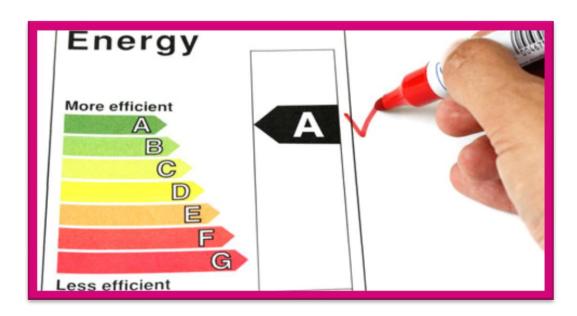


DOMESTIC ENERGY EFFICIENCY IN NEWHAM ANNUAL REPORT



2013-14

London Borough of Newham

Energy and Sustainability
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The national and international picture

Domestic energy efficiency has had its profile raised in recent years due to the link to climate change. This is because harmful pollutants such as carbon dioxide are released into the atmosphere by power stations, who burn coal, oil and to a lesser extent gas, in order to heat and light our homes. International agreements, including European Union Directives, have put pressure on individual countries to improve their energy efficiency performance and so 'cut carbon'.

In 2008 the UK government responded through the Climate Change Act, which committed the UK for the first time to five-year rolling carbon reduction plans. The long-term target is to reduce 'greenhouse gases' (GHGs, primarily carbon) by 80% from 1990 levels by 2050. These are not currently translated down into local targets at local authority level, and so councils are free to develop their own local approaches. Each year the government issues a report on the energy efficiency of the UK housing stock – it always lags by two years and so the latest published in July 2014 relates to 2012¹. It shows that there has been a steady rate of improvement - nationally between 1996 and 2012 the average SAP² rating of a dwelling increased by 14 SAP points from 45 to 59. Chart 1 below shows the improvement per tenure between 2001 and 2012.

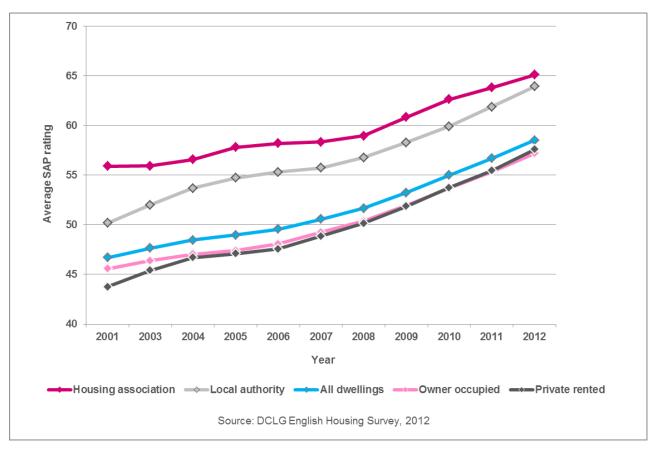


Chart 1: National average SAP rating by tenure, 2001-2012

However the UK still has a long way to go before becoming a domestically energy efficient country. At present the UK is known as the 'cold man of Europe', with very high levels of fuel poverty and poorly insulated homes³. The 2012 Annual Report showed that 73% of the housing stock could potentially have benefitted from at least one of the energy improvement measures covered by an Energy Performance Certificate (EPC)⁴. These energy improvement measures were mainly of the basic kind - new heating via a condensing boiler, cavity wall insulation and installing or upgrading loft insulation.

English Housing Survey2012 Energy Efficiency of English Housing Report

² SAP stands for Standard Assessment Procedure - it is the methodology used by DECC to assess and compare the energy and environmental performance of dwellings, the range is 0-100 with the higher score the better the energy performance. The current version in use is SAP09.

³ Association for the Conservation of Energy - Energy efficiency and excess winter deaths: Comparing the UK and Sweden, November 2013

⁴ An EPC confirms a property's current energy performance and potential cost-effective improvement measures.

How Newham is doing compared to all other London boroughs

From the data available this can only be done by comparing levels of 'carbon emissions per capita'. An estimate is made of the amount of carbon dioxide gas produced in the power station to supply the gas and electricity used in homes in the borough - this total is then divided by the number of residents in the borough to provide an estimate per person - this is called your personal 'domestic carbon footprint'. The Department of Energy and Climate Change (DECC), the responsible central government department, issues the statistics each year. These reports always lag by two years and the latest reports published in 2014 relate to 2012.

If you want to view the reports go to https://www.gov.uk/government/statistics/local-authority-emissions-estimates.

Newham's record against other boroughs using this method of comparison is very good. Table 1 below ranks all London boroughs for each year since the start of DECC records in 2005, with the lowest domestic carbon footprint at the top. It shows that Newham has consistently had one of the lowest footprints in London. We overtook Tower Hamlets to reach the top of the table in 2011 and have maintained this position in 2012. The last two columns in the table show the movement in the size of footprint over time. All London boroughs saw an annual increase in their footprint between 2011-12, Newham having the 5th lowest rise. However almost all boroughs saw a significant decrease since 2005,with Newham's improvement rate by far the greatest.

It should also be noted that the real size of our footprint is even smaller than this. This is because Newham has long argued that the population statistics used by central government (ONS, stands for Office of National Statistics) significantly under-report the population of the borough, and that the GLA population projections are more accurate.

However whilst we know that our domestic carbon footprint is small, largely due to low income, we recognise that as the population prospers we will need to encourage people to make more sustainable choices.

