floor area was also unavailable this has been approximated. The estimated capacity required for each cluster has then been calculated using the recognised average number of hours that heat is required in a year (2250hrs/year).

6 Cluster Analysis for the London Borough of Bromley

From the data collection and analysis as part of this heat mapping process, only one DE opportunity cluster has been identified for the London Borough of Bromley. The identified cluster opportunity is visualised on the map in Figure 4 and is addressed in more detail in the following report sections.

It is also noted that there is an existing district heating scheme at The Walnuts in Orpington. This scheme is currently limited in its expansion potential due to its proximity to a major road and no significant additional heat loads in the vicinity from the data provided.

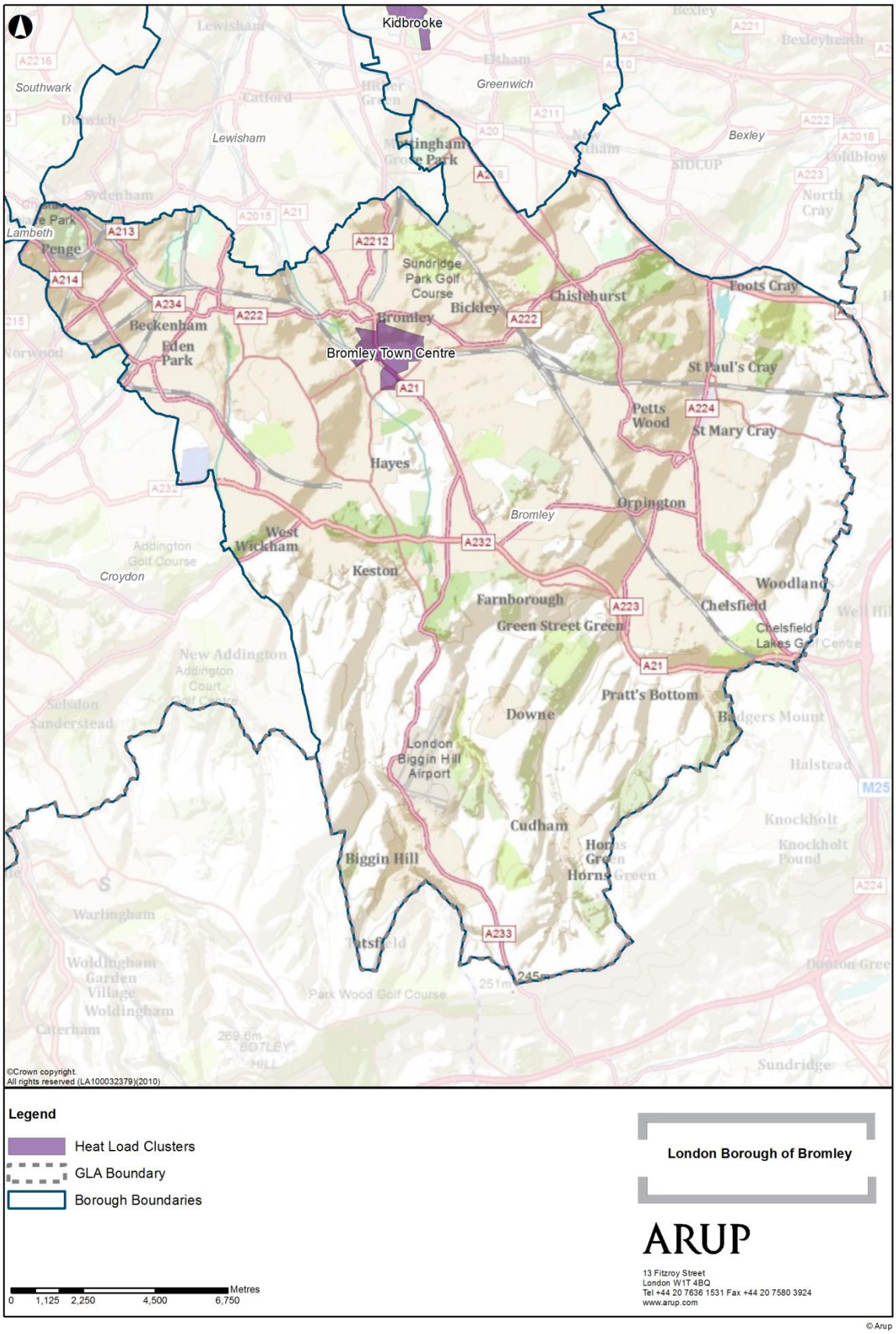

Figure 4: Identified heat cluster for the London Borough of Bromley

The heat cluster is described in more detail below. The descriptions are based on a desk top analysis of data provided by the borough and as such provide a high level indication of potential opportunities for DE schemes. It should be noted that site surveys were not carried out nor were any potential stakeholders contacted as part of this analysis. The cluster analysis represents potential opportunities that will require further feasibility and assessment before progressing to the next stage of development.

