

Understanding Electricity & Gas Prices in Ireland

2008 REPORT



Understanding Electricity & Gas Prices in Ireland

2nd Semester (July – December) 2007

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*Energy Policy Statistical
Support Unit*

Sustainable Energy Ireland

Sustainable Energy Ireland was established as Ireland's national energy agency under the Sustainable Energy Act 2002. SEI's mission is to promote and assist the development of sustainable energy. This encompasses environmentally and economically sustainable production, supply and use of energy, in support of Government policy, across all sectors of the economy including public bodies, the business sector, local communities and individual consumers. Its remit relates mainly to improving energy efficiency, advancing the development and competitive deployment of renewable sources of energy and combined heat and power, and reducing the environmental impact of energy production and use, particularly in respect of greenhouse gas emissions.

SEI is charged with implementing significant aspects of government policy on sustainable energy and the climate change abatement, including:

- Assisting deployment of superior energy technologies in each sector as required;
- Raising awareness and providing information, advice and publicity on best practice;
- Stimulating research, development and demonstration;
- Stimulating preparation of necessary standards and codes;
- Publishing statistics and projections on sustainable energy and achievement of targets.

It is funded by the Government through the National Development Plan with programmes part financed by the European Union.

Energy Policy Statistical Support Unit (EPSSU)

SEI has a lead role in developing and maintaining comprehensive national and sectoral statistics for energy production, transformation and end use. This data is a vital input to meeting international reporting obligations, for advising policy makers and informing investment decisions. Based in Cork, EPSSU is SEI's specialist statistics team. Its core functions are to:

- Collect, process and publish energy statistics to support policy analysis and development in line with national needs and international obligations;
- Conduct statistical and economic analyses of energy services sectors and sustainable energy options;
- Contribute to the development and promulgation of appropriate sustainability indicators.

Highlights

This report analyses data published by Eurostat collected under the new methodology for the EU Gas and Electricity Price Transparency Directive that came into effect on January 1st 2008. The focus of the report is on the first cycle of electricity and gas price data gathered under this improved methodology and is thus limited to the period July – December 2007, i.e. the second semester 2007.

- The new revised EU Gas and Electricity Price Transparency Directive methodology represents a major step forward in assessing the real costs of electricity and gas to consumers and in being able to make comparisons between EU countries.
- The Price Directive also places average prices in the public domain enabling energy purchasers and consumers to benchmark their own charges against the average in their own country.
- Within Europe, Ireland has the highest overall dependency on fossil fuels in electricity generation at 88% and also has a 60% dependency on gas and oil in generation. This dependency within the fuel mix has a key bearing on the variation in the price of electricity, especially in times of volatile price movement with respect to not only gas and oil prices but also to coal prices.

Highlights – Industry

- Electricity prices to industrial and commercial customers in Ireland for the second half of 2007 were above average in all consumption bands for which data is available, ranging from 3% to 52% above the EU average electricity prices.
- For the electricity consumption bands that represent most of Ireland's industrial customers, electricity prices in Ireland were between 23% and 29% above the EU average and between 21% and 27% above the Eurozone average.
- The higher electricity prices in Ireland are due in part to the high proportion of electricity generated by gas and oil (60% compared with 24% on average for OECD Europe). Gas prices in Europe increased on average by 35% between 2005 and 2006 and a further 12% in 2007. Oil prices doubled between July 2007 and July 2008.
- Gas prices for industrial and commercial customers in Ireland for the second half of 2007 were 9% to 13% above the average for EU countries for lower consumption bands and 6% below the EU average for large gas customers.
- Within the Eurozone, gas prices in Ireland were 4% to 8% above the average for lower gas users and 10% below the average for higher users.

Highlights – Residential

Valid comparison of residential gas and electricity prices between countries can best be made when currency exchange and living standards are corrected for. Purchasing Power Parities (PPPs) are currency conversion rates that both convert to a common currency and equalise the purchasing power of different currencies.

- Residential electricity prices in Ireland were between 9% and 15% (depending on the level of consumption) below the EU average for most residential customers in the period July – December 2007, when comparing using purchasing power parities.
- Electricity costs for the *average* residential electricity consumer¹ in Ireland were 9% less than the EU average based on purchasing power parities and 3% below the Eurozone average on the same basis.
- Natural gas cost for the *average* consumer² were 2% below the EU average using purchasing power parities and 12% below the Eurozone average on the same basis.

¹Electricity consumers using between 2,500 and 5,000 kWh per annum (DC band).

² Gas consumers using between 20 and 200 GJ (5,555 and 55,555 kWh) per annum (D2 band).

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1 Introduction

The rise in energy prices over the past number of years are a key concern to all energy consumers in Ireland, as they impact the rate of inflation and competitiveness. Understanding the key contributing factors and the precise impacts of energy price increases are key ingredients to developing appropriate, sensible and measured responses from businesses, householders and policy makers. Comparing energy prices in Ireland with those of other EU Member States and elsewhere is a particularly important aspect of any analysis of the impact of price increases. This report seeks to add to that analysis and thereby increase the understanding of energy price increases in Ireland.

The report draws on the results of a new EU methodology for gathering energy price data that came into effect on January 1st 2008. The focus of the report is on the first cycle of electricity and gas price data gathered under this improved methodology and is thus limited to the period July – December 2007, i.e. the second semester 2007.

The report is structured as follows:

- Section 2 provides a context for the analysis, touching on global factors affecting energy prices, discussing some characteristics that particularly impact on prices in Ireland and outlining the new methodology for gathering electricity and gas price data.
- Section 3 focuses on electricity and gas prices paid by industrial and commercial customers, informing the discussion on impacts of energy price increases for business in Ireland.
- Section 4 focuses on price changes for domestic customers, comparing prices for households in Ireland with those of other EU Member States.
- Section 5 draws some conclusions from this initial analysis
- Appendix 1 shows the average electricity and natural gas prices in the various consumption bands in Ireland during the 2nd semester 2007.

SEI acknowledges the co-operation of electricity and gas suppliers in providing the information necessary for Ireland to comply with the European Commission Decision (2007/394/EC) amending Directive 90/377/EEC with regard to the methodology to be applied for the collection of gas and electricity prices charged to industrial and household end-users and to allow this analysis to be carried out.

This is the first report SEI has carried out specifically focusing on energy prices. Feedback and comments on the report are welcome and should be addressed by post to the address on the rear cover or by email to <mailto:EPSSU@SEI.ie>.

Readers may be interested in previous statistical analysis related to energy prices carried out by SEI. The report *Energy in Ireland 1990 – 2006* tracks changes in aggregated energy prices from 2000. The report *Energy in Industry 2007* assesses how significant energy costs are as a proportion of overall cost base for industrial enterprises, drawing on data from CSO's Census of Industrial Production. Both reports are available from <http://www.sei.ie/statistics>.

2 Factors Affecting Electricity and Gas Prices in Ireland

There are a number of factors that influence energy prices in Ireland and how prices here compare with prices elsewhere. These factors include, but are not limited to, imported fuel prices, energy infrastructure investment costs, Ireland's electricity generating fuel mix and non-energy costs that affect energy prices (for example taxes levied, employment costs, raw material and shipping costs).

2.1 Global Energy Prices

The most significant factor affecting energy prices in Ireland is recent increases in global oil prices due to Ireland's high dependence on oil. In addition there is the knock on impact oil prices have on other energy prices, in particular natural gas and as a consequence electricity prices.

According to Ireland's 2007³ energy balance oil accounts for 66% of Total Final Consumption (TFC)⁴ in Ireland (almost 100% in transport TFC, 40% of residential TFC, 39% of industry TFC and 35% of services TFC) and 56% of Ireland's primary energy supply⁵. According to EU statistics⁶, Ireland's oil dependence (as a proportion of primary energy supply) is higher than any other EU-15 Member State except Luxembourg (63% primary energy in 2006).

Figure 1 tracks the nominal crude oil prices⁷ over the period 2004 – 2008. Prices have risen from \$30 per barrel in 2004 to a peak of \$140 per barrel in early July 2008. As shown in Figure 1, the trend was steeper recently and crude oil prices doubled between July 2007 and July 2008.

Figure 1 Crude Oil Price Trend 2004 – August 12th 2008



Source: EIA⁸

³ The 2007 data is drawn from the draft energy balance as of July 30th 2008. For the latest energy balance see www.sei.ie/statistics

⁴ Total Final Consumption represents all energy that end users are billed for directly.

⁵ Primary Energy Supply is the TFC plus primary energy used in transformation (electricity generation, oil refining, peat briquetting, etc.)

⁶ European Commission Directorate General for Energy and Transport 2008 *EU Energy and Transport in Figures Statistical Pocketbook 2007/2008*. ISBN 978-92-79-07082-2

⁷ These prices are daily spot prices of Brent crude oil, which is sourced from the North Sea and are used as a benchmark to price European, African and Middle Eastern oil that is exported to the West.

⁸ The Energy Information Administration (EIA) is a statistical agency of the U.S. Department of Energy that publishes price energy data at <http://www.eia.doe.gov/emeu/international/contents.html>

Recent analysis undertaken by the International Energy Agency⁹ suggests that the recent price rises are due to a number of factors, primarily the strong growth in global oil demand and the limited growth in supply.

Demand growth has been concentrated in developing countries (particularly China¹⁰, India, the Middle East and Latin America) and has offset reduced demand in the largest global energy consumer, the United States¹¹ (this reduced demand being due to weak economic performance and high oil prices). The low growth on the supply side is due to a levelling off of non-OPEC crude oil since 2004 (the ongoing decline of mature fields and project delays and cost escalation in new production) and project slippage in new OPEC crude oil capacity. The IEA analysis also finds no sign of abnormal stockbuilding suggesting that the recent oil price increases are due to supply demand fundamentals rather than speculation.

The IEA points to the positive impact of growing biofuel production in Europe and the US since 2005 that have compensated for some of the shortfalls in oil supply. Given the relatively low spare oil capacity, oil prices would be much higher, according to the IEA, without the contribution of biofuels.

The analysis in this report relates to natural gas and electricity prices, which are both directly affected by oil price rises. The impact on electricity prices depends on the proportion of oil and natural gas in the electricity generation fuel mix and is discussed further in Section 2.2 of this report.

