

Sub-national domestic electricity consumption in Northern Ireland (experimental data) 2011

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This factsheet presents the findings of the latest work carried out by DECC in conjunction with the electricity industry in Northern Ireland and the Department of Enterprise Trade and Investment in Northern Ireland (DETINI) to estimate domestic electricity consumption in Northern Ireland for the 26 District Councils. It is intended that this information will enable central, local and regional bodies in Northern Ireland to understand patterns of electricity usage in local areas and enable them to target and monitor policies more effectively. It is important to note that these data are classified as experimental statistics and should be viewed and used with care.

These data supplement the existing Great Britain sub-national electricity consumption estimates¹, although these series are not directly comparable due to differing sources and time periods. The data in this factsheet covers the financial year 2011 (April 2011 to March 2012), which has changed from the previous analysis (which covered the 2010 calendar year January 2010 to December 2010) and any time series analyses should be interpreted with caution. The reader should also bear in mind that the winter of 2011 was much milder than 2010 and this will impact the amount of electricity consumed for domestic heating purposes as the data are not weather or temperature corrected.

The dataset can be accessed here: https://www.gov.uk/government/organisations/department-of-energy-climate-change/series/sub-national-electricity-consumption-in-northern-ireland. For further details on the methodology, assumptions and data interpretation relating to the electricity consumption statistics, please refer to the Methodology and Guidance booklet for Regional energy data which can be accessed here:

https://www.gov.uk/government/organisations/department-of-energy-climate-change/series/sub-national-energy-consumption. We would be grateful for any feedback on the content of this article. Please send any comments to energyefficiency.stats@decc.gsi.gov.uk.

Sub-national electricity consumption datasets for Great Britain can be accessed here: https://www.gov.uk/government/statistical-data-sets/regional-and-local-authority-electricity-consumption-statistics-2005-to-2011.



Background to the domestic electricity market in Northern Ireland

On the 1 November 2007, the Single Electricity Market (SEM) was introduced to Northern Ireland to help provide a stable, transparent and competitive energy market. This reflected the opening up of markets under EC legislation, and built upon the privatisation of the electricity supply market following the Electricity (Northern Ireland) Order 1992. In 2011, eight supply companies (Airtricity, Board Gais, Budget Energy, Power NI (formerly named NIE Energy), Electric Ireland (formerly named ESBie), Energia, Firmus Energy Supply Ltd and Quinn Energy Supply Ltd operated within Northern Ireland. However, only Airtricity, Firmus and Power NI supplied electricity to domestic consumers. The data analysed largely cover the financial year 2011 and are based on billed units for customers that have been connected for at least 12 months and as a result data have been uplifted to match annual sales data.

Total annual domestic electricity consumption

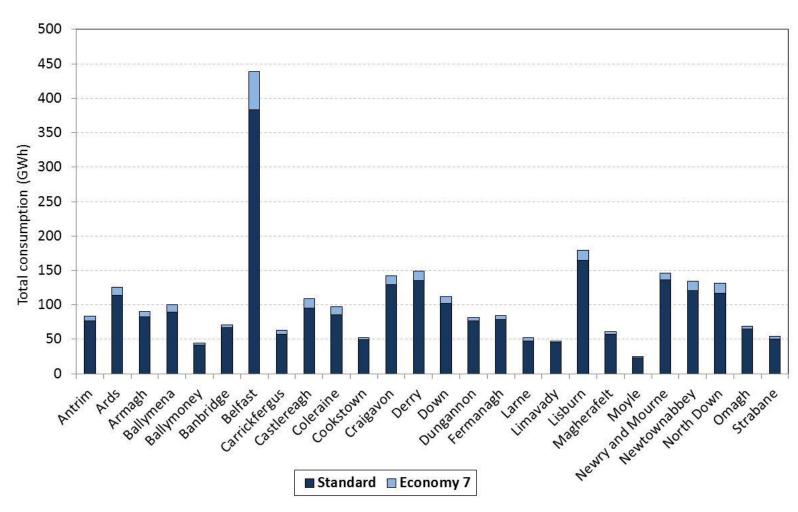
Total annual domestic electricity consumption in Northern Ireland in 2011 was estimated to be 2,826 Gigawatt hours (GWh) (compared to 2,978 GWh in 2010). Belfast, the largest city in Northern Ireland, consumed the most domestic electricity at district level at 439 GWh. Moyle was the lowest consuming district with a total consumption of 26 GWh.

