Royal Borough of Kingston upon Thames

Home Energy Conservation Act

Further Report

March 2013

1. Introduction

The Home Energy Conservation Act 1995 (HECA) recognises local authorities' ability to use their position to significantly improve the energy efficiency of all the residential accommodation in their areas. In July 2012 the Department for Energy and Climate Change (DECC) published requirements under HECA for all local authorities in England to report on the measures they propose to take to achieve this aim.

DECC has set a deadline of 31st March 2013 to publish the first of these reports, known as a "further report". Subsequent reports known as "progress reports" must be published at two-year intervals following this date. This document sets out Kingston Council's strategic objectives in improving the energy efficiency of homes in the borough, current trends and the actions the Council will take to help achieve its objectives

2. Where do we want to get to?

2.1 National strategic targets

The requirement to improve the energy efficiency of homes stems from the legal requirements to reduce carbon dioxide (CO_2) emissions set out in the Climate Change Act 2008 and the government's Carbon Plan, published in 2011. The Carbon Plan sets the following targets in relation to housing:

a. to reduce greenhouse gas CO2 emissions by 29% by 2017, 35% by 2022, and 50% by 2027 – for buildings this means a reduction between 24% and 39% lower than 2009 levels by 2027;
b. to insulate all cavities and lofts, where practical, by 2020;
c. by 2030, between 1 – 3.7m additional solid wall installations and between 1.9 - 7.2m other energy efficiency installations;
d. by 2030, 1.6 - 8.6m building level low carbon heat installations such as heat pumps (Government modelling suggests that 21 - 45% of heat supplies to buildings will need to be low carbon); and
e. by 2050 emissions from UK buildings to be "close to zero".

The government has also set a target of eradicating fuel poverty in England, as far as reasonably possible, by 2016. The government defines fuel poor households as those that need a household which needs to spend more than 10 percent of their income on home energy (including heating the home to 21 degrees for the main living area, and 18 degrees for other occupied rooms).

2.2 Local strategic targets

The **Kingston Plan** commits to reducing the boroughs carbon dioxide (CO_2) emissions in line with national targets to reduce UK net CO_2 emissions by 26-32% by 2020 and 80% by 2050. The Boroughs Energy Strategy (April 2009) sets out how this will be achieved through 20 key objectives, split between the Council's key role as a community leader, a planning authority and a service provider and asset holder.

Community leader:

1. Reduce CO2 emissions arising from energy consumption by all sectors (Domestic, Industry and Commerce, and Transport.)
2. Increase energy and water resource efficiency
3. Increase the proportion of purchased and generated energy from renewable and clean alternative energy sources
4. A local research and development network with educational institutions, businesses and industry to develop local evidence and best practice.
5. A local labour and skills capacity to raise awareness and deliver energy improvements.
6. Opportunities to make best use of support and finance for investment in energy awareness and energy improvement programmes.
7. More members of the community committed to take personal responsibility for their energy use and carbon emissions.
8. Action to alleviate fuel poverty.

Planning Authority

9. An evidence base to support the Local Development Framework policies on climate change
10. Increased renewable and clean alternative energy capacity and infrastructure.
11. The development of low carbon areas.
12. High standards of energy performance from sustainable design and construction, of new and existing buildings.
13. Low carbon transport infrastructure and sustainable transport provision.

Service provider and asset holder

14. A local authority that leads by example to follow the energy hierarchy.
15. A management plan and investment programme of asset and fleet improvement applying best value principles.
16. Increased staff awareness, training and accountability for energy use and travel choices.
17. The attribution of responsibility and accountability of energy use to Council services.
18. The assessment of building energy and transport implications in decision making for service delivery and capital investment.
19. A procurement process that applies best value principles to ensure energy and transport impacts are accounted for.
20. Use opportunities to increase energy generation from Council assets and contracts.

Kingston's **Housing Strategy** (October, 2011) also aims to improve the energy efficiency in housing across the borough. The Housing Strategy targets an average Council Housing Stock SAP score of 69, with the lowest scoring properties being targeted for improvements first. These improvements are taking place as part of the Better Homes programme, with national funding grants such as CERT, CESP and ECO being utilised where possible. Regarding the private housing stock, over which the Council has less direct control, the Housing Strategy sets targets to raise awareness of Climate Change and energy efficiency in 11 key areas:

1. Devise a communications and advice programme aimed at private owners, to encourage energy efficiency in private sector homes.
2. Tackle fuel poverty through support for the Re-New project, targeted visiting in specific areas of the Borough such as Chessington North, Hook and Old Malden and direct financial assistance to owners where resources are available.
3. In collaboration with sub-regional partners, devise and promote a local and sub-regional Empty Homes Plan to bring private homes back into use.
4. License and promote the good management of Houses in Multiple Occupation.
5. Prioritise the use of capital resources to; Provide Disabled Facilities Grants; Support enforcement work in the private sector; Bring empty homes back into use; Tackle fuel poverty and improve energy efficiency, and Review the cost effectiveness and value for money of renewal grants and loans.
6. Use the Private Sector Housing Consultative Committee to increase landlord and tenant involvement in the development of services.
7. Provide advice to both landlords and tenants as part of a co-ordinated Housing Advice service.
8. Promote and encourage good standards of management by encouraging landlord accreditation, backed by specialist advice, training and support for landlords.
9. Further develop the partnership between RBK and the University to use their combined influence in the private rented sector to improve accommodation standards.
10. Promote the Tenant Finder service and pilot the advertising of private homes on the Choice-Based Lettings system to increase access to the private rented sector for low-income households.
11. In collaboration with partners in the South-West London Housing Partnership, improve our knowledge of the condition of private sector homes in the Borough

The need to reduce fuel poverty occurs throughout different aspects of the Housing Strategy, and it is recognised there are multiple drivers for why fuel poverty affects residents. In achieving both energy efficiency improvements and awareness of energy consumption throughout the borough, fuel poverty can be addressed and reduced.

The NHS lead **Joint Annual Public Health Report** for Kingston 'Sustainability and Health' 2010-11, expands on some of the issues in the Housing strategy with regards to the link between housing and health. The report highlights six key areas in which the housing Strategy can address health issues linked to housing. These are:

1. Pursue the programme to bring all council homes up to the Decent Homes Standard by 2016, with the associated improvements to energy efficiency, heating, ventilation and the environment.
2. Implement the Strategy's proposals to improve the advice and assistance available to private owners in the Borough about improving energy efficiency in their home and, where appropriate, pursue existing programmes to address poor energy efficiency and fuel poverty through initiatives such as the Home Energy Doctor Scheme, RE:NEW, and Coldbusters.
3. In seeking to increase the stock of affordable housing in the Borough place a high priority on provision for families.
4. Give a high priority to mitigating the health effects of overcrowding in the Borough.
5. In association with other agencies, develop initiatives to address health inequality amongst statutory homeless households, particularly those living in temporary accommodation.
6. Through the Homelessness Forum, prioritise the consideration of health issues amongst single homeless people, including rough sleepers, and including consideration of the Nightshelter project.

The Councils **Core Strategy** (adopted April 2012) sets out the current and future targets for improving the energy efficiency of new build homes. Policy DM1 sets out that new build homes must achieve Code for Sustainable Homes 'Level 4' up to 2016, and Level 6 (zero carbon) from 2016 onwards. Planning applications are also required to provide an Energy Statement that details how the development will achieve CO_2 emissions reductions of 25% beyond current Building Regulations Part L (2010). This is in line with the London Plan (2011), and the process encourages developers to consider a full range of energy efficiency measures, starting with energy use reduction through building efficiency, moving on to clean energy generation, and finally considering renewable energy technologies.

The Health and Wellbeing board govern the **Kingston Health and Wellbeing Strategy** (March 2013) and its action plan. One of the key themes within the strategy is working together to support older people remain independent and well in their homes. The development of an Older Peoples Housing Strategy will be one of the methods to embed the actions for tackling fuel poverty and energy efficiency in the home within the outcomes of the Kingston Health and Wellbeing Strategy.

From the local strategies adopted over the last five years it is clear to see Kingston has a commitment to reducing carbon dioxide emissions, improving energy efficiency and tackling fuel poverty across the Climate Change, Housing, Health and Planning agendas.

3. Where are we now?

3.1 Energy use and carbon dioxide (CO_2) emissions

The borough's overall per capita CO_2 emissions are lower than the London average and reflect a reduction in total carbon dioxide emissions across all sectors and an increase in population over the period from 2005 to 2010 (**Appendix.2 Figure.1**).Energy consumption in housing is currently (2010 figure) the largest source of CO_2 emissions in Kingston at 42% of the total. Kingston's domestic sector has reduced its actual kilo tons of carbon dioxide (CO_2) emissions by 5.81% from 2005 to 2010 and at the same time the boroughs per capita emissions in the domestic sector alone have reduced by 8.70% during the same period (**Appendix.2 Figure.2**).