The coupling of gas prices to oil prices is historically evident despite the existence of three distinctly separate (in terms of production, treatment and consumption) natural gas markets worldwide¹² compared with a single, global oil market. The major gas markets are in

- North America and the Caribbean
- Europe incl. Russia and Central Asia, and Africa (North and West)
- Asia and the Middle East

According to a report by Cambridge Economics Research Associates (CERA)¹³, oil indexation provides the pricing mechanism within Europe, through long-term contracts that supply at least 70 percent of gas demand. It has been a continuing basis for pricing over the past 40 years and despite record high oil prices, the price of gas will continue to be coupled to oil for the foreseeable future, meaning higher gas prices. Effectively a stable, reliable and transparent alternative to an oil index has yet to emerge. A gas market with sufficient liquidity could provide an alternative index to oil in gas contracts. But while continental European hubs do exist, they have not developed to the point where they could become a viable alternative.

Within the EU-27, gas prices have risen along with oil price developments according to data from the European Commission¹⁴. Prices rose for industrial users by an average of 35% between 2005 and 2006 and a further 12% in 2007. The total increase from 2005 to 2007 was comparable for household customers, although major price increases came into effect mainly in 2007.

The CERA report highlights one major factor that could disrupt the status quo which is the delivery of large volumes of liquefied natural gas (LNG) to Europe. New import infrastructure, particularly in the United Kingdom, combined with additional volumes of LNG from Qatar may put pressure on the relationship that exists between buyers and the existing sellers of gas.

There are also sub-markets within these three regional gas markets, as evidenced by the higher increase in gas prices in UK and Ireland relative to other EU Member States in recent years¹⁵. This was associated with specific supply characteristics of that market, namely the decline of gas production from the UK Continental Shelf and the timing of new infrastructure allowing increased imports from Norway (Langeled pipeline September 2006), Belgium

⁹ International Energy Agency 2008 *Medium Term Oil Market Report*

¹⁰ One contextual aspect of this is that primary energy use per capita in 2005 was 7.9 toe for the USA compared with 1.3 for China (For Ireland the figure was 3.7) Source: IEA 2007 *Key World Energy Statistics*

¹¹ International Energy Agency 2008 *Oil Market Report – A Monthly Market and Stocks Assessment July 2008*.

¹² European Commission 2006 *Annex to the Green Paper A European Strategy for Sustainable, Competitive and Secure Energy – What is at stake – Background Document*. COM(2006) 105 Final

¹³ Cambridge Energy Research Associates 2008 *An Enduring Relationship? Oil and Gas Prices in Europe*.

¹⁴ European Commission 2008 *Progress in creating the internal gas and electricity market* COM(2008) 192 Final.

¹⁵ Sustainable Energy Ireland 2007. *Security of Supply in Ireland 2007 Report*.

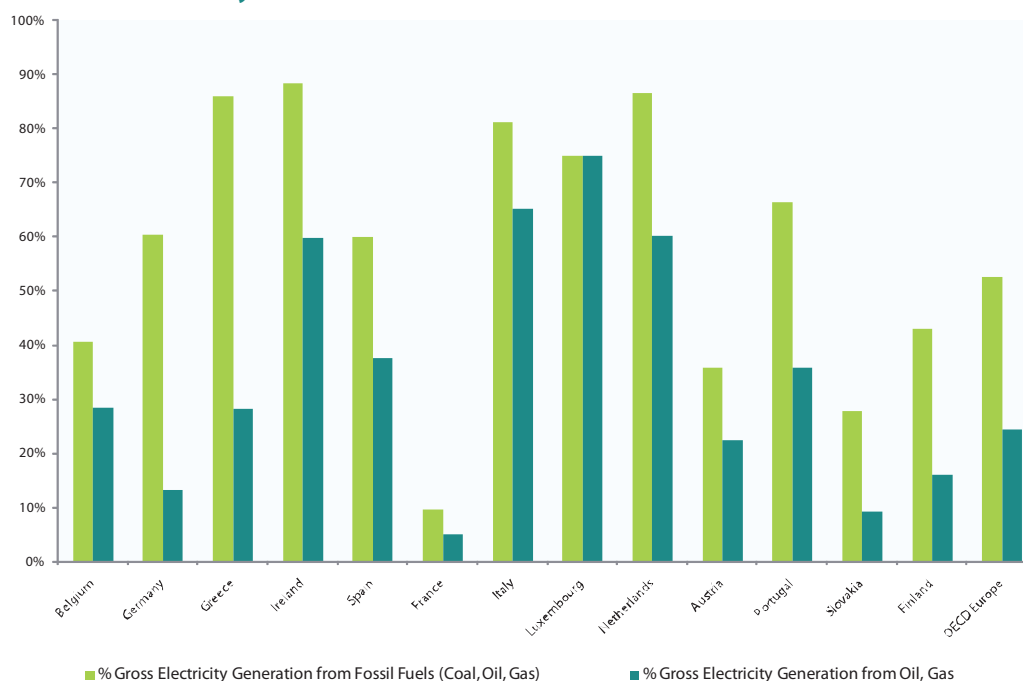
(additional compression at Zeebrugge November 2006) and the Netherlands (BBL Balgzand Bacton Leiding November 2006)¹⁶. This additional infrastructure and increased LNG capacity allowed for increased gas supply options and dampened the high gas prices that were observed in winter 2005/2006.

2.2 Fuel Mix for Electricity Generation

The fuel mix for electricity generation has a key bearing on the variation in the price of electricity in different countries. Other factors include the level of competition in electricity generation, labour costs, taxation policy and the level of investment in infrastructure (i.e. improving the transmission and distribution networks).

The electricity generation fuel mix is important especially in periods of volatile price movement such as has been experienced in recent times, in particular with respect to gas and oil prices but also to coal prices. This provides one aspect of increased understanding required to assess different electricity prices in different EU Member States. Figure 2 and Table 1 show the percentage of electricity generation in selected Eurozone countries that is fossil fuel based (coal, oil & gas) and separately the proportion of electricity generated from gas and oil.

Figure 2 Gross Electricity Generation from Fossil Fuels in Eurozone



Source: IEA

As highlighted in Table 1 Ireland has the highest overall dependency of electricity generation on fossil fuels at 88% and also has a 60% dependency on gas and oil generation. Italy, Luxembourg and The Netherlands have higher gas and oil generation dependency than Ireland at 65%, 75% and 60% respectively.

Table 1 Percentage of Gross Electricity Generation from Fossil Fuels in selected Eurozone countries

Percentage Electricity Generated from:	Belgium	Germany	Greece	Ireland	Spain	France	Italy	Luxembourg	Netherlands	Austria	Portugal	Slovakia	Finland	OECD Europe
Coal, Oil & Gas	41%	60%	86%	88%	60%	10%	81%	75%	87%	36%	66%	28%	43%	53%
Gas & Oil	28%	13%	28%	60%	37%	5%	65%	75%	60%	22%	36%	9%	16%	24%

Source: IEA

¹⁶ National Grid 2007 Winter 2007/2008 Preliminary Consultation Report. Published by Ofgem.

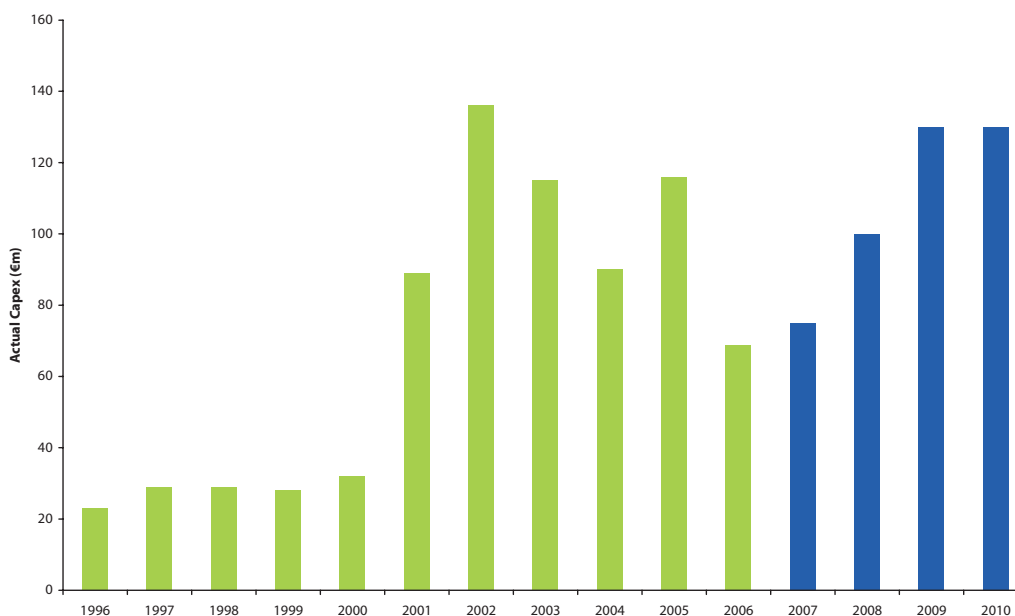
2.3 Investment in Electricity and Gas Infrastructure

Investment in electricity and gas infrastructure assets is a further contributing factor to electricity and gas prices, depending on the level of costs and the extent to which these costs are passed through to final customers.

In terms of electricity infrastructure, Ireland relies on an extensive high-voltage transmission network and a medium- and low-voltage distribution network to transport electricity domestically. Rapid growth in electricity demand in Ireland (5% per annum average annual growth 1990 – 2006) coupled with a long period of significant under-investment in electricity transmission and distribution network led to a network investment programme worth €4.4 billion, in both transmission and distribution networks between 1996 and 2005. A total investment of €4.9 billion in both transmission and distribution networks is planned up to 2013.

Figure 3 shows the investment in Ireland’s electricity network over the last decade. Total transmission investment over the period 1990 to 2006 was €755.8m. The CER in its 2006 to 2010 *Transmission Price Control Review Decision Paper*¹⁷, published on the 9th September 2005, has set a cap on capital expenditure on transmission of €520 million. The planned spend by ESB Networks for the remainder of this period is presented (in blue) on the right of Figure 3¹⁸. The impact of this capital constraint will be continually reviewed as project designs and costs evolve.

Figure 3 Electricity Transmission Investment 1996 to 2010



Source: ESB Networks

2.4 Share of Taxes in the Prices paid by Consumers in Europe

A factor that affects the prices paid by consumers is the amount of non-recoverable taxes that are levied on energy. Business can generally recover value added tax (VAT) but not other taxes including energy taxes, carbon taxes, climate change levies, so the level of ex-VAT taxes is important. Householders cannot generally recover any taxes so the level total tax levied is important. Table 2 to Table 5 shows the level of taxes applicable to assessing price comparisons in Europe for industry and households. In Ireland’s case there are no non-recoverable taxes levied on electricity or gas for industry and the level of VAT levied on households at 11.9% of total price (13.5% VAT is levied on the basic price) is at the lower end compared with the other countries.

¹⁷ Available from <http://www.cer.ie/cerdocs/cer05144.pdf>.

