Mayor of London

London Heat Map +

Heat Mapping Study - London Borough of Merton

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Executive Summary

The aim of the London Heat Map is to identify opportunities for decentralised energy networks in London, with this report detailing the findings for the London Borough of Wandsworth. 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 London Boroughs remaining from the DEMaP programme with a report outlining their potential opportunities for DE; the London Borough of Merton is one such Borough.

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

The London Borough of Merton has six cluster areas identified in this report which have been highlighted as opportunity areas for future investigation into DE scheme. These areas are in the very early stages of development into a DE network, having only been newly identified. The only exception is Rosehill Park, on the border with Sutton which was identified in the previous round of heat mapping. For each of the clusters, further steps are recommended to progress the schemes as the London Borough of Merton moves towards the Mayor's Targets for DE in London.

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 Merton. To compile it, Arup consultant engineers worked in partnership with the London Borough of Merton 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 Merton.

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

2 Background

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

In 2010, residential, commercial and public sector buildings represented over 40% of UK greenhouse gas emissions1; 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 heat and electricity from a central source, known as the Energy Centre (EC), to end users via a District Heating (DH) network. The EC normally hosts one or more Combined Heat and Power (CHP) units as well as back-up boilers and thermal stores.

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

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

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

2.2 The history of heat mapping: DEMaP

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

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

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

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

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

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

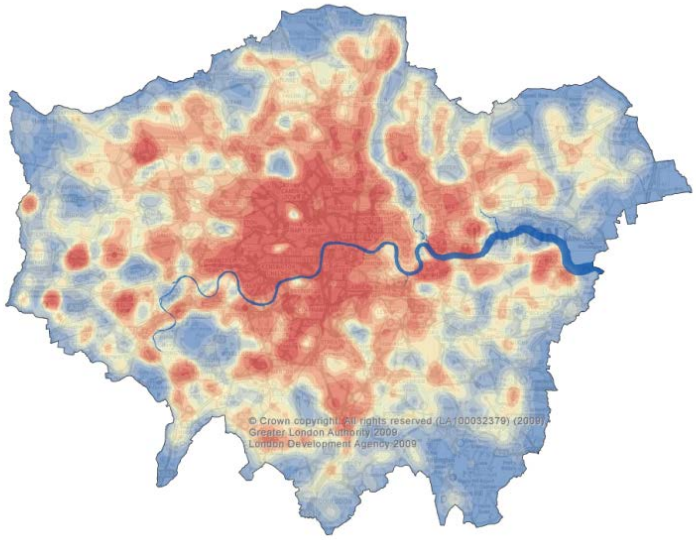

Figure 1: The London Heat Map, as viewable at www.londonheatmap.org.uk

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

The aims of the heat mapping exercise are:

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

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

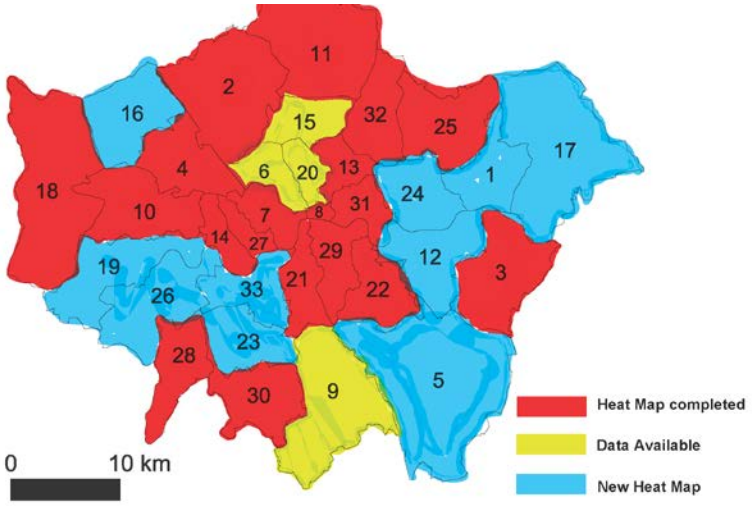

Figure 2: The Heat mapping status of London Boroughs.

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

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

3 Policy context

3.1 UK climate change agenda

The UK Government has responded to the climate change agenda with a range of climate change legislation, targets and actions to reduce 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 – which sets out a range of CO_2 emission targets for new developments which must be achieved through a hierarchy of 'Be lean: use less energy; Be clean: supply energy efficiently and Be green: use renewable energy'
- **Policy 5.5** – Decentralised energy networks.
  - A) **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.
  - B) **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

The goals of the heat mapping exercise are very much in line with the London Borough of Merton's policy initiatives, particularly its Core Planning Strategy.

The Borough is clearly making efforts on a number of fronts, demonstrating a leading role in climate change mitigation and addressing constituents' energy needs. Historically, the Borough established "The Merton Rule" in 2003, requiring new residential and commercial developments above a certain size to meet 10% of energy consumption by on-site renewables. Whilst now largely superseded by the Code for Sustainable Homes[3], this policy has been very influential, with around half of the United Kingdom's local authorities adopting it as a best practice in some capacity[4].

In recent times both the London Plan and Merton have moved away from the use of prescriptive renewable energy towards the use of emissions reductions targets enshrined in sustainable design and construction standards such as Code for Sustainable Homes. By doing so the environmental performance of buildings will continue to be driven forward, without restricting the developers flexibility to choose the energy strategy which is most suitable for the developments location.

In order to help bring forward viable district energy networks within the borough policies have been introduced into the Local Development Framework to encourage developments to connect to district heating systems.

Merton Core Strategy (2011)

Policy 15 d) Regeneration plans in town centres are an excellent opportunity to implement District Heat and Power networks, and all major development would be strongly encouraged to be 'Multi Utility Service Company (MUSCo)' ready.

South London Waste Plan (2012)

Policy WP8: Proposed energy recovery developments, including thermal treatments, will be required to: … (c) deliver renewable heat and power (or heat, power and cooling), for local users where feasible; and, … Any proposed thermal treatment facilities must allow for the recovery of renewable heat and power (or heat, power and cooling) and be within a fully enclosed covered building.

[3] www.planningportal.gov.uk/uploads/code_for_sust_homes.pdf
[4] http://www.solarcentury.co.uk/knowledge-base/the-merton-rule/

The work carried out through DEMaP will help to support the councils own research into where the most suitable locations for district energy systems within the borough are, and help in the formation of policy designed to deliver viable district heating schemes within the borough.

At the time of writing the council is currently consulting on its Development Plan and Site and Policies document. The Development Plan and master plans for Morden The South Wimbledon/colliers wood area will aim to identify where the key areas for district energy networks can be found, allowing the mayors emissions reduction hierarchy to implemented consistently across the borough.

Figure 3: Examples of Merton's sustainability initiatives and policies

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).

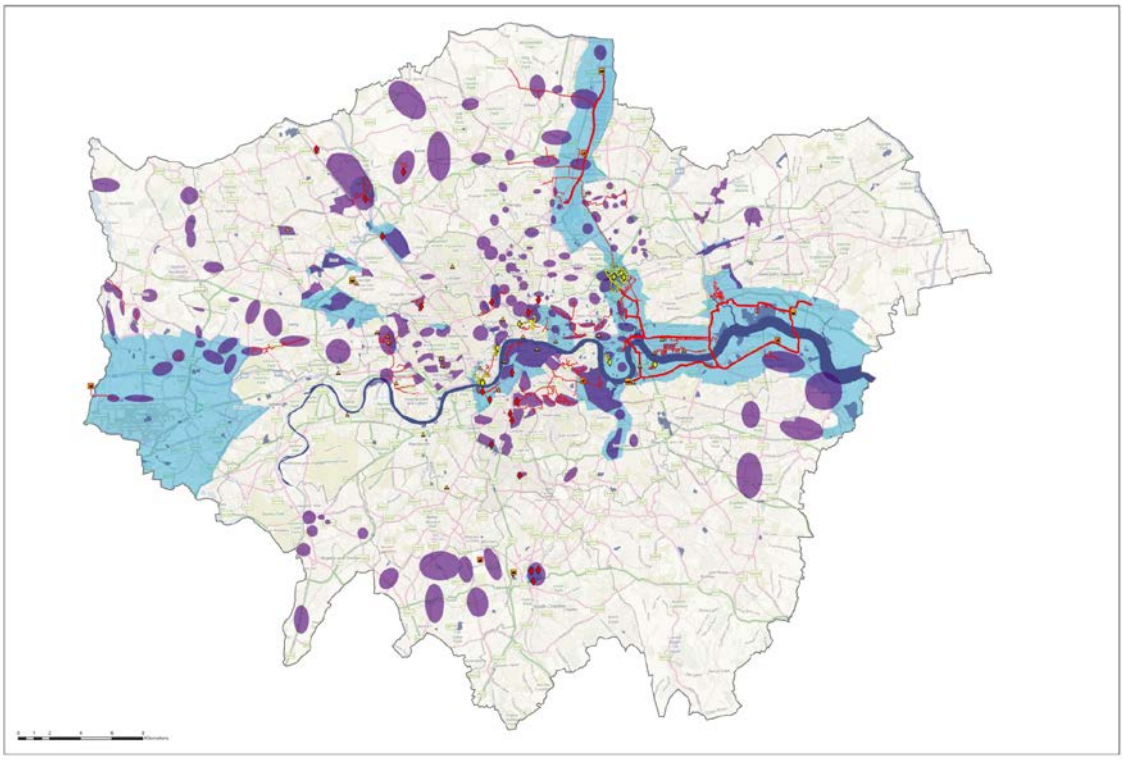

Figure 4: London 'Vision Map' for Decentralised Energy 2012

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 Merton 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 Phase1: 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 Merton 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 Merton, 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.

The London Borough of Merton has already started the heat mapping process before Arup has contacted them on 21st of December 2011. Arup has been directly in contact with Jon Buick, Climate Change Department Officer, who has supplied the heat map data carried out by the London Borough of Merton.

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 Merton, 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 smaller interface units with communal heat off-take can improve the economic and financial viability of new schemes, and often results in additional floorspace 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 Merton 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 Merton wish to investigate the cluster opportunity further.

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

6 Cluster Analysis for Merton

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 Cluster analysis

In order to support the feasibility of a DE network and adequate level of heat demand within a certain area is required. The denser is the area, the higher is the potential for DE.

Not only density, but also a balanced heat demand is very important for DE schemes. This is because different building types have different heat requirements and usage profiles throughout a normal operating day. As an example, residential buildings have a peak heating demand twice a day normally between 7 and 9am and 6 to 9pm, which is when people have a high requirement of Domestic Hot Water (DHW) mainly for showers. A commercial building instead, (e.g. offices and public buildings) usually has a peak heat demand in the morning between 6 to 7am, due to a boiler start up, and keeps an sort of constant profile until about 7 to 8pm. Other buildings such as hospitals, leisure centres and laboratories have a constant high heat requirement almost 24/7.

These types of buildings are also called anchor heat loads and because they need a large and constant heat supply are therefore important actors in a DE network. Not only hospitals, laboratories and leisure centre are part of this category but also universities and big hotels. Therefore having a cluster of buildings which satisfy the above characteristics is considered essential for a more efficient and cost effective DE network. The possibility to identify any existing major heat supply plants in the Borough is also important for:

- implementation with the new DH network, if these still have a suitable lifetime;
- decommissioning and retrofitting existing plant in order to be part of a new DE scheme;
- connecting to a future DE network.

What is more, new developments can act a crucial part in a DE network, especially if this can be an anchor load and maybe also location of a major energy supply plant. New development can be ideal for future extensions of DE networks.

7 Potential Opportunities

The heat mapping process for the London Borough of Merton identified the potential opportunity areas for DE associated with existing and new major heat demands and supplies.

The opportunity areas have been defined and explained below.