There has been an improvement in energy performance of the 5600 domestic properties owned and managed as part of RBK's social housing stock from an average rating of 62SAP points to 69SAP points out of 100, over the last 10years to 2012. This represents a band 'C' energy performance rating for the majority of the stock using a sample survey of 19% of the RBK social housing dwellings. There are just fewer than 100 properties with a SAP rating below 50 points which will be targeted for energy efficiency improvements (the locations of those within the sample survey group are shown in **Appendix.2 Figure.3**). The majority of RBK social properties with cavity and accessible lofts have been insulated using CERT funding to the value of £2.5million over the last 3 years, as set out in the Housing Strategy. The next phase of improvements aims to target the hard-to-treat cavity walls and solid wall properties within the estate.

Official statistics show the average Energy Performance Certificate (EPC) rating for a home in England and Wales is band D, with a SAP rating of 60. This suggests that private rented and owner occupied housing is much less energy efficient on average than social housing in Kingston. This highlights the good work that has been done within the Councils social housing stock, but also the work that needs to be done within the private housing sector to improve energy efficiency.

There is a correlation between privately owned housing and higher rates of energy consumption. For example, the North-West Coombe Hill area of the borough shows particularly higher rates of electricity and gas consumption than other areas of the borough (**Appendix.2 Figure.7** and **Figure.8**), while there is also a higher proportion of private ownership (**Appendix2 Figure.13**). This area also shows some of the lowest levels of benefits claimants (**Appendix.2 Figure.9 and Figure.12**) and deprivation (**Appendix.2 Figures.10 and .11**), suggesting residents generally do not suffer from low income. However, there are still signs of prevalent fuel poverty in the same areas, highlighting the potential for improved insulation or behaviour change to reduce gas and electricity consumption.

For Kingston's domestic energy use, gas consumption currently contributes 57.4% of all CO_2 emissions, compared to 41.2% from electricity and 0.2% from other fuel types (**Appendix.2 Figure.3**). As future gas supply potentially becomes limited, there may be an increasing need to electrify energy demand, and therefore future electricity consumption may start to account for an increasing proportion of CO_2 emissions, with the proportion of gas emissions decreasing.

3.2 Fuel Poverty

The latest figures from 2010 show that 5,973 of households (9.9%) in Kingston are affected by fuel poverty. This was a drop from the previous year (6,727 households, 11.1% in 2009) but an increase since 2008 (5,385 households, 8.8%) (**Appendix.2 Table.1**). This sudden increase in fuel poverty in 2009 has widely been attributed to increases in wholesale energy costs (Ofgem[1] indicators). In comparison with the current average percentage of households affected by fuel poverty across London (10.8%) and across England (16.4%), there are proportionally fewer households in fuel poverty in Kingston (**Appendix.2 Table.2**). Nonetheless, fuel poverty can still affect around one in every ten households in Kingston.

It is shown by **Figure.4**, **Figure.5** and **Figure.6** (**Appendix.2**) how levels of fuel poverty can change annually within the Borough, for example economic difficulties combined with increasing fuel prices can push households into fuel poverty. These figures also show how the average rate of fuel poverty across the borough does not provide an accurate representation of how fuel poverty actually affects Kingston residents. For example, **Figure.5** (**Appendix.2**) (Fuel Poverty in 2010), shows how there can be over a 10% difference in the rate of fuel poverty between areas within the Borough. When compared alongside other factors, such as number of Job Seekers Allowance (JSA) claimants (**Appendix.2 Figure.12**) and overall deprivation (**Appendix.2 Figure.11**), there are certain areas of the Borough that are particularly vulnerable to fuel poverty. The Cambridge Road Estate has some of the highest levels of benefits claimants and is the only area in the borough that is in the 20% most deprived areas nationally (borough profile); also in 2009 it was one of the most affected areas by increasing fuel prices (as shown by the high proportion of fuel poverty in **Appendix.2 Figure.5**). However, the Cambridge Road Estate area also shows some of the lowest levels of electricity and gas consumption (**Appenix.2 Figures.7 and .8**), which highlights fuel poverty is not just an energy efficiency issue; there are a number of underlying social issues too.

Kingston is ranked 264 out of 326 nationally for levels of deprivation (1= most deprived), and is the 3rd least deprived Borough in London. This goes to show how fuel poverty can still be prevalent in parts of one of the comparatively least deprived local authority areas in the country.

[1] Ofgem- Electricity and Gas market indicators (http://www.ofgem.gov.uk/Markets/RetMkts/rmr/smr/Pages/indicators.aspx)

3.3 Health

As highlighted in the London Assembly report 'In From the Cold? Tackling Fuel Poverty in London', there is a proven link between a lack of home insulation and excess winter deaths. This is because cold homes significantly increase the occurrence of serious health problems, and people affected by fuel poverty take longer to recover from serious illness. It has been estimated that nationally, the cost of cold homes to the NHS is £859 million per year; however this figure is likely to be much higher (DH (2010) *2009 Annual Report of the Chief Medical Officer)*.

The risk of excess winter deaths has been shown to increase with age. Kingston has an ageing population, with the 65+ population predicted to increase by 33% between 2011 and 2033. The 2011 census shows that 12.7% of Kingston's population is over 65 years of age. Similarly, the impacts of fuel poverty have an increased effect on children and young people, as children living in cold homes are twice as likely to suffer respiratory problems as children living in warm homes. **Figure.10** (**Appendix.2**) shows the areas in Kingston where Children and Older people are affected by income deprivation, which is a factor that significantly affects fuel poverty and therefore poor health and excess winter deaths.

In Kingston, the number of excess winter deaths is significantly higher than the national average. This is likely to be a result of the age demographic rather than excessively poor housing, however both factors are contributory. Through targeting households for energy efficiency improvements that suffer from fuel poverty, low SAP ratings, claim benefits or have young families and people of a pensionable age, the rate of excess winter deaths can be reduced.

4. How we will get there?

The data outlined above and examined in more detail in Appendix.2 outlines the scale of the challenge if Kingston's homes are to be retrofitted to help the borough meet its strategic objectives. The action plan set out below details how the borough will begin to address this challenge through improving data, accessing funding and working with partners to provide value for money and facilitate delivery of energy efficiency projects

All delivery objectives aim to tackle fuel poverty and reduce energy use and carbon emissions

- By working in partnership with local boroughs and local voluntary and public sector organisations, where appropriate
- By using area based / street by street programmes of engagement, where appropriate
- By linking to existing RBK social housing refurbishment programmes, including both planned and reactive maintenance works
- By encouraging local employment and training opportunities
- By maximising investment and value for money
- By promoting behaviour change

This will involve

- Implementing policies, procedures and measures to deliver a reduction in the proportion of borough residents in fuel poverty.
- Implementing energy efficiency measures to assist in all social housing meeting the Decent Homes Standard.

The HECA report will be governed under the borough's Energy Strategy (Sustainable Housing Programme) and Housing Strategy (Energy Efficiency Project – OK5 project 7)

4.1 Private Sector Housing

Objective	Actions	Success Criteria	Responsible person & stakeholders	Delivery period	Progress update (Ongoing / completed / committed / proposed)
DATA MANAGEMENT Improve the quality, scope and analysis of data to inform the delivery of energy efficiency programmes in the borough	Purchase EPC (Energy Performance Certificate) data for Kingston upon Thames	Domestic energy performance data held by RBK	Climate Change Team and Property Inspection Team Supported by Strategic Business	April 2013	committed
	Compile existing data from DECC and previous energy efficiency projects delivered in the borough	Central set of national and local data including energy use, fuel poverty estimates, excess winter deaths, local grant allocations, and energy measures installed	Climate Change Team and Property Inspection Team Supported by Strategic Business	April 2013	completed
	Load data sates on to corporate GIS, such as EPC data	Mapped information and an aid to targeting projects	Climate Change Team	April 2014	proposed (mapped by LSOA)
	Explore the use of housing data to target home improvements	Briefing note on options and cost	Property Inspection Team GIS team	April 2014	proposed
FUNDING Access funding to provide energy efficiency measures for low income households and areas	Identify ECO Affordable Warmth funding eligible areas and households using existing data	Target postcode addresses and mapped areas	Climate Change Team and Property Inspection Team External stakeholders	Ongoing	proposed