¹⁸ Note that estimates are provisional and are subject to change, especially as projects may be delayed by the planning processes or by difficulties with way leaves etc. The costs shown are the costs which are expected to be incurred by ESB Networks, and do not include any investment which is paid for directly by third parties (e.g. for line diversions or grid connections). The forecasts are shown in 2006 currency values.

Table 2 shows the basic price for electricity and the non-recoverable taxes for industrial electricity consumers whose annual consumption is between 500 and 2,000 MWh¹⁹. The non-recoverable tax varies from zero (for 8 Member States including Ireland) to Italy at 2.98 c/kWh, the latter representing 20% of the ex-VAT electricity price. The Member States are ranked in increasing order of non-recoverable taxes as a of ex-VAT prices.

Table 2 Share of taxes in electricity prices for industrial consumers (2nd semester 2007)

	Basic Price	Non-recoverable taxes	Non-recoverable taxes
	in € per 100 kWh		as % of ex-VAT price
Latvia	5.94	0.00	0.0
Lithuania	7.20	0.00	0.0
Greece	7.89	0.00	0.0
Romania	9.08	0.00	0.0
Czech Republic	9.46	0.00	0.0
Slovakia	10.48	0.00	0.0
Malta	12.21	0.00	0.0
Ireland	12.35	0.00	0.0
Sweden	6.51	0.05	0.8
Bulgaria	5.62	0.06	1.1
Cyprus	13.69	0.22	1.6
Croatia	7.24	0.14	1.9
Austria	7.74	0.16	2.0
Estonia	5.18	0.12	2.3
Luxembourg	9.99	0.32	3.1
Finland	5.63	0.23	3.9
United Kingdom	10.33	0.45	4.2
Slovenia	8.72	0.38	4.2
Spain	9.17	0.45	4.7
Poland	8.43	0.62	6.9
France	5.24	0.56	9.7
Netherlands	9.00	1.00	10.0
Portugal	7.79	0.89	10.3
Belgium	8.53	0.96	10.1
Hungary	9.97	1.31	11.6
Germany	8.94	1.19	11.7
Denmark	7.65	1.30	14.5
Norway	6.28	1.28	16.9
Italy	11.60	2.98	20.4

Source: Eurostat

In the case of gas prices to industrial customers, there are 10 Member States (including Ireland) for which the non-recoverable taxes are zero, as shown in Table 3. These prices relate to gas customers who use between 10,000 and 100,000 GJ of gas per annum²⁰. The non-recoverable taxes vary from zero to €1.41 /GJ, the latter representing 18% of ex-VAT price of gas.

¹⁹ Based on industrial electricity consumption band IC

²⁰ Based on industrial gas consumption band I3

Table 3 Share of taxes in gas prices for industrial consumers (2nd semester 2007)

	Basic Price	Non-recoverable taxes	Non-recoverable taxes
	in € per GJ		as % of ex-VAT price
Bulgaria	5.02	0.00	0.0
Estonia	5.04	0.00	0.0
Lithuania	6.76	0.00	0.0
Czech Republic	6.82	0.00	0.0
Spain	7.07	0.00	0.0
Poland	7.22	0.00	0.0
Latvia	7.70	0.00	0.0
Slovakia	7.94	0.00	0.0
Portugal	8.20	0.00	0.0
Ireland	9.72	0.00	0.0
Belgium	7.70	0.13	1.7
Luxembourg	9.24	0.16	1.7
France	8.34	0.17	2.0
Hungary	8.35	0.22	2.6
Italy	9.04	0.37	3.9
Croatia	6.13	0.28	4.4
United Kingdom	6.81	0.37	5.1
Netherlands	8.51	0.59	6.5
Finland	6.30	0.50	7.4
Germany	9.86	0.93	8.6
Slovenia	8.07	0.79	8.9
Denmark	6.50	0.85	11.5
Sweden	10.69	1.80	14.4
Romania	6.48	1.41	17.9

Source: Eurostat

Table 4 Share of taxes in electricity prices for domestic consumers (2nd semester 2007)

	Basic Price	Other taxes (excl. VAT)	VAT	All taxes
	in € per 100 kWh			as % of total price
Portugal	14.86	0.00	0.73	4.7
United Kingdom	14.11	0.00	0.70	4.7
Latvia	6.94	0.00	0.35	4.8
Malta	9.45	0.00	0.48	4.8
Greece	9.00	0.00	0.84	8.5
Luxembourg	14.21	0.80	0.90	10.7
Ireland	16.90	0.00	2.28	11.9
Cyprus	13.48	0.22	2.02	14.2
Lithuania	7.37	0.00	1.33	15.3
Czech Republic	8.95	0.00	1.68	15.8
Slovakia	11.52	0.00	2.18	15.9
Bulgaria	6.03	0.00	1.18	16.4
Romania	9.54	0.00	1.87	16.4
Estonia	6.52	0.13	1.21	17.0
Spain	11.64	0.59	2.03	18.4
Croatia	7.93	0.13	1.78	19.4
Poland	10.69	0.62	2.49	22.5
Slovenia	8.61	0.69	1.86	22.8
Belgium	12.86	1.37	2.60	23.6
Finland	8.68	0.74	2.07	24.5
France	9.14	1.25	1.74	24.6
Hungary	9.57	1.23	2.16	26.2
Netherlands	13.00	2.00	3.00	27.8
Norway	10.69	1.30	2.99	28.6
Austria	11.78	2.07	2.77	29.1
Italy	16.74	4.87	2.16	29.6
Sweden	10.13	2.77	3.23	37.2
Germany	12.79	4.85	3.41	39.2
Denmark	10.27	8.94	4.80	57.2

Source: Eurostat

The level of taxes applied to household electricity prices is significantly higher than that applied to industrial electricity prices, as shown in Table 4. These prices are for customers who use between 2,500 and 5,000 kWh per annum²¹. The VAT charges are shown separately from other taxes for the purposes of comparison. There are 11 Member States (including Ireland) who apply VAT charges only to domestic customers. Total taxes vary from 0.35 c/kWh (Latvia) to 13.74 c/kWh (Denmark), or between 4.7% and 57% of total prices. For Ireland, taxes account for 11.9% of the final electricity and gas prices to household consumers.

Table 5 shows the level of taxes applied to gas prices for domestic customers within the EU who have an annual consumption of between 20 and 200 GJ per annum²². As in the case of electricity, the taxes applied to domestic customers generally exceed those applied to industrial customers, although for domestic customers there are more Member States who apply zero non-VAT tax to gas prices. The amounts of tax vary from 47 c/GJ to €20.57/GJ or 4.7 to 56% of final domestic gas prices.

Table 5 Share of taxes in gas prices for domestic consumers²³ (2nd semester 2007)

	Basic Price	Other taxes (excl. VAT)	VAT	All taxes
	in € per GJ			as % of total price
United Kingdom	9.44	0.00	0.47	4.7
Portugal	17.27	0.00	0.86	4.7
Luxembourg	9.78	0.00	0.62	6.0
Ireland	14.84	0.00	2.01	11.9
Spain	13.92	0.00	2.23	13.8
France	12.18	0.00	2.12	14.8
Latvia	7.33	0.00	1.32	15.3
Lithuania	5.52	0.00	0.99	15.2
Estonia	6.17	0.00	1.13	15.5
Czech Republic	8.40	0.00	1.60	16.0
Slovakia	9.67	0.00	1.84	16.0
Hungary	8.85	0.00	1.77	16.7
Bulgaria	7.48	0.00	1.50	16.7
Poland	9.13	0.00	2.01	18.0
Belgium	11.14	0.34	2.41	19.8
Croatia	5.93	0.37	1.30	22.0
Slovenia	11.11	0.78	2.38	22.1
Germany	12.68	1.64	2.72	25.6
Austria	12.38	1.75	2.82	27.0
Romania	6.31	1.67	1.52	33.6
Italy	11.24	3.19	2.88	35.1
Netherlands	11.94	4.35	3.09	38.4
Sweden	14.38	6.07	5.11	43.7
Denmark	16.31	13.19	7.38	55.8

Source: Eurostat

2.5 Purchasing Power

Another factor impacting gas and electricity prices in a country are the costs associated with labour and services. In wealthier countries the cost of living as well as labour and services costs tend to be higher. Comparing electricity and gas prices on the basis of purchasing power parity is used to separate the price differences associated with differences in wealth from those associated with other factors.

Ireland's economic growth has increased more rapidly than for other EU-Member States as shown in Table 6.

²¹ Based on household electricity consumption band DC

²² Based on household electricity consumption band DC

²³ Based on household gas consumption band D2

Table 6 GDP per capita in PPS (Purchasing Power Standard) 1997 – 2007 EU-27 = 100

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
EU (27 countries)	100	100	100	100	100	100	100	100	100	100	100
Euro area	115.9	116	115.8	115.3	113.8	112.9	112.1	110.9	111	110.5	110
Denmark	133.5	132.2	131.1	131.9	128.2	128.7	124.5	125.9	126.5	125.6	122.8
Germany	124.6	122.7	122.4	118.8	116.9	115.5	116.9	116.6	115	114	113.2
Ireland	115.1	121.6	126.6	131	132.9	138.3	140.8	141.8	143.5	145.2	146.3
Spain	93.5	95.6	96.5	97.6	98.4	100.7	101.2	101.2	102.8	104.8	106.8
France	114.9	115.3	115	115.6	116	116.3	112.1	110.3 ^(b)	112.3	111.7	111.2
Luxembourg	215.1	217.9	237.9	244.3	234.7	240.9	247.3	253.2	263.9	278.8	276.3
Finland	110.9	114.6	115.4	117.6	116	115.5	113.3	116.5	115	116.7	116.7
Sweden	123.8	122.7	125.6	127.1	121.8	121.4	123	125	123.6	124.4	126.1
United Kingdom	116.5	116.1	116	117.2	117.9	118.7	119.8	122	119.1	117.7	115.8

Source: EUROSTAT

Purchasing Power Parities (PPPs) are currency conversion rates that convert to a common currency as well as equalising the purchasing power of different currencies. In other words, they eliminate the differences in price levels between countries in the process of conversion. This purchasing power exchange rate equalises the purchasing power of different currencies in their home countries for a given basket of goods. Using a PPP basis is arguably more useful when comparing differences in living standards on the whole between nations because PPP takes into account the relative cost of living and the inflation rates of different countries, rather than just a nominal gross domestic product (GDP) comparison.

2.6 Methodologies for Assessing Prices

The International Energy Agency (IEA) are responsible for a major international compilation of energy prices at all market levels: import prices, industry prices and consumer prices. A large portion of the data is drawn from a quarterly reporting system of end-use energy prices initiated in 1981.

