SUSTAINABLE ENERGY AUTHORITY OF IRELAND

Electricity & Gas Prices in Ireland

2nd Semester (July – December) 2016

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Energy Policy Statistical Support Unit

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Sustainable Energy Authority of Ireland

The Sustainable Energy Authority of Ireland has a mission to play a leading role in transforming Ireland into a society based on sustainable energy structures, technologies and practices. To fulfil this mission SEAI aims at providing well-timed and informed advice to Government, and delivering a range of programmes efficiently and effectively, while engaging and motivating a wide range of stakeholders and showing continuing flexibility and innovation in all activities. SEAI's actions will help advance Ireland to the vanguard of the global green technology movement, so that Ireland is recognised as a pioneer in the move to decarbonised energy systems.

Energy Policy Statistical Support Unit (EPSSU)

SEAI 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 in meeting international reporting obligations, for advising policymakers and informing investment decisions. Based in Cork, EPSSU is SEAI'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.

Key Highlights

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

Ireland has one of the highest overall dependency of electricity generation on fossil fuels at 62%, behind Greece at 71%, the Netherlands at 79%, Poland at 84%, Cyprus at 91% and Malta at 92%. Regarding gas dependency in electricity generation, Ireland has the second highest share behind Latvia at 50%.

Business Electricity

The weighted average price of electricity to business consumers in Ireland has been above both the Europe[1] and Euro Area[2] average[3] since the second half of 2011. In the current semester (July to December 2016) the weighted average price in Ireland fell by 3.4% and was 7.8% and 1.8% above the EU and Euro Area respectively.

Table 1 summarises the key changes for the electricity consumption bands for business in Ireland for the period July to December 2016 and compares with the changes across the EU and Euro Area.

Table 1 *Business Electricity Prices (ex-VAT) – 2nd Semester 2016*

Band (GWh)	Share of business electricity in Ireland	% change since last semester			Ireland's ranking* for electricity price in Europe
		Ireland	Europe	Euro Area	
IA (<0.02)	8.7%	1.3%	-1.0%	-0.7%	6th
IB (0.02 – 0.5)	30.1%	-3.4%	-2.6%	-2.4%	7th
IC (0.5 – 2.0)	15.2%	-6.2%	-2.3%	-1.9%	6th
ID (2.0 – 20)	26.5%	0.1%	-2.2%	-1.9%	8th
IE (20 – 70)	10.2%	-3.4%	-2.3%	-1.8%	9th
IF (70 – 150)	9.3%	-3.3%	2.8%	4.7%	9th

Source: Eurostat and SEAI ** A ranking of 1 means most expensive*

Since the last semester (January to June 2016), all consumption bands, experienced decreases in the price of electricity to business in Ireland with the exception of bands IA and ID. The changes in the price in this semester ranged from a decrease of 6.2% in band IC to an increase of 1.3% in band IA.. The reductions were greater in Ireland in this semester compared with the EU and Euro Area, except for band ID where price increased in Ireland. In terms of ranking, the consumption bands IE and IF were the lowest ranking, at ninth most expensive in the EU and bands IA and IC were the highest at sixth.

Business Gas

Since 2013, the weighted average price of gas to business consumers in Ireland has fluctuated between the EU and Euro Area average. In the current semester it increased by 3.6% and was 9% above the EU and 5% above Euro Area.

Table 2 summarises the key changes for the consumption bands in Ireland for the period July to December 2016 and compares with the changes across the Europe and EU Area.

Table 2 *Business Gas Prices (ex-VAT) – 2nd Semester 2016*

Band (GWh)	Share of business gas in Ireland	% change since last semester			Ireland's ranking* for electricity price in Europe
		Ireland	Europe	Euro Area	
I1 (<0.28)	10.4%	2.3%	-0.4%	0.6%	6th
I2 (0.28 – 2.8)	16.7%	10.6%	-3.4%	-2.5%	6h
I3 (2.8 – 28)	19.9%	3.4%	-4.7%	-3.1%	5th
I4 (28 – 280)	36.5%	7.4%	-3.6%	-2.4%	6th
I5 (280 – 1,100)	16.5%	..	1.4%	2.8%	18th

Source: Eurostat and SEAI ** A ranking of 1 means most expensive*

Prices increased in the all consumption bands in Ireland while prices fell in all consumption bands in the EU and Euro

1 Europe here includes all the European Union 28 countries plus Norway and Turkey.
2 The Euro Area consists of those European Union countries which have adopted the euro as their currency, currently 18 member states.
3 We present weighted average prices for Ireland together with simple average of the bands for the EU and the Euro Area. Although not fully comparable, they allow some insights to be given.

Area with the exception of band I5. In consumption band I3, price increased in Ireland by 3.4% while it fell in the EU and Euro Area by 4.7% and 3.1% respectively. Ireland was 20% above the EU average in band I2 and 7% below in band I5.

Households Electricity

Between 2011 and the end of 2015, the weighted average price of electricity to household consumers has been above the EU average. In the last semester it went below the EU average and remained below in this semester at 1.3% below the EU and 9.2% below Euro Area. The weighted average price of electricity to households in Ireland increased by 2.5% in the second half of 2016.

Table 3 summarises the key changes for the electricity consumption bands for households in Ireland for the period July to December 2016 and compares with the changes across the EU and EU Area.

Table 3 *Household Electricity Prices (ex-VAT) – 2nd Semester 2016*

Band (MWh)	Share of household electricity in Ireland	% change since last semester			Ireland's ranking* for electricity price in Europe
		Ireland	Europe	Euro Area	
DA (<1.0)	2.1%	8.4%	1.8%	0.9%	4th
DB (1.0 – 2.5)	11.5%	5.2%	1.1%	2.2%	4th
DC (2.5 – 5.0)	37.8%	0.8%	0.1%	0.9%	6th
DD (5.0 – 15)	41.4%	0.1%	-0.1%	0.4%	7th
DE (>15)	7.2%	-3.7%	-1.2%	-1.7%	10th

Source: Eurostat and SEAI ** A ranking of 1 means most expensive*

The price increased in all bands in Ireland except for band DE where it fell by 3.7%. Ireland was 14% and 3% above the EU average in DC and DD respectively and was sixth and seventh most expensive respectively in the EU in both bands.

Households Gas

The price of gas to household consumers in Ireland was below both the EU and Euro Area since 2009. In the current semester it was 6.5% and 17.8% below the EU and Euro Area respectively. The weighted average price of gas to households in Ireland increased by 4.5% in the second half of 2016.

Table 4 summarises the key changes for the consumption bands in Ireland for the period July to December 2016 and compares with the changes across the EU and EU Area.

Table 4 *Household Gas Prices (ex-VAT) – 2nd Semester 2016*

Band (MWh)	Share of household gas in Ireland	% change since last semester			Ireland's ranking* for electricity price in Europe
		Ireland	Europe	Euro Area	
D1 (<5.6)	6.3%	13.6%	11.3%	13.2%	12th
D2 (5.6 – 56)	91.9%	4.0%	2.3%	5.6%	7th
D3 (>56)	1.8%	-1.6%	-4.0%	-1.3%	6th

Source: Eurostat and SEAI ** A ranking of 1 means most expensive*

In the main gas band, D2, the price increased in Ireland at a higher rate than the EU but lower than the Euro Area. Prices increased by 4.0% in Ireland compared with increases of 2.3% and 5.6% in the EU and the Euro Area respectively. Ireland's ranking moved to 7th most expensive in the EU and was 7% above the EU average but 6% below the Euro Area.

Key Data

Business Electricity Prices (ex-VAT) – 2nd Semester 2016

Business Electricity	Band Share	Ireland c/kWh	Ireland relative to:		Ranking* in:		Semester price change:		
			EU	Euro Area	EU	Euro Area	Ireland	EU	Euro Area
Band IA	8.7%	19.6	106%	98%	6	6	1.3%	-1.0%	-0.7%
Band IB	30.1%	15.4	112%	104%	7	7	-3.4%	-2.6%	-2.4%
Band IC	15.2%	12.5	109%	102%	6	5	-6.2%	-2.3%	-1.9%
Band ID	26.5%	10.2	102%	97%	8	6	0.1%	-2.2%	-1.9%
Band IE	10.2%	8.6	101%	99%	9	7	-3.4%	-2.3%	-1.8%
Band IF	9.3%	7.8	102%	102%	9	7	-3.3%	2.8%	4.7%
Weighted Average	-	**12.5**	**108%**	**102%**	-	-	**-3.4%**	-	-

Source: Eurostat and SEAI

Business Gas Prices (ex-VAT)– 2nd Semester 2016

Business Gas	Band Share	Ireland c/kWh	Ireland relative to:		Ranking in:		Semester price change:		
			EU	Euro Area	EU	Euro Area	Ireland	EU	Euro Area
Band I1	10.4%	5.2	112%	107%	6	4	2.3%	-0.4%	0.6%
Band I2	16.7%	4.4	120%	113%	6	4	10.6%	-3.4%	-2.5%
Band I3	19.9%	3.4	113%	108%	5	4	3.4%	-4.7%	-3.1%
Band I4	36.5%	2.6	108%	105%	6	5	7.4%	-3.6%	-2.4%
Band I5	16.5%	2.0	93%	90%	18	11	..	1.4%	2.8%
Weighted Average	-	**3.5**	**109%**	**105%**	-	-	**3.6%**	-	-

Source: Eurostat and SEAI

Residential Electricity Prices (all taxes included) – 2nd Semester 2016

Household Electricity	Band Share	Ireland c/kWh	Ireland relative to:		Ranking in:		Semester price change:		
			EU	Euro Area	EU	Euro Area	Ireland	EU	Euro Area
Band DA	2.1%	44.3	132%	119%	4	4	8.4%	1.8%	0.9%
Band DB	11.5%	29.8	131%	123%	4	3	5.2%	1.1%	2.2%
Band DC	37.8%	23.4	114%	106%	6	5	0.8%	0.1%	0.9%
Band DD	41.4%	19.9	103%	94%	7	6	0.1%	-0.1%	0.4%
Band DE	7.2%	16.6	90%	83%	10	9	-3.7%	-1.2%	-1.7%
Weighted Average	-	**22.6**	**99%**	**91%**	-	-	**2.5%**	-	-

Source: Eurostat and SEAI

Residential Gas Prices (all taxes included) – 2nd Semester 2016

Household Gas	Band Share	Ireland c/kWh	Ireland relative to:		Ranking in:		Semester price change:		
			EU	Euro Area	EU	Euro Area	Ireland	EU	Euro Area
Band D1	6.3%	8.3	82%	71%	12	10	13.6%	11.3%	13.2%
Band D2	91.9%	6.8	107%	94%	7	5	4.0%	2.3%	5.6%
Band D3	1.8%	6.0	109%	97%	6	4	-1.6%	-4.0%	-1.3%
Weighted Average	-	**6.9**	**94%**	**82%**	-	-	**4.5%**	-	-

Source: Eurostat and SEAI

**Note: A ranking of 1 denotes most expensive.*
EU here includes all the European Union 28 countries plus Norway and Turkey.
The Euro Area consists of those European Union countries which have adopted the euro as their currency, currently 18 member states.

*Bands mentioned in the table refer to consumption bands defined in the Transparency of Gas and Electricity Prices Directive. The consumption levels for each band is shown at the start of sections **4.1**, **4.2**, **5.1** and **5.2** and in Appendix 1 – Electricity and Gas Prices in Ireland.*

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1 Introduction

The fluctuations in energy prices over the past number of years are a key concern for all energy consumers in Ireland, as they impact on the rate of inflation and on competitiveness. Understanding the main contributing factors and the precise impacts of energy price changes is of key importance in developing appropriate, sensible and measured responses from businesses, householders and policymakers. 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 changes and competition. This report seeks to inform that analysis and thereby increase the understanding of energy price changes in Ireland.

This report draws on the results of the improved EU methodology for gathering energy price data that came into effect on 1 January 2008. The focus of the report is on the electricity and gas price data gathered under this improved methodology and on the period July – December 2016, i.e. the second semester of 2016 (S2 2016). Revisions to Eurostat's data have been incorporated into this report. Eurostat data presented in this report are as posted on Eurostat's website[1] on 5 May 2017.

Also included in this report is a disaggregation of electricity prices into the components of energy and supply, network costs, and taxes and levies for the second semester of 2016 (S2 2016). See *Sections 4.1.6* and *5.1.6*.

Charts showing the percentage change in prices in the last semester and the last 12 months show the change in national currency rather than the euro values. This better reflects the actual price inflation in the individual countries as it omits currency fluctuations.

The report is structured as follows:

- *Section 2* provides a context for the analysis, touching on global factors affecting energy prices and discussing some characteristics that particularly impact on prices in Ireland;
- *Section 3* presents weighed average prices for Ireland and for now simple averages for the EU and Euro Area.
- *Section 4* focuses on electricity and gas prices paid by industrial and services (business) customers, informing the discussion on impacts of energy price changes on business in Ireland;
- *Section 5* focuses on price changes for residential customers, comparing prices for households in Ireland with those of other EU Member States;
- *Appendix 1* shows the average electricity and natural gas prices in the various consumption bands in Ireland during the S2 2016.

Six separate annexes are available in pdf from www.seai.ie/statistics detailing, for the latest five semesters, for all countries and all consumption bands, the electricity and gas prices to business and residential consumers. There are separate annexes for gas prices in GJ and kWh. Tables in the annexes show the ex-tax, ex-VAT and all-taxes-included prices for all categories.

SEAI acknowledges the cooperation of electricity and gas suppliers in providing the information necessary for Ireland to comply with the EU Regulation (2016/1952)[2] and enabling this analysis to be carried out.

This is the eighteenth edition of this report focusing on energy prices. Feedback and comments on the report are welcome and should be sent by post to the address on the back cover or by e-mail to epssu@seai.ie.

Readers may also be interested in previous statistical analysis related to energy prices carried out by SEAI. The report *Energy in Ireland 1990 – 2015 (2016 Report)* tracks changes in aggregated energy prices from 2000, based on International Energy Agency (IEA) data, available from http://www.seai.ie/Energy-Data-Portal/Energy%20Data%20Publications/.

1 http://ec.europa.eu/eurostat/web/energy/data/database
2 http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=uriserv:OJ.L_.2016.311.01.0001.01.ENG

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).

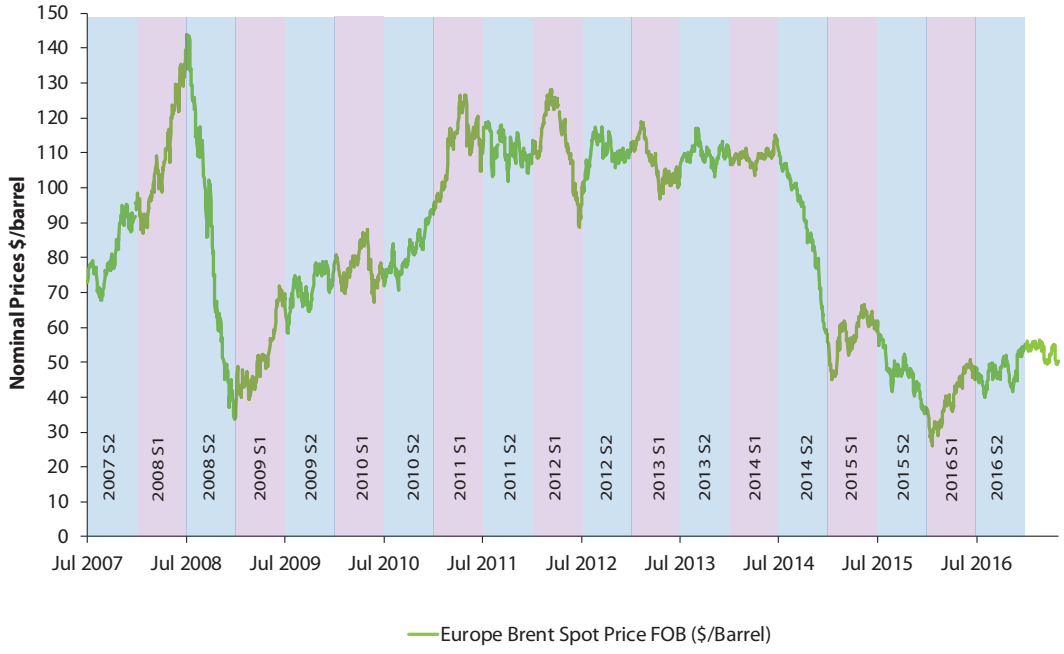
2.1 Global Energy Prices

The most significant factor affecting energy prices in Ireland is the instability of global oil prices which have shown dramatic fluctuations in recent years. This has particular effect in Ireland due to our high dependence on oil. In addition there is the knock-on impact that oil prices have on other energy prices, in particular natural gas, and as a consequence electricity prices.

According to Ireland's 2015[3] energy balance, oil accounts for 57% of Total Final Consumption (TFC)[4] in Ireland, 97% of transport TFC, 36% of residential TFC, 19% of industry TFC, 19% of services TFC and 48% of Ireland's primary energy supply[5]. According to EU statistics[6], Ireland's oil dependence (as a proportion of primary energy supply) is the fifth highest in the EU.

Figure 1 tracks the nominal crude oil prices[7] over the period 2007 – 2017. As shown in *Figure 1*, crude oil prices were quite high between 2011 and 2014 following earlier volatility. From July 2014 the price fell steadily to reach $55/barrel by the end of December. The price of oil fell to a low of $46/barrel in January 2015 before rebounding somewhat to €65/barrel in May but fell throughout the second half of 2015 to a low of $27/barrel in January 2016. It increased steadily throughout the first half of 2016 to just under €50/barrel at the end of June and remained at and average of €48/barrel for the second half of 2016.

Figure 1 *Crude Oil Price Trend 2007 – to 1 May 2017*



Source: EIA[8]

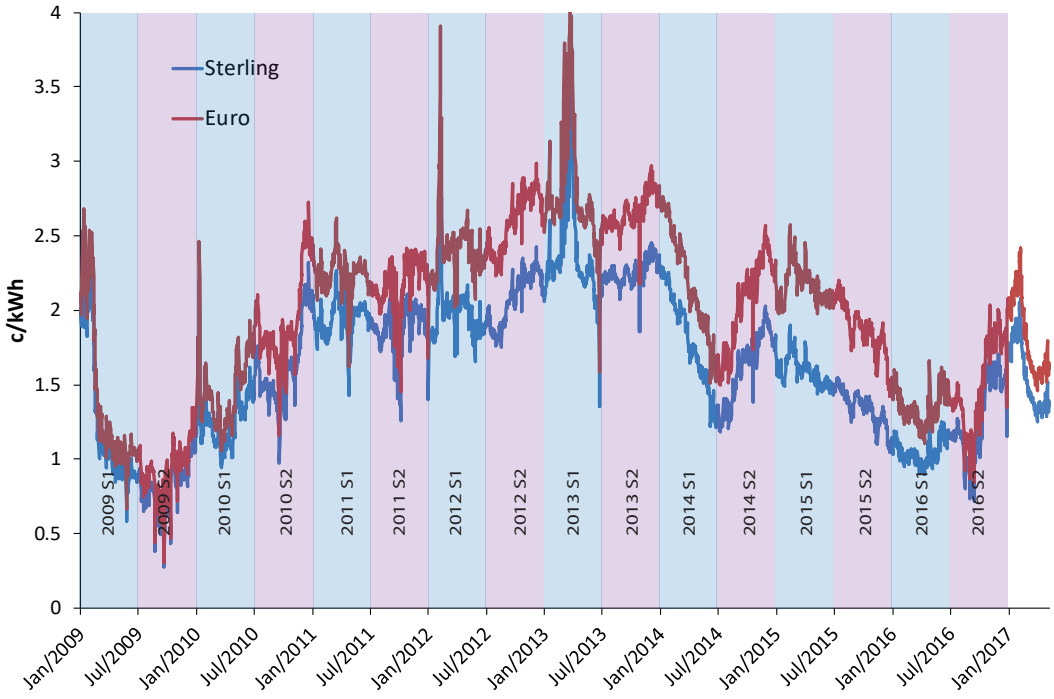
3 For the latest energy balance see www.seai.ie/statistics
4 TFC represents all energy that end-users are billed for directly.
5 Primary Energy Supply is the TFC plus primary energy used in transformation (electricity generation, oil refining, peat briquetting, etc.)
6 Eurostat, Energy Statistics Database, http://ec.europa.eu/eurostat/web/energy/data/database,
7 These prices are daily spot prices of Brent crude oil, a widely used 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 US Department of Energy that publishes price energy data at www.eia.doe.gov/emeu/international/contents.html

Figure 2 *Exchange Rates 2008 to 9 May 2017*

Source: Central Bank of Ireland

Figure 2 tracks exchange rates from 2008 to 2017. These currency changes contributed to the changing cost of gas and subsequently electricity in Ireland. During the second half of 2016 the euro fell against the dollar by 1.6% on average but increased in value against sterling following the Brexit referendum by 10.3% on average compared with the previous semester.

Figure 3 *Natural Gas System Average Prices (p and c/kWh) (Actual Day UK Balancing Point) 2009 – to 8 May 2017*



Source: National Grid UK

Figure 3 shows the 'actual day' System Average Price for gas at the UK balancing point. This is the average price of

all gas traded via the On the Day Commodity Market (OCM) mechanism[9]. This illustrates the trend in the wholesale price of gas and the effect of the currency fluctuation on the price paid in Ireland.

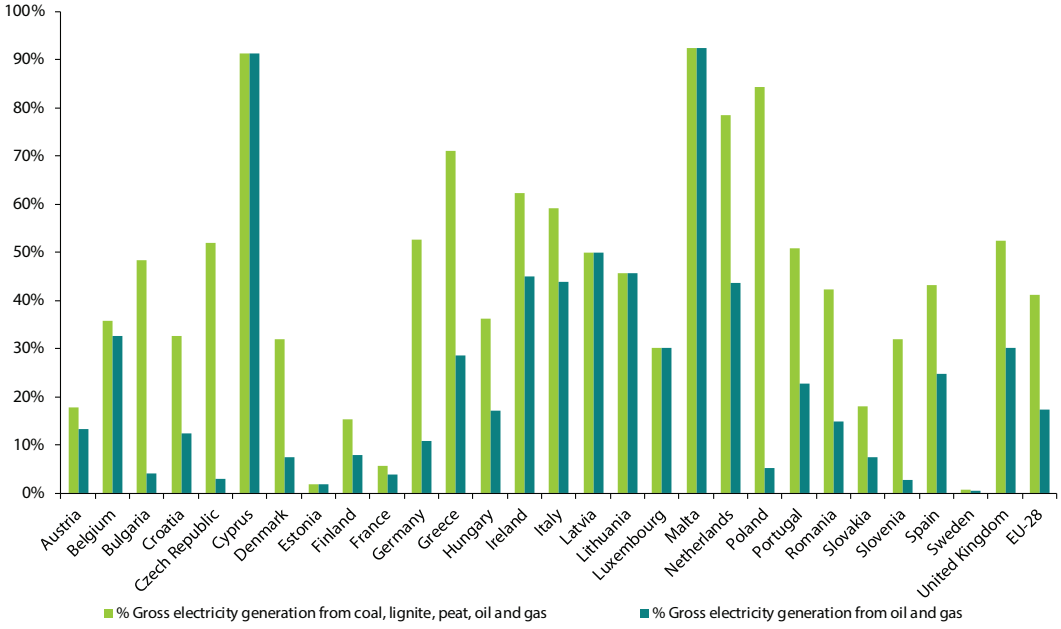
The price of gas fell steadily from February 2015 until September 2016, falling by 45% before increasing again by approximately 42% by the end of the year. On average the price during the second semester of 2016 (S2 2016) was 23% higher than the first semester of 2016 (S1 2016) in sterling terms and 11% higher in euro terms. Compared the same semester in 2015 prices were 3.4% lower in sterling terms and 26% lower in euro terms.