Objective	Actions	Success Criteria	Responsible person & stakeholders	Delivery period	Progress update (Ongoing / completed / committed / proposed)
Such as ECO Affordable Warmth and ECO Carbon Saving Communities Obligation targeting low-income communities defined using the bottom 15% of Lower Super Output Areas	Identify delivery partner to refer householders to funding	Appointed delivery agent and active promotions with RBK	Climate Change Team and Property Inspection Team External stakeholders		-Kingston is currently working with Climate Energy to deliver Coldbusters (secured ECO Affordable Warmth) funding. -RBK managing Home Improvement Grants. -NHS offering free home visits to over 65s.
FUNDING Promote uptake of energy efficiency measures through funding such as • Green Deal • Carbon Savings ECO funding for hard to treat properties • RBK Home Improvement Grant	Identify preferred approach to delivering Green Deal in Kingston	Approved business case	Climate Change Team and Property Inspection Team	March 2014	proposed
	Ensure Council communications channels provide appropriate advice and information to householders	Information and signposting on RBK website, neighbourhood promotional avenues such as facebook page, and RBK contact centre	Climate Change Team and Property Inspection Team Corporate Communications Contact Centre team	March 2014	proposed
	Promote the uptake of RBK's Home Improvement Grant and its role in improving energy efficiency; offering up to £10,000 towards the cost of reducing risk to occupiers from hazards that may exist in the property, and/or for energy improvement works.	Increased thermal comfort for residents, reduced condensation in properties and reduced ill health	Property Inspection Team	March 2014	Policy adopted in December 2012 committed

Objective	Actions	Success Criteria	Responsible person & stakeholders	Delivery period	Progress update (Ongoing / completed / committed / proposed)
PLANNING / zero carbon homes Decide on Council's approach to 'allowable solutions'	Investigate setting up community energy fund to administer income from allowable solutions, Section 106, Feed in Tariff and Community Infrastructure Levy (CIL)	Ring fenced funding for investment according the policy criteria	Climate Change Team Supported by LDF & Policy Team	Ongoing	proposed
	Consider the priorities for investment from community energy fund	Outline proposal of investment projects with description, cost and timeline	Climate Change Team Supported by LDF & Policy Team	Ongoing	proposed
PLANNING / zero carbon homes Remove barriers to retrofit in planning system	Investigate ways to facilitate and promote solid wall insulation in planning	Options appraisal of methods to enable improvement of solid wall properties in the borough	Climate Change Team Supported by LDF & Policy Team and Development Control Property Inspection Team	Ongoing	proposed

4.2 RBK Social Housing

Objective	Actions	Success Criteria	Responsible person & stakeholders	Delivery period	Progress update (Ongoing / completed / committed / proposed)
Improve the energy efficiency of the lowest SAP rated properties	Identify RBK Social housing properties with a SAP rating below 50 Prepare a package of works eligible for ECO funding	Identify improvements measures that no longer need to be funded by RBK reactive and planned works programmes	Climate Change Team supported by Better Homes team and Housing Maintenance Team	September 2013	proposed
	Carry out analysis of housing stock and planned investment to determine potential CO_2 savings and level of ECO funding	Receive ECO funding to offset reactive and planned works	Climate Change Team supported by Better Homes team and Housing Maintenance Team	September 2013	proposed
	Install improvement measures such as solid wall insulation and replacement of crittall windows	Improve the SAP rating and thermal comfort for residents	Climate Change Team supported by Better Homes team and Housing Maintenance Team	April 2013 - March 2015	proposed

Objective	Actions	Success Criteria	Responsible person & stakeholders	Delivery period	Progress update (Ongoing / completed / committed / proposed)
Educate RBK social housing residents to save energy and water	Prepare leaflets and promotional materials for RBK Social Housing Residents	Information distributed to all RBK Social Housing residents	Climate Change Team supported by Communications Team Housing Communications sub-group		proposed
	Train heating and electrical contractors to provide energy and water saving advice at point of contact with residents in their home.	Front line staff able to engage with residents about practical ways to reduce energy and water use to manage utility costs	Climate Change Team supported by Housing Maintenance Team		proposed
Improve the ability of RBK social housing residents to control their heating	Identify RBK Social Housing properties with the opportunity to improve heating controls and the cost of works Identify funding sources such as ECO	Identify improvements measures that no longer need to be funded by RBK reactive and planned works programmes Align delivery timetable	Climate Change Team supported by Housing Operations Manager Housing Maintenance Team		proposed
	Assess the practicalities of installing improved heating controls	Increased thermal comfort for residents, reduced condensation in properties and reduced ill health	Climate Change Team supported by Housing Operations		proposed

Objective	Actions	Success Criteria	Responsible person & stakeholders	Delivery period	Progress update (Ongoing / completed / committed / proposed)
			Manager Housing Maintenance Team		
Install appropriate renewable technology on RBK Social Housing properties	Identify properties due for a new boiler and their potential for solar thermal technology Prepare a business case for installation	Business case and proposal for installing solar thermal technology including potential energy & carbon savings	Climate Change Team supported by Housing Maintenance Team		proposed
	Identify opportunities in sheltered housing for PV or Solar thermal Prepare a business case for installation	Business case and proposal for installing solar thermal technology including potential energy & carbon savings	Climate Change Team supported by Housing Maintenance Team		proposed
Improve accurate billing of for RBK social Housing Residents	Investigate the opportunity of installing Smart Meters in social housing stock	Business case and proposal for installing smart meters with benefits and cost assessment	Climate Change Team supported by Housing Operations Manager Housing Maintenance Team		proposed

Review date: 31st March 2014

Submission of next progress report: 31st March 2015

		Date
Version number	v0.7	22.03.13
Status	FINAL	-
Approved by	Climate Change Team Service Manager (Marie-Claire Edwards) Private Sector & Prevention Service Manager (Sarah Lawton)	March 2013
	Climate Change Programme Board	June 2013

For further information, please contact Oliver Walton, Carbon Reduction and Sustainability Officer or Shadia Rahman, Climate Change Officer

Appendix 1.Sustainable Housing Programme

Ref. Energy Strategy AIP4 2012-13, Project List 2012 – 2015, (Annex 1)

Project	**Strategic project objectives** **2012/13**	**Strategic project objectives** **2013/14/15**	**Meets objective number** **Key Priority (KP)**	**Resource required 12/13**	**Resource required 13/14/15**
Project 8 Sustainable Housing	Develop plans and policies to tackle fuel poverty within the borough. Implement a co-ordinated approach to deliver energy efficiency improvements to social housing. Engage with private sector residents, landlords and tenants to provide advice on energy efficiency.	Implement policies, procedures and measures to deliver a reduction in the proportion of borough residents in fuel poverty. Implement energy efficiency measures to assist in all social housing meeting the Decent Homes Standard.	1, 2, 3, 5, 6, 7, 8, 15, 18. KP 2, 3, 4.	0.5 FTE	0.5 FTE

Ref. Energy Strategy AIP4 2012-13, 2012 – 2013 Project List with Outcomes and Success Criteria (Annex 2)

2012/13	**Outcomes**	**Success Criteria**
Sustainable Housing	Energy Strategy and Housing Strategy resources aligned Projects delivered in partnership with authorities in sub-region Simple home energy efficiency advice and signposting information consistent across the borough Internal and external funding aligned Review opportunities for retrofit and energy initiatives in RBK stock	Climate Change Team working in partnership to deliver the One Kingston OK#5 'Strategic Housing Programme' project 7 - Energy Efficiency. Clear website content and promotional materials accessible to all residents External funding secured such as GLA funds (for example for area based engagement – RE:NEW 2), utility company grants (CERT funding for measures) and central government grants (CESP for measures) Residents targeted for support Referrals generated to grants for energy efficiency measures from local funds such as RBK Coldbusters, RBK Warmer Homes Healthy People, RBK housing improvement grants or government funds such as Warmfront. Energy efficiency measures installed as part of the Better Homes Programme of works