6.1 Bromley Town Centre Cluster

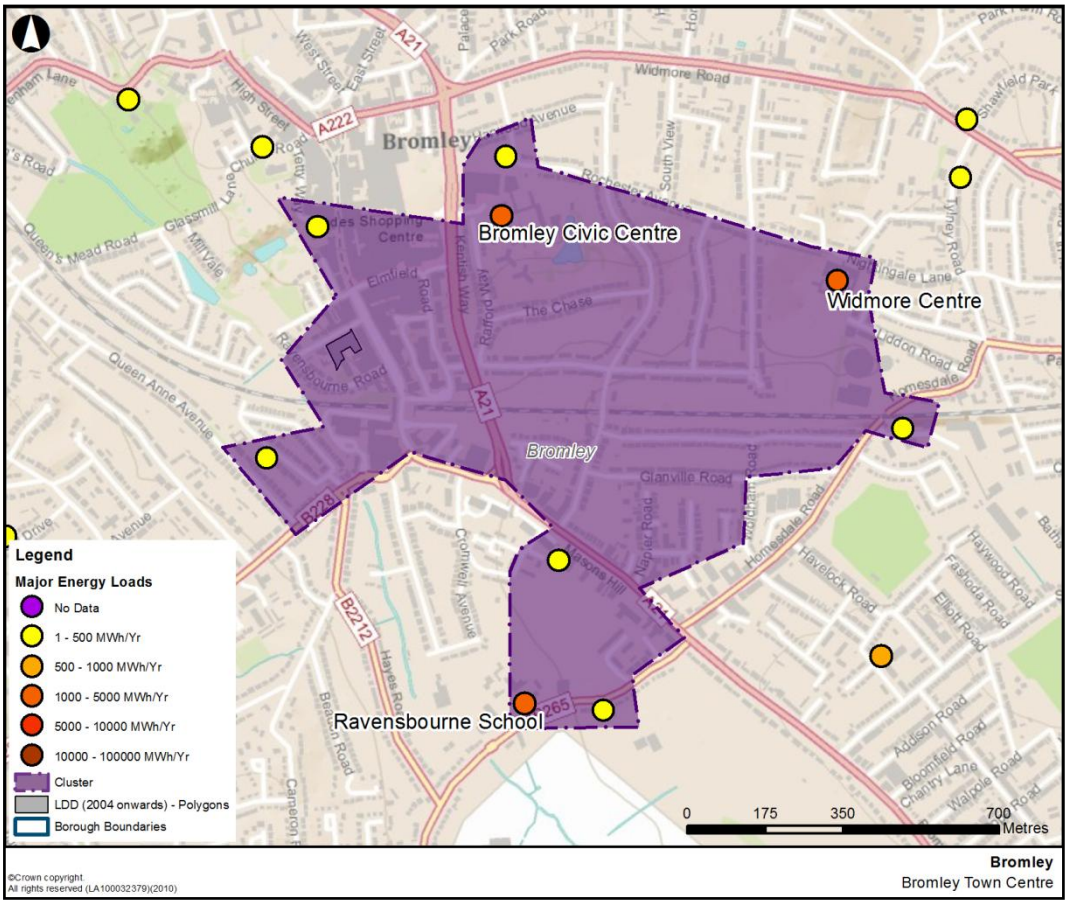

Figure 5: Bromley Town Centre Heat Cluster

The Bromley Town Centre cluster comprises 11 existing loads and one planned development totalling 5,647 MWh/yr of heat consumption. As can be seen in Figure 5, these loads are relatively spread out over an area reaching 2km across giving a low density of heat load and area. However, it is reasonable to assume that there are more appropriate typologies existing in the area that could be identified with further research, which is the key recommendation if taking this cluster forward.

The largest loads identified in this cluster, indicated on the above map are:

- Bromley Civic Centre (2,698MWh/yr)
- Ravensbourne School (1,721 MWh/yr)
- Widmore Centre (1,165 MWh/yr)

The heat load profiles for these buildings are unlikely to be suitable anchor load candidates. This is because schools and office buildings tend to have a high seasonal variation in thermal demand whereas an ideal anchor load would have a large demand with a constant load profile.

There may be a possible anchor load in the form of the Pavilion Leisure Centre which has a fuel consumption of (2,668MWh/yr). This sports facility is expected to have a relatively constant, high thermal demand due to the fact that it has a swimming pool, thus making it a more suitable anchor load. Spatial data was not available for this site so it cannot be mapped with the other sites; however, through discussion with the London Borough of Bromley, it has been identified as the most likely anchor load in this area.

The existing loads identified are mostly educational facilities, with a few local governmental buildings and a care home to add diversity to the cluster. Further investigation into other building typologies in the area is advisable to improve overall demand density and diversity. There are also physical constraints within the identified area relating to the railway line and the major road the A21 that would need to be considered in any further investigation.

It should also be noted that this cluster is in a wide catchment area within which smaller potential heat network(s) may exist, and if built out over time may connect together to make a bigger network. Again further investigation is recommended to understand this potential better.

Further steps:

- Explore the potential for district heating schemes in areas identified for development in the Bromley Town Centre Area Action Plan (e.g. Churchill Place, Site G) and in particular those sites which have been granted planning consent (e.g. Bromley South Central, Site K)
- Explore the vicinity for additional public / private loads that have not yet been captured in this analysis to add diversity to the cluster, in particular the identification of anchor loads
- Give consideration to the feasibility of any potential network crossing the railway and A21

Table 1: Existing buildings in the Bromley Town Centre cluster

Name	Ownership	Typology	Fuel Consumption (MWh/yr)
Bromley Civic Centre	Other public	Education facilities	2,698
The Ravensbourne School	Other public	Education facilities	1,721
The Widmore Centre	Other public	Local government estate	1,165
St Marks C of E Primary	Other public	Education facilities	456
Bertha James Day Centre		Education facilities	301
Bickley Primary School	Other public	Education facilities	287
Bromley Central Library	Other public	Education facilities	202
Bromley Youth Offending Team	Other public	Local government estate	87
Central Depot	Other public	Local government estate	53
St Blaise Care Home	Other public	NHS	37
		TOTAL Fuel Consumption	**7,007 MWh/yr**

Table 2: Planned developments in Bromley Town Centre Cluster

Name	Ownership	Typology	Benchmarked Fuel Consumption (MWh/yr)
Bromley Town Centre Area Action Plan	Not available	Mixed Use	Not available

Table 3: Summary of Existing and New Developments for Bromley Town Centre Cluster

Total Fuel Consumption	**7,007 MWh/yr**
Total Estimated Heat Demand	**5,605 MWh/yr**
Estimated Peak Heat Load	**2.50 MW**

7 Implementation Plan

This implementation plan has been developed from the clusters identified in the high level heat mapping study undertaken for the London Borough of Bromley. It summarises the technical opportunities, constraints and next steps from this analysis. It is not inclusive of any political or economic drivers or barriers.

