

## Non-domestic National Energy Efficiency Data Framework – new publication

The National Energy Efficiency Data-Framework (ND-NEED) was set up by DECC to provide a better understanding of energy use in domestic and non-domestic buildings. The purpose of the non-domestic National Energy Efficiency Data-Framework (ND-NEED) is to match buildings data to electricity and gas consumption data. Over the past year, improvements to the coverage and methodology have been made to ND-NEED and a report presenting statistical analysis of energy use in these buildings has now been published<sup>1</sup>.

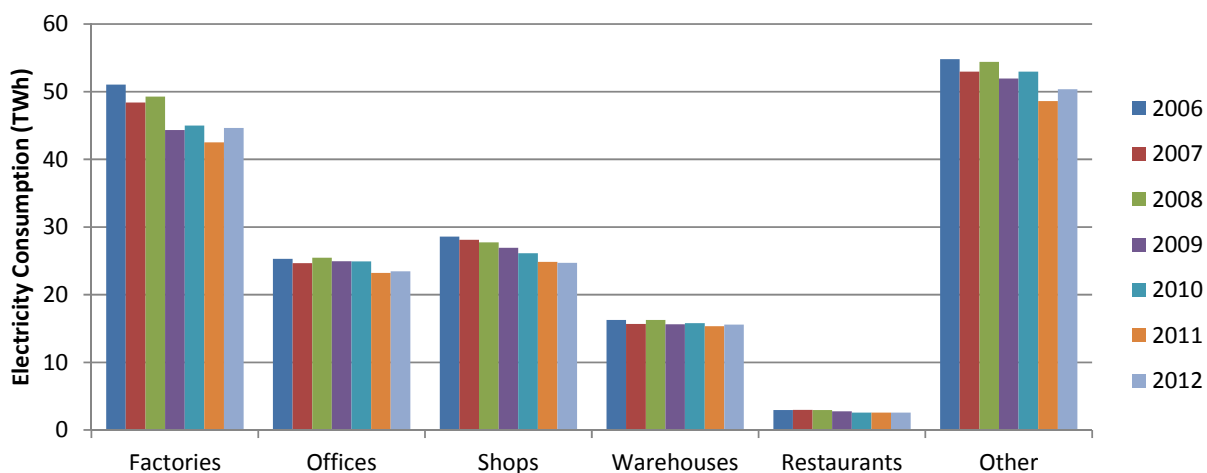
The new report follows on from the May 2014 publication, which reported the development and quality assurance of this project. Since then improvements in address matching have been made, and feedback from the consultation held on weighting has been implemented. The results in this report should be considered experimental since the weighting methodology has been implemented for the first time. We welcome any feedback on both the results presented and ideas for how this analysis could be improved and what users would like to see done with the data; please contact:

[Energyefficiency.stats@decc.gsi.gov.uk](mailto:Energyefficiency.stats@decc.gsi.gov.uk)

### Consumption analysis

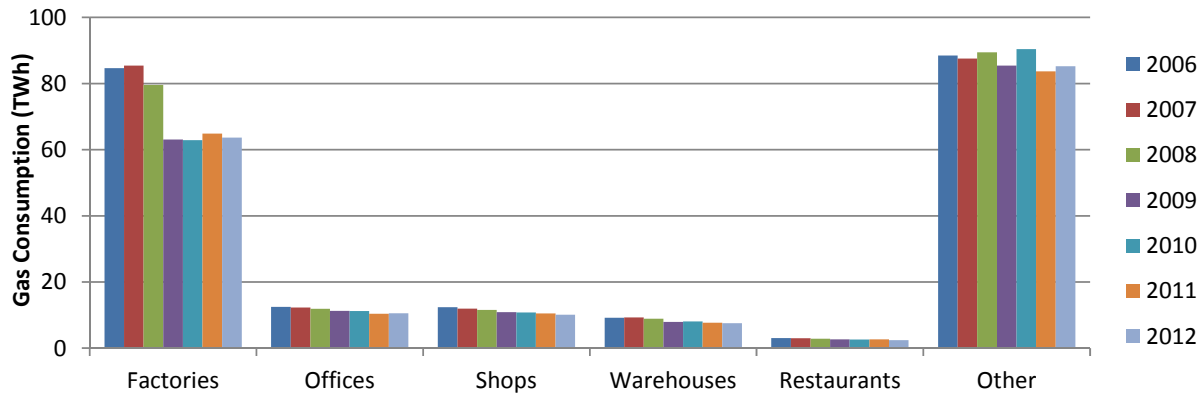
Figure 1 (electricity) and Figure 2 (gas) show how ND-NEED can disaggregate consumption between the main building types. Factories are the largest consuming group of buildings in the non-domestic sector and account for over one quarter of electricity consumption and over a third of gas consumption. Electricity consumption of factories decreased by 13 per cent between 2006 and 2012 and their gas consumption by 25 per cent, with the majority of savings between 2008 and 2009 as UK industrial index of production fell by 10 per cent over the year. Shops (the second highest consuming building type) decreased their electricity consumption by 18 per cent and their gas consumption by 16 per cent between 2006 and 2012.