Borough	20	05	20	06	20	07	20	08	20	09	20	10	20	11	20	12	Move from		Move from 2	
	No	Rank	%	Rank	%	Rank														
Newham	1.888	2	1.852	2	1.763	2	1.698	2	1.494	2	1.538	2	1.320	1	1.432	1	8.5%	5	-24.1%	1
Haringey	2.395	21	2.338	20	2.232	19	2.141	17	1.885	15	2.001	15	1.733	15	1.873	15	8.1%	3	-21.8%	2
Barking & Dagenham	2.111	6	2.094	6	2.011	6	1.940	5	1.695	5	1.777	5	1.536	5	1.653	5	7.6%	1	-21.7%	3
Brent	2.310	18	2.257	16	2.159	16	2.093	14	1.855	12	1.944	10	1.658	10	1.820	11	9.8%	19	-21.2%	4
Waltham Forest	2.233	12	2.174	9	2.073	9	2.022	6	1.785	6	1.867	6	1.614	6	1.765	7	9.4%	16	-20.9%	5
Hackney	2.014	4	1.959	4	1.887	4	1.840	4	1.635	4	1.724	3	1.498	3	1.618	3	8.0%	2	-19.7%	6
Islington	2.237	13	2.191	12	2.112	12	2.085	12	1.855	12	1.949	11	1.657	9	1.799	9	8.6%	6	-19.6%	7
Greenwich	2.183	7	2.138	7	2.054	8	2.022	6	1.806	8	1.894	7	1.625	7	1.764	6	8.6%	6	-19.2%	8
Lambeth	2.203	8	2.152	8	2.053	7	2.028	8	1.803	7	1.909	8	1.647	8	1.788	8	8.6%	6	-18.8%	9
Lewisham	2.290	14	2.228	14	2.139	14	2.090	13	1.863	14	1.973	14	1.713	14	1.865	13	8.9%	10	-18.5%	10
Enfield	2.410	22	2.376	22	2.291	21	2.224	21	1.977	20	2.080	19	1.786	19	1.964	17	10.0%	22	-18.5%	10
Hounslow	2.229	11	2.191	12	2.104	10	2.074	10	1.836	9	1.929	9	1.663	11	1.818	10	9.3%	15	-18.4%	12
Redbridge	2.304	16	2.254	15	2.157	15	2.137	16	1.917	17	2.028	17	1.741	16	1.908	16	9.6%	17	-17.2%	13
Tower Hamlets	1.764	1	1.743	1	1.686	1	1.663	1	1.480	1	1.533	1	1.342	2	1.466	2	9.2%	13	-16.9%	14
Hillingdon	2.367	20	2.344	21	2.260	20	2.222	20	1.982	21	2.101	20	1.809	20	1.970	19	8.9%	10	-16.8%	15
Southwark	1.975	3	1.917	3	1.858	3	1.818	3	1.634	3	1.727	4	1.517	4	1.648	4	8.7%	9	-16.6%	16
Ealing	2.219	9	2.187	11	2.114	13	2.080	11	1.852	11	1.965	13	1.692	13	1.870	14	10.5%	28	-15.8%	17
Barnet	2.685	31	2.668	31	2.568	30	2.532	29	2.259	29	2.398	29	2.073	29	2.262	29	9.1%	12	-15.7%	18
Harrow	2.454	25	2.430	25	2.342	24	2.297	23	2.052	23	2.183	23	1.887	23	2.071	22	9.8%	19	-15.6%	19
Croydon	2.481	27	2.460	27	2.374	27	2.347	26	2.092	24	2.213	24	1.923	24	2.113	24	9.9%	21	-14.8%	20
Havering	2.581	29	2.561	29	2.466	28	2.429	28	2.169	28	2.319	28	2.006	27	2.208	27	10.1%	24	-14.5%	21
Bexley	2.420	23	2.393	23	2.303	23	2.274	22	2.048	22	2.176	22	1.886	22	2.084	23	10.5%	28	-13.9%	22
Wandsworth	2.305	17	2.257	16	2.178	17	2.176	18	1.941	18	2.059	18	1.785	18	1.991	20	11.6%	31	-13.6%	23
Kingston upon Thames	2.456	26	2.420	24	2.350	25	2.326	25	2.093	25	2.231	25	1.938	25	2.123	25	9.6%	17	-13.6%	23
Merton	2.316	19	2.279	18	2.196	18	2.189	19	1.967	19	2.106	21	1.842	21	2.029	21	10.1%	24	-12.4%	25
Sutton	2.447	24	2.444	26	2.371	26	2.355	27	2.109	26	2.234	26	1.960	26	2.157	26	10.0%	22	-11.9%	26
Bromley	2.745	32	2.723	32	2.631	32	2.615	32	2.362	31	2.525	31	2.201	31	2.424	31	10.2%	26	-11.7%	27
Hammersmith	2.226	10	2.179	10	2.104	10	2.115	15	1.896	16	2.024	16	1.753	17	1.968	18	12.3%	32	-11.6%	28
Camden	2.057	5	2.052	5	2.006	5	2.028	8	1.844	10	1.953	12	1.684	12	1.824	12	8.3%	4	-11.4%	29
Richmond upon Thames	2.679	30	2.655	30	2.580	31	2.588	31	2.339	30	2.501	30	2.178	30	2.410	30	10.6%	30	-10.0%	30
Westminster	2.290	14	2.310	19	2.291	21	2.315	24	2.158	27	2.308	27	2.031	28	2.219	28	9.2%	13	-3.1%	31
City of London	2.924	33	2.853	33	2.759	33	2.934	33	2.663	33	2.936	33	2.600	33	2.866	33	10.2%	26	-2.0%	32
Kensington and Chelsea	2.505	28	2.546	28	2.525	29	2.563	30	2.372	32	2.568	32	2.317	32	2.615	32	12.8%	33	4.4%	33

Table 1: London per capita local CO2 emission estimates 2005-2012 (Source: DECC)

How much gas and electricity Newham homes use

DECC publishes this information annually, at LSOA level (LSOAs are smaller than wards and typically cover about 400 households). The gas reporting year runs from 1st October and the electricity reporting year runs from 31st January. It measures actual use from gas and electricity meters, it is not an estimate. From the LSOA figures, usage can then be calculated by ward and Community Neighbourhood level. The latest report published in 2013 relates to 2012. The DECC report is available at https://www.gov.uk/government/statistics/sub-national-electricity-and-gas-consumption-summary-report-2013. If you want to look at the information for your area, to find out what ward you are in go to https://mgov.newham.gov.uk/mgFindMember.aspx and enter your post code.

Table 2 below shows these figures at LSOA level. The LSOAs are ranked in order of their gas use for 2012, the highest first. We have also included a comparison with the results of the DECC predictions for usage in 2012 from the 2010 gas and electricity consumption figures, in order to identify higher than expected gas and electricity use areas - this may indicate poor energy efficiency. However all LSOAs saw a decrease in gas use compared to the expected levels – this may be an indication of residents turning off their gas heating due to escalating prices. Some LSOAs did see an increase in electricity use compared to the expected levels – however these LSOAs were not those ranking high in our fuel poverty data, as shown in the last column of the table. So at this LSOA level there is no correlation with our fuel poverty data. Get more information on our fuel poverty data.