Appendix.2

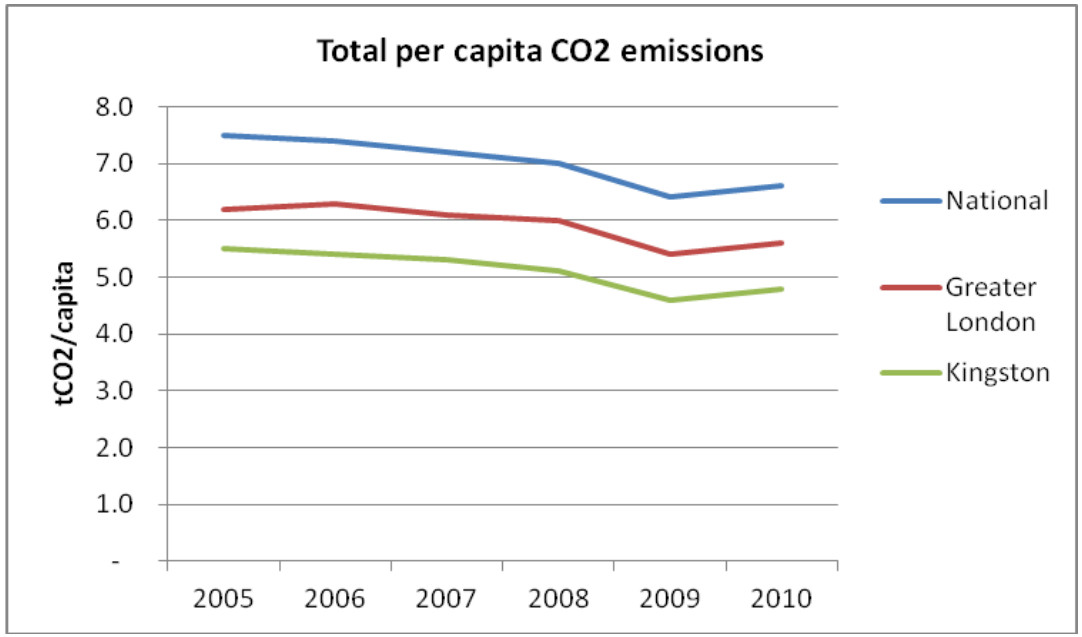

Figure.1 – Per capita CO_2 emissions National, London and Kingston. (DECC Local and Regional CO2 Emissions Estimates for 2005-2010)

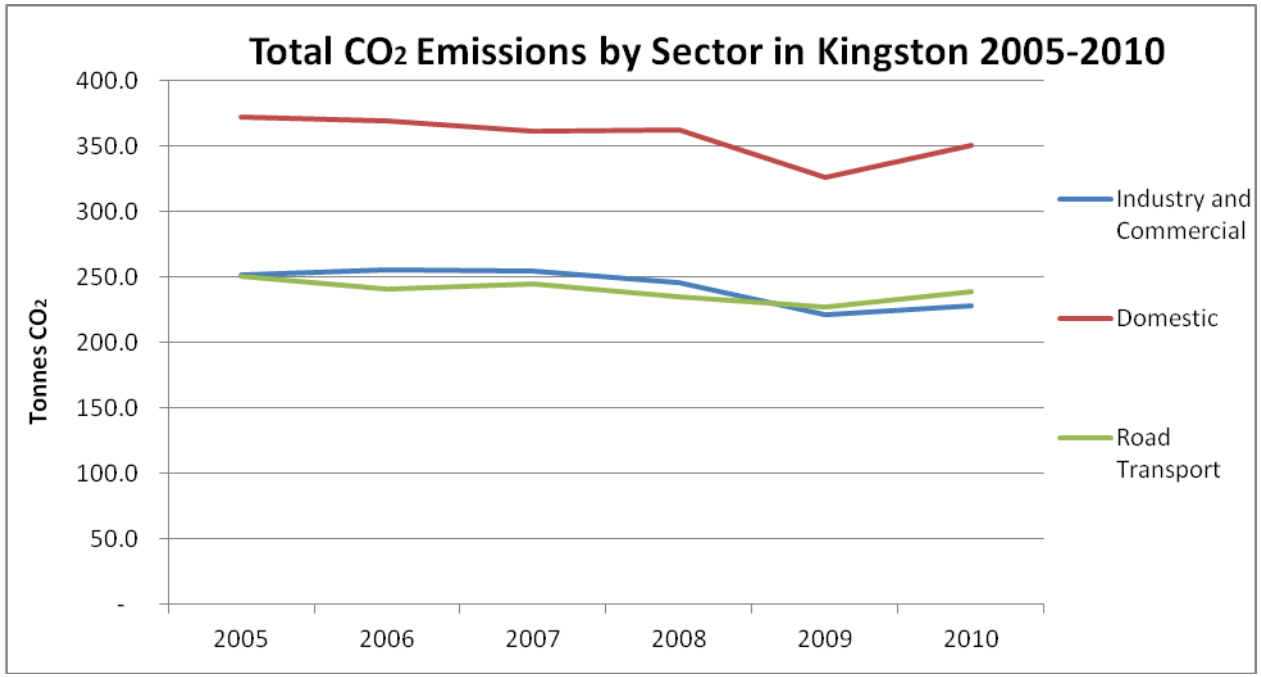

Figure.2 – CO_2 Emissions by Sector (DECC Local and Regional CO2 Emissions Estimates for 2005-2010)

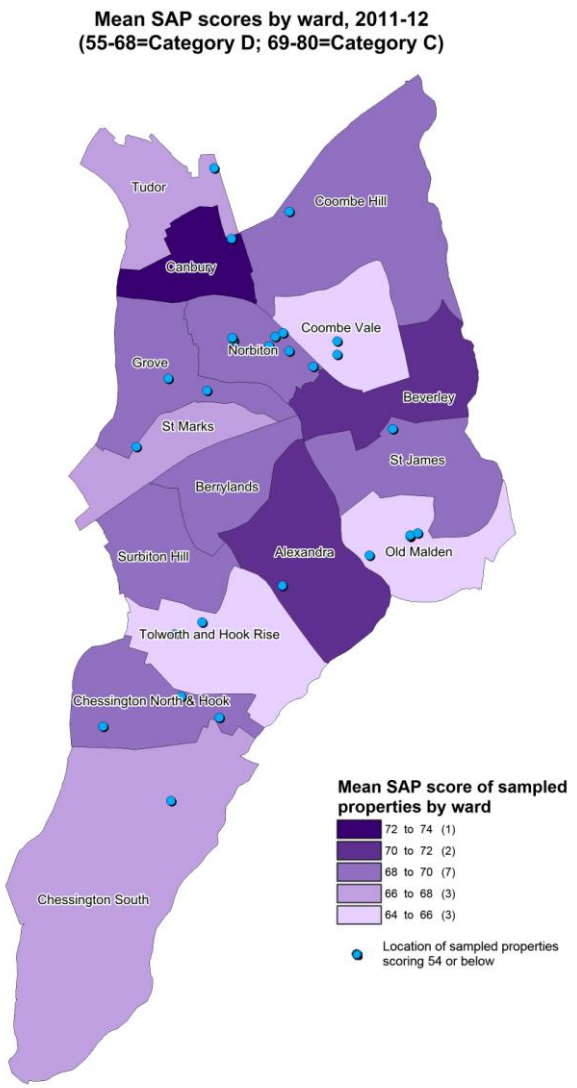

Figure.3 – SAP scores by ward within RBK's Social Housing Stock (RBK Data Observatory)

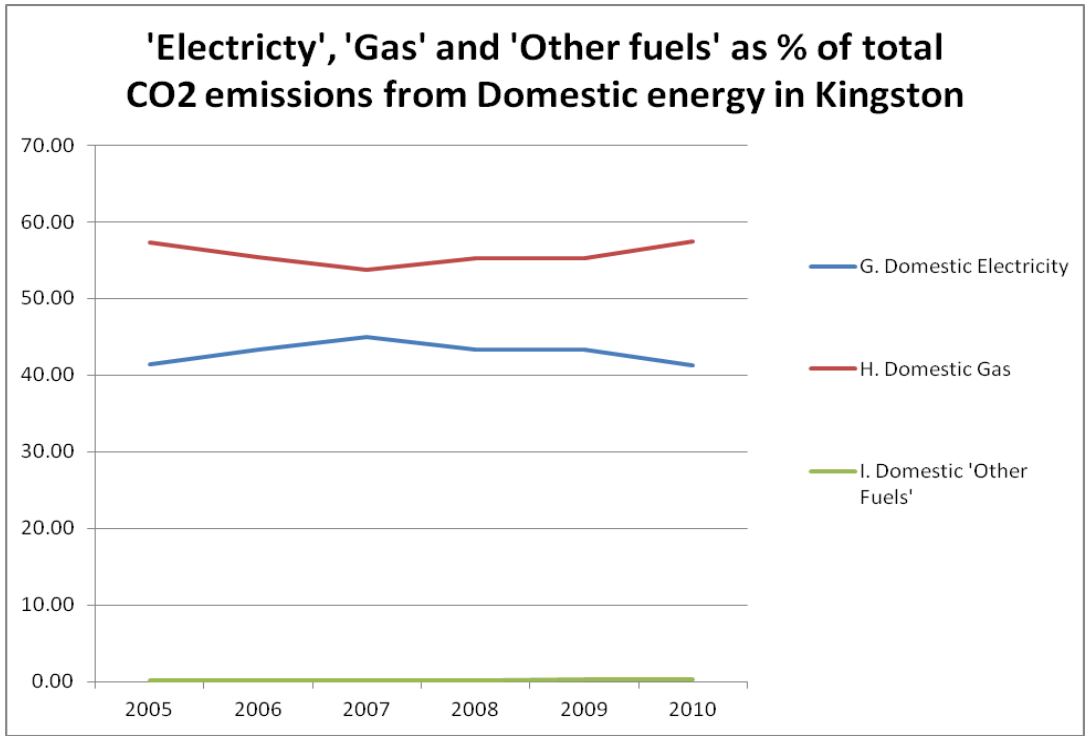

Figure. 3 – Fuel type as percentage of CO_2 emissions from Domestic Energy in Kingston (DECC Local and Regional CO2 Emissions Estimates for 2005-2010)