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. This is particularly significant with respect to an electricity fuel mix which relies on internationally traded fuels such as gas, oil and coal. During periods of volatile price movements in these fuels there is a strong knock-on impact on electricity prices. Other factors that affect electricity prices 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).

Figure 4 and *Table 5* show the percentage of electricity generation in the EU that is fossil fuel based (coal, lignite, peat oil and gas) and, separately, the proportion of electricity generated from gas and oil.

Figure 4 *Gross Electricity Generation from Fossil Fuels (excl. peat) in Europe (2015)*



Source: Based on Eurostat data

As highlighted in *Table 5*, Ireland has a high overall dependency of electricity generation on fossil fuels at 62%, behind Greece at 71%, the Netherlands at 79%, Poland at 84%, Cyprus at 91% and Malta at 92%. Ireland also has a high dependency on oil and gas generation, at 45%. Apart from Malta and Cyprus, in 2015 only Latvia at 50% and Lithuania at 46% have higher gas and oil generation dependency than Ireland.

Regarding gas dependency in electricity generation, Ireland has second highest share at 44% behind Latvia at 50%.

9 http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=4518

Table 5 *Percentage of Gross Electricity Generation from Fossil Fuels (excl. peat) in Europe (2015)*

Percentage electricity generated from:	Austria	Belgium	Bulgaria	Croatia	Czech Republic	Cyprus	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland
Coal, Oil and Gas	18%	36%	48%	33%	52%	91%	32%	2%	15%	6%	53%	71%	36%	**62%**
Gas and Oil	13%	33%	4%	12%	3%	91%	7%	2%	8%	4%	11%	28%	17%	**45%**
Gas	12%	32%	4%	10%	3%	0%	6%	1%	8%	3%	10%	18%	17%	**44%**

Percentage electricity generated from:	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	EU-28
Coal, Oil and Gas	59%	50%	46%	30%	92%	79%	84%	51%	42%	18%	32%	43%	1%	52%	41%
Gas and Oil	44%	50%	46%	30%	92%	44%	5%	23%	15%	7%	3%	25%	0%	30%	17%
Gas	39%	50%	40%	30%	0%	42%	4%	20%	14%	6%	3%	19%	0%	29%	15%

Source: Eurostat

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 from electricity generation locations to consumers. Rapid growth in electricity demand in Ireland (2.9% per annum average annual growth 1990 – 2015) coupled with a long period of significant under investment in the electricity transmission and distribution networks led to a network investment programme being established in 2000, in both transmission and distribution networks.

The Transmission System Operator (TSO) and the Transmission Asset Owner (TAO) are allowed to recover revenue from the Transmission Use of System (TUoS) customer over the period 2016 – 2020, to cover their costs. The allowed revenues are reviewed annually. For the Price Review 4 (PR4) period 2016 – 2020, the Commission for Energy Regulation (CER) approved an expenditure of €1.8 billion for the transmission system (Decision Paper CER/15/296[10]) and €2.7 billion for the distribution system (Decision Paper CER/15/295[11]).

According to the CER[12], the transmission average unit price (AUP) for the tariff period 1 October 2016 – 30 September 2017 is estimated to be 1.34 c/kWh, a 1.44% increase from the previous twelve-month period. The rise in the transmission AUP according to the CER can be attributed mostly to the following factors:

- The increase in overall revenue to be collected in 2017 as per the PR4 determination;
- A key element driving the increase is deferred capital expenditure from PR3 in addition to forecast new connections;
- An increase to asset management costs (opex) due to successful planning applications for new line builds; and
- An increase to repairs and maintenance costs driven by a reduction in lone working and implementation of health and safety processes.

For the distribution system the AUP for Distribution Use of System charge for the 1 October 2016 – 30 September 2017 period is 3.4 c/kWh. This is a 3.85% increase on the previous twelve-month period.

The natural gas transmission network in Ireland has been operated by Gas Networks Ireland (GNI) since 2008. The transmission network consists of 2,433 km of high pressure pipelines while the low pressure distribution networks is 11,339 km[13]. The Irish system has three compressor stations, Beattock and Brighouse Bay in southwest Scotland,

10 http://www.cer.ie/docs/001043/CER15296%20Decision%20on%20TSO%20and%20TAO%20Transmission%20Revenue%20for%202016%20to%202020%20(1).pdf
11 http://www.cer.ie/docs/001044/CER15295%20Decision%20on%20DSO%20PR4%20Distribution%20Revenue%202016%20to%202020.pdf
12 http://www.cer.ie/docs/000982/CER14427%20Transmisson%20Revenue%20Information%20Note%202015.pdf
13 http://www.gasnetworks.ie/Global/Gas%20Industry/BGN%20Gas%20Industry%20Website%20Content/Gas%20Industry%20Documents/GNI_

and Midleton near Cork. The high pressure transmission network conveys gas from entry points at Inch, Moffat and, since January 2016, Bellanaboy to directly connected customers and distribution networks throughout Ireland, as well as to connected systems at exit points in Scotland (the Scotland–Northern Ireland Pipeline) and the Isle of Man.

The maximum import capacity for the interconnectors is determined by the capability of the compressor stations to deliver high pressure flows into the pipelines. This current limit is 1.24 million cubic metres per hour. According to the latest forecasts from Gas Networks Ireland (GNI) Network Development Plan 2016, Ireland's transmission network infrastructure has sufficient capacity to meet future gas flow requirements in the short to medium term.

The current set of revenue controls for the gas transmission and distribution networks (CER/12/196) was published on 23 November 2012 and runs until September 2017. During the period yearly updates will be completed. The overall weighted distribution tariffs (CER/16/244) increased in nominal terms by 0.2% for the period 1 October 2016 – 30 September 2017. Distribution Network Tariffs for 2016/17 increased by 0.2% compared to 2015/'16. Network tariffs are charged to gas suppliers who may choose to pass them on to their customers. At present distribution network tariffs make up approximately 30% of a domestic customers bill. The network tariff changes for 2016/'17 equate to approximately 0.06% of an average residential gas customer's bill. On an average customers bill this tariff change would equate to approximately €0.50 of an average residential gas customers annual bill.

Transmission network tariffs (CER/16245) in nominal terms are down 1.3% versus 2015/'16. Network tariffs are charged to gas suppliers who may choose to pass them on to their customers. At present transmission network tariffs make up approximately 10% of a domestic customers bill. The network tariff changes for 2016'17 equate to approximately 0.1% of change to an average residential gas customer's bill. This tariff change would equate to approximately €0.10 of a decrease on an average residential gas customers bill.

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

Another 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 and climate-change levies), so the level of ex-VAT taxes is important. Householders cannot generally recover any taxes so the level of total tax levied is important. *Table 6* to *Table 9* show the level of taxes applicable to an assessment of price comparisons in Europe for industry and households. In Ireland's case there were no non-recoverable taxes on gas[14] for industry up to the second semester 2009 (S2 2009) but since 1 May 2010 carbon tax has been levied. There has been a small level of excise duty levied on non-household use of electricity[15] since October 2008. 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 of a comparison with the other countries.

In addition a Public Service Obligation (PSO) levy is charged to all electricity customers. The PSO levy is designed to support certain peat, gas and renewable generation plants as mandated by Government and approved by the European Commission. The underlying policy objective is the security of the energy supply – including the use of indigenous fuels and the promotion of renewable energy generation. *Figure 5* shows the PSO cost breakdown for the period 2010 – 2017.

Peat accounted for 35% of the positive costs of the total PSO levy shown in *Figure 5* for 2015/16, renewables 52% and capacity 14%. For the 2016/17 period, renewables account for 69% of the positive costs, peat for 29% and other 2%.

From October 2015 to Sepetember 2016[16] domestic electricity consumers have been charged a flat rate of €5.01 per month for PSO, a 6.5% increase on the previous year. Small business consumers have had a flat rate charge of €17.80 per month in 2015/16, a 3.2% decrease on 2014/15. Medium and large business consumers are being charged at a rate of €2.76 per month per kVA of maximum import capacity – down 3.2% on the previous year.

From October 2016 to Sepetember 2017[17] domestic electricity consumers are charged a flat rate of €6.02 per month for PSO, a 20.2% decrease on the previous year. Small business consumers have had a flat rate charge of €21.18 per month in 2016/17, an 18.5% decrease on 2015/16. Medium and large business consumers are being charged at a rate of €3.41 per month per kVA of maximum import capacity – up 23.5% on the previous year.

NetworkDevPlan_2016.pdf

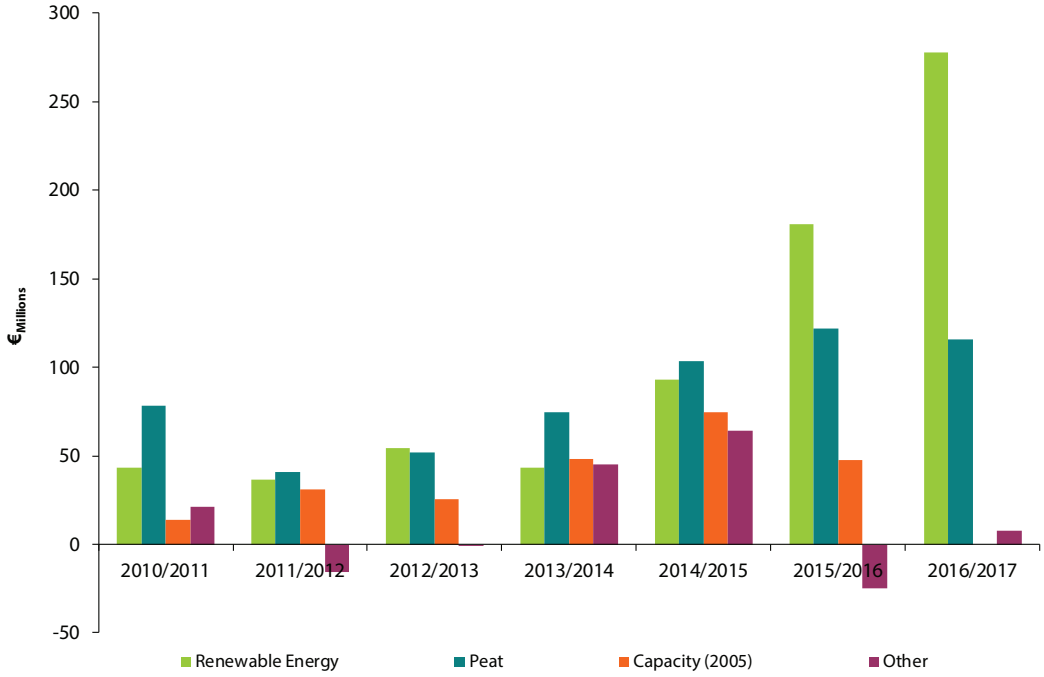
14 Emissions trading has resulted in an increase in wholesale electricity prices affecting all customers. The level of increase varies across the EU and depends on the carbon content of fuel mix used in electricity generation and the level of price pass-through to customers. This increase is not explicitly quantified and forms part of the basic electricity price. Emissions trading will also tend to increase the cost of using gas for companies involved in emissions trading. This is not reflected in the basic price nor is it captured in the recoverable or non-recoverable taxes.

15 In accordance with Directive 2003/96/EC, the Finance Act 2008 introduced excise duty, called electricity tax, on supplies of electricity made on or after 1 October 2008. There are two tax rates: €0.50 per megawatt hour (MWh) for electricity supplied for business use; and €1 per MWh, for electricity supplied for non-business use. This is not applied to electricity for residential use.

16 CER (July, 2014), *Public Service Obligation 2014/2015 (CER/14/361)*, www.cer.ie

17 CER (July, 2015), *Public Service Obligation 2015/2016 (CER/15/142)*, www.cer.ie

Figure 5 *Public Service Obligation Levy Cost Breakdown 2010 – 2017*



Source: Commission for Energy Regulation (CER)

The CER notes that the changes for 2016/17 were due to:

- expected decreases in wholesale electricity prices (i.e. the estimated wholesale electricity price is 17% lower than the price used to calculate the 2015/16 PSO);
- an expected 33% increase in the number of renewable generation plants qualifying for PSO payments;
- the capacity payment in the Single Electricity Market of €5.08/MWh for 2016/17 is slightly lower than the capacity payment of €5.77/MWh in the current 2015/16 period. This reduces the forecast revenues from the market and hence increases the PSO; and,
- an under recovery of monies by renewable generators and ESB's peat plants within the 2014/15 PSO period, which is captured by an R-Factor adjustment.

The CER also notes that the following also contributed downward pressure on the PSO Levy:

- Termination of contracts. The termination of PSO contracts for Tynagh, Aughinish and Edenderry will result in these plants receiving no ex-ante support from the PSO for the 2016/17 PSO period. This is reducing the levy by circa €55 million compared to the current period;
- Contracts for Difference (CfDs). For 2016/17, PSO-related CfDs are reducing the levy by €14.0 million. This reflects an SMP outturn for 2014/15 which on average was lower than the CfD strike price for the period overall. This relates to the PSO-supported generation contracted through Electric Ireland;

Table 6 shows the basic prices for electricity and the non-recoverable taxes for industrial electricity consumers whose annual consumption is between 500 and 2,000 MWh[18]. The Member States are ranked in increasing order of the basic price plus non-recoverable taxes.

The non-recoverable tax varies from zero in Malta to €6.99 per 100 kWh in Germany, the latter representing 47% of the ex-VAT price of electricity. Non-recoverable tax on electricity to business in Ireland amounted to €1.30 per 100 kWh or 10.4% of the ex-VAT price – below the average for non-zero, non-recoverable tax applied in the EU. The average non-recoverable tax on electricity to business in the EU was 30% and in the Euro Area it was 34% of the ex-VAT price.

Table 6 *Electricity Prices and Taxes for Industrial Consumers in Band IC (1st semester 2017)*

	Basic price plus non-recoverable taxes	Basic price	Non-recoverable taxes	Non-recoverable taxes
	in € per 100 kWh	in € per 100 kWh		as % of ex-VAT price
Sweden	6.56	6.51	0.05	0.8%
Finland	6.94	6.24	0.70	10.1%
Czech Republic	7.32	7.21	0.11	1.5%
Romania	7.71	6.43	1.28	16.6%
Bulgaria	7.88	7.78	0.10	1.3%
Hungary	7.96	7.19	0.77	9.7%
Netherlands	8.05	6.57	1.48	18.4%
Norway	8.13	6.39	1.74	21.4%
Poland	8.15	7.69	0.46	5.6%
Slovenia	8.32	6.66	1.66	20.0%
Luxembourg	8.58	7.67	0.91	10.6%
Croatia	8.77	8.25	0.52	5.9%
Lithuania	8.82	7.30	1.52	17.2%
France	8.93	6.52	2.41	27.0%
Estonia	8.96	7.55	1.41	15.7%
Denmark	9.36	6.46	2.90	31.0%
Austria	10.04	6.85	3.19	31.8%
Spain	10.29	9.79	0.50	4.9%
Slovakia	11.12	10.67	0.45	4.0%
Greece	11.15	8.75	2.40	21.5%
Portugal	11.35	9.51	1.84	16.2%
Belgium	11.58	8.79	2.79	24.1%
Latvia	12.01	9.33	2.68	22.3%
Ireland	**12.45**	**11.15**	**1.30**	**10.4%**
United Kingdom	12.78	9.70	3.08	24.1%
Cyprus	12.95	12.11	0.84	6.5%
Malta	13.99	13.99	0.00	0.0%
Germany	14.92	7.93	6.99	46.8%
Italy	15.56	8.79	6.77	43.5%
Euro Area	12.18	8.03	4.15	34.1%
EU-28	11.40	8.01	3.39	29.7%

Source: Eurostat

In the case of gas prices to industrial customers, there is one Member State, Lithuania, for which the non-recoverable taxes are zero, as shown in *Table 7*. These prices relate to gas customers who use between 10,000 and 100,000 GJ (2,800 – 28,000 MWh) of gas per annum[19].

The non-recoverable taxes vary from zero to €1.57 per 100 kWh in Finland, representing 36% of the ex-VAT price of gas. Non-recoverable tax on gas to business in Ireland amounted to €0.34 per 100 kWh, or 10% of the ex-VAT price. The average non-recoverable tax on gas to business was 11% in the EU and 11.4% in the Euro Area.

18 Based on business electricity consumption band IC which accounts for 15.2% of business electricity consumption.
19 Based on business gas consumption band I3 which accounts for 21.0% of business gas consumption.

Table 7 *Gas Prices and Taxes for Industrial Consumers in Band I3 (1st semester 2017)*

	Basic price plus non-recoverable taxes	Basic price	Non-recoverable taxes	Non-recoverable taxes
	in € per 100 kWh	in € per 100 kWh		as % of ex-VAT price
Bulgaria	1.92	1.82	0.10	5.2%
Estonia	2.34	2.06	0.28	12.0%
Lithuania	2.45	2.45	0.00	0.0%
Latvia	2.48	2.31	0.17	6.9%
United Kingdom	2.49	2.35	0.14	5.6%
Belgium	2.57	2.33	0.24	9.3%
Czech Republic	2.58	2.46	0.12	4.7%
Spain	2.60	2.54	0.06	2.3%
Poland	2.61	2.56	0.05	1.9%
Romania	2.62	1.79	0.83	31.7%
Italy	2.73	2.56	0.17	6.2%
Hungary	2.75	2.55	0.20	7.3%
Croatia	2.75	2.71	0.04	1.5%
Portugal	2.76	2.70	0.06	2.2%
Greece	2.83	2.28	0.55	19.4%
Netherlands	2.85	2.25	0.60	21.1%
Denmark	3.01	2.09	0.92	30.6%
Slovakia	3.12	2.99	0.13	4.2%
Slovenia	3.26	2.76	0.50	15.3%
Luxembourg	3.30	3.17	0.13	3.9%
Germany	3.32	2.91	0.41	12.3%
Ireland	**3.39**	**3.05**	**0.34**	**10.0%**
Austria	3.41	2.74	0.67	19.6%
France	3.78	3.33	0.45	11.9%
Sweden	3.84	2.99	0.85	22.1%
Finland	4.40	2.83	1.57	35.7%
Euro Area	3.15	2.79	0.36	11.4%
EU-28	3.01	2.68	0.33	11.0%

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 8*. These prices are for customers who use between 2,500 and 5,000 kWh per annum[20]. The VAT charges are shown separately from other taxes for the purposes of comparison.

There are three Member States listed in *Table 8* which apply VAT charges only to residential customers. Total taxes (VAT plus other taxes) vary from €0.61 per 100 kWh (Malta) to €20.91 per 100 kWh (Denmark), or between 4.8% and 68% of total prices. For Ireland, on average, taxes and levies account for 19.7% of the final electricity prices to household consumers. The average non-recoverable tax on electricity to households in the EU was 36%, and in the Euro Area it was 39% of the ex-VAT price.

20 Based on household electricity consumption band DC which accounts for 36% of electricity consumption in households.

Table 8 *Electricity Prices and Taxes for Residential Consumers in Band DC (1st semester 2017)*

	Price including all taxes	Basic price	Other taxes (excl. VAT)	VAT	All taxes
	in € per 100 kWh		in € per 100 kWh		as % of total price
Bulgaria	9.38	7.81	0.00	1.57	16.7%
Hungary	11.25	8.86	0.00	2.39	21.2%
Lithuania	11.71	8.18	1.50	2.03	30.1%
Romania	12.33	8.93	1.35	2.05	27.6%
Estonia	12.38	9.60	1.41	1.37	22.5%
Malta	12.74	12.13	0.00	0.61	4.8%
Croatia	13.31	10.18	0.47	2.66	23.5%
Poland	13.52	10.53	0.46	2.53	22.1%
Czech Republic	14.21	11.62	0.11	2.48	18.2%
Slovakia	15.37	12.49	0.32	2.56	18.7%
Finland	15.45	10.20	2.26	2.99	34.0%
Netherlands	15.92	11.89	1.27	2.76	25.3%
Cyprus	16.21	12.85	0.85	2.51	20.7%
Latvia	16.24	10.74	2.68	2.82	33.9%
Slovenia	16.29	11.17	2.19	2.93	31.4%
Norway	16.78	15.25	0.28	1.25	9.1%
Luxembourg	16.98	13.27	2.45	1.26	21.8%
France	17.11	11.06	3.53	2.52	35.4%
Greece	17.23	11.85	3.43	1.95	31.2%
United Kingdom	18.31	14.79	2.65	0.87	19.2%
Sweden	19.62	12.81	2.89	3.92	34.7%
Austria	20.10	12.22	4.53	3.35	39.2%
Spain	22.84	17.96	0.91	3.97	21.4%
Ireland	**23.38**	**18.78**	**1.82**	**2.78**	**19.7%**
Italy	23.40	14.16	7.12	2.12	39.5%
Portugal	23.64	12.46	6.76	4.42	47.3%
Belgium	27.45	18.15	4.88	4.42	33.9%
Germany	29.77	13.82	11.20	4.75	53.6%
Denmark	30.84	9.93	14.74	6.17	67.8%
Euro Area	22.04	13.40	5.33	3.31	39.2%
EU-28	20.54	13.15	4.44	2.95	36.0%

Source: Eurostat

Table 9 shows the level of taxes applied to gas prices for residential customers within the EU who have an annual consumption of between 5,600 and 56,000 kWh per annum[21]. As in the case of electricity, the taxes applied to residential customers generally exceed those applied to industrial customers.

For residential customers there are seven Member States that apply zero non-VAT tax to gas prices. Total taxes (VAT plus other taxes) vary from €0.35 per 100 kWh (UK) to €5.13 per 100 kWh (Sweden), or 7% to 45% of final residential gas prices.

Up to the end of 2009, non-VAT taxes were zero in Ireland. However, the carbon tax on natural gas was introduced on 1 May 2010. The carbon tax was initially levied at €3.07/MWh and this has since been increased, to €4.10/MWh from 1 May 2012. Total taxes and levies amounted to €1.18 per 100 kWh and accounted for 17% of the gas price paid by Irish households in S2 2016 (band D2).

On average, the non-recoverable tax on gas to households in the EU was 26%, and in the Euro Area it was 31%, of the ex-VAT price.

21 Based on household gas consumption band D2 which accounts for 92.3% of gas consumption in the household sector.

Table 9 *Gas Prices and Taxes for Residential Consumers in Band D2 (1st semester 2017)*

	Price including all taxes in € per 100 kWh	Basic price	Other taxes (excl. VAT)	VAT	All taxes as % of total price
		in € per 100 kWh			
Bulgaria	3.11	2.60	0.00	0.51	16.4%
Romania	3.23	1.67	0.94	0.62	48.3%
Estonia	3.28	2.43	0.21	0.64	25.9%
Hungary	3.60	2.83	0.00	0.77	21.4%
Croatia	3.70	2.96	0.00	0.74	20.0%
Lithuania	3.87	3.20	0.00	0.67	17.3%
Latvia	4.06	3.18	0.18	0.70	21.7%
Luxembourg	4.18	3.52	0.30	0.36	15.8%
Poland	4.41	3.59	0.00	0.82	18.6%
Slovakia	4.45	3.71	0.00	0.74	16.6%
United Kingdom	5.01	4.66	0.12	0.23	7.0%
Belgium	5.34	4.09	0.34	0.91	23.4%
Czech Republic	5.63	4.66	0.00	0.97	17.2%
Slovenia	5.63	3.96	0.65	1.02	29.7%
Germany	6.42	4.80	0.60	1.02	25.2%
Greece	6.52	5.20	0.57	0.75	20.2%
Austria	6.74	4.93	0.69	1.12	26.9%
France	6.76	5.20	0.62	0.94	23.1%
Ireland	**6.78**	**5.60**	**0.37**	**0.81**	**17.4%**
Denmark	7.41	3.09	2.84	1.48	58.3%
Netherlands	8.08	3.98	2.70	1.40	50.7%
Portugal	8.26	6.32	0.40	1.54	23.5%
Italy	8.38	5.29	1.69	1.40	36.9%
Spain	8.57	6.85	0.24	1.48	20.1%
Sweden	11.42	6.29	2.85	2.28	44.9%
Euro Area	7.19	4.96	1.07	1.16	31.0%
EU-28	6.36	4.69	0.76	0.91	26.3%

Source: Eurostat

2.5 Consumption Volume (Seasonal) Effect on Average Unit Price

The volume of energy consumed in a semester can have a significant effect on the average unit price calculated. This is because the fixed costs (standing charges, levies, etc.) will form a larger proportion of the average price if the consumption volumes are low and vice versa. This is also known as a seasonal effect and is more pronounced in the household gas price than in the household electricity price.