By profile type

The relationship between domestic standard and domestic Economy 7 electricity consumption varied across districts. For Castlereagh, 13 per cent of total domestic consumption was Economy 7 compared to only 5 per cent in Limavady. Chart 1 below details total consumption for each of the 26 districts, split by profile type.



Chart 1 Total domestic consumption by profile type, 2011





Analysis at district level

Average annual domestic electricity consumption (standard and Economy 7 combined) per meter was 3,744 kWh; this compares with NI consumption of 3,956 kWh in 2010 and 4,078 kWh for Great Britain in 2011. The district with the highest average domestic electricity consumption per meter was Down 4,081 kWh per meter, with Belfast the lowest at 3,408 kWh per meter. In terms of households, Belfast comprises 17 per cent of total households in Northern Ireland but consumed 16 per cent of total domestic consumption; which explains why Belfast – despite being the highest consuming district – has the lowest average consumption of the 26 districts in Northern Ireland.

By profile

The average standard domestic consumption per meter in Northern Ireland was 3,584 kWh in 2011 (3,785 kWh in 2010 and 3,952 kWh in 2009), with a high of 3,925 kWh in Down and a low of 3,191 kWh in Belfast. Average Economy 7 consumption in Northern Ireland was 87 per cent higher than average standard domestic consumption at 6,688 kWh, with Cookstown having the highest average Economy 7 consumption at 8,419 kWh and Derry with the lowest at 5,199 kWh per meter per year.

These extremes in Economy 7 consumption may be related to whether the households have access to the gas network or not. Of the 26 districts, 10 have access to gas and these are in the eastern parts of Northern Ireland (Antrim, Ballymena, Ballymoney, Banbridge, Belfast, Coleraine, Craigavon, Derry, Limavady and Newry and Mourne). These 10 district areas connected to the gas network have an average Economy 7 consumption of 6,483 kWh, approximately 500 kWh lower than those connected to the gas network (6,993 kWh).

Chart 2 shows District Council level consumption for the domestic sector split by profile type.



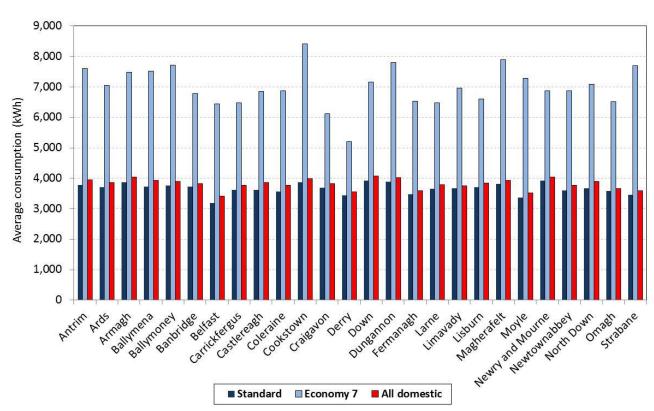


Chart 2 Average domestic electricity consumption per meter by profile type, 2011

Analysis at UK level

England was responsible for 83 per cent of total UK domestic energy consumption in 2011, followed by Scotland (10 per cent), Wales (5 per cent) and Northern Ireland (3 per cent). Table 1 below details energy consumption for each of the four countries that make up the United Kingdom.

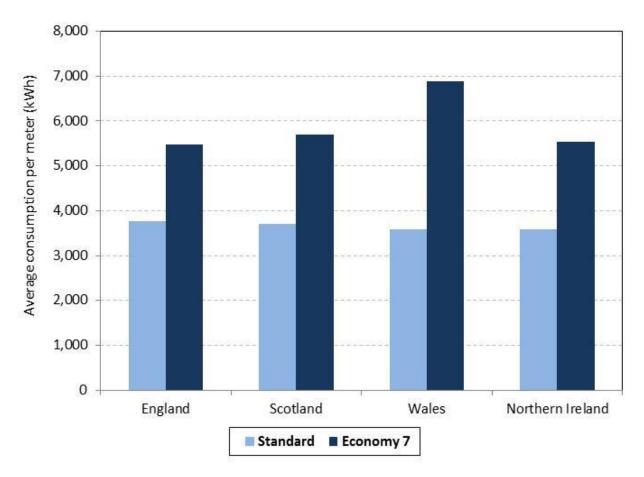
Table 1 Domestic consumption in the UK by profile type, 2011