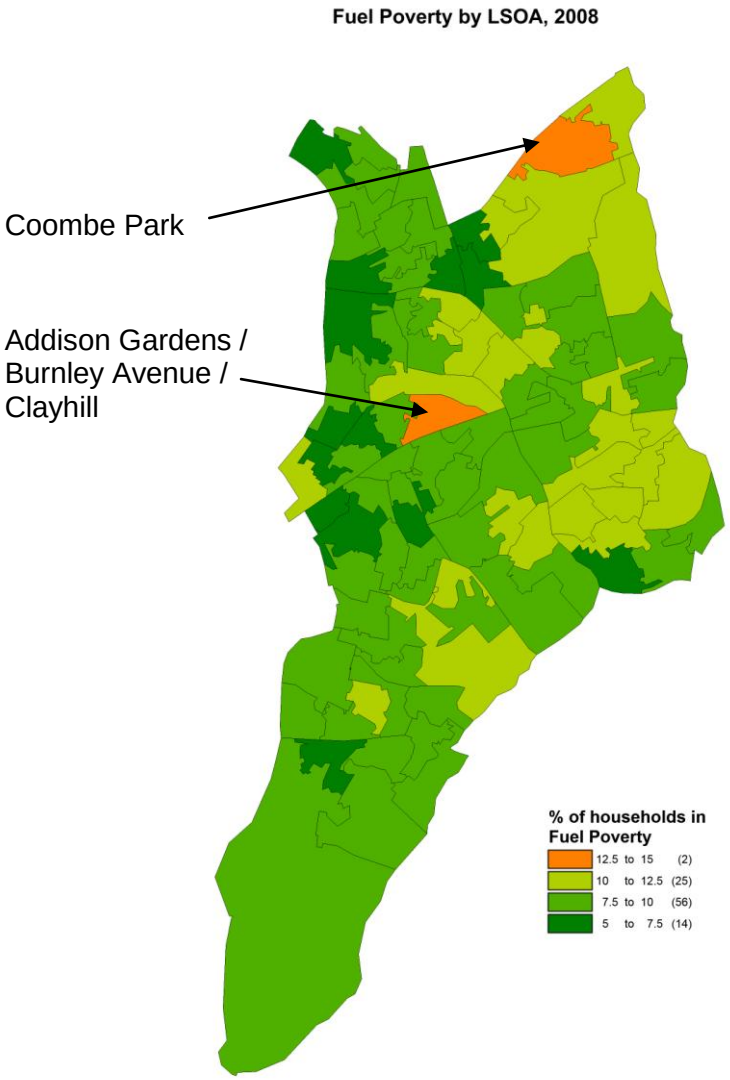

Figure.4 – 2008 Fuel Poverty by LSOA in Kingston

(DECC Sub-regional Fuel Poverty, 2008)

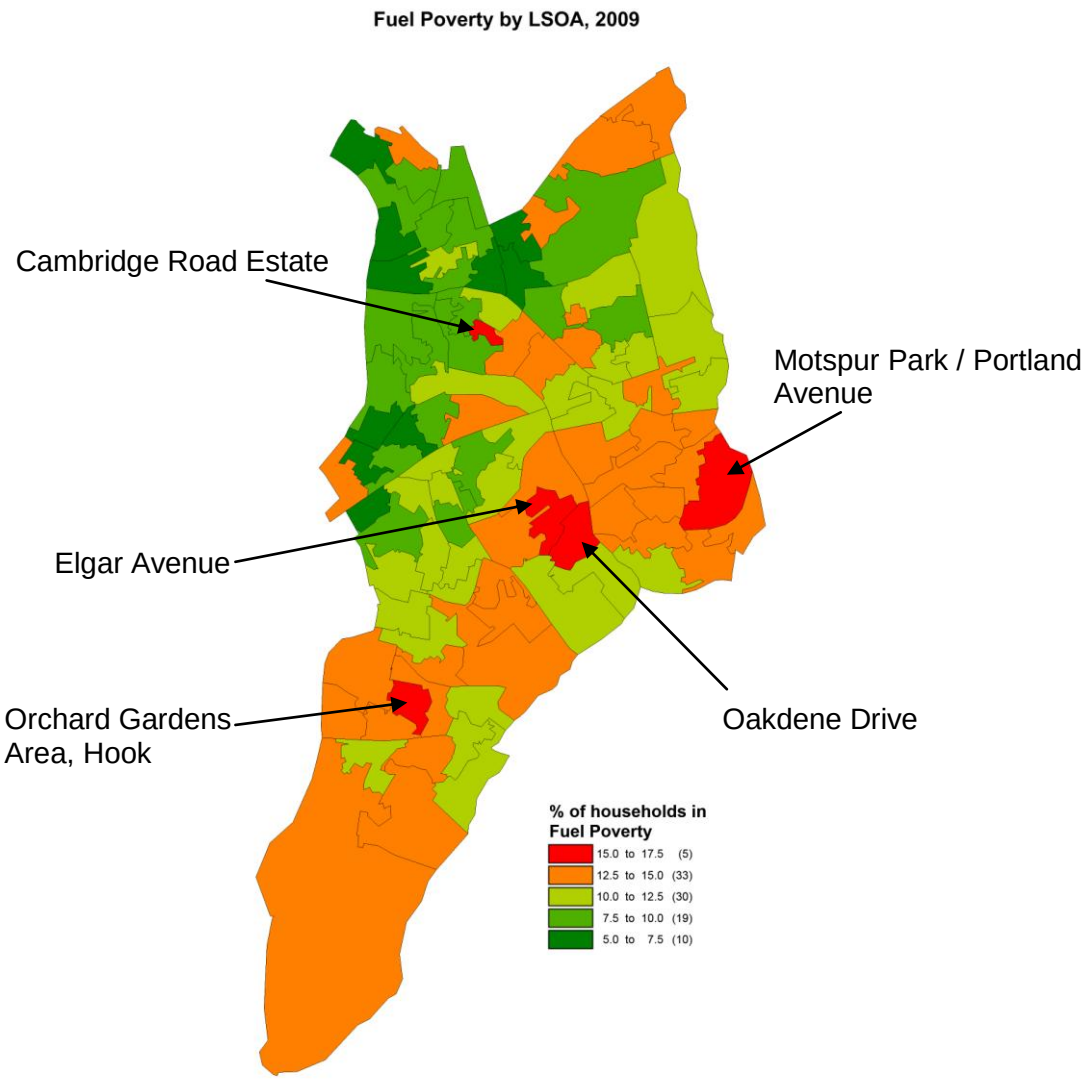

Figure.5 – 2009 Fuel Poverty by LSOA in Kingston

(DECC Sub-regional Fuel Poverty, 2009)