To analyse this effect we've looked at the typical ratio of annual consumption that is used in semester one (S1) and semester two (S2) each year, as shown in *Table 10*.

Table 10 *Ratio of Semester 1 to Semester 2 Consumption Volume*

Household Consumption Ratio	Semester 1	Semester 2
Electricity	53%	47%
Gas	66%	34%

We then looked at a number of typical consumers and constructed semi-annual bills based on typical supplier costs for both standard rates and discounted rates[22]. All the costs; unit rates, levies and taxes, were kept constant for each semester. For typical consumers we chose three consumption levels for both electricity and gas, as shown in *Table 11*.

22 Suppliers give discounted rates, typically contracted for one year, to consumers who have switched accounts to them and then revert to standard rates once the contracted time has elapsed.

Table 11 *Typical Household Consumption*

Household Electricity	Household Gas
2,500 kWh (top of band DB)	12,000 kWh (within band D2)
5,000 kWh (top of band DC)	18,000 kWh (within band D2)
10,000 kWh (middle of band DD)	25,000 kWh (within band D2)

Six monthly bills were constructed and the average unit prices for each semester were calculated. Comparing the average unit prices for S2 with S1 the following increases were observed, as shown in *Table 12*.

Table 12 *Apparent Percentage Change in Unit Price Between S1 and S2 Based on Change in Consumption Volume*

Household Electricity	Discounted Rates	Standard Rates
2,500 kWh (top of band DB)	+6.6%	+6.1%
5,000 kWh (top of band DC)	+4.4%	+4.0%
10,000 kWh (middle of band DD)	+2.7%	+2.4%

Household Gas	Discounted Rates	Standard Rates
12,000 kWh (within band D2)	+16%	+14.4%
18,000 kWh (within band D2)	+11.5%	+10.1%
25,000 kWh (within band D2)	+8.6%	+7.5%

From the tables above it can be seen that the volume effect on the price change apparent between semesters is greater for gas and, also, the effect is larger for the lower consumption levels.

An electricity consumer on discounted rates using 5,000 kWh per annum consuming 53% of this in the first half of the year would see an apparent average unit price increase in the second half of the year of 4.4%. The same consumer on standard rates would see a lower apparent increase of 4%.

A gas consumer on discounted rates using 18,000 kWh per annum consuming 66% of this in the first half of the year would see an apparent increase of 11.5% in average unit price in the second half of the year. On standard rates this would be an apparent increase of 10.1%.

While this analysis is done at the level of an individual consumer it helps to understand the semester-on-semester price change in the Gas and Electricity Prices Regulation data that is derived at the national level.

2.6 Purchasing Power

When comparing prices of goods across countries it is important to not only correct for differences in currencies but also for the differences in income and living standards. This is of particular importance when comparing prices paid by residential consumers. Comparisons using the purchasing power parity (PPP) method for residential consumers are detailed in *Sections 5.1.4* and *5.2.2*.

A factor affecting gas and electricity prices in a country is 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. For residential consumers, comparing electricity and gas prices on the basis of PPP is a method that may be used to separate the price differences associated with differences in wealth from those associated with other factors.

PPPs are currency conversion rates that convert to a common currency and equalise the purchasing power of different currencies. In other words, they seek to eliminate the differences in price levels between countries due to differences in currency exchange rates and in living standards. 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.

3 Average Prices

The Government's Energy White Paper *Ireland's Transition to a Low Carbon Energy Future 2015-2030*[23] commits to developing measures of Ireland's energy cost competitiveness and this new section has been initiated to deliver on that commitment. One of the strengths of the Electricity and Gas Price Regulation is that it provides a rich dataset for analysis and comparison between EU countries. However, because the data is collected and presented in many consumption bands it is difficult to present a simple message on trends and comparison. One solution to this problem is to present weighted average prices.

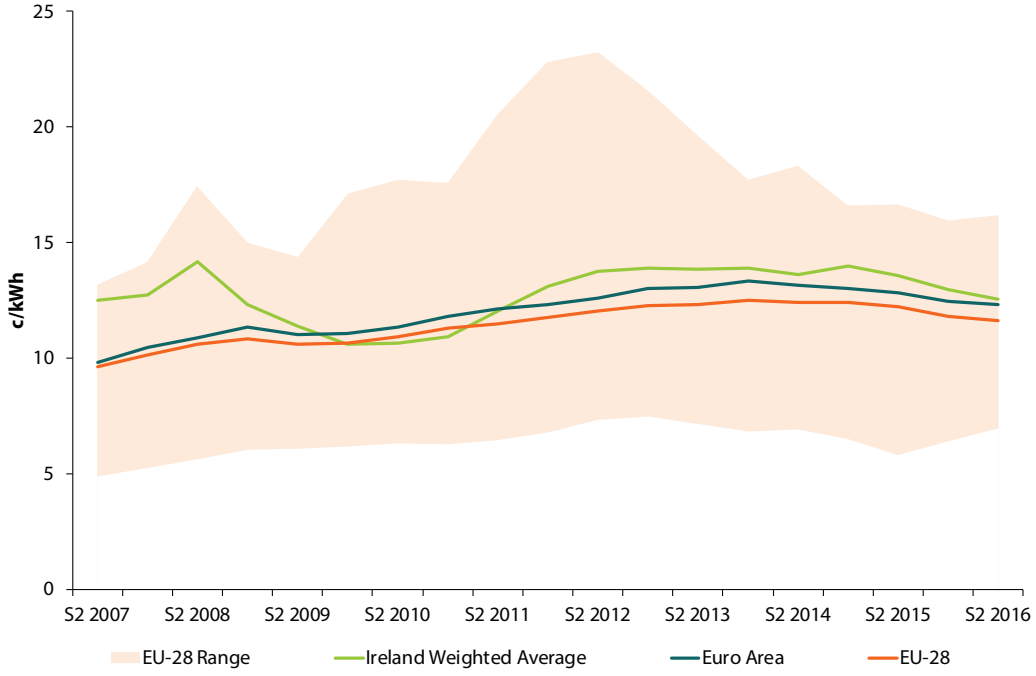
For instance, a single weighted average price for electricity to business can be constructed by weighting the price in each band by the consumption of electricity in that band in a given semester. This calculation is possible for Ireland now but weightings for other countries are not currently published by Eurostat. However the new weighted average prices for all other EU Member States won't be published until 2018.

In the meantime, SEAI is presenting here what these simplified prices might look like. We present weighted average prices for Ireland together with simple average of the bands for the EU and the Euro Area. These different averages are not directly comparable but it is thought that, as both the EU and Euro Area data are from a diverse range of economies and wide geographic spread, the simple average won't differ significantly from a weighted average. When Eurostat does publish weightings and weighted averages we will then use these for a more direct comparison.

For business electricity and gas prices we are presenting three separate views on average prices. The first is an overall weighted average of all the consumption bands. The other two are for low and high volume consumers. Contracts, tariffs and charges differ greatly between low and high volume consumers and it is hoped that these two views will better reflect the trends and comparisons in these markets. For households we present only the averages for all consumption bands.

3.1 Average Electricity Price to Business

Figure 6 *Average Electricity Prices (ex-VAT) to Business – All Consumption Bands*



Source: SEAI based on Eurostat data

Figure 6 and *Table 13* show the average electricity price to business across all consumption bands in the Euro Area and the EU-28 and the weighted average across all bands in Ireland. Given the caveat that the weighted average is not fully comparable with the normal average, it can be seen that the price of electricity to business consumers in Ireland has been above both the EU and Euro Area since the second half of 2011. In the second half of 2016 it was 7.8% and 1.8% above the EU and Euro Area respectively.

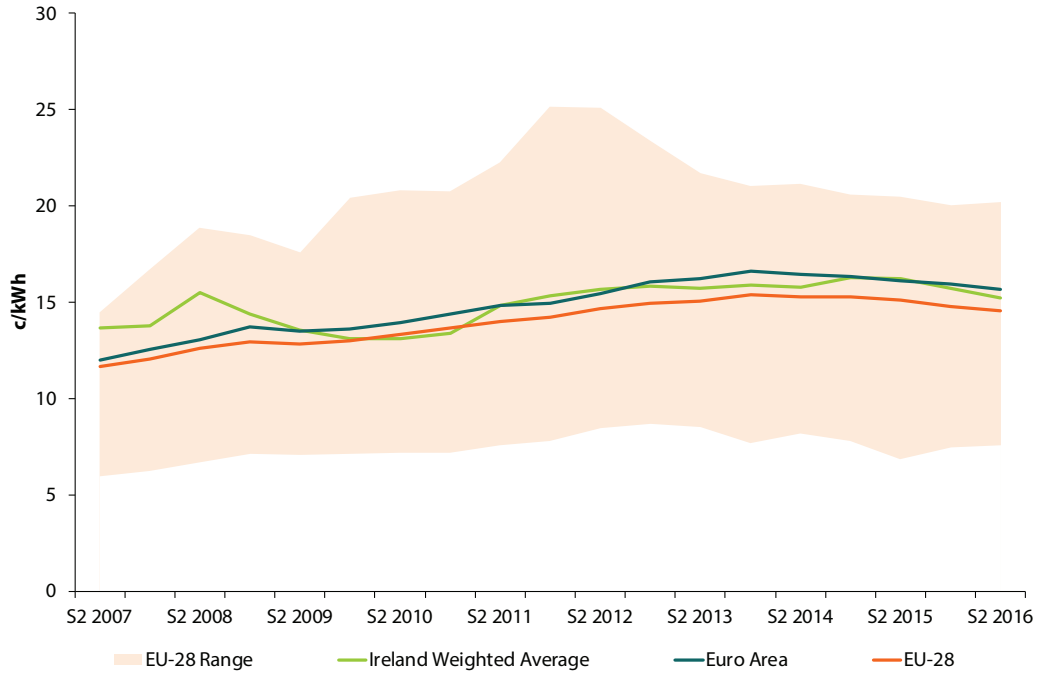
23 http://www.dccae.gov.ie/en-ie/energy/topics/Energy-Initiatives/energy-policy-framework/white-paper/Pages/White-Paper-on-Energy-Policy-in-Ireland-.aspx

Table 13 *Average Electricity Prices (ex-VAT) to Business – All Consumption Bands*

Electricity prices to Business (ex-VAT) c/kWh	S1 2013	S2 2013	S1 2014	S2 2014	S1 2015	S2 2015	S1 2016	S2 2016
Ireland (weighted average)	13.88	13.83	13.89	13.60	14.00	13.58	12.97	12.53
Euro Area (average)	13.01	13.06	13.32	13.17	13.02	12.81	12.44	12.31
EU-28 (average)	12.28	12.30	12.49	12.40	12.39	12.24	11.79	11.62
Ireland relative to;								
Euro Area	106.7%	105.9%	104.3%	103.3%	107.6%	106.0%	104.3%	101.8%
EU-28	113.0%	112.4%	111.2%	109.7%	113.0%	111.0%	110.0%	107.8%

Source: Eurostat

Figure 7 *Average Electricity Prices (ex-VAT) to Business – Low Consumption Bands (IA, IB & IC)*



Source: SEAI based on Eurostat data

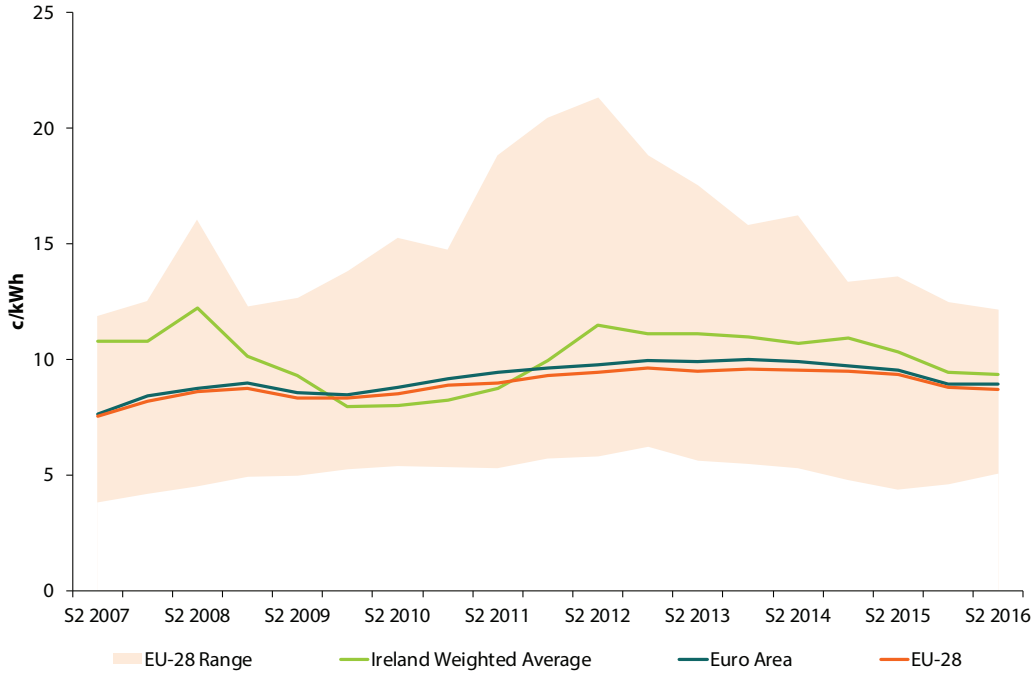
Figure 7 and *Table 14* show the average electricity price to business in the Euro Area and the EU-28 and the weighted average for the low consumption bands IA, IB and IC in Ireland. Given the caveat that the weighted average is not fully comparable with the normal average, it can be seen that the price of electricity to business consumers in Ireland has been above the EU over the period with the exception of S2 2010 and S1 2011. It has fluctuated above and below Euro Area averages since second half of 2011. In the second half of 2016 it was 4.8% above the EU and 2.8% below the Euro Area.

Table 14 *Average Electricity Prices (ex-VAT) to Business – Low Consumption Bands (IA, IB & IC)*

Electricity prices to Business (ex-VAT) c/kWh	S1 2013	S2 2013	S1 2014	S2 2014	S1 2015	S2 2015	S1 2016	S2 2016
Ireland (weighted average)	15.85	15.75	15.89	15.78	16.29	16.24	15.75	15.23
Euro Area (average)	16.05	16.21	16.63	16.43	16.31	16.09	15.93	15.67
EU-28 (average)	14.96	15.08	15.39	15.27	15.29	15.14	14.80	14.53
Ireland relative to;								
Euro Area	98.7%	97.2%	95.5%	96.0%	99.9%	101.0%	98.9%	97.2%
EU-28	105.9%	104.4%	103.2%	103.4%	106.6%	107.3%	106.4%	104.8%

Source: Eurostat

Figure 8 *Average Electricity Prices (ex-VAT) to Business – High Consumption Bands (ID, IE & IF)*



Source: SEAI based on Eurostat data

Figure 8 and *Table 15* show the average electricity price to business in the Euro Area and the EU-28 and the weighted average for the high consumption bands ID, IE and IF in Ireland. Given the caveat that the weighted average is not fully comparable with the normal average, it can be seen that the price of electricity to business consumers in Ireland has been above both the EU and Euro Area over the period with the exception of between S1 2010 to S1 2012. In the second half of 2016 it was 7.4% and 4.5% above the EU and Euro Area respectively.

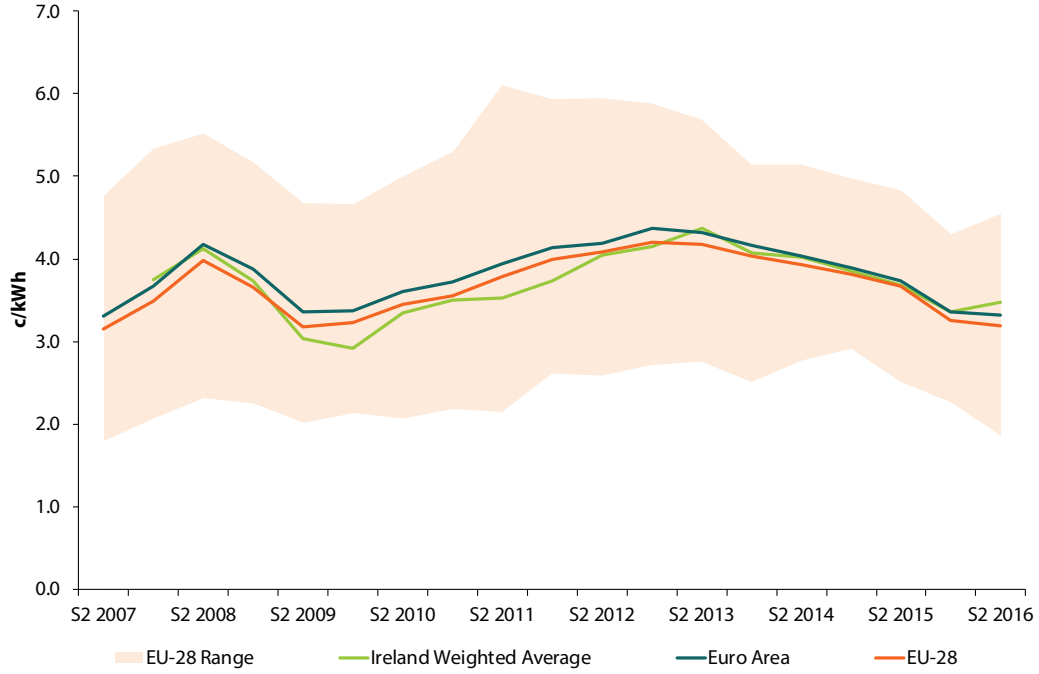
Table 15 *Average Electricity Prices (ex-VAT) to Business – High Consumption Bands (ID, IE & IF)*

Electricity prices to Business (ex-VAT) c/kWh	S1 2013	S2 2013	S1 2014	S2 2014	S1 2015	S2 2015	S1 2016	S2 2016
Ireland (weighted average)	11.11	11.11	10.97	10.70	10.92	10.32	9.46	9.35
Euro Area (average)	9.97	9.90	10.02	9.91	9.73	9.54	8.95	8.94
EU-28 (average)	9.61	9.51	9.59	9.53	9.49	9.34	8.77	8.70
Ireland relative to;								
Euro Area	111.4%	112.3%	109.6%	107.9%	112.2%	108.2%	105.7%	104.5%
EU-28	115.6%	116.9%	114.4%	112.3%	115.1%	110.5%	107.8%	107.4%

Source: Eurostat

3.2 Average Gas Price to Business

Figure 9 *Average Gas Prices (ex-VAT) to Business – All Consumption Bands*



Source: SEAI based on Eurostat data

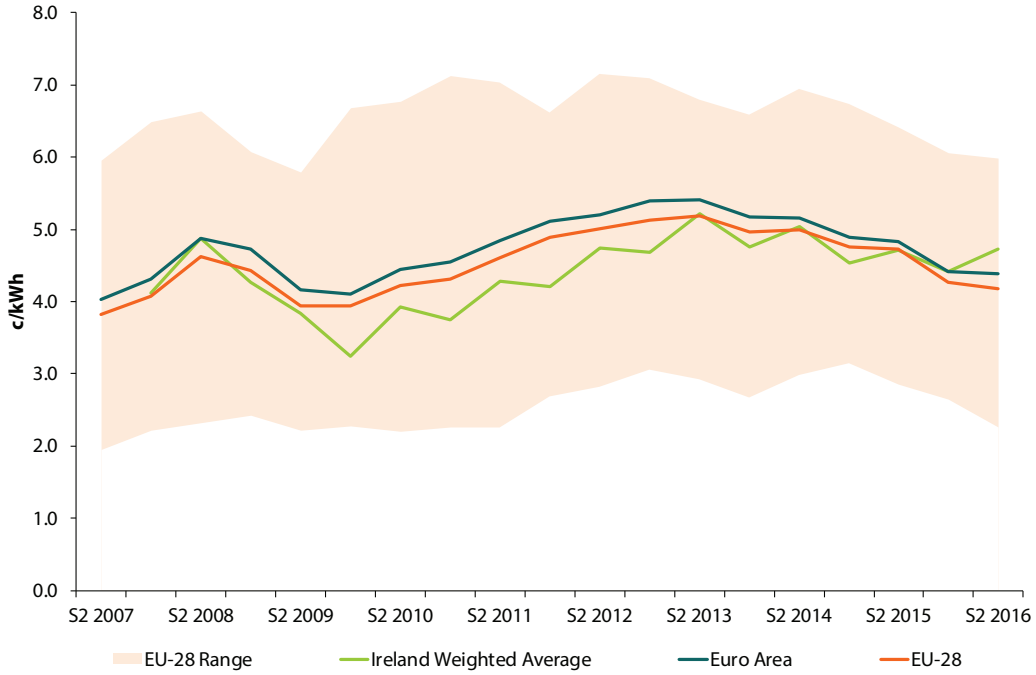
Figure 9 and *Table 16* show the average gas price to business across all consumption bands in the Euro Area and the EU-28 and the weighted average across all bands in Ireland. Given the caveat that the weighted average is not fully comparable with the normal average, it can be seen that the price of gas to business consumers in Ireland was below both the EU and Euro Area between S2 2009 and S2 2013. Since then it has been above the EU average and from S1 2014 until S1 2016 it was below the Euro Area average. In the second half of 2016 it was 9.2% above the EU and 4.7% below Euro Area.

Table 16 *Average Gas Prices (ex-VAT) to Business – All Consumption Bands*

Gas prices to Business (ex-VAT) c/kWh	S1 2013	S2 2013	S1 2014	S2 2014	S1 2015	S2 2015	S1 2016	S2 2016
Ireland (weighted average)	4.16	4.37	4.07	4.01	3.85	3.68	3.36	3.48
Euro Area (average)	4.38	4.32	4.16	4.03	3.89	3.73	3.36	3.32
EU-28 (average)	4.21	4.17	4.03	3.93	3.81	3.67	3.26	3.18
Ireland relative to;								
Euro Area	95.0%	101.3%	97.9%	99.7%	99.1%	98.7%	100.0%	104.7%
EU-28	98.8%	104.8%	100.9%	102.1%	101.2%	100.4%	103.1%	109.2%

Source: Eurostat

Figure 10 *Average Gas Prices (ex-VAT) to Business – Low Consumption Bands (I1 & I2)*



Source: SEAI based on Eurostat data

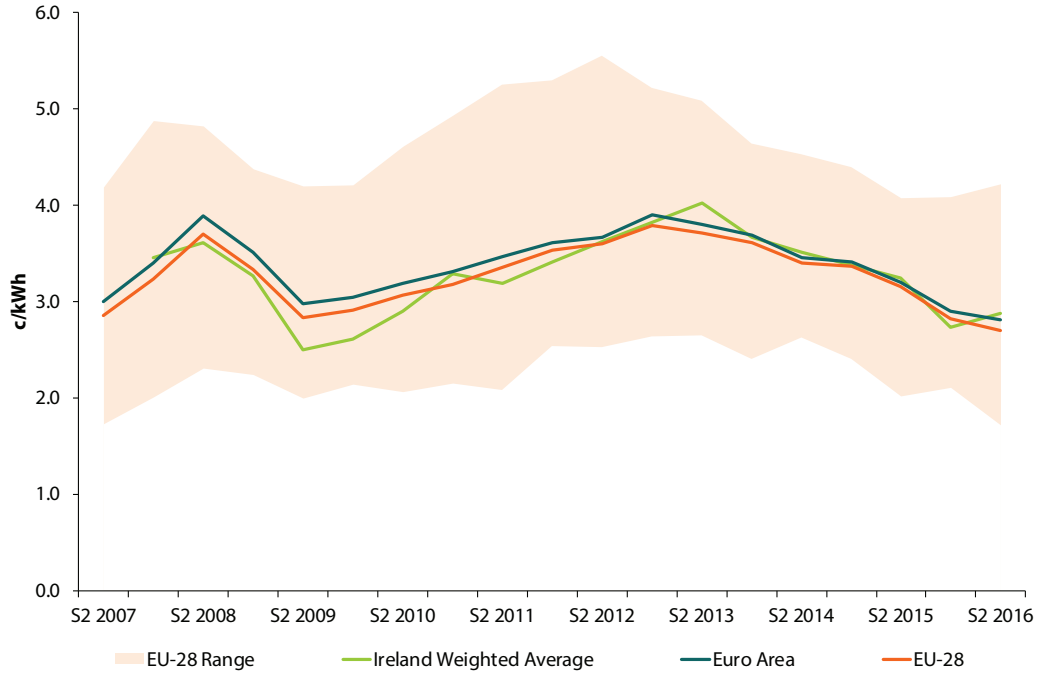
Figure 10 and *Table 17* show the average gas price to business in the Euro Area and the EU-28 and the weighted average in the low consumption bands I1 and I2 in Ireland. Given the caveat that the weighted average is not fully comparable with the normal average, it can be seen that the price of gas to business consumers in Ireland was below both the EU and Euro Area for most of the period with the exception of 2008 and S2 2013 and S2 2014 when it was above the EU average. In the second half of 2016 it was 12.9% and 7.8% above the EU and Euro Area respectively.