DE Opportunity Area	Technical opportunity (Low/Medium/ High)	Constraints	Next Steps for delivering DE schemes
Bromley Town Centre	Medium	Railway and large A-road running through the cluster. Lack of diversity Lack of anchor loads Low demand density	Explore the potential for District Heating schemes in areas identified for development in the Bromley Town Centre Area Action Plan Explore the vicinity for additional public / private loads that have not yet been captured in this analysis to add diversity to the cluster, in particular the identification of anchor loads (e.g Glades Shopping Centre) Give consideration to the feasibility of any potential network crossing the railway and A21

8 Conclusions and Recommendations

Based on the data made available in this heat mapping exercise, the London Borough of Bromley has very limited opportunity in the way of district heat networks.

The study has identified an opportunity for a heat network within Bromley Town Centre. This opportunity cluster contains a few potential large heat loads, such as Bromley Civic Centre, the Ravensbourne School and the Widmore Centre which combined account for approximately 5584 MWh/yr of fuel consumption for heating. The majority of the rest of the cluster is made up of schools so there is limited diversity, but it is envisaged that because it is the town centre there may be other loads in the vicinity that could provide this, but are currently unknown.

It should also be noted that this identified cluster could also be considered as a wide catchment area within which smaller potential heat network(s) may exist, and if built out over time may connect together to make a bigger network. Potential new developments also exist in the area that have been identified in the Bromley Town Centre Area Action Plan.

At this stage a key recommendation for taking forward the Bromley Town Centre cluster would be for additional feasibility investigation work. This would enable the borough to acquire greater knowledge of other potential loads in the cluster area.

Apart from this potential opportunity the densities relating to building proximity and heat demands are relatively low and do not present opportunities for other district heat networks in the borough.

However, this does not mean that there are no potential opportunities in the borough to achieve the wider aims of decentralised energy schemes, namely; decarbonisation of the energy supply, resulting in reduced fuel poverty and increased security of supply.

Using the data from the London Borough of Bromley, the borough can be characterised as:

- A suburban region with energy loads relatively sparsely spread
- Few large publically owned energy loads (government offices, hospitals, schools, prisons)
- Few large energy sources (e.g. waste treatment plants, industrial processes, power plants)

The appropriate options for decentralised energy would therefore be focused on taking a more building level technical approach rather than a district level technical approach. The commercial aspects of a district level approach could still be applicable to achieve economies of scale.

The technical interventions that could potentially form part of a decentralised energy programme in the London Borough of Bromley may include:

For heat:

- Solar thermal
- Small scale biomass boilers
- Ground source heat pumps
- Air source heat pumps

For electricity:

- Photovoltaic panels (PV)
- Appropriately sized wind turbines

There may also be the opportunity for the borough to contribute to the decarbonisation of the national gas and electricity grids, perhaps through energy from waste mechanisms or other renewable resources.

To fully understand the potential for wider decentralised energy opportunities is outside the scope of this Heat Map report, which has specifically focused on the development of heat network. A more detailed renewable and low carbon energy resource study would be required to identify and analyse the potential for any such programmes of work within the borough. This could also enable the London Borough of Bromley to identify a suitable addition to any proposed Community Infrastructure Levy (CIL) that would allow the borough to fund carbon reduction infrastructure. The possibility of setting up a local carbon fund collected through the planning process could also be explored and quantified. Both of these approaches would enable the London Borough of Bromley to prioritise carbon reductions programs using new funding streams.

Appendix A

Populated Templates and Categories

A1 Populated Templates

A1.1.1 Major Heat Loads

OXS	OYS	Name	Address	Postcode	Ownership	New Development	Typology	Heating supply	Fuel source	Fuel consumption: all assets exc. CHP (MWh/yr)	Fuel consumption: CHP (MWh/yr)	Gross internal floor area (m2)	Number of dwellings	Installed thermal capacity: all assets exc. CHP (MWth)	CHP installed electrical capacity (MWe)	CHP installed thermal capacity (MWth)	CO2 emissions (tCO2/yr)	Year of Construction	Year of data collection	Start date	Completion date	Data Source	Confidentiality of data	Attach file	Borough	Real or estimated data?	Notes
547190	167604	208 High Street	208 HIGH STREET	BR5 4AX	-	-	Other Public Buildings	-	Natural gas	92	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
541676	169359	213 Widmore Road	213 WIDMORE ROAD	BR1 2RG	-	-	Other Public Buildings	-	Natural gas	3	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
546204	166394	50 Vinson Close	50 VINSON CLOSE	BR6 0EG	-	-	Other Public Buildings	-	Natural gas	36	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
546521	169375	85 Cotmandene Crescent	85 COTMANDENE CRESCENT	BR5 2RA	-	-	Other Public Buildings	-	Natural gas	46	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
535936	170118	Alexandra Infant School	KENT HOUSE ROAD	BR3 1JG	-	-	Education facilities	-	Natural gas	265	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
535892	170956	Alexandra Junior School	CATOR ROAD	SE26 5DS	-	-	Education facilities	-	Natural gas	50	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
534344	170050	Anerley Town Hall	174 ANERLEY ROAD	SE20 8BD	-	-	Local government estate	-	Natural gas	398	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
535912	170276	Anne Sutherland House	THESINGER ROAD	SE20 7NN	-	-	Other Public Buildings	-	Natural gas	268	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
542735	167443	Astley Training Centre	MAGPIE HALL LANE	BR2 8ED	-	-	Other Public Buildings	-	Natural gas	283	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
536507	169021	Balgowan Primary School	BALGOWAN ROAD	BR3 4HJ	-	-	Education facilities	-	Natural gas	420	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
545368	170915	Beaverwood School For Girls	BEAVERWOOD ROAD	BR7 6HE	-	-	Education facilities	-	Natural gas	1193	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
540758	168367	Bertha James Day Centre	BERTHA JAMES COURT	BR2 9HJ	-	-	Other Public Buildings	-	Natural gas	301	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
541384	168997	Bickley Primary School	NIGHTINGALE LANE	BR1 2SQ	-	-	Education facilities	-	Natural gas	287	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
541425	158590	Biggin Hill Children And Family Centre	SUNNINGVALE AVENUE	TN16 3TN	-	-	Education facilities	-	Natural gas	57	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
542282	159261	Biggin Hill Primary School	OLD TYE AVENUE	TN16 3LY	-	-	Education facilities	-	Natural gas	452	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
542408	166806	Bishop Justus Coe School	MAGPIE HALL LANE	BR2 8HZ	-	-	Education facilities	-	Natural gas	1317	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-

OXS	OYS	Name	Address	Postcode	Ownership	New Development	Typology	Heating supply	Fuel source	Fuel consumption: all assets exc. CHP (MWh/yr)	Fuel consumption: CHP (MWh/yr)	Gross internal floor area (m2)	Number of dwellings	Installed thermal capacity: all assets exc. CHP (MWth)	CHP installed electrical capacity (MWe)	CHP installed thermal capacity (MWth)	CO2 emissions (tCO2/yr)	Year of Construction	Year of data collection	Start date	Completion date	Data Source	Confidentiality of data	Attach file	Borough	Real or estimated data?	Notes
547393	165878	Blenheim Primary School	BLENHEIM ROAD	BR6 9BH	-	-	Education facilities	-	Natural gas	724	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
540217	169118	Bromley Central Library	110 HIGH STREET	BR1 1EX	-	-	Other Public Buildings	-	Natural gas	202	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
542356	172305	Bromley Childrens Fund	13 BELVOIR CLOSE	SE9 4TD	-	-	Other Public Buildings	-	Natural gas	7	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
540629	169142	Bromley Civic Centre	STOCKWELL CLOSE	BR1 3UH	-	-	Local government estate	-	Natural gas	2698	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
539946	169732	Bromley Community Drug Project	35 LONDON ROAD	BR1 3QR	-	-	Other Public Buildings	-	Natural gas	79	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
544610	163420	Bromley Environment Education Centre	HIGH ELMS COUNTRY PARK	BR6 7JH	-	-	Education facilities	-	Natural gas	65	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
539227	170774	Bromley Hill Cemetery	BROMLEY HILL	BR1 4JU	-	-	Other Public Buildings	-	Natural gas	0	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
537511	169608	Bromley Road Infant School	ST GEORGES ROAD	BR3 5JG	-	-	Education facilities	-	Natural gas	252	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
-	-	Bromley Town Hall	30 TWEEDY ROAD	BR1 3FE	-	-	Local government estate	-	Natural gas	366	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
543205	167655	Bromley Youth Music Trust	SOUTHBOROUGH LANE	BR2 8AA	-	-	Other Public Buildings	-	Natural gas	225	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
-	-	Bromley Youth Offending Team	8 MASONS HILL	BR2 9EY	-	-	Other Public Buildings	-	Natural gas	87	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
542383	169863	Bullers Wood School	ST NICOLAS LANE	BR7 5LJ	-	-	Education facilities	-	Natural gas	1060	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
540627	170993	Burnt Ash Library	BURNT ASH LANE	BR1 5AF	-	-	Other Public Buildings	-	Natural gas	22	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
539928	171096	Burnt Ash Primary School	RANGEFIELD ROAD	BR1 4QX	-	-	Education facilities	-	Natural gas	737	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
547748	165554	Burwood School	AVALON ROAD	BR6 9BD	-	-	Education facilities	-	Natural gas	369	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
542161	171467	Castlecombe Primary School	CASTLECOMBE ROAD	SE9 4AT	-	-	Education facilities	-	Natural gas	302	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
542161	171467	Castlecombe Youth Centre	CASTLECOMBE ROAD	SE9 4AT	-	-	Education facilities	-	Natural gas	116	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
536154	170469	Cator Park School For Girls	LENNARD ROAD	BR3 1QR	-	-	Education facilities	-	Natural gas	1293	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-

OXS	OYS	Name	Address	Postcode	Ownership	New Development	Typology	Heating supply	Fuel source	Fuel consumption: all assets exc. CHP (MWh/yr)	Fuel consumption: CHP (MWh/yr)	Gross internal floor area (m2)	Number of dwellings	Installed thermal capacity: all assets exc. CHP (MWth)	CHP installed electrical capacity (MWe)	CHP installed thermal capacity (MWth)	CO2 emissions (tCO2/yr)	Year of Construction	Year of data collection	Start date	Completion date	Data Source	Confidentiality of data	Attach file	Borough	Real or estimated data?	Notes
541531	168664	Central Depot	THE AVENUE	BR1 2QX	-	-	Other Public Buildings	-	Natural gas	53	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
542621	159304	Charles Darwin School	JAIL LANE	TN16 3AU	-	-	Education facilities	-	Natural gas	1051	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
548105	164280	Chelsfield Primary School	WARREN ROAD	BR6 6EP	-	-	Education facilities	-	Natural gas	146	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
544263	169997	Chislehurst COE Primary School	SCHOOL ROAD	BR7 5PQ	-	-	Education facilities	-	Natural gas	86	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
543518	171152	Chislehurst Library	RED HILL	BR7 6DA	-	-	Other Public Buildings	-	Natural gas	113	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
540092	169297	Church House Gardens	CHURCH ROAD	BR2 0EG	-	-	Other Public Buildings	-	Natural gas	34	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
535996	169285	Churchfields Primary School	CHURCHFIELDS ROAD	BR3 4QR	-	-	Education facilities	-	Natural gas	569	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
535968	169207	Churchfields Road Depot	CHURCHFIELDS ROAD	BR3 4QY	-	-	Other Public Buildings	-	Natural gas	82	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
538367	169148	Clare House Primary School	OAKWOOD AVENUE	BR3 6PJ	-	-	Education facilities	-	Natural gas	188	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
534990	170275	Community Vision Children And Family Centre	WOODBINE GROVE	SE20 8UX	-	-	Education facilities	-	Natural gas	256	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
544319	169675	Coopers Technology College	HAWKWOOD LANE	BR7 5PS	-	-	Education facilities	-	Natural gas	863	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
546604	169287	Cotmandene Children And Family Centre	105-107 COTMANDENE CRESCENT	BR5 2RB	-	-	Other Public Buildings	-	Natural gas	26	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
546506	169318	Cotmandene Community Resource Centre	65 COTMANDENE CRESCENT	BR5 2RG	-	-	Other Public Buildings	-	Natural gas	31	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
544676	167117	Crofton Infant School	TOWNCOURT LANE	BR5 1EJ	-	-	Education facilities	-	Natural gas	502	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
544659	167057	Crofton Junior School	TOWNCOURT LANE	BR5 1EL	-	-	Education facilities	-	Natural gas	609	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
533798	170694	Crystal Palace Park Grounds	CRYSTAL PALACE PARK ROAD	SE19 2AA	-	-	Other Public Buildings	-	Natural gas	6	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
543126	159305	Cudham Coe Primary School	JAIL LANE	TN16 3AX	-	-	Education facilities	-	Natural gas	182	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-

OXS	OYS	Name	Address	Postcode	Ownership	New Development	Typology	Heating supply	Fuel source	Fuel consumption: all assets exc. CHP (MWh/yr)	Fuel consumption: CHP (MWh/yr)	Gross internal floor area (m2)	Number of dwellings	Installed thermal capacity: all assets exc. CHP (MWth)	CHP installed electrical capacity (MWe)	CHP installed thermal capacity (MWth)	CO2 emissions (tCO2/yr)	Year of Construction	Year of data collection	Start date	Completion date	Data Source	Confidentiality of data	Attach file	Borough	Real or estimated data?	Notes
543731	164962	Darrick Wood Infant School	LOVIBONDS AVENUE	BR6 8ER	-	-	Education facilities	-	Natural gas	392	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
543731	164962	Darrick Wood Junior School	LOVIBONDS AVENUE	BR6 8ER	-	-	Education facilities	-	Natural gas	363	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
543731	164962	Darrick Wood School	LOVIBONDS AVENUE	BR6 8ER	-	-	Education facilities	-	Natural gas	1093	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
542079	172719	Dorset Road Infants School	DORSET ROAD	SE9 4QX	-	-	Education facilities	-	Natural gas	66	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
543246	161722	Downe Primary School	HIGH ELMS ROAD	BR6 7JN	-	-	Education facilities	-	Natural gas	142	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
547228	167514	Duke Youth Centre	PARK ROAD	BR5 4AS	-	-	Other Public Buildings	-	Natural gas	125	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
544123	171443	Edgebury Primary School	BELMONT LANE	BR7 6BL	-	-	Education facilities	-	Natural gas	49	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
542428	166644	Education Development Centre	CHURCH LANE	BR2 8LD	-	-	Education facilities	-	Natural gas	929	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
544496	164284	Farnborough Primary School	FARNBOROUGH HILL	BR6 7EQ	-	-	Education facilities	-	Natural gas	157	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
538999	165887	Glebe School	HAWES LANE	BR4 9AE	-	-	Education facilities	-	Natural gas	734	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
546929	169820	Grays Farm Primary School	GRAYS FARM ROAD	BR5 3AD	-	-	Education facilities	-	Natural gas	418	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
545879	163582	Green Street Green Primary School	VINE ROAD	BR6 6DT	-	-	Education facilities	-	Natural gas	380	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
543731	164962	Griffin Sensory Support Unit	LOVIBONDS AVENUE	BR6 8ER	-	-	Other Public Buildings	-	Natural gas	100	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
538809	166162	Hawes Down Infant School	THE MEAD	BR4 0BA	-	-	Education facilities	-	Natural gas	262	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
538809	166162	Hawes Down Junior School	THE MEAD	BR4 0BA	-	-	Education facilities	-	Natural gas	281	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
540495	166273	Hayes Library	HAYES STREET	BR2 7LH	-	-	Other Public Buildings	-	Natural gas	38	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
540813	166417	Hayes Primary School	GEORGE LANE	BR2 7LQ	-	-	Education facilities	-	Natural gas	195	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
540620	165814	Hayes School	WEST COMMON ROAD	BR2 7DB	-	-	Education facilities	-	Natural gas	1286	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-

OXS	OYS	Name	Address	Postcode	Ownership	New Development	Typology	Heating supply	Fuel source	Fuel consumption: all assets exc. CHP (MWh/yr)	Fuel consumption: CHP (MWh/yr)	Gross internal floor area (m2)	Number of dwellings	Installed thermal capacity: all assets exc. CHP (MWth)	CHP installed electrical capacity (MWe)	CHP installed thermal capacity (MWth)	CO2 emissions (tCO2/yr)	Year of Construction	Year of data collection	Start date	Completion date	Data Source	Confidentiality of data	Attach file	Borough	Real or estimated data?	Notes
539515	168422	Highfield Infant School	HIGHFIELD DRIVE	BR2 0RX	-	-	Education facilities	-	Natural gas	142	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
539390	168183	Highfield Junior School	SOUTH HILL ROAD	BR2 0RL	-	-	Education facilities	-	Natural gas	311	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
547161	166711	Hillside Primary School	DYKE DRIVE	BR5 4LZ	-	-	Education facilities	-	Natural gas	704	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
545698	165100	Holy Innocents Rc Primary School	MITCHELL ROAD	BR6 9JT	-	-	Education facilities	-	Natural gas	382	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
534388	169775	James Dixon Primary School	WILLIAM BOOTH ROAD	SE20 8BW	-	-	Education facilities	-	Natural gas	643	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
537430	168596	Kelsey Park Sports College	MANOR WAY	BR3 3SJ	-	-	Education facilities	-	Natural gas	601	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
546848	170207	Kemnal Technology College	SEVENOAKS WAY	DA14 5AA	-	-	Education facilities	-	Natural gas	1123	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
541406	164498	Keston Coe Primary School	LAKES ROAD	BR2 6BN	-	-	Education facilities	-	Natural gas	347	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
540858	168030	Kingswood Centre	HAYES LANES	BR2 9EA	-	-	Other Public Buildings	-	Natural gas	5	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
537798	167371	Langley Park School For Boys	HAWKSBROOK LANE	BR3 3BP	-	-	Education facilities	-	Natural gas	356	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
538021	167339	Langley Park School For Girls	HAWKSBROOK LANE	BR3 3BE	-	-	Education facilities	-	Natural gas	1735	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
546538	168730	Leesons Primary School	LEESONS HILL	BR5 2GA	-	-	Education facilities	-	Natural gas	668	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
546601	169891	Link Youth Centre	MIDFIELD WAY	BR5 2QL	-	-	Other Public Buildings	-	Natural gas	86	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
535074	170377	Malcolm Primary School	MALCOLM ROAD	SE20 8RH	-	-	Education facilities	-	Natural gas	450	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
547884	167977	Manor Oak Primary School	SWEEPS LANE	BR5 3PE	-	-	Education facilities	-	Natural gas	249	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
536046	168049	Marian Vian Primary School	SHIRLEY CRESCENT	BR3 4AZ	-	-	Education facilities	-	Natural gas	862	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
544319	169675	Marjorie Mcclure School	HAWKWOOD LANE	BR7 5PS	-	-	Education facilities	-	Natural gas	607	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
544154	170896	Mead Road Infants School	MEAD ROAD	BR7 6AD	-	-	Education facilities	-	Natural gas	77	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
546403	169518	Midfield Centre	CHIPPERFIELD ROAD	BR5 2QR	-	-	Other Public Buildings	-	Natural gas	1	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-

OXS	OYS	Name	Address	Postcode	Ownership	New Development	Typology	Heating supply	Fuel source	Fuel consumption: all assets exc. CHP (MWh/yr)	Fuel consumption: CHP (MWh/yr)	Gross internal floor area (m2)	Number of dwellings	Installed thermal capacity: all assets exc. CHP (MWth)	CHP installed electrical capacity (MWe)	CHP installed thermal capacity (MWth)	CO2 emissions (tCO2/yr)	Year of Construction	Year of data collection	Start date	Completion date	Data Source	Confidentiality of data	Attach file	Borough	Real or estimated data?	Notes
546460	170094	Midfield Primary School	GROVELANDS ROAD	BR5 3EG	-	-	Education facilities	-	Natural gas	936	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
542349	171797	Mottingham Community And Learning Shop	1-2 CRANLEY PARADE	SE9 4DZ	-	-	Other Public Buildings	-	Natural gas	4	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
542189	172874	Mottingham Library	31 MOTTINGHAM ROAD	SE9 4QZ	-	-	Other Public Buildings	-	Natural gas	78	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
542576	172101	Mottingham Primary School	RAVENSWORTH ROAD	SE9 4LW	-	-	Education facilities	-	Natural gas	435	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
544671	165209	Newstead Wood School For Girls	AVEBURY ROAD	BR6 9SA	-	-	Education facilities	-	Natural gas	1082	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
540484	166118	Norman Park	HAYES LANE	BR2 7BA	-	-	Other Public Buildings	-	Natural gas	1019	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
537549	166471	Oak Lodge Primary School	CHAMBERLAIN CRESCENT	BR4 0LJ	-	-	Education facilities	-	Natural gas	544	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
541298	159396	Oaklands Primary School	OAKLANDS LANE	TN16 3DN	-	-	Education facilities	-	Natural gas	355	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
545971	166089	Orchard Cottage	25 ORCHARD GROVE	BR6 0RX	-	-	Other Public Buildings	-	Natural gas	73	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
546394	166195	Orpington College Of Further Education	THE WALNUTS	BR6 0TE	-	-	Education facilities	-	Natural gas	291	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
546544	166499	Orpington Library	THE PRIORY	BR6 0HH	-	-	Other Public Buildings	-	Natural gas	213	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
540163	170377	Parish Coe Primary School	79 LONDON LANE	BR1 4HF	-	-	Education facilities	-	Natural gas	190	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
535396	170272	Penge Library	MAPLE ROAD	SE20 8HT	-	-	Other Public Buildings	-	Natural gas	34	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
544072	167635	Petts Wood Library	FRANKSWOOD AVENUE	BR5 1BP	-	-	Other Public Buildings	-	Natural gas	53	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
539479	167038	Pickhurst Junior School	PICKHURST LANE	BR4 0HL	-	-	Education facilities	-	Natural gas	593	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
546380	168100	Poverest Adult Education Centre	TILLINGBOURNE GREEN	BR5 2EX	-	-	Education facilities	-	Natural gas	283	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
546011	167882	Poverest Primary School	TILLINGBOURNE GREEN	BR5 2JD	-	-	Education facilities	-	Natural gas	1084	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
547450	161476	Pratts Bottom Primary School	HOOKWOOD ROAD	BR6 7NX	-	-	Education facilities	-	Natural gas	118	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-

OXS	OYS	Name	Address	Postcode	Ownership	New Development	Typology	Heating supply	Fuel source	Fuel consumption: all assets exc. CHP (MWh/yr)	Fuel consumption: CHP (MWh/yr)	Gross internal floor area (m2)	Number of dwellings	Installed thermal capacity: all assets exc. CHP (MWth)	CHP installed electrical capacity (MWe)	CHP installed thermal capacity (MWth)	CO2 emissions (tCO2/yr)	Year of Construction	Year of data collection	Start date	Completion date	Data Source	Confidentiality of data	Attach file	Borough	Real or estimated data?	Notes
542428	166644	Princes Plain Primary School	CHURCH LANE	BR2 8LD	-	-	Education facilities	-	Natural gas	154	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
541482	168152	Raglan Primary School	RAGLAN ROAD	BR2 9NL	-	-	Education facilities	-	Natural gas	662	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
541797	165342	Ravens Wood School	OAKLEY ROAD	BR2 8HP	-	-	Education facilities	-	Natural gas	318	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
543518	171152	Red Hill Primary School	RED HILL	BR7 6DA	-	-	Education facilities	-	Natural gas	431	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
536890	169718	Riverside Beckenham Asd Centre	2 HAYNE ROAD	BR3 4HY	-	-	Education facilities	-	Natural gas	184	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
547397	169337	Riverside School	MAIN ROAD	BR5 3HS	-	-	Education facilities	-	Natural gas	1142	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
535805	169952	Royston Primary School	HIGH STREET	SE20 7QR	-	-	Education facilities	-	Natural gas	670	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
546442	166282	Saxon Day Centre	LYCH GATE ROAD	BR6 0TJ	-	-	Other Public Buildings	-	Natural gas	6	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
541337	169854	Scotts Park Primary School	1 ORCHARD ROAD	BR1 2PR	-	-	Education facilities	-	Natural gas	208	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
537666	169509	Short Term Respite Care	45 BROMLEY ROAD	BR3 5JD	-	-	NHS	-	Natural gas	49	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
538816	168696	Shortlands Library	110 SHORTLANDS ROAD	BR2 0JP	-	-	Other Public Buildings	-	Natural gas	51	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
542395	167675	Southborough Library	SOUTHBOROUGH LANE	BR2 8AP	-	-	Other Public Buildings	-	Natural gas	65	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
543205	167655	Southborough Primary School	SOUTHBOROUGH LANE	BR2 8AA	-	-	Education facilities	-	Natural gas	597	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
538844	165283	Sparrows Den: Sports Pavilion 2	CORKSCREW HILL	BR4 9BB	-	-	Sport & Leisure facilities	-	Natural gas	100	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
542018	158995	Spitfire Youth Centre	CHURCH ROAD	TN16 3LB	-	-	Education facilities	-	Natural gas	209	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
535087	169672	St Anthonys Rc Primary School	GENOA ROAD	SE20 8ES	-	-	Education facilities	-	Natural gas	209	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
540640	169276	St Blaise Care Home	2 ST BLAISE AVENUE	BR1 3DA	-	-	NHS	-	Natural gas	37	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
541661	169228	St Georges Bickley Coe Primary School	TYLNEY ROAD	BR1 2RJ	-	-	Education facilities	-	Natural gas	264	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-