MLSOA	LSOA	Ward	Av gas use (kWh)	Compared to predicted consumption from 2010	Av elec use (kWh)	Compared to predicted consumption from 2010	FP Ranking (2012 10% indicator)
E02000720	E01003555	Plaistow South	18,310	-6.30%	4,783	-2.77%	33
E02000723	E01003532	Manor Park	17,108	-7.92%	4,367	+2.79%	47
E02000723	E01003530	Wall End	16,259	-11.65%	4,423	+2.58%	7
E02000730	E01003568	West Ham	16,161	-5.31%	4,224	+6.65%	12
E02000723	E01003529	Plaistow South	16,122	-8.65%	4,160	+1.50%	56
E02000717	E01003585	Forest Gate South	16,035	-10.38%	4,286	+1.31%	20
E02000721	E01003572	East Ham South	15,915	-11.06%	4,601	+5.50%	40
E02000730	E01003573	Plaistow North	15,768	-8.56%	4,115	+1.76%	43
E02000728	E01003628	Canning Town North	15,619	-10.37%	3,776	-1.90%	47
E02000716	E01003584	East Ham North	15,613	-9.39%	4,307	+7.14%	76
E02000724	E01003560	Stratford & New Town	15,544	-16.86%	4,018	+0.88%	25
E02000723	E01003531	Canning Town South	15,443	-7.85%	4,275	-1.71%	99
E02000720	E01003561	Stratford & New Town	15,363	-9.23%	3,815	+6.52%	20
E02000715	E01003581	Green Street East	15,230	-6.16	3,728	-1.66%	16
E02000720	E01003547	Forest Gate North	15,061	-8.22%	3,936	+4.35%	40
E02000716	E01003586	Forest Gate South	15,057	-7.24%	4,330	+9.87%	50
E02000728	E01003627	Royal Docks	15,048	-7.90%	3,818	-0.69%	34
E02000719	E01003557	East Ham Central	14,986	-9.97%	4,766	+5.20%	108
E02000721	E01003571	Canning Town North	14,968	-12.27%	3,757	-1.91%	8
E02000728	E01003626	Stratford & New Town	14,961	-9.17%	4,006	+7.86%	19
E02000724	E01003533	Little Ilford	14,959	-14.05%	4,261	+7.10%	93
E02000730	E01003569	Forest Gate North	14,894	-9.74%	3,891	+6.40%	3
E02000727	E01003565	Boleyn	14,879	-12.40%	3,969	-3.99%	6
E02000723	E01003534	Manor Park	14,817	-5.43%	3,789	-7.41%	25
E02000714	E01003543	Wall End	14,738	-8.52%	3,703	+8.50%	66
E02000721	E01003570	Green Street East	14,671	-5.56%	4,575	+19.68%	14
E02000731	E01003520	Wall End	14,641	-14.57%	4,347	+14.23%	59
E02000731	E01003526	Forest Gate North	14,615	-6.40%	3,899	+10.51%	29
E02000724	E01003589	Custom House	14,573	-8.51%	3,841	+10.10%	40
E02000729	E01003597	East Ham South	14,373	-8.66%	3,473	-8.10%	72

Table 2: Newham 2012 domestic gas and electricity consumption by LSOA

E02000738	E01003492	Green Street West	14,372	-9.93%	4,041	+9.40%	25
E02000736	E01003621	Plaistow North	14,334	-9.19%	3,588	+1.61%	4
E02000718	E01003575	East Ham North	14,326	-10.26%	3,778	+6.23%	34
E02000721	E01003558	Manor Park	14,278	-13.17%	4,042	+8.82%	1
E02000724	E01003563	Little Ilford	14,275	-11.39%	3,822	+8.14%	5
E02000729	E01003635	Canning Town South	14,273	-6.56%	3,554	-4.47%	93
E02000717	E01003579	Boleyn	14,255	-11.89%	3,787	-5.63%	20
E02000738	E01003495	Little Ilford	14,254	-9.85%	3,510	-6.50%	69
E02000724	E01003588	Plaistow North	14,192	-11.25%	3,660	+1.86%	52
E02000731	E01003525	Green Street West	14,169	-15.68%	3,987	+3.35%	56
E02000730	E01003574	Canning Town South	14,169	-10.14%	3,549	+1.71%	20
E02000727	E01003562	Wall End	14,148	-12.42%	3,534	+5.93%	13
E02000729	E01003596	Canning Town South	14,116	-13.11%	3,887	+9.88%	64
E02000722	E01003554	Plaistow North	14,088	-10.25%	3,658	+4.03%	78
E02000745	E01003519	Wall End	14,009	-8.69%	4,093	-2.72%	108
E02000737	E01003527	Forest Gate South	13,920	-10.49%	3,964	+5.38%	69
E02000727	E01003564	Wall End	13,886	-12.50%	3,675	-0.31%	34
E02000715	E01003583	East Ham South	13,840	-8.61%	3,677	+3.42%	16
E02000729	E01003552	Boleyn	13,776	-12.45%	3,676	+1.12%	45
E02000720	E01003567	Plaistow North	13,747	-11.64%	3,680	+7.03%	99
E02000728	E01003625	Stratford & New Town	13,638	-6.15%	4,261	+13.68%	59
E02000731	E01003521	Forest Gate North	13,629	-13.73%	3,950	-0.28%	16
E02000735	E01003491	Green Street East	13,500	-11.80%	3,998	+15.85%	29
E02000739	E01003602	Plaistow North	13,454	-6.44%	3,828	-1.96%	74
E02000738	E01003493	Little Ilford	13,007	-7.10%	3,327	+4.73%	71
E02000728	E01003629	Canning Town North	12,995	-5.30%	3,401	+2.03%	39
E02000737	E01003537	East Ham Central	12,973	-8.14%	3,488	-4.36	29
E02000742	E01003541	Plaistow South	12,933	-8.33%	3,431	-3.35%	34
E02000742	E01003539	East Ham Central	12,916	-6.97%	3,734	-2.35%	72
E02000738	E01003494	East Ham Central	12,907	-8.04%	3,457	-1.04%	54
E02000736	E01003536	Plaistow South	12,878	-6.17%	3,674	+3.35%	43
E02000716	E01003578	Stratford & New Town	12,824	-10.65%	3,574	+4.36%	2
E02000734	E01003637	Royal Docks	12,802	-10.90%	3,573	-6.19%	62