Table 17 *Average Gas Prices (ex-VAT) to Business – Low Consumption Bands (I1 & I2)*

Gas prices to Business (ex-VAT) c/kWh	S1 2013	S2 2013	S1 2014	S2 2014	S1 2015	S2 2015	S1 2016	S2 2016
Ireland (weighted average)	4.68	5.22	4.75	5.04	4.54	4.71	4.42	4.72
Euro Area (average)	5.40	5.41	5.18	5.16	4.90	4.83	4.42	4.38
EU-28 (average)	5.13	5.18	4.97	4.99	4.76	4.73	4.26	4.19
Ireland relative to;								
Euro Area	86.8%	96.5%	91.8%	97.9%	92.7%	97.5%	100.0%	107.8%
EU-28	91.3%	100.8%	95.6%	101.1%	95.4%	99.6%	103.7%	112.9%

Source: Eurostat

Figure 11 *Average Gas Prices (ex-VAT) to Business – High Consumption Bands (I3 & I4)*



Source: SEAI based on Eurostat data

Figure 11 and *Table 18* show the average gas price to business in the Euro Area and the EU-28 and the weighted average in the high consumption bands I3 and I4 in Ireland. Given the caveat that the weighted average is not fully comparable with the normal average, it can be seen that the price of gas to business consumers in Ireland was mainly below both the EU and Euro Area until S2 2012. In the first half of 2016 it dipped to 3.3% and 5.8% below the EU and Euro Area respectively but in the second half of 2016 it has gone above both by 6.4% and 2.3% respectively.

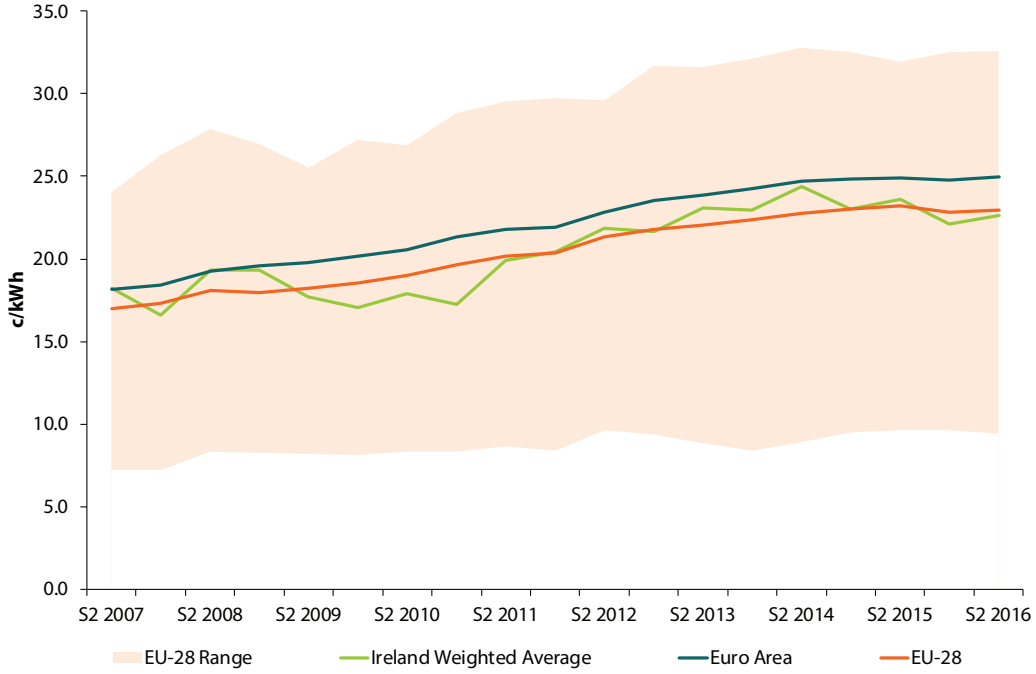
Table 18 *Average Gas Prices (ex-VAT) to Business – High Consumption Bands (I3 & I4)*

Gas prices to Business (ex-VAT) c/kWh	S1 2013	S2 2013	S1 2014	S2 2014	S1 2015	S2 2015	S1 2016	S2 2016
Ireland (weighted average)	3.82	4.03	3.67	3.52	3.38	3.24	2.74	2.88
Euro Area (average)	3.91	3.81	3.69	3.46	3.42	3.20	2.90	2.82
EU-28 (average)	3.79	3.72	3.61	3.41	3.37	3.16	2.83	2.71
Ireland relative to;								
Euro Area	97.9%	105.9%	99.5%	101.8%	98.9%	101.4%	94.5%	102.3%
EU-28	100.9%	108.4%	101.6%	103.2%	100.2%	102.6%	96.8%	106.4%

Source: Eurostat

3.3 Average Electricity Price to Households

Figure 12 *Average Electricity Prices (ex-VAT) to Households – All Consumption Bands*



Source: SEAI based on Eurostat data

Figure 12 and *Table 19* show the average electricity price to households across all consumption bands in the Euro Area and the EU-28 and the weighted average across all bands in Ireland. Given the caveat that the weighted average is not fully comparable with the normal average, it can be seen that the price of electricity to household consumers in Ireland was below both the EU and Euro Area between S2 2009 and S2 2011 but was above the EU average until the second half of 2015. In the second half of 2016 it was 1.3% and 9.2% below the EU and Euro Area respectively.

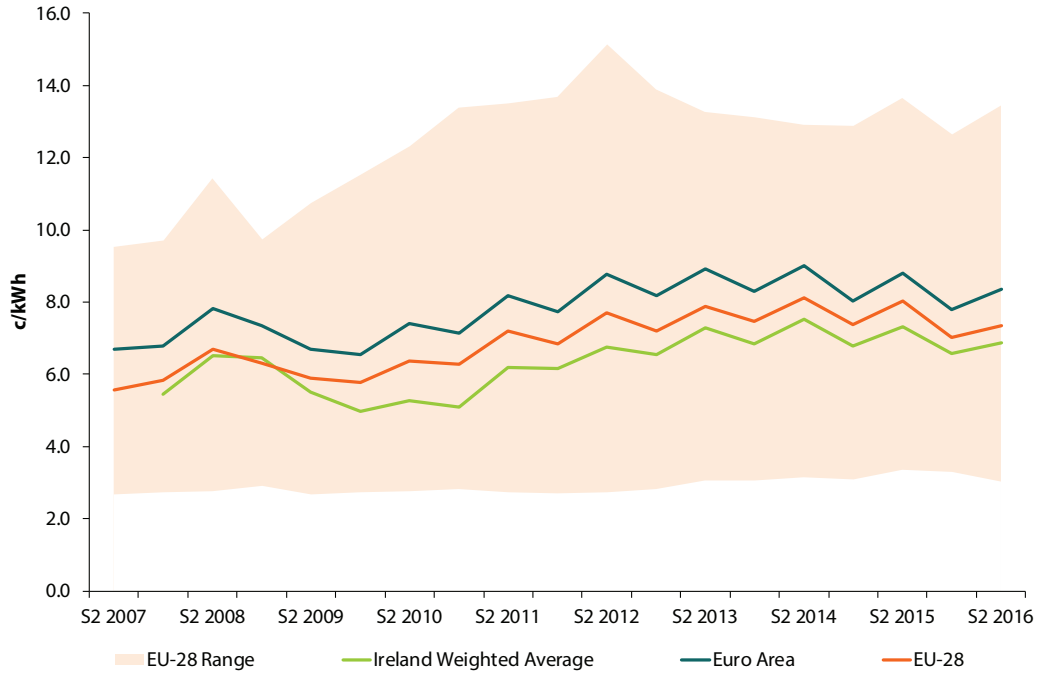
Table 19 *Average Electricity Prices (all taxes included) to Household – All Consumption Bands*

Electricity prices to households (all taxes included) c/kWh	S1 2013	S2 2013	S1 2014	S2 2014	S1 2015	S2 2015	S1 2016	S2 2016
Ireland (weighted average)	21.64	23.11	22.97	24.38	23.00	23.60	22.09	22.64
Euro Area (average)	23.55	23.85	24.25	24.69	24.82	24.92	24.78	24.94
EU-28 (average)	21.77	22.03	22.35	22.75	22.99	23.19	22.80	22.93
Ireland relative to;								
Euro Area	91.9%	96.9%	94.8%	98.8%	92.6%	94.7%	89.1%	90.8%
EU-28	99.4%	104.9%	102.8%	107.2%	100.0%	101.8%	96.9%	98.7%

Source: Eurostat

3.4 Average Gas Price to Households

Figure 13 *Average Gas Prices (ex-VAT) to Households – All Consumption Bands*



Source: SEAI based on Eurostat data

Figure 13 and *Table 20* show the average gas price to households across all consumption bands in the Euro Area and the EU-28 and the weighted average across all bands in Ireland. Given the caveat that the weighted average is not fully comparable with the normal average, it can be seen that the price of gas to household consumers in Ireland was below both the EU and Euro Area over the whole period with the exception of S2 2009. In the second half of 2016 it was 6.5% and 17.8% below the EU and Euro Area respectively.

Table 20 *Average Gas Prices (all taxes included) to Household – All Consumption Bands*

Gas prices to Households (all taxes included) c/kWh	S1 2013	S2 2013	S1 2014	S2 2014	S1 2015	S2 2015	S1 2016	S2 2016
Ireland (weighted average)	6.55	7.28	6.84	7.53	6.77	7.33	6.56	6.86
Euro Area (average)	8.18	8.92	8.30	9.01	8.03	8.81	7.79	8.34
EU-28 (average)	7.20	7.87	7.46	8.12	7.39	8.04	7.02	7.34
Ireland relative to;								
Euro Area	80.1%	81.6%	82.4%	83.6%	84.4%	83.2%	84.3%	82.2%
EU-28	90.9%	92.5%	91.7%	92.6%	91.7%	91.1%	93.5%	93.5%

Source: Eurostat

4 Energy Prices for Business

The Gas and Electricity Prices Regulation refers to gas and electricity prices charged to business end-users, but it recognises that suppliers generally cannot always distinguish between industrial and commercial services users and so accepts that business end-users may include other non-residential users. In essence therefore, business prices refer to non-residential prices. Gas and electricity prices include all charges payable including; energy consumed, network charges, other charges (capacity charges, commercialisation, meter rental, public service obligation, etc.), all netted for any rebates or premiums due. Initial connection charges are not included. Prices are recorded as national average prices.

4.1 Business Electricity Prices

The prices represent average prices weighted across the suppliers, using the market share of the electricity suppliers surveyed as the weighting factor. 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. In Ireland the weighted average price is used and represents the full market. The weighting is based on the volume sold by suppliers.

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

In order to ensure confidentiality, data relating to prices are communicated only where there are, in the Member State concerned, at least three end-users in each consumption band.

Three price levels are reported to Eurostat:

- 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 categories of end-user shown in *Table 21*.

Table 21 *Categories for Business End-Use of Electricity*

Consumption band	Annual electricity consumption (MWh)		Band share of business electricity consumption in Ireland S2 – 2016
	Lowest	Highest	
Band IA		< 20	8.7%
Band IB	20	< 500	30.1%
Band IC	500	< 2,000	15.2%
Band ID	2,000	< 20,000	26.5%
Band IE	20,000	< 70,000	10.2%
Band IF	70,000	<= 150,000	9.3%

Data and analysis on electricity prices in this section are based on the survey results from the Gas and Electricity Prices Regulation in respect of S2 2016. Analysis here is confined to the average electricity price *excluding VAT and other recoverable taxes* as this is the most relevant to business consumers. Data is presented on the trend in electricity prices since the start of the data collection under the new methodology. There is also a focus on the latest semester data as well as the data revisions published by Eurostat. The prices shown refer to average prices being charged by suppliers. For individual business customers, the price paid for electricity to a supplier will depend to some extent on the load profile of the customer and may be higher or lower than the average because of this.

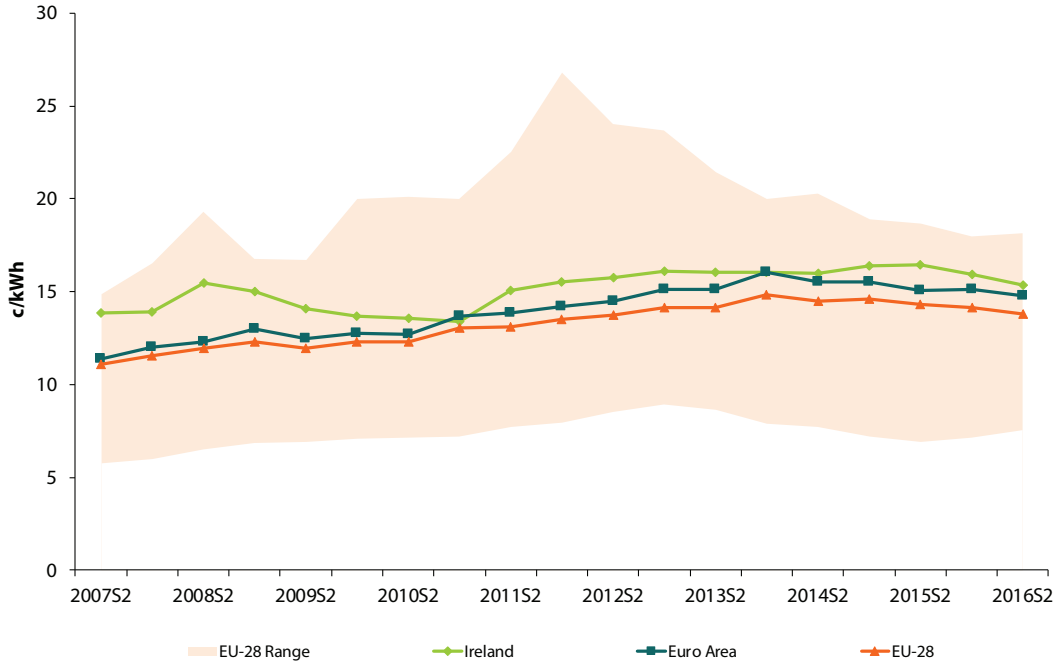
Data and analysis are highlighted here for three consumption bands, IB, IC and ID. IC is the band typically reported on by Eurostat for international comparison, but as band IB and band ID have market shares of 30% and 27% respectively in Ireland they are analysed here also.

4.1.1 Business Electricity Prices in Consumption Band IB

Figure 14 shows the trend in electricity prices in consumption band IB for Ireland, the EU and the Euro Area. For reference, band IB accounted for 30% of the electricity use in the business market in Ireland in this semester (see *Table 25*).

The price of electricity to Irish business in this consumption band fell throughout 2009 and 2010, and into the first half of 2011. Prices then increased generally, with slight dips in the second halves of 2013, 2014 and then fell throughout 2016.

Figure 14 *Business Electricity Prices (ex-VAT) in Band IB (2nd semester 2007 to 2nd semester 2016)*



Source: Eurostat

In the second half of 2016 prices in this band decreased by 3.4%, while prices in the EU and the Euro Area fell by 2.6% and 2.4% respectively. This resulted in prices in Ireland moving to 11.7% above the EU average and to 4.2% above the Euro Area average, as shown in *Figure 14*. Price changes in S2 2016 ranged from a 12% increase in Cyprus to a 26% price decrease in the Netherlands.

Table 22 shows the ex-VAT electricity prices in band IB (20 – 500 MWh per annum) for the five semesters between the second half of 2014 and the second half of 2016 for all countries in the EU. Also shown is the price change for each country between each subsequent semester and for the most recent 12 months for which data is available.

Over the 12-month period S2 2015 – S2 2016 price changes varied from a 19% increase in Norway to a 17% decrease in Greece. Ireland experienced a decrease of 6.3% over the 12-month period. This decrease for Ireland compares with a 3.7% decrease in the EU and a 2.1% decrease in the Euro Area.

Ireland's ranking for the price of electricity in this business consumption band (see *Table 26*) in the second half of 2016 was the seventh most expensive. Since 2007, the average ranking for Ireland in this band was 6th most expensive.

Note that the percentage price change shown in *Table 22* is calculated from the published Eurostat euro values for each country. Percentage price changes in national currencies may differ considerably from these as significant moves in the currency exchange rate with the euro may distort price changes. Percentage changes in national currencies are shown in *Figure 15*.

Tables for all electricity consumption bands are published in a separate annex which is available at www.seai.ie/statistics.

Table 22 *Business Electricity Prices in Band IB in Europe (S2 2014 – S2 2016)*

	without VAT (c/kWh)					% change				
Band IB	*July '14 – Dec '14*	*Jan '15 – Jun '15*	*July '15 – Dec '15*	*Jan '16 – Jun '16*	*July '16 – Dec '16*	*S2 '14 – S1 '15*	*S1 '15 – S2 '15*	*S2 '14 – S1 '15*	*S1 '16 – S2 '16*	*12 months to S2 '16*
Austria	12.69	12.46	12.54	12.32	12.10	-1.8%	0.6%	-1.8%	-1.8%	-3.5%
Belgium	14.44	14.39	14.66	14.93	15.75	-0.3%	1.9%	1.8%	5.5%	7.4%
Bulgaria	9.11	8.96	10.33	10.71	9.46	-1.6%	15.3%	3.7%	-11.7%	-8.4%
Croatia	10.91	10.77	10.79	10.58	10.48	-1.3%	0.2%	-1.9%	-0.9%	-2.9%
Cyprus	20.26	16.68	16.10	13.11	14.70	-17.7%	-3.5%	-18.6%	12.1%	-8.7%
Czech Republic	12.45	12.06	12.24	11.66	11.65	-3.1%	1.5%	-4.7%	-0.1%	-4.8%
Denmark	10.20	9.67	9.65	10.05	9.98	-5.2%	-0.2%	4.1%	-0.7%	3.4%
Estonia	9.97	9.51	9.82	9.32	9.61	-4.6%	3.3%	-5.1%	3.1%	-2.1%
Finland	8.60	8.41	8.36	8.28	8.44	-2.2%	-0.6%	-1.0%	1.9%	1.0%
France	11.46	12.32	11.90	11.96	11.00	7.5%	-3.4%	0.5%	-8.0%	-7.6%
Germany	17.81	17.59	17.17	17.45	17.23	-1.2%	-2.4%	1.6%	-1.3%	0.3%
Greece	18.20	17.10	18.63	16.02	15.44	-6.0%	8.9%	-14.0%	-3.6%	-17.1%
Hungary	9.97	9.72	9.65	9.20	9.39	-2.5%	-0.7%	-4.7%	2.1%	-2.7%
Ireland	**15.99**	**16.40**	**16.42**	**15.92**	**15.38**	**2.6%**	**0.1%**	**-3.0%**	**-3.4%**	**-6.3%**
Italy	19.85	18.90	18.64	17.97	18.15	-4.8%	-1.4%	-3.6%	1.0%	-2.6%
Latvia	13.02	13.18	13.09	12.85	13.60	1.2%	-0.7%	-1.8%	5.8%	3.9%
Lithuania	12.40	10.94	10.97	10.56	9.94	-11.8%	0.3%	-3.7%	-5.9%	-9.4%
Luxembourg	11.15	10.29	10.30	10.12	10.16	-7.7%	0.1%	-1.7%	0.4%	-1.4%
Malta	20.10	17.84	15.55	15.78	15.57	-11.2%	-12.8%	1.5%	-1.3%	0.1%
Netherlands	10.91	14.30	10.55	13.80	10.21	31.1%	-26.2%	30.8%	-26.0%	-3.2%
Norway	8.16	7.78	6.90	7.52	8.18	-4.7%	-11.3%	9.0%	8.8%	18.6%
Poland	11.18	11.60	11.33	10.67	10.66	3.8%	-2.3%	-5.8%	-0.1%	-5.9%
Portugal	14.73	14.68	14.40	14.99	15.71	-0.3%	-1.9%	4.1%	4.8%	9.1%
Romania	9.76	9.89	9.60	9.24	9.06	1.3%	-2.9%	-3.7%	-1.9%	-5.6%
Slovakia	14.06	13.79	13.81	13.51	13.44	-1.9%	0.1%	-2.2%	-0.5%	-2.7%
Slovenia	10.52	10.35	10.65	10.47	10.26	-1.6%	2.9%	-1.7%	-2.0%	-3.7%
Spain	15.58	15.80	15.11	14.67	14.10	1.4%	-4.4%	-2.9%	-3.9%	-6.7%
Sweden	7.74	7.22	7.01	7.15	7.64	-6.7%	-2.9%	2.0%	6.9%	9.0%
Turkey	8.40	8.78	7.99	7.79	7.55	4.5%	-9.0%	-2.5%	-3.1%	-5.5%
United Kingdom	14.99	16.72	16.97	15.37	14.24	11.5%	1.5%	-9.4%	-7.4%	-16.1%
Euro Area	15.52	15.53	15.08	15.13	14.76	0.1%	-2.9%	0.3%	-2.4%	-2.1%
EU-28	14.47	14.61	14.30	14.14	13.77	1.0%	-2.1%	-1.1%	-2.6%	-3.7%
Ireland relative to:										
Euro Area	103.0%	105.6%	108.9%	105.2%	104.2%					
EU-28	110.5%	112.3%	114.8%	112.6%	111.7%					

Source: Eurostat

Figure 15 *Percentage Change (national currency) in Business Electricity Price (band IB) – Semester and 12 Months*