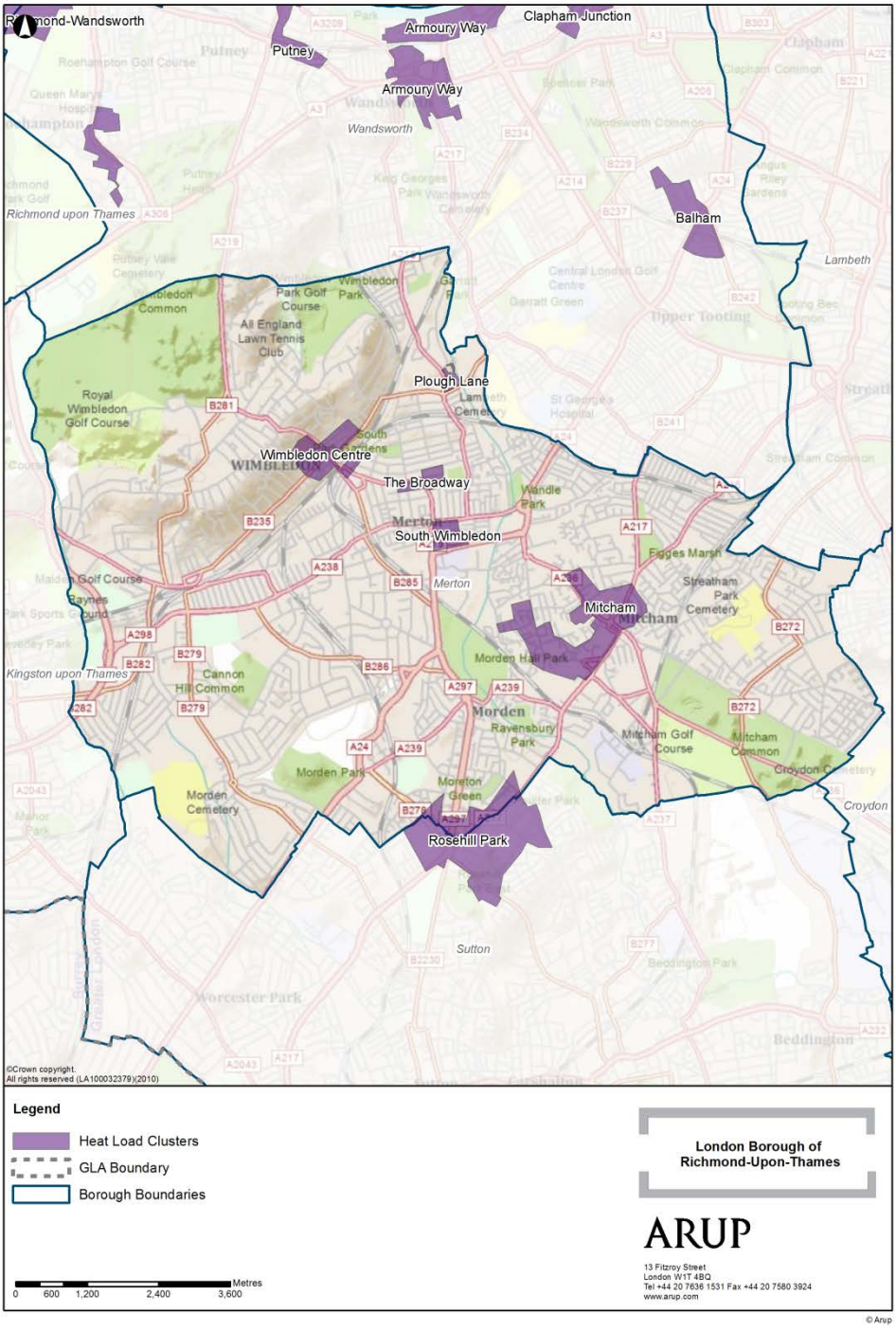

Figure 5. London Borough of Merton, showing location of potential opportunity areas.

7.1.1 Wimbledon Centre

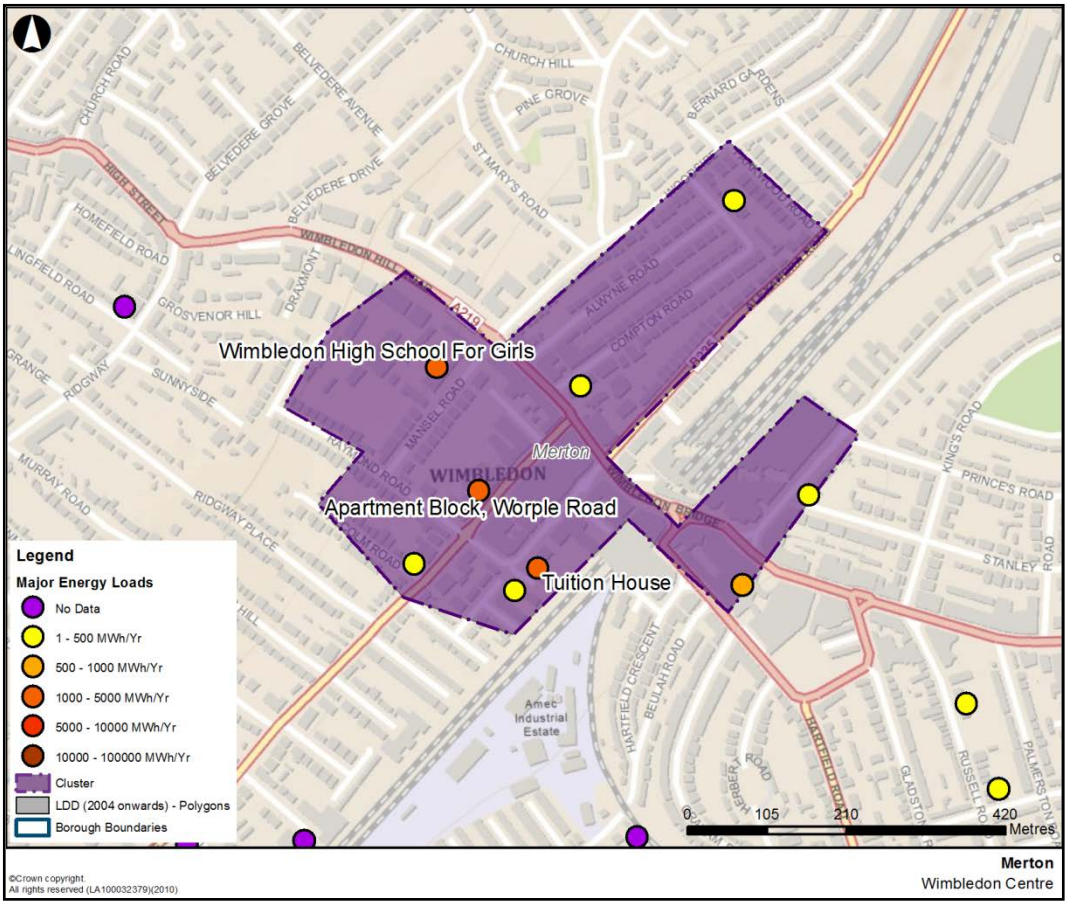

Figure 6. Central Wimbledon Cluster

Comments

The Central Wimbledon cluster comprises 11 existing buildings and encompasses two sites which have been allocated by the borough for new developments. These new sites have not yet been awarded planning consent and are only indicative of new developments. This cluster has been selected due to the high density of buildings in the area which are likely to have a large heat demand. The total heat demand was estimated, since data was only available for two of the 11 buildings with the others being benchmarked. The total annual estimated energy usage for the buildings identified is approximately 5.1GWh, with a maximum load of 3MW.

The cluster is approximately 0.25km^2 in area and has potential anchor loads, in Wimbledon High School, Tuition House (office building) and a residential development on Worple Road. Each of these buildings has an annual energy usage of over 1GWh. It is recommended that during a feasibility study for this area, the heating method for the anchor loads is determined since this will impact the possibility of implementation. For example, the project becomes more feasible if the buildings are heated communally, rather than via individual boilers. This is because the work may only be limited to the boiler house and would involve the removal of the existing central plant and the installation of a heat exchanger. In the event that the flats are heated by individual boilers, then it becomes more

difficult since the utilities within the building would likely require significant refurbishment. In this case, the connection to the heat network would likely only be feasible during a major building renovation.

This cluster has a good mix of building typology, indicating that the heat load profile will be sufficiently varied, and may be suitable for a DH network. The main geographical constraint on the cluster (which would require further investigation), is the integration of district heating pipework with existing utilities around the railway, which may act as a physical obstacle when laying the pipework. The railway line separates Wimbledon Police Station and Cannons Health and Fitness club from the rest of the buildings. Since neither of these are one of the most significant heat loads for the cluster, the feasibility of the whole scheme is not significantly lowered by the location of the railway.

There are two planned future developments located within the cluster, Wimbledon Site 3 and Site 4, which could be connected to the heat network. Their predicted energy consumption data and planned typology was unavailable at the time of writing.

Existing buildings

Name	Ownership	Typology	Fuel Consumption (MWh/yr)
The Rent Service, Tuition House	Central government	Central government estate	1,056.00*
21-33 Apartment 101, Worple Road, London	Private	Multi-address buildings	1,036.44
Wimbledon High School For Girls	Local Education Authority	Education facilities	1,011.00*
Cannons Health & Fitness Ltd	Private	Sport & Leisure facilities	535.60*
Hyatt Hotels & Resorts Ltd	Private	Hotels (> 99 units or 4,999 m2)	443.52*
Willington School	Local Education Authority	Education facilities	292.50*
Wimbledon Police Station 15-23, Metropolitan Police	Other public	Police stations	288.00*
Wimbledon Library	Local Government	Other public buildings	217.82
Justin James Hotel	Private	Hotels (> 99 units or 4,999 m2)	141.90*
Esporta Health Clubs Ltd	Private	Sport & Leisure facilities	78.28*
		Total Annual Fuel Demand	**5,101MWh/yr**

* Benchmarked figures based on CIBSE guidelines

Total Fuel Consumption	**5,101 MWh/yr**
Total Estimated Heat Demand	**4,081 MWh/yr**
Estimated Peak Heat Load	**1.81 MW**

Planned developments

Name	Ownership	Typology	Fuel Consumption (MWh)
Wimbledon Site 3	Not available	Other public buildings	Not available
Wimbledon Site 4	Not available	Other public buildings	Not available

Further Steps

- Contact those loads with no data available and confirm the accuracy of the benchmarked estimates used in this study.
- Investigate possible new developments that could connect to a network in this area which have not been identified in this study.
- Engage with potential anchor loads to determine plant-replacement dates
- Explore the vicinity for additional public / private loads that have not yet been captured in this analysis.

7.1.2 The Broadway

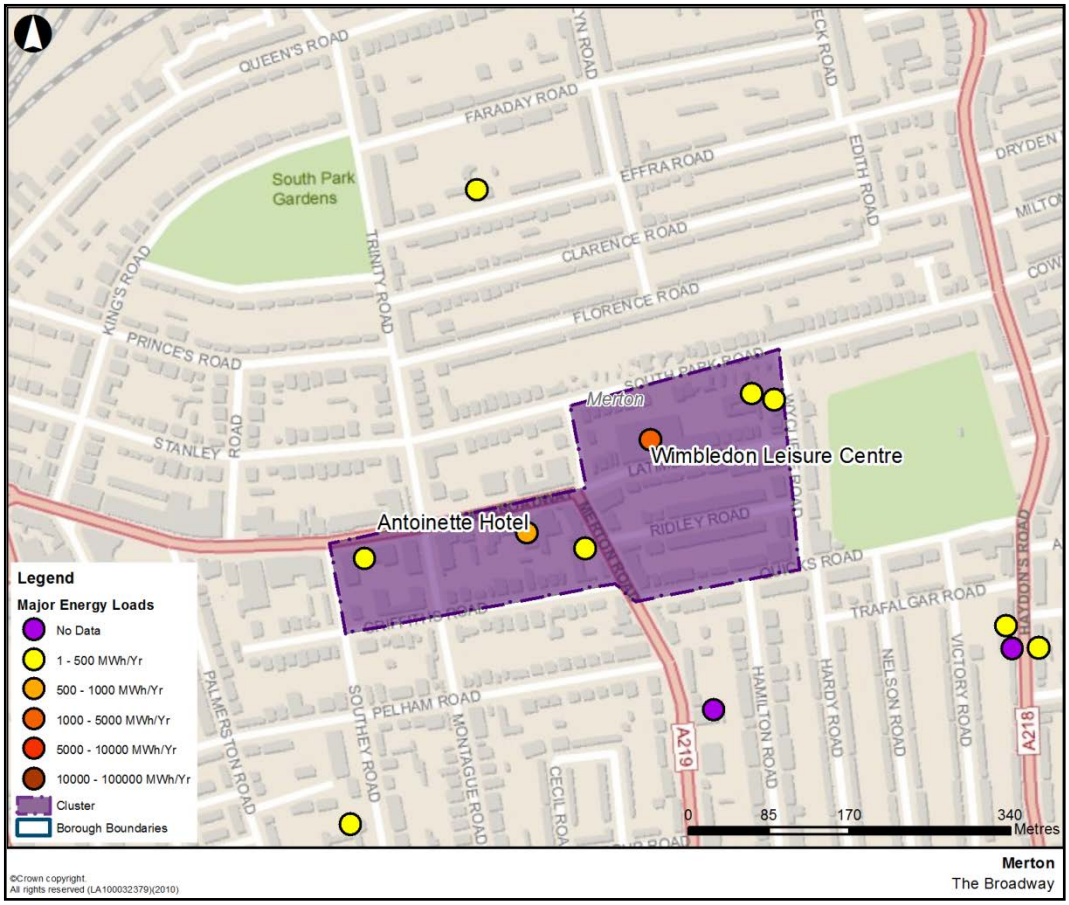

Figure 7. The Broadway Cluster

Comments

There may be the opportunity for a heat network in the Broadway area, with the Wimbledon Leisure Centre providing a potential anchor load. The total estimated fuel consumption for the 6 building cluster is 3880MWh/yr. Fuel consumption has been estimated for three of the buildings where data was unavailable. The close proximity of the buildings lends itself to a heat network, with few identified geographical constraints within the 0.074km^2 area. A heat network in the area should be able to reach buildings for connection via the smaller residential streets, meaning there should only be a requirement to cross the main road, rather than lay pipework along the length of it. Access issues would need to be investigated further to identify any constraints for consideration.