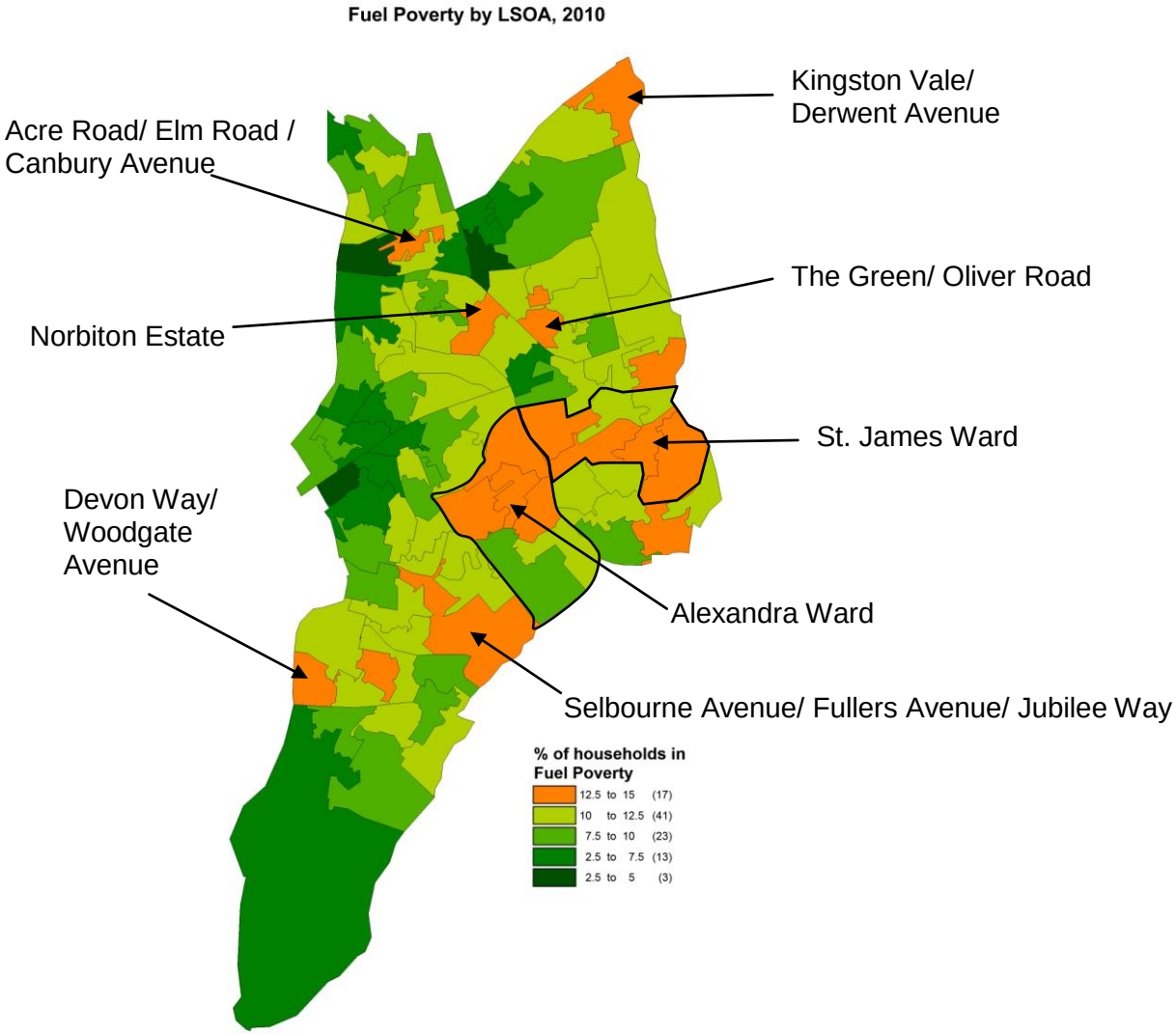

Figure.6 – 2010 Fuel Poverty by LSOA in Kingston

(DECC Sub-regional Fuel Poverty, 2010)

Table.1 - Fuel Poverty in Kingston (DECC Sub-regional Fuel Poverty data)

	Households	Households in fuel poverty	% of households fuel poor
2008	61,313	5,385	8.8%
2009	60,531	6,727	11.1%
2010	60,586	5,973	9.9%

Table.2 – Fuel poverty in Kingston, London and UK in 2010 (DECC Sub-regional Fuel Poverty data)

	All Households	Fuel Poor Households	Percent Fuel Poor
Kingston upon Thames	60,586	5,973	9.9%
London	3,049,047	330,783	10.8%
National	21,599,926	3,535,932	16.4%

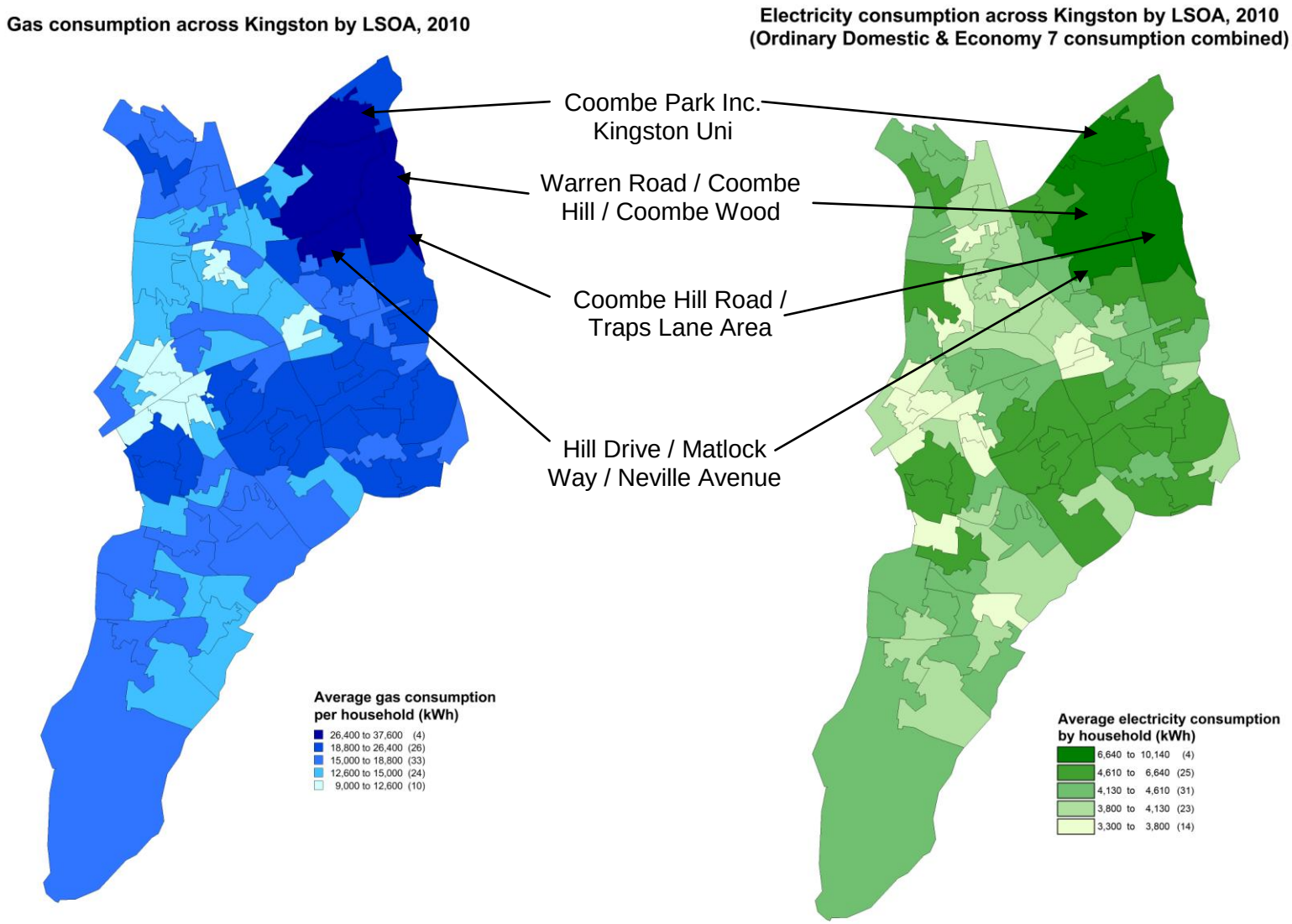

Figure.7 – 2010 Gas Consumption by LSOA in Kingston

(DECC Domestic Gas LSOA 2010 raw data)

Figure.8 – 2010 Electricity Consumption by LSOA in Kingston

(DECC Domestic Electricity LSOA 2010 raw data)

Table 3- Cold busters improvements since 2003 in Kingston upon Thames (RBK data)

Measure	Households
Boiler Replacement	*679*
Cavity insulation	*15*
Loft insulation	*126*
Glazing	*20*
Draught proofing	*91*
Referrals from RE:NEW 1	*35*