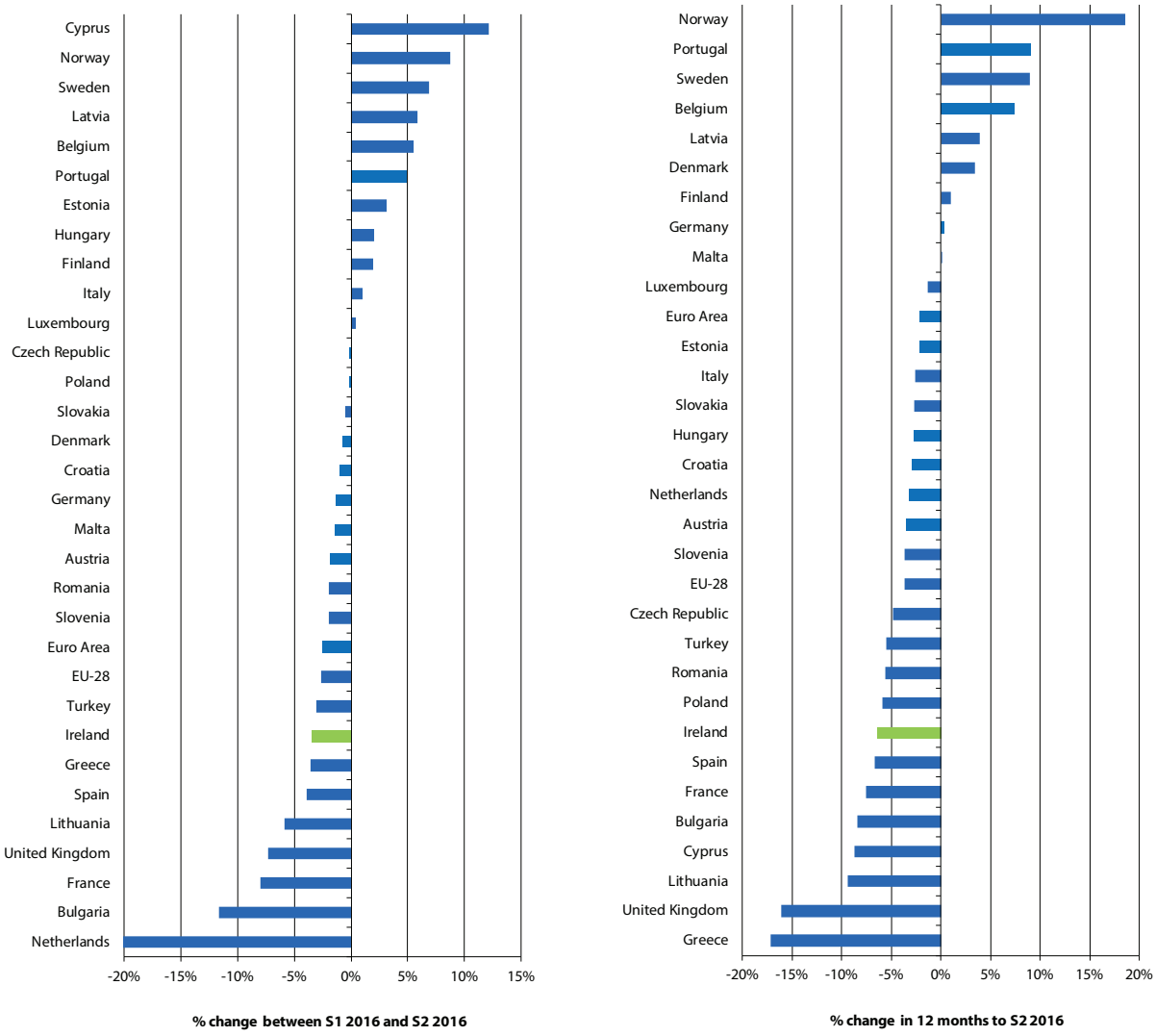
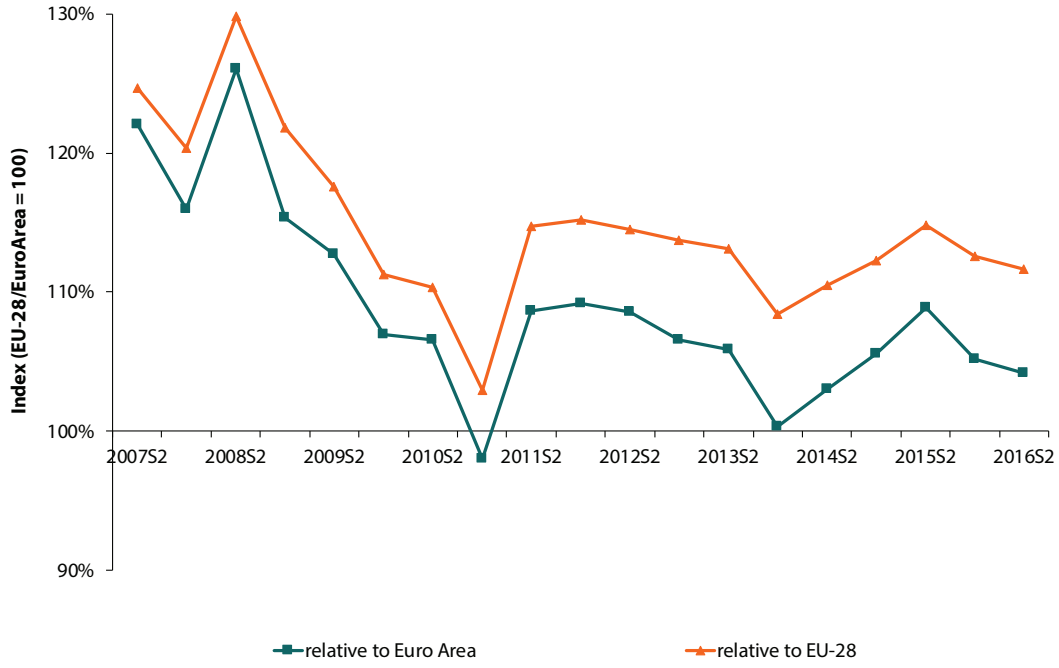


Figure 16 shows the ex-VAT price for electricity in Ireland for band IB consumption levels relative to the EU and the Euro Area as an index over the period. The price in Ireland was above the EU average price during the period, ranging from a high of 30% above average in the second half of 2008 down to 3.4% above in the first half of 2011. During the latest semester prices were 11.7% above the EU average, down from 12.6% above in the previous semester.

Prices were also above the Euro Area average for most of the period, ranging from 26% above average in the second half of 2008 to a low of 1.4% below in the first half of 2011. During the latest semester prices were 4.2% above the Euro area average, down from 5.2% above in the previous semester.

Figure 16 *Business Electricity Prices (ex-VAT) in Band IB Relative to EU and Euro Area*



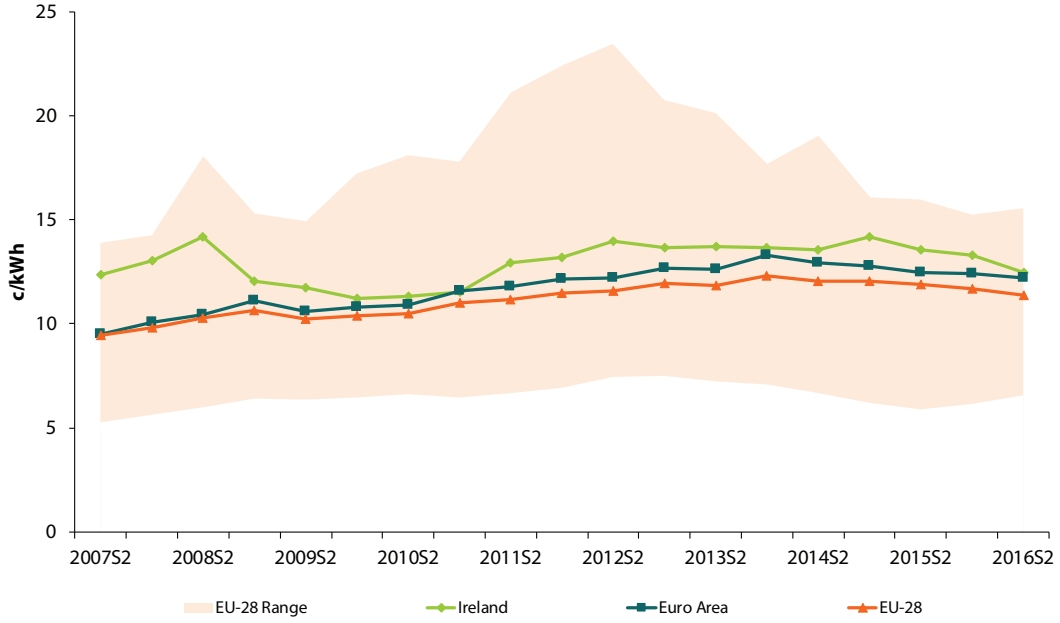
Source: Based on Eurostat data

4.1.2 Business Electricity Prices in Consumption Band IC

Figure 17 shows the trend in electricity prices in consumption band IC for Ireland, EU and the Euro Area. For reference, band IC, which is the consumption band normally reported on by Eurostat, accounted for 15.2% of the electricity use in the business market in Ireland in this semester (see *Table 25*).

The price of electricity to Irish business fell throughout 2009 and into the first half of 2010. Prices in this band increased until the second semester of 2012 (S2 2012), when they were 24% higher compared with the first semester of 2010 (S1 2010). Since then the price has generally fallen with the exception of the first semester of 2015.

Figure 17 *Business Electricity Prices (ex-VAT) in Band IC (2nd semester 2007 to 2nd semester 2016)*



Source: Eurostat

Table 23 shows the ex-VAT electricity prices in band IC (500 – 2000 MWh per annum) for the five semesters between the second half of 2014 and the second half of 2016 for all countries in the EU. Also shown is the price change for each country between each subsequent semester and for the most recent 12 months for which data is available.

Price changes in S2 2016 ranged from a 24% increase in Cyprus to a 21% price decrease in Bulgaria. Ireland experienced a 6.2% decrease in the semester. The EU as a whole experienced a 2.3% decrease in the first half of 2016 and the Euro Area a 1.9% decrease.

Over the 12-month period S2 2015 – S2 2016 price changes varied from a 19% increase in Norway to a 16% decrease in the UK. The price in this band decreased by 8.3% in Ireland over the 12-month period. This compares with a 4.0% decrease experienced in the EU and a 2.4% decrease in the Euro Area.

Ireland's ranking for its price of electricity in this business consumption band (see *Table 26*) in the first half of 2016 moved to sixth most expensive. Since 2007, the average ranking for Ireland in this band was 5th most expensive.

Note that the percentage price change shown in *Table 23* is calculated from the published Eurostat euro values for each country. Percentage price changes in national currencies may differ considerably from these as significant moves in the currency exchange rate with the euro may distort price changes. Percentage changes in national currencies are shown in *Figure 18*.

Tables for all electricity consumption bands are published in a separate annex which is available at www.seai.ie/statistics.

Table 23 *Business Electricity Prices in band IC in Europe (S2 2014 – S2 2016)*

	without VAT (c/kWh)					% change				
Band IC	*July '14 – Dec '14*	*Jan '15 – Jun '15*	*July '15 – Dec '15*	*Jan '16 – Jun '16*	*July '16 – Dec '16*	*S2 '14 – S1 '15*	*S1 '15 – S2 '15*	*S2 '14 – S1 '15*	*S1 '16 – S2 '16*	*12 months to S2 '16*
Austria	10.55	10.39	10.47	10.26	10.04	-1.5%	0.8%	-2.0%	-2.1%	-4.1%
Belgium	10.86	11.00	10.81	11.15	11.58	1.3%	-1.7%	3.1%	3.9%	7.1%
Bulgaria	7.57	6.92	7.82	10.02	7.88	-8.6%	13.0%	28.1%	-21.4%	0.8%
Croatia	9.18	9.20	9.28	9.03	8.77	0.2%	0.9%	-2.7%	-2.9%	-5.5%
Cyprus	19.03	13.93	14.12	10.48	12.95	-26.8%	1.4%	-25.8%	23.6%	-8.3%
Czech Republic	8.19	7.72	7.83	7.30	7.32	-5.7%	1.4%	-6.8%	0.3%	-6.5%
Denmark	9.72	8.99	9.06	9.48	9.36	-7.5%	0.8%	4.6%	-1.3%	3.3%
Estonia	9.31	8.89	9.58	8.78	8.96	-4.5%	7.8%	-8.4%	2.1%	-6.5%
Finland	7.22	7.07	7.06	6.85	6.94	-2.1%	-0.1%	-3.0%	1.3%	-1.7%
France	9.38	10.27	9.51	9.93	8.93	9.5%	-7.4%	4.4%	-10.1%	-6.1%
Germany	15.20	15.09	14.93	15.05	14.92	-0.7%	-1.1%	0.8%	-0.9%	-0.1%
Greece	12.98	12.92	11.50	11.73	11.15	-0.5%	-11.0%	2.0%	-4.9%	-3.0%
Hungary	8.99	8.67	8.70	8.05	7.96	-3.6%	0.3%	-7.5%	-1.1%	-8.5%
Ireland	**13.57**	**14.17**	**13.57**	**13.27**	**12.45**	**4.4%**	**-4.2%**	**-2.2%**	**-6.2%**	**-8.3%**
Italy	17.35	16.08	15.97	15.26	15.56	-7.3%	-0.7%	-4.4%	2.0%	-2.6%
Latvia	11.83	11.78	11.83	11.65	12.01	-0.4%	0.4%	-1.5%	3.1%	1.5%
Lithuania	11.71	9.89	9.97	9.40	8.82	-15.5%	0.8%	-5.7%	-6.2%	-11.5%
Luxembourg	9.87	9.28	8.93	8.73	8.58	-6.0%	-3.8%	-2.2%	-1.7%	-3.9%
Malta	17.80	15.99	14.05	14.22	13.99	-10.2%	-12.1%	1.2%	-1.6%	-0.4%
Netherlands	8.88	9.02	8.46	8.57	8.05	1.6%	-6.2%	1.3%	-6.1%	-4.8%
Norway	8.08	7.70	6.85	7.44	8.13	-4.7%	-11.0%	8.6%	9.3%	18.7%
Poland	8.33	8.82	8.61	8.08	8.15	5.9%	-2.4%	-6.2%	0.9%	-5.3%
Portugal	11.87	11.40	11.54	11.25	11.35	-4.0%	1.2%	-2.5%	0.9%	-1.6%
Romania	8.07	8.30	8.02	7.60	7.71	2.9%	-3.4%	-5.2%	1.4%	-3.9%
Slovakia	11.74	11.26	11.22	10.92	11.12	-4.1%	-0.4%	-2.7%	1.8%	-0.9%
Slovenia	8.47	8.27	8.70	8.47	8.32	-2.4%	5.2%	-2.6%	-1.8%	-4.4%
Spain	11.67	11.73	11.33	11.05	10.29	0.5%	-3.4%	-2.5%	-6.9%	-9.2%
Sweden	6.66	6.22	5.90	6.16	6.56	-6.6%	-5.1%	4.4%	6.5%	11.2%
Turkey	8.07	8.17	7.02	7.44	7.25	1.2%	-14.1%	6.0%	-2.6%	3.3%
United Kingdom	13.38	14.89	15.20	13.77	12.78	11.3%	2.1%	-9.4%	-7.2%	-15.9%
Euro Area	12.91	12.76	12.48	12.42	12.18	-1.2%	-2.2%	-0.5%	-1.9%	-2.4%
EU-28	12.06	12.06	11.87	11.67	11.40	0.0%	-1.6%	-1.7%	-2.3%	-4.0%
Ireland relative to:										
Euro Area	105.1%	111.1%	108.7%	106.8%	102.2%					
EU-28	112.5%	117.5%	114.3%	113.7%	109.2%					

Source: Eurostat

Figure 18 *Percentage Change (national currency) in Business Electricity Price (band IC) – Semester and 12 Months*

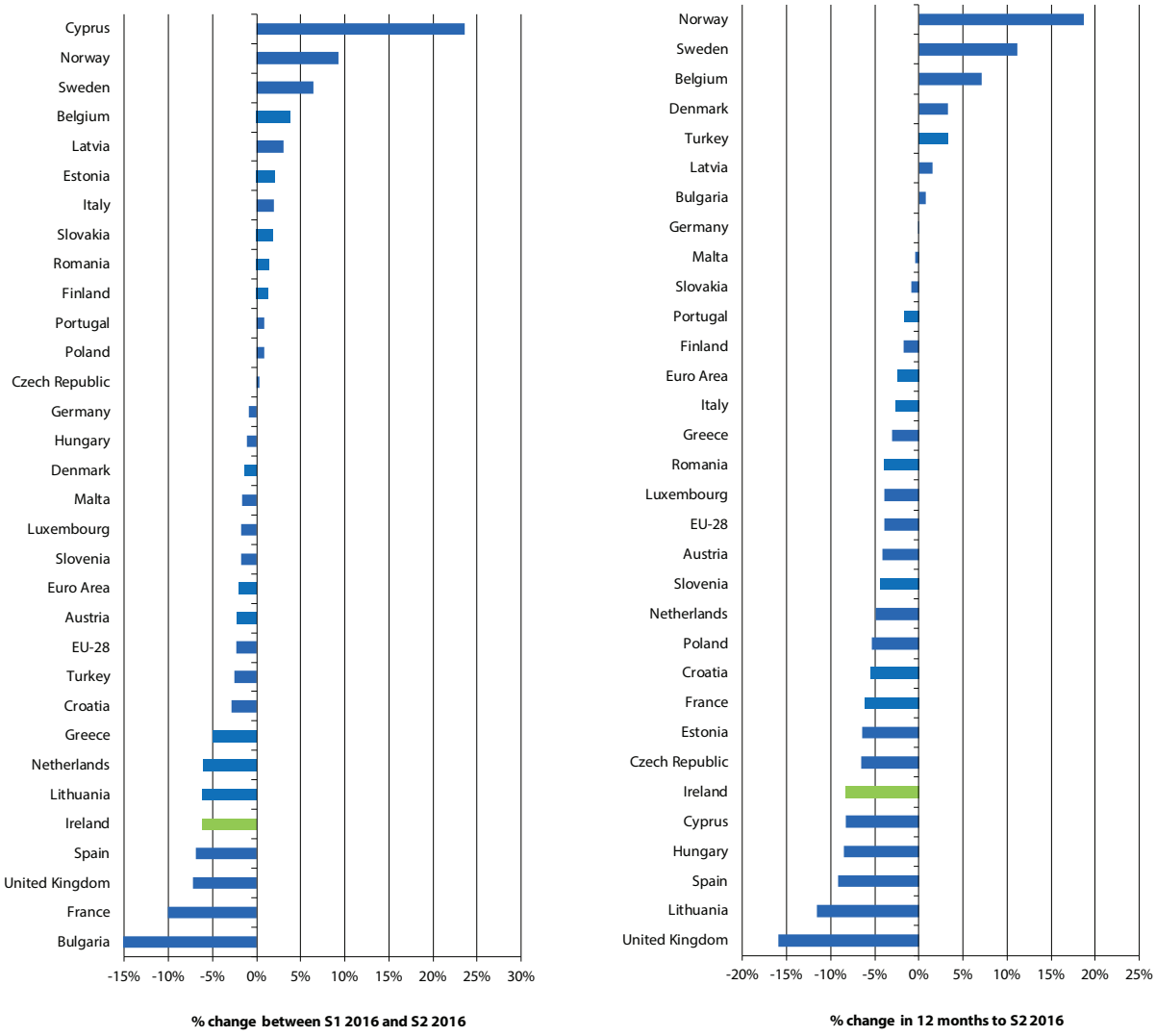
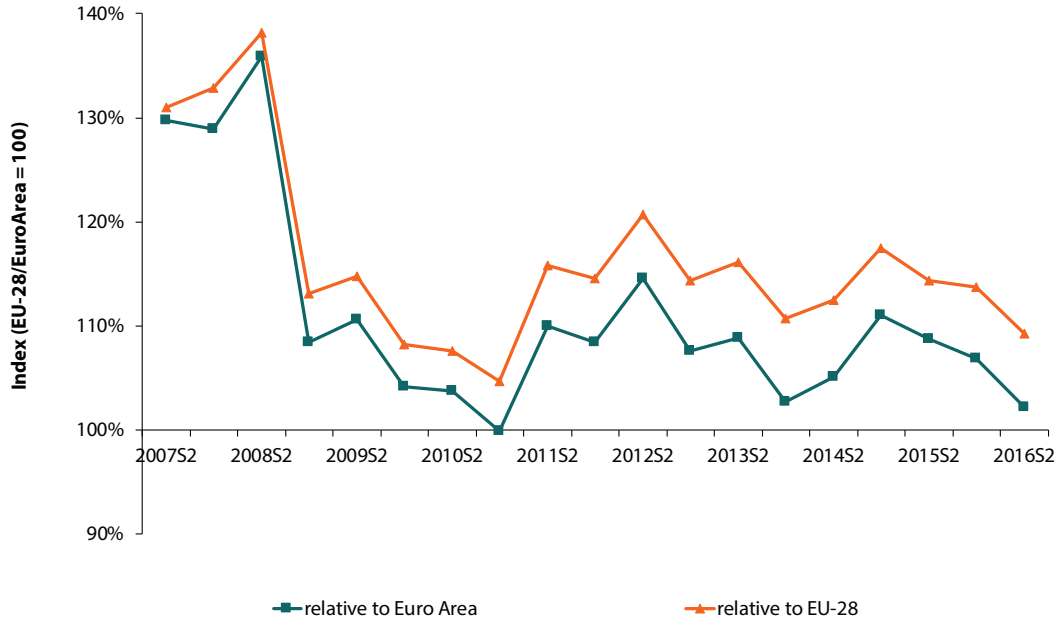


Figure 19 shows the ex-VAT price for electricity in Ireland for band IC consumption levels relative to the EU and the Euro Area as an index over the period. The price in Ireland was above the EU average price during the period, ranging from a high of 38% above average in the second half of 2008 to 4.8% above in the first half of 2011. The price in Ireland in the first half of 2016 was 9.2% above the EU average.

Prices were also above the Euro Area average for most of the period, ranging from 36% above average in the second half of 2008 to a low of 0.1% below in the first half of 2011. During the latest semester prices in Ireland were 2.2% above the Euro Area average.

Figure 19 *Business Electricity Prices (ex-VAT) in Band IC Relative to EU and Euro Area*



Source: Based on Eurostat data

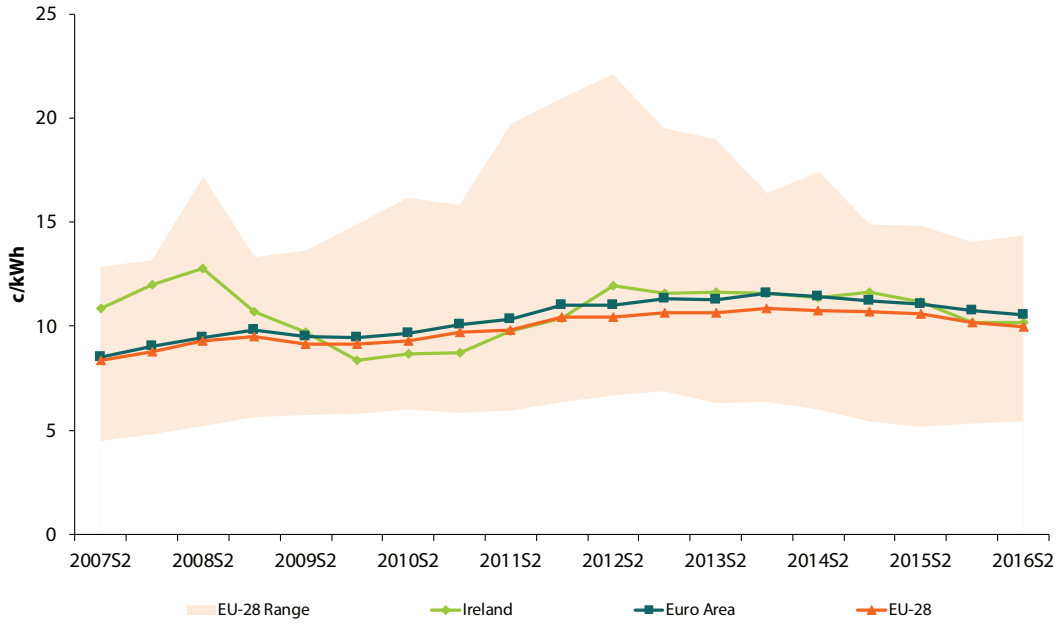
4.1.3 Business Electricity Prices in Consumption Band ID

Figure 20 shows the trend in electricity prices in consumption band ID for Ireland, EU and the Euro Area. The price of electricity to Irish business fell throughout 2009 and into the first half of 2010. The price in this band then increased until the end of 2012, when it was 43% higher than the start of 2010. Since then the price has been generally falling, with the exception of the first semester 2015 and the latest semester.