The Wimbledon Leisure Centre is likely to be a good anchor load, since sports facilities have a high energy demand throughout the year which would act as a base load for the network. It was noted that the Leisure Centre has recently undergone renovations, however it is unknown at this stage what changes, if any, were included for energy provision as part of this work. The leisure centre is publicly owned and operated. It should be noted that four of the six buildings identified are privately owned, engagement early in development process is advisable to determine their interest in the project.

There is a mix of typologies between office, residential, commercial and sports and leisure which would suit the application of a heat network. However it should be noted that the feasibility of the network may be reliant on providing connections to the private buildings identified, which make up roughly half of the heat demand. Connection contracts may be more be more difficult to negotiate when dealing with a number of private entities.

Existing buildings

Name	Ownership	Typology	Fuel Consumption (MWh/yr)
Wimbledon Leisure Centre	Local Government	Sport & Leisure facilities	1696.95
Antoinette Hotel	Private	Hotels (> 99 units or 4,999 m2)	924.00*
Viscount Point	Local Government	Multi-address buildings	444.19
Maritum Hotel	Private	Hotels (> 99 units or 4,999 m2)	396.00*
Phoenix Hotel	Private	Hotels (> 99 units or 4,999 m2)	396.00*
Parking Section Offices	Local Government	Local government estate	23.03
Total			3880.17

***** Benchmarked figures based on CIBSE guidelines

Total Fuel Consumption	**3380 MWh/yr**
Total Estimated Heat Demand	**3104 MWh/yr**
Estimated Peak Heat Load	**1.38 MW**

Further Steps

- Contact those loads with no data available and confirm the accuracy of the benchmarked estimates used in this study.
- Engage with the Wimbledon Leisure Centre and Antoinette Hotel to determine existing energy provision to both and plant-replacement dates.
- Explore the vicinity for additional public / private loads that have not yet been captured in this analysis.

7.1.3 South Wimbledon

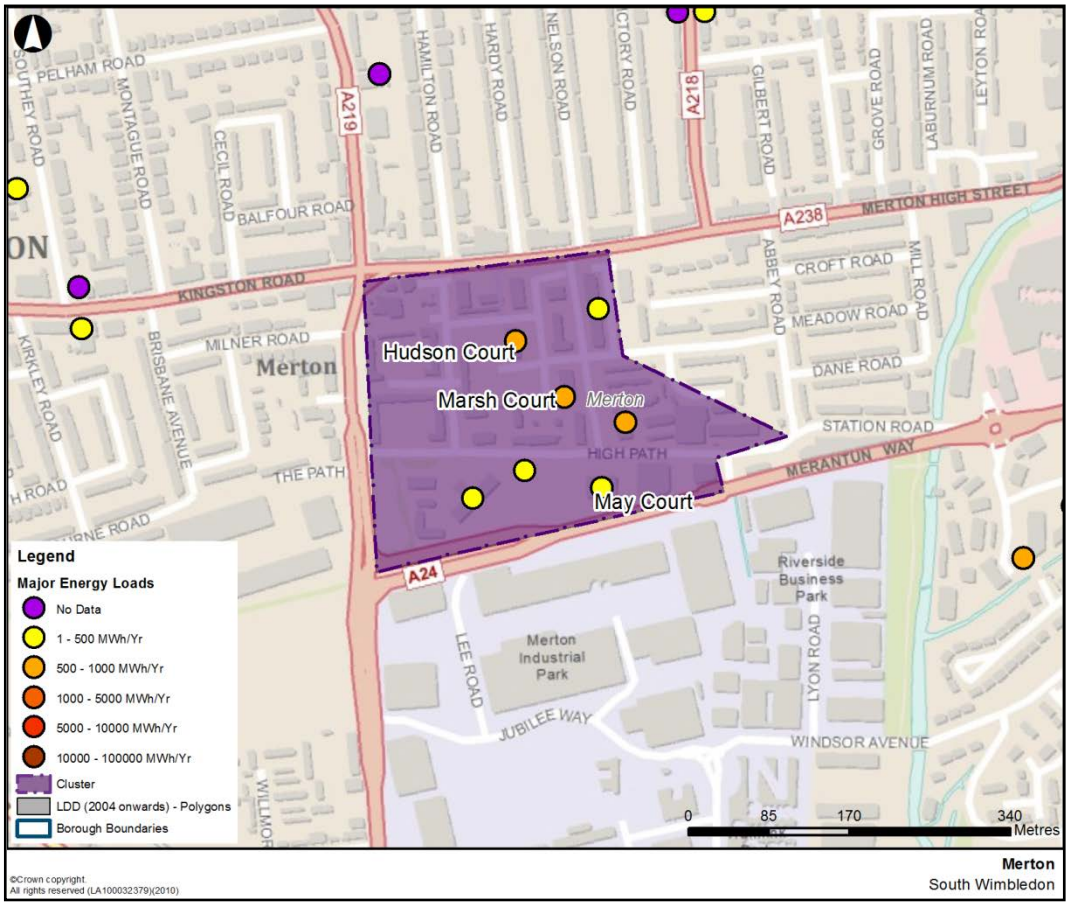

Figure 8. South Wimbledon Cluster

Comments

The South Wimbledon cluster comprises 7 buildings over a 0.094km^2 area between Merton High Street and Merantun Way. Collected data suggests a total fuel demand of almost 2GWh/yr. Three large publicly owned residential buildings provide the majority of the heat load for the cluster, Hudson Court, Marsh Court and May Court, which have a combined fuel demand of over 1.5GWh/yr. These buildings appear to be of a similar age and construction so it is possible that their plant equipment will require replacement over a similar timescale, thus presenting an opportunity. This means they could be connected to a district heating network, however it should be investigated how these flats are currently heated: by individual boiler or by a communal system with centralised plant. If the flats are heated centrally, it would significantly increase the feasibility and viability of the scheme since it would not require significant building retrofit to connect the large anchor loads to a network. Private leaseholders would need to be identified and engaged at an early stage.

There are several small schools and children's centres which could connect into the network, however three quarters of the demand identified in the cluster is comprised of the large mansion blocks. This would result in the demand profile for the network strongly following that of the residential development with peak demand occurring during mornings and evenings. In order to provide a more

constant heat demand, connections to more buildings could be investigated to increase the diversity of the building types if this emerges as a barrier to the scheme. During this process no other public sector buildings have been identified for inclusion, however there may be potential to connect to buildings in the proximity such as Merton Evangelical Church on Rodney Place or the commercial properties on Merton High Street.

No serious geographical constraints have been identified since the area is primarily high density residential with no issues for access. South Wimbledon Tube Station is located in the North East of the cluster and the Northern Line underground tunnel runs from along the north of the cluster along Merton High Street. This should be considered when planning the laying of pipework in the area since the location and depth of trenches may be constrained.

Existing buildings

Name	Ownership	Typology	Fuel Consumption (MWh/yr)
Hudson Court	Local Government	Multi-address buildings	514.32
Marsh Court	Local Government	Multi-address buildings	514.32
May Court	Local Government	Multi-address buildings	514.32
Merton Abbey Primary School	Local Education Authority	Education facilities	228.99
High Path Community Day Centre	Local Government	Other public buildings	112.51
Merton Abbey Children's Centre	Local Government	Other public buildings	50.00
Mychell House (No 1)	Local Government	Other public buildings	20.38
		Total	**1954.85**

***** Benchmarked figures based on CIBSE guidelines

Total Fuel Consumption	**1955 MWh/yr**
Total Estimated Heat Demand	**1564 MWh/yr**
Estimated Peak Heat Load	**0.70 MW**

Further Steps

- Engage with the social housing estates to determine if the buildings are communally heated and any planned plant-replacement dates.
- Explore the vicinity for additional public / private loads that have not yet been captured in this analysis.

7.1.4 Mitcham

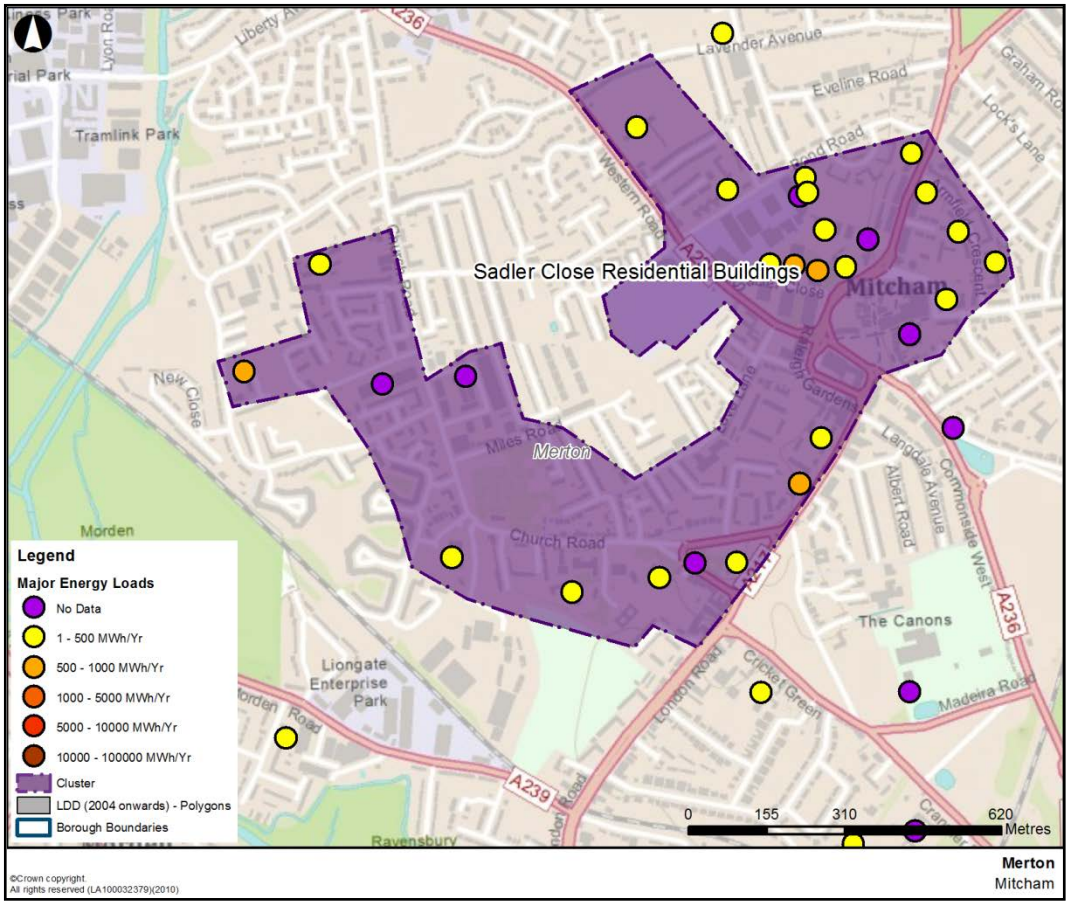

Figure 9. Mitcham Cluster

Comments

The Mitcham cluster comprises 23 buildings between central Mitcham and Morden Hall Park. It is the largest cluster identified in the London Borough of Merton with a total identified fuel demand of 8.3GWh and covers an area of approximately 0.75km^2. The cluster covers 11 future developments which have been identified by the borough, however these are in the very early stages, pre-planning and as such there is no certainty of what will be built or any timescales for the project.

Gladstone House (0.9GWh/yr) or Fountain House (0.8GW/yr) on Sadler Close could provide a suitable anchor load for a heat network. There is a good variation in building use across the cluster which would mean that the heat demand profile from the network would be varied enough to support a DE scheme. The majority of the large heat loads are from residential buildings; however there are enough mixed use developments, schools and other building types to distribute the load throughout the day. It is unclear at this stage of the study how the large residential developments are heated; however it would present an opportunity to develop a network if their heating systems may be considered for replaced in the near future. If this is the case, then it may be possible at that time to investigate their inclusion

in a new heat network as the anchor load. There may be space around the Sadler Close development for an energy centre but this is subject to further investigation.

The data indicates that the large residential blocks on Saddler Close are privately owned. This would suggest that their inclusion in a district heating scheme would be subject to them being already prepared for a connection to a DH network. The level of renovation work required to retrofit is likely to require a strong business case.

If required, it may be possible to increase the head load for the network by including some of the commercial developments nearby, data for which has not been included in this study, but may still be interested in engaging with the scheme. The large size of this cluster would suggest that phased expansion and connection may be suitable. It is envisaged that any initial feasibility work will be conducted in the area between Sadler Close and Holborn Way since this is where the largest heat loads are located. Future expansion could then move south, along London Road.