**Figure 1: Electricity consumption (TWh) for each building type for each year in ND-NEED, 2006-2012**



<sup>1</sup> ND National Energy Efficiency Data-Framework: Energy Statistics 2006-12 [www.gov.uk/government/statistics/the-non-domestic-national-energy-efficiency-data-framework-nd-need](http://www.gov.uk/government/statistics/the-non-domestic-national-energy-efficiency-data-framework-nd-need)

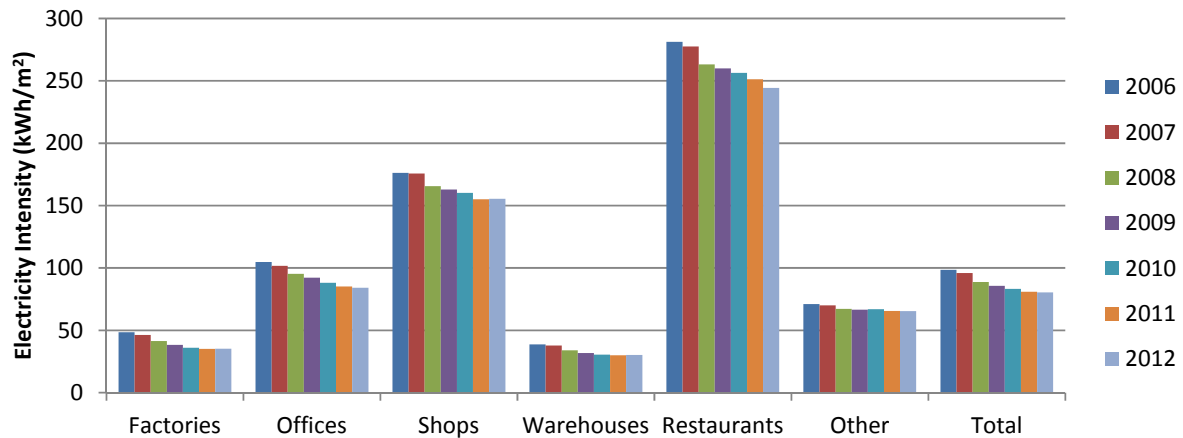
**Figure 2: Gas consumption (TWh) for each building type for each year in ND-NEED, 2006-2012**



### Energy intensity analysis<sup>2</sup>

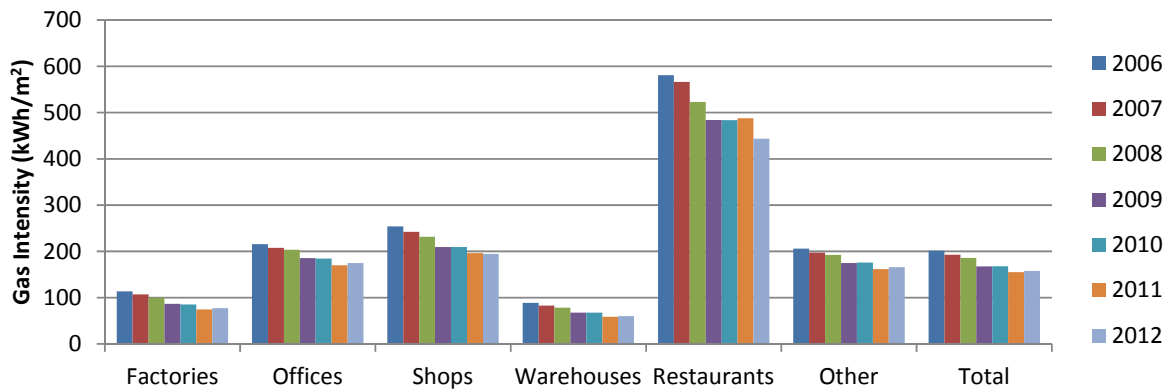
For both electricity (Figure 3) and gas (Figure 4), warehouses have the lowest average energy intensity measured as consumption per m<sup>2</sup>, followed by factories. Electricity and gas intensities fell across all building types between 2006 and 2012 with reductions of between 14 and 25 per cent in electricity intensity for the main building types and 23 and 33 per cent reductions for gas intensity. The largest savings were seen in factories and warehouses.

**Figure 3: Median electricity intensity for non-domestic buildings by building type, 2006-2012**



<sup>2</sup> It should be noted that the floor area data in ND-NEED is a fixed value for each building since the data has been taken from a 2012 version of the 2010 Ratings List. Changes over time in the size of individual buildings will not be factored in to the analysis but buildings will only be included in the analysis if they have valid consumption readings in for the relevant year and therefore the overall floor area included in the analysis does vary year on year.

**Figure 4: Median gas intensity for non-domestic buildings by building type, 2006-2012**



### Business size analysis

Using the Experian data in ND-NEED, it is possible to analyse trends by size of business in terms of site and organisation employment. No specific weighting has been applied to correct for the sample of ND-NEED records that have matched to Experian data.

For electricity, larger businesses (in terms of employment) have higher average intensities than smaller businesses. However, for gas the intensity is generally lower for larger businesses, although this is not the case for factories.

The analysis found statistically significant differences between small & medium sized enterprises (SMEs) and larger enterprises in their rate of reduction in electricity and gas intensity for most building types

The full report can be found at: [www.gov.uk/government/collections/national-energy-efficiency-data-need-framework](http://www.gov.uk/government/collections/national-energy-efficiency-data-need-framework)

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