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E02000741	E01003601	Canning Town North	12,738	-8.80%	3,789	+2.90%	68
E02000732	E01003490	Green Street West	12,686	-15.01%	3,535	+6.64%	84
E02000719	E01003548	Plaistow North	12,683	-10.72%	3,504	+6.56%	88
E02000714	E01003550	Boleyn	12,629	-13.24%	3,496	+7.25%	110
E02000735	E01003606	Canning Town North	12,623	-7.99%	3,688	+2.20%	47
E02000721	E01003556	Plaistow South	12,592	-12.49%	3,982	+5.50%	9
E02000731	E01003522	Green Street West	12,591	-13.54%	3,353	+4.20%	10
E02000741	E01003603	Manor Park	12,438	-8.58%	3,526	+1.11%	20
E02000746	E01003482	Wall End	12,357	-24.77%	6,118	+7.98%	156
E02000732	E01003524	East Ham South	12,343	-11.75%	3,633	+15.30%	58
E02000736	E01003623	West Ham	12,209	-7.87%	3,629	-0.60%	82
E02000714	E01003544	West Ham	12,201	-14.81%	3,662	+4.50%	45
E02000735	E01003592	Canning Town North	12,201	-4.31%	3,568	+1.65%	66
E02000737	E01003523	Manor Park	12,111	-5.90%	3,484	+2.62%	76
E02000735	E01003599	Forest Gate North	12,097	-6.40%	3,349	+8.94%	86
E02000722	E01003551	East Ham Central	12,049	-19.36%	3,744	+13.91%	84
E02000745	E01003484	Green Street East	12,014	-11.59%	5,213	+19.24%	155
E02000727	E01003566	Forest Gate South	11,919	-15.51%	3,348	-1.02%	88
E02000736	E01003622	Forest Gate North	11,902	-12.42%	3,701	+6.18%	62
E02000739	E01003594	Plaistow North	11,885	-19.56%	3,876	+9.18%	121
E02000741	E01003605	West Ham	11,873	-6.55%	3,094	+0.90%	65
E02000737	E01003624	Custom House	11,841	-11.38%	3,498	+5.67%	81
E02000744	E01003508	Stratford & New Town	11,806	-10.59%	3,197	-4.70%	93
E02000741	E01003608	Royal Docks	11,804	-10.66%	3,764	+10.60%	54
E02000733	E01003632	Custom House	11,799	-12.55%	3,206	-3.89%	31
E02000742	E01003538	East Ham North	11,711	-5.65%	3,600	+5.00%	90
E02000748	E01003485	East Ham North	11,665	-9.56%	4,145	+1.05%	160
E02000715	E01003582	Custom House	11,664	-7.51%	3,016	-10.06%	52
E02000746	E01003486	Green Street West	11,542	+0.90%	3,741	-9.48%	158
E02000744	E01003604	Boleyn	11,539	-4.04%	3,501	+3.98%	59
E02000714	E01003546	Plaistow South	11,537	-16.53%	3,344	-4.06%	128
E02000744	E01003507	Green Street East	11,525	-11.63%	3,672	+1.94%	50
E02000740	E01003500	Little Ilford	11,501	-10.70%	4,264	+12.69	126

Table 2: Newham 2012 domestic gas and electricity consumption by LSOA

E02000732	E01003489	East Ham Central	11,492	-9.04%	2,904	-9.12%	98
E02000742	E01003540	East Ham Central	11,445	-7.62%	3,449	-2.49%	106
E02000750	E01033582	Beckton	11,435	N/A	4,636	N/A	162
E02000726	E01033586	Royal Docks	11,416	N/A	3,967	N/A	112
E02000745	E01003483	Green Street East	11,413	-11.09%	3,787	-0.27%	160
E02000725	E01003617	Canning Town South	11,407	-11.11%	4,496	+15.75%	140
E02000725	E01003618	Little Ilford	11,339	-9.67%	3,131	-2.06%	28
E02000719	E01003549	Plaistow South	11,304	-9.37%	3,502	+7.73%	118
E02000746	E01003487	Forest Gate South	11,271	-14.18%	4,406	+20.03%	130
E02000719	E01003545	Plaistow North	11,199	-10.48%	3,410	+7.58%	136
E02000747	E01003497	Wall End	11,154	-13.25%	3,357	-2.15%	111
E02000726	E01003615	Beckton	11,136	-15.14%	3,403	-8.82%	78
E02000717	E01003591	Forest Gate North	11,038	-11.87%	3,280	+1.38%	34
E02000718	E01003580	East Ham North	10,928	-12.61%	3,224	-0.87%	14
E02000717	E01003587	East Ham South	10,867	-8.92%	4,337	+17.27%	132
E02000718	E01003528	East Ham North	10,838	-11.44%	2,901	-0.11%	103
E02000745	E01003516	Green Street East	10,821	-8.05%	3,338	-4.40%	96
E02000733	E01003631	Stratford & New Town	10,818	-10.11%	4,055	+14.71%	136
E02000748	E01033574, E01033575, E01033576	Beckton/ Custom House	10,640	N/A	N/A	N/A	N/A
E02000737	E01003542	Wall End	10,591	-7.12%	3,191	-5.58%	101
E02000722	E01003559	Forest Gate South	10,555	-24.87%	3,518	+13.72%	104
E02000734	E01003630	West Ham	10,499	-16.77%	3,084	+5.13%	86
E02000736	E01003535	Boleyn	10,410	-7.39%	3,405	+1.74%	115
E02000739	E01003595	Canning Town South	10,401	-8.08%	2,721	-6.38%	106
E02000743	E01003502	Plaistow South	10,347	-11.05%	3,173	-4.48%	90
E02000748	E01003513	West Ham	10,344	-6.22%	3,910	+4.92%	153
E02000749	E01003514	Forest Gate South	10,332	-9.61%	3,544	+0.79%	146
E02000739	E01003607	Canning Town North	10,269	-21.21%	3,117	-11.88%	74
E02000732	E01003488	Canning Town South	10,255	-8.72%	3,124	+3.76%	123
E02000725	E01003616	Canning Town South	10,251	-18.38%	3,412	+10.34%	139
E02000716	E01003590	Forest Gate South	10,240	-11.16%	3,035	+3.02%	122
E02000743	E01003501	Manor Park	10,222	-19.77%	3,530	+0.12	117
E02000749	E01003512	East Ham South	10,206	-6.69%	3,202	-1.31%	101