Existing buildings

Name	Ownership	Typology	Fuel Consumption (MWh/yr)
Gladstone House	Private	Multi-address buildings	927.34
Fountain House	Private	Multi-address buildings	818.24
Frensham Court	Private	Multi-address buildings	576.67
Glebe Court	Private	Multi-address buildings	506.53
Chart House	Private	Multi-address buildings	490.95
19 Holborn Way	Private	Multi-address buildings	483.15
Liberty Middle School	Local Education Authority	Education facilities	471.74
Sir Arthur Bliss Court	Private	Multi-address buildings	467.57
Cricket Green Special School	Local government	Education facilities	444.80
Coningsby Court	Private	Multi-address buildings	436.40
Paxton Court	Private	Multi-address buildings	420.81
Glebe Court	Private	Multi-address buildings	397.43
Haslemere Primary School	Local Education Authority	Education facilities	378.64
Benedict Primary School	Local Education Authority	Education facilities	339.12
Bond Primary School	Local Education Authority	Education facilities	311.24
Melrose School	Local Education Authority	Education facilities	251.95
Vestry Hall	Local Government	Other public buildings	209.66
St. Marks Primary School	Local Education Authority	Education facilities	201.01

Mitcham Library	Local Government	Other public buildings	116.52
David Nicholas Creche	Local Government	Other public buildings	34.27
Supported Living Team	Local Government	Other public buildings	10.63
Bond Road School	Local Education Authority	Education facilities	1.18
Mitcham Fire Station	Other public	Fire stations	0.14
		Total	**8295.98**

***** Benchmarked figures based on CIBSE guidelines

Total Fuel Consumption	**8296 MWh/yr**
Total Estimated Heat Demand	**6637 MWh/yr**
Estimated Peak Heat Load	**2.95 MW**

Name	**Ownership**	**Typology**	**Fuel Consumption (MWh)**
Mitcham Site 3 - 16	Not Available	Other public buildings	Not Available

Further Steps

- Engage with potential residential anchor loads in Sadler Close to determine plant-replacement dates – it is possible this may be in the near future.
- Explore the vicinity for additional public / private loads that have not yet been captured in this analysis.
- Ensure the future developments are built with capacity to connect to a DH network.

7.1.5 Plough Lane

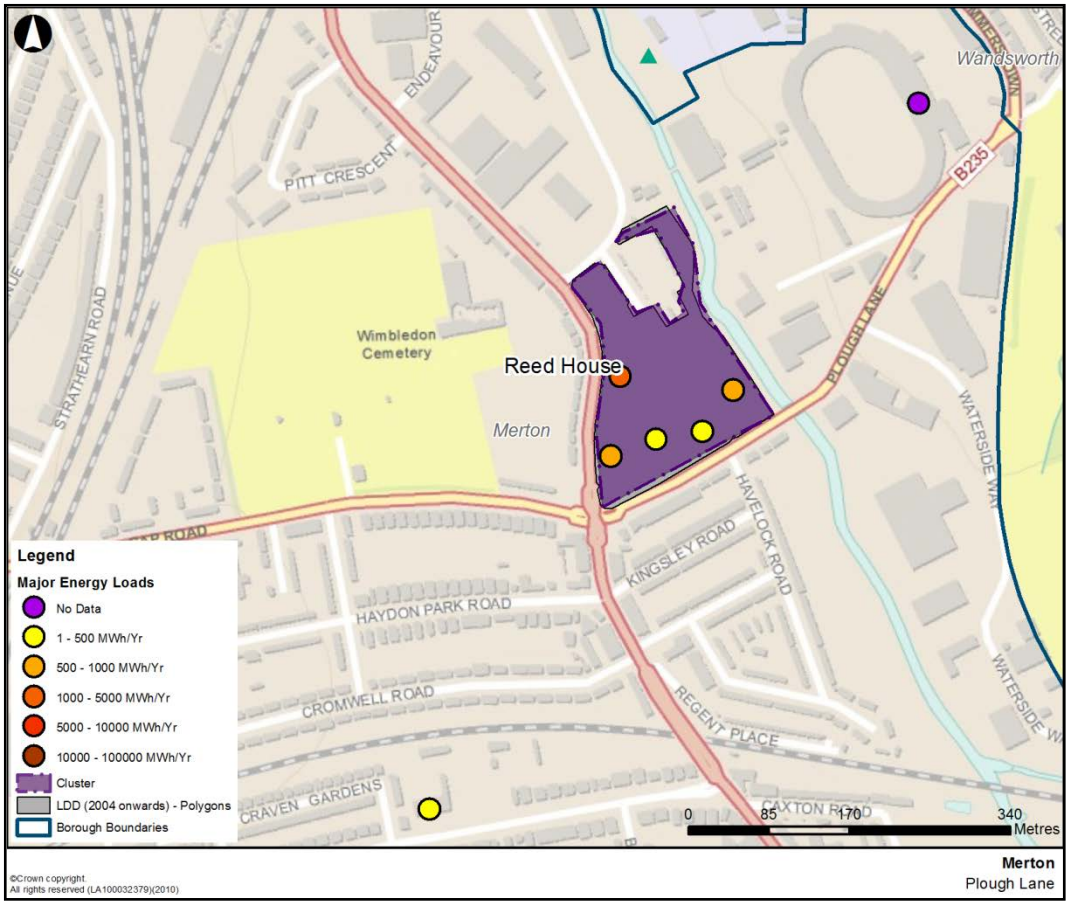

Figure 10. Plough Lane Cluster

Comments

The Plough Lane cluster of buildings is comprised of newly built private accommodation blocks which have a total fuel demand of 3.8GWh/yr. This opportunity offers a high energy density in small area which may suit a heat network.

The development is made up of four blocks, of which Reed house has the highest energy demand, 1.4GWh/yr. It is not known how these buildings are heated, which could be centrally or via communal plant equipment. The feasibility of the scheme would be improved if the buildings were heated communally, since it may only require the replacement of the existing boilers at the end of their economic life with a CHP engine, and the addition of smaller back up and top up boilers. The buildings appear to have been completed in the last four years so may have been future-proofed for connection to a DH network. Connections between buildings would be simple when compared to a larger heat network since there would be little to no requirement for road closures and the pipework runs would be short in length.

The development appears to be entirely residential in makeup, which would suggest a highly variable heat load characteristic with typical high demands in the morning and evening and low heat requirement for the rest of the day. In order to

develop a more constant demand profile which would better suit a DH network, the inclusion of other building typologies would be recommended. One possibility in this area would be to connect to the large commercial retail park to the north of the development, however there are associated complexities when dealing with commercial entities so early engagement during the feasibility stage is encouraged.

The residential buildings have only recently been completed, which would indicate that they will not be considering any plant replacement in the near future, likely to be upwards of fifteen years for new boiler equipment, it is however recommended that this development be earmarked for future feasibility study with engagement from the building operators.

Existing buildings

Name	Ownership	Typology	Fuel Consumption (MWh)
Reed House	Private	Multi-address buildings	1433.88
Bassett House	Private	Multi-address buildings	732.52
Stannard House	Private	Multi-address buildings	639.01
Cork House	Private	Multi-address buildings	483.15
Lawrie House	Private	Multi-address buildings	483.15
Total			3771.72
		Total Fuel Consumption	3772 MWh/yr
		Total Estimated Heat Demand	**3017 MWh/yr**
		Estimated Peak Heat Load	**1.34 MW**

Further Steps

As mentioned in the comments regarding the cluster analysis for Plough Lane, this opportunity is not likely to be feasible until the residential developments require significant refurbishment. Since they have only recently been completed, the heating systems in the building are unlikely to require replacement within at least 15 years.

- Engage with the buildings operators and the property managers for the commercial retail park north of the cluster.
- Identify specific potential anchor loads and determine plant-replacement dates (even if, as expected, this is not in the near future)
- Explore the vicinity for additional public / private loads that have not yet been captured in this analysis.

7.2 Cross-Borough opportunities

7.2.1 Rosehill Park

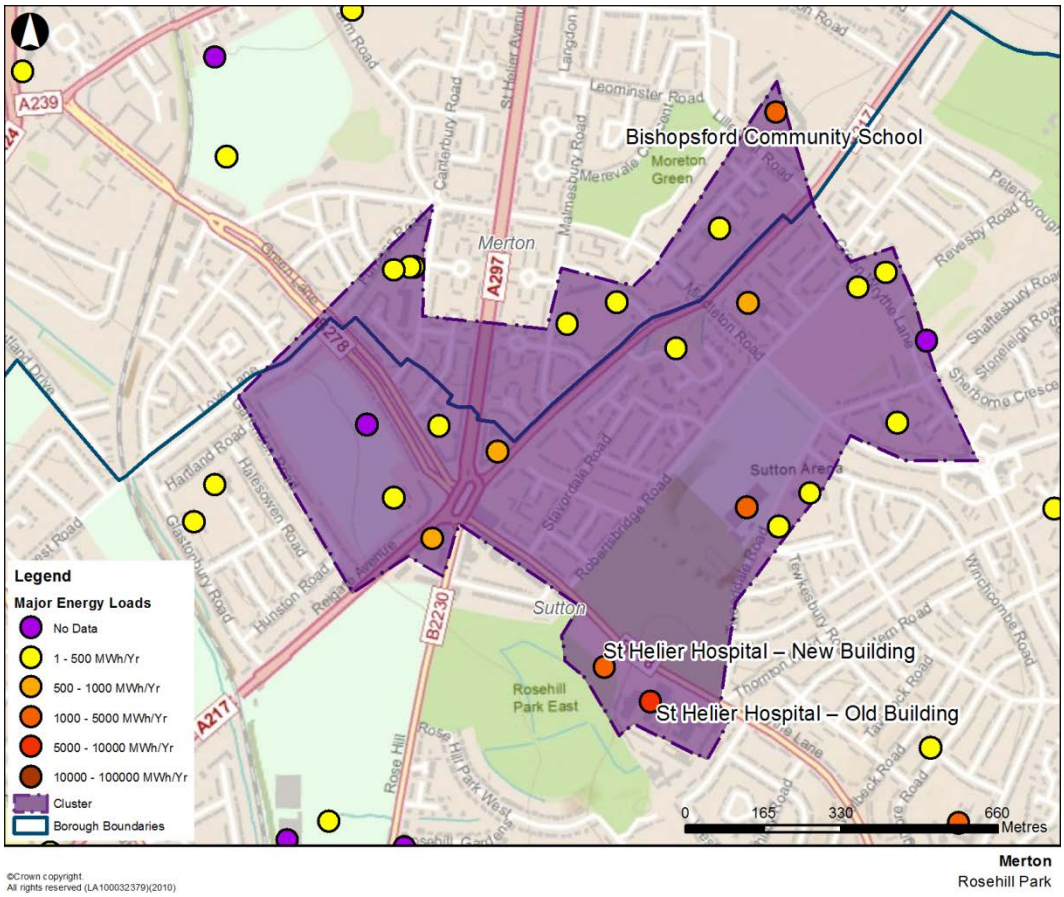

Figure 11. Plough Lane Cluster

Comments

Rosehill Park was identified as a robust opportunity in the heat mapping report for the London Borough of Sutton. This study into the opportunities in Merton has indicated several areas close to the border with Sutton which would be suitable for inclusion in a DE scheme in the area. The network would utilise the heat demand from St Helier Hospital as the anchor for the network, which has a fuel consumption of 9.5GWh/yr.

The report for Sutton does not consider cross-borough opportunities for DE networks, but describes the Rosehill area as follows:

> *Rosehill appears to offer robust technical characteristics for DE delivery, whilst also mitigating management and delivery risks due to the number of priority buildings that are publicly owned. The application of the optimised CHP plant capacities (1.29MWe) in the Rosehill could potentially contribute CO_2 emissions savings of approximately 14% (2.8ktCO_2) in this area of opportunity.*

> *The Rosehill Area also contains a large number of educational facilities (secondary and primary schools) and a leisure centre, which all surround St Helier Hospital. St Helier Hospital and the Sutton Arena Leisure Centre acting as anchor heat load consumers, St Helier Hospital anchoring an energy centre, and the educational centres providing a sufficient diversity of consumer types meet the technical criteria for DE implementation and improve the commercial viability of an ESCo operating in this area of opportunity. A limited range of stakeholders minimises delivery risk as the Council will be able to gain buy-in more readily.*[5]

The most significant addition to the heat network identified in the study for the

London Borough of Sutton, would be Bishopsford Community School. This building would have the 3rd highest fuel demand in the network after the two buildings that make up St Helier's Hospital, with a fuel demand of 1.9GWh/yr.

Bishopsford Community School would require a pipework connection of approximately 1.5km from an energy centre located at St Helier Hospital. If there are sufficient heat loads along the route that connects the school to the energy centre, this would be a suitable connection; however it is unlikely that this length network spur could be justified by the demand from the school alone.

As was established in the report for Sutton, the total heat demand and variety in building topology may make this scheme feasible from a technical perspective.

There do not appear to be any geographical constraints which would inhibit the extension of the DH network into the London Borough of Merton, so the development of this scheme should be discussed with representatives from the London Borough of Sutton to move forwards. Since the majority of the heat demand for the cluster, including the principle anchor load is located within the London Borough of Sutton, it would be advised to follow their lead in the development of this heat network opportunity.