The price in Ireland in band ID increased by 0.1% during the second half of 2016. During the same period prices fell in the EU and Euro Area by 2.2% and 1.9% respectively. For reference, band ID accounted for 27% of the electricity use in the business market in Ireland during the second half of 2016.

As can be seen in *Figure 20*, the electricity price to business increased from 2007 until the end of 2008. This coincided with the rise in global energy prices shown in *Figure 1*. From the start of 2009 the price of electricity in this band fell steadily while average prices in the EU and the Euro Area were relatively stable. This resulted in prices to business in this consumption band being 8.1% below the EU average and 11.1% below the Euro Area average in the first half of 2010. Prices in this band in Ireland continued increasing until the second half of 2012 when they began to rise at a faster rate (15.2%) than in the EU (0.3%), which pushed Irish prices above both the EU and Euro Area averages. Prices in Ireland have been generally falling since the end of 2012; they were 15% lower at the start of 2016 since then.

Figure 20 *Business Electricity Prices (ex-VAT) in Band ID (2nd semester 2007 to 2nd semester 2016)*



Source: Eurostat

Table 24 shows the ex-VAT electricity prices in band ID (2,000 – 20,000 MWh per annum) for the five semesters between the second half of 2014 and the second half of 2016 for all countries in the EU. Also shown is the price change for each country between the semesters and for the latest 12 months.

Price changes in S2 2016 ranged from a 32% increase in Cyprus to an 11% price decrease in France. Ireland experienced an 0.1% increase in the semester. The EU as a whole and the Euro Area experienced a 2.2% and 1.9% decrease respectively in the second half of 2016.

Over the 12-month period S2 2015 – S2 2016 price changes varied from an 26% increase in Norway to a 15% decrease in the UK. Ireland experienced a decrease of 8.6% over the 12-month period. The decrease in band ID for Ireland compares with average decreases in the EU and the Euro Area of 5.9% and 4.8% respectively.

Ireland's ranking for its price of electricity in this business consumption band (see *Table 26*) in the second half of 2016 dropped to eighth most expensive. Since 2007, the average ranking for Ireland in this band was 8th most expensive.

Note that the percentage price change shown in *Table 24* is calculated from the published Eurostat euro values for each country. Percentage price changes in national currencies may differ considerably from these as significant moves in the currency exchange rate with the euro may distort price changes. *Figure 21* shows graphically the percentage change in national currencies, arranged in increasing order of price change.

Tables for all electricity consumption bands are published in a separate annex which is available at http://www.seai.ie/Publications/Statistics_Publications/Electricity_and_Gas_Prices/.

Table 24 *Business Electricity Prices in Band ID in Europe (S2 2014 – S2 2016)*

	without VAT (c/kWh)					% change				
Band ID	*July '14 – Dec '14*	*Jan '15 – Jun '15*	*July '15 – Dec '15*	*Jan '16 – Jun '16*	*July '16 – Dec '16*	*S2 '14 – S1 '15*	*S1 '15 – S2 '15*	*S2 '14 – S1 '15*	*S1 '16 – S2 '16*	*12 months to S2 '16*
Austria	9.37	8.97	9.09	8.57	7.95	-4.3%	1.3%	-5.7%	-7.2%	-12.5%
Belgium	9.73	9.56	9.72	9.47	9.79	-1.7%	1.7%	-2.6%	3.4%	0.7%
Bulgaria	6.81	6.20	7.00	7.64	7.01	-9.0%	12.9%	9.1%	-8.2%	0.1%
Croatia	7.82	7.91	8.05	7.78	7.68	1.2%	1.8%	-3.4%	-1.3%	-4.6%
Cyprus	17.42	12.56	12.44	9.12	12.07	-27.9%	-1.0%	-26.7%	32.3%	-3.0%
Czech Republic	7.71	7.18	7.20	6.39	6.29	-6.9%	0.3%	-11.3%	-1.6%	-12.6%
Denmark	9.63	8.98	9.05	9.41	9.09	-6.7%	0.8%	4.0%	-3.4%	0.4%
Estonia	8.51	8.19	8.88	8.08	8.06	-3.8%	8.4%	-9.0%	-0.2%	-9.2%
Finland	7.01	6.63	6.81	6.50	6.67	-5.4%	2.7%	-4.6%	2.6%	-2.1%
France	8.07	8.95	8.47	8.35	7.43	10.9%	-5.4%	-1.4%	-11.0%	-12.3%
Germany	13.26	13.16	13.00	12.85	12.62	-0.8%	-1.2%	-1.2%	-1.8%	-2.9%
Greece	10.64	10.02	8.97	9.29	8.62	-5.8%	-10.5%	3.6%	-7.2%	-3.9%
Hungary	8.75	8.52	8.54	7.63	7.49	-2.6%	0.2%	-10.7%	-1.8%	-12.3%
Ireland	**11.36**	**11.64**	**11.15**	**10.18**	**10.19**	**2.5%**	**-4.2%**	**-8.7%**	**0.1%**	**-8.6%**
Italy	15.91	14.89	14.85	14.06	14.35	-6.4%	-0.3%	-5.3%	2.1%	-3.4%
Latvia	10.68	10.81	10.72	10.74	10.72	1.2%	-0.8%	0.2%	-0.2%	0.0%
Lithuania	11.70	9.06	9.03	8.36	7.91	-22.6%	-0.3%	-7.4%	-5.4%	-12.4%
Luxembourg	6.73	6.39	5.84	5.39	5.44	-5.1%	-8.6%	-7.7%	0.9%	-6.8%
Malta	15.80	14.12	12.39	12.21	12.33	-10.6%	-12.3%	-1.5%	1.0%	-0.5%
Netherlands	8.22	8.17	7.97	7.74	7.66	-0.6%	-2.4%	-2.9%	-1.0%	-3.9%
Norway	6.54	6.19	5.43	6.14	6.82	-5.4%	-12.3%	13.1%	11.1%	25.6%
Poland	7.13	7.68	7.52	7.17	7.10	7.7%	-2.1%	-4.7%	-1.0%	-5.6%
Portugal	10.09	10.32	10.39	10.20	10.51	2.3%	0.7%	-1.8%	3.0%	1.2%
Romania	7.30	7.48	7.18	6.83	7.21	2.5%	-4.0%	-4.9%	5.6%	0.4%
Slovakia	10.53	10.10	9.86	9.68	9.97	-4.1%	-2.4%	-1.8%	3.0%	1.1%
Slovenia	7.55	7.23	7.53	7.12	7.17	-4.2%	4.1%	-5.4%	0.7%	-4.8%
Spain	10.29	9.68	9.55	9.02	8.63	-5.9%	-1.3%	-5.5%	-4.3%	-9.6%
Sweden	5.98	5.45	5.15	5.31	5.57	-8.9%	-5.5%	3.1%	4.9%	8.2%
Turkey	7.26	7.88	6.96	6.68	6.58	8.5%	-11.7%	-4.0%	-1.5%	-5.5%
United Kingdom	12.14	13.71	13.95	12.68	11.79	12.9%	1.8%	-9.1%	-7.0%	-15.5%
Euro Area	11.43	11.22	11.06	10.73	10.53	-1.8%	-1.4%	-3.0%	-1.9%	-4.8%
EU-28	10.74	10.69	10.58	10.18	9.96	-0.5%	-1.0%	-3.8%	-2.2%	-5.9%
Ireland relative to:										
Euro Area	99.4%	103.7%	100.8%	94.9%	96.8%					
EU-28	105.8%	108.9%	105.4%	100.0%	102.3%					

Source: Eurostat

Figure 21 *Percentage Change (national currency) in Business Electricity Price (band ID) – Semester and 12 Months*

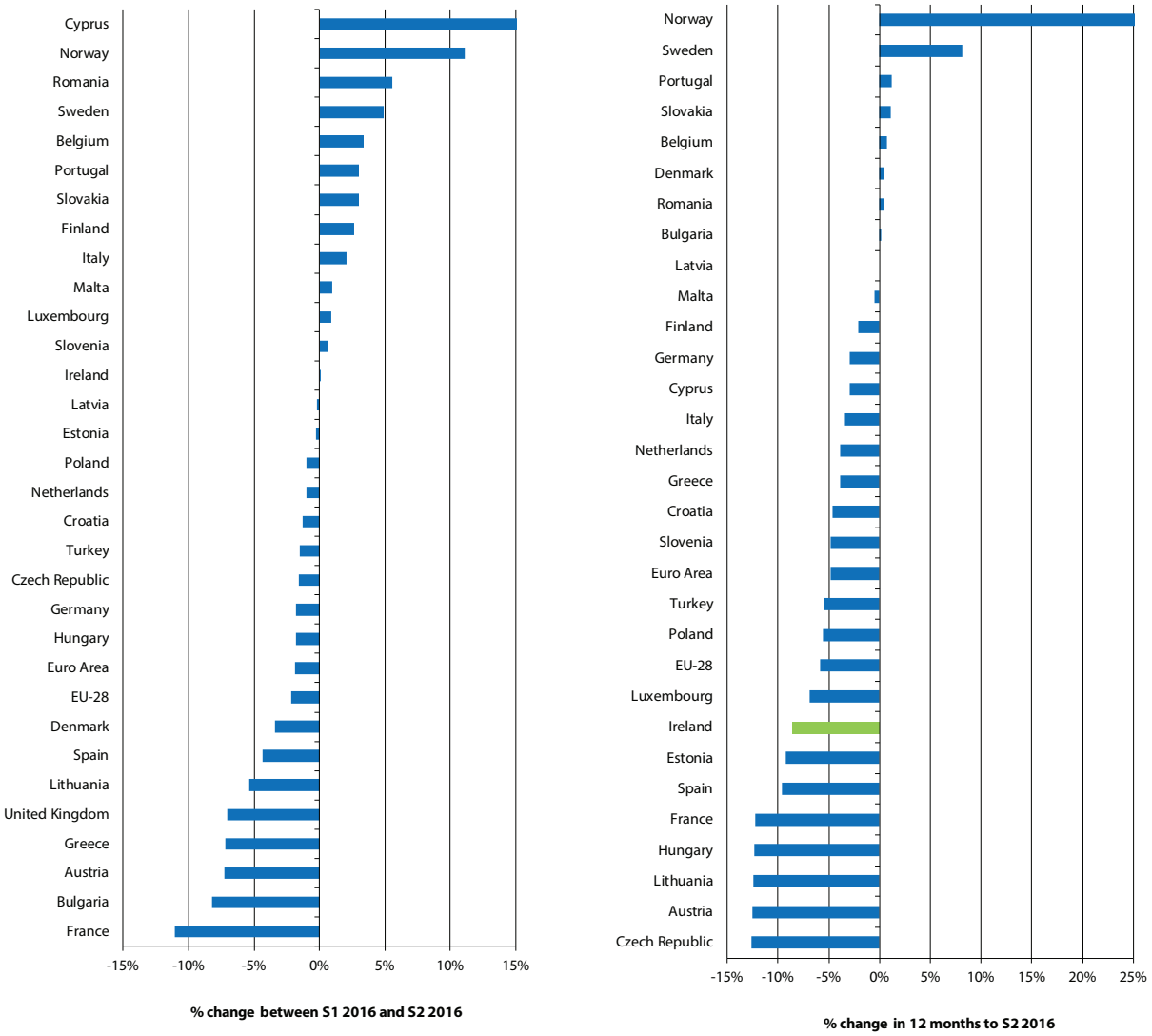
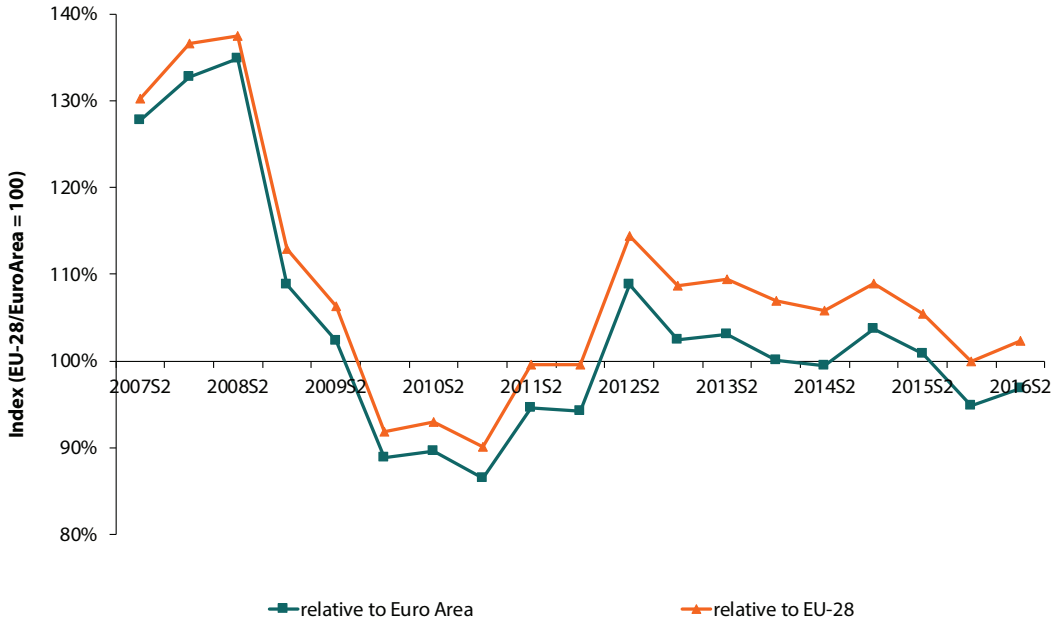


Figure 22 shows the ex-VAT price for electricity in Ireland for band ID consumption levels relative to the EU and the Euro Area as an index over the period. The price in Ireland was above the EU average price from the second half of 2007 until the second half of 2009 and has been again since the second half of 2012. The price relative to the EU ranged from a high of 38% above average in the second half of 2008 to a low of 9.9% below in the first half of 2011. During the latest semester prices were 2.3% above the EU average.

The trend for the Euro Area average was similar to the EU trend with prices ranging from 35% above average in the second half of 2008 to a low of 13.6% below in the first half of 2011. During the latest semester prices in Ireland were 3.2% below the Euro Area average.

Figure 22 *Business Electricity Prices (ex-VAT) in Band ID Relative to EU and Euro Area*



Source: Based on Eurostat data

4.1.4 Business Electricity Prices – EU Comparison

Table 25 shows Ireland's position in relation to the EU average electricity prices to business for S2 2016 with S1 2016 shown in grey. Also shown in *Table 25* are the market shares by volume for each band.

Table 25 *Business Electricity Prices (cents) in Ireland (2nd semester 2016) – EU Comparison*

Electricity prices to business consumers (excluding VAT)	Price c/kWh	% change since last semester	Relative to EU average S2 2016	Relative to EU average S1 2016	Band share of market
Band IA	19.6	1.3%	**106%**	104%	8.7%
Band IB	15.4	-3.4%	**112%**	113%	30.1%
Band IC	12.5	-6.2%	**109%**	114%	15.2%
Band ID	10.2	0.1%	**102%**	100%	26.5%
Band IE	8.6	-3.4%	**101%**	102%	10.2%
Band IF	7.8	-3.3%	**102%**	108%	9.3%

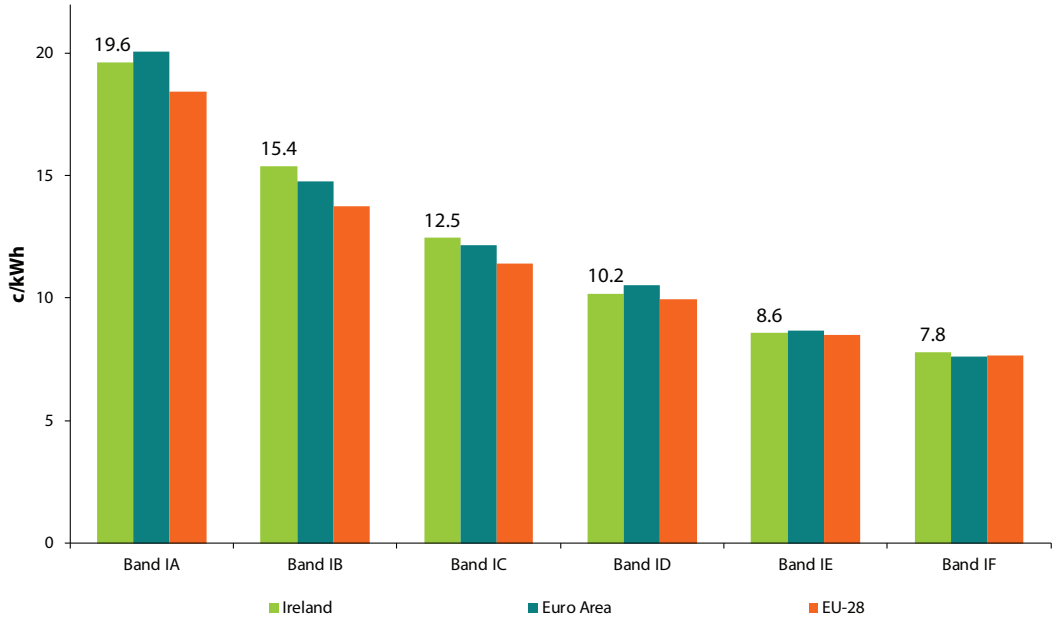
Source: Eurostat

All consumption bands, experienced decreases in the price of electricity to business in Ireland in S2 2016 with the exception of bands IA and ID. The changes in the price in this semester ranged from a decrease of 6.2% in band IC to an increase of 1.3% in band IA.

The ex-VAT prices for business in Ireland are all above the EU average in all consumption bands, ranging from 1% above in band IE to 12% above in band IC.

In terms of market share, band IB is the most significant, accounting for 30% of the business electricity market, followed by band ID on 27%. When reporting on electricity prices for the EU, Eurostat normally uses band IC to compare prices between countries. This consumption band has an 15% share of the Irish business electricity market and was 14% above the EU average during the first second of 2016. *Figure 23* shows graphically the position of the ex-VAT electricity prices to business during S2 2016.

Figure 23 *Business Electricity Prices (ex-VAT) 2nd Semester 2016*



Source: Eurostat

Table 26 shows Ireland's ranking in the EU for the ex-VAT prices paid by business for electricity over the time period ranging from S2 2013 – S2 2016. A ranking of 1 means the most expensive. The bottom row of the table shows the number of countries on which the ranking is based. *Table 26* should also be read in conjunction with the market share of each band as shown in *Table 25*.

Table 26 *Ireland's Ranking in EU for Business Electricity Prices (ex-VAT)*

Ranking of electricity prices to business consumers (ex-VAT)	July '13 – Dec '13	Jan '14 – Jun '14	July '14 – Dec '14	Jan '15 – Jun '15	July '15 – Dec '15	Jan '16 – Jun '16	July '16 – Dec '16
Band IA	8	8	8	7	6	9	**6**
Band IB	6	6	6	7	5	4	**7**
Band IC	5	5	5	5	6	5	**6**
Band ID	5	7	7	6	6	7	**8**
Band IE	8	8	8	6	7	6	**9**
Band IF	9	7	6	7	7	5	**9**
No. of Countries	30	30	30	30	30	30	**30**

Source: Eurostat

In the latest semester, the consumption bands IA and IC were the highest ranking, at sixth most expensive in the EU. Since the last semester, band IB improved by three place to seventh. Bands ID, IE and IF all improved their ranking in the latest semester.

4.1.5 Business Electricity Prices – Euro Area Comparison

Among the Euro Area countries, business electricity prices in Ireland for the second half of 2016 were above or at the average in bands IB, IC, ID, and IF, ranging from bands IC and IF being 2% above the Euro Area average to band IB being 4% above. Bands IA, ID and IE were 2%, 3% and 1% respectively below the Euro Area average.

Table 27 *Business Electricity Prices (cents) (2nd semester 2016) – Euro Area Comparison*

Electricity prices to business consumers (excluding VAT)	Price c/kWh	Relative to Euro Area average S2 2016	Relative to Euro Area average S1 2016
Band IA (Consumption < 20 MWh)	19.6	98%	96%
Band IB (20 MWh < Consumption < 500 MWh)	15.4	104%	105%
Band IC (500 MWh < Consumption < 2,000 MWh)	12.5	102%	107%
Band ID (2,000 MWh < Consumption < 20,000 MWh)	10.2	97%	95%
Band IE (20,000 MWh < Consumption < 70,000 MWh)	8.6	99%	100%
Band IF (70,000 MWh < Consumption < 150,000 MWh)	7.8	102%	111%

Source: Eurostat

4.1.6 Disaggregation of Business Electricity Prices

Once a year Eurostat collects a disaggregation of electricity prices from Member States, breaking the average price in each consumption band into its components of energy and supply, network costs and taxes and levies. *Table 28* shows the disaggregation of electricity prices to business in consumption band IC for S2 2016, sorted by the share of energy and supply in the ex-tax price.

With reference to *Table 28*, the energy and supply component in Ireland was 7.4 c/kWh out of the 12.5 c/kWh total price. This represented 66% of the price exclusive of all taxes, it was the fourth highest in absolute terms and the sixth highest, out of 31 countries, in terms of the share of the ex-tax price.

Network costs accounted for 34% of the ex-tax price or 3.8 c/kWh in absolute terms. This was the sixth highest in absolute terms and ninth in terms of the share of the ex-tax price.