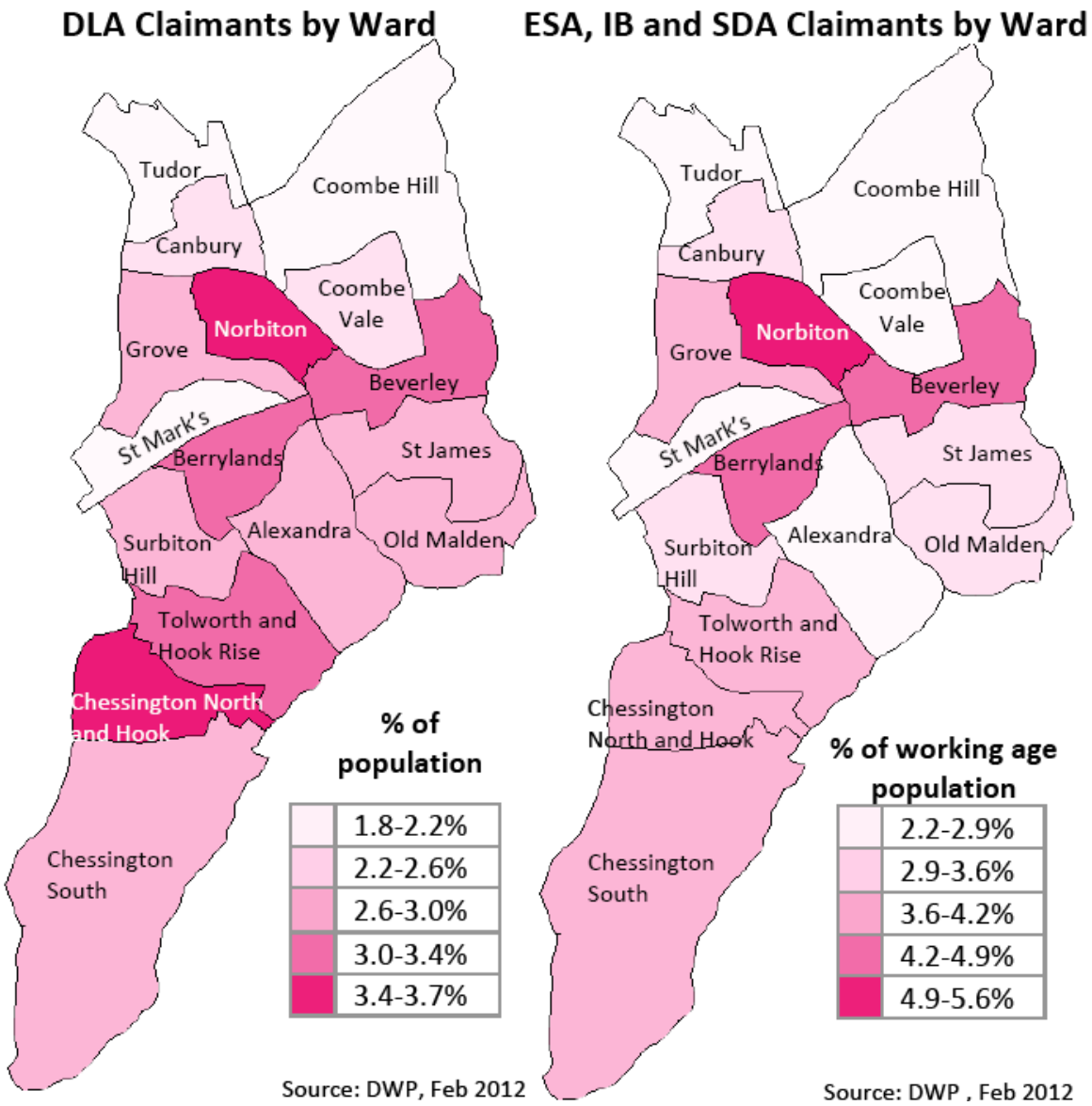

Figure.9 – Disability Living Allowance (DLA) claimants by ward (left); Employment and Support Allowance (ESA), Incapacity Benefit (IB) and Income Support and Severe Disablement Allowance (SDA) claimants by ward (right).

(Taken from Borough Profile)

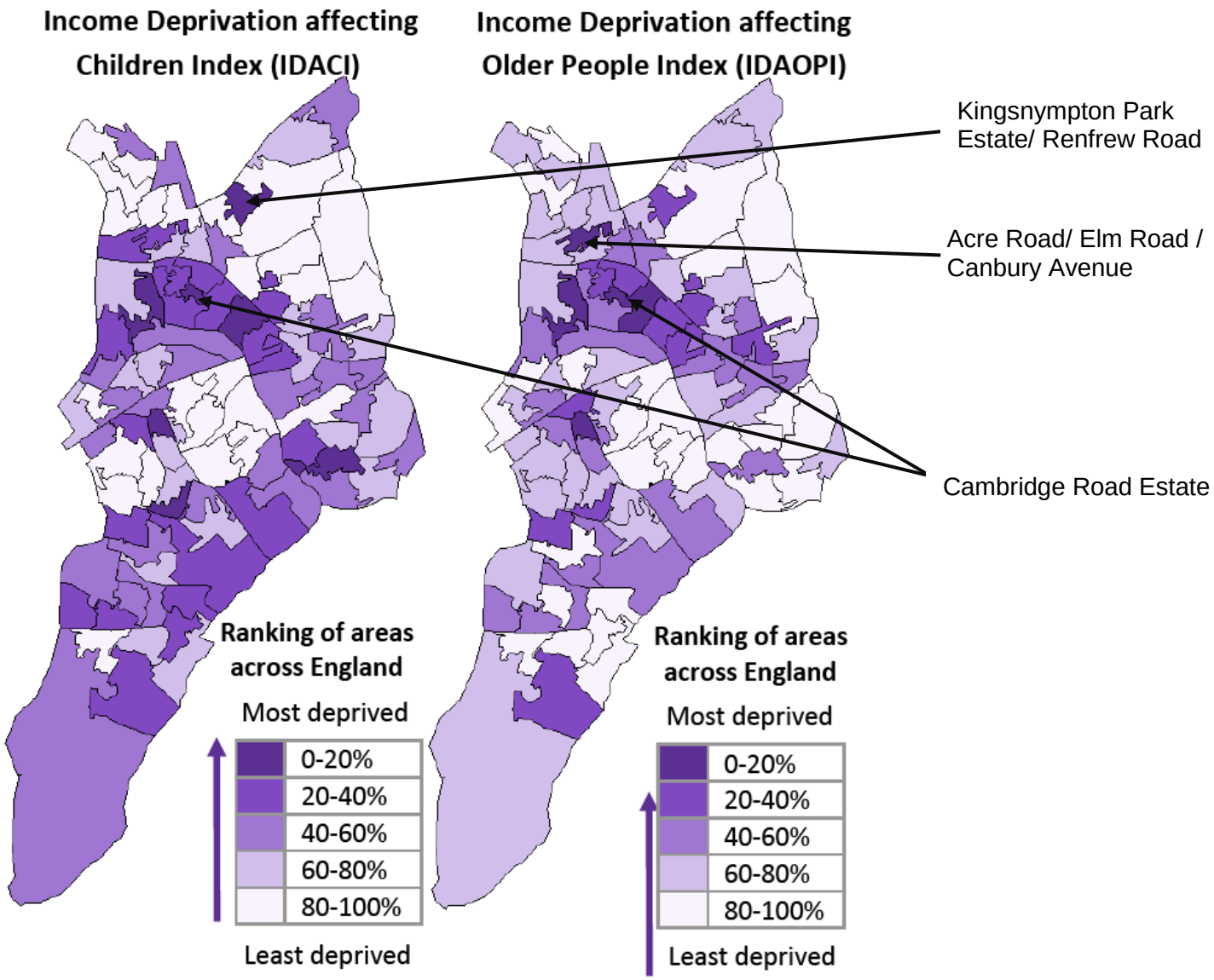

Figure.10 – Income Deprivation affecting Children (2012) (left); Income deprivation affecting Older People (2012) (right)

(Taken from Borough Profile)