[5] Excerpt from London Borough of Sutton, Heat Mapping Study, Final Issue - March 2011, URS Corporation Ltd

Existing buildings

Name	Ownership	Typology	Fuel Consumption (MWh/yr)
St Helier Hospital	NHS	NHS	9500.00
St Helier Hospital - New Building	NHS	NHS	4683.00
Bishopsford Community School	Local Education Authority	Education facilities	1855.05
Sutton Arena Leisure Centre	Local government (Sutton)	Sport & Leisure facilities	1547.20
Rosehill Court	Unknown	Multi-address buildings	972.80
Festival Court	Unknown	Multi-address buildings	656.64
St.Peter's Church	Church	Churches	623.70
St.Helier Methodist Church	Church	Churches	455.10
St. Theresa's School	Local Education Authority	Education facilities	421.41
Tweedale Primary School	Local Education Authority	Education facilities	412.95
Chaucer Centre	Local Government	Other public buildings	342.78
Green Wrythe Primary School	Local Education Authority	Education facilities	333.40
Malmesbury Primary School	Local Education Authority	Education facilities	316.14
Hill House Community Centre	Local Government	Other public buildings	194.85
Smart Centre	Local Government	Education facilities	146.73
The Quad Youth Centre	Local Government	Other public buildings	141.70
Middleton Circle Library	Local Government	Local government estate	127.68
Tweeddale Play Centre (Now Tweeddale Children's Centre)	Local Government	Education facilities	99.96
Newminster Children's Centre	Local Government	Other public buildings	53.29
Thomas Wall Park Pavilion	Unknown	Other public buildings	48.79
Merton Home Care	Local Government	Other public buildings	28.93
Twisted Monkey	Private	Museums & Art Galleries	16.25
		Total Fuel Consumption	**22,978 MWh/yr**
		Total Estimated Heat Demand	**18,383 MWh/yr**

Estimated Peak Heat Load	**8.17 MW**

Buildings shown in orange are located in The London Borough of Merton.

Further Steps

- Confirm loads with building occupiers in Merton to verify demand on this side of the borough boundary.
- Open a dialogue with planners in the London Borough of Sutton to establish their aims with the project going forwards.
- Engage with Bishopsford Community School loads to determine plant-replacement dates.
- Explore the vicinity for additional public / private loads that have not yet been captured in this analysis.

8 Implementation Plan

The following table outlines priorities and next steps, moving forwards with DE in The London Borough of Merton.

DE Opportunity Area	Priority	Constraints	Next Steps for delivering DE schemes
Wimbledon Centre	Medium	Proximity to railway line and associated difficulties with integration of DH pipework.	Approach building owners and operators to gauge interest in scheme. Further feasibility study work required.
The Broadway	Medium	Progress subject to inclusion of strong anchor load in Wimbledon Leisure Centre.	Open a dialogue with Wimbledon Leisure Centre to determine their support for the scheme and to see if they may have space to accommodate and energy centre. Further feasibility study work required.
South Wimbledon	Medium	If large residential blocks are individually heated it may be difficult to encourage them to refit entre building for DE connection.	Open dialogue with operators of Hudson Court, Marsh Court and May Court who will act as anchor loads for network to determine their interest in the scheme. Further feasibility study work required.
Mitcham	High	If large residential blocks are individually heated it may be difficult to encourage them to refit entre building for DE connection.	Investigate the opportunity to deploy a DE scheme to serve the large residential buildings on Sadler Close. Investigate how these buildings are heated and if they are open to connection. Further feasibility study work required.
Rosehill Park	Low	Engagement with London Borough of Sutton	Liaise with London Borough of Sutton regarding their intentions regarding implementing DE in St Helier Hospital and the surrounding area.
Plough Lane	Low	Private building operators are unlikely to want to connect to DE scheme in near future since residential development is newly completed.	It is likely that the new residential buildings (anchor loads) may not require any refurbishment work in the near future so should be noted for future development purposes.

9 Conclusions and Recommendations

Based on the data made available in this heat mapping exercise, it has been found that there are six heat load clusters that offer varying degrees of opportunity for the implementation of DE and DH schemes in the London Borough of Merton.

9.1 Opportunity areas

The following areas have been identified as opportunity areas

Wimbledon Centre: A 5.1GWh/yr cluster comprised of 11buildings. This cluster was rated as a medium priority and contains three potential anchor loads.

The Broadway: 3.3GWh/yr of fuel demand spread across 6 buildings. The Wimbledon Leisure may act as a suitable anchor load and should be approached to determine their engagement with a scheme in the area. This cluster was rated as a medium priority.

South Wimbledon: a 2GWh/yr cluster totalling 7 buildings centred on three large social housing blocks. This has been determined to be a medium opportunity for the deployment of a DE scheme and these social housing blocks could be approached to determine their level of interest in a scheme.

Mitcham: The Mitcham cluster is comprised of 23 buildings and has an annual fuel demand of 8.3GWh. It is the largest cluster identified and it is anticipated that the installation of any networks would be phased from north to south.

Plough Lane: 3.8GWh/yr located within a cluster of 5 buildings in the northeast of Merton. The buildings are newly built and may have been constructed with the ability to connect to a future network. This should be determined to allow further investigation into the location of an energy centre to take place.

Rosehill Park: is a cross borough opportunity with the London Borough of Sutton. It was identified in the study undertaken by the London Borough of Sutton in the previous round of heat mapping. There is a significant heat load centred around St Helier Hospital which may warrant a heat network in the area which could extend into the London Borough of Merton.

9.2 Next steps

Each cluster has had steps identified to progress towards DE in the area. These steps vary for each cluster which should be viewed individually, however the common steps to move forwards with the process are as follows:

- Identify buildings within or close to the clusters for which data was unavailable during this study. It may be possible to incorporate these into the cluster and by increasing the heat load, the commercial feasibility of the network is likely to be improved.
- Engage with the anchor loads for networks within the cluster to determine their engagement with a scheme in the area. It would also be useful to understand the heating systems in the major buildings and their plant replacement strategies.

- In cases where there are significant geographical constraints facing a DE network, investigate the potential for smaller networks operating independently. It is possible that future links could be made over the lifetime of DH scheme.

9.3 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 opportunities for wider decentralised energy opportunities is outside the scope of this Heat Map report, which has specifically focused on opportunities for developing heat networks within the London Borough of Merton. More detailed analysis would be required to identify opportunities for renewable and low carbon energy resource within the borough. These could be delivered through a range of 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 could help the London Borough of Merton to meet their carbon reduction targets and contribute towards the Mayor of London’s carbon reduction commitment of 60% by 2025.

Appendix A

Populated templates and Categories

A1 Populated template

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
526808	170382	Browns Fitness Club	127-129, High Street Colliers Wood, London	SW19 2HR		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
524900	170518	Cannons Health & Fitness Ltd	37, The Broadway, London	SW19 1QB		No	Sport & Leisure facilities			535.6	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
527865	168345	Canons Leisure Centre	The Canons, Madeira Road, Mitcham	CR4 4HD		No	Sport & Leisure facilities	Individual boilers	Natural gas	1856.5	-	-	-	-	-	-	-	-	-				No		Merton	Real	
526218	171834	Christophers Squash & Fitness	Wimbledon Stadium, Plough Lane, London	SW17 0BL		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
523730	168913	David Lloyd Leisure Ltd	Bushey Road, London	SW20 8DE		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
524761	170185	Dundonald Recreation Ground	Flat 7 Kingfisher Court 1, Dundonald Road, London	SW19 3QH		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
524552	170642	Esporta Health Clubs Ltd	21-33, Worple Road, London	SW19 4JS		No	Sport & Leisure facilities			78.28	-	-	-	-	-	-	-	-	-				No		Merton	Benchmarked	
527866	169054	Fitness First Ltd	1-3, Upper Green East, Mitcham	CR4 2PE		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
526342	170826	Holmes Place Health Club				No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
526820	168955	Millbrook Health Care	Unit 2, Batsworth Road, Mitcham	CR4 3BX		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
524459	167717	Morden Park School		SM4 5QX		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	

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
526808	170382	Browns Fitness Club	127-129, High Street Colliers Wood, London	SW19 2HR		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
		Sports Centre																									
523511	169334	Results Health & Fitness Ltd	594, Kingston Road, London	SW20 8DN		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
524483	172204	Sports Centre				No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
528899	168769	Westminster City School	Playing Fields, Tamworth Lane, Mitcham, Surrey	CR4 1DH		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
525577	168474	The London Borough of Merton	Merton Civic Centre London Road ,Morden	SM4 5DX	Central government	No	Central government estate			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
524630	170540	The Rent Service	Tuition House 27-37 St. Georges Road ,London	SW19 4EU	Central government	No	Central government estate			1056	-	-	-	-	-	-	-	-	-				No		Merton	Benchmarked	
522517	168302	SACRED HEART RC PRIMARY SCHOOL	SACRED HEART RC PRIMARY SCHOOL	KT3 4ND		No	Education facilities	Individual boilers	Natural gas	372.879	-	2284.6	-	-	-	-	-	-	-				No		Merton	Real	
522774	168885	WEST WIMBLEDON PRIMARY SCHOOL	WEST WIMBLEDON PRIMARY SCHOOL	SW200BZ		No	Education facilities	Individual boilers	Natural gas	387.167	-	2794.64	-	-	-	-	-	-	-				No		Merton	Real	
522579	168610	RAYNES PARK HIGH SCHOOL	RAYNES PARK HIGH SCHOOL	SW200JL		No	Education facilities	Individual boilers	Natural gas	141.933	-	12904	-	-	-	-	-	-	-				No		Merton	Real	
522454	170384	ROWANS SCHOOL	ROWANS SCHOOL	SW200EG		No	Education facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	

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
526808	170382	Browns Fitness Club	127-129, High Street Colliers Wood, London	SW19 2HR		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
523946	166995	ARAGON PRIMARY SCHOOL	ARAGON PRIMARY SCHOOL	SM4 4QU		No	Education facilities	Individual boilers	Natural gas	405.169	-	3987.47	-	-	-	-	-	-	-				No		Merton	Real	
523499	167656	ST. JOHN FISHER RC PRIMARY SCHOOL	ST. JOHN FISHER RC PRIMARY SCHOOL	SW209NA		No	Education facilities	Individual boilers	Natural gas	258.039	-	-	-	-	-	-	-	-	-				No		Merton	Real	
523143	169842	HOLLYMOUNT PRIMARY SCHOOL	HOLLYMOUNT PRIMARY SCHOOL	SW200SQ		No	Education facilities	Individual boilers	Natural gas	108.449	-	2202.81	-	-	-	-	-	-	-				No		Merton	Real	
523684	169946	URSULINE HIGH SCHOOL	URSULINE HIGH SCHOOL	SW208HA		No	Education facilities	Individual boilers	Natural gas	1336.541	-	13060	-	-	-	-	-	-	-				No		Merton	Real	
523764	169916	HALL SCHOOL	HALL SCHOOL	SW208HF		No	Education facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
523447	170678	KING'S COLLEGE SCHOOL	KING'S COLLEGE SCHOOL	SW194TT		No	Education facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
524097	167361	HATFIELD PRIMARY SCHOOL	HATFIELD PRIMARY SCHOOL	SM4 4SJ		No	Education facilities			424.125	-	2439.73	-	-	-	-	-	-	-				No		Merton	Real	
524580	168083	HILLCROSS MIDDLE SCHOOL	HILLCROSS MIDDLE SCHOOL	SM4 4EE		No	Education facilities			597.379	-	2716.18	-	-	-	-	-	-	-				No		Merton	Real	
524394	169733	WIMBLEDON CHASE MIDDLE SCHOOL	WIMBLEDON CHASE MIDDLE SCHOOL	SW193QB		No	Education facilities	Individual boilers	Natural gas	513.121	-	3708.14	-	-	-	-	-	-	-				No		Merton	Real	

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
526808	170382	Browns Fitness Club	127-129, High Street Colliers Wood, London	SW19 2HR		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
524848	169809	THE GROVE NURSERY SCHOOL	THE GROVE NURSERY SCHOOL	SW193QX		No	Education facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
524742	169223	RUTLISH SCHOOL	RUTLISH SCHOOL	SW209AD		No	Education facilities	Individual boilers	Natural gas	1585.941	-	12029	-	-	-	-	-	-	-				No		Merton	Real	
524321	170180	CAMPAIGN AGAINST SCHOOL EXPULSION	CAMPAIGN AGAINST SCHOOL EXPULSION	SW196ZJ		No	Education facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
524583	170095	DUNDONALD PRIMARY SCHOOL	DUNDONALD PRIMARY SCHOOL	SW193QH		No	Education facilities	Individual boilers	Natural gas	228.671	-	1601.1	-	-	-	-	-	-	-				No		Merton	Real	
524496	170805	WIMBLEDON HIGH SCHOOL FOR GIRLS	WIMBLEDON HIGH SCHOOL FOR GIRLS	SW194AB		No	Education facilities			1011	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
524148	170088	WIM HIGH SCHOOL PLAYING FIELD CENTRE	WIM HIGH SCHOOL PLAYING FIELD CENTRE	SW194JA		No	Education facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
524833	171489	RICARDS LODGE HIGH SCHOOL	RICARDS LODGE HIGH SCHOOL	SW197HB		No	Education facilities	Individual boilers	Natural gas	1877.785	-	12523	-	-	-	-	-	-	-				No		Merton	Real	
524756	171337	BISHOP GILPIN PRIMAR	BISHOP GILPIN PRIMARY	SW197EP		No	Education facilities	Individual boilers	Natural gas	336.979	-	2478.8	-	-	-	-	-	-	-				No		Merton	Real	