| | | Standard meter | s | E | conomy 7 mete | rs | Domestic meters | | |
|-----------------|-------------------------------|------------------------------------|---|-------------------------------|--|---|-------------------------------|--|---|
| | Total consumption (GWh) | Total number of meters (thousands) | Mean consumption per meter (kWh) | Total consumption (GWh) | Total number of meters (thousands) | Mean consumption per meter (kWh) | Total consumption (GWh) | Total number of meters (thousands) | Mean consumption per meter (kWh) |
| England | 70,861 | 18,772 | 3,775 | 23,787 | 4,342 | 5,479 | 94,648 | 23,113 | 4,095 |
| Scotland | 8,347 | 2,255 | 3,701 | 2,803 | 492 | <i>5,702</i> | 11,150 | 2,747 | 4,059 |
| Wales | 4,519 | 1,263 | 3,577 | 768 | 112 | 6,877 | 5,287 | 1,375 | 3,845 |
| Unallocated | 209 | 61 | 3,413 | 27 | 5 | 5,547 | 236 | 66 | 3,572 |
| Great Britain | 83,935 | 22,351 | <i>3,755</i> | 27,386 | 4,950 | 5,533 | 111,321 | 27,301 | 4,078 |
| Nothern Ireland | 2,566 | 716 | 3,584 | 260 | 39 | 6,688 | 2,826 | 755 | 3,744 |
| United Kingdom | 86,501 | 23,067 | 3,750 | 27,646 | 4,989 | 5,542 | 114,147 | 28,056 | 4,069 |



Of these four countries, England had the highest average ordinary domestic consumption at 3,775 kWh. For average Economy 7 consumption, Wales had the highest at 6,877 kWh (Chart 3).

Chart 3 Average consumption per meter, 2011

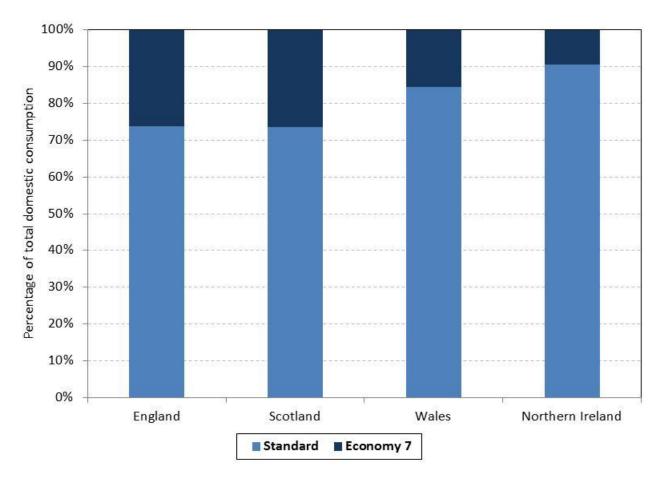


Energy efficiency improvements (such as increased levels of insulation and the introduction of more efficient electrical appliances), external temperatures and respective fuel mix in the domestic market for each country, including the availability of gas, will all impact on the average consumption. For example, the extent to which there are generally less gas connected houses in Northern Ireland would increase average electricity use for heating.

Chart 4 illustrates the distribution between ordinary standard domestic tariff and the Economy 7 tariff between the countries of the UK. In 2011, 9 per cent of total domestic electricity consumption in Northern Ireland was sold on an Economy 7 tariff. This compares to 25 per cent for both England and Scotland.



Chart 4 Distribution of total domestic consumption by profile, 2011



Northern Ireland sub-national consumption data on road transport fuels for the years 2005 to 2011 can be accessed here: https://www.gov.uk/government/organisations/department-of-energy-climate-change/series/road-transport-consumption-at-regional-and-local-level.

Consumption data relating to residual (i.e. non-electricity, non-gas and non-road transport) fuels for the years 2005 to 2010 can be found on the DECC website here:

https://www.gov.uk/government/organisations/department-of-energy-climate-change/series/sub-national-consumption-of-other-fuels.