While this provides an extensive databank of energy prices, comparisons between countries is not a trivial task. Definitions for prices shown for a particular energy source used in a given sector may differ from country to country. At one extreme, gasoline prices are closely comparable between countries; at the other extreme, only broad order of magnitude comparisons between coal prices may be possible.

Data collected in Ireland for IEA's Energy Prices & Taxes surveys are overall average prices for a given sector and therefore represent an aggregate price for small, medium and large consumers.

EUROSTAT collects electricity and gas prices under Council Directive 90/377/EEC of 29 June 1990 concerning a Community procedure to improve the transparency of gas and electricity prices charged to industrial end-users. This Directive obliges Member States to ensure that undertakings that supply electricity and gas to industrial end-users provide statistical data on an annual basis. Data must be provided to Eurostat on the price and terms of sale of gas and electricity to industrial end-users, the price systems in use and the breakdown of consumers and the corresponding volumes by category of consumption. Sustainable Energy Ireland has responsibility for the collection, collation and reporting of data on Ireland's behalf.

In 2002 Eurostat's Energy Statistics Committee meeting gave the mandate to set up a task force to study improvements in the existing data collection and methodology to take account in particular of market liberalization that changed the context for the methodology applied. Directive 90/377/EEC was recast in the interests of clarity and as a result the revised methodology has been applied since 1st January 2008. The electricity and gas price comparisons assessed in sections 3 and 4 of this report are drawn from the first set of results arising from this new methodology.

This new methodology reflects more accurately the actual cost of gas and electricity to final consumers as it incorporates all the factors in the cost of their use. The methodology is comprehensive and transparent and in each customer category, information is sought from each supplier regarding the volume of sales and the associated revenue. This allows computation of a national sales weighted unit price for electricity and gas for each customer category. It facilitates the comparison of costs across the EU but care must be taken in choosing the relevant costs to compare and to allow for currency and purchasing power differences.

3 Energy Prices for Business

The Directive refers to gas and electricity prices charged to industrial end-users, however it recognises that suppliers generally can't distinguish between industrial and other commercial use and so accepts that industrial end-user may include other non-residential user. In essence therefore, industrial prices refer to all non-residential prices. Gas and electricity prices include all charges payable including: energy consumed, network charges, other charges (capacity charges, commercialisation, meter rental etc) all netted for any rebates or premiums due. Initial connection charges are not included. Prices are recorded as national average prices.

3.1 Industrial / Commercial Electricity Costs

The prices represent weighted average prices, using the market share of the electricity suppliers surveyed as weighting factors. Arithmetic average prices were provided by Member States only when weighted figures could not be calculated. In either case, Member States are required to ensure that a representative share of the national market is covered in the survey.

Market shares should be based on the quantity of electricity invoiced by electricity suppliers to industrial end-users. If possible, the market shares are calculated separately for each band. The information used for calculating weighted average prices is managed by Member States, respecting confidentiality rules.

In the interest of confidentiality, data relating to prices are communicated only where there are, in the Member State concerned, at least three end-users in each of the categories.

Three levels of prices are provided:

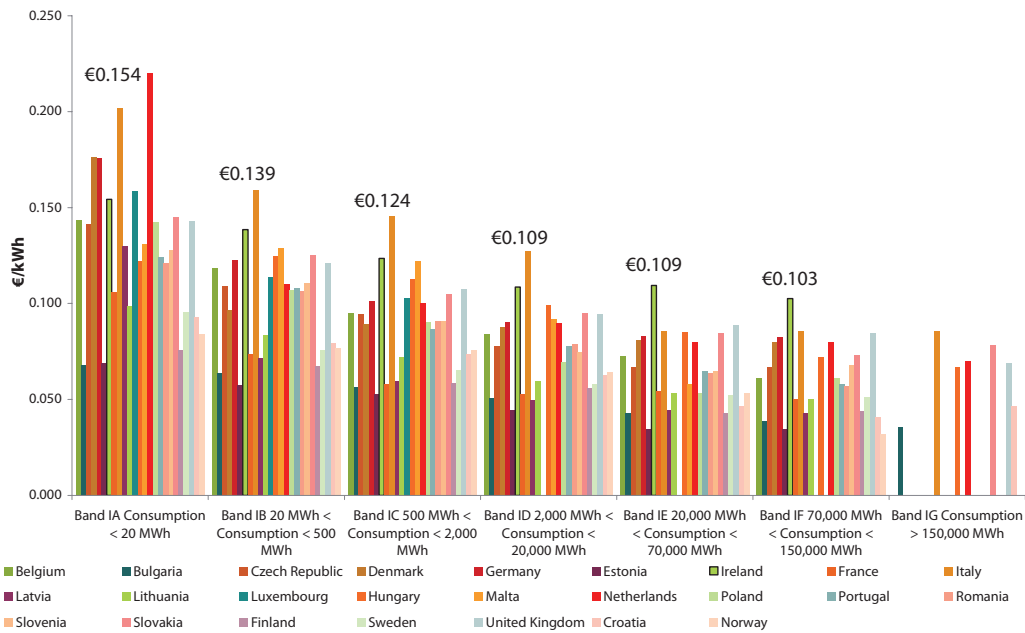
- Prices excluding taxes and levies,
- Prices excluding VAT and other recoverable taxes,
- Prices including all taxes, levies and VAT.

Electricity prices are surveyed for the following categories of industrial end-user:

Industrial End-User	Annual electricity consumption (MWh)	
	Lowest	Highest
Band - IA		< 20
Band - IB	20	< 500
Band - IC	500	< 2 000
Band - ID	2 000	< 20 000
Band - IE	20 000	< 70 000
Band - IF	70 000	<= 150 000

Figure 4 presents a comparison of electricity costs to industry and commercial enterprises in Ireland compared with the other EU member states based on the first returns from the revised Gas & Electricity Price Directive for the second semester of 2007. The analysis looks first at a comparison of industrial/commercial electricity costs in euro across all the countries and then makes a comparison based on eurozone countries only. The *excluding VAT price* was used as this is the most relevant for industrial/commercial consumers.

Figure 4 Industrial/Commercial Electricity Prices (€) in EU (2nd Semester 2007)



Source: Eurostat

Industrial/Commercial electricity prices in Ireland for the second half of 2007 were above the average for EU countries in all bands for which data is available, ranging from 3% to 52% above. In the lowest consumption band IA, Ireland is 3% above the average with five other countries, Denmark, Germany, Luxembourg, Italy and Netherlands, having higher electricity costs. In bands IB, IC and ID Ireland has the second highest cost with Italy being the only country more expensive. For the other two bands, IE and IF for which there is data for Ireland, Ireland is the most expensive.

Table 7 Industrial/Commercial Electricity Prices (€) in Ireland (2nd Semester 2007) – EU Comparison

Electricity Prices Industrial/Commercial Consumers (all taxes included)	Cost €/kWh	Relative to EU Average
Band IA (Consumption < 20 MWh)	0.154	103%
Band IB (20 MWh < Consumption < 500 MWh)	0.139	123%
Band IC (500 MWh < Consumption < 2,000 MWh)	0.124	129%
Band ID (2,000 MWh < Consumption < 20,000 MWh)	0.109	129%
Band IE (20,000 MWh < Consumption < 70,000 MWh)	0.109	152%
Band IF (70,000 MWh < Consumption < 150,000 MWh)	0.103	149%
Band IG (Consumption > 150,000 MWh)	:	:

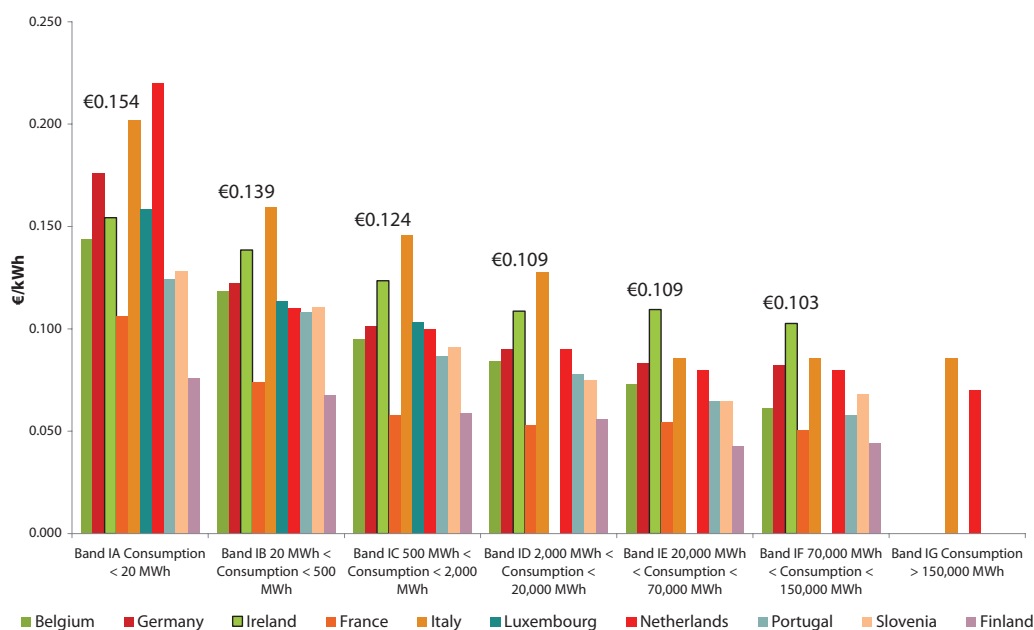
Source: Eurostat

Figure 5 illustrates the data presented in Figure 4 colour coding the countries of Europe according to electricity price bands for the customers within consumption band ID (2,000 – 20,000 MWh per annum). This clearly shows Ireland and Italy in the highest category. It is interesting to compare the results of this analysis with the dependence on gas and oil in the electricity fuel mix shown in Figure 2 and Table 1. Italy and Ireland have 65% and 60% (respectively) of their electricity generated by gas and oil. The Netherlands also has 60% of its electricity from gas and oil and it falls into the next highest price category, as shown in Figure 5.

Figure 5 Industrial/Commercial Electricity Prices in Europe (2nd Semester 2007)



Figure 6 Industrial/Commercial Electricity Prices (€) in Eurozone (2nd Semester 2007)



Source: Eurostat

Within the Eurozone countries, industrial/commercial electricity prices in Ireland for the second half of 2007 were above the average in bands IB to IF ranging from 21% above in band IB to 51% above in band IE. Prices were 2% lower in band IA.