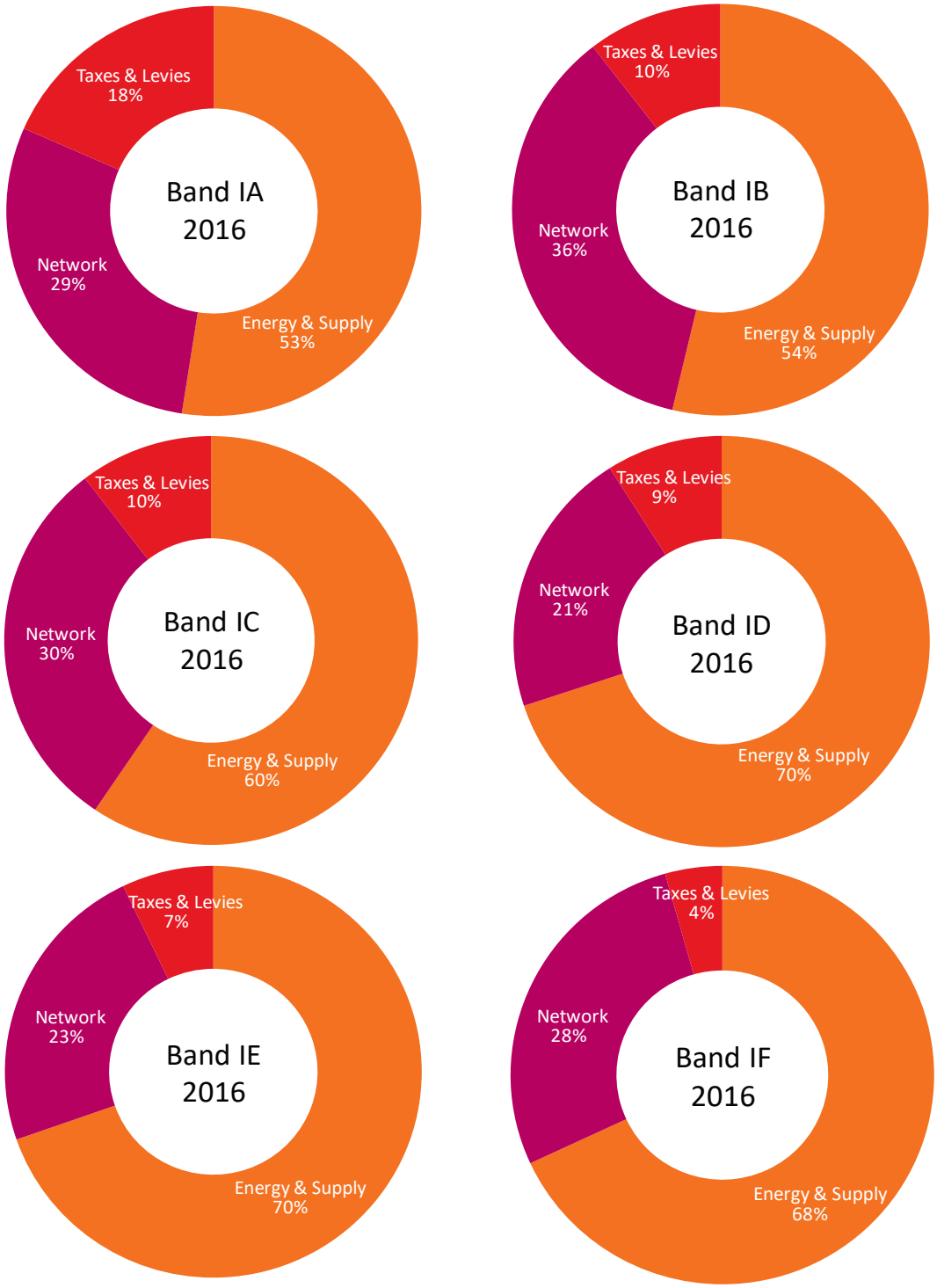
Table 28 *Disaggregated Business Electricity Prices 2nd Semester 2016*

Country	Total Price	Disaggregate price in c/kWh			Share in ex-tax price %	
		Energy and Supply	Network Costs	Non-Recoverable Taxes and Levies	Energy and Supply	Network Costs
Malta	14.0	11.8	2.2	0.0	84.3%	15.7%
Italy	15.6	7.1	1.7	6.8	80.2%	19.8%
Spain	10.3	7.8	2.0	0.5	79.8%	20.2%
Bulgaria	7.9	6.2	1.6	0.1	79.6%	20.4%
Cyprus	13.0	9.4	2.7	0.8	77.4%	22.6%
Turkey	7.3	5.3	1.7	0.2	75.6%	24.4%
United Kingdom	12.8	7.3	2.5	3.1	74.7%	25.3%
France	8.9	4.8	1.8	2.4	73.0%	27.0%
Netherlands	8.1	4.7	1.9	1.5	71.7%	28.3%
Slovenia	8.3	4.5	2.1	1.7	67.9%	32.1%
Finland	6.9	4.2	2.1	0.7	67.1%	32.9%
Hungary	8.0	4.8	2.4	0.8	66.8%	33.2%
Bosnia and Herzegovina	6.1	4.1	2.0	0.0	66.7%	33.3%
Ireland	**12.5**	**7.4**	**3.8**	**1.3**	**66.4%**	**33.6%**
Poland	8.2	4.8	2.9	0.5	62.5%	37.5%
Portugal	11.4	5.8	3.7	1.8	61.2%	38.8%
Austria	10.0	4.1	2.7	3.2	60.1%	39.9%
Denmark	9.4	3.8	2.7	2.9	58.7%	41.3%
Serbia	4.7	2.4	1.8	0.5	57.9%	42.1%
Sweden	6.6	3.8	2.8	0.1	57.8%	42.2%
Lithuania	8.8	4.1	3.2	1.5	56.6%	43.4%
Romania	7.7	3.6	2.9	1.3	55.3%	44.7%
Germany	14.9	4.4	3.6	7.0	55.0%	45.0%
Croatia	8.8	4.4	3.8	0.5	53.8%	46.2%
Czech Republic	7.3	3.9	3.4	0.1	53.4%	46.6%
Belgium	11.6	4.6	4.2	2.8	52.4%	47.6%
Luxembourg	8.6	4.0	3.7	0.9	52.2%	47.8%
Norway	8.1	3.3	3.1	1.8	52.0%	48.0%
Estonia	9.0	3.9	3.7	1.4	51.0%	49.0%
Montenegro	7.8	3.9	3.9	0.0	50.1%	49.9%
Latvia	12.0	4.6	4.8	2.7	48.8%	51.2%
Slovakia	11.1	3.9	6.8	0.5	36.6%	63.4%

Source: Eurostat

Figure 24 shows graphically the disaggregated components that make up the electricity prices to business in Ireland for all bands.

Figure 24 *Disaggregation of Business Electricity Prices by Consumption Bands in Ireland*



4.2 Business Gas Prices

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 included. Prices are recorded as national average prices.

The prices represent average prices weighted across the suppliers, using the market shares of the gas suppliers surveyed as the weighting factor; arithmetic average prices are 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. In Ireland the weighted average price is used and, as all suppliers are surveyed, represents the full market.

Market shares are based on the quantity of gas invoiced by the gas suppliers to business 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 consumption bands.

Three pricing levels are reported to Eurostat:

- 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 categories of business end-user shown in *Table 29*:

Table 29 *Categories for Business End-Use of Natural Gas*

Consumption bands	Annual gas consumption (MWh)		Band share of business gas consumption in Ireland S2 2016
	Lowest	Highest	
Band I1		< 280	10.4%
Band I2	280	< 2,800	16.7%
Band I3	2,800	< 28,000	19.9%
Band I4	28,000	< 280,000	36.5%
Band I5	280,000	<= 1,100,000	16.5%

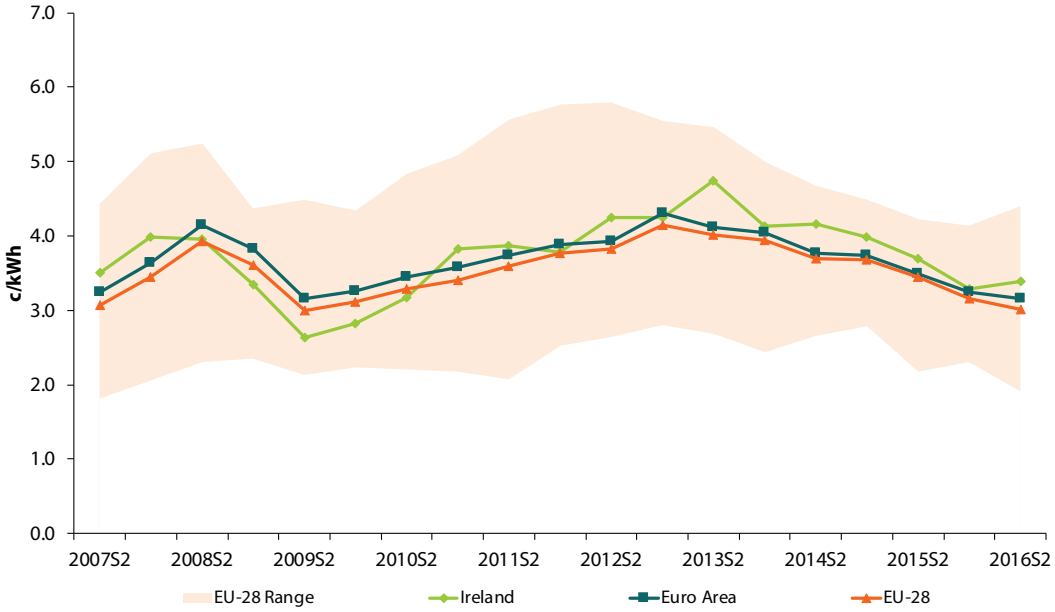
Data and analysis on gas prices in this section are based on the survey results from the Gas and Electricity Prices Regulation in respect of S2 2016. As with electricity prices, the average gas price *excluding VAT and other recoverable taxes* is used as this is the most relevant to business consumers. Data is presented on the trend in gas prices since the start of the data collection under the new methodology. There is also a focus on the latest semester data as well as the data revisions published by Eurostat.

Data analysis is highlighted here for two consumption bands, I3 and I4. I3 is the band typically reported on by Eurostat for international comparisons. Band I4 is also reported here as it the largest in terms of market share and also represents larger consumers. In aggregate, these two bands account for 56% of the non-domestic natural gas market.

4.2.1 Business Gas Prices in Consumption Band I3

As shown in *Figure 25*, gas prices to business in Ireland in consumption band I3 fell by 34% over the 18-month period from S1 2008 until the end of 2009. The price then increased in general, by 80%, between S2 2009 and S2 2013. The price has fallen generally since S2 2013 and was 31% lower than that point in the first half of 2016 but increased again in the second half of 2016.

Figure 25 *Business Gas Prices (ex-VAT) in Band I3 (2nd semester 2007 to 2nd semester 2016)*



Source: Eurostat

For consumers in smaller consumption bands I1 and I2, prices in Ireland increased in S2 2016 by 2.3% and 10.6% respectively. Ireland moved to being 12% above the EU average price in consumption band I1, and to 20% above the average in band I2 (see *Table 32*).

Table 30 shows prices in band I3 for the five semesters between the second half of 2014 and the second half of 2016. Also shown is the price change for each country between each subsequent semester, and for the most recent 12 months for which data is available.

Price changes in S2 2016 ranged from an 14% increase in France to a 26% price decrease in the Netherlands. Gas price increased by 3.4% in this consumption band in Ireland. The EU and the Euro Area experienced an 4.7% and 3.1% decrease respectively in price in band I3 in this semester. Ireland moved to being 13% above the EU average, from 3.8% above in the previous semester.

Over the 12-month period S2 2015 – S2 2016 price changes varied from a 12% increase in Lithuania to a 29% decrease in the UK. Ireland experienced a decrease of 8.4% over the 12-month period, which compares with a 13% decrease experienced in the EU and a 9.7% decrease in the Euro Area.

Note that the percentage price change shown in *Table 30* is calculated from the published Eurostat euro values for each country. Percentage price changes in national currencies may differ considerably from these. *Figure 26* shows graphically the percentage change in national currencies, arranged in increasing order of price change.

Table 30 *Business Gas Prices in Band I3 in Europe (S2 2014 – S2 2016)*

	without VAT (c/kWh)					% change				
Band I3	*July '14 – Dec '14*	*Jan '15 – Jun '15*	*July '15 – Dec '15*	*Jan '16 – Jun '16*	*July '16 – Dec '16*	*S2 '14 – S1 '15*	*S1 '15 – S2 '15*	*S2 '14 – S1 '15*	*S1 '16 – S2 '16*	*12 months to S2 '16*
Austria	4.01	3.96	3.78	3.41	3.41	-1.2%	-4.5%	-9.8%	0.0%	-9.8%
Belgium	2.93	2.94	2.86	2.57	2.57	0.3%	-2.7%	-10.1%	0.0%	-10.1%
Bulgaria	3.41	3.21	2.69	2.30	1.92	-5.9%	-16.2%	-14.5%	-16.5%	-28.6%
Croatia	4.01	3.89	3.51	3.27	2.75	-3.0%	-9.8%	-6.8%	-15.9%	-21.7%
Czech Republic	3.04	2.97	2.94	2.62	2.58	-2.3%	-1.0%	-10.9%	-1.5%	-12.2%
Denmark	3.70	3.68	3.44	2.87	3.01	-0.5%	-6.5%	-16.6%	4.9%	-12.5%
Estonia	3.69	3.60	2.71	2.43	2.34	-2.4%	-24.7%	-10.3%	-3.7%	-13.7%
Finland	4.67	4.46	4.22	4.14	4.40	-4.5%	-5.4%	-1.9%	6.3%	4.3%
France	3.79	3.77	3.67	3.33	3.78	-0.5%	-2.7%	-9.3%	13.5%	3.0%
Germany	4.01	3.95	3.77	3.39	3.32	-1.5%	-4.6%	-10.1%	-2.1%	-11.9%
Greece	4.67	4.15	3.60	2.96	2.83	-11.1%	-13.3%	-17.8%	-4.4%	-21.4%
Hungary	3.89	3.67	3.38	3.17	2.75	-5.7%	-7.9%	-6.2%	-13.2%	-18.6%
Ireland	**4.16**	**3.99**	**3.70**	**3.28**	**3.39**	**-4.1%**	**-7.3%**	**-11.4%**	**3.4%**	**-8.4%**
Italy	3.45	3.54	3.19	3.12	2.73	2.6%	-9.9%	-2.2%	-12.5%	-14.4%
Latvia	3.56	3.47	2.94	2.67	2.48	-2.5%	-15.3%	-9.2%	-7.1%	-15.6%
Lithuania	3.74	2.80	2.18	2.68	2.45	-25.1%	-22.1%	22.9%	-8.6%	12.4%
Luxembourg	3.94	3.95	3.72	3.52	3.30	0.3%	-5.8%	-5.4%	-6.2%	-11.3%
Netherlands	3.36	3.89	3.21	3.84	2.85	15.8%	-17.5%	19.6%	-25.8%	-11.2%
Poland	3.64	3.74	3.38	2.70	2.61	2.7%	-9.6%	-20.1%	-3.3%	-22.8%
Portugal	4.44	4.16	3.79	3.40	2.76	-6.3%	-8.9%	-10.3%	-18.8%	-27.2%
Romania	3.08	3.00	2.90	2.78	2.62	-2.6%	-3.3%	-4.1%	-5.8%	-9.7%
Slovakia	3.76	3.47	3.47	3.05	3.12	-7.7%	0.0%	-12.1%	2.3%	-10.1%
Slovenia	4.38	3.67	3.80	3.45	3.26	-16.2%	3.5%	-9.2%	-5.5%	-14.2%
Spain	3.74	3.50	3.17	2.81	2.60	-6.4%	-9.4%	-11.4%	-7.5%	-18.0%
Sweden	4.41	4.49	4.18	3.73	3.84	1.8%	-6.9%	-10.8%	2.9%	-8.1%
Turkey	2.65	2.78	2.52	2.45	2.24	4.9%	-9.4%	-2.8%	-8.6%	-11.1%
United Kingdom	3.47	3.57	3.51	2.91	2.49	2.9%	-1.7%	-17.1%	-14.4%	-29.1%
Euro Area	3.76	3.74	3.49	3.25	3.15	-0.5%	-6.7%	-6.9%	-3.1%	-9.7%
EU-28	3.70	3.68	3.45	3.16	3.01	-0.5%	-6.2%	-8.4%	-4.7%	-12.8%
Ireland relative to:										
Euro Area	110.6%	106.7%	106.0%	100.9%	107.6%					
EU-28	112.4%	108.4%	107.2%	103.8%	112.6%					

Source: Eurostat

Tables for all gas consumption bands in both GJ and kWh are published in separate annexes which are available at www.seai.ie/statistics.

Figure 26 *Percentage Change (national currency) in Business Gas Price (band I3) – Semester and 12 Months*

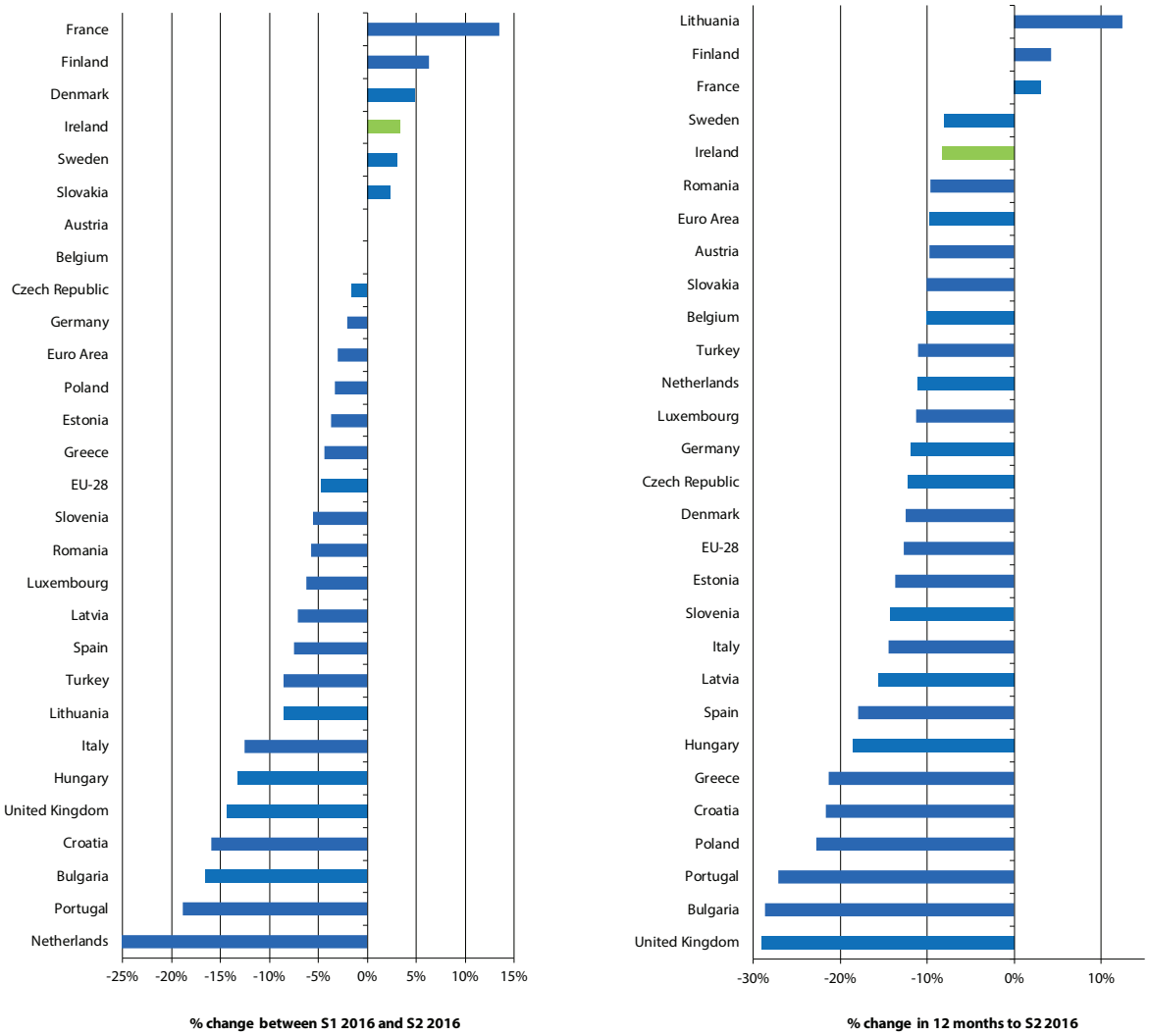
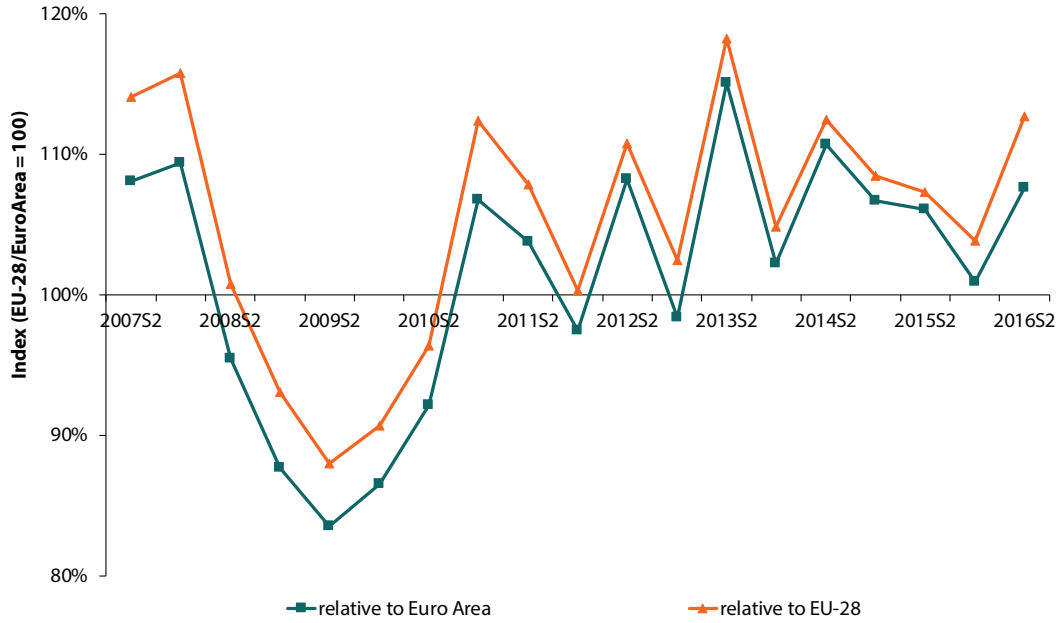


Figure 27 shows the ex-VAT price for gas in Ireland for band I3 consumption levels relative to the EU and the Euro Area as an index over the period. The price in Ireland was above the EU average price for the periods: second half of 2007 to the second half of 2008; the first half of 2011 to the current semester. Prices relative to the EU average ranged from a high of 17.9% above average in S2 2013 to a low of 13% below average in the second half of 2009. In the second half of 2016 the price in this band was 13% above the EU average.

The trend for the Euro Area average was similar to the EU trend with prices ranging from 14.8% above average in S2 2013 to a low of 17% below in the second half of 2009. Prices in Ireland were 7.6% above the Euro Area average in the second half of 2016.

Figure 27 *Business Gas Prices (ex-VAT) in Band I3 Relative to EU and Euro Area*

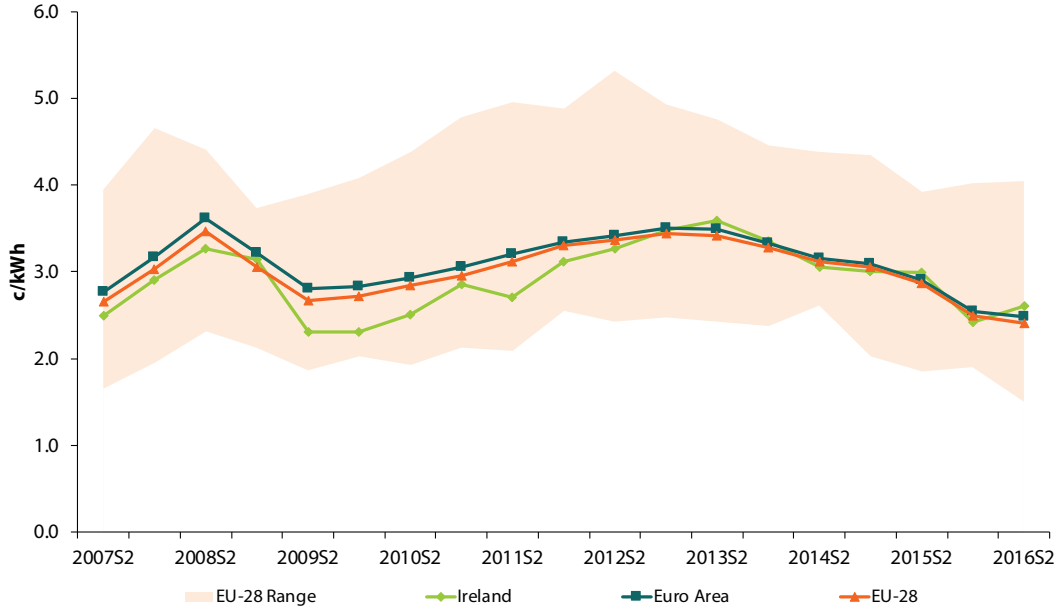


Source: Based on Eurostat data

4.2.2 Business Gas Prices in Consumption Band I4

As shown in *Figure 28*, gas prices to business in consumption band I4 fell from S2 2008 to the end of 2009 and dropped by 29% over that 12-month period. After that the price of gas in this consumption band generally increased, by a total of 55%, until S2 2013. Prices in this band in Ireland fell by 33% until the first half of 2016, while prices in the EU and the Euro Area fell by 26%. Price in this band increased during the second half of 2016.

Figure 28 *Business Gas Prices (ex-VAT) in Band I4 (2nd semester 2007 to 2nd semester 2016)*



Source: Eurostat

Table 31 shows prices in band I4 for the five semesters between the second half of 2014 and the second half of 2016. Also shown is the price change for each country between each subsequent semester, and for the most recent 12 months for which data is available.

Price changes in S2 2016 ranged from an 7.4% increase in Ireland to a 21% price decrease in Bulgaria. Gas prices

increased by 7.4% in this consumption band in Ireland. The EU and the Euro Area both experienced price decreases of 3.6% and 2.4% respectively in band I4 in this semester.