Table 2: Newham 2012 domestic gas and electricity consumption by LSOA

E02000733	E01003634	Canning Town South	10,117	-13.66%	3,239	-9.47%	142
E02000747	E01003506	East Ham North	10,016	-11.31%	3,428	-7.38%	115
E02000745	E01003518	Manor Park	9,851	-9.71%	3,477	+4.29%	156
E02000722	E01003553	East Ham South	9,827	-16.06%	3,465	+6.80%	104
E02000740	E01003593	Stratford & New Town	9,821	-11.43%	3,084	-3.12%	113
E02000740	E01003498	Green Street East	9,792	-7.56%	3,817	+24.00%	120
E02000726	E01033583	Beckton	9,772	N/A	5,110	N/A	118
E02000743	E01003499	Green Street West	9,771	-14.73%	3,246	+8.09%	125
E02000744	E01003509	Boleyn	9,771	-9.74%	2,979	-6.88%	10
E02000750	E01033580	Beckton	9,769	N/A	2,732	N/A	164
E02000726	E01033579	Custom House	9,718	N/A	3,389	N/A	97
E02000715	E01003576	West Ham	9,685	-10.78%	2,763	-15.99%	82
E02000749	E01003517	Little Ilford	9,684	-13.63%	3,522	+2.16%	150
E02000748	E01003481	Green Street West	9,619	-9.36%	3,812	+12.43%	152
E02000749	E01003511	East Ham Central	9,611	-13.94%	3,446	+0.76%	132
E02000747	E01033584	Royal Docks	9,535	N/A	3,201	N/A	113
E02000725	E01003619	Manor Park	9,397	-8.52%	3,357	+4.92%	80
E02000733	E01003636	Custom House	9,395	-14.24%	3,107	-0.55%	129
E02000746	E01003480	Little Ilford	9,244	-10.9%	3,151	-5.33%	154
E02000740	E01003496	Little Ilford	9,226	-17.01%	3,395	+4.16%	142
E02000734	E01003600	Stratford & New Town	9,170	-7.81%	3,004	+2.77%	132
E02000747	E01033585	Royal Docks	9,140	N/A	3,714	N/A	130
E02000750	E01033577	Beckton	9,028	N/A	3,012	N/A	163
E02000750	E01033581	Beckton	9,027	N/A	3,580	N/A	140
E02000743	E01003503	Boleyn	8,829	-14.18%	2,912	+3.06%	142
E02000750	E01003609	Forest Gate North	8,683	-14.12%	2,910	-8.18%	151
E02000734	E01003598	Canning Town North	8,624	-12.22%	2,962	+2.60%	90
E02000733	E01003633	Canning Town South	8,533	-11.61%	2,693	-7.25%	123
E02000750	E01003611	West Ham	8,409	-19.65%	2,896	+5.21%	126
E02000748	E01003479	Forest Gate South	8,307	-4.33%	4,219	+15.67%	158
E02000749	E01003515	East Ham South	8,169	-19.82%	2,996	-0.50%	138
E02000718	E01003577	Custom House	7,956	-15.81%	2,430	-23.42%	132
Unallocated2	Unallocated	N/A	7,709	N/A	N/A	N/A	N/A

Table 2: Newham 2012 domestic gas and electricity consumption by LSOA

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E02000726	E01033578	Beckton	7,552	N/A	2,558	N/A	142
E02000747	Unallocated1	N/A	No data	N/A	7,034	N/A	N/A
E02000750	Unallocated1	N/A	No data	N/A	2,156	N/A	N/A
E02000747	E01033575	Custom House	N/A	N/A	6,548	N/A	146
E02000747	E01033576	Beckton	N/A	N/A	2,698	N/A	148
E02000747	E01033574	Beckton	N/A	N/A	4,242	N/A	149
E02000747	E01033576, E01033584 (Econ 7)	Beckton / Royal Docks	N/A	N/A	3,143	N/A	N/A
E02000745	E01003519, E01003480 (Econ 7)	Wall End / Little Ilford	N/A	N/A	3,380	N/A	N/A
E02000750	E01003611, E01033577, E01033580 (Econ 7)	West Ham / Beckton	N/A	N/A	13,042	N/A	N/A

Table 2: Newham 2012 domestic gas and electricity consumption by LSOA

Table 3 below uses the gas and electricity use by LSOA figures above to show this usage by Ward, ranked by gas use, the highest first. The higher than expected gas use figures may indicate newbuild sites. There does not seem to be any pattern to the higher or lower than expected electricity figures, and as before there is no correlation with our fuel poverty data.

Ward	Av gas use (kWh)	Compared to predicted consumption from 2010	Av elec use (kWh)	Compared to predicted consumption from 2010	FP Ranking (2012 10% indicator)
Wall End	121,781	-9.06%	38,131	+13.42%	4
Plaistow North	121,349	-4.5%	33,319	-2.46%	13
Canning Town South	118,964	+32.42%	34,950	+16.03%	16
Stratford & New Town	113,945	+24.16%	33,014	+5.33%	15
Forest Gate South	107,636	-19.73%	34,650	-1.59%	8
Little Ilford	107,489	-11.34%	34,073	+10.43%	3
Plaistow South	106,023	+14.86%	30,049	+17.62%	6
Forest Gate North	101,919	-8.32%	28,916	+2.52%	12
Manor Park	100,222	-13.74%	29,572	-4.1%	11
Canning Town North	100,038	+12.01%	28,058	+0.81%	17
Green Street East	98,966	-21.3%	32,128	+9.02%	2
East Ham Central	98,378	-17.98%	28,988	-4.57%	4
Boleyn	96,088	-14.41%	27,725	-3.03%	9
East Ham South	95,540	-6.93%	29,384	+1.28%	10
West Ham	91,380	-6.23%	31,609	+13.58%	14
East Ham North	85,097	-26.32%	25,383	-12.73%	7
Green Street West	84,750	-26.85%	25,715	-7.51%	1
Custom House	80,493	-11.6%	29,035	-2.89%	18
Beckton	74,812	-29.72%	42,237	+10.37%	20
Royal Docks	69,745	+74.35%	23,609	+69.11%	19
Unallocated	7,709	N/A	9,190	N/A	N/A

Table 3: Newham 2012 domestic gas and electricity consumption by Ward

Table 4 below uses the breakdown by Ward to show usage by Community Neighbourhood, ranked by gas use, the highest first. At this level there does seem to be a correlation with our fuel poverty rankings, strong in the case of gas, less so in the case of electricity. It also shows that gas use has been lower than expected in high fuel poverty areas, perhaps indicating that residents have been turning off their gas heating systems in order to reduce bills.