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
526808	170382	Browns Fitness Club	127-129, High Street Colliers Wood, London	SW19 2HR		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
		Y SCHOOL	SCHOOL																								
524889	171025	WILLINGTON SCHOOL	WILLINGTON SCHOOL	SW197QQ		No	Education facilities			292.5	-	-	-	-	-	-	-	-	-				No		Merton	Benchmarked	
525601	167924	ST. ANNES SCHOOL	ST. ANNES SCHOOL	SM4 5LT		No	Education facilities	Individual boilers	Natural gas	991.711	-	2305.65	-	-	-	-	-	-	-				No		Merton	Real	
525115	167495	MORDEN FIRST SCHOOL	MORDEN FIRST SCHOOL	SM4 5PX		No	Education facilities			151.598	-	1347.22	-	-	-	-	-	-	-				No		Merton	Real	
525610	167776	ABBOTSBURY PRIMARY FIRST SCHOOL	ABBOTSBURY PRIMARY FIRST SCHOOL	SM4 5JS		No	Education facilities	Individual boilers	Natural gas	353.51	-	2203.09	-	-	-	-	-	-	-				No		Merton	Real	
525305	168616	POPLAR PRIMARY SCHOOL	POPLAR PRIMARY SCHOOL	SW193JZ		No	Education facilities	Individual boilers	Natural gas	266.144	-	2226.56	-	-	-	-	-	-	-				No		Merton	Real	
525912	169822	MERTON ABBEY PRIMARY SCHOOL	MERTON ABBEY PRIMARY SCHOOL	SW192JY		No	Education facilities	Individual boilers	Natural gas	228.986	-	1254.06	-	-	-	-	-	-	-				No		Merton	Real	
525188	169312	MERTON PARK PRIMARY SCHOOL	MERTON PARK PRIMARY SCHOOL	SW193HQ		No	Education facilities	Individual boilers	Natural gas	259.288	-	1133.4	-	-	-	-	-	-	-				No		Merton	Real	
525197	170361	ST. MARYS RC PRIMARY SCHOOL	ST. MARYS RC PRIMARY SCHOOL	SW191QL		No	Education facilities	Individual boilers	Natural gas	205.013	-	1592.64	-	-	-	-	-	-	-				No		Merton	Real	
525813	170270	SUNNYSIDE	SUNNYSIDE NURSERY	SW191EG		No	Education facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	

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
526808	170382	Browns Fitness Club	127-129, High Street Colliers Wood, London	SW19 2HR		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
		NURSERY SCHOOL	SCHOOL																								
525429	170149	PELHAM PRIMARY SCHOOL	PELHAM PRIMARY SCHOOL	SW191NU		No	Education facilities	Individual boilers	Natural gas	197.121	-	1523.8	-	-	-	-	-	-	-				No		Merton	Real	
525490	172549	WIMBLEDON PARK PRIMARY SCHOOL	WIMBLEDON PARK PRIMARY SCHOOL	SW198EJ		No	Education facilities	Individual boilers	Natural gas	303.387	-	2502.99	-	-	-	-	-	-	-				No		Merton	Real	
526267	166961	MALMESBURY PRIMARY SCHOOL	MALMESBURY PRIMARY SCHOOL	SM4 6HG		No	Education facilities	Individual boilers	Natural gas	316.143	-	2725.65	-	-	-	-	-	-	-				No		Merton	Real	
526709	167408	BISHOPSFORD COMMUNITY SCHOOL	BISHOPSFORD COMMUNITY SCHOOL;	SM4 6DU		No	Education facilities	Individual boilers	Natural gas	1855.05	-	11313	-	-	-	-	-	-	-				No		Merton	Real	
526589	167162	ST. THERESAS SCHOOL	ST. THERESAS SCHOOL	SM4 6RL		No	Education facilities	Individual boilers	Natural gas	421.411	-	2569.58	-	-	-	-	-	-	-				No		Merton	Real	
526985	168971	DOLPHIN SWIM SCHOOL	DOLPHIN SWIM SCHOOL	CR4 3TD		No	Education facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
526957	168612	BENEDICT PRIMARY SCHOOL	BENEDICT PRIMARY SCHOOL	CR4 3BQ		No	Education facilities	Individual boilers	Natural gas	339.116	-	2912.8	-	-	-	-	-	-	-				No		Merton	Real	
526695	169193	HASLEMERE PRIMAR	HASLEMERE PRIMARY SCHOOL	CR4 3PQ		No	Education facilities	Individual boilers	Natural gas	378.643	-	2428.17	-	-	-	-	-	-	-				No		Merton	Real	

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
526808	170382	Browns Fitness Club	127-129, High Street Colliers Wood, London	SW19 2HR		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
		Y SCHOOL																									
526968	170285	SINGLEGATE PRIMARY SCHOOL	SINGLEGATE PRIMARY SCHOOL	SW192NT		No	Education facilities	Individual boilers	Natural gas	140.408	-	1435.96	-	-	-	-	-	-	-				No		Merton	Real	
526333	170941	GARFIELD PRIMARY SCHOOL	GARFIELD PRIMARY SCHOOL	SW198SB		No	Education facilities	Individual boilers	Natural gas	348.437	-	2707.18	-	-	-	-	-	-	-				No		Merton	Real	
526129	170335	SHARONA STAGE SCHOOL	SHARONA STAGE SCHOOL	SW191HL		No	Education facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	None	
527952	168869	DATE VALLEY SCHOOL	DATE VALLEY SCHOOL	CR4 2QA		No	Education facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	None	
527196	168543	MELROSE SCHOOL	MELROSE SCHOOL	CR4 3BE		No	Education facilities	Individual boilers	Natural gas	251.952	-	1275.49	-	-	-	-	-	-	-				No		Merton	Real	
527753	168044	CRANMER MIDDLE SCHOOL	CRANMER MIDDLE SCHOOL	CR4 4XU		No	Education facilities	Individual boilers	Natural gas	461.221	-	3128	-	-	-	-	-	-	-				No		Merton	Real	
527570	168344	ST. PETER & ST. PAUL RC PRIMARY SCHOOL	ST. PETER & ST. PAUL RC PRIMARY SCHOOL	CR4 4LA		No	Education facilities	Individual boilers	Natural gas	272.323	-	2288.63	-	-	-	-	-	-	-				No		Merton	Real	
527658	169364	BOND ROAD SCHOOL	BOND ROAD SCHOOL	CR4 3HJ		No	Education facilities	Individual boilers	Natural gas	1.178	-	2859.44	-	-	-	-	-	-	-				No		Merton	Real	
527324	169465	LIBERTY MIDDLE SCHOOL	LIBERTY MIDDLE SCHOOL	CR4 3EB		No	Education facilities	Individual boilers	Natural gas	471.735	-	3712.19	-	-	-	-	-	-	-				No		Merton	Real	

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
526808	170382	Browns Fitness Club	127-129, High Street Colliers Wood, London	SW19 2HR		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
527938	169123	ST. MARKS PRIMARY SCHOOL	ST. MARKS PRIMARY SCHOOL	CR4 2LF		No	Education facilities	Individual boilers	Natural gas	201.011	-	1598.63	-	-	-	-	-	-	-				No		Merton	Real	
527696	169262	BOND PRIMARY SCHOOL	BOND PRIMARY SCHOOL	CR4 3HG		No	Education facilities	Individual boilers	Natural gas	311.241	-	2859.44	-	-	-	-	-	-	-				No		Merton	Real	
527783	169243	EAGLE HOUSE SCHOOL	EAGLE HOUSE SCHOOL	CR4 3HD		No	Education facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	None	
527647	169328	SCHOOL UNIFORM DIRECT	SCHOOL UNIFORM DIRECT	CR4 3HG		No	Education facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	None	
528779	169447	LONESOME PRIMARY SCHOOL	LONESOME PRIMARY SCHOOL	CR4 1SD		No	Education facilities	Individual boilers	Natural gas	412.952	-	2362.3	-	-	-	-	-	-	-				No		Merton	Real	
528639	169241	MITCHAM VALE HIGH SCHOOL	MITCHAM VALE HIGH SCHOOL	CR4 1SF		No	Education facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	None	
528303	169740	GORRINGE PARK PRIMARY SCHOOL	GORRINGE PARK PRIMARY SCHOOL	CR4 2YA		No	Education facilities	Individual boilers	Natural gas	406.617	-	2921.03	-	-	-	-	-	-	-				No		Merton	Real	
528624	169820	BEECHOLME PRIMARY SCHOOL	BEECHOLME PRIMARY SCHOOL	CR4 2HZ		No	Education facilities			168.1768	-	1489.46	-	-	-	-	-	-	-				No		Merton	Real	
528358	170616	LINKS PRIMARY	LINKS PRIMARY SCHOOL	SW179EH		No	Education facilities			228.92	-	2644.01	-	-	-	-	-	-	-				No		Merton	Real	

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526808	170382	Browns Fitness Club	127-129, High Street Colliers Wood, London	SW19 2HR		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
		SCHOOL																									
529443	168170	SHERWOOD FIRST SCHOOL	SHERWOOD FIRST SCHOOL	CR4 1JP		No	Education facilities			494.536	-	2712.41	-	-	-	-	-	-	-				No		Merton	Real	
529751	168655	GARDEN PRIMARY SCHOOL	GARDEN PRIMARY SCHOOL	CR4 1JW		No	Education facilities			747.309	-	4127.81	-	-	-	-	-	-	-				No		Merton	Real	
529670	168606	GREENWOOD FIRST SCHOOL	GREENWOOD FIRST SCHOOL	CR4 1PF		No	Education facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	None	
529940	168652	WILLIAM MORRIS PRIMARY SCHOOL	WILLIAM MORRIS PRIMARY SCHOOL	CR4 1PJ		No	Education facilities			439.758	-	3099.3	-	-	-	-	-	-	-				No		Merton	Real	
529841	169520	STANFORD PRIMARY SCHOOL	STANFORD PRIMARY SCHOOL	SW165HB		No	Education facilities			242.614	-	2297	-	-	-	-	-	-	-				No		Merton	Real	
522124	168103	NEW MALDEN FIRE STATION	180 BURLINGTON ROAD	KT3 4LP	Other public	No	Fire stations	Individual boilers	Natural gas	0.28630884	-	1010	-	0.25	-	-	-	1977	2009			Meters	No		Merton	Real	
525495	170045	WIMBLEDON FIRE STATION	37 KINGSTON ROAD	SW19 1JN	Other public	No	Fire stations	Individual boilers	Natural gas	0.39129151	-	1465	-	0.34	0.55	0.015	-	1988	2009			Meters	No		Merton	Real	
527440	168600	MITCHAM FIRE STATION	30 LOWER GREEN WEST	CR4 3AF	Other public	No	Fire stations	Individual boilers	Natural gas	0.14354744	-	352.6	-	0.12	-	-	-	1928	2009			Meters	No		Merton	Real	
523820	167295	BEVERLY HOTEL	LOWER MORDEN LANE,	SM4 4SS	Private	No	Hotels (> 99 units or 4,999 m2)			-	-	-	-	-	-	-	-	-	-				No		Merton	None	