Over the 12-month period S2 2015 – S2 2016 price changes varied from a 3.1% increase in Finland to a 34% decrease in Bulgaria. The price in Ireland fell by 13% over the 12 months and compares with a decrease of 16% in the EU and an 14% decrease in the Euro Area.

Note that the percentage price change shown in *Table 31* is calculated from the published Eurostat euro values for each country. Percentage price changes in national currencies may differ considerably from these. *Figure 29* shows graphically the percentage change in national currencies, arranged in increasing order of price change.

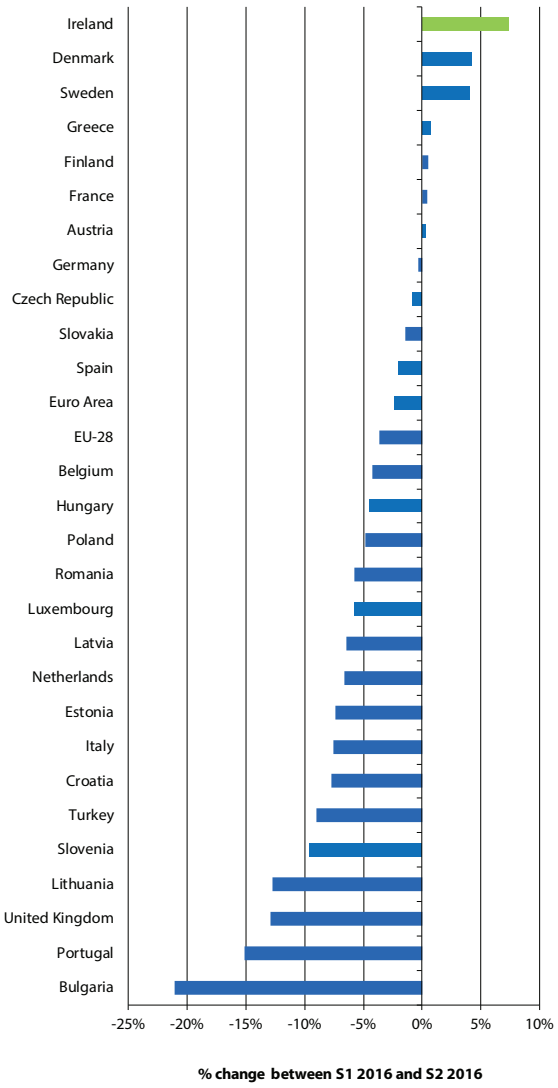
Table 31 *Business Gas Prices in Band I4 in Europe (S2 2014 to S2 2016)*

	without VAT (c/kWh)					**% change**				
Band I4	*July '14 – Dec '14*	*Jan '15 – Jun '15*	*July '15 – Dec '15*	*Jan '16 – Jun '16*	*July '16 – Dec '16*	*S2 '14 – S1 '15*	*S1 '15 – S2 '15*	*S2 '14 – S1 '15*	*S1 '16 – S2 '16*	*12 months to S2 '16*
Austria	3.39	3.43	3.24	2.83	2.84	1.2%	-5.5%	-12.7%	0.4%	-12.3%
Belgium	2.63	2.61	2.49	2.14	2.05	-0.8%	-4.6%	-14.1%	-4.2%	-17.7%
Bulgaria	3.06	2.84	2.29	1.90	1.50	-7.2%	-19.4%	-17.0%	-21.1%	-34.5%
Croatia	3.80	3.58	2.87	2.60	2.40	-5.8%	-19.8%	-9.4%	-7.7%	-16.4%
Czech Republic	2.81	2.71	2.64	2.28	2.26	-3.6%	-2.6%	-13.6%	-0.9%	-14.4%
Denmark	3.15	3.16	2.92	2.35	2.45	0.3%	-7.6%	-19.5%	4.3%	-16.1%
Estonia	3.62	3.35	2.61	2.43	2.25	-7.5%	-22.1%	-6.9%	-7.4%	-13.8%
Finland	4.38	4.34	3.92	4.02	4.04	-0.9%	-9.7%	2.6%	0.5%	3.1%
France	3.06	3.04	2.91	2.39	2.40	-0.7%	-4.3%	-17.9%	0.4%	-17.5%
Germany	3.19	3.16	2.99	2.65	2.64	-0.9%	-5.4%	-11.4%	-0.4%	-11.7%
Greece	4.28	3.79	3.20	2.50	2.52	-11.4%	-15.6%	-21.9%	0.8%	-21.3%
Hungary	2.87	2.78	2.93	2.69	2.57	-3.1%	5.4%	-8.2%	-4.5%	-12.3%
Ireland	**3.05**	**3.01**	**2.99**	**2.42**	**2.60**	**-1.3%**	**-0.7%**	**-19.1%**	**7.4%**	**-13.0%**
Italy	2.96	2.92	2.77	2.51	2.32	-1.4%	-5.1%	-9.4%	-7.6%	-16.2%
Latvia	3.38	3.31	2.79	2.49	2.33	-2.1%	-15.7%	-10.8%	-6.4%	-16.5%
Lithuania	3.15	2.02	1.85	2.12	1.85	-35.9%	-8.4%	14.6%	-12.7%	0.0%
Luxembourg	3.14	3.15	2.96	2.58	2.43	0.3%	-6.0%	-12.8%	-5.8%	-17.9%
Netherlands	2.72	3.04	2.64	2.55	2.38	11.8%	-13.2%	-3.4%	-6.7%	-9.8%
Poland	3.17	3.24	2.91	2.27	2.16	2.2%	-10.2%	-22.0%	-4.8%	-25.8%
Portugal	3.81	3.55	3.27	2.78	2.36	-6.8%	-7.9%	-15.0%	-15.1%	-27.8%
Romania	2.76	2.60	2.48	2.42	2.28	-5.8%	-4.6%	-2.4%	-5.8%	-8.1%
Slovakia	3.45	3.24	3.21	2.81	2.77	-6.1%	-0.9%	-12.5%	-1.4%	-13.7%
Slovenia	3.57	3.25	3.00	2.72	2.46	-9.0%	-7.7%	-9.3%	-9.6%	-18.0%
Spain	3.47	3.17	2.92	2.44	2.39	-8.6%	-7.9%	-16.4%	-2.0%	-18.2%
Sweden	4.04	4.19	3.81	3.41	3.55	3.7%	-9.1%	-10.5%	4.1%	-6.8%
Turkey	2.61	2.77	2.45	2.34	2.13	6.1%	-11.6%	-4.5%	-9.0%	-13.1%
United Kingdom	2.86	2.93	2.78	2.25	1.96	2.4%	-5.1%	-19.1%	-12.9%	-29.5%
Euro Area	3.15	3.09	2.90	2.54	2.48	-1.9%	-6.1%	-12.4%	-2.4%	-14.5%
EU-28	3.11	3.06	2.87	2.49	2.40	-1.6%	-6.2%	-13.2%	-3.6%	-16.4%
Ireland relative to:										
Euro Area	96.8%	97.4%	103.1%	95.3%	104.8%					
EU-28	98.1%	98.4%	104.2%	97.2%	108.3%					

Source: Eurostat

Tables for all gas consumption bands in both GJ and kWh are published in separate annexes which are available at www.seai.ie/statistics.

Figure 29 *Percentage Change (national currency) in Business Gas Price (band I4) – Semester and 12 Months*



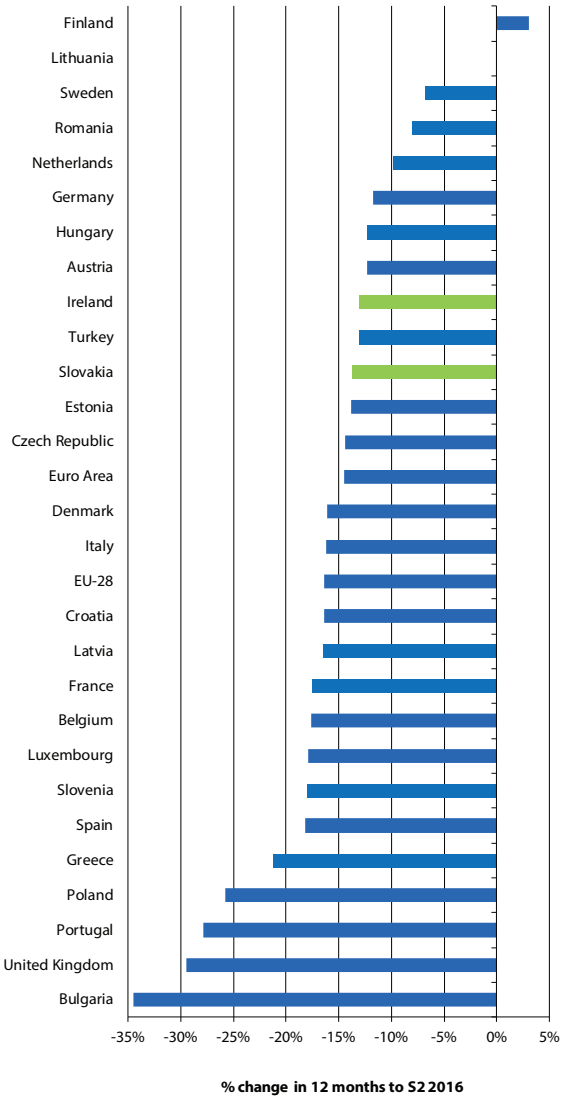
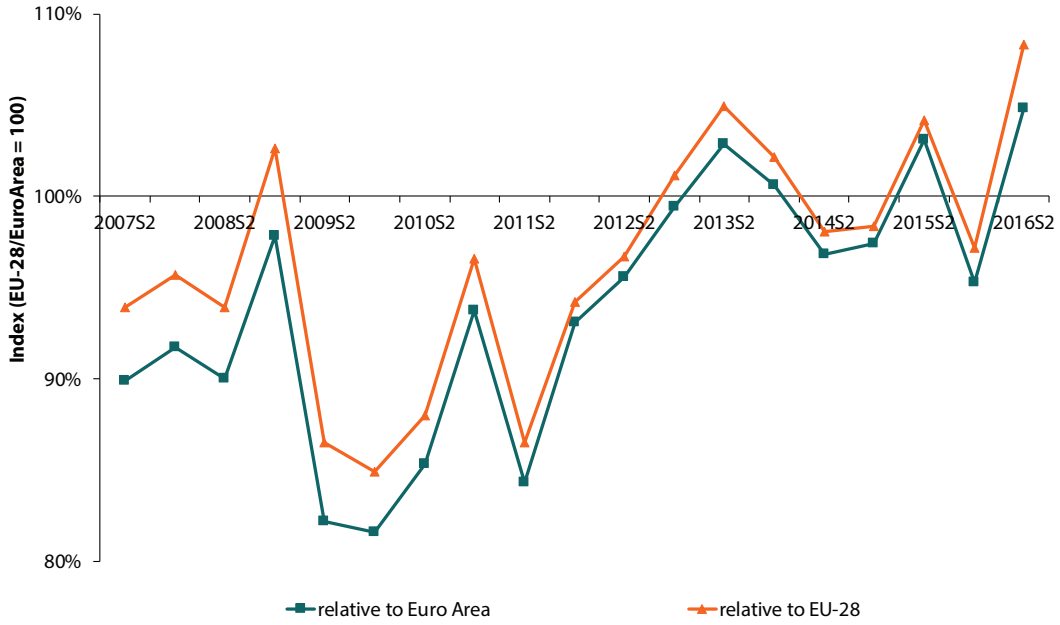


Figure 30 shows the ex-VAT price for gas in Ireland for band I4 consumption levels relative to the EU and the Euro Area as an index over the period. The price in Ireland was below the EU average price for most of the period, with the exception of the first half of 2009 and the three semesters between the start of 2013 and start of 2014. Prices relative to the EU ranged from a high of 5.3% above average in the second half of 2013 to a low of 14.8% below average in the first half of 2010. The price was 8.3% above the EU average in the second half of 2016.

The price of gas in Ireland relative to the Euro Area was below the Euro Area average from the second half of 2007 until the middle of 2013. Prices ranged from 3.2% above average in S2 2013 to a low of 18.1% below in the second half of 2009 and the first half of 2010. Prices during the second half of 2016 were 4.8% above the Euro Area average.

Figure 30 *Business Gas Prices (ex-VAT) in Band I4 Relative to EU and Euro Area*



Source: Based on Eurostat data

4.2.3 Business Gas Prices – EU Comparison

Table 32 *Business Gas Prices in Ireland (2nd semester 2016) – EU Comparison*

Gas prices to business consumers (excluding VAT)	Price €/GJ	Price c/kWh	% change since last semester	Relative to EU average 2016 - S2	Relative to EU average 2016 - S1	Band share of market
Band I1	14.6	5.2	2.3%	**112%**	109%	10.4%
Band I2	12.2	4.4	10.6%	**120%**	104%	16.7%
Band I3	9.4	3.4	3.4%	**113%**	104%	19.9%
Band I4	7.2	2.6	7.4%	**108%**	97%	36.5%
Band I5	5.5	2.0	..	**93%**	..	16.5%

Source: Eurostat

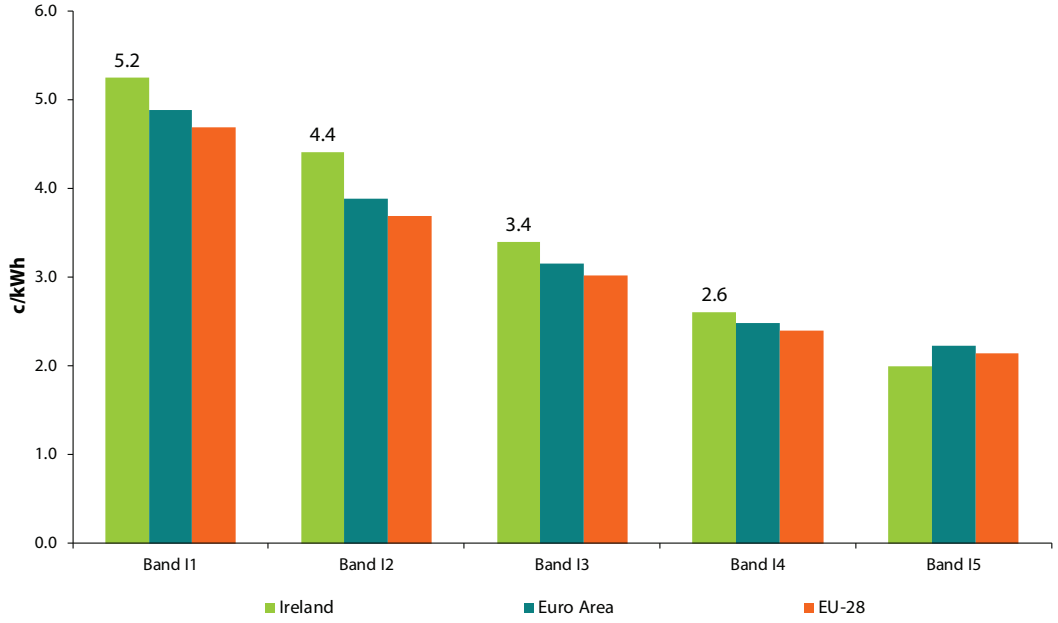
Table 32 shows Ireland's position relative to the EU average gas prices to business for S2 2016 with S1 2016 shown in grey. *Table 32* also shows the market shares by volume for each band.

With respect to ex-VAT gas prices to business, all consumption bands experienced price increases in this semester ranging from a fall of 2.3% in band I1 to 10.6% in band I2.

With reference to *Table 32*, Ireland's position, compared with the EU average gas prices to industry, was below the EU average in band I5 and above the EU average in bands I1, to I4 ranging from 8% to 20% above.

Figure 31 shows graphically the position of the ex-VAT gas prices to business in each consumption band during S2 2016.

Figure 31 *Business Gas Prices (ex-VAT) 2nd Semester 2016*



Source: Eurostat

Table 33 shows Ireland's ranking in the EU for the ex-VAT prices paid by business for gas. A ranking of 1 means the most expensive. The bottom row of the table shows the number of countries on which the ranking is based. *Table 33* should be read in conjunction with the market share of each band as shown in *Table 32*.

Table 33 *Ireland's Ranking in EU for Business Gas Prices (ex-VAT)*

Gas prices to business consumers (excluding VAT)	July '13 – Dec '13	Jan '14 – Jun '14	July '14 – Dec '14	Jan '15 – Jun '15	July '15 – Dec '15	Jan '16 – Jun '16	July '16 – Dec '16
Band I1	9	9	9	9	6	8	**6**
Band I2	13	14	13	15	11	10	**6**
Band I3	6	11	6	5	8	10	**5**
Band I4	12	12	19	18	8	17	**6**
Band I5	..	..	..	..	..	..	**18**
No. of Countries	27	27	27	27	27	27	**27**

Source: Eurostat

During S2 2016 in band I3, the band on which Eurostat reports, Ireland was ranked sixth most expensive, an deterioration from the tenth highest ranking in the previous semester. This band represents 20% of the business gas market in Ireland. Since 2007, the average ranking for Ireland in this band was 10th most expensive.

In the higher consumption band I4, during the second half of 2016 out of 27 countries, Ireland's ranking deteriorated 11 places from seventeenth to sixth most expensive. Since 2007, the average ranking for Ireland in this band was 15th most expensive.

Bands I1's ranking moved from eighth to sixth and band I2 moved from tenth to sixth place in the second half of 2016.

4.2.4 Business Gas Prices – Euro Area Comparison

Business gas prices in Ireland for the second half of 2016 were above the average for Euro Area countries in all consumption bands except band I5 where it was 10% below, as shown in *Table 34*. Prices were above the Euro Area average in the other bands, ranging from 5% above in band I4 to 13% above in band I2.

Table 34 *Business Gas Prices in Ireland (2nd semester 2016) – Euro Area Comparison*

Gas prices to business consumers (excluding VAT)	Price €/GJ	Price c/kWh	Relative to Euro Area average 2016 - S2	Relative to Euro Area average 2016 - S1
Band I1 (Consumption < 280 MWh)	14.6	5.2	107%	106%
Band I2 (280 MWh < Consumption < 2,800 MWh)	12.2	4.4	113%	100%
Band I3 (2,800 MWh < Consumption < 28,000 MWh)	9.4	3.4	108%	101%
Band I4 (28,000 MWh < Consumption < 280,000 MWh)	7.2	2.6	105%	95%
Band I5 (280,000 MWh < Consumption < 1,100,00 MWh)	5.5	2.0	90%	..

Source: Eurostat

5 Energy Prices for Households

5.1 Residential Electricity Prices

The data collection for households is on the data collection of gas and electricity prices as specified in Regulation 2016/1952.

For households, 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 the establishment of a representative data compilation system based on the following rules:

The prices represent average prices weighted across the suppliers, using the market share of the electricity suppliers surveyed as the weighting factor. 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. In Ireland the weighted average price is used and, as all suppliers are surveyed, represents the full market.

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. In Ireland the weighted averages are calculated based on the market shares of suppliers in each band.

Three pricing levels are reported to Eurostat:

- 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 categories of household end-user shown in *Table 35*:

Table 35 *Categories for Residential End-Use of Electricity*

Household end-user	Annual electricity consumption (kWh)		Band share of residential electricity consumption in Ireland S2 2016
	Lowest	Highest	
Very small (DA)	<1,000		2.1%
Small (DB)	1,000	2,500	11.5%
Medium (DC)	2,500	5,000	37.8%
Large (DD)	5,000	15,000	41.4%
Very large (DE)	≥15,000		7.2%

There follows a comparison of electricity prices to residential consumers in Ireland with the other EU Member States based on the survey results from the revised Gas & Electricity Prices Regulation in respect of S2 2016 (July – December). The analysis looks first at a basic comparison of residential electricity prices in euro across all the countries and then refines this to more relevant comparisons based on PPPs, before finally exploring a comparison based on Euro Area countries only. The price including all taxes, levies and VAT was used as this is the most relevant for residential consumers.

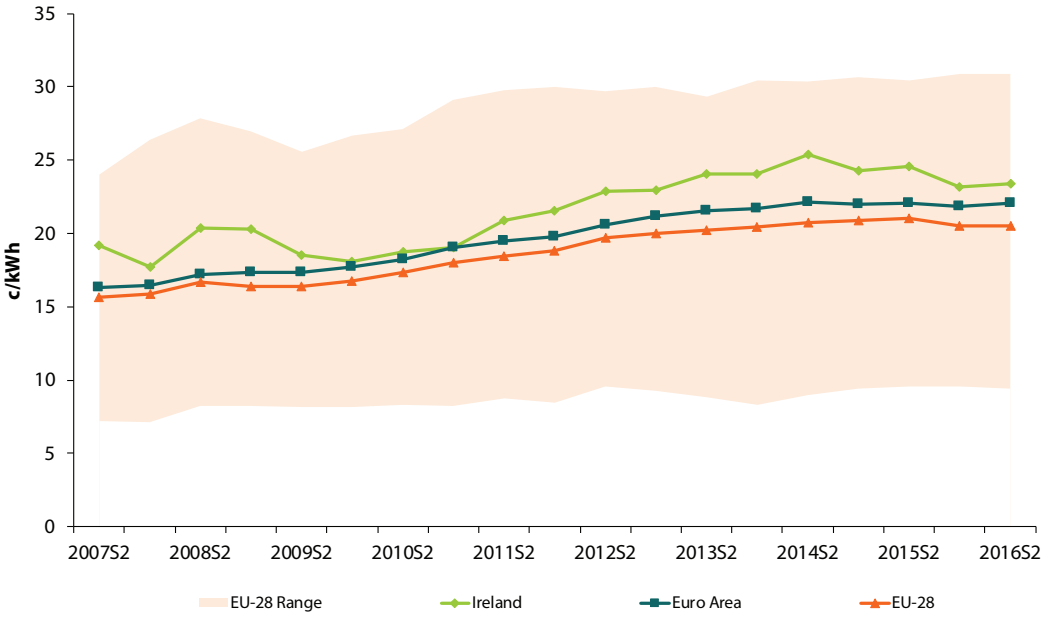
With regard to consumption bands, the most relevant for the majority of residential consumers are the DC band (2,500 – 5,000 kWh per annum) and the DD band (5,000 – 15,000 kWh per annum). In the lower consumption bands the average price per kWh is higher because the standing charges and network charges 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. Also as of the second semester of 2015, customers in band DA with semester consumption of less than 50 kWh are excluded.

5.1.1 Residential Electricity Prices in Consumption Band DC

Figure 32 shows the trend in electricity prices in consumption band DC for Ireland, the EU and the Euro Area. For reference, band DC, which is the consumption band normally reported on by Eurostat, accounted for 38% of the electricity use in the residential market in Ireland during the second half of 2016 (see *Table 35*).

The average price in the EU and the Euro Area has been steadily increasing over the whole period shown in *Figure 32,* price being, respectively, 31% and 35% higher at the end of the period compared with the start while the price in Ireland was 22% higher.

Figure 32 *Residential Electricity Prices (all taxes included) in Band DC (2nd semester 2007 to 2nd semester 2016)*



Source: Eurostat

In S2 2016 Ireland was 14% above the EU average, up from 13% above in the previous semester.

Table 36 shows prices in band DC for the five semesters between the second half of 2014 and the second half of 2016 and includes data revisions published by Eurostat. Also shown is the price change for each country between each subsequent semester, and for the most recent 12 months for which data is available.

Price changes in S2 2016 ranged from an 8.0% increase in Slovakia to an 6.2% price decrease in the UK. Ireland experienced an 0.8% price increase in this consumption band during the second half of 2016. The EU as a whole experienced on average a 0.1% increase in price and the Euro Area experienced an increase of 0.9% in band DC.

Over the 12-month period S2 2015 – S2 2016 price changes varied from a 17% increase in Belgium to a 16% decrease in the UK. Ireland experienced a decrease of 4.7% over the 12 months, while both the EU and Euro Area experienced price decreases of 2.3% and 0.2% respectively.

Note that the percentage price change shown in *Table 36* is calculated from the published Eurostