



Mayor of London

London Heat Map +
Heat Mapping Study - London
Borough of Hounslow

REP-Hounslow/01

Issue | 29 March 2012



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Appendices

Appendix A

Populated Template and London Heat Map Heat Load typologies

A1 Populated Template

A2 London Heat Map Heat Load Typologies

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 Hounslow is one such Borough.

The heat load and supply data used for the London Heat Map has been sourced by the London Borough of Hounslow and supplemented by additional data retrieved 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.

Within the London Borough of Hounslow at least two clusters with the opportunity for the development of significant DE schemes have been identified; these being in the Hounslow Town Centre and Brentford areas. A cluster with cross-borough potential with the London Borough of Richmond-Upon-Thames has also been identified, which could harness waste heat from the soon-to-expand Combined Heat and Power (CHP) plant at the Mogden Sewage Works near Isleworth. In total, seven clusters of varying levels of opportunity are identified and discussed, with recommendations for the next steps in delivering these schemes highlighted in an Implementation Plan developed in collaboration with the London Borough of Hounslow.

Following on from these identified opportunities, the London Borough of Hounslow have assigned "High" priorities for the Hounslow Town Centre and Brentford clusters, having taken into account heat loads, council priorities and scheme feasibilities.

Further to the findings of the heat mapping study in the London Borough of Hounslow, it is recommended that the Borough also consider other decentralised energy interventions that may be better suited to its characterisation as a suburban region with energy loads relatively sparsely spread. These could include technologies such as solar thermal, biomass boilers or ground source heat pumps, but it is recommended that 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 decentralised energy

This report outlines the potential opportunities for decentralised energy in the London Borough of Hounslow and should be read alongside the Borough's evidence base for Carbon Reduction Policies¹. To compile it, Arup consultant engineers worked in partnership with the London Borough of Hounslow to carry out the data collection and analysis to identify opportunities for decentralised energy.

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 Hounslow.

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

A section on the opportunities within the Borough for implementing public building retrofit through the GLA's RE:FIT programme is also included in this report.

¹ Evidence Base for Carbon Reduction Policies (February 2010) - http://www.hounslow.gov.uk/evidence_base_carbon_reduction_policies.pdf

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 CO₂ 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 emissions²; 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, Decentralised Energy (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.

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

In 2009 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 Agency³ (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.

² Building Britain: The path to sustainable growth for the built environment (2012). Aldersgate Group.

³ 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.

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 which was used to populate the London Heat Map (Figure 1).

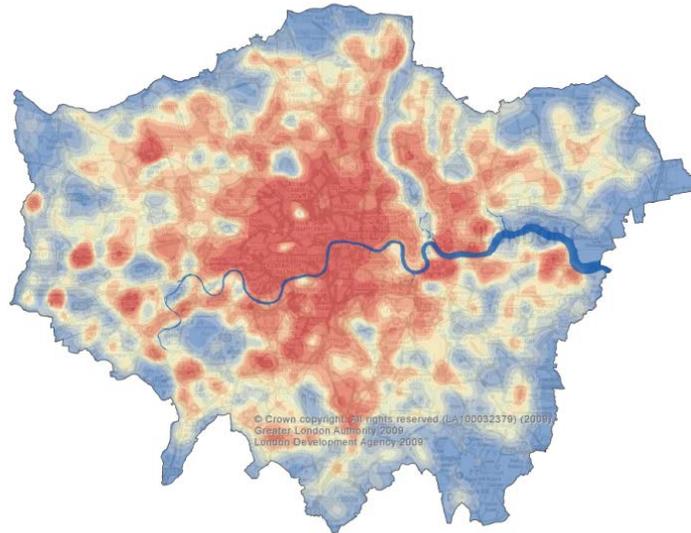


Figure 1: The London Heat Map, as viewable at www.londonheatmap.org.uk

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.

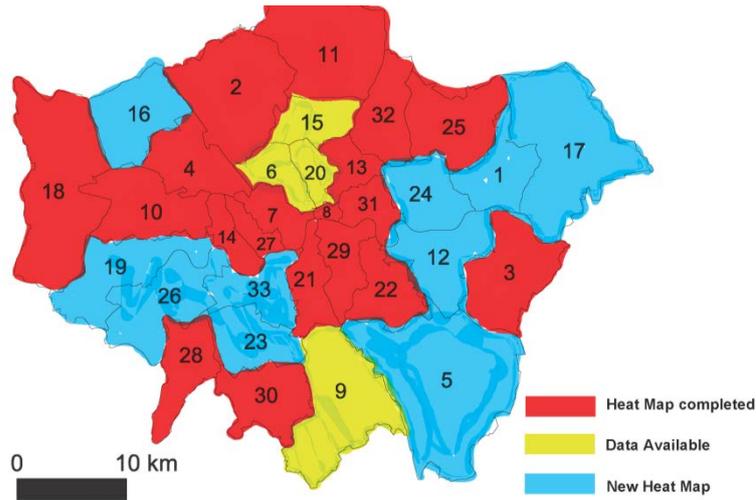


Figure 2: The Heat mapping status of London Boroughs.

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

1. London Borough of Barking and Dagenham
5. London Borough of Bromley
7. City of Westminster
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

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 carbon (GHG) emission, 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 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 emissions

This policy sets out a range of CO₂ 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:
 - major heat loads (including anchor heat loads, with particular reference to sites such as universities, hospitals and social housing)
 - major heat supply plant
 - possible opportunities to utilise energy from waste
 - possible heating and cooling network routes
 - implementation options for delivering feasible projects, considering issues of procurement, funding and risk and the role of the public sector.

3.3 Borough policy

Local planning policy for the London Borough of Hounslow is contained within the 'Development Plan'. The Development Plan for the Borough comprises of the saved policies in the Council's Unitary Development Plan (UDP)⁴, Employment Development Plan Document (EDPD)⁵, Brentford Area Action Plan (BAAP)⁶ and the London Plan.

Work has commenced on the borough's Core Strategy, with consultation on the Core Strategy 'Preferred Strategy'⁷ undertaken in July – October 2011. This Heat Mapping Study will provide the evidence that identifies and supports opportunities for decentralised energy in the Borough, which may be identified and implemented through the Core Strategy and associated documents. This study also supports the aspirations to create a town centre wide decentralised energy network in Hounslow Town Centre (Draft Hounslow Town Centre Supplementary Planning Document, February 2012)⁸.

The borough's social housing is managed by Hounslow Homes ALMO (Arms Length Management Organisation). Hounslow Homes' vision is to play a key role in contributing to a vibrant, inclusive, safe and a sustainable modern London borough. The socially, environmentally and financially responsible management of energy and carbon emissions from both the properties that Hounslow Homes manage and the operations that they deliver is fundamental to achieving the vision of a sustainable borough.

Hounslow Homes aspire to be a low carbon ALMO by reducing their carbon emissions, and are motivated by the desire to minimise Hounslow's impact on global warming.

⁴ London Borough of Hounslow Unitary Development Plan (December 2003):
http://www.hounslow.gov.uk/index/environment_and_planning/planning_policy/udp/udp_download.htm

⁵ London Borough of Hounslow Employment Development Plan Document (November 2008):
<http://www.hounslow.gov.uk/employmentdpd.pdf>

⁶ London Borough of Hounslow, Brentford Area Action Plan (January 2009):
<http://www.hounslow.gov.uk/baap.pdf>

⁷ London Borough of Hounslow Core Strategy – Preferred Strategy (July 2011):
http://www.hounslow.gov.uk/core_strategy_jul11.pdf

⁸ Hounslow Town Centre Master plan (February 2012):
http://www.hounslow.gov.uk/hounslow_masterplan_feb2012.pdf

Hounslow Homes aim to adopt an approach to domestic energy and carbon management which demonstrates their commitment to reducing energy demand, improving efficiency and exploring new energy opportunities for the properties that they manage. Hounslow Homes also have an aspiration to ensure that all their residents can afford to heat their homes. By embracing the need to undertake eco-retrofits, connect to decentralised energy networks, install renewable / low carbon energy sources, tackle fuel poverty and deliver affordable warmth. Hounslow Homes has a clear focus to provide warm, comfortable and affordable homes. Tenants will be financially better off and have improved health. The homes will be easier to let and have increased asset value and lower management and maintenance costs.

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" below, or can be viewed in more detail on the London Heat Map's vision layer (www.londonheatmap.org.uk).

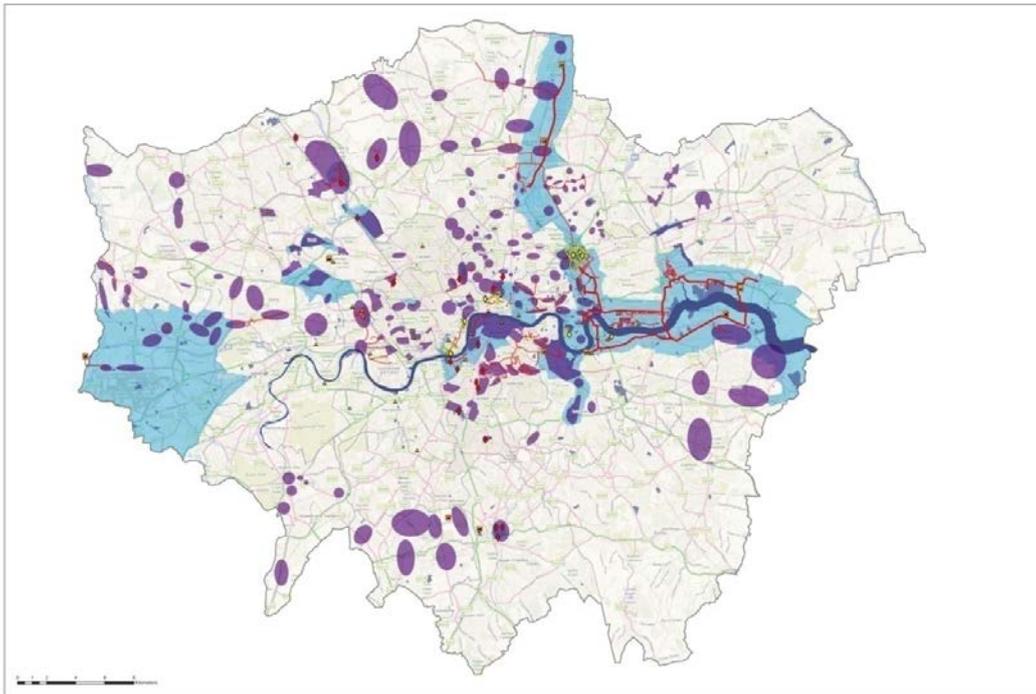


Figure 3: The Decentralised Energy for London "Vision Map" 2012

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 Hounslow 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 existing and already planned heat loads, heat supply plants and district heating networks.

Some data points within the London Borough of Hounslow 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 Hounslow, 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 A.

An inception meeting was held in the Hounslow Civic Centre on 27th January 2012 with representatives from the London Borough of Hounslow. Ajit Bansal, Environmental Strategy Officer; Laura Shellard, Energy Efficiency Officer (Private Sector Housing); and Rory Prendergast, Environmental Advisor attended this meeting. Following the meeting, the London Borough of Hounslow carried out the data gathering exercise for heat mapping.

The full data set provided is available in Appendix A.

5.2 Phase 2: Identifying opportunities for potential DH networks

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 Hounslow, 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 Hounslow 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 Hounslow wish to investigate the cluster opportunity further.

Where buildings within an identified cluster had no fuel consumption data, this has been calculated using recognised industry 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 Hounslow

The clusters for the London Borough of Hounslow have been identified and visualised on the map in Figure 4 through the methodology for Phases 1 and 2 of the heat mapping process. Seven clusters have been identified. Each cluster is addressed in more detail in the following report sections.

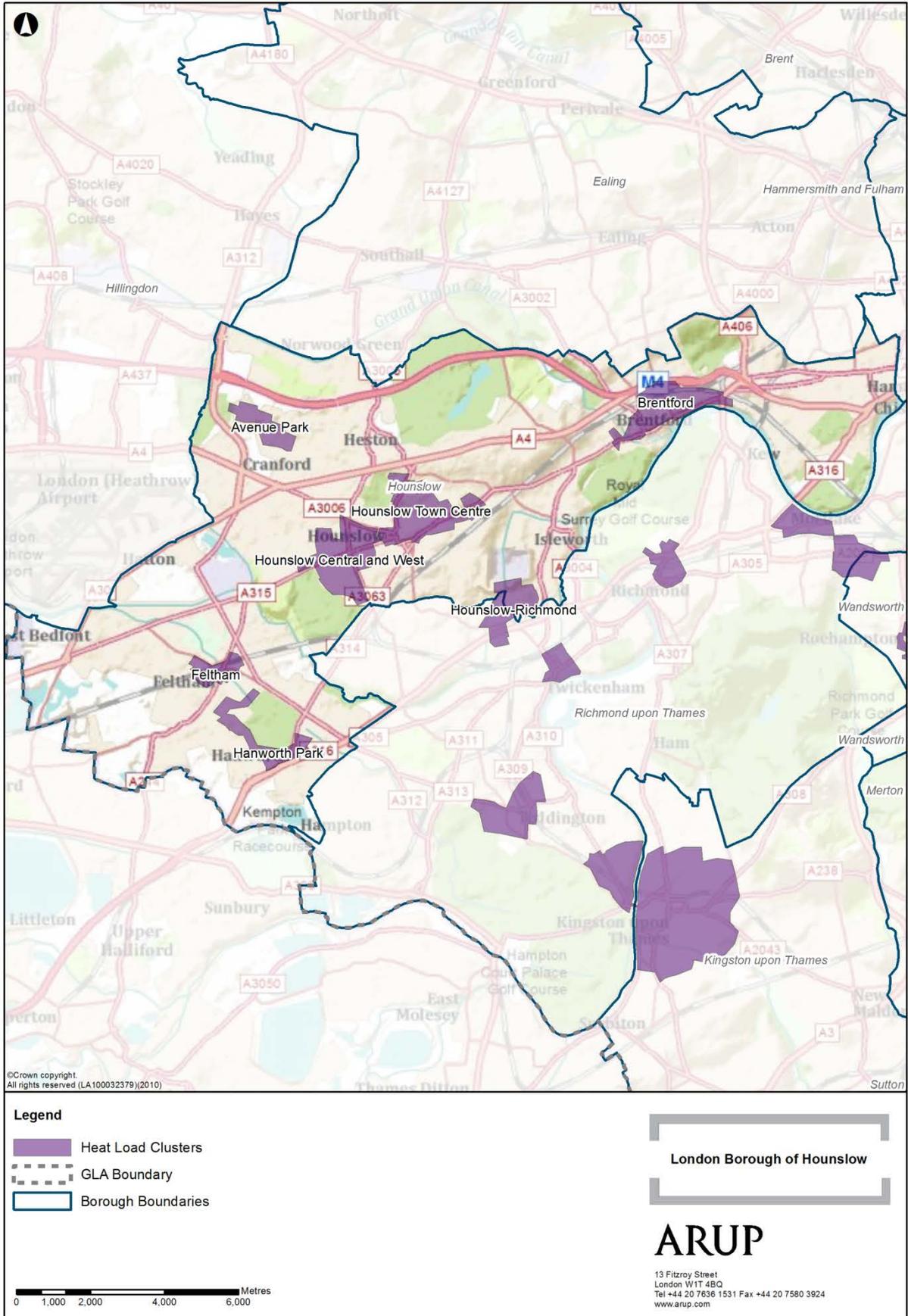


Figure 4: Identified heat clusters for the London Borough of Hounslow

6.1 Heat Clusters within the London Borough of Hounslow

The main data source for the London Borough of Hounslow was fuel consumption taken from meter readings for local government-operated housing estates and corporate council buildings (this includes: civic centre, town halls, community halls, schools, leisure centre, libraries etc).

As a result, the majority of the clusters identified are based around those housing estates and corporate council buildings with data, taking into account other information where available.

In general, the social housing estates present good opportunities for connection to a DH network, as the majority are served by communal boilers, meaning individual users may avoid changes inside their flats. Similarly, the corporate council buildings are served by central boilers and so offer good potential for connection to DH networks.

Each of the clusters 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.

6.1.1 Central and West Hounslow Cluster

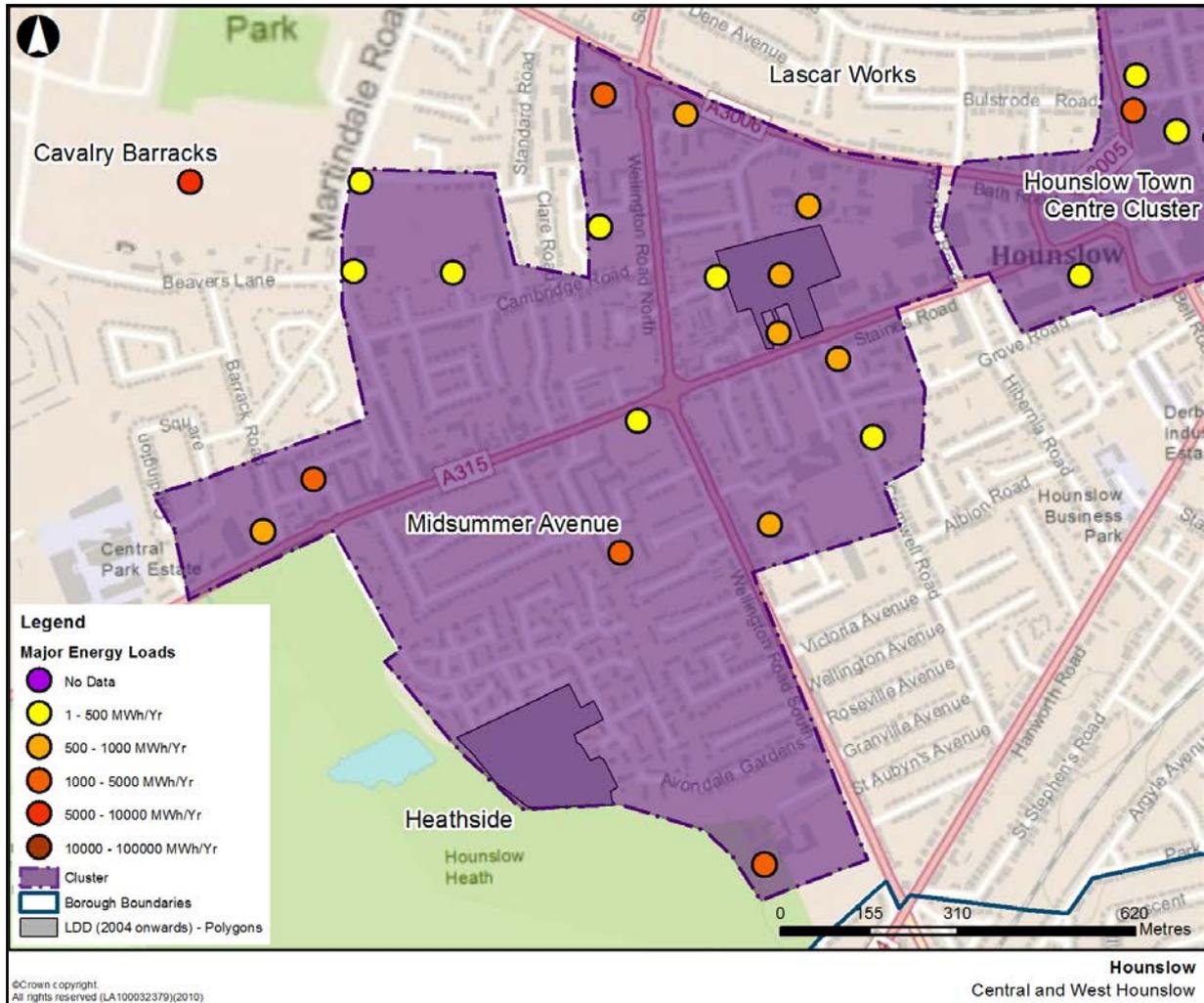


Figure 5: Central and West Hounslow Heat Cluster (left)

The Central and West Hounslow cluster concerns seventeen existing loads and two new developments. As can be seen in Figure 5, while some of these loads are close to one another, particularly in the north-east of the cluster, overall they are relatively spread out giving a lower density. The considerable total fuel consumption of this cluster (see Table 1) goes some way to compensating for this. Further potential for this cluster comes from the adjacent Hounslow Town Centre Cluster (discussed in Section 6.1.2).

New developments are sourced from the London Development Database (GLA), already represented on the London Heat Map. Desktop research has determined that the private development at Heathside, Vickers Way, Hounslow, is now complete. Planning permission for the Lascar Works Site has been granted by Hounslow Council and construction has started with over half the housing development now complete (proposed completion 2012/13). Annual fuel consumption for both these developments has been benchmarked. Additionally, the potential Cavalry Barracks site development (UDP Site H4, as per the London Strategic Housing Land Availability Assessment and Housing Capacity Study (SHLAA/HCS), 2009) has an identified capacity of 931 units, which could add a

further significant fuel consumption of around 5,668 MWh/yr to the scheme if it was linked with this cluster, and could contribute funds to its development.

At this stage the boiler house at Maitland Close, representing the largest annual consumption for the cluster, might be an appropriate location for the energy centre for any eventual network within this cluster. Another option could be the boiler house at Midsummer Avenue Estate, as this is somewhat more central to the cluster. All residential buildings have been identified as using central boilers, which would likely make them all appropriate for connection to a DH network, depending on the age of plant.

As mentioned previously, this cluster has a high annual fuel consumption, and the identified load typologies represent a good level of diversity, with a mix of mainly residential and educational typologies meaning that a large CHP engine (in the range of 6.5 MW_{th}, see Table 2) could be utilised, giving the potential for favourable economics.

The nearby Hounslow Town Centre Cluster, which is currently identified by the Hounslow Town Centre Master Plan (February 2012)⁹ as suitable for a DH network development, presents opportunities for both clusters. If both clusters were to be built out, there would be the potential for inter-connection at some point in time to enhance overall scheme economics and reliability; this could be allowed for with appropriately future-proofed network design. Alternatively, should only one of the two clusters be taken forward, depending on economics it could be appropriate to harness some of the nearby loads identified in the adjacent cluster.

Further steps:

- Engage with potential anchor loads, determining plant-replacement dates for all communally heated estates
- Explore the vicinity for additional public / private loads that have not yet been captured in this analysis to add further demand and diversity to the cluster

⁹ Hounslow Town Centre Master plan (February 2012):
http://www.hounslow.gov.uk/hounslow_masterplan_feb2012.pdf

Table 1: Existing buildings in Central and West Hounslow Cluster

| Name | Ownership | Typology | Fuel Consumption (MWh/yr) |
|--|------------------|--|---------------------------|
| Maitland Close Estate And Cooper House | Other public | Social Housing Estate | 3,170 |
| Tivoli Road | Other public | Social Housing Estate | 2,826 |
| Midsummer Avenue | Other public | Social Housing Estate | 2,366 |
| The Heathland School | Local government | Education facilities | 2,061 |
| St Marks Catholic School | Local government | Education facilities | 967 |
| Heathside (Former Metropolitan Police Riot Training Centre)* | Not Available | Residential | 954 |
| Boswood Court | Other public | Social Housing Estate | 814 |
| Lascar Works Site ⁺ | Private | Social Housing Estate | 731 |
| Sycamore Court | Other public | Social Housing Estate | 629 |
| Shalimar Hotel | Private | Hotels (> 99 units or 4,999 m ²) | 590 |
| Heath Court | Other public | Social Housing Estate | 552 |
| Frogley House | Other public | Social Housing Estate | 516 |
| Old Farm Close | Other public | Social Housing Estate | 499 |
| Hounslow Education Centre | Local government | Education facilities | 460 |
| St Michael And St Martin RC Primary | Local government | Education facilities | 370 |
| Hounslow Heath Infant And Nusery | Local government | Education facilities | 338 |
| Grove Road Primary | Local government | Education facilities | 258 |
| Hounslow Heath Junior | Local government | Education facilities | 246 |
| Wellington Day Centre | Local government | Local government estate | 34 |
| TOTAL Fuel Consumption | | | 18,381 MWh/yr |

*Benchmarked based on industry standards;

⁺ Development under construction, benchmarked based on industry standards

Table 2: Summary of loads for Central and West Hounslow Cluster

| | |
|------------------------------------|----------------------|
| Total Fuel Consumption | 18,381 MWh/yr |
| Total Estimated Heat Demand | 18,704 MWh/yr |
| Estimated Peak Heat Load | 6.54 MW |

6.1.2 Hounslow Town Centre Cluster

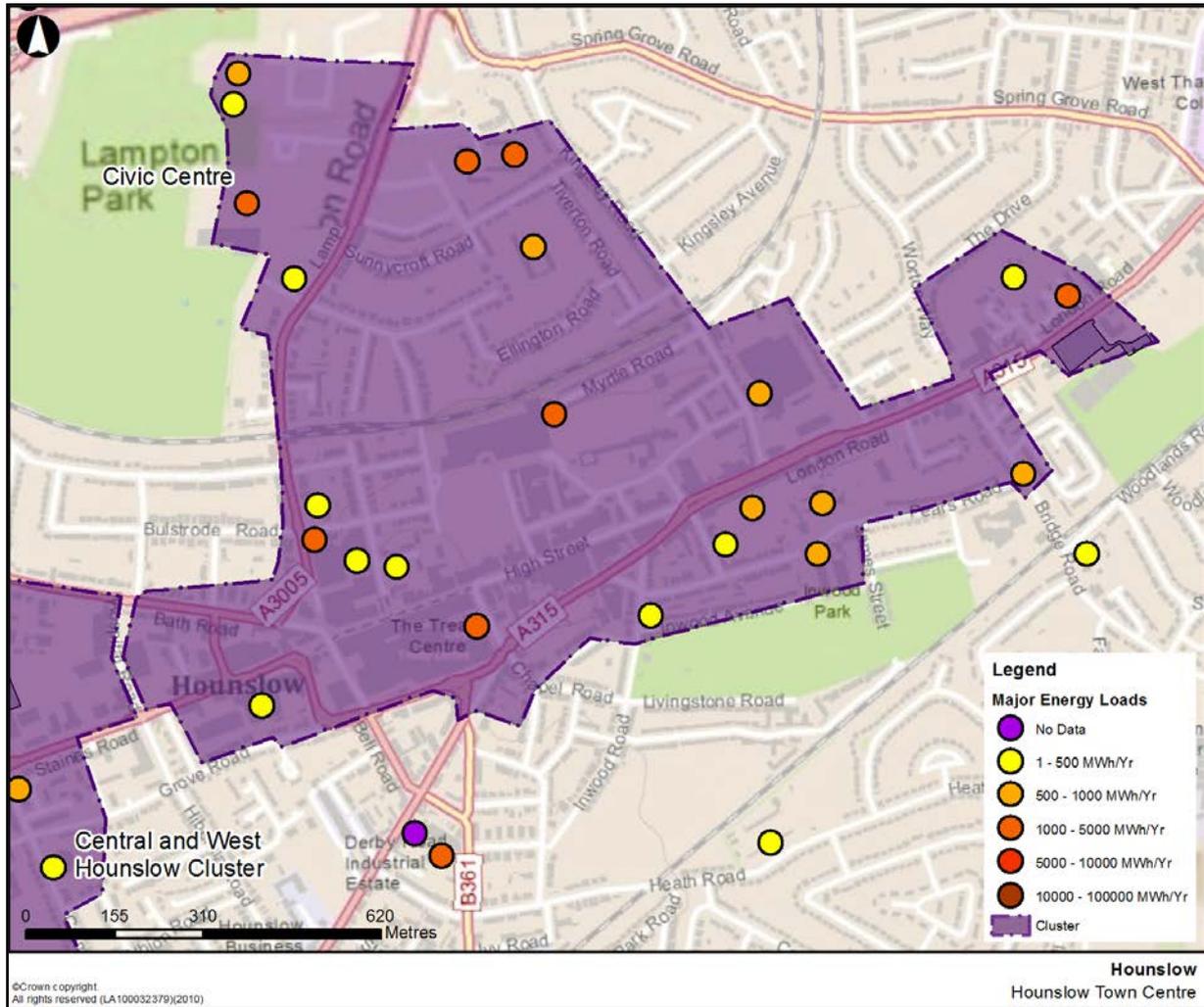


Figure 6: Hounslow Town Centre Heat Cluster

6.1.2.1 Hounslow Town Centre Heat Cluster

The London Borough of Hounslow has recently published a master plan for Hounslow Town Centre which includes a vision for a DE scheme. This scheme is described in more details in Section 6.1.2.2 below. Arup independently identified this cluster using the standardised heat mapping process used for the London Heat Map, which is described below. A comparative review of both analyses is provided in Section 6.1.2.3.

The Hounslow Town Centre Cluster contains 21 existing buildings and four buildings in various stages of planning, which have been benchmarked. As can be seen from Table 3, whilst some of the loads in the cluster are quite spread apart, they combine to give a high total annual fuel consumption. Diversity in the cluster is very good, with nearly all possible building typologies represented; the estimated total heat load of just under 8 MW_{th} would allow for a significantly sized CHP engine to serve this cluster.

The clear potential anchor load at this time is the Civic Centre, with annual fuel consumption of over 4,000 MWh. Its central boiler house could possibly be used

as the energy centre for the scheme, however if it the whole cluster were indeed to be incorporated, it is possible that a dedicated, standalone building might be required due to the size.

In terms of ownership, the majority of buildings are under some form of public influence, which could allow for greater simplicity in managing stakeholders in the development of any eventual scheme.

The new developments outlined in Table 4 are quite spread out around the cluster, and are not insignificant in their contribution to the total cluster heat load. If these progress through the planning stages there exists the potential to secure developer contributions to assist with the build-out of any DH network, and a requirement to connect to the scheme could be incorporated as well.

As highlighted in Section 6.1.1, the Central and West Hounslow cluster is very nearby to this cluster, and would have the potential for inter-connection or the donation of additional loads to this scheme if either were to go ahead, which could go some way to improving scheme economics.

6.1.2.2 Hounslow Town Centre Master Plan

The previous section serves to confirm the potential of the Town Centre Cluster as an area suitable for the development of a DE scheme. As described in the adopted Hounslow Town Centre Master Plan (February 2012)¹⁰, the existing energy evidence base for the Core Strategy has found that the town centre area (representing a slightly smaller sub-area of the cluster defined above) is appropriate for a possible combined cooling, heat and power scheme, with likely development phasing having already been considered.

A strategy for the implementation of DE networks in the Town Centre Cluster (as outlined in Figure 7) has been developed, containing the following key principles (verbatim):

- 1. A town centre wide decentralised energy network should be created, with new developments either implementing or contributing towards the implementation of the infrastructure.*
- 2. The delivery of the network should be phased to provide a decentralised source for all major developments.*
- 3. Energy centres serving major developments should be provided as part of development proposals in accordance with the locations indicated in the master plan*
- 4. Energy centres should be sized to allow the connection of existing nearby buildings.*
- 5. Energy centres should be sized to serve the 'anchor' development with additional space future proofed to allow the connection of planned future development.*
- 6. Where development does not directly provide a new energy centre, but will be supplied by it, a contribution should be made towards the necessary infrastructure and costs of connection costs.*

¹⁰ Hounslow Town Centre Master plan (February 2012):
http://www.hounslow.gov.uk/hounslow_masterplan_feb2012.pdf

7. *All applications for major development in the town centre should demonstrate where and how the infrastructure will be provided for connection to the town centre network, including connecting pipe work.*

Further information about this potential scheme is given in the Evidence Base for Carbon Reduction Policies¹¹, published February 2010. This previous study delineated clusters within central Hounslow slightly differently from this report, referring to the area of Hounslow Central and West, which covers parts of both Hounslow Town Centre and the Central and West Hounslow clusters identified in this report. Also, the methodology focussed primarily on new regeneration areas only, while this study takes some note of existing stock. Nevertheless, the heat demand estimated for the cluster (at around 9 MWh/yr) is of the same order as that found in this report, which serves to confirm the potential of this region of the London Borough of Hounslow for the implementation of DE schemes.

The Evidence Base highlights that there are few strategic issues relevant to the development of DE schemes in the area, but points out that it is an Air Quality Management Area, with a number of listed buildings.



Figure 7: The Hounslow Town Centre Cluster according to the Hounslow Town Centre Masterplan (adopted February 2012)¹².

¹¹ Evidence Base for Carbon Reduction Policies, London Borough of Hounslow (February 2010)
http://www.hounslow.gov.uk/evidence_base_carbon_reduction_policies.pdf

¹² Hounslow Town Centre Master plan (February 2012):
http://www.hounslow.gov.uk/hounslow_masterplan_feb2012.pdf

6.1.2.3 Review of Hounslow Town Centre Cluster

The Hounslow Town Centre Cluster, whether considering that outlined in Section 6.1.2.1 or the sub-section in the Hounslow Town Centre Masterplan presents a good opportunity for some level of implementation of a DE scheme, particularly if the nearby loads in the Central and West Hounslow cluster are kept in mind.

Further steps are presented below. At this point these are relatively generic, with the intention of further boosting the potential of this scheme. As evidenced by the Masterplan, the opportunity for this cluster is already high.

Further steps:

- Investigate the likely potential anchor load (civic centre) for the opportunity to site an energy centre here; determine plant age and replacement dates.
- Explore the vicinity for additional public / private demand that has not yet been captured in this analysis.
- For new developments, consider further the planning powers in place to secure developer contributions towards any scheme, and the potential to require future buildings to connect to such a scheme.

Table 3: Existing buildings in Hounslow Town Centre cluster

| Name | Ownership | Typology | Fuel Consumption (MWh/yr) |
|---|------------------|--|---------------------------|
| Civic Centre | Local government | Local government estate | 4,130 |
| Hounslow Manor School | Local government | Education facilities | 1,868 |
| Hounslow Library (The Treaty Centre) | Local government | Local government estate | 1,471 |
| Star Road (1-27) And Derwent Lodge | Other public | Social Housing Estate | 1,420 |
| Continental Hotel* | Private | Hotels (> 99 units or 4,999 m ²) | 1,304 |
| Brookwood (1) (1-55, 2-74) | Other public | Social Housing Estate | 1,176 |
| Westgate House, London Road | Unknown | Residential | 1,157 |
| Brookwood (2) 57-109, Odd 76-146 | Other public | Social Housing Estate | 1,006 |
| Bridge Road Depot | Local government | Local government estate | 856 |
| Hyde House | Other public | Social Housing Estate | 838 |
| Lampton School | Local government | Education facilities | 728 |
| Hounslow Town Primary | Local government | Education facilities | 565 |
| Alexandra Junior | Local government | Education facilities | 559 |
| Everglades | Other public | Social Housing Estate | 321 |
| Hounslow Police Station, Metropolitan Police* | Other public | Police stations | 307* |
| Golds Gym* | Private | Sport & Leisure facilities | 271 |
| Spring Grove Primary | Local government | Education facilities | 221 |
| Council Offices Adjacent To The Civic Centre | Local government | Local government estate | 152 |
| The Spot - Hounslow Child And Family Centre Aka Nantly House Under 8's Centre | Local government | Education facilities | 129 |
| Lampton Sports | Local government | Sport & Leisure facilities | 112 |
| Montague Hall | Local government | Local government estate | 100 |
| TOTAL Fuel Consumption | | | 18,691 MWh/yr |

* Benchmarked based on industry standards;

Table 4: New developments in Hounslow Town Centre cluster

| Name | Typology | Approval Stage | Estimated Fuel Consumption (MWh) |
|---|-----------------|-----------------------|---|
| Hotel, Lampton Road (Erection of a part 3 storey part 6 storey building comprising 2 hotels one of 128 rooms and the other 60 rooms with associated parking) | Hotels | Permission on the LDD | 1,551 |
| UDP Site M23 - Hounslow Bus Garage (113 Units) | Residential | Allocation | 688 |
| UDP Site M26 - Site Extended To Include High Street Frontage (100 units) | Residential | Allocation | 609 |
| UDP Site M6 - 20 To 28 (77 units) | Residential | Allocation | 469 |
| TOTAL Fuel Consumption | | | 3,317 MWh/yr |

Table 5: Summary of Existing and New Developments for Hounslow Town Centre Cluster

| | |
|------------------------------------|----------------------|
| Total Fuel Consumption | 22,008 MWh/yr |
| Total Estimated Heat Demand | 17,606 MWh/yr |
| Estimated Peak Heat Load | 7.83 MW |

6.1.3 Feltham Cluster

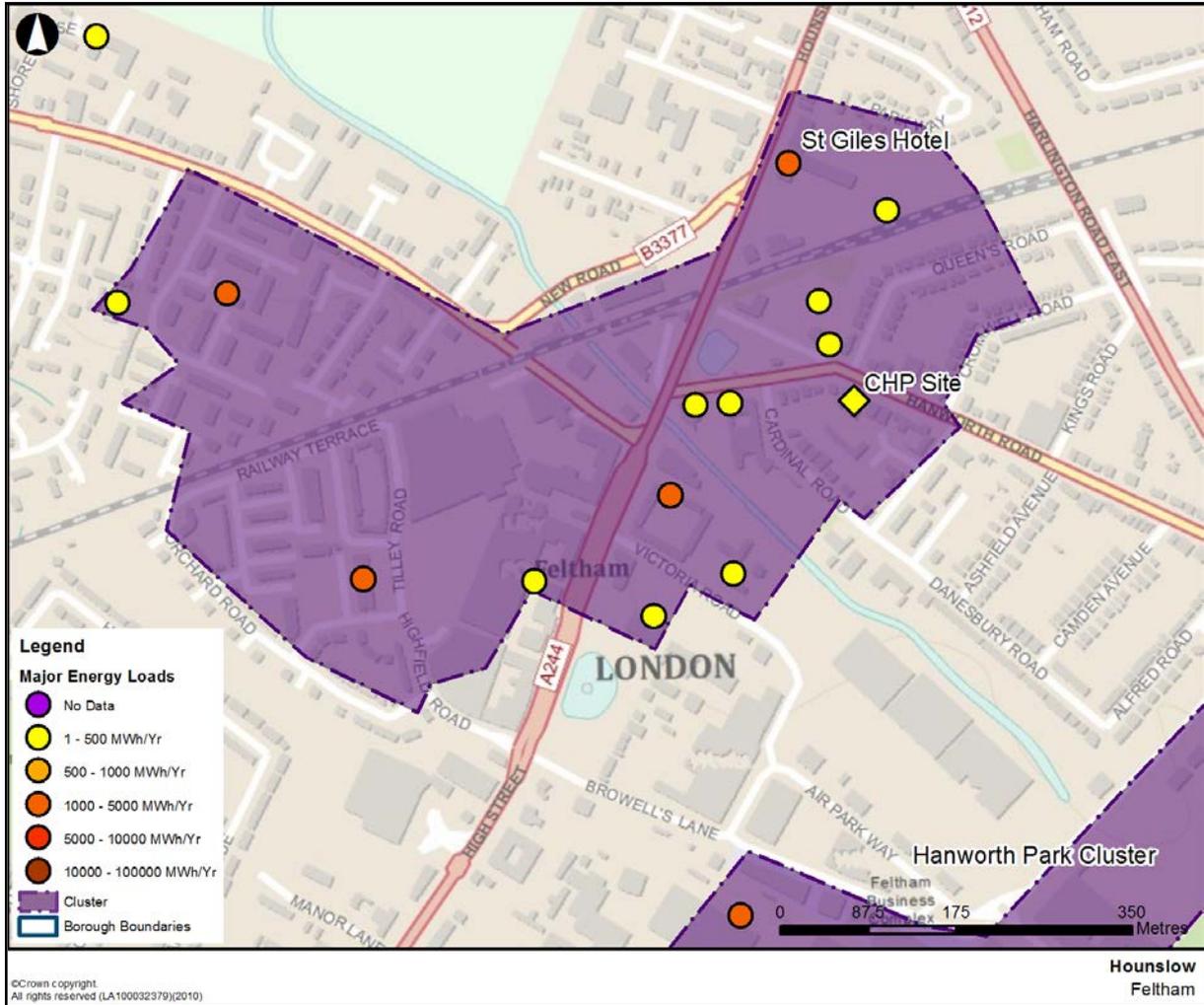


Figure 8: Feltham Heat Cluster

The Feltham cluster is made up of twelve buildings, with a good mix of educational, local government estate, and communally-heated residential estate building typologies. This cluster includes one known new development, which has been benchmarked.

Whilst there is a good level of diversity in this cluster, a potential issue is that it is very much dominated by the three social housing estates and the hotel (which make up 90% of the total cluster fuel consumption, see Table 6); diversity benefits might not be as high, and it is unclear at this stage how complimentary the two dominant typologies would be.

No obvious anchor load exists, however the boiler house at the St Giles Hotel (representing the largest consumption) could be a possible location. Another option could be the existing CHP site (see Figure 8), where an installed thermal capacity of 90 kW_{th} (relatively small) is available; this could perhaps be expanded to serve any future network. At this stage, nothing further is known about the status of this CHP; further investigation is recommended for assessing this cluster.

Two main potential physical barriers exist in this cluster, which should be taken into account when considering priorities. The railway and the A244 (Hounslow

Road) together might act in such a way that development of any heat network is restricted. This issue is beyond the scope of this investigation, but any feasibility assessment for this cluster would likely need to take these barriers into account.

Described further in the next section (Section 6.1.4), there exists the potential for linking this cluster with the nearby Hanworth Park cluster to the south (see Figure 8). If the railway through Feltham does emerge as inappropriate for a network crossing, then the demands south of the railway could still potentially be connected with the Hanworth Park cluster.

Further steps:

- Engage with potential anchor loads, determining plant-replacement dates for all communally heated estates and the St Giles Hotel
- Investigate the possibility of the CHP site being used or expanded for any future network development in the cluster
- Explore the vicinity for additional public / private demand that has not yet been captured in this analysis.
- Give consideration to the feasibility of any potential network crossing the railway in particular

Table 6: Existing buildings in Feltham cluster

| Name | Ownership | Typology | Fuel Consumption (MWh/yr) |
|--|------------------|--|---------------------------|
| St. Giles Hotel | Private | Hotels (> 99 units or 4,999 m ²) | 4,969* |
| Southern Avenue | Other public | Social Housing Estate | 3,164 |
| Highfields | Other public | Social Housing Estate | 2,839 |
| New Chapel Square | Other public | Social Housing Estate | 2,276 |
| St Lawrence Rc Primary | Local government | Education facilities | 379 |
| Cardinal Road Infant And Nusery | Local government | Education facilities | 358 |
| St. Catherine's House | Local government | Local government estate | 202 |
| Ashmead Depot | Local government | Local government estate | 199 |
| Feltham Local Office - Social Services | Local government | Local government estate | 196 |
| The Longford Centre | Local government | Local government estate | 61 |
| Victoria School | Local government | Education facilities | 54 |
| Feltham North Childrens Centre Aka Alf King Centre | Local government | Education facilities | 32 |
| TOTAL Fuel Consumption | | | 14,729 MWh/yr |

Table 7: New developments in Feltham cluster

| Name | Typology | Approval Stage | Estimated Fuel |
|------|----------|----------------|----------------|
|------|----------|----------------|----------------|

| | | | Consumption (MWh) |
|--|-------------|------------|--------------------------|
| UDP M24 - Land South Of Astronaut House (35 units) | Residential | Allocation | 213 |
| TOTAL Fuel Consumption | | | 213 MWh/yr |

- Benchmarked based on industry standards;

Table 8: Summary of Existing and New Developments for Feltham Cluster

| | |
|------------------------------------|----------------------|
| Total Fuel Consumption | 14,942 MWh/yr |
| Total Estimated Heat Demand | 11,954 MWh/yr |
| Estimated Peak Heat Load | 5.31 MW |

6.1.4 Hanworth Park Cluster

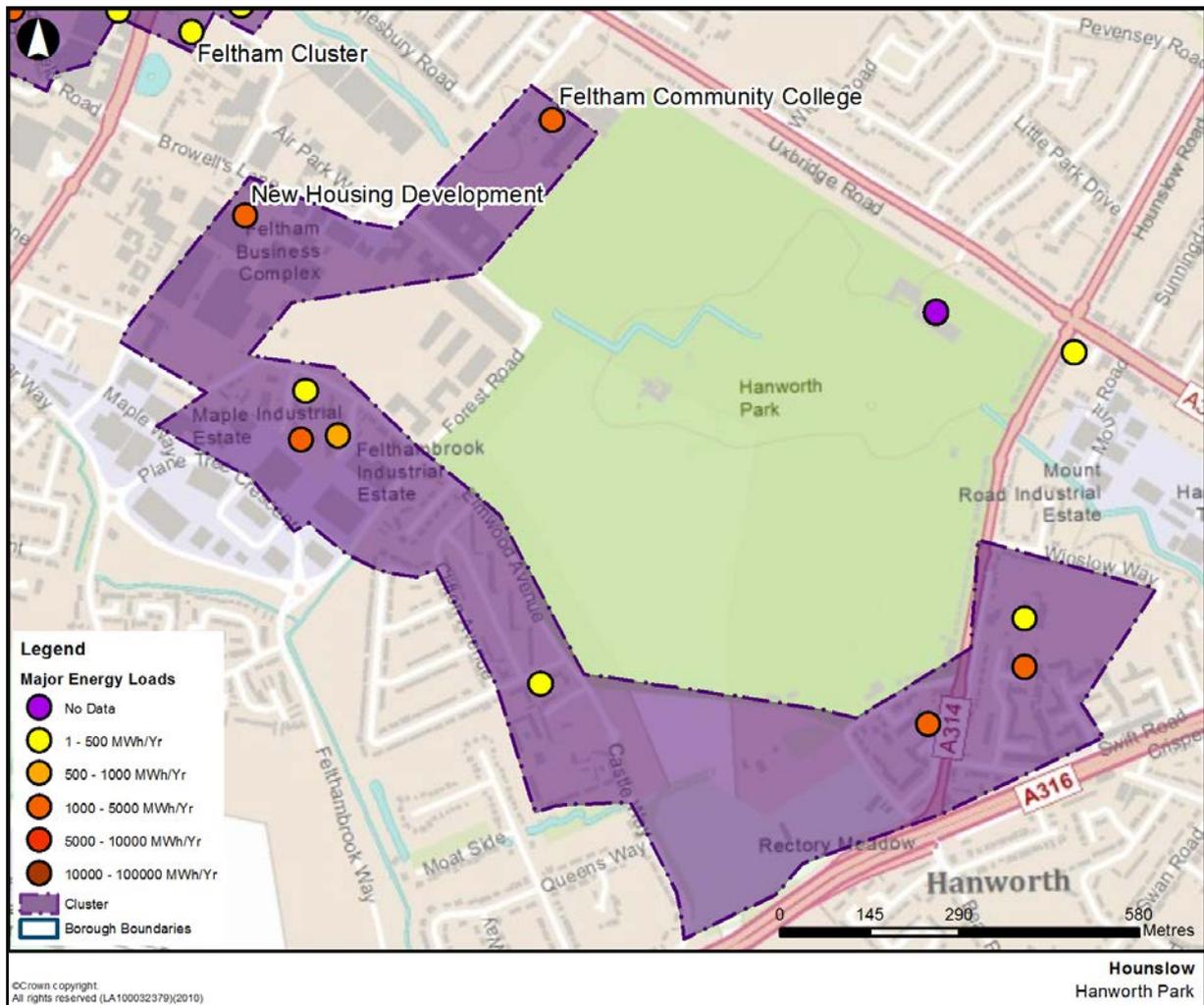


Figure 9: Hanworth Park heat cluster

The Hanworth Park cluster is characterised by a long string of potential loads. Six existing social housing estates make up the cluster, along with two educational facilities and a planned residential development (See Figure 9). Whilst the distance between the furthest two points is relatively large, the greatest separation between any two points is just over 600m, which would not be unreasonable if sufficient demand could be secured within this cluster. Additionally, there exists the possibility for routing the network through Hanworth Park for a relatively low-cost dig when compared to suburban roads, however further work would be required to assess if this is feasible with all stakeholders as Hanworth Park is also a Site of Importance for Nature Conservation (SINC). Depending on additional heat demands identified in the vicinity, this cluster could present an opportunity; it is noted that the cluster is surrounded on three sides by industrial and trading estates, which could add extra demand and diversity.

If further investigation deems the entire connection of this cluster to be unviable, a possible mini-cluster consisting of the new housing development site, the three existing housing estates in the north and Feltham Community College could be considered.

No obvious anchor load exists, however the boiler house at the Oriol estate (representing the largest consumption) would be a possible location.

The interesting opportunity for this cluster comes with the potential new development (UDP Site M1, as per SHLAA/HCS); where up to 412 residential units could be constructed. This possible development could contribute funding towards any eventual scheme, as well as house an energy centre for the cluster. In addition, it can be noted that the Feltham cluster is not very far from the development site; depending on the nature of the development, it could be a logical step to link these two clusters together via a heat network.

Further steps:

- Gain further clarity on the new development at UDP site M1, investigating the possibility for using a CHP unit for potential connection to a heat network, and investigate the possibility of obtaining developer contributions towards any DE scheme.
- Explore the vicinity for additional public / private loads that have not yet been captured in this analysis, particularly in the industrial estates.

Table 9: Existing buildings in Hanworth Park cluster

| Name | Ownership | Typology | Fuel Consumption (MWh/yr) |
|--------------------------------------|-------------------------|-----------------------|---------------------------|
| Oriol Estate | Other public | Social Housing Estate | 3,876 |
| The Hollands | Other public | Social Housing Estate | 1,840 |
| Feltham Community College | Local Government Estate | Education Facilities | 1,518 |
| Sandalwood Road (no.2) 59-79, 76-102 | Other public | Social Housing Estate | 1,138 |
| Pinewood Road (1-29, 2-38) | Other public | Social Housing Estate | 609 |
| Oriol Primary | Local Government Estate | Education Facilities | 467 |
| Sandalwood Road (no.1) 1-57, 2-74 | Other public | Social Housing Estate | 451 |
| Rectory Court | Other public | Social Housing Estate | 170 |
| TOTAL Fuel Consumption | | | 10,069 MWh/yr |

Table 10: New developments in Hanworth Park cluster

| Name | Typology | Approval Stage (SHLAA/HCS) | Estimated Fuel Consumption (MWh) |
|--|-------------|----------------------------|----------------------------------|
| UDP Site M1, Browells Lane (412 units) | Residential | Allocation | 2,508 |
| TOTAL Fuel Consumption | | | 2,508 MWh/yr |

Table 11: Summary of Existing and New Developments in Hanworth Park Cluster

| | |
|------------------------------------|----------------------|
| Total Fuel Consumption | 12,577 MWh/yr |
| Total Estimated Heat Demand | 10,060 MWh/yr |
| Estimated Peak Heat Load | 4.47 MW |

6.1.5 Cranford Cluster

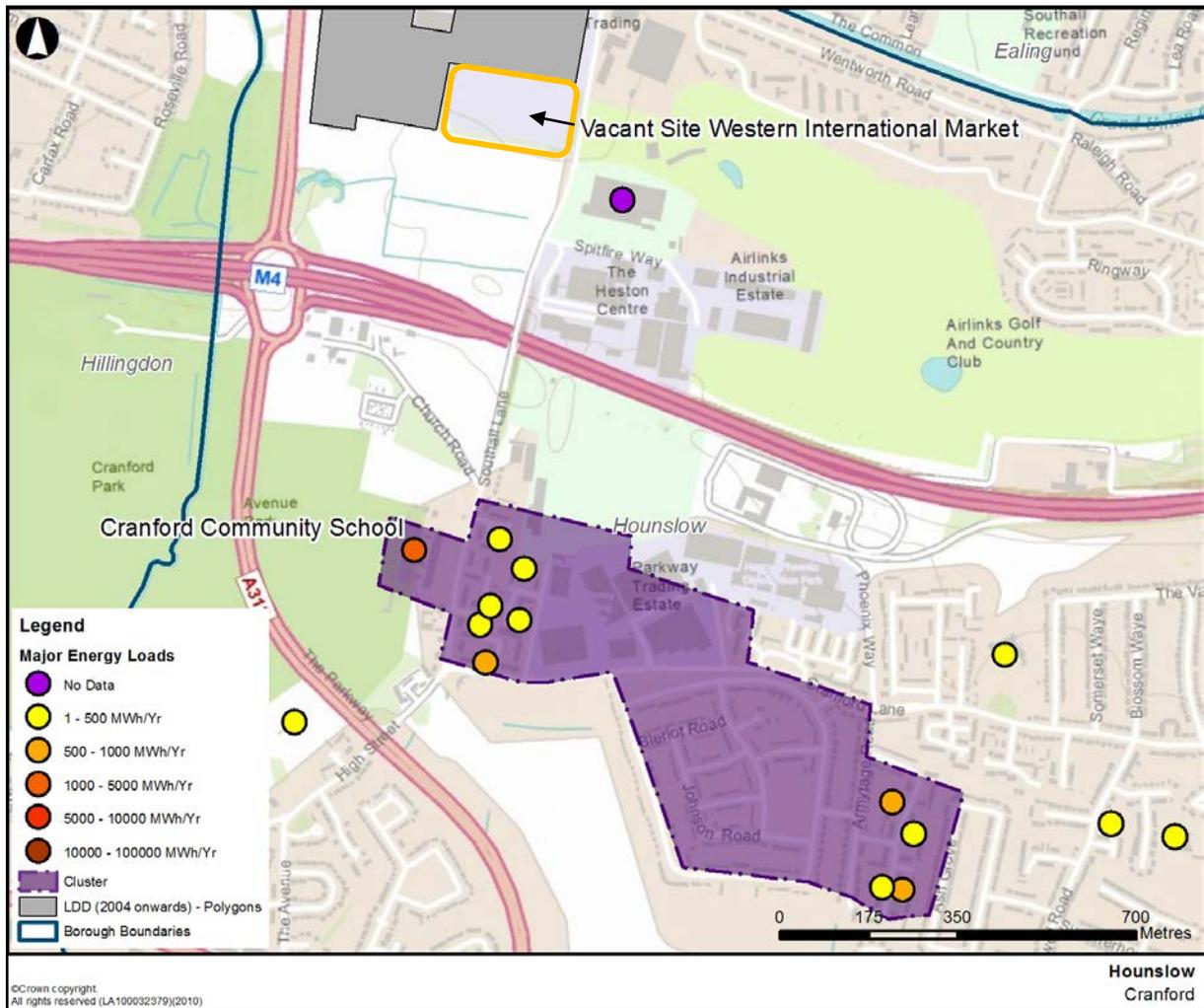


Figure 10: Cranford Heat Cluster

The Cranford cluster is made up of eleven social housing demand sites and a school. The demands are densely clustered in the East and West sides of the cluster (See Figure 10, above), but there is a lack of identified loads in the middle. The two mini-clusters are separated by approximately 800m. High level desktop analysis reveals some low density residential usage in this area, as well as a number of relatively large trading estates to the North. There is no new development information for this cluster. If further analysis deemed the gap between the two mini-clusters to be too large, the potential might exist for linking the community estates on the west of the cluster with the school for a smaller heat network.

At this stage the clear potential anchor load for this cluster would be the Cranford Community School, which is the greatest heat demand and could have a plant room suitable for an energy centre. Load diversity is very low, pending additional information. No new developments have been identified in this cluster. Connecting these loads together with a DH network is a possibility, as they are served by central boilers, but more information would be required about additional demand in the area to make up suitable levels of demand and diversity to justify network construction.

A further opportunity for heat supply to this cluster exists in the potential waste management site (as allocated in the Draft proposed submission plan in the West London Waste Development Plan (WLWDP), November 2011) at the vacant portion of the Western International Market (See Figure 10). At this stage it is undecided what waste technologies would be used here, but if some form of incineration was employed, there could be the potential for heat off-take and supply to the Cranford Cluster. The main difficulty here, however, would be routing DH piping across the M4 motorway.

Further steps:

- Explore the vicinity for additional public / private loads that have not yet been captured in this analysis.
- Engage with the school to determine possible plant replacement dates and suitability for a DH scheme.

Table 12: Existing Buildings in Cranford Cluster

| Building Name | Typology | Ownership | Fuel Consumption (MWh/yr) |
|-------------------------------------|----------------------|-----------------------|---------------------------|
| Cranford Community School | Education Facilities | Local Government | 3,370 |
| Cranford Lane (269-347) | Other public | Social Housing Estate | 597 |
| Norman Crescent, flats 25-55 Odd | Other public | Social Housing Estate | 593 |
| Norman Crescent, flats 134-192 Even | Other public | Social Housing Estate | 505 |
| Redwood flats 46-81 | Other public | Social Housing Estate | 493 |
| Norman Crescent, flats 141-199 Odd | Other public | Social Housing Estate | 465 |
| Redwood flats 87-112 | Other public | Social Housing Estate | 451 |
| Norman Crescent, flats 56-106 Even | Other public | Social Housing Estate | 445 |
| Norman Crescent, flats 81-139 Odd | Other public | Social Housing Estate | 437 |
| Redwood flats 14-39 | Other public | Social Housing Estate | 407 |
| Redwood flats 113-138 | Other public | Social Housing Estate | 398 |
| Crane Lodge Road (1-43) | Other public | Social Housing Estate | 254 |
| TOTAL Fuel Consumption | | | 8,415 MWh/yr |

Table 13: Summary of Existing and New Developments in Cranford Cluster

| | |
|------------------------------------|---------------------|
| Total Fuel Consumption | 8,415 MWh/yr |
| Total Estimated Heat Demand | 6,732 MWh/yr |
| Estimated Peak Heat Load | 2.99 MW |

6.1.6 Brentford Cluster

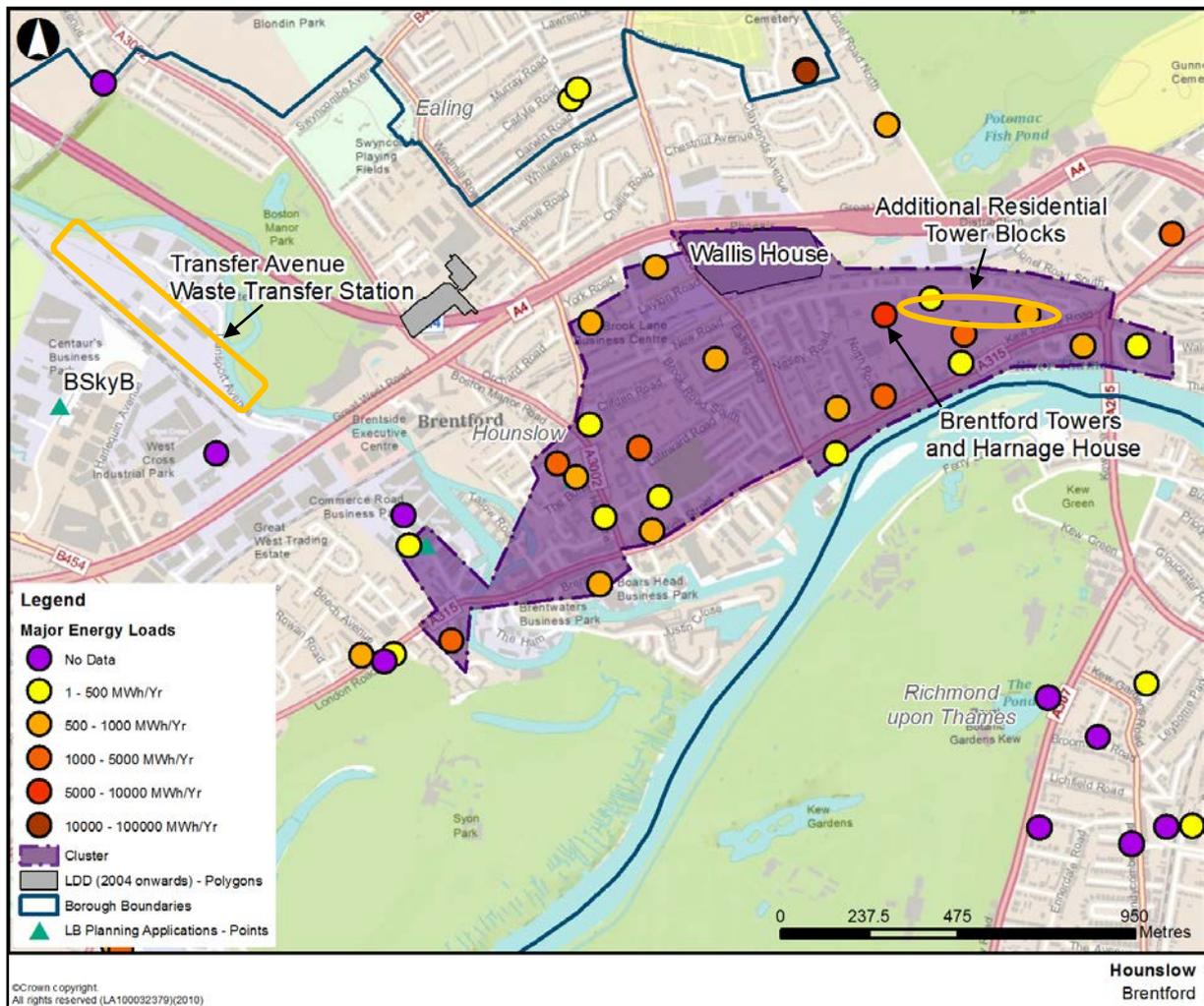


Figure 11: Brentford Heat Cluster

The Brentford cluster is made up of fifteen existing buildings, and a number of potential developments as identified in the Brentford Area Action Plan¹³ (BAAP), where additional information on further developments can be found. The Wallis house development was under construction in 2008 and is now complete; annual consumption for this site was benchmarked based on the number of residential units available from the LDD database. Hence, whilst this development is presented in Table 15 below as “planned”, it is actually considered to be an existing heat load for the purpose of this analysis. A potential opportunity for this cluster is the presence of the BSkyB Osterley Biomass CHP unit, which has the potential to supply low-carbon heat and electricity to the scheme, but it is noted this is quite a long distance from the centre of the cluster.

This cluster has more demand diversity than the others so far identified in Hounslow, with a hotel, cultural, and educational building typologies adding to the mix, so would likely allow for optimum operation of a CHP engine. As this area of the borough is more built-up than the others so far discussed, it is likely

¹³ Brentford Area Action Plan, January 2009 <http://www.hounslow.gov.uk/baap.pdf>

that additional research here would yield a number of other potential demands to add to the cluster's density and diversity.

At this point, Brentford Towers and Harnage House, as well as the other apartment blocks in this site (not visible on the heat map) would appear to be good anchor loads, as they are the largest in the cluster, being made up of a number of high-rise social housing units. Data provided by the borough indicates that these towers are served by communal boilers. Notably, desktop research reveals these to be part of a group of six towers of around 22 stories each (See Figure 11). While data is not available for all these towers, if they have similar characteristics to Brentford Towers and Harnage House then this site might present a very good opportunity for a DE scheme as they could readily be adapted for connection to a DH network. Determining existing plant lifetimes, replacement dates, and plant room sizes will be useful to further evaluate this opportunity.

All social housing estates in the existing buildings have been identified as using communal boilers, and hence is likely to be suitable for connection to a DE scheme.

The Wallis House development, whilst likely to be of appreciable demand, is on the other side of a railway line, which might present a barrier to connection to any eventual heat network; further study would be required to determine the feasibility of any crossing.

To the north-west of the cluster (see Figure 11) the presence of a biomass CHP unit at the BSKyB offices presents a very good opportunity for the scheme. The Evidence Base¹⁴ highlights that it has a potential energy yield of 10 GWh/yr in waste heat (a little under half the Brentford cluster's total consumption), with the potential revenue for BSKyB a strong financial incentive for selling to a growth area network. One potential barrier for this development would be the distance between BSKyB and the centre of the Brentford cluster; piping would have to cover approximately two kilometres, and cross the A4 and a railway line, which could prove restrictive.

As with the Cranford Cluster (Section 6.1.5), the November 2011 draft WLWDP identifies the Transfer Avenue Waste Transfer Station (see Figure 11) as having potential for some form of DE. Should any heat supply facility be developed here, the Brentford Cluster could prove a suitable source of demand. However, as with the BSKyB source, the required distance of heat piping might present a barrier.

Further steps:

- Explore the vicinity for additional public / private loads that have not yet been captured in this analysis.
- Engage with BSKyB on the opportunity for connecting its CHP unit to any eventual scheme.
- For the council estate towers along Green Dragon Lane, determine plant age and replacement schedules.
- Investigate the feasibility and appetite for network crossings of the rail line for connection to the Wallis House development.

¹⁴ Evidence Base for Carbon Reduction Policies, London Borough of Hounslow (February 2010)
http://www.hounslow.gov.uk/evidence_base_carbon_reduction_policies.pdf

Table 14: Existing Buildings in Brentford Heat Cluster

| Name | Ownership | Typology | Fuel Consumption (MWh/yr) |
|---------------------------------------|------------------|---------------------------------|---------------------------|
| Brentford Towers And Harnage House | Other public | Social Housing Estate | 6,315 |
| Brentford School For Girls | Local government | Education facilities | 2,444 |
| Brent Lea (120-171) And Danehurst | Other public | Social Housing Estate | 2,239 |
| Travelodge Hotels Ltd* | Private | Hotels (> 99 units or 4,999 m2) | 1,700 |
| Kew Bridge Road And Thameside Centre* | Private | Social Housing Estate | 1,000 |
| Lambert Lodge | Other public | Social Housing Estate | 749 |
| Griffin Court | Other public | Social Housing Estate | 726 |
| Kew Bridge Steam Museum* | Private | Museums & Art Galleries | 613 |
| Watermans Arts Centre* | Private | Museums & Art Galleries | 345 |
| The Maltings | Other public | Social Housing Estate | 314 |
| St Paul's Ce Primary | Local government | Education facilities | 228 |
| Brentford Library (Boston Manor Road) | Local government | Local government estate | 169 |
| The Musical Museum* | Private | Museums & Art Galleries | 159 |
| Brentford Day Nusery (Half Acre) | Local government | Education facilities | 103 |
| TOTAL Fuel Consumption | | | 17,104 MWh/yr |

*Benchmarked based on industry standards;

Table 15: New developments in Brentford cluster

| Name | Typology | Approval Stage (SHLAA/HCS) | Estimated Fuel Consumption (MWh/yr) |
|---|-------------|----------------------------|-------------------------------------|
| Wallis House/Great West Quarter Great West Road, TW8 9BD | Mixed Use | Approval | 2,214* |
| BAAP Site M4 - Kew Bridge Pumping Station And Thames Water Land | Residential | | 2,149 |
| Commerce Road | Mixed Use | | 889 |
| Brentford Waterside (BAAP Proposal Site M8) | Residential | | 779 |
| BAAP Site M3 - Kew Bridge Site | Residential | | 761 |
| Brentford Football And Sports Club Ltd, Griffin Park Braemar Road, Brentford, TW8 0NT | Residential | Approval | 724 |
| BAAP Site M1 - Alfa Laval | Residential | | 524 |
| BAAP Site M7 - Somerfield Stores | Residential | | 2149 |
| BAAP Site M4 - Kew Bridge Pumping Station And Thames Water Land | Residential | | 889 |
| TOTAL Fuel Consumption | | | 11,078 MWh/yr |

*Satellite map analysis indicates that this development is complete. The figure 2,214 MWh/yr is for residential units in the site only, as GIFA is not available to benchmark the gallery and health club that are known to be on this site.

Table 16: Summary of Existing and New Developments in Brentford Cluster

| | |
|------------------------------------|----------------------|
| Total Fuel Consumption | 28,182 MWh/yr |
| Total Estimated Heat Demand | 22,546 MWh/yr |
| Estimated Peak Heat Load | 10.02 MW |

6.2 Cross-Borough opportunities

6.2.1 Isleworth / Twickenham

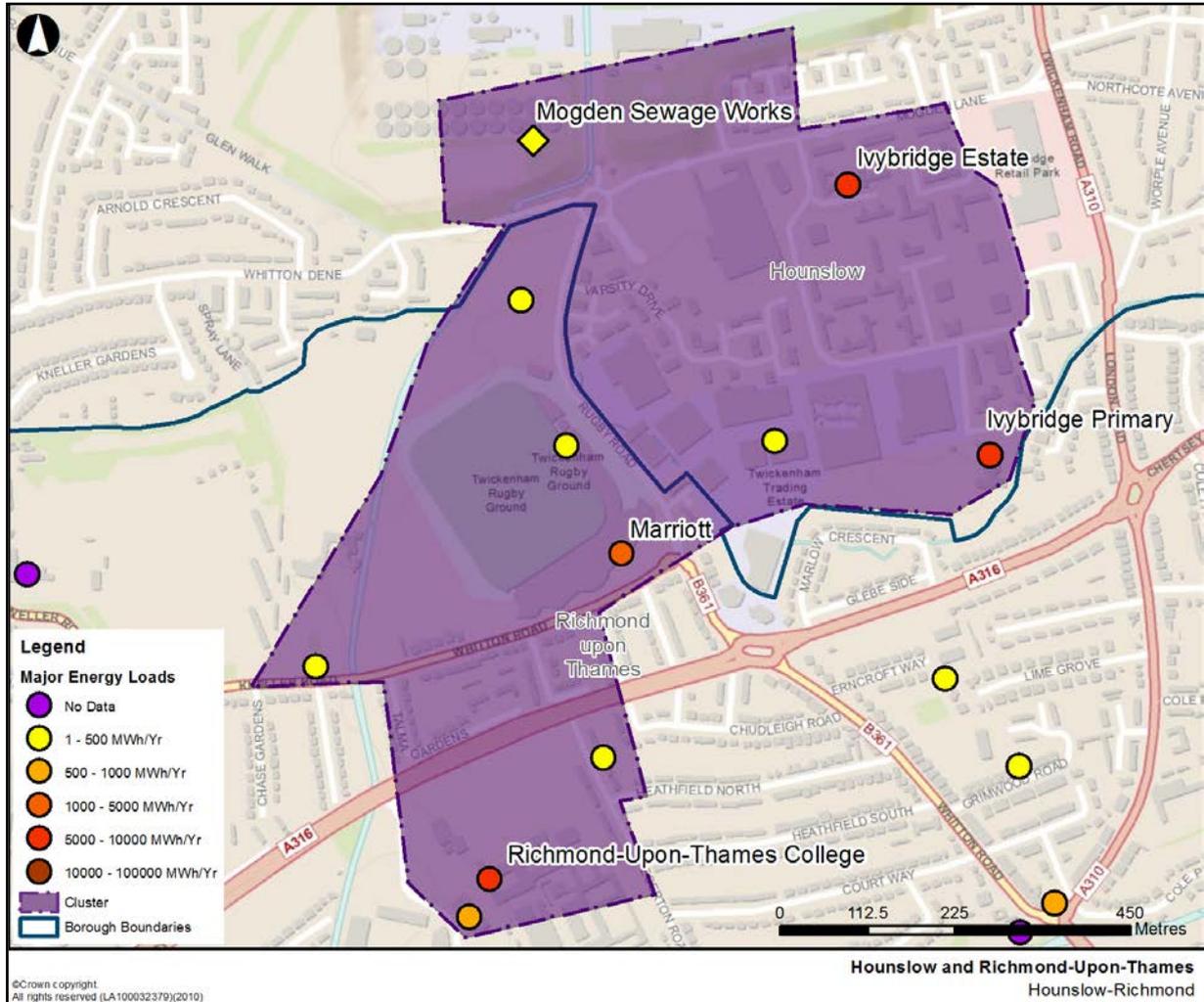


Figure 12: Isleworth / Twickenham heat cluster

The Isleworth / Twickenham cluster is a medium-sized cluster made up of nine demands, with some level of cross-borough opportunity with the London Borough of Richmond-Upon-Thames. The key opportunity for this cluster, either as a borough-only or cross-borough scheme is the Mogden Sewage Works (see Figure 12), which currently has a CHP unit installed that is due to increase in capacity.

On the Hounslow side, the considerable demands of Ivybridge Primary and the Ivybridge Estate, which is served by communal boilers, presents an attractive prospect for connection to a DH scheme. The London United Busways Ltd site brings some diversity to the scheme, and it is likely that additional research would yield further loads in the trading estate that it is located in.

The cross-borough opportunity is viewed as moderate; indicated on the LDD as a new development, the Twickenham Stadium development is now complete. As they were recently constructed, it is unlikely that building owners would desire connection to any eventual scheme requiring them to replace new plant, but the opportunity exists. The possibility does exist to extend south, capturing the load of

Richmond-upon-Thames College. In addition, the area in Richmond-upon-Thames further to the south towards Teddington is under investigation by the London Borough of Richmond-upon-Thames, as reported in the Twickenham Campus Low Carbon Energy Options Study¹⁵, and it is noted that potential residential developments at the former Gregg's Bakery site and north of Twickenham Rugby Stadium could further expand the scheme.

The key opportunity for this network is in the CHP site at the Mogden Sewage Works (as identified on Figure 12). As identified in the Evidence Base for Carbon Reduction Policies¹⁶, the existing CHP plant at the site is due to increase in capacity in line with extensions to the site, to a predicted rating of 12 MW_{th}¹⁷. The Evidence Base estimates there could be circa 400 kW_{th} of spare capacity, with a caveat that it would most likely vary significantly throughout the year. As it is, this potential spare capacity could be used to feed this cluster, although the Evidence Base also considers exporting it to meet relatively low heat demands in Isleworth. The existing CHP site could also form the basis of an energy centre for the cluster, and depending on the appetite of the sewage works, could be expanded upon further in capacity to meet loads further south in the London Borough of Richmond-upon-Thames.

Given the location of the key supply plant, it is likely that the London Borough of Hounslow would be appropriate as the leader of this scheme, although at the moment the identified loads are well-split between either borough. Some early engagement between boroughs to consider this opportunity is advised.

Further steps specific to the London Borough of Hounslow:

- Engage with Mogden Sewage Works to identify issues in expansion, further heat off-take; determine age of plant and likely replacement dates.
- Investigate the vicinity (predominantly on the Hounslow side) for additional potential heat loads.
- Determine state of boiler house in Ivybridge estate.
- Engage with the London Borough of Richmond-Upon-Thames, investigating appetites for development of the scheme, and further potential developments in the vicinity.

¹⁵ White Young Green Twickenham Campus Low Carbon Energy Options Study (2009)
<http://cabnet.richmond.gov.uk/mgConvert2PDF.aspx?ID=18606>

¹⁶ Evidence Base for Carbon Reduction Policies, London Borough of Hounslow (February 2010)
http://www.hounslow.gov.uk/evidence_base_carbon_reduction_policies.pdf

¹⁷ The Evidence Base actually states 12kW_{th} rather than MW_{th}; this is viewed as an error, given that the spare capacity is estimated at 400kW_{th}.

Table 17: Existing Buildings in Isleworth / Twickenham cluster

| Name | Ownership | Typology | Fuel Consumption (MWh/yr) |
|--|------------------|--|---------------------------|
| Ivybridge Primary | Local Government | Education Facilities | 8,349 |
| Ivybridge Estate | Other public | Social Housing Estate | 7,430 |
| Richmond-Upon-Thames College | Private | Education Facilities | 6,047 |
| Twickenham Marriott Hotel | Private | Hotels (> 99 units or 4,999 m ²) | 4,290* |
| Cannon Health Club (now Nuffield Fitness) | Private | Sport & Leisure Facilities | 792 |
| Twickenham Stadium / Rugby Football Union (RFU) Site | Private | Multi-address Buildings | 493 |
| London United Busways Ltd | Private | Private commercial (> 9,999 m ²) | 480 |
| Chase Bridge Primary School | Local Government | Education Facilities | 388 |
| Museum of Rugby Twickenham | Private | Museums & Art Galleries | 149* |
| Egerton Road No 26 / Respite Services | Local Government | Local Government Estate | 60 |
| TOTAL Fuel Consumption | | | 28,478 MWh/yr |

 Loads in the London Borough of Richmond-Upon-Thames

*Benchmarked based on industry standards

Table 18: Summary of Existing and New Developments in Isleworth / Twickenham Cluster

| | |
|------------------------------------|----------------------|
| Total Fuel Consumption | 28,478 MWh/yr |
| Total Estimated Heat Demand | 22,782 MWh/yr |
| Estimated Peak Heat Load | 10.13 MW |

7 Implementation Plan

The Implementation Plan has been developed jointly by Arup and the London Borough of Hounslow to identify the priority, potential constraints and next steps for delivering each DE cluster identified through the Heat Mapping process.

| DE Opportunity Area | Priority* (Low/Medium/High) | Constraints | Next Steps for delivering DE schemes |
|---------------------------|-----------------------------|---|---|
| Central and West Hounslow | Medium | Relatively spread out loads in the west of the cluster. | Engage with potential anchor loads (e.g. Maitland Close), determining plant-replacement dates for all communally heated estates. Explore the vicinity for additional public / private loads that have not yet been captured in this analysis to add diversity to the cluster. |
| Hounslow Town Centre | High | A315, A316, A3006 run through the cluster, possibly presenting barriers to network development | Investigate the likely potential anchor load (civic centre) for the opportunity to site an energy centre here; determine plant age and replacement dates. Explore the vicinity for additional public / private demand that has not yet been captured in this analysis. For new developments, consider further the planning powers in place to secure developer contributions towards any scheme, and the potential to require future buildings to connect to such a scheme. |
| Feltham | Low / Medium | Railway and large A-road running through the cluster. Diversity; while there are various building typologies in the cluster, it is dominated by the hotel and housing estates. | Engage with potential anchor loads, determining plant-replacement dates for all communally heated estates and the St Giles Hotel. Investigate the possibility of the CHP site being used or expanded for any future network development in the cluster. Explore the vicinity for additional public / private demand that has not yet been captured in this analysis. Give consideration to the feasibility of any potential network crossing the railway. |
| Hanworth Park | Low | Long distance for potential network to connect all loads. | Gain further clarity on the new development at UDP site M1, investigating the possibility for using a CHP unit for potential |

| | | | |
|------------------------|--------------|--|--|
| | | Lack of diversity. | connection to a heat network, and investigate the possibility of obtaining developer contributions towards any DE scheme. Explore the vicinity for additional public / private loads that have not yet been captured in this analysis. |
| Cranford | Low | Long distance for interconnection of the two mini-clusters within this main cluster. Lack of diversity. | Explore the vicinity for additional public / private loads that have not yet been captured in this analysis. Engage with the school to determine possible plant replacement dates and suitability for a DH scheme |
| Brentford | High | Railway line potentially cuts off connection to northern loads, and link to BSKyB CHP unit. | Explore the vicinity for additional public / private loads that have not yet been captured in this analysis. Engage with BSKyB on the opportunity for connecting its CHP unit to any eventual scheme. For the council estate towers along Green Dragon Lane, determine plant age and replacement schedules. Consider the feasibility and appetite for network crossings of the rail line for connection to the Wallis House development. |
| Isleworth / Twickenham | Low / Medium | New buildings on Richmond-Upon-Thames side are already complete, with relatively new plant. | Engage with Mogden Sewage Works to identify issues in expansion, further heat off-take; determine age of plant and likely replacement dates. Investigate the vicinity (predominantly on the Hounslow side) for additional potential heat loads. Determine state of boiler house in Ivybridge estate. Engage with the London Borough of Richmond-Upon-Thames, investigating appetites for development of the scheme, and further potential developments in the vicinity. |

*Cluster implementation priorities have been allocated by the London Borough of Hounslow by assessing the estimated heat loads, council priorities and the feasibility of the scheme.

8 Conclusions and Recommendations

Based on the data made available in this heat mapping exercise, it has been found that there are a number of heat load clusters that offer varying degrees of opportunity for the implementation of DE and DH schemes in the London Borough of Hounslow. These are highlighted, and further steps are briefly discussed below.

8.1 Opportunity areas

Two clusters with good levels of opportunity were identified around the centre of Hounslow; the Central and West Hounslow and Hounslow Town Centre clusters. These combine high levels of annual fuel consumption with a good level of diversity, and some new developments which could serve to enable any future growth of DE schemes in the area. Notably, the February 2012 Hounslow Town Centre Master Plan has already identified the area as suitable for DE development, and any future scheme could choose to make use of one or both clusters, or an amalgamation of the two, depending on the findings of any further feasibility study.

The Brentford Cluster has been identified, both in this report and the Brentford Area Action Plan, as having good potential for the development of DE. As this is a relatively built-up area of the borough, there has been found to be a high level of annual fuel consumption, as well as good density and diversity of demand. While it is not yet clear if network routing would be feasible, the potential exists for heat off-take and supply to the cluster from the BSKyB CHP and the potential waste transfer station development to the west of the cluster.

Another two clusters, with perhaps slightly lower levels of opportunity, are the Feltham and Hanworth Park Clusters. While these do not exhibit levels of demand density as high as those described above, their estimated load levels are in the range of 5 MW_{th}, which would still represent significant schemes. Furthermore, pending additional investigation, the potential to join these two areas together might exist.

The identified Cranford Cluster, whilst having relatively low annual fuel consumption, might have the potential for a mini-DE network within its western sub-cluster, although currently this is dominated by residential and educational load typologies.

An interesting cross-borough opportunity with the London Borough of Richmond-Upon-Thames has been identified. The Isleworth / Twickenham Cluster has the potential to source heat from the expanding CHP centre at the Mogden Sewage Works and supply a number of high residential and educational loads near to the borough border. Should cross-borough collaboration prove infeasible, the loads on the London Borough of Hounslow side of the cluster could still be high enough to justify a DH network in this area.

8.2 Borough priorities

In line with the technical opportunities for each cluster identified in this study, the London Borough of Hounslow has assessed the borough priority based on council

priorities and scheme feasibilities. The Brentford and Hounslow Town Centre clusters have been assigned “High” priorities for further progression, while the Central and West Hounslow cluster has been given a “Medium” priority.

8.3 Next steps

At this stage a general recommendation before taking any clusters forward for additional feasibility investigation work would be to acquire greater knowledge of other potential loads in the cluster areas. Whilst this study covered the whole borough and was necessarily high-level, having identified the high-opportunity areas it should now prove more resource efficient to find additional information on additional potential loads within the clusters and in their immediate surroundings.

Clusters containing existing loads served by central boilers or community heating systems would benefit from investigation into the conditions of existing plant, and likely replacement dates.

Clusters with potential physical barriers to network build-out, such as railway lines or main roads would benefit from consideration being given to the feasibility of crossing these obstacles.

Where new developments are determined to impact the viability of any scheme, consideration could be given to requiring these to connect to any eventual DH network, or at least incorporating DH-readiness into their heating systems.

Further cluster-specific recommendations can be found in the Implementation Plan in Section 7.

8.4 Additional opportunities for DE

It should also be noted that there may be other potential opportunities in the borough that achieve the wider aims of decentralised energy schemes, namely; decarbonisation of the energy supply, reduced fuel poverty and increased security of supply.

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 networks within the London Borough of Hounslow. 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. These other programmes of work could include:

- Implementing other technological interventions such as solar thermal, small scale biomass boilers, ground source heat pumps, air source heat pumps, photovoltaic panels (PV) and appropriately sized wind turbines
- Contributing to the decarbonisation of the national gas and electricity grids, perhaps through energy from waste mechanisms or other renewable resources
- Identifying a suitable addition to any proposed Community Infrastructure Levy (CIL) that would allow the borough to fund carbon reduction infrastructure

- Setting up a local carbon fund collected through the planning process to enable the borough to prioritise carbon reduction programmes

Ultimately these programmes of work should help the London Borough of Hounslow to meet the Mayor of London's carbon reduction commitment of 60% by 2025.

8.5 Concluding remarks

Compared to some of the more central boroughs in the GLA, the London Borough of Hounslow could perhaps be thought of as less dense in population, heat demand, and hence opportunities for DE. This study has found, however, that there are a number of potential areas where the borough contains sufficient levels of heat demand, density, and diversity to justify the development of DH networks around CHP, so delivering carbon emissions savings to the borough, and the potential to reduce instances of fuel poverty for its residents. Particularly for the Hounslow Town Centre and Brentford clusters, the opportunity exists for DE schemes of significant magnitudes that would serve as an example to other areas both within London and the entire United Kingdom should they be realised.

Appendix A

Populated Template and London
Heat Map Heat Load typologies

A1 Populated Template

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 |
|--------|--------|---|--|-----------|------------------|-----------------|-------------------------|-----------------|-------------|--|--------------------------------|--------------------------------|---------------------|--|---|---------------------------------------|-------------------------|----------------------|-------------------------|------------|-----------------|-------------|-------------------------|-------------|----------|-------------------------|-------|
| 511680 | 173295 | De Brome Building (Leased by West Thames College: Feltham Skills Centre) | 77 Boundaries Road, Feltham, Middlesex | TW13 5DT | Local government | No | Education facilities | Central Boilers | Natural gas | 244.79 | - | 4,116 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 510809 | 173330 | Feltham North Childrens Centre aka Alf King Centre | 7 Hanworth Road | TTW13 5AF | Local government | No | Education facilities | Central Boilers | Natural gas | 32.40 | - | - | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 511481 | 175793 | Beavers Childrens Children | c/o Surestart, The Hub, Salisbury Road, Hounslow | TW4 7NW | Local government | No | Education facilities | Central Boilers | Natural gas | 157.97 | - | - | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 508821 | 173234 | Bedfont Childrens Centre | Fairholme Primary School, Peacock Avenue, Bedfont | TW14 8ET | Local government | No | Education facilities | Central Boilers | Natural gas | 12.36 | - | - | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 517646 | 177512 | Brentford Day Nusery (Half Acre) | Brentford | TW8 8BH | Local government | No | Education facilities | Central Boilers | Natural gas | 102.63 | - | - | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 509664 | 172324 | Feltham Hill Childrens Centre | Feltham Hill Junior, Infant and Nursery, Bedfont Road, Feltham | TW13 4LZ | Local government | No | Education facilities | Central Boilers | Natural gas | 167.50 | - | - | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 512213 | 175652 | Hounslow Education Centre | Martindale Road, Hounslow | TW4 7HE | Local government | No | Education facilities | Central Boilers | Natural gas | 460.18 | - | 2,000 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 515798 | 176712 | Woodbridge Educational Service | 24 Wood Lane, Isleworth | TW7 5ED | Local government | No | Education facilities | Central Boilers | Natural gas | 163.81 | - | - | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 516059 | 175596 | Redlees Centre Under Fives | Redlees Park, Worton Road, Isleworth, Middlesex | TW7 6ER | Local government | No | Education facilities | Central Boilers | Natural gas | 46.11 | - | - | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 513572 | 175839 | The Spot - Hounslow Child and Family Centre aka Nantly House Under 8's Centre | 33 Lampton Road, Hounslow, TW3 1JG | TW3 1JG | Local government | No | Education facilities | Central Boilers | Natural gas | 128.92 | - | - | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 516993 | 177141 | Acton Lodge Resource Centre - Brentford Care Centre | 84 London Road, Brentford | TW8 8JJ | Local government | No | Local government estate | Central Boilers | Natural gas | 518.15 | - | 1,571 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 520551 | 178308 | Chiswick Offices Social Services | Ashburnham House, Horticultural Place off Heathfield Terrace, Chiswick, London | W4 4BY | Local government | No | Local government estate | Central Boilers | Natural gas | 44.97 | - | 670 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 512399 | 177317 | Berkeley Centre - CTPLD | 27 Cranford Lane, Heston | TW5 9EP | Local government | No | Local government estate | Central Boilers | Natural gas | 25.85 | - | 319 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 520601 | 178645 | Chiswick Day Care Centre | Bridge Street, London | W4 5UF | Local | No | Local | Central | Natural gas | 204.90 | - | 726 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |

| 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 (MWh) | CHP installed electrical capacity (MWe) | CHP installed thermal capacity (MWh) | 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 |
|--------|--------|--|--|----------|------------------|-----------------|-------------------------|-----------------|-------------|--|--------------------------------|--------------------------------|---------------------|---|---|--------------------------------------|-------------------------|----------------------|-------------------------|------------|-----------------|-------------|-------------------------|-------------|----------|-------------------------|-------|
| | | | | | government | | government estate | Boilers | | | | | | | | | | | | | | | | | | | |
| 520814 | 178686 | Clifton Gardens Elderley Persons Home (aka Chiswick Resource Centre) | 59 Clifton Gardens, off Belmont Road, Chiswick, London | W4 5TZ | Local government | No | Local government estate | Central Boilers | Natural gas | 551.03 | - | 1,736 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 517079 | 177143 | Drop in Centre - Canal House aka Cherry Tree House | 97 London Road, Brentford, Middlesex | TW8 8JQ | Local government | No | Local government estate | Central Boilers | Natural gas | 235.70 | - | - | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 509956 | 172166 | Feltham Dene | Spring Road | TW13 7JB | Local government | No | Local government estate | Central Boilers | Natural gas | 213.69 | - | - | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 510819 | 173287 | Feltham Local Office - Social Services | 13 Hanworth Road, Feltham, Middlesex | TW13 5AF | Local government | No | Local government estate | Central Boilers | Natural gas | 195.93 | - | 621 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 512105 | 177151 | Heston Day Support Service | 36 Springwell Road, Hounslow | TW5 9EJ | Local government | No | Local government estate | Central Boilers | Natural gas | 51.42 | - | - | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 512474 | 176823 | Heston House | Vicarage Farm Road, Hounslow | TW5 0AH | Local government | No | Local government estate | Central Boilers | Natural gas | 1075.10 | - | 2,845 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 512824 | 177543 | Heston Local Office | - | - | Local government | No | Local government estate | Central Boilers | Natural gas | 215.71 | - | 685 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 512835 | 177530 | Heston Resource Centre - Acorn Centre | New Heston Road, Hounslow | TW5 0LW | Local government | No | Local government estate | Central Boilers | Natural gas | 121.27 | - | 267 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 516185 | 175638 | Isleworth Centre (Ground and First Floor) | 146 Twickenham Road, Isleworth | TW7 7DJ | Local government | No | Local government estate | Central Boilers | Natural gas | 184.99 | - | - | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 514287 | 175770 | School Road Centre - Number 10 Project | 10 School Road, Hounslow | TW3 1QZ | Local government | No | Local government estate | Central Boilers | Natural gas | 13.31 | - | 645 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 510727 | 174094 | Two Bridges Resource Centre | 2A Marriott Close, Feltham | TW14 9PZ | Local government | No | Local government estate | Central Boilers | Natural gas | 123.81 | - | 482 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 514808 | 175894 | Bridge Road Depot | Pears Road, Hounslow | TW3 1SQ | Local government | No | Local government estate | Central Boilers | Natural gas | 856.45 | - | 5,121 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 513449 | 176371 | Civic Centre | Lampton Road, Hounslow | TW3 4DN | Local government | No | Local government | Central Boilers | Natural gas | 4130.20 | - | 24,528 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |

| 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 (MWh) | CHP installed electrical capacity (MWe) | CHP installed thermal capacity (MWh) | 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 |
|--------|--------|--|---|----------|------------------|-----------------|----------------------------|-----------------|-------------|--|--------------------------------|--------------------------------|---------------------|---|---|--------------------------------------|-------------------------|----------------------|-------------------------|------------|-----------------|-------------|-------------------------|-------------|----------|-------------------------|-------|
| | | | | | | | estate | | | | | | | | | | | | | | | | | | | | |
| 513531 | 176239 | Council Offices adjacent to the Civic Centre | 88 Lampton Road, Hounslow | TW3 4DN | Local government | No | Local government estate | Central Boilers | Natural gas | 152.49 | - | 1,057 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 512816 | 177547 | Heston Local Area Office | 41 New Heston Road, Hounslow | TW5 0LW | Local government | No | Local government estate | Central Boilers | Natural gas | 63.05 | - | 685 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 519171 | 178280 | Brentford Fountain | 658 Chiswick High Road, Brentford | TW8 0HJ | Local government | No | Sport & Leisure facilities | Central Boilers | Natural gas | 2202.96 | - | - | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 520517 | 178341 | Chiswick Town Hall | Heathfield Terrace, Turnham Green, Chiswick | W4 4JN | Local government | No | Local government estate | Central Boilers | Natural gas | 211.86 | - | 2,492 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 511849 | 172556 | Hanworth Air Park Leisure Centre | Uxbridge Road, Hanworth | TW13 5EG | Local government | No | Sport & Leisure facilities | Central Boilers | Natural gas | 2882.20 | - | - | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 510796 | 173718 | Feltham Assembly Hall | Feltham Park, Hounslow Road, Feltham | TW14 9DN | Local government | No | Local government estate | Central Boilers | Natural gas | 74.31 | - | 1,137 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 512880 | 177638 | Heston Pool | New Heston Road, Hounslow | TW5 0LW | Local government | No | Sport & Leisure facilities | Central Boilers | Natural gas | 2386.32 | - | 2,173 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 512882 | 177541 | Heston Village Hall | New Heston Road, Hounslow | TW5 0LW | Local government | No | Local government estate | Central Boilers | Natural gas | 286.50 | - | 240 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 516394 | 175752 | Isleworth Public Hall | South Street, Isleworth | TW7 7BG | Local government | No | Local government estate | Central Boilers | Natural gas | 95.58 | - | 632 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 516070 | 175501 | Isleworth Rec Club | Twickenham Road, Isleworth | TW7 7EU | Local government | No | Sport & Leisure facilities | Central Boilers | Natural gas | 1983.39 | - | 3,626 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 513425 | 176546 | Lampton Sports | Lampton Avenue, Hounslow | TW3 4EP | Local government | No | Sport & Leisure facilities | Central Boilers | Natural gas | 111.93 | - | - | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 513641 | 175742 | Montague Hall | Montague Road, Hounslow | TW3 1LD | Local government | No | Local government estate | Central Boilers | Natural gas | 99.52 | - | 537 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 521230 | 177327 | New Chiswick Pool | Edensor Road, Chiswick | W4 2RG | Local government | No | Sport & Leisure facilities | Central Boilers | Natural gas | 2466.28 | - | 1,033 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |

| 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 |
|-----------|--------|---------------------------------------|-----------------------------------|----------|------------------|-----------------|-------------------------|-----------------|-------------|--|--------------------------------|--------------------------------|---------------------|--|---|---------------------------------------|-------------------------|----------------------|-------------------------|------------|-----------------|-------------|-------------------------|-------------|----------|-------------------------|-------|
| 509530 | 173557 | Southville Community Centre | Southville Road, Bedfont, Feltham | TW14 8AP | Local government | No | Local government estate | Central Boilers | Natural gas | 35.14 | - | 634 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 512698 | 175230 | Wellington Day Centre | 292 Staines Road, Hounslow | TW4 5BA | Local government | No | Local government estate | Central Boilers | Natural gas | 33.63 | - | 400 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 510111 | 173329 | Ashmead Depot | Ashmead Road, Feltham | TW14 9NN | Local government | No | Local government estate | Central Boilers | Natural gas | 198.72 | - | 852 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 518524 | 178106 | Cornish House | Green Dragon Lane, Hounslow | TW8 | Local government | No | Local government estate | Central Boilers | Natural gas | 2.10 | - | - | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 511133 | 176211 | Hounslow West Depot | 75 Great South West Road | TW4 9NH | Local government | No | Local government estate | Central Boilers | Natural gas | 198.20 | - | - | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 515864 | 174056 | Langdale Community Centre | 240 Summerwood Road, Isleworth | TW7 7QN | Local government | No | Local government estate | Central Boilers | Natural gas | 91.68 | - | - | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 510686 | 173226 | St. Catherines House | 2 Hanworth Road, Feltham | TW13 5AB | Local government | No | Local government estate | Central Boilers | Natural gas | 202.47 | - | 1,550 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 508872 | 173716 | Bedfont Library | Staines Road, Bedfont | TW14 8DB | Local government | No | Local government estate | Central Boilers | Natural gas | 97.95 | - | 465 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 517605 | 177763 | Brentford Library (Boston Manor Road) | Boston Manor Road | TW8 8DW | Local government | No | Local government estate | Central Boilers | Natural gas | 169.47 | - | 612 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 520819 | 178405 | Chiswick Library | Dukes Avenue | W4 2AB | Local government | No | Local government estate | Central Boilers | Natural gas | 222.28 | - | 1,546 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 510761 | 176670 | Cranford Library | Bath Road | TW5 9TL | Local government | No | Local government estate | Central Boilers | Natural gas | 93.10 | - | 1,993 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 519052 | 179247 | Gunnorsbury Park Museum | Popes Lane, London | W3 8LQ | Local government | No | Museums & Art Galleries | Central Boilers | Natural gas | 305.27 | - | - | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 519137 | 179293 | Gunnorsbury Park | Popes Lane, London | W3 8LQ | Local government | No | Museums & Art Galleries | Central Boilers | Natural gas | 320.08 | - | - | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 512071.75 | 172492 | Hanworth Library | Uxbridge Road, Hanworth | TW13 5EG | Local government | No | Local government estate | Central Boilers | Natural gas | 122.49 | - | 679 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |

| 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 (MWh) | CHP installed electrical capacity (MWe) | CHP installed thermal capacity (MWh) | 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 |
|----------|----------|--|--|----------|------------------|-----------------|-------------------------|-----------------|-------------|--|--------------------------------|--------------------------------|---------------------|---|---|--------------------------------------|-------------------------|----------------------|-------------------------|------------|-----------------|-------------|-------------------------|-------------|---------|-------------------------|-------|
| 513850 | 175627 | Hounslow Library (The Treaty Centre) | Centre Space, Treaty Centre, High Street, Hounslow | TW3 1ES | Local government | No | Local government estate | Central Boilers | Natural gas | 1471.01 | - | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - | |
| 514956 | 177228 | Osterley Library | St Mary's Crescent | TW7 4NB | Local government | No | Local government estate | Central Boilers | Natural gas | 66.21 | - | 361 | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - | |
| 510526 | 173050 | The Longford Centre | Tilley Road, Feltham, Middlesex | TW13 4BH | Local government | No | Local government estate | Central Boilers | Natural gas | 60.86 | - | 2,014 | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - | |
| 510185 | 174768 | Urban Farm (Continental Landscapes) | Faggs Road, Feltham | TW14 0LZ | Local government | No | Local government estate | Central Boilers | Natural gas | 0.31 | - | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - | |
| 513950 | 176295 | Alexandra Junior | Denbigh Road, Hounslow | TW3 4DU | Local government | No | Education facilities | Central Boilers | Natural gas | 559.26 | - | 2,383 | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - | |
| 512929 | 177231 | Andrew Ewing Primary (aka Westbrook Primary) | Westbrook Road, Heston, Hounslow | TW5 0NB | Local government | No | Education facilities | Central Boilers | Natural gas | 243.38 | - | 2,270 | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - | |
| 511171 | 175731 | Beavers Community Primary | Arundel Road, Hounslow | TW4 6HR | Local government | No | Education facilities | Central Boilers | Natural gas | 607.41 | - | 3,701 | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - | |
| 509105 | 174367 | Bedfont Primary | Hatton Road, East Bedfont | TW14 9QZ | Local government | No | Education facilities | Central Boilers | Natural gas | 685.63 | - | 5,339 | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - | |
| 520690 | 178592 | Belmont Primary (aka Belmont Nursery School) | Belmont Road, Chiswick | W4 5UL | Local government | No | Education facilities | Central Boilers | Natural gas | 481.90 | - | 3,014 | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - | |
| 511896 | 177485 | Berkeley Primary | Cranford Lane, Heston | TW5 9HQ | Local government | No | Education facilities | Central Boilers | Natural gas | 434.95 | - | 2,753 | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - | |
| 517740 | 177701 | Brentford School for Girls | 5 Boston Manor Road, Brentford | TW8 0PG | Local government | No | Education facilities | Central Boilers | Natural gas | 2443.98 | - | 9,522 | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - | |
| 510720 | 173228 | Cardinal Road Infant and Nursery | Cardinal Road, Feltham | TW13 5AL | Local government | No | Education facilities | Central Boilers | Natural gas | 357.91 | - | 2,256 | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - | |
| 521132.6 | 177286.6 | Cavendish Primary | Edensor Road, Chiswick | W4 2RG | Local government | No | Education facilities | Central Boilers | Natural gas | 333.57 | - | 1,978 | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - | |
| 514364.9 | 175244.5 | Chatsworth Primary School | Heath Road, Hounslow | TW3 2NW | Local government | No | Education facilities | Central Boilers | Natural gas | 397.59 | - | 3,063 | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - | |
| 520956 | 177309 | Chiswick Community School | Burlington Lane, Chiswick | W4 3UN | Local government | No | Education facilities | Central Boilers | Natural gas | 2741.18 | - | 12,026 | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - | |
| 512522.5 | 172595.9 | Crane Infants and Nursery School | Norman Avenue, Hanworth | TW13 5LN | Local government | No | Education facilities | Central Boilers | Natural gas | 18.84 | - | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - | |
| 512522.5 | 172595.9 | Crane Park Primary | Norman Avenue, Hanworth | TW13 5LN | Local government | No | Education facilities | Central Boilers | Natural gas | 1094.97 | - | 4,702 | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - | |
| 510734 | 177692 | Cranford Community School | High Street, Cranford | TW5 9PD | Local government | No | Education facilities | Central Boilers | Natural gas | 3370.00 | - | 12,220 | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - | |

| 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 (MWh) | CHP installed electrical capacity (MWe) | CHP installed thermal capacity (MWh) | 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 |
|--------|--------|---------------------------------|--|----------|------------------|-----------------|----------------------|-----------------|-------------|--|--------------------------------|--------------------------------|---------------------|---|---|--------------------------------------|-------------------------|----------------------|-------------------------|------------|-----------------|-------------|-------------------------|-------------|----------|-------------------------|-------|
| 510603 | 176235 | Cranford Junior | Berkeley Avenue, Cranford | TW4 6LB | Local government | No | Education facilities | Central Boilers | Natural gas | 553.09 | - | 3,721 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 509447 | 172812 | Edward Pauling Primary | Redford Close, Feltham | TW13 4TQ | Local government | No | Education facilities | Central Boilers | Natural gas | 347.46 | - | 2,948 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 508821 | 173233 | Fairholme Primary | Peacock Avenue, Bedfont | TW14 8ET | Local government | No | Education facilities | Central Boilers | Natural gas | 726.08 | - | 4,070 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 511227 | 172871 | Feltham Community College | Browells Lane, Feltham | TW13 7EF | Local government | No | Education facilities | Central Boilers | Natural gas | 1518.52 | - | 15,269 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 509695 | 172161 | Feltham Hill Junior | Ashford Road, Feltham | TW13 4QP | Local government | No | Education facilities | Central Boilers | Natural gas | 473.97 | - | 2,588 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 509664 | 172324 | Feltham Hill Infant and Nuser | Bedfont Road, Feltham | TW13 4LZ | Local government | No | Education facilities | Central Boilers | Natural gas | 215.42 | - | 1,706 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 512117 | 171047 | Forge Lane Primary | Forge Lane, Hanworth | TW13 6UN | Local government | No | Education facilities | Central Boilers | Natural gas | 374.34 | - | 2,601 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 520136 | 177596 | Grove Park Primary | Nightingale Close, Chiswick | W4 3JN | Local government | No | Education facilities | Central Boilers | Natural gas | 298.91 | - | 1,848 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 513110 | 175201 | Grove Road Primary | Cromwell Road, Hounslow | TW3 3QQ | Local government | No | Education facilities | Central Boilers | Natural gas | 258.02 | - | 1,726 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 513320 | 177345 | Heston Community School | Heston Road, Heston | TW5 0QR | Local government | No | Education facilities | Central Boilers | Natural gas | 2334.67 | - | 11,354 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 513308 | 177431 | Heston Community Sports Hall | Hounslow, Middlesex | TW5 0QZ | Local government | No | Education facilities | Central Boilers | Natural gas | 319.78 | - | - | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 512200 | 175494 | Hounslow Heath Infant and Nuser | Martindale Road, Hounslow | TW4 7HE | Local government | No | Education facilities | Central Boilers | Natural gas | 338.06 | - | 2,335 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 512374 | 175491 | Hounslow Heath Junior | Selwyn Close, Cambridge Road, Hounslow | TW4 7BD | Local government | No | Education facilities | Central Boilers | Natural gas | 246.22 | - | 2,448 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 513987 | 176000 | Hounslow Manor School | Prince Regent Road, Hounslow | TW3 1NE | Local government | No | Education facilities | Central Boilers | Natural gas | 1868.13 | - | 10,727 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 514456 | 175843 | Hounslow Town Primary | Pears Road, Hounslow | TW3 1SR | Local government | No | Education facilities | Central Boilers | Natural gas | 565.48 | - | 2,759 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 515308 | 176984 | Isleworth and Syon School | Ridgeway Road, Isleworth | TW7 5LJ | Local government | No | Education facilities | Central Boilers | Natural gas | 1017.00 | - | 9,141 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 516139 | 176282 | Isleworth Town Primary | Twickenham Road, Isleworth | TW7 6AB | Local government | No | Education facilities | Central Boilers | Natural gas | 270.84 | - | 2,048 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 515922 | 174346 | Ivybridge Primary | Summerwood Road, Isleworth | TW7 7QB | Local government | No | Education facilities | Central Boilers | Natural gas | 8349.01 | - | 4,070 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 513434 | 176600 | Lampton School | Lampton Avenue, Hounslow | TW3 4EP | Local government | No | Education facilities | Central Boilers | Natural gas | 728.25 | - | 10,996 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 511658 | 171082 | Lindon Bennett School | Main Street, Feltham | TW13 6ST | Local government | No | Education facilities | Central Boilers | Natural gas | 546.31 | - | 1,683 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |

| 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 (MWh) | CHP installed electrical capacity (MWe) | CHP installed thermal capacity (MWh) | 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 |
|--------|--------|-------------------------------------|--|----------|------------------|-----------------|----------------------|-----------------|-------------|--|--------------------------------|--------------------------------|---------------------|---|---|--------------------------------------|-------------------------|----------------------|-------------------------|------------|-----------------|-------------|-------------------------|-------------|----------|-------------------------|-------|
| 518405 | 178577 | Lionel Primary | Lionel Road North, Brentford | TW8 9QT | Local government | No | Education facilities | Central Boilers | Natural gas | 845.70 | - | 2,828 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 509803 | 173813 | Longford Community School | Tachbrook Road, Feltham | TW14 9PE | Local government | No | Education facilities | Central Boilers | Natural gas | 3238.07 | - | 16,816 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 509157 | 174531 | Marjory Kinnon School | Hatton Road, Bedfont, Feltham, Middlesex | TW14 9QZ | Local government | No | Education facilities | Central Boilers | Natural gas | 1013.75 | - | 2,761 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 516229 | 176881 | Marlborough Primary | Off London Road, via Darcy Road, Isleworth | TW7 5XA | Local government | No | Education facilities | Central Boilers | Natural gas | 538.91 | - | 3,647 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 512552 | 178345 | Norwood Green Infant and Nuser | Thorncliffe Road, Southall | UB2 5RN | Local government | No | Education facilities | Central Boilers | Natural gas | 232.39 | - | 1,594 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 514918 | 175753 | Oaklands School | Woodlands Road, Isleworth | TW7 6JZ | Local government | No | Education facilities | Central Boilers | Natural gas | 310.47 | - | 1,520 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 511993 | 172056 | Oriel Primary | Hounslow Road, Hanworth | TW13 6QQ | Local government | No | Education facilities | Central Boilers | Natural gas | 467.20 | - | 3,456 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 509787 | 173406 | Southville Infant and Nuser | Bedfont Lane, Feltham | TW14 9NP | Local government | No | Education facilities | Central Boilers | Natural gas | 533.51 | - | 3,549 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 511139 | 173878 | Sparrow Farm Infant and Nuser | Denham Road, Feltham | TW14 0DB | Local government | No | Education facilities | Central Boilers | Natural gas | 173.63 | - | 1,353 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 511338 | 173818 | Sparrow Farm Junior | Sparrow Farm Drive, Feltham | TW14 0DG | Local government | No | Education facilities | Central Boilers | Natural gas | 403.97 | - | 1,422 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 514791 | 176242 | Spring Grove Primary | Star Road, Isleworth | TW7 4HB | Local government | No | Education facilities | Central Boilers | Natural gas | 220.69 | - | 1,448 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 512230 | 177125 | Springwell Infant and Nuser | Speart Lane, Heston | TW5 9EF | Local government | No | Education facilities | Central Boilers | Natural gas | 466.01 | - | 1,774 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 512360 | 177029 | Springwell Junior | Vicarage Farm Road, Hounslow | TW5 0AG | Local government | No | Education facilities | Central Boilers | Natural gas | 248.81 | - | 1,908 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 510644 | 173014 | St Lawrence RC Primary | Victoria Road, Feltham | TW13 4FF | Local government | No | Education facilities | Central Boilers | Natural gas | 379.10 | - | 2,019 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 512998 | 175610 | St Marks Catholic School | 106 Bath Road, Hounslow, Middlesex | TW3 3EJ | Local government | No | Education facilities | Central Boilers | Natural gas | 966.89 | - | 9,464 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 521084 | 177989 | St Marys RC Primary (Chiswick) | Duke Road, Chiswick | W4 2DF | Local government | No | Education facilities | Central Boilers | Natural gas | 239.27 | - | 1,869 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 516294 | 175817 | St Marys RC Primary (Isleworth) | South Street, Isleworth | TW7 7EE | Local government | No | Education facilities | Central Boilers | Natural gas | 159.54 | - | 1,428 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 512631 | 175572 | St Michael and St Martin RC Primary | Belgrave Road, Hounslow | TW4 7AG | Local government | No | Education facilities | Central Boilers | Natural gas | 370.13 | - | 2,402 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 517794 | 177567 | St Paul's CE Primary | St Pauls Road, Brentford | TW8 0PN | Local government | No | Education facilities | Central Boilers | Natural gas | 227.86 | - | 1,155 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 519493 | 177903 | Strand on the Green Junior | Thames Road, Chiswick | W4 3NX | Local government | No | Education facilities | Central Boilers | Natural gas | 612.32 | - | 2,320 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |

| 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 (MWh) | CHP installed electrical capacity (MWe) | CHP installed thermal capacity (MWh) | 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 |
|--------|--------|-------------------------------------|------------------------------------|----------|------------------|-----------------|----------------------------|-----------------|-------------|--|--------------------------------|--------------------------------|---------------------|---|---|--------------------------------------|-------------------------|----------------------|-------------------------|------------|-----------------|-------------|-------------------------|-------------|----------|-------------------------|-------|
| 516545 | 176760 | Syon Park School | Twickenham Road, Isleworth | TW7 6AU | Local government | No | Education facilities | Central Boilers | Natural gas | 187.63 | - | - | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 516442 | 175825 | The Blue CE School | North Street, Isleworth, Middlesex | TW7 6RQ | Local government | No | Education facilities | Central Boilers | Natural gas | 173.54 | - | 752 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 510500 | 177353 | The Cedars Primary School | High Street, Cranford | TW5 9RU | Local government | No | Education facilities | Central Boilers | Natural gas | 191.95 | - | 1,322 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 516419 | 176928 | The Green School | Busch Corner, Isleworth | TW7 5BB | Local government | No | Education facilities | Central Boilers | Natural gas | 851.46 | - | 8,625 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 512919 | 174446 | The Heathland School | Wellington Road South, Hounslow | TW4 5JD | Local government | No | Education facilities | Central Boilers | Natural gas | 2060.99 | - | 13,519 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 513024 | 177772 | The Rosary RC Primary | 10 The Green, Heston | TW5 0RL | Local government | No | Education facilities | Central Boilers | Natural gas | 248.62 | - | 2,525 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 516226 | 176513 | The Smallberry Green School | Turnpike Way, Isleworth | TW7 5BF | Local government | No | Education facilities | Central Boilers | Natural gas | 383.32 | - | 2,969 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 510724 | 173057 | Victoria School | Victoria Road, Feltham | TW13 4AQ | Local government | No | Education facilities | Central Boilers | Natural gas | 54.42 | - | 1,640 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 512823 | 176312 | Wellington Primary | Sutton Lane, Hounslow | TW3 4LB | Local government | No | Education facilities | Central Boilers | Natural gas | 271.85 | - | 2,197 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 521192 | 178039 | William Hogarth Primary | Duke Road, Chiswick | W4 2JR | Local government | No | Education facilities | Central Boilers | Natural gas | 751.89 | - | 3,147 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 515798 | 176711 | Woodbridge Park Educational Service | 24 Wood Lane, Isleworth | TW7 5ED | Local government | No | Education facilities | Central Boilers | Natural gas | 144.44 | - | 1,103 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 516484 | 175406 | Worple Primary | Queens Terrace, Isleworth | TW7 7DB | Local government | No | Education facilities | Central Boilers | Natural gas | 249.99 | - | 1,607 | - | - | - | - | - | - | 2011 | - | - | - | No | - | Hounslow | - | - |
| 511145 | 178386 | David Lloyd Racquet & Fitness Club | Southall Lane, Hounslow | TW5 9PE | - | No | Sport & Leisure facilities | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 521271 | 176519 | Esporta Health Club | Dukes Meadows, London | W4 2SX | - | No | Sport & Leisure facilities | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 521902 | 178590 | Esporta Health Clubs Ltd | 3, Chiswick High Road, London | W4 2ND | - | No | Sport & Leisure facilities | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 513567 | 175779 | Golds Gym | 29-31, Lampton Road, Hounslow | TW3 1JA | - | No | Sport & Leisure facilities | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 516602 | 175733 | La Fitness Ltd | Swan Street, Isleworth | TW7 6RJ | - | No | Sport & Leisure facilities | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 511849 | 172557 | Life Centre | Uxbridge Road, Feltham | TW13 5EG | - | No | Sport & | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |

| 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 |
|--------|--------|--------------------------|-------------------------------|----------|--------------------|-----------------|---------------------------------|----------------------|-------------|--|--------------------------------|--------------------------------|---------------------|--|---|---------------------------------------|-------------------------|----------------------|-------------------------|------------|-----------------|-------------|-------------------------|-------------|----------|-------------------------|-------|
| | | | | | | | Leisure facilities | | | | | | | | | | | | | | | | | | | | |
| 521267 | 177323 | Life Centre | Edensor Road, London | W4 2RG | - | No | Sport & Leisure facilities | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 516604 | 177687 | Topnotch Health Club | 1-5, Windsor Close, Brentford | TW8 9DZ | - | No | Sport & Leisure facilities | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 517054 | 177122 | London Cyrenians Housing | 97 London Road ,Brentford | TW8 8JQ | Central government | No | Central government estate | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 510336 | 174777 | Feltham Fire Station | 101 FAGGS ROAD | TW14 0LZ | Other public | No | Fire stations | Assets including CHP | Natural gas | 233.45 | 28 | 847 | 0.00 | 0.2 | 0.01 | 0.02 | 0 | 1961 | 2009 | - | - | Meters | No | - | Hounslow | - | - |
| 515167 | 176444 | Heston Fire Station | 520 LONDON ROAD | TW7 4HR | Other public | No | Fire stations | Individual boilers | Natural gas | 364.27 | 0 | 1,049 | 0.00 | 0.31 | 0.00 | 0.00 | 0 | 1936 | 2009 | - | - | Meters | No | - | Hounslow | - | - |
| 520280 | 178258 | Chiswick Fire Station | 2/4 HEATHFIELD GARDENS | W4 4JY | Other public | No | Fire stations | Assets including CHP | Natural gas | 223.82 | 28 | 718 | 0.00 | 0.19 | 0.01 | 0.02 | 0 | 1964 | 2009 | - | - | Meters | No | - | Hounslow | - | - |
| 510893 | 173896 | Hounslow Hotel | HOUNSLOW ROAD, FELTHAM | TW140AU | Private | No | Hotels (> 99 units or 4,999 m2) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 510779 | 173469 | St. Giles Hotel | HOUNSLOW ROAD, FELTHAM | TW149AD | Private | No | Hotels (> 99 units or 4,999 m2) | - | - | 4969.00 | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 512945 | 175384 | Shalimar Hotel | STAINES ROAD, HOUNSLOW | TW3 3JJ | Private | No | Hotels (> 99 units or 4,999 m2) | - | - | 590.00 | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 512362 | 177737 | Thorncliffe Hotel | NORTH HYDE LANE, HOUNSLOW | TW5 0ES | Private | No | Hotels (> 99 units or 4,999 m2) | - | - | 0.00 | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 513890 | 174504 | South Western Hotel | WHITTON ROAD, HOUNSLOW | TW3 2EP | Private | No | Hotels (> 99 units or 4,999 m2) | - | - | 0.00 | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 513743 | 175262 | Treaty Lodge Hotel | HANWORTH ROAD, HOUNSLOW | TW3 3TU | Private | No | Hotels (> 99 units or 4,999 m2) | - | - | 0.00 | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 513567 | 175779 | Continental Hotel | LAMPTON ROAD, HOUNSLOW | TW3 1JA | Private | No | Hotels (> 99 units or 4,999 m2) | - | - | 0.00 | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |

| 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 (MWh) | CHP installed electrical capacity (MWe) | CHP installed thermal capacity (MWh) | 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 |
|--------|--------|--|-------------------------------|----------|--------------|-----------------|---------------------------------|----------------|-------------|--|--------------------------------|--------------------------------|---------------------|---|---|--------------------------------------|-------------------------|----------------------|-------------------------|------------|-----------------|-------------|-------------------------|-------------|----------|-------------------------|-------|
| 513066 | 176734 | Master Robert Hotel | GREAT WEST ROAD, HOUNSLOW | TW5 0BD | Private | No | Hotels (> 99 units or 4,999 m2) | - | - | 0.00 | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 515612 | 177338 | The Osterley Four Pillars Hotel | GREAT WEST ROAD, ISLEWORTH | TW7 5NA | Private | No | Hotels (> 99 units or 4,999 m2) | - | - | 0.00 | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 518396 | 177843 | Travelodge Hotels Ltd | HIGH STREET, BRENTFORD | TW8 0BD | Private | No | Hotels (> 99 units or 4,999 m2) | - | - | 1700.00 | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | Benchmarked | - |
| 519613 | 178461 | Chiswick Moran Hotel | CHISWICK HIGH ROAD, LONDON | W4 5RY | Private | No | Hotels (> 99 units or 4,999 m2) | - | - | 0.00 | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 520941 | 178561 | Shangri-La Hotels & Resorts | FISHERS LANE, LONDON | W4 1RX | Private | No | Hotels (> 99 units or 4,999 m2) | - | - | 0.00 | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 521231 | 178564 | Fouberts Hotel | TURNHAM GREEN TERRACE, LONDON | W4 1QP | Private | No | Hotels (> 99 units or 4,999 m2) | - | - | 0.00 | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 521539 | 178530 | Chiswick Hotel | CHISWICK HIGH ROAD, LONDON | W4 2LS | Private | No | Hotels (> 99 units or 4,999 m2) | - | - | 0.00 | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 521904 | 178670 | Stamford Hotel | GOLDHAWK ROAD, LONDON | W6 0SB | Private | No | Hotels (> 99 units or 4,999 m2) | - | - | 0.00 | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 521596 | 179022 | Chiswick Court Hotel | BATH ROAD, LONDON | W4 1LJ | Private | No | Hotels (> 99 units or 4,999 m2) | - | - | 0.00 | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 518783 | 178064 | Kew Bridge Steam Museum | - | TW8 0EN | Private | No | Museums & Art Galleries | - | - | 613.00 | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | Benchmarked | - |
| 518604 | 177932 | The Musical Museum | 399 High Street, Brentford | TW8 0DU | Private | No | Museums & Art Galleries | - | - | 159.00 | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | Benchmarked | - |
| 518269 | 177686 | Watermans Arts Centre | 40 High Street, Brentford | TW8 0DS | Private | No | Museums & Art Galleries | - | - | 345.00 | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | Benchmarked | - |
| 516346 | 176341 | West Middlesex University Hospital | TWICKENHAM ROAD, ISLEWORTH | TW7 6AF | Other public | No | NHS | - | - | 0.00 | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 513710 | 175730 | Hounslow Police Station, Metropolitan Police | MONTAGUE ROAD, HOUNSLOW | TW3 1LB | Other public | No | Police stations | - | - | 0.00 | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 521023 | 178460 | Chiswick Police Station 205-207, Metropolitan Police | CHISWICK HIGH ROAD, LONDON | W4 2DU | Other public | No | Police stations | - | - | 0.00 | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |

| 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 |
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| 508870 | 172052 | H M Prison Feltham | FIELD VIEW | TW134RZ | Other public | No | Prisons | - | - | 0.00 | - | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 508996 | 172409 | Hm Yoi & Rc Feltham | BEDFONT ROAD | TW134ND | Other public | No | Prisons | - | Oil | 2151.01 | - | - | 0.00 | 0.640182 | 0.00 | 0.00 | 628.466 | - | 1997 | - | - | Boiler Sites | No | - | Hounslow | - | - |
| 508996 | 172409 | Hm Yoi & Rc Feltham | BEDFONT ROAD | TW134ND | Other public | No | Prisons | - | Oil | 107.55 | - | - | 0.00 | 0.032009 | 0.00 | 0.00 | 31.4233 | - | 1997 | - | - | Boiler Sites | No | - | Hounslow | - | - |
| 512013 | 171488 | Bear and Swan | Bear Road, Hanworth | TW13 6RF | Other public | No | Social Housing Estate | Boilers | Natural Gas | 1030.00 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | No | - | Hounslow | Estimated | Estate |
| 513049 | 175339 | Frogley House | Estridge Close, Hounslow | TW3 3QX | Other public | No | Social Housing Estate | Boilers | Natural Gas | 515.92 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 512783 | 175771 | Boswood Court | Ede Close, Hounslow | TW3 3EY | Other public | No | Social Housing Estate | Boilers | Natural Gas | 814.08 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Sheltered Housing Unit |
| 517236 | 177180 | Brent Lea (120-171) and Danehurst | Brent Lea, Brentford | TW8 8HY | Other public | No | Social Housing Estate | Boilers | Natural Gas | 2238.62 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Sheltered Housing Unit |
| 513916 | 176458 | Brookwood (2) 57-109, Odd 76-146 | Brookwood Road, Hounslow | TW3 4HE | Other public | No | Social Housing Estate | Boilers | Natural Gas | 1006.23 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 513834 | 176445 | Brookwood (1) (1-55, 2-74) | Brookwood Road, Hounslow | TW3 4HB | Other public | No | Social Housing Estate | Boilers | Natural Gas | 1176.08 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 508645 | 173711 | Burlington House | Burlington Close, Bedfont | TW14 8JU | Other public | No | Social Housing Estate | Boilers | Natural Gas | 216.38 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Sheltered Housing Unit |
| 511993 | 171978 | Oriol Estate | Cottington Road, Hanworth | TW13 6YH | Other public | No | Social Housing Estate | Boilers | Natural Gas | 3875.88 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 514885 | 176209 | Star Road (1-27) and Derwent Lodge | Star Road, Isleworth | TW7 4HF | Other public | No | Social Housing Estate | Boilers | Natural Gas | 1420.42 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Sheltered Housing Unit |
| 509627 | 173665 | Edward Pauling House | Westmacott Drive, Feltham | TW14 9RJ | Other public | No | Social Housing Estate | Boilers | Natural Gas | 689.42 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Sheltered Housing Unit |
| 514156 | 175646 | Everglades | Inwood Avenue, Hounslow | TW3 1XF | Other public | No | Social Housing Estate | Boilers | Natural Gas | 321.04 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Sheltered Housing Unit |
| 508395 | 173498 | David Henry Waring Court | Staines Road, Bedfont | TW14 8PE | Other public | No | Social Housing Estate | Boilers | Natural Gas | 639.77 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Sheltered Housing Unit |
| 516656 | 176809 | Fenn House | Lodge Close, Isleworth | TW7 5BS | Other public | No | Social Housing Estate | Boilers | Natural Gas | 532.65 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Sheltered Housing Unit |
| 518272 | 177809 | Griffin Court | Walnut Tree Road, | TW8 0JZ | Other public | No | Social | Boilers | Natural Gas | 725.73 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Sheltered |

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| | | | Brentford | | | | Housing Estate | | | | | | | | | | | | | | | | | | | | Housing Unit |
| 508258 | 173395 | Hatchett Road | Hatchett Road, Feltham | TW14 8DX | Other public | No | Social Housing Estate | Boilers | Natural Gas | 760.23 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 512930 | 175046 | Heath Court | Benham Gardens, Hounslow | TW4 5JY | Other public | No | Social Housing Estate | Boilers | Natural Gas | 552.04 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 510355 | 173052 | Highfields | Lemon Grove, Feltham | TW13 4DH | Other public | No | Social Housing Estate | Boilers | Natural Gas | 2839.19 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 512462 | 177329 | Hogarth Court | Cranford Lane, Hounslow | TW5 9ES | Other public | No | Social Housing Estate | Boilers | Natural Gas | 586.85 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Sheltered Housing Unit |
| 514448 | 175754 | Hyde House | 103 Pears Road, Hounslow | TW3 1RZ | Other public | No | Social Housing Estate | Boilers | Natural Gas | 837.65 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Sheltered Housing Unit |
| 520802 | 178635 | Jessop House | Kirton Close, Chiswick | W4 5UX | Other public | No | Social Housing Estate | Boilers | Natural Gas | 589.00 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Sheltered Housing Unit |
| 517610 | 178040 | Lambert Lodge | 56 Layton Road, Brentford | TW8 0PT | Other public | No | Social Housing Estate | Boilers | Natural Gas | 749.27 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Sheltered Housing Unit |
| 510736 | 174114 | Lavender Court | Becketts Close, Feltham | TW14 0BU | Other public | No | Social Housing Estate | Boilers | Natural Gas | 603.00 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Sheltered Housing Unit |
| 512639 | 175805 | Maitland Close Estate and Cooper House | Maitland Close, Hounslow | TW4 7DR | Other public | No | Social Housing Estate | Boilers | Natural Gas | 3169.81 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate and Sheltered Housing Unit |
| 518398 | 178060 | Brentford Towers and Harnage House | Green Dragon Lane, Brentford | TW8 0DL | Other public | No | Social Housing Estate | Boilers | Mixed source | 6315.15 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Sheltered Housing Unit |
| 519467 | 178045 | Meadowcroft | Brooks Road, Chiswick | W4 3BD | Other public | No | Social Housing Estate | Boilers | Natural Gas | 463.54 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Sheltered Housing Unit |
| 512668 | 174997 | Midsummer Avenue | Midsummer Avenue, Hounslow | TW4 5BB | Other public | No | Social Housing Estate | Boilers | Natural Gas | 2365.65 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 510661 | 173136 | New Chapel Square | Victoria Road, Feltham | TW13 4AY | Other public | No | Social Housing Estate | Boilers | Natural Gas | 2275.69 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 511676 | 177194 | Norman Crescent, flats 25-55 Odd | Norman Crescent, Heston | TW5 9JR | Other public | No | Social Housing Estate | Boilers | Natural Gas | 593.19 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 511717 | 177131 | Norman Crescent, flats 56- | Norman Crescent, Heston | TW5 9JP | Other public | No | Social | Boilers | Natural Gas | 445.38 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |

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| | | 106 Even | | | | | Housing Estate | | | | | | | | | | | | | | | | | | | | |
| 511655 | 177026 | Norman Crescent, flats 81-139 Odd | Norman Crescent, Heston | TW5 9JN | Other public | No | Social Housing Estate | Boilers | Natural Gas | 437.27 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 511695 | 177020 | Norman Crescent, flats 134-192 Even | Norman Crescent, Heston | TW5 9JW | Other public | No | Social Housing Estate | Boilers | Natural Gas | 504.81 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 511655 | 177026 | Norman Crescent, flats 141-199 Odd | Norman Crescent, Heston | TW5 9JN | Other public | No | Social Housing Estate | Boilers | Natural Gas | 465.38 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 510671 | 173641 | Nursery Close | Nursery Close, Feltham | TW14 9BE | Other public | No | Social Housing Estate | Boilers | Natural Gas | 300.42 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 512837 | 175484 | Old Farm Close | Old Farm Close, Hounslow | TW4 7AB | Other public | No | Social Housing Estate | Boilers | Natural Gas | 498.62 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 510090 | 173596 | Owen House | Shore Close, Feltham | TW14 9QE | Other public | No | Social Housing Estate | Boilers | Natural Gas | 470.15 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Sheltered Housing Unit |
| 510875 | 177469 | Cranford Lane (269-347) | Cranford Lane, Heston | TW5 9PH | Other public | No | Social Housing Estate | Boilers | Natural Gas | 596.69 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 510881 | 172356 | Pinewood Road (1-29, 2-38) | Pinewood Road, Feltham | TW13 7BD | Other public | No | Social Housing Estate | Boilers | Natural Gas | 608.77 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 511209 | 171949 | Rectory Court | Fernside Avenue, Hanworth | TW13 7QE | Other public | No | Social Housing Estate | Boilers | Natural Gas | 169.58 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Sheltered Housing Unit |
| 510865 | 177545 | Redwood flats 113-138 | Redwood estate, Cranford | TW5 9PP | Other public | No | Social Housing Estate | Boilers | Natural Gas | 398.35 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 510885 | 177583 | Redwood flats 87-112 | Redwood estate, Cranford | TW5 9PW | Other public | No | Social Housing Estate | Boilers | Natural Gas | 451.19 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 510942 | 177554 | Redwood flats 14-39 | Redwood estate, Cranford | TW5 9PL | Other public | No | Social Housing Estate | Boilers | Natural Gas | 406.96 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 510951 | 177655 | Redwood flats 46-81 | Redwood estate, Cranford | TW5 9PN | Other public | No | Social Housing Estate | Boilers | Natural Gas | 492.77 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 510903 | 177713 | Crane Lodge Road (1-43) | Crane Lodge Road, Cranford | TW5 9PG | Other public | No | Social Housing Estate | Boilers | Natural Gas | 253.54 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 510828 | 172428 | Sandalwood Road (no.1) 1-57, 2-74 | Sandalwood Road, Feltham | TW13 7AY | Other public | No | Social Housing Estate | Boilers | Natural Gas | 451.04 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 510822 | 172349 | Sandalwood Road (no.2) 59-79, 76-102 | Sandalwood Road, Feltham | TW13 7BB | Other public | No | Social Housing Estate | Boilers | Natural Gas | 1138.15 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 510220 | 173338 | Southern Avenue | Southern Avenue, Feltham | TW14 9ND | Other public | No | Social Housing Estate | Boilers | Natural Gas | 3163.65 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 515739 | 174695 | Ivybridge Estate | Summerwood Road, Isleworth | TW7 7QD | Other public | No | Social Housing Estate | Boilers | Natural Gas | 7429.96 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 512042 | 175035 | Sycamore Court | Barrack Road, Hounslow | TW4 6AE | Other public | No | Social | Boilers | Natural Gas | 628.81 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Sheltered |

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| | | | | | | | Housing Estate | | | | | | | | | | | | | | | | | | | | Housing Unit |
| 511837 | 171884 | The Hollands | Park Road, Hanworth | TW13 6PQ | Other public | No | Social Housing Estate | Boilers | Natural Gas | 1840.00 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 519079 | 177978 | The Maltings | Spring Grove, Chiswick | W4 3NH | Other public | No | Social Housing Estate | Boilers | Natural Gas | 313.81 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Sheltered Housing Unit |
| 512130 | 175126 | Tivoli Road | Tivoli Road, Hounslow | TW4 6AS | Other public | No | Social Housing Estate | Boilers | Natural Gas | 2825.65 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 519641 | 178397 | Tomlinson Close | Tomlinson Close, Chiswick | W4 4DR | Other public | No | Social Housing Estate | Boilers | Natural Gas | 419.58 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 509336 | 173228 | Watermead Estate | Watermead, Bedfont, Feltham | TW14 8BA | Other public | No | Social Housing Estate | Boilers | Natural Gas | 3075.88 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Estate |
| 516399 | 175862 | Wynne Court | Hartland Road, Isleworth | TW7 6RH | Other public | No | Social Housing Estate | Boilers | Natural Gas | 728.81 | - | - | - | - | - | - | - | - | 2011 | - | - | Bills | - | - | Hounslow | Estimated | Sheltered Housing Unit |
| 517520 | 177659 | Kew Bridge Road and Thameside Centre | Kew Bridge Road | TW8 0ED | Private | Yes | Social Housing Estate | Assets including CHP | Mixed source | 1000.08 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Hounslow | 308 private dwellings - community gas fired heating system. Provison will be made to link the enery centre9s) within the proposed development, and to connect to a district scheme in the evne of future proposals for an area-wide district heating scheme. | |
| 516327 | 176355 | Former West Middlesex Hospital | Twickenham Road | TW7 6AG | Private | Yes | Social Housing Estate | Boilers | Natural Gas | 668.88 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Hounslow | 206 Private Dwellings. Development includes | |
| 516346 | 176341 | Great West Quarter | Great West Road | TW8 9BD | Private | Yes | Social Housing Estate | - | - | 2214.45 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Hounslow | community gas fired heating in each of the buildings | |
| 512949 | 175488 | Lascar Works Site | Staines Road, Hounslow | TW3 3JL | Private | Yes | Social Housing Estate | Boilers | - | 730.58 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Hounslow | 682 dwellings. CHP for health club and hotel 225 dwellings - biomass fired community heating | |
| 516089 | 177818 | BSkyB | Grant Way, Isleworth | TW7 5QD | Private | Yes | Social Housing Estate | Assets including CHP | Natural Gas | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Hounslow | Estimated | - |
| 516089 | 177818 | Commerce Road | Commerce Road, Brentford, Middlesex | TW8 8LE | Private | Yes | Social Housing Estate | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Hounslow | Land and buildings at Commerce Road Industrial Estate | |

| 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 |
|--------|--------|-----------------------------|-----------------|----------|-----------|-----------------|-----------------------|----------------------|-------------|--|--------------------------------|--------------------------------|---------------------|--|---|---------------------------------------|-------------------------|----------------------|-------------------------|------------|-----------------|-------------|-------------------------|-------------|----------|--|-------|
| 517121 | 177437 | Former Car Park And Canteen | Elmwood Avenue | TW13 7AH | Private | Yes | Social Housing Estate | Boilers | Natural Gas | 162.35 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Hounslow | 50 dwellings - Community heating for the flats on site | |
| 510554 | 172627 | Alfa Level Site | Great West Road | TW8 9BU | Private | Yes | Social Housing Estate | Assets including CHP | Natural Gas | 668.88 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | Hounslow | 206 private dwellings to be built - community heating | |

A1.1.2 Major Heat Supply Plants

| OXS | OYS | Name | Plant Address | Postcode | Ownership | New development | Typology | Fuel source | Fuel consumption: all assets inc. CHP (MWh/yr) | Heat generation: all assets inc CHP (MWh/yr) | Installed thermal capacity: all assets inc. CHP (MWth) | Installed power: all assets inc CHP (MWe) | CO2 emissions (tCO2/yr) | Date of Construction | Year of data collection | Start date | Completion date | Data source | Confidentiality of data | Attach file | Borough | Real or estimated data? | Notes |
|--------|--------|-----------------------------------|---------------|----------|-----------|-----------------|-----------|-------------|--|--|--|---|-------------------------|----------------------|-------------------------|------------|-----------------|-------------|-------------------------|-------------|----------|-------------------------|-------|
| 517642 | 177572 | Brentford Police, House & Station | - | - | - | - | CHP sites | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 511145 | 178386 | David Lloyd Club Heston | - | - | - | - | CHP sites | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 510844 | 173230 | Isleworth | - | - | - | - | CHP sites | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 516035 | 174735 | Isleworth Baths | - | - | - | - | CHP sites | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 519441 | 178393 | Brentford Fountain Leisure Centre | - | - | - | - | CHP sites | - | - | - | - | - | - | - | - | - | - | - | No | - | Hounslow | - | - |
| 515800 | 174883 | Mogden Sewage Treatment Works | - | - | - | - | CHP sites | - | - | - | 10 | 16 | 0 | - | - | - | - | - | No | - | Hounslow | - | - |

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.