OXS	OYS	Name	Address	Postcode	Ownership	New Development	Typology	Heating supply	Fuel source	Fuel consumption: all assets exc. CHP (MWh/yr)	Fuel consumption: CHP (MWh/yr)	Gross internal floor area (m2)	Number of dwellings	Installed thermal capacity: all assets exc. CHP (MWth)	CHP installed electrical capacity (MWe)	CHP installed thermal capacity (MWth)	CO2 emissions (tCO2/yr)	Year of Construction	Year of data collection	Start date	Completion date	Data Source	Confidentiality of data	Attach file	Borough	Real or estimated data?	Notes
543870	167619	St James Rc Primary School	MAYBURY CLOSE	BR5 1BL	-	-	Education facilities	-	Natural gas	204	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
535369	170300	St Johns C of E Primary School	MAPLE ROAD	SE20 8HU	-	-	Education facilities	-	Natural gas	253	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
540989	170054	St Josephs Rc Primary School	PLAISTOW LANE	BR1 3JQ	-	-	Education facilities	-	Natural gas	133	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
540102	168598	St Marks Coe Primary School	AYLESBURY ROAD	BR2 0QR	-	-	Education facilities	-	Natural gas	456	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
547157	167453	St Mary Cray Primary School	HIGH STREET	BR5 4AR	-	-	Education facilities	-	Natural gas	286	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
538173	170174	St Marys Rc Primary School	WESTGATE ROAD	BR3 5DE	-	-	Education facilities	-	Natural gas	307	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
546558	165140	St Olaves And St Saviours Grammar School	GODDINGTON LANE	BR6 9SH	-	-	Education facilities	-	Natural gas	1397	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
547649	168474	St Pauls Cray Coe Primary School	BUTTERMERE ROAD	BR5 3WD	-	-	Education facilities	-	Natural gas	358	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
546140	169427	St Pauls Cray Library	MICKLEHAM ROAD	BR5 2RW	-	-	Other Public Buildings	-	Natural gas	48	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
545462	169221	St Peter And St Pauls Rc Primary School	ST PAULS WOOD HILL	BR5 2SR	-	-	Education facilities	-	Natural gas	498	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
547305	166927	St Philomena's Rc Primary School	CHELSFIELD ROAD	BR5 4DR	-	-	Education facilities	-	Natural gas	117	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
542204	171993	St Vincents Rc Primary School	HARTING ROAD	SE9 4JR	-	-	Education facilities	-	Natural gas	162	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
535163	168890	Stewart Fleming Primary School	WITHAM ROAD	SE20 7YB	-	-	Education facilities	-	Natural gas	376	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
534656	169942	Streetwise Youth Centre	1-3 ANERLEY STATION ROAD	SE20 8PY	-	-	Other Public Buildings	-	Natural gas	32	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
534796	169582	Sunrise Centre	2 BETTS WAY	SE20 8TZ	-	-	Other Public Buildings	-	Natural gas	176	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
540204	170332	The Elms Supported Living Unit For Ld	62 LONDON LANE	BR1 4HE	-	-	Other Public Buildings	-	Natural gas	65	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
547078	164431	The Highway Primary School	THE HIGHWAY	BR6 9DJ	-	-	Education facilities	-	Natural gas	284	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
547240	165902	The Priory School	TINTAGEL ROAD	BR5 4LG	-	-	Education facilities	-	Natural gas	1782	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-

OXS	OYS	Name	Address	Postcode	Ownership	New Development	Typology	Heating supply	Fuel source	Fuel consumption: all assets exc. CHP (MWh/yr)	Fuel consumption: CHP (MWh/yr)	Gross internal floor area (m2)	Number of dwellings	Installed thermal capacity: all assets exc. CHP (MWth)	CHP installed electrical capacity (MWe)	CHP installed thermal capacity (MWth)	CO2 emissions (tCO2/yr)	Year of Construction	Year of data collection	Start date	Completion date	Data Source	Confidentiality of data	Attach file	Borough	Real or estimated data?	Notes
540682	168046	The Ravensbourne School	HAYES LANE	BR2 9EH	-	-	Education facilities	-	Natural gas	1721	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
541384	168997	The Widmore Centre	NIGHTINGALE LANE	BR1 2SQ	-	-	Other Public Buildings	-	Natural gas	1165	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
544913	165067	Tubbenden Primary School	SANDY BURY	BR6 9SD	-	-	Education facilities	-	Natural gas	624	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
537774	167753	Unicorn Primary School	CRESWELL DRIVE	BR3 3AL	-	-	Education facilities	-	Natural gas	212	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
539791	169404	Valley Primary School	BECKENHAM LANE	BR2 0DA	-	-	Education facilities	-	Natural gas	383	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
545739	164420	Warren Road Primary School	WARREN ROAD	BR6 6JF	-	-	Education facilities	-	Natural gas	776	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
538611	165881	West Wickham Library	GLEBE WAY	BR4 0SH	-	-	Other Public Buildings	-	Natural gas	87	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
539994	164918	Wickham Common Primary School	GATES GREEN ROAD	BR4 9DG	-	-	Education facilities	-	Natural gas	340	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
535358	169648	Winsford House	GARDEN ROAD	SE20 7RN	-	-	Other Public Buildings	-	Natural gas	54	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
542112	170158	Wood Lodge Living Skills Centre	1-2 LARCH COURT	BR1 2WA	-	-	Other Public Buildings	-	Natural gas	12	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-
537322	170426	Worsley Bridge Junior School	BRACKLEY ROAD	BR3 1RF	-	-	Education facilities	-	Natural gas	382	-	-	-	-	-	-	-	-	2012	-	-	-	-	-	Bromley	-	-

A2 London Heat Map heat Load Typologies

The London Heat Map categorises heat loads in accordance with the previous DEMaP database provided by the LDA.

The London Heat Map's categories are listed below:

- [Residential] Multi-Address buildings (>49 per building)
- Sport & Leisure Facilities
- Prisons
- Hotels (>99 units or 4,999m²)
- Educational Facilities
- Police Stations
- Fire Stations
- NHS
- Museums and art galleries
- Central government estate
- Local government estate
- Religious Buildings
- Private residential units (>149 units or 9,999m²)
- Private commercial units (>9,999m²)
- Social Housing Estate
- Other Public Buildings

Buildings with small loads have not been included in this categorisation. This is because their thermal demand is considered big enough to influence the potential of identifying a district heat network opportunity.