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
526808	170382	Browns Fitness Club	127-129, High Street Colliers Wood, London	SW19 2HR		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
			MORDEN																								
524882	168670	FIRST CHOICE MARKETING HOTELS REPRESENTATION	HEYFORD AVENUE, LONDON	SW209JT	Private	No	Hotels (> 99 units or 4,999 m2)			-	-	-	-	-	-	-	-	-	-				No		Merton	None	
524466	170546	JUSTIN JAMES HOTEL	WORPLE ROAD, LONDON	SW194JZ	Private	No	Hotels (> 99 units or 4,999 m2)			141.9	-	-	-	-	-	-	-	-	-				No		Merton	None	
524166	170175	WIMBLEDON HOTEL	WORPLE ROAD, LONDON	SW194HZ	Private	No	Hotels (> 99 units or 4,999 m2)			-	-	-	-	-	-	-	-	-	-				No		Merton	None	
524599	170510	HYATT HOTELS & RESORTS LTD	FRANCIS GROVE, LONDON	SW194DW	Private	No	Hotels (> 99 units or 4,999 m2)			443.52	-	-	-	-	-	-	-	-	-				No		Merton	None	
524850	171019	WORCESTER HOUSE HOTEL	ALWYNE ROAD, LONDON	SW197AE	Private	No	Hotels (> 99 units or 4,999 m2)			-	-	-	-	-	-	-	-	-	-				No		Merton	None	
525615	170457	ANTOINETTE HOTEL	THE BROADWAY, LONDON	SW191SD	Private	No	Hotels (> 99 units or 4,999 m2)			924	-	-	-	-	-	-	-	-	-				No		Merton	Benchmarked	
525853	170604	MARITUM HOTEL	BURGESS MEWS, LONDON	SW191UF	Private	No	Hotels (> 99 units or 4,999 m2)			396	-	-	-	-	-	-	-	-	-				No		Merton	Benchmarked	
525677	170441	PHOENIX HOTEL	MERTON ROAD, LONDON	SW191ED	Private	No	Hotels (> 99 units or 4,999 m2)			396	-	-	-	-	-	-	-	-	-				No		Merton	Benchmarked	
525902	171545	REED HOUSE	FLAT 1 21 DURNSFORD ROAD LONDON	SW198GU	Private	No	Multi-address buildings		Natural Gas (Estimated)	1433.8752	-	-	184	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on number of Units- 1 unit estimated to be 80sq.m - Fuel Consumption

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
526808	170382	Browns Fitness Club	127-129, High Street Colliers Wood, London	SW19 2HR		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
																											estimated only for residential Unit
525989	171487	CORK HOUSE	FLAT 1 5 DURNSFORD ROAD LONDON	SW198GR	Private	No	Multi-address buildings		Natural Gas (Estimated)	483.1536	-	-	62	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on number of Units- 1 unit estimated to be 80sq.m - Fuel Consumption estimated only for residential Unit
525957	169988	HUDSON COURT	FLAT 1 PINCOTT ROAD LONDON	SW192LF	Private	No	Multi-address buildings		Natural Gas (Estimated)	514.3248	-	-	66	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on number of Units- 1 unit estimated to be 80sq.m - Fuel Consumption estimated only for residential Unit
526494	169759		FLAT 1 2 CHAPTER WAY LONDON	SW192RY	Private	No	Multi-address buildings		Natural Gas (Estimated)	506.532	-	-	65	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on number of Units- 1 unit estimated to be 80sq.m - Fuel Consumption estimated only for residential Unit
525940	171479	LAWRIE HOUSE	FLAT 1 3 DURNSFORD ROAD LONDON	SW198FP	Private	No	Multi-address buildings		Natural Gas (Estimated)	483.1536	-	-	62	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on number of Units- 1 unit estimated to be 80sq.m - Fuel Consumption estimated only for residential Unit
523487	169462	LANGHAM COURT	FLAT 1 WYKE ROAD LONDON	SW208RP	Private	No	Multi-address buildings		Natural Gas (Estimated)	1129.956	-	-	145	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on number of Units- 1 unit estimated to be 80sq.m - Fuel Consumption estimated only for residential Unit
524552	170642	21-33	APARTMENT	SW194BG	Private	No	Multi-		Natural	1036.4424	-	-	133	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on

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
526808	170382	Browns Fitness Club	127-129, High Street Colliers Wood, London	SW19 2HR		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
			101 WORPLE ROAD LONDON				address buildings		Gas (Estimated)																		number of Units- 1 unit estimated to be 80sq.m - Fuel Consumption estimated only for residential Unit
528036	169197	CONINGSBY COURT	FLAT 1 ARMFIELD CRESCENT MITCHAM	CR4 2JT	Private	No	Multi-address buildings		Natural Gas (Estimated)	436.3968	-	-	56	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on number of Units- 1 unit estimated to be 80sq.m - Fuel Consumption estimated only for residential Unit
527021	170757	KYLE COURT	UNIT 6 93 PARK ROAD LONDON	SW192BE	Private	No	Multi-address buildings		Natural Gas (Estimated)	389.64	-	-	50	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on number of Units- 1 unit estimated to be 80sq.m - Fuel Consumption estimated only for residential Unit
527636	169190	GLADSTONE HOUSE	FLAT 1 SADLER CLOSE MITCHAM	CR4 3EJ	Private	No	Multi-address buildings		Natural Gas (Estimated)	927.3432	-	-	119	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on number of Units- 1 unit estimated to be 80sq.m - Fuel Consumption estimated only for residential Unit
527962	169258	PAXTON COURT	FLAT 1 ARMFIELD CRESCENT MITCHAM	CR4 2JY	Private	No	Multi-address buildings		Natural Gas (Estimated)	420.8112	-	-	54	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on number of Units- 1 unit estimated to be 80sq.m - Fuel Consumption estimated only for residential Unit
527682	169180	FOUNTAIN HOUSE	FLAT 1 SADLER CLOSE MITCHAM	CR4 3EG	Private	No	Multi-address buildings		Natural Gas (Estimated)	818.244	-	-	105	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on number of Units- 1 unit estimated to be 80sq.m - Fuel

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
526808	170382	Browns Fitness Club	127-129, High Street Colliers Wood, London	SW19 2HR		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
																											Consumption estimated only for residential Unit
526545	168981	FRENSHAM COURT	FLAT 1 PHIPPS BRIDGE ROAD MITCHAM	CR4 3PG	Private	No	Multi-address buildings		Natural Gas (Estimated)	576.6672	-	-	74	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on number of Units- 1 unit estimated to be 80sq.m - Fuel Consumption estimated only for residential Unit
526627	168254		1 RAVENSBURY COURT MITCHAM	CR4 4DU	Private	No	Multi-address buildings		Natural Gas (Estimated)	459.7752	-	-	59	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on number of Units- 1 unit estimated to be 80sq.m - Fuel Consumption estimated only for residential Unit
526073	169902	MARSH COURT	FLAT 1 PINCOTT ROAD LONDON	SW192LD	Private	No	Multi-address buildings		Natural Gas (Estimated)	514.3248	-	-	66	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on number of Units- 1 unit estimated to be 80sq.m - Fuel Consumption estimated only for residential Unit
527738	169188		FLAT 15 19 HOLBORN WAY MITCHAM	CR4 3FG	Private	No	Multi-address buildings		Natural Gas (Estimated)	483.1536	-	-	62	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on number of Units- 1 unit estimated to be 80sq.m - Fuel Consumption estimated only for residential Unit
526021	171531	STANNARD HOUSE	FLAT 1 23 PLOUGH LANE LONDON	SW198DN	Private	No	Multi-address buildings		Natural Gas (Estimated)	639.0096	-	-	82	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on number of Units- 1 unit estimated to be 80sq.m - Fuel Consumption estimated only for residential Unit

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
526808	170382	Browns Fitness Club	127-129, High Street Colliers Wood, London	SW19 2HR		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
527588	169193	CHART HOUSE	FLAT 1 SADLER CLOSE MITCHAM	CR4 3HX	Private	No	Multi-address buildings		Natural Gas (Estimated)	490.9464	-	-	63	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on number of Units- 1 unit estimated to be 80sq.m - Fuel Consumption estimated only for residential Unit
525406	171035	KATHLEEN GODFREE COURT	FLAT 1 80 QUEENS ROAD LONDON	SW198LB	Private	No	Multi-address buildings		Natural Gas (Estimated)	467.568	-	-	60	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on number of Units- 1 unit estimated to be 80sq.m - Fuel Consumption estimated only for residential Unit
526546	169814		FLAT 1 4 CHAPTER WAY LONDON	SW192RZ	Private	No	Multi-address buildings		Natural Gas (Estimated)	428.604	-	-	55	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on number of Units- 1 unit estimated to be 80sq.m - Fuel Consumption estimated only for residential Unit
527869	169413	SIR ARTHUR BLISS COURT	FLAT 1 210 LONDON ROAD MITCHAM	CR4 3TA	Private	No	Multi-address buildings		Natural Gas (Estimated)	467.568	-	-	60	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on number of Units- 1 unit estimated to be 80sq.m - Fuel Consumption estimated only for residential Unit
525444	170430	VISCOUNT POINT	FLAT 1 199 THE BROADWAY LONDON	SW191NL	Private	No	Multi-address buildings		Natural Gas (Estimated)	444.1896	-	-	57	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on number of Units- 1 unit estimated to be 80sq.m - Fuel Consumption estimated only for residential Unit
526009	169929	MAY COURT	FLAT 1 PINCOTT ROAD	SW192LE	Private	No	Multi-address buildings		Natural Gas (Estimat	514.3248	-	-	66	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on number of Units- 1 unit estimated to be

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
526808	170382	Browns Fitness Club	127-129, High Street Colliers Wood, London	SW19 2HR		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
			LONDON						ed)																		80sq.m - Fuel Consumption estimated only for residential Unit
527690	168849	GLEBE COURT	FLAT 181 LONDON ROAD MITCHAM	CR4 3NY	Private	No	Multi-address buildings		Natural Gas (Estimated)	397.4328	-	-	51	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on number of Units- 1 unit estimated to be 80sq.m - Fuel Consumption estimated only for residential Unit
525892	171461	BASSETT HOUSE	FLAT 1 1 DURNSFORD ROAD LONDON	SW198EA	Private	No	Multi-address buildings		Natural Gas (Estimated)	732.5232	-	-	94	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on number of Units- 1 unit estimated to be 80sq.m - Fuel Consumption estimated only for residential Unit
527647	168758	GLEBE COURT	FLAT 107 LONDON ROAD MITCHAM	CR4 3NJ	Private	No	Multi-address buildings		Natural Gas (Estimated)	506.532	-	-	65	-	-	-	-	-	-				No		Merton	Estimated	GIFA estimated on number of Units- 1 unit estimated to be 80sq.m - Fuel Consumption estimated only for residential Unit
527739	170486	Swains Rd,		SW179JA	Local government	No	Multi-address buildings		Oil	1176	-	-	-	0.35	-	-	-	-	2008			Boiler Sites	No		Merton	Real	
527739	170486	Flanders Cres,		SW179JA	Local government	No	Multi-address buildings		Oil	1176	-	-	-	0.35	-	-	251.536934	-	2008			Boiler Sites	No		Merton	Real	
527739	170486	Singleton Close,		SW179JA	Local government	No	Multi-address buildings		Oil	1008	-	-	-	0.3	-	-	215.603087	-	2008			Boiler Sites	No		Merton	Real	
527739	170486	Singleton Close,		SW179JA	Local government	No	Multi-address buildings		Oil	705.6	-	-	-	0.21	-	-	150.92216	-	2008			Boiler Sites	No		Merton	Real	
527739	170486	Flanders		SW179JA	Local	No	Multi-		Oil	537.6	-	-	-	0.16	-	-	114.9	-	2008			Boiler	No		Merton	Real	

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
526808	170382	Browns Fitness Club	127-129, High Street Colliers Wood, London	SW19 2HR		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
		Cres,			government		address buildings										88313					Sites					
525545	167315	Yenston Close, Morden,		SM46SE	Local government	No	Multi-address buildings		Oil	201.6	-	-	-	0.06	-	-	43.120617	-	2008			Boiler Sites	No		Merton	Real	
525022	169836	Dorset Hall, Kingston Road, Wimbledon,		SW193NQ	Local government	No	Multi-address buildings		Oil	201.6	-	-	-	0.06	-	-	43.120617	-	2008			Boiler Sites	No		Merton	Real	
525060	169796	Wykeham House,		SW193PA	Local government	No	Multi-address buildings		Oil	201.6	-	-	-	0.06	-	-	43.120617	-	2008			Boiler Sites	No		Merton	Real	
525060	169796	Wykeham House,		SW193PA	Local government	No	Multi-address buildings		Oil	201.6	-	-	-	0.06	-	-	43.120617	-	2008			Boiler Sites	No		Merton	Real	
525521	167525	Central Road, Morden,		SM45SP	Local government	No	Multi-address buildings		Oil	-	-	-	-	-	-	-	-	-	2008			Boiler Sites	No		Merton	None	
526198	170529	All Saints Boiler Houses: Tintern Close/Woburn Close, ,		SW191DP	Local government	No	Multi-address buildings		Oil	1008	-	-	-	0.3	-	-	215.603087	-	2008			Boiler Sites	No		Merton	Real	
526214	170506	All Saints Boiler Houses: Tintern Close/Woburn Close, ,		SW191DP	Local government	No	Multi-address buildings		Oil	1008	-	-	-	0.3	-	-	215.603087	-	2008			Boiler Sites	No		Merton	Real	
522967	169352	Durham Road, Raynes Park,		SW200QH	Local government	No	Multi-address buildings		Oil	672	-	-	-	0.2	-	-	143.735391	-	2008			Boiler Sites	No		Merton	Real	