Table 2 Sub-national domestic electricity consumption statistics 2011 (Experimental Statistics)

| | Standard meters | | | Economy 7 meters | | | Domestic meters | | |
|--------------------|----------------------------|------------------------|----------------------------------|-------------------------|------------------------|----------------------------------|-------------------------|------------------------|----------------------------------|
| District Council | Total consumption (GWh) | Total number of meters | Mean consumption per meter (kWh) | Total consumption (GWh) | Total number of meters | Mean consumption per meter (kWh) | Total consumption (GWh) | Total number of meters | Mean consumption per meter (kWh) |
| Antrim | 76.465 | 20,233 | 3,779 | 7.035 | 925 | 7,605 | 83.500 | 21,158 | 3,946 |
| Ards | 114.164 | 30,850 | 3,701 | 11.314 | 1,603 | 7,058 | 125.479 | 32,453 | 3,866 |
| Armagh | 82.720 | 21,355 | 3,874 | 7.381 | 986 | 7,486 | 90.101 | 22,341 | 4,033 |
| Ballymena | 89.665 | 24,108 | 3,719 | 10.397 | 1,381 | 7,529 | 100.063 | 25,489 | 3,926 |
| Ballymoney | 42.078 | 11,163 | <i>3,769</i> | 2.916 | 378 | 7,715 | 44.995 | 11,541 | 3,899 |
| Banbridge | 67.022 | 17,949 | 3,734 | 3.978 | 587 | 6,778 | 71.000 | 18,536 | 3,830 |
| Belfast | 383.688 | 120,255 | 3,191 | 55.509 | 8,625 | 6,436 | 439.196 | 128,880 | 3,408 |
| Carrickfergus | 57.700 | 15,949 | 3,618 | 5.580 | 862 | 6,473 | 63.280 | 16,811 | 3,764 |
| Castlereagh | 94.885 | 26,218 | 3,619 | 14.438 | 2,105 | 6,859 | 109.323 | 28,323 | 3,860 |
| Coleraine | 85.899 | 24,142 | 3,558 | 11.224 | 1,631 | 6,882 | 97.123 | 25,773 | 3,768 |
| Cookstown | 49.092 | 12,707 | 3,863 | 3.157 | 375 | 8,419 | 52.249 | 13,082 | 3,994 |
| Craigavon | 129.533 | 35,015 | 3,699 | 12.263 | 2,004 | 6,119 | 141.796 | 37,019 | 3,830 |
| Derry | 135.558 | 39,426 | 3,438 | 13.626 | 2,621 | 5,199 | 149.183 | 42,047 | 3,548 |
| Down | 102.523 | 26,121 | 3,925 | 9.466 | 1,323 | 7,155 | 111.989 | 27,444 | 4,081 |
| Dungannon | 76.369 | 19,633 | 3,890 | 5.719 | 733 | 7,803 | 82.088 | 20,366 | 4,031 |
| Fermanagh | 78.361 | 22,601 | 3,467 | 6.562 | 1,005 | 6,529 | 84.923 | 23,606 | 3,597 |
| Larne | 47.645 | 13,068 | 3,646 | 4.248 | 656 | 6,475 | 51.893 | 13,724 | 3,781 |
| Limavady | 45.148 | 12,306 | 3,669 | 2.159 | 310 | 6,965 | 47.307 | 12,616 | 3,750 |
| Lisburn | 164.796 | 44,462 | 3,706 | 14.247 | 2,158 | 6,602 | 179.042 | 46,620 | 3,840 |
| Magherafelt | 57.685 | 15,101 | 3,820 | 3.278 | 415 | 7,898 | 60.962 | 15,516 | 3,929 |
| Moyle | 23.446 | 6,971 | 3,363 | 2.060 | 283 | 7,281 | 25.507 | 7,254 | 3,516 |
| Newry and Mourne | 136.238 | 34,794 | 3,916 | 10.030 | 1,458 | 6,880 | 146.268 | 36,252 | 4,035 |
| , Newtownabbey | 120.668 | 33,519 | 3,600 | 13.350 | 1,943 | 6,871 | 134.018 | 35,462 | 3,779 |
| North Down | 116.442 | 31,656 | 3,678 | 15.305 | 2,160 | 7,085 | 131.746 | 33,816 | 3,896 |
| Omagh | 64.753 | 18,109 | 3,576 | 3.868 | 593 | 6,523 | 68.621 | 18,702 | 3,669 |
| Strabane | 50.747 | 14,656 | 3,463 | 3.348 | 435 | 7,696 | 54.095 | 15,091 | 3,585 |
| Unallocated | 72.345 | 23,562 | 3,070 | 7.798 | 1,361 | 5,730 | 80.144 | 24,923 | 3,216 |
| Grand Total | 2,565.635 | 715,929 | 3,584 | 260.257 | 38,916 | 6,688 | 2,825.891 | 754,845 | 3,744 |