Table 8 Industrial/Commercial Electricity Prices (€) (2nd Semester 2007) – Eurozone Comparison

Electricity Prices Domestic Consumers (all taxes included)	Cost €/kWh	Relative to Eurozone Average
Band IA (Consumption < 20 MWh)	0.154	98%
Band IB (20 MWh < Consumption < 500 MWh)	0.139	121%
Band IC (500 MWh < Consumption < 2,000 MWh)	0.124	127%
Band ID (2,000 MWh < Consumption < 20,000 MWh)	0.109	126%
Band IE (20,000 MWh < Consumption < 70,000 MWh)	0.109	151%
Band IF (70,000 MWh < Consumption < 150,000 MWh)	0.103	149%
Band IG (Consumption > 150,000 MWh)	:	:

Source: Eurostat

Recalling Table 1, the shaded columns show the countries that have some or all industrial/commercial electricity costs being 20% above the average for Europe in the second half of 2007. The darker shading for Ireland and Italy show that all the categories IA – IG are more than 20% above the average. With the exception of Slovakia and Germany the countries with high electricity prices tend to have high proportion of electricity generated from gas and oil (predominately gas). In the case of Germany, it is apparent from Table 2, that a key factor in its high prices is the level of non-recoverable tax applied (14.5% of final electricity price). The United Kingdom, not shown in the table, is also above the average in terms of electricity costs, has 37% of its electricity generation from gas and oil. France has the lowest exposure to gas and oil prices with just 5% coming from oil and gas. France also has the lowest electricity prices to industrial/commercial consumers being 17% to 35% lower than the EU average.

3.2 Industrial / Commercial Gas Costs

The gas prices presented include all charges payable: network charges plus energy consumed minus any rebates or premiums, plus other charges (meter rental, standing charges, etc.). Initial connection charges are not to be included. Prices are recorded as national average prices.

These prices represent weighted average prices, using the market shares of the gas suppliers surveyed as weighting factors; with arithmetic average prices provided only when weighted figures cannot be calculated. In either case, Member States are required to ensure that a representative share of the national market is covered by the survey.

Market shares are based on the quantity of gas invoiced by the gas suppliers to industrial end-users. When possible, the market shares are calculated separately for each band. The information used for calculating weighted average prices is managed by Member States, respecting confidentiality rules.

In the interest of confidentiality, data relating to prices will be communicated only where there are, in the Member State concerned, at least three end-users in each of the categories.

Three levels of prices are provided:

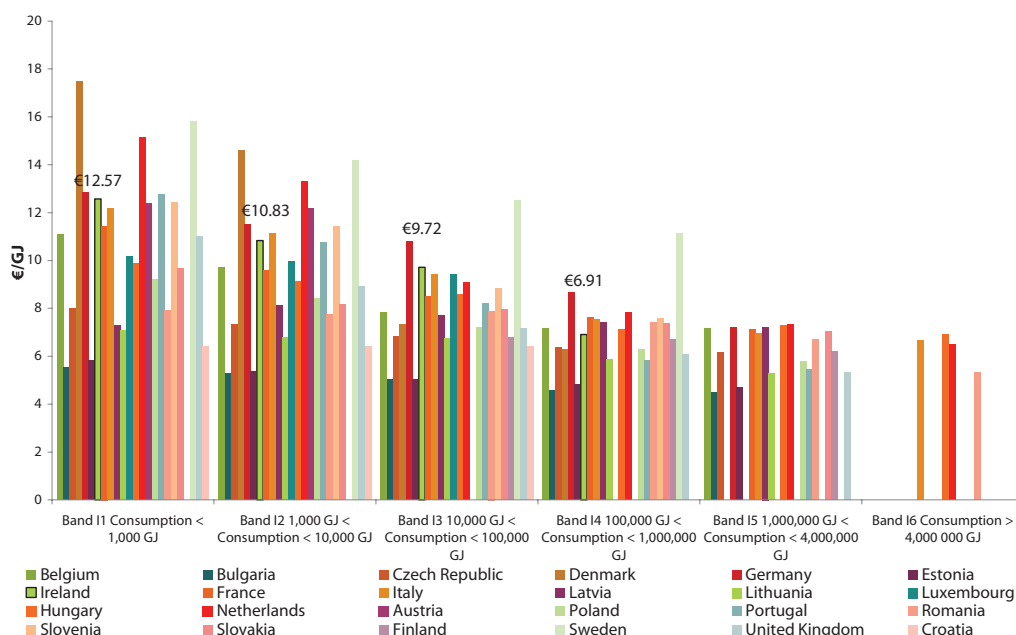
- prices excluding taxes and levies,
- prices excluding VAT and other recoverable taxes,
- prices including all taxes, levies and VAT.

Gas prices are surveyed for the following categories of industrial end-user:

Industrial End-User	Annual gas consumption (GJ)	
	Lowest	Highest
Band - I1		< 1 000
Band - I2	1 000	< 10 000
Band - I3	10 000	< 100 000
Band - I4	100 000	< 1 000 000
Band - I5	1 000 000	<= 4 000 000

This is a comparison of natural gas costs to industry and commercial enterprises in Ireland compared with the other EU member states based on the first returns from the revised Gas & Electricity Price Directive for the second semester of 2007. The analysis looks first at a comparison of industrial/commercial gas costs in euro across all the countries and then makes a comparison based on eurozone countries only. The *excluding VAT price* was used as this is the most relevant for industrial/commercial consumers.

Figure 7 Industrial/Commercial Gas Prices (€) in EU (2nd Semester 2007)



Industrial/Commercial gas prices in Ireland for the second half of 2007 were above the average for EU countries in bands I1 to I3, ranging from 9% to 13% above. In band I4 Ireland was 6% below the average.

Table 9 Industrial/Commercial Gas Prices (€) in Ireland (2nd Semester 2007) – EU Comparison

Electricity Prices Industrial/Commercial Consumers (all taxes included)	Cost €/GJ	Relative to EU Average
Band I1 (Consumption < 1,000 GJ)	12.570	111%
Band I2 (1,000 GJ < Consumption < 10,000 GJ)	10.830	109%
Band I3 (10,000 GJ < Consumption < 100,000 GJ)	9.720	113%
Band I4 (100,000 GJ < Consumption < 1,000,000 GJ)	6.910	94%
Band I5 (1,000,000 GJ < Consumption < 4,000,000 GJ)	:	
Band I6 (Consumption > 4,000 000 GJ)	:	

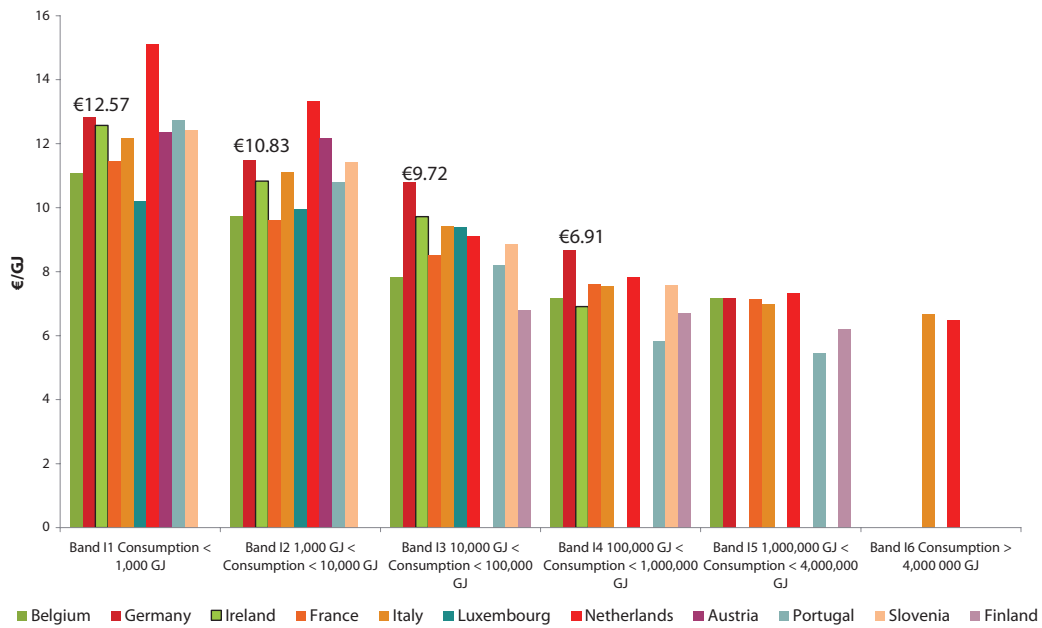
Source: Eurostat

Figure 8 illustrates the data presented in Figure 7 clustering the countries of Europe into price ranges for the price band I3. It is interesting to note the significant difference in gas prices between Ireland and the UK, given both form part of the same regional market. This may be due to the size of the gas market in each jurisdiction and economies of scale and possible currency exchange rate anomalies.

Figure 8 Industrial/Commercial Gas Prices in Europe (2nd Semester 2007)



Figure 9 Industrial/Commercial Gas Prices (€) in Eurozone (2nd Semester 2007)



In the Eurozone industrial/commercial gas prices in Ireland for the second half of 2007 were above to the average for Eurozone countries in bands I1 to I3 ranging from 4% to 8% above (see Table 10). In consumption band I4 Ireland was 10% below the average.

Table 10 Industrial/Commercial Gas Prices (€) in Ireland (2nd Semester 2007) – Eurozone Comparison

Electricity Prices Industrial/Commercial Consumers (all taxes included)	Cost €/GJ	Relative to EU Average
Band I1 (Consumption < 1,000 GJ)	12.570	106%
Band I2 (1,000 GJ < Consumption < 10,000 GJ)	10.830	104%
Band I3 (10,000 GJ < Consumption < 100,000 GJ)	9.720	108%
Band I4 (100,000 GJ < Consumption < 1,000,000 GJ)	6.910	90%
Band I5 (1,000,000 GJ < Consumption < 4,000,000 GJ)	:	
Band I6 (Consumption > 4,000 000 GJ)	:	

Source: Eurostat

4 Energy Prices for Households

4.1 Domestic Electricity Costs

The data collection for households is based on a voluntary agreement and complements the data collection of gas and electricity prices for industrial users as specified in Council Directive 90/377/EEC. The methodology for collecting data on household electricity prices was also changed for the under the revised Directive.

For household, electricity prices include all charges payable including: energy consumed, network charges, other charges (capacity charges, commercialisation, meter rental etc) all netted for any rebates or premiums due. Initial connection charges are not included. The Member States develop and implement cost-effective procedures to ensure a representative data compilation system based on the following rules:

- Prices represent weighted average prices, using the market share of the electricity suppliers surveyed as weighting factors. Arithmetic average prices are provided only when weighted figures cannot be calculated. In either case, Member States ensure that a representative share of the national market is covered by the survey.
- Market shares are based on the quantity of electricity invoiced by electricity supply undertakings to household end-users. If possible, the market shares are calculated separately for each band. The information used for calculating weighted average prices is managed by Member States, respecting confidentiality rules.