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
526808	170382	Browns Fitness Club	127-129, High Street Colliers Wood, London	SW19 2HR		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
522967	169352	Durham Road, Raynes Park,		SW200QH	Local government	No	Multi-address buildings		Oil	161.28	-	-	-	0.048	-	-	34.496493	-	2008			Boiler Sites	No		Merton	Real	
524622	169515	A Gallery Ltd	154 Merton Hall Road, London	SW19 3PZ	Private	No	Museums & Art Galleries			-	-	-	-	-	-	-	-	-	-				No		Merton	None	
523447	170678	Collyer Hall Theatre	King's College School Southside Common, London, Greater London	SW19 4TT	Private	No	Museums & Art Galleries			-	-	-	-	-	-	-	-	-	-				No		Merton	None	
527865	168345	The Cannons	The Canons Madeira Road, Mitcham	CR4 4HD	Private	No	Museums & Art Galleries			-	-	-	-	-	-	-	-	-	-				No		Merton	None	
527522	168602	Wandle Industrial Museum	Vestry Hall London Road, Mitcham	CR4 3UD	Private	No	Museums & Art Galleries			-	-	-	-	-	-	-	-	-	-				No		Merton	None	
524151	172311	Wimbledon Lawn Tennis Museum (Visit Britain Assessed)		SW19 5AE	Private	No	Museums & Art Galleries			-	-	-	-	-	-	-	-	-	-				No		Merton	None	
524083	170885	Wimbledon Museum Of Local History	22 Ridgway, London	SW19 4QN	Private	No	Museums & Art Galleries			-	-	-	-	-	-	-	-	-	-				No		Merton	None	
523012	172445	Wimbledon Windmill Museum		SW19 5NQ	Private	No	Museums & Art Galleries			-	-	-	-	-	-	-	-	-	-				No		Merton	None	
522663	170224	ST. GEORGES HOSPITAL	COPSE HILL, LONDON	SW200NE	Other public	No	NHS			-	-	-	-	-	-	-	-	-	-				No		Merton	None	
523575	172248	PARKSID	PARKSIDE,	SW195NX	Other public	No	NHS			-	-	-	-	-	-	-	-	-	-				No		Merton	None	

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
526808	170382	Browns Fitness Club	127-129, High Street Colliers Wood, London	SW19 2HR		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
		E HOSPITAL	LONDON																								
524645	169481	NELSON HOSPITAL	KINGSTON ROAD, LONDON	SW208DB	Other public	No	NHS			-	-	-	-	-	-	-	-	-	-				No		Merton	None	
527875	168069	WILSON HOSPITAL	CRANMER ROAD, MITCHAM	CR4 4TP	Other public	No	NHS			-	-	-	-	-	-	-	-	-	-				No		Merton	None	
524652	169482	NELSON HOSPITAL	NELSON HOSPITAL	SW208DB	Other public	No	NHS		Oil	161	-	-	-	0.048013	-	-	47.13495	-	1997			Boiler Site	No		Merton	Real	
522643	170200	ATKINSON MORLEY'S HOSPITAL	Copse Hill	SW200NE	Other public	No	NHS		Oil	2065	-	-	-	0.614575	-	-	603.32736	-	1997			Boiler Site	No		Merton	Real	
524988	170636	WIMBLEDON POLICE STATION 15-23, METROPOLITAN POLICE	QUEENS ROAD, LONDON	SW198NN	Other public	No	Police stations			288	-	-	-	-	-	-	-	-	-				No		Merton	None	
525545	168492	POLICE STATION, METROPOLITAN POLICE	CROWN LANE, MORDEN	SM4 5DA	Other public	No	Police stations			-	-	-	-	-	-	-	-	-	-				No		Merton	None	
523764	170414	Wimbledon College	Edge Hill, Wimbledon	SW19 4NS	Public	No	Education facilities			3323.626	-	11231	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
524917	167499	Morden Park Pool	London Road, Morden	SM4 5HE	Local Government	No	Sport & Leisure facilities			2016.211	-	3112	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	Data includes also CHP fuel consumption.
525746	170555	Wimbledo	Latimer Road,	SW19 1EW	Local	No	Sport &			1696.946	-	5526.43	-	-	-	-	-	-	2011			Council	No		Merton	Real	

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
526808	170382	Browns Fitness Club	127-129, High Street Colliers Wood, London	SW19 2HR		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
		n Leisure Centre	Wimbledon		Government		Leisure facilities															Data					
524168.75	169012.71	Merton Adult Education Centre	Whatley Centre, Whatley Avenue	SW20 9NS	Local Government	No	Education facilities			588.704	-	2651.93	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
523470	166526	Transport Offices and Workshop	15-33 Amenity Way, Morden	SM4 4AX	Local Government	No	Local government estate			471.394	-	994.25	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
527368.21	168571.18	Cricket Green Special School	Lower Green West, Mitcham, Surrey	CR4 3AF	Public	No	Education facilities			444.795	-	1543.48	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
525700	171087.3	Priory Primary School	Queens Road, Wimbledon	SW19 8LX	Public	No	Education facilities			381.99	-	3698.75	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
525942.51	167081.02	Chaucer Centre	Canterbury Road, Morden	SM4 6PX	Local Government	No	Other public buildings			342.783	-	2300.15	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
527591	167945	Jan Malinowski Centre	114 Riverside Drive, Mitcham	CR4 4BW	Local Government	No	Other public buildings			282.368	-	1312.4	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
526238	170472	All Saints Day Centre	44 All Saints Road, London	SW19 1BX	Local Government	No	Other public buildings			252.743	-	668.76	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
524686.62	170780.09	Wimbledon Library	35 Wimbledon Hill Road, Wimbledon	SW19 7NB	Local Government	No	Other public buildings			217.818	-	1614.1	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
525498	170001	Merton Hall	78 Kingston Road, London SW19 1LA	SW19 1LA	Local Government	No	Other public buildings			210.868	-	552.98	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
527522	168602	Vestry Hall	Cricket Green, 336-338 London Road, Mitcham	CR4 3UD	Local Government	No	Other public buildings			209.657	-	1760.15	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
524278	168952	Joseph Hood Primary School	Whatley Avenue, London	SW20 9NS	Local Government	No	Education facilities			202.164	-	1090	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	

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
526808	170382	Browns Fitness Club	127-129, High Street Colliers Wood, London	SW19 2HR		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
524871	169147	Rutlish High School Pavillion	Watery Lane, Merton	SW20 9AD	Local Government	No	Education facilities			109.8	-	549	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
527494	169650	Lavender Children's Centre	London Road, Mitcham, Surrey	CR4 3LB	Local Government	No	Other public buildings			186.661	-	868.48	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
526318	167996	Gifford House	67C Connaught Gardens, Morden	SM4 6HY	Local Government	No	Local government estate			178.985	-	950.27	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
525701	168150	Brightwell Respite Care Centre	160A Bordesley Road, Morden	SM4 5LT	Local Government	No	Multi-address buildings			160.186	-	510	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
526440	170412	All Saints C of E Primary School	East Road, London	SW19 1AR	Public	No	Education facilities			158.345	-	1469.46	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
525562	170820	Holy Trinity C of E Primary School	Effa Road, London	SW19 8PW	Public	No	Education facilities			149.683	-	2411	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
525933	167081	Smart Centre	Canterbury Building, Canterbury Road, Morden	SM4 6PT	Local Government	No	Education facilities			146.73	-	1258.58	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
527456	170212	Taylor Road Ethnic Elder Centre	Taylor Road, Mitcham	CR4 3JR	Local Government	No	Other public buildings			139.967	-	288	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
		St Jospeh Hood Memorial Playing Field	Marina Avenue, Motspur Park	KT3 6NE	Local Government	No	Education facilities			138.402	-	452.7	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
524845	167556	Morden	Morden Park,	SM4 5QU	Local	No	Local			131.072	-	707.63	-	-	-	-	-	-	2011			Council	No		Merton	Real	

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
526808	170382	Browns Fitness Club	127-129, High Street Colliers Wood, London	SW19 2HR		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
		Park House	London Road, Morden		Government		government estate															Data					
524662	170030	Dundonald Recreation Ground	Dundonald Road, Wimbledon	SW19 3QH	Local Government	No	Sport & Leisure facilities			122.586	-	398.13	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
522714	169770	Cottenham Park Rec Ground	Melbury Gardens, Raynes Park	SW20 0PY	Local Government	No	Sport & Leisure facilities			118.429	-	304.55	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
527898	169335	Mitcham Library	157 London Road, Mitcham	CR4 2YR	Local Government	No	Other public buildings			116.518	-	1326.31	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
526048	169833	High Path Community Day Centre	63 High Path, South Wimbledon, London	SW19 2JY	Local Government	No	Other public buildings			112.511	-	731.54	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
524101	168666	Joseph Hood Rec Ground	Martin Way, Morden	SW20 9BX	Public	No	Sport & Leisure facilities			111.403	-	571.58	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
522222	169895	St Matthews Primary School	Cottenham Park Road	SW20 0SX	Public	No	Education facilities			109.565	-	1365.97	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
525239	170248	Russell Road Offices	54 Russell Road, Wimbledon	SW19 1QN	Local Government	No	Local government estate			107.977	-	621.3	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
526157	170336	South Wimbledon Youth Offices	72-74 Haydons Road, South Wimbledon	SW19 1HL	Local Government	No	Local government estate			106.932	-	541.28	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
524285	166908	King George's Playing Fields	Tudor Drive, Morden	SM4 4PN	Public	No	Sport & Leisure facilities			100.226	-	522.36	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
527468	167858	112 Riverside Drive	112 Riverside Drive, Mitcham	CR4 4BW	Local Government	No	Other public buildings			89.729	-	-	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
526831	170436	Colliers	115 High Street,	SW19 2HR	Local	No	Other public			89.715	-	409.17	-	-	-	-	-	-	2011			Council	No		Merton	Real	

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
526808	170382	Browns Fitness Club	127-129, High Street Colliers Wood, London	SW19 2HR		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
		Wood (Donald Hope) Library	Colliers Wood		Government		buildings															Data					
526122	170359	South Wimbledon Youth Centre	18 Arras Avenue, Morden	SM4 6DF	Local Government	No	Other public buildings			84.676	-	290.35	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
530173	168422	Pollards Hill Youth Centre	South Lodge Avenue, Mitcham	CR4 1LT	Local Government	No	Other public buildings			71.53	-	374.09	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
530048	168431	Pollards Hill Library	South Lodge Avenue, Mitcham	CR4 1LT	Local Government	No	Other public buildings			62.223	-	703.4	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
523334	166600	Street Sweeping & Salt Store	63-69 Amenity Way, Morden	SM4 4AX	Local Government	No	Other public buildings			60.092	-	-	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
523193	167974	Meadowsweet House	14 Meadowsweet Close, Raynes Park	SW20 9PB	Local Government	No	Other public buildings			56.951	-	-	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
526371	167006	Newminster Children's Centre	Newminster Road, Morden	SM4 6HJ	Local Government	No	Other public buildings			53.286	-	-	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
525967	169851	Merton Abbey Children's Centre	Merton Abbey Primary School, High Path, Merton	SW19 2JY	Local Government	No	Other public buildings			50	-	-	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
524061	168020	Eastways Day Centre	44 Eastway, Morden	SM4 4HW	Local Government	No	Other public buildings			38.904	-	389.45	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
522600	167697	West Barnes Library	10 Station Road, New Malden	KT3 6JF	Local Government	No	Other public buildings			38.119	-	359.82	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
523464	166570	Waste Managem	Garth Road, Morden	SM4 4AX	Local Government	No	Other public buildings			36.839	-	-	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	

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
526808	170382	Browns Fitness Club	127-129, High Street Colliers Wood, London	SW19 2HR		No	Sport & Leisure facilities			-	-	-	-	-	-	-	-	-	-				No		Merton	Estimated	
		ent - Garth Road																									
525812	167624	Youth Office	Farm Road, Morden	SM4 6RA	Local Government	No	Local government estate			34.311	-	-	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
527662	169335	David Nicholas Creche	57 Bond Road, Mitcham	CR4 3HJ	Local Government	No	Other public buildings			34.269	-	122.95	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
525645	168537	Athena House (1st Floor)	London Road, Morden	SM4 5AZ	Local Government	No	Local government estate			33.276	-	-	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
525899	167075	Merton Home Care	Home Care Building, Canterbury Road, Morden	SM4 6PX	Local Government	No	Other public buildings			28.929	-	238.79	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
525877	170598	Parking Section Offices	38 Wycliffe Road, Wimbledon	SW19 1ER	Local Government	No	Local government estate			23.033	-	104.85	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
526045	170022	Mychell House (No 1)	1 Mychelle House, Pincott Road, Wimbledon	SW19 2NN	Local Government	No	Other public buildings			20.383	-	-	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
527504	169340	Supported Living Team	106 Bond Road, Mitcham	CR4 3EN	Local Government	No	Other public buildings			10.631	-	-	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
528471	169091	Adventure Playground Building	Acacia Road	CR4 1SF	Local Government	No	Other public buildings			10.579	-	148.51	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	
523507	166550	Corporate Archive	35-55 Amenity Way, Morden	SM4 4AX	Local Government	No	Local government estate			10.575	-	796.81	-	-	-	-	-	-	2011			Council Data	No		Merton	Real	

A2 London Heat Map 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.