Community Neighbourhood	Av gas use (kWh)	Compared to predicted consumption from 2010	Av elec use (kWh)	Compared to predicted consumption from 2010	FP Ranking (2012 10% indicator)
East Ham	315,699	-11.45%	96,503	3.76%	2
Custom House & Canning Town	299,495	10.84%	92,043	4.77%	7
Manor Park	292,808	-17.03%	89,028	-1.92%	3
Green Street	279,804	-20.93%	85,568	-0.34%	1
Plaistow	227,372	3.64%	63,368	6.13%	5
Forest Gate	209,555	-14.56%	63,566	0.24%	4
Stratford & West Ham	205,325	8.51%	64,623	9.21%	6
Beckton & Royal Docks	144,557	-1.29%	65,846	26.07%	8
Unallocated	7,709	N/A	9,190	N/A	N/A

Table 4: Newham 2012 domestic gas and electricity consumption by Community Neighbourhood

Barriers to improving energy efficiency levels in Newham

Low income levels:

- Newham has the second highest unemployment rate in London at 11.8%.⁵
- About 37% of the households in the borough are on benefits.
- Even for those in work, we have the lowest gross full-time weekly pay rate in London.
- The average annual household income is £23,872 compared to the national UK average of £27,347 when generally speaking London incomes and costs are higher.
- Compared to most other London boroughs, Newham does not have a sizeable distinct
 affluent area(s) and many owner-occupiers are on low incomes including 20% on benefits.
 This creates barriers to takeup of energy efficiency schemes requiring significant resident
 investment, such as the Green Deal, outlined in the next section of this report.

A large and problematic private rented sector:

- Compared to many boroughs especially those in Central London, Newham's private rented sector is not in good physical condition
- Tenants are generally on low-income with around 54% of private rented households earning £20,000 or less, with 43% earning £15,000 or less. 33% are on benefits compared to 26% on Housing Benefit nationally.⁶
- Pressures on supply have been caused by the Olympics and the recession and in general
 the sector has become a magnet for transient and hard-to-reach groups such as those with
 immigration issues and language and cultural barriers to engaging with authority.
- Newham landlords are comparatively disengaged, sometimes absentee, often with a small
 portfolio of properties and operating on a small profit margin with little incentive to invest.
 Rentals are often not their main income stream.
 - This creates barriers to takeup not only of investment opportunities but also of grant schemes targeting the vulnerable such as ECO, outlined in the next section of this report.

Age and health-related issues:

- Newham has become a comparatively young borough whereas significant funding is targeted at the vulnerable elderly such as those on Pension Credit
- Issues such as mental health and long-term medical conditions are prevalent in the borough and these, whilst attracting funding, can be practical barriers to residents coming forward to get work done.

Opportunities offered by the new funding frameworks of 'Green Deal' and 'ECO'

Green Deal and ECO are the Coalition flagship energy efficiency schemes launched in January 2013.

Using the **Green Deal**, residents pay back the cost of the improvements over time through the electricity bill. The electricity supplier passes the payments on to the Green Deal Provider who carried out the work. The annual amount repaid is capped, at no more than a typical household will save on heating bills as a result of the improvements. For more details see http://www.energysavingtrust.org.uk/Take-action/Find-a-grant/Green-Deal-and-ECO.

'ECO' is the abbreviation for Energy Company Obligation, whereby the main energy suppliers have now been given a new set of targets by central government to save carbon/reduce home heating costs. The first phase started on 1 January 2013 and runs to 31 March 2015, with a second phase ECO2 running from 1 April 2015 until 31 March 2017. It focuses on providing energy efficiency measures to low income and vulnerable consumers and those living in 'hard-to-treat'

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⁵ ONS April 2013-March 2014

⁶ EHS 2011/12

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properties, by placing an obligation on energy suppliers to fund energy efficiency improvements worth around £1.3 billion per year in the first phase, and £1.05 billion per year in ECO2. There are three elements to ECO:

<u>Carbon Saving Obligation (also known as CERO)</u> – During the first phase this covers the installation of measures like solid wall and hard-to-treat cavity wall insulation, which ordinarily cannot be financed solely through the Green Deal. In ECO2 this will be extended to include loft and cavity wall insulation.

<u>Carbon Saving Communities Obligation (CSCO)</u> - This provides insulation measures to households in specified areas of low income.

<u>Affordable Warmth Obligation (also known as HHCRO)</u> - This provides heating and insulation measures to private sector residents on certain means-tested benefits, which apply to vulnerable groups including the elderly, disabled and families.

Green Deal in particular has got off to a very slow start. Since the launch on 28 January 2013, DECC has reported that by 31st March 2014 nationally there had been only 2,500 Green Deal measures installed to 995 properties, from 188,234 Green Deal Assessments. To promote early takeup, from 1st November 2012 DECC had offered 'cashback' incentives once work was complete – however by 31st March 2014 this had led to only 11,488 measures. Together with the Green Deal only funded only measures, these works represented only 2% of measures installed over this period, the remaining 98% being delivered under ECO funding.

There are many concerns about the fundamentals and detailed working of Green Deal, summarised as follows:

Owner-occupiers

Will they agree to what will probably be perceived as a very long-term loan at commercial interest rates in the current economic climate.

The fuel bill savings are not guaranteed and a household's energy use can change over time especially over the period of these loans – and even more likely, if the property is sold a new household's energy use could well be different and hence the estimated fuel bill savings do not occur.

So we could see a situation where purchasers demand that the loan is repaid before sale.

Private tenants

For the first time improvements would not rely on the landlord, but how attractive is it for tenants to pay.

Many are transient (London average length of tenancy 18 months), and with insecure tenancies there is a fear of a rent increase which would cancel out the fuel bill savings, or retaliatory eviction by the landlord.

Our view is that Green Deal is primarily catering for affluent owner-occupiers and we are not anticipating major demand in the private sector in Newham. However our Green Deal and ECO partnership with Willmott Dixon Energy Services, detailed later in this report, should capture any interest.

However we have always anticipated that Newham has considerable potential for ECO funding, especially the HHCRO strand for private sector vulnerable residents and the CSCO strand for insulation for priority areas of which we have 150, representing <u>92%</u> of the borough and the highest in London. Our good level of ECO takeup is detailed later in this report.

What we are doing in Newham to improve our domestic energy efficiency standards

Despite the barriers, we have a good track record in maximising external funding to support an active programme of intervention, and seek to maintain this track record under the new funding arrangements. We promote all funding assistance available through our webpages http://www.newham.gov.uk/Pages/Category/Energy-efficiency.aspx as well as specifically targeting eligible groups through outreach or mailouts.

Installation of physical measures

The two most common measures are the repair/replacement of individual central heating systems and insulation. It is estimated that poor insulation means around £1 in every £4 currently spent heating UK homes is wasted. Until 2013 the only insulation work funded by central government was loft and cavity wall insulation. Solid wall insulation is now available, funded through the Green Deal/ECO framework - an estimated 53% of properties in Newham are Victorian terrace solid walled.

Social tenants, including council tenants, have their heating and insulation maintained by their landlords.