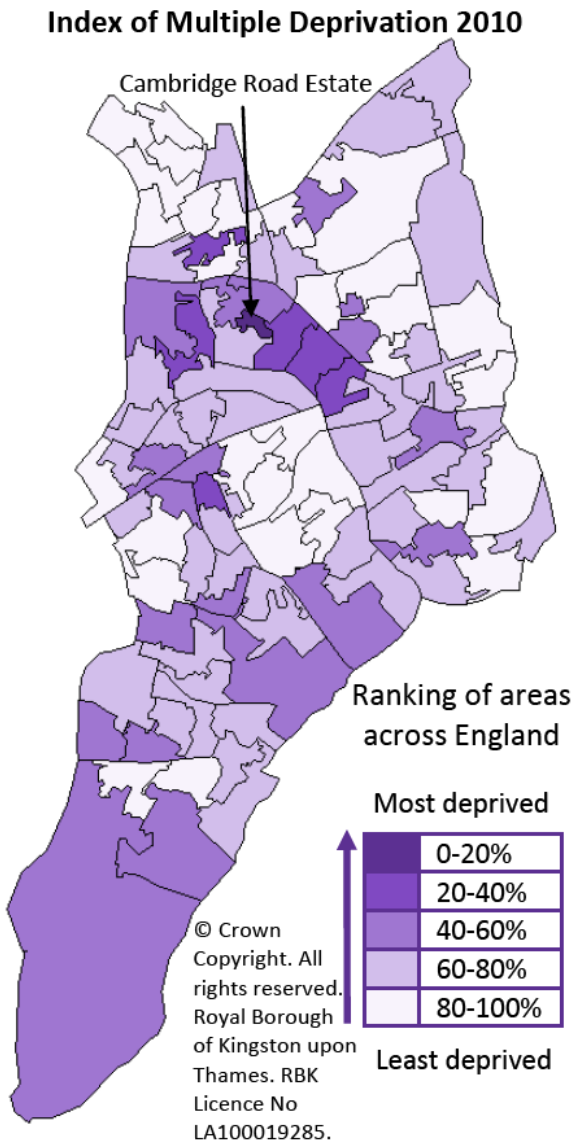

Figure.11– Index of Multiple Deprivation (taken from Borough Profile)

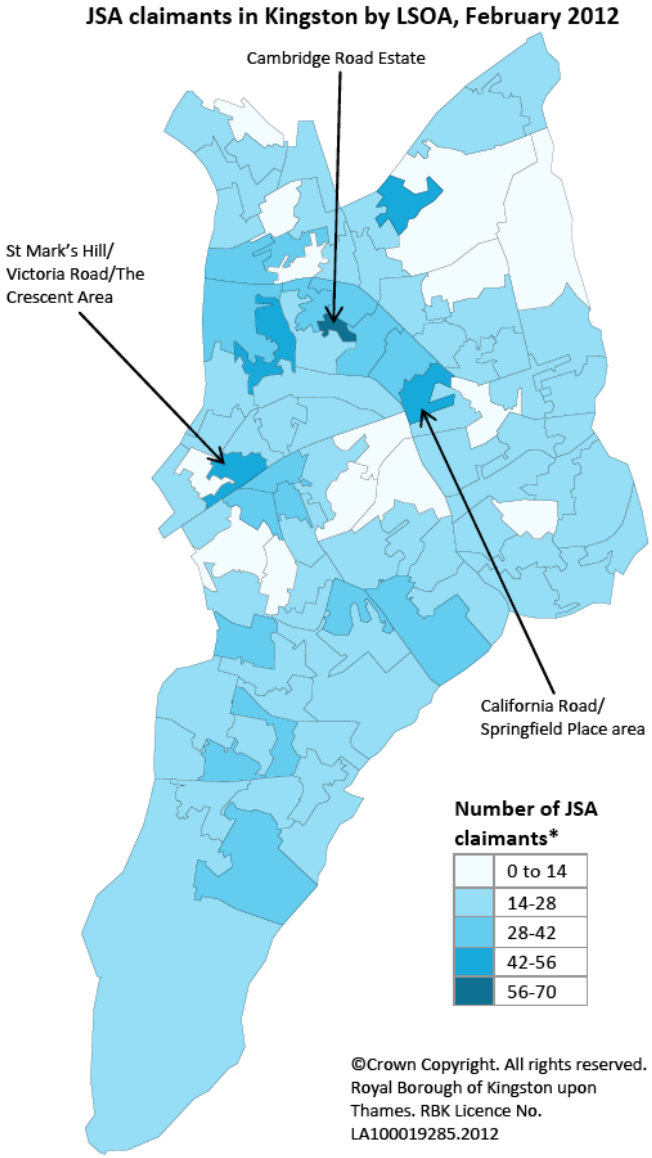

Figure.12 – Job Seekers Allowance claimants (taken from Borough Profile)

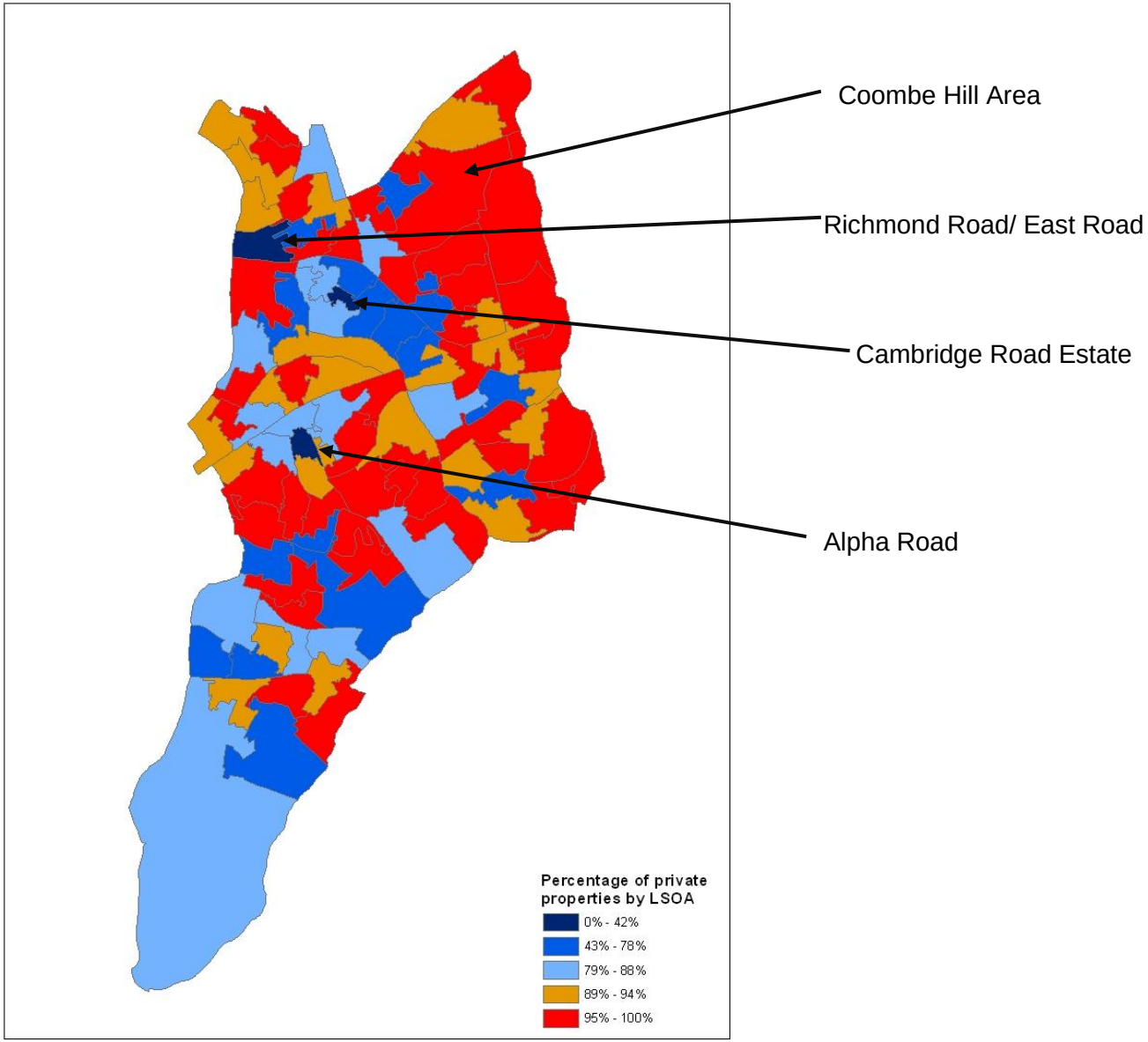

Figure.13 – Percentage of private properties across Kingston.

Appendix.3

Links to Data Sources

- DECC Local and Regional CO2 Emissions Estimates for 2005-2010 (https://www.gov.uk/government/publications/local-authority-emissions-estimates)
- LLSOA electricity and gas: 2010 (https://www.gov.uk/government/statistical-data-sets/llsoa-electricity-and-gas-2010-experimental)
- DECC Sub-Regional Fuel Poverty 2010 (https://www.gov.uk/government/statistical-data-sets/fuel-poverty-2010-sub-regional-data)
- Modelling domestic gas consumption in 2009 (https://www.gov.uk/government/statistical-data-sets/modelling-domestic-gas-consumption-in-2009)
- For future reference: London LSOA Atlas (http://data.london.gov.uk/visualisations/atlas/lsoa-atlas-2012/atlas.html)