Three levels of prices are provided:

- prices excluding taxes and levies,
- prices excluding VAT and other recoverable taxes,
- prices including all taxes, levies and VAT.

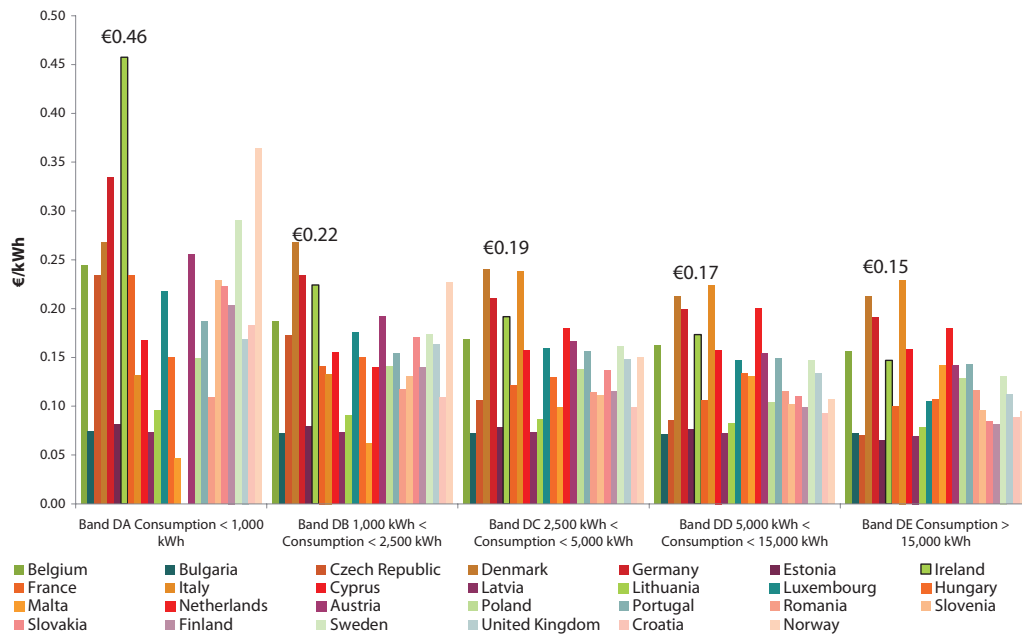
Electricity prices are surveyed for the following categories of household end-user:

Household end-user	Annual electricity consumption (kWh)	
	<i>Lowest</i>	<i>Highest</i>
Very small (DA)	<1 000	
Small (DB)	1 000	<2 500
Medium (DC)	2 500	<5 000
Large (DD)	5 000	<15 000
Very large (DE)	≥15 000	

This is a comparison of electricity costs to domestic consumers in Ireland compared with the other EU member states based on the first returns from the revised Gas & Electricity Price Directive for the second semester of 2007 (July to December). The analysis looks first at a basic comparison of domestic electricity costs in euro across all the countries and then refines this to more relevant comparisons based on purchasing power parities and finally comparison based on eurozone countries only. The price including all taxes, levies and VAT was used as this is the most relevant for domestic consumers.

With regard to consumption bands, the most relevant for the majority of domestic consumers are the DC band (2,500 – 5,000 kWh per annum) and the DD band (5,000 – 15,000 kWh per annum). In the lower consumption bands the average cost per kWh is higher because the standing charges and network charges form a larger proportion of the annual costs. In the case of Ireland for instance, there are significant numbers of holiday homes that may be unoccupied for most of the year yet standing charges are still incurred with little or no electricity usage. During data collection, zero usage accounts were excluded.

Figure 10 Domestic Electricity Prices (€) in EU (2nd Semester 2007)



Source: Eurostat

With reference to Figure 10 Ireland was the highest cost in the DA band. However, as mentioned earlier this is to be expected if there are a significant number of very low usage accounts such as holiday homes. Looking at the DC and DD bands Ireland is the fourth and fifth most expensive in these respective bands with electricity costs on average being 20% and 17% respectively above the average of the EU-27 countries.

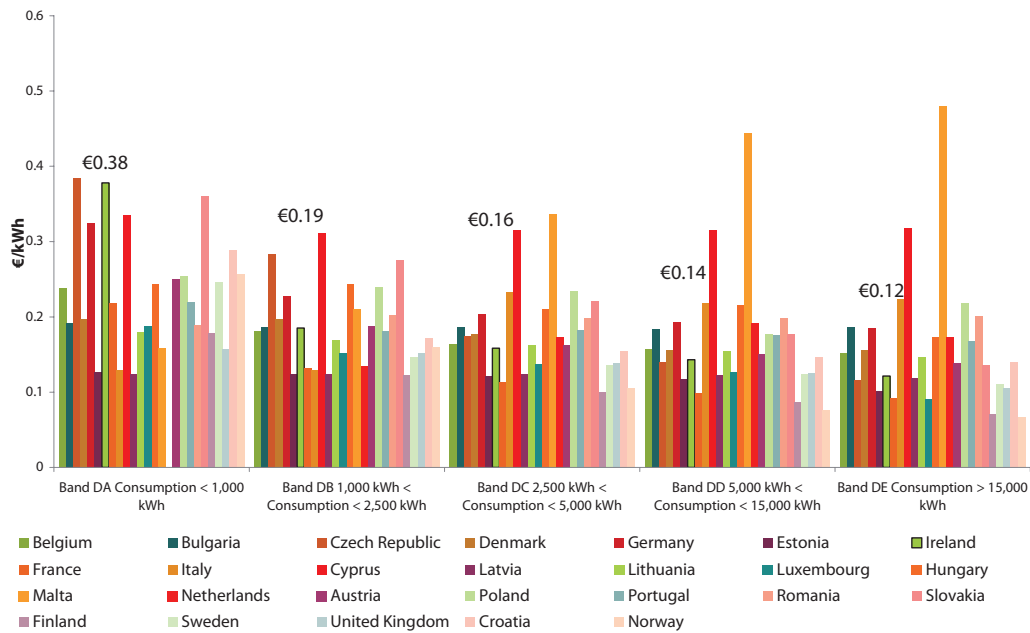
Table 11 Domestic Electricity Prices (€) in Ireland (2nd Semester 2007) – EU Comparison

Electricity Prices Domestic Consumers (all taxes included)	Cost €/kWh	Relative to EU Average
Band DA (Consumption < 1 000 kWh)	0.458	198%
Band DB (1,000 kWh < Consumption < 2,500 kWh)	0.224	134%
Band DC (2,500 kWh < Consumption < 5,000 kWh)	0.192	120%
Band DD (5,000 kWh < Consumption < 15,000 kWh)	0.173	117%
Band DE (Consumption > 15,000 kWh)	0.147	105%

Source: Eurostat

Some caveats should be acknowledged in looking at these basic euro prices. Non euro country prices are converted into euro at the prevailing exchange rates but don't take into account the varying purchasing powers in each country. To correct for this Eurostat also publish prices in purchasing power parities. These are presented in Figure 11.

Figure 11 Domestic Electricity Prices in EU at Purchasing Power Parities (2nd Semester 2007)



Source: Eurostat

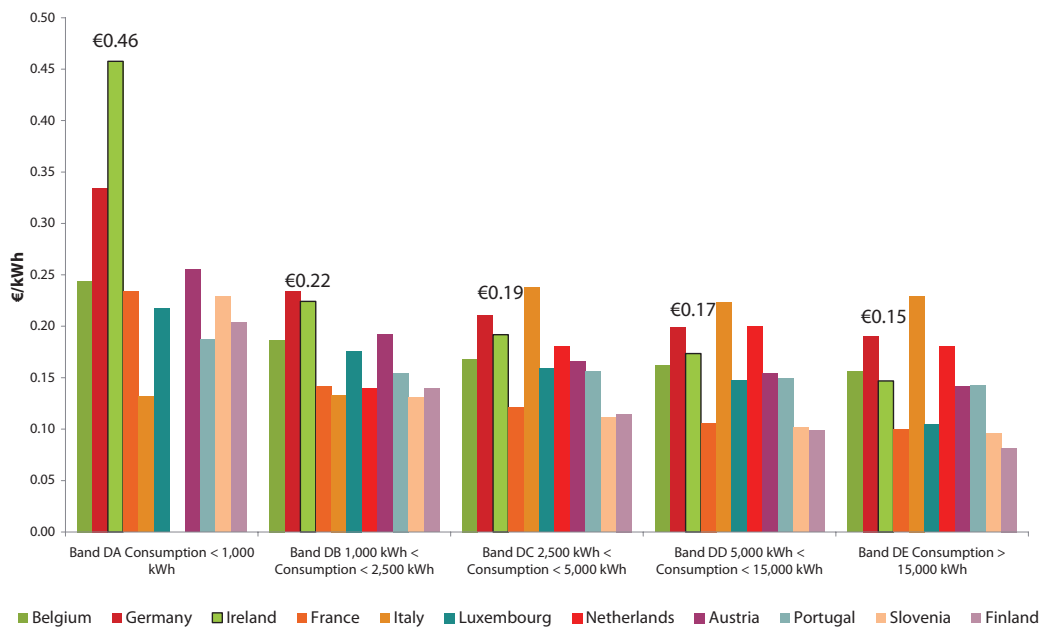
Using purchasing power parities indicates that Ireland is cheaper than the average in the three highest consumption bands and specifically in band DC is 91% of the average (9% below the average) and in band DD is 85% of the average (15% below).

Table 12 Domestic Electricity Prices (Purchasing Power Parity) (2nd Semester 2007) – EU Comparison

Electricity Prices Domestic Consumers (all taxes included)	Cost (PPP) €/kWh	Relative to EU Average
Band DA (Consumption < 1 000 kWh)	0.378	163%
Band DB (1,000 kWh < Consumption < 2,500 kWh)	0.185	101%
Band DC (2,500 kWh < Consumption < 5,000 kWh)	0.158	91%
Band DD (5,000 kWh < Consumption < 15,000 kWh)	0.143	85%
Band DE (Consumption > 15,000 kWh)	0.121	76%

Source: Eurostat

Figure 12 Domestic Electricity Prices (€) in Eurozone (2nd Semester 2007)



Source: Eurostat

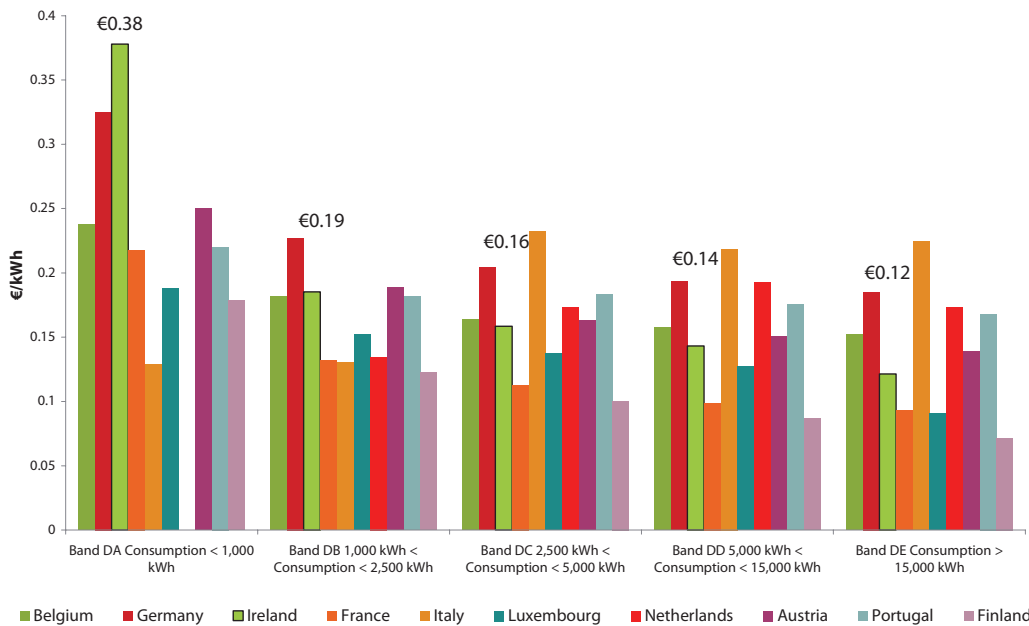
Focusing on just the Eurozone countries Ireland is third most expensive in band DC and fourth most expensive in band DD. Ireland is closer to the average measured in basic euro prices within the Eurozone than compared with all the EU countries. In band DC we are 9% above the average in the Eurozone and 5% above in band DD.

Table 13 Domestic Electricity Prices (€) in Ireland (2nd Semester 2007) – Eurozone Comparison

Electricity Prices Domestic Consumers (all taxes included)	Cost €/kWh	Relative to Eurozone Average
Band DA (Consumption < 1 000 kWh)	0.458	181%
Band DB (1,000 kWh < Consumption < 2,500 kWh)	0.224	126%
Band DC (2,500 kWh < Consumption < 5,000 kWh)	0.192	109%
Band DD (5,000 kWh < Consumption < 15,000 kWh)	0.173	105%
Band DE (Consumption > 15,000 kWh)	0.147	93%

Source: Eurostat

Figure 13 Domestic Electricity Prices in Eurozone at Purchasing Power Parities (2nd Semester 2007)



Source: Eurostat

In terms of purchasing power within the Eurozone countries, Ireland is fourth most expensive in band DC and sixth most expensive in band DD. Again using this measure Ireland is 3% below the average for the Eurozone in band DC and 7% below in band DD.

Table 14 Domestic Electricity Prices (Purchasing Power Parity) (2nd Semester 2007) – Eurozone

Electricity Prices Domestic Consumers (all taxes included)	Cost €/kWh	Relative to Eurozone Average
Band DA (Consumption < 1 000 kWh)	0.378	160%
Band DB (1,000 kWh < Consumption < 2,500 kWh)	0.185	113%
Band DC (2,500 kWh < Consumption < 5,000 kWh)	0.158	97%
Band DD (5,000 kWh < Consumption < 15,000 kWh)	0.143	93%
Band DE (Consumption > 15,000 kWh)	0.121	86%

Source: Eurostat

4.2 Domestic Gas Costs

The data collection for households is based on a voluntary agreement and complements the data collection of gas and electricity prices for industrial users as specified in Council Directive 90/377/EEC and the methodology for collecting household data was also changed so the prices under the revised Directive are not directly comparable with the old methodology.

For household, gas prices include all charges payable including: energy consumed, network charges, other charges (capacity charges, commercialisation, meter rental etc) all netted for any rebates or premiums due. Initial connection charges are not to be included. The Member States develop and implement cost-effective procedures to ensure a representative data compilation system based on the following rules:

- Prices represent weighted average prices, using the market share of the natural gas supply undertakings surveyed as weighting factors. Arithmetic average prices will be provided only when weighted figures cannot be calculated. In either case, Member States will ensure that a representative share of the national market is covered by the survey.

- Market shares are based on the quantity of gas invoiced by gas supply undertakings to household end-users. If possible, the market shares are calculated separately for each band. The information used for calculating weighted average prices is managed by Member States, respecting confidentiality rules.

Three levels of prices are to be provided:

- prices excluding taxes and levies,
- prices excluding VAT and other recoverable taxes,
- prices including all taxes, levies and VAT.

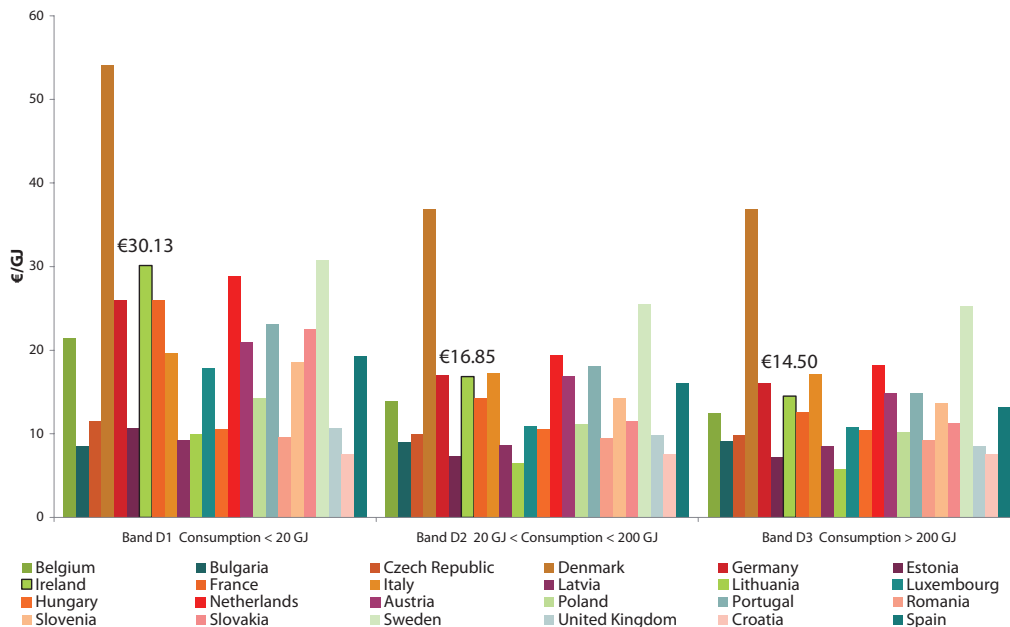
Gas prices are surveyed for the following categories of household end-user:

Household end-users	Annual gas consumption (GJ)	
	Lowest	Highest
D1 - Small	0	<20
D2 - Medium	20	<200
D3 - Large	≥200	

This is a comparison of gas costs to domestic consumers in Ireland compared with the other EU member states based on the first returns from the revised Gas & Electricity Price Directive for the second semester of 2007 (July to December). The analysis looks first at a basic comparison of domestic gas costs in euro across all the countries and then refines this down to more relevant comparisons based on purchasing power parities and finally comparison based on eurozone countries only. The price including all taxes, levies and VAT was used as this is the most relevant for domestic consumers.

With regard to consumption bands the most relevant for the majority of domestic consumers is the medium band (20 – 200 GJ per annum) referred to as D2. In the lower consumption bands the average cost per kWh is higher because the standing charges and network charges form a larger proportion of the annual costs.

Figure 14 Domestic Gas Prices (€) in EU (2nd Semester 2007)



Source: Eurostat

In the D2 band Ireland is 17% above the average for the EU as a whole.

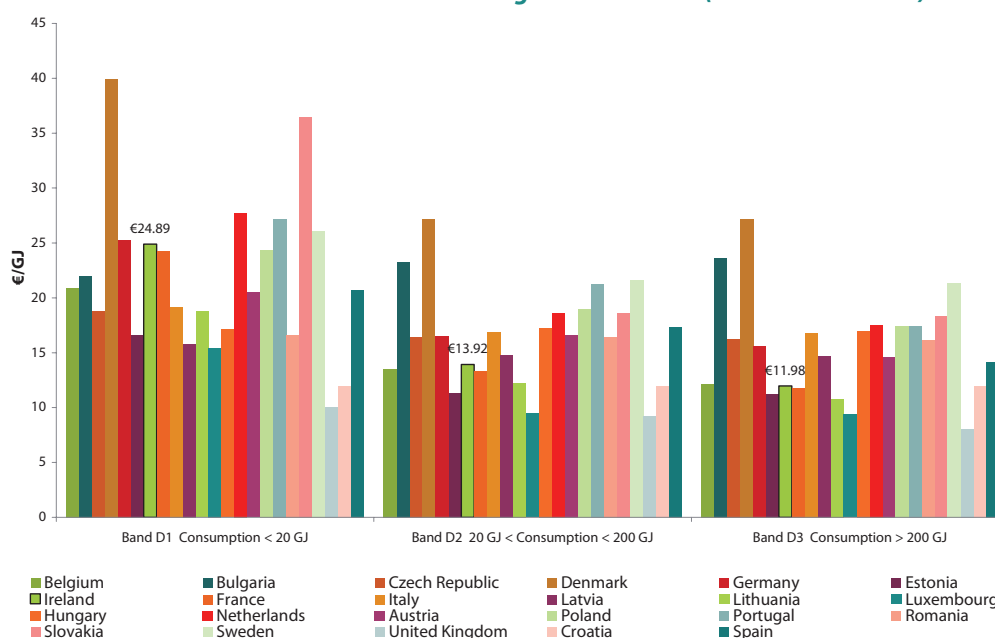
Table 15 Domestic Gas Prices (€) in Ireland (2nd Semester 2007) – EU Comparison

Gas Prices Domestic Consumers (all taxes included)	Cost €/GJ	Cost €/kWh	Relative to EU Average
Band D1 - Small	30.13	0.108	151%
Band D2 - Medium	16.85	0.061	117%
Band D3 - Large	14.50	0.052	108%

Source: Eurostat

Some caveats should be acknowledged in looking at these basic euro prices. Non euro countries prices are converted into euro at the prevailing exchange rates but don't take into account the varying purchasing powers in each country. To correct for this Eurostat also publish prices in purchasing power parities. These are presented in Figure 15.

Figure 15 Domestic Gas Prices in EU at Purchasing Power Parities (2nd Semester 2007)



Source: Eurostat

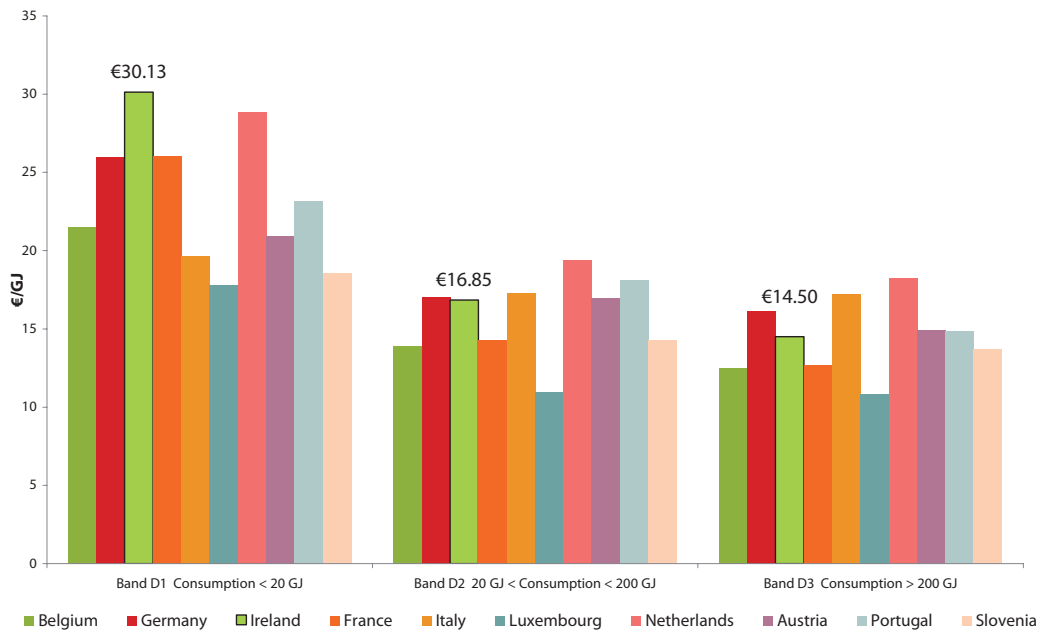
Using purchasing power parities shows that Ireland is 2% cheaper than the average in the relevant medium consumption bands.

Table 16 Domestic Gas Prices (Purchasing Power Parity) (2nd Semester 2007) – EU Comparison

Gas Prices Domestic Consumers at purchasing power parities (all taxes included)	Cost €/GJ	Cost €/kWh	Relative to EU Average
Band D1 - Small	24.891	0.090	129%
Band D2 - Medium	13.920	0.050	98%
Band D3 - Large	11.979	0.043	90%

Source: Eurostat

Figure 16 Domestic Gas Prices (€) in Eurozone (2nd Semester 2007)



Source: Eurostat

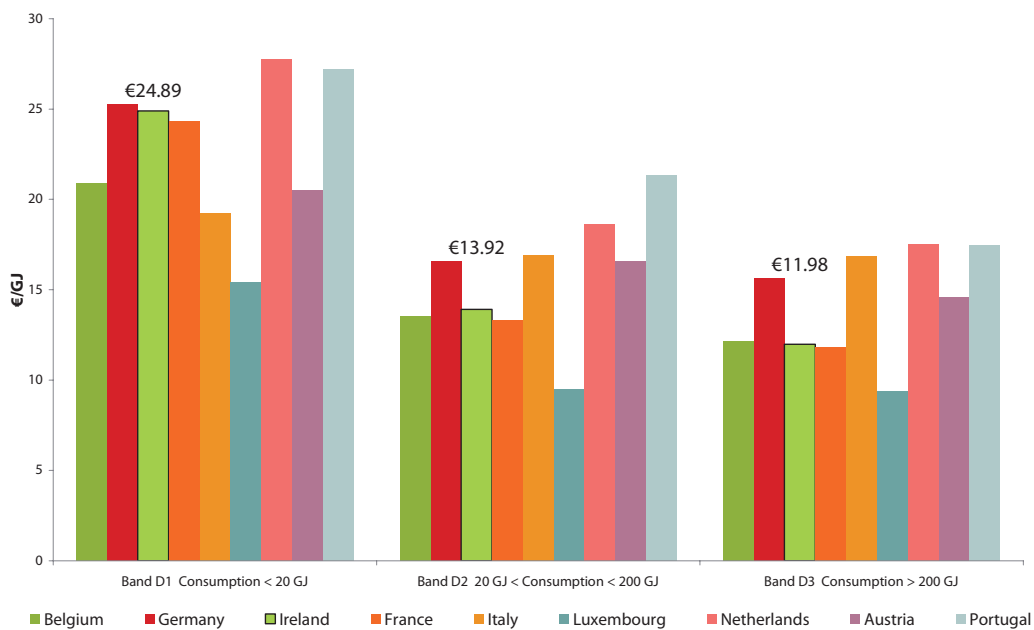
Focusing on just the Eurozone countries Ireland is just 2% above the Eurozone average in the medium band.

Table 17 Domestic Gas Prices (€) in Ireland (2nd Semester 2007) – Eurozone Comparison

Gas Prices Domestic Consumers (all taxes included)	Cost €/GJ	Cost €/kWh	Relative to Eurozone Average
Band D1 - Small	30.13	0.108	124%
Band D2 - Medium	16.85	0.061	102%
Band D3 - Large	14.50	0.052	93%

Source: Eurostat

Figure 17 Domestic Gas Prices in Eurozone at Purchasing Power Parities (2nd Semester 2007)



Source: Eurostat

Based on purchasing power parities, gas costs to the majority of domestic consumers are 12% below the average for the Eurozone countries.

Table 18 Domestic Gas Prices (Purchasing Power Parity) (2nd Semester 2007) – Eurozone Comparison

Gas Prices Domestic Consumers at purchasing power parities (all taxes included)	Cost €/GJ	Cost €/kWh	Relative to Eurozone Average
Band D1 - Small	24.891	0.090	108%
Band D2 - Medium	13.920	0.050	88%
Band D3 - Large	11.979	0.043	85%

Source: Eurostat

5 Conclusions

The new Price Directive methodology represents a major step forward in assessing the real costs of electricity and gas allowing comparisons between EU countries. It places average prices in the public domain enabling consumers to benchmark their own charges against the average. A consumer can simply look at what they are paying for gas or electricity, divide it by the quantity of gas or electricity and arrive at a unit cost that maybe above or below the average for the consumption band they fall into. If they are paying above the average then they can push their supplier for a better deal or switch to a more competitive supplier. Similarly there is now data in the public domain against which suppliers can benchmark their prices.

Comparing Ireland's gas and electricity with those of other EU countries places us at the upper end of the scale particularly in electricity prices to industry. The main factor in the high electricity prices is Ireland's dependency on generation from fossil fuel – difficulties which are reflected in other countries that also have similar generation portfolios.

Ireland is also above the EU average with regard to domestic electricity and gas prices being 20% and 17% approximately above the average. However, using purchasing power parities to remove cost of living differences between countries, electricity and gas prices to households in Ireland are 9% and 2% respectively below the EU average.

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Appendix 1 – Electricity & Gas Prices in Ireland

Table 19 Industrial Electricity Prices (€) – 2nd Semester 2007

Industrial Electricity Prices (ex VAT) weighted average across all suppliers	€/kWh
Band IA Consumption < 20 MWh	0.1543
Band IB 20 MWh < Consumption < 500 MWh	0.1385
Band IC 500 MWh < Consumption < 2,000 MWh	0.1235
Band ID 2,000 MWh < Consumption < 20,000 MWh	0.1086
Band IE 20,000 MWh < Consumption < 70,000 MWh	0.1094
Band IF 70,000 MWh < Consumption < 150,000 MWh	0.1026
Band IG Consumption > 150,000 MWh	:

Source: Eurostat

Table 20 Industrial Gas Prices (€) – 2nd Semester 2007

Industrial Gas Prices (ex VAT) weighted average across all suppliers	€/GJ	€/kWh
Band I1 Consumption < 1,000 GJ	12.57	0.045
Band I2 1,000 GJ < Consumption < 10,000 GJ	10.83	0.039
Band I3 10,000 GJ < Consumption < 100,000 GJ	9.72	0.035
Band I4 100,000 GJ < Consumption < 1,000,000 GJ	6.91	0.025
Band I5 1,000,000 GJ < Consumption < 4,000,000 GJ	:	:
Band I6 Consumption > 4,000 000 GJ	:	:

Source: Eurostat

Table 21 Household Electricity Prices (€) – 2nd Semester 2007

Household Electricity Prices (all taxes included) weighted average across all suppliers	€/kWh
Band DA Consumption < 1,000 kWh	0.458
Band DB 1,000 kWh < Consumption < 2,500 kWh	0.224
Band DC 2,500 kWh < Consumption < 5,000 kWh	0.192
Band DD 5,000 kWh < Consumption < 15,000 kWh	0.173
Band DE Consumption > 15,000 kWh	0.147

Source: Eurostat

Table 22 Household Electricity Prices (Purchasing Power Parities) – 2nd Semester 2007

Household Electricity Prices (all taxes included) weighted average across all suppliers	€_{PPP}/kWh
Band DA Consumption < 1,000 kWh	0.378
Band DB 1,000 kWh < Consumption < 2,500 kWh	0.185
Band DC 2,500 kWh < Consumption < 5,000 kWh	0.158
Band DD 5,000 kWh < Consumption < 15,000 kWh	0.143
Band DE Consumption > 15,000 kWh	0.121

Source: Eurostat

Table 23 Household Gas Prices (€) – 2nd Semester 2007

Household Gas Prices (all taxes included) weighted average across all suppliers	€/GJ	€/kWh
Band D1 Consumption < 20 GJ	30.13	0.108
Band D2 20 GJ < Consumption < 200 GJ	16.85	0.061
Band D3 Consumption > 200 GJ	14.50	0.052

Source: Eurostat

Table 24 Household Gas Prices (Purchasing Power Parities) – 2nd Semester 2007

Household Gas Prices (all taxes included) weighted average across all suppliers	€_{PPP}/GJ	€/kWh
Band D1 Consumption < 20 GJ	24.891	0.090
Band D2 20 GJ < Consumption < 200 GJ	13.920	0.050
Band D3 Consumption > 200 GJ	11.979	0.043

Source: Eurostat



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