For vulnerable private residents, we promoted access to central government's fuel poverty programme Warm Front. In a typical year we attracted about £1.1M of this funding into the borough, assisting over 600 residents with heating and insulation, and we were consistently in the top 3 London boroughs for receipt of these funds. However this scheme was stopped in January 2013 as part of the move to the new funding frameworks of Green Deal/ECO.

Additionally, since 2001 we were able to offer assistance through a local social enterprise London Warm Zone (LWZ), through access to East London 'sub-regional' funding provided ultimately by central government. In a typical year we were able to access about £350k of these funds, the highest in East London, with over 100 residents assisted with heating. Newham was the 'Accountable Body' (Lead Borough) for the East London Renewal Partnership of the seven East London boroughs which administered these funds. We also gained funding for the Partnership for more of these measures from the Department of Health Warm Homes Fund, both in 11/12 and 12/13. In partnership with London Warm Zone, we pioneered new ways of identifying and helping fuel poor residents, as detailed in the next section. However this funding has wound down over the last few years and has now expired. Outputs for the last 2 years are as follows:

ELRP Heating Outputs										
Year		Numb	er	Total Spend						
real	00	PR	Total	rotal Spelid						
2012/13	24	10	34	£123,257.81						
2013/14	32	7	39	£150,384.23						
Total	Total 56 17 73 £273,642.0									

Table 5: Newham ELRP heating outputs 2012-14

LWZ also assisted us to gain access to CERT energy supplier funding for loft and cavity wall insulation through their contract with EDF Energy. Over the last two years 741 private sector residents have accessed £187,968 worth of loft and cavity wall insulation using this route. The CERT scheme has also now ended.

Over the last three years we also successfully bid for GLA (RE:NEW Phases 1 and 2) and Olympic Delivery Authority (ODA) funding to identify and in many cases fund works, especially for vulnerable private sector residents, as Table 6 below shows.

Measure	RE:	NEW 1	ODA		RI	E:NEW 2	Total		
Weasure	Number	Cost	Number	Cost	Number Cost		Number	Cost	
CWI	0	£0.00	4	£1,160.00	4	£1,004.58	8	£2,164.58	
Full loft	17	£4,165.00	42	£12,180.00	68	£12,873.52	127	£29,218.52	
Loft top-up	21	£4,725.00	28	£8,120.00	1	£240.46	50	£13,085.46	
Heating	11	£28,678.00	0	£0.00	387	£1,305,351.00	398	£1,334,029.00	
Total	49	£37,568.00	74	£21,460.00	460	£1,319,469.56	583	£1,378,497.56	

Table 6: Newham RE:NEW projects heating and insulation outputs

Action to identify eligible households

Newham has established good practice in this area:

- We pioneered the neighbourhood-based approach to domestic energy efficiency in partnership with London Warm Zone (LWZ) from 2001. LWZ started life as Newham Warm Zone in 2001 when Newham was selected as a Fuel Poverty priority area by central government, and together we pioneered this approach which has now been recognized and adopted by central government as national best practice. It involves targeting a neighbourhood (usually a ward) for door-to-door assessments followed by a one-stop shop for practical and financial assistance, referrals for heating and insulation measures together with income maximisation. Since 2001 we have canvassed every ward in the borough at least once.
- In order to identify particularly needy cases we supplement the door-knocking process with a referral network of professional groups such as health fieldworkers, and community groups such as ethnic minority elderly. We have committed time and external resources to building up this network. We used the Department of Health Warm Homes funding to develop a short training course for front-line staff and volunteers on how to recognise the signs of fuel poverty and how to make a referral to LWZ, Adult Services and/or the ActiveNewham Befriending scheme on behalf of hard-to-reach residents. We trained 175 local 'Affordable Warmth Champions'.
- We also supplement this search by issuing mailouts to suitable benefit recipients.
- We also have an established extensive energy property database which we purchased in 1996
 and have updated annually and extended regularly ever since, with a current coverage of 53%
 and the facility to report by ward. It lists all the properties in the borough and records the
 energy efficiency standard where known. We are now looking at the best options for upgrading
 this, to report by LSOA (small neighbourhoods) and to capture benefits data as well, in order
 to be able to make a desktop fuel poverty calculation.

Action to reduce energy use through promotion of behaviour change

The three GLA/ODA projects we ran recently across selected areas of the borough did aim to improve levels of energy efficient behaviour. Trained energy assessors visited residents' homes for about an hour, inspecting energy systems, installing energy monitors and other energy saving devices such as shower-timers, giving general energy saving advice and tips, and referring the resident on to schemes such as Warm Front if they were eligible for fuel poverty schemes which provide heating and/or insulation. The total funding for these schemes amounted to £620,381.25 and the wards involved were Little Ilford, Green Street East, West Ham, Forest Gate South, Forest Gate North and Beckton. Table 7 below shows the outputs of these schemes and the carbon saved.

ltem	Number						
item	RE:NEW 1	ODA	RE:NEW 2	Total			
Visits	2,154	1,532	1,301	4,987			
Easy Measures							
Draught Proofing	3	298	ı	301			
Eco Betas	-	-	575	575			
Hippo cistern displacement device	28		ı	28			
Hot Water Tank Jackets	-	7	1	7			
Radiator panels	-	1,457	14	1,471			
Real time monitors	2,037	1,408	876	4,321			
Save a flush	995	786	691	2,472			
Shower Heads	1,288	913	793	2,994			
Showertimers	1,244	1,123	809	3,176			
Stand-by switches	1,974	1,210	1	3,184			
Tap Aerators	833	354	311	1,498			
Total	8,402	7,556	4,069	20,027			
Carbon Saved (Tonnes)	4,379.19	2,444.95	1,359.73	8,183.87			

Table 7: Newham RE:NEW projects "easy measures" outputs

The Government are also currently driving the roll out of 'smart meters' to every household in Great Britain. It hopes that these will help consumers to manage their energy use. The plan is that through 'real time displays' (small monitors), households will be able to understand the cost of the energy that they are using and avoid waste.

How we are tackling the private rented sector

Our private rented sector is now estimated to comprise over 40,000 dwellings and is now the largest tenure in the borough having nearly doubled in size over the last 10 years. From 1st January 2013 we became the first UK borough to license all private rented property. This is intended to act as a driver to improve property management standards. Specifically for energy efficiency standards:

- heating appliances are to be properly checked, maintained and working efficiently.
- the requirement for energy performance certification will ensure that both tenants and landlords are made aware of steps that can be taken to reduce energy consumption.

We have a target of full compliance by 2017.

Working closely with the Police, Immigration Enforcement and HMRC, the scheme has already been successful in addressing some of the worst behaviours in the sector. As at 28th March 2014, there had been 224 prosecutions, 128 simple cautions, 132 multiagency operations, 270 arrests, 18 landlords banned and 564 probationary licences issued for one year only representing 783 properties. For more details see www.newham.gov.uk/propertylicensing

The role of new-build and RSLs

The large scale of our low-carbon new-build developments makes a significant contribution to our levels of domestic energy efficiency. This is also a major way in which RSLs make their contribution, such as the ex-Olympic Athletes Village development, now known as East Village, led by Triathlon, an RSL consortium. The scale of our continuing newbuild market is indicated by the fact that from April 2008 to March 2014, Newham at 3,436 had the second largest number of post-completion certificates⁷ issued nationally, Tower Hamlets having the largest.⁸

⁷ These 'Code for Sustainable Homes' certificates award a 'sustainability' score to each new housing unit.

How we are already maximising funding through the new ECO framework

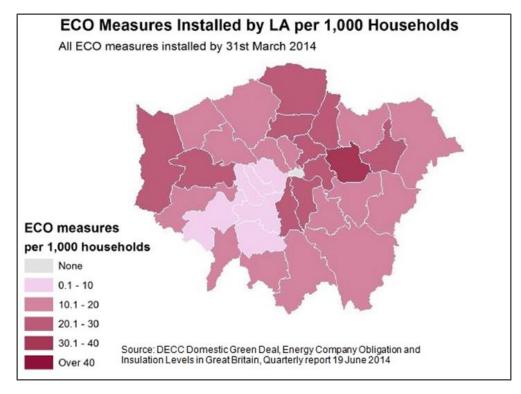
We were fortunate that through the RE:NEW 2 scheme we had contractors already on the ground when the ECO scheme launched in January 2013. Further, Newham's potential to attract AW and CSCO funding has been widely recognized by private contractors responsible for implementing the scheme, and many areas of the borough have been targeted for visits.

Tables 8 and 9 below show firstly, how we benefitted from RE:NEW 2 more than any other East London borough, nearly as much as the other East London boroughs put together; and secondly how much more ECO in total we have received than any other borough in London.

⁸ DCLG Code for Sustainable Homes Statistical Release May 2014

Item	Barking & Dagenham	Hackney	Havering	Newham	Redbridge	Tower Hamlets	Waltham Forest	Sub Total (Excluding LBN)	Grand Total (Including LBN)
<u>Heating</u>									
ECO (HHCRO)	£161,904.00	£26,984.00	£131,547.00	£1,305,351.00	£426,101.00	£30,357.00	£340,673.00	£1,117,566.00	£2,422,917.00
Heating Sub Total	£161,904.00	£26,984.00	£131,547.00	£1,305,351.00	£426,101.00	£30,357.00	£340,673.00	£1,117,566.00	£2,422,917.00
<u>Insulation</u>									
RE:NEW	£4,229.00	£1,847.00	£7,729.00	£1,538.00	£13,236.00	£2,726.00	£5,729.00	£35,496.00	£37,034.00
CERT	£1,428.00	£1,139.00	£16,430.00	£8,549.00	£1,294.00	£1,053.00	£8,387.00	£29,731.00	£38,280.00
ECO (CERO/CSCO)	£5,282.00	£879.00	£49,073.00	£7,230.00	£7,424.00	£824.00	£99,584.00	£163,066.00	£170,296.00
Insulation Sub Total	£10,939.00	£3,865.00	£73,232.00	£17,317.00	£21,954.00	£4,603.00	£113,700.00	£228,293.00	£245,610.00
Total	£172,843.00	£30,849.00	£204,779.00	£1,322,668.00	£448,055.00	£34,960.00	£454,373.00	£1,345,859.00	£2,668,527.00

Table 8: East London RE:NEW 2 outputs



Map 1: ECO measures installed in London boroughs

Local Authority	Carbon Saving Target (CERO)	Carbon Savings Community (CSCO)	Affordable Warmth (HHCRO)	Total no. of ECO measures delivered	H/holds with at least one usual resident	ECO measures per 1,000 h/holds
Newham	348	1,513	1,392	3,253	101,519	32.0
Ealing	1,907	864	584	3,355	124,082	27.0
Southw ark	2,928	241	57	3,226	120,422	26.8
Tow er Hamlets	2,280	329	91	2,700	101,257	26.7
Hackney	1,289	908	275	2,472	101,690	24.3
Haringey	963	1,097	376	2,436	101,955	23.9
Enfield	831	1,037	954	2,822	119,916	23.5
Barking & Dagenham	273	702	632	1,607	69,681	23.1
Lambeth	2,483	425	81	2,989	130,017	23.0
Waltham Forest	291	1,006	865	2,162	96,861	22.3
Hillingdon	1,517	121	538	2,176	100,214	21.7
Bromley	1,917	281	321	2,519	130,862	19.2
Havering	973	348	485	1,806	97,199	18.6
Redbridge	760	67	899	1,726	99,105	17.4
Greenw ich	520	884	288	1,692	101,045	16.7
Islington	1,241	269	15	1,525	93,556	16.3
Bexley	823	260	341	1,424	92,604	15.4
Sutton	1,026	16	163	1,205	78,174	15.4
Kingston	904	0	64	968	63,639	15.2
Croydon	1,110	471	537	2,118	145,010	14.6
Barnet	1,501	38	418	1,957	135,916	14.4
Harrow	843	24	321	1,188	84,268	14.1
Camden	1,256	41	13	1,310	97,534	13.4
Hounslow	867	95	287	1,249	94,902	13.2
Brent	611	361	438	1,410	110,286	12.8
Lew isham	355	710	273	1,338	116,091	11.5
Merton	340	0	200	540	78,757	6.9
Richmond	469	0	48	517	79,835	6.5
Wandsw orth	548	63	102	713	130,493	5.5
Westminster	317	105	9	431	105,772	4.1
H/smith & Fulham	23	131	11	165	80,590	2.0
Kensington & Chelsea	6	19	4	29	78,536	0.4
City of London	0	0	0	0	4,385	0.0

Table 9: ECO measures installed in London boroughs

We are currently working to improve further on this performance in future years. We now have a 17 month contract with Willmott Dixon Energy Services, running from 1st September 2014 to 31st March 2016, for both the council stock and the private sector, for them to partner with us to identify more ECO-eligible residents and properties and install appropriate measures, and also to identify any residents interested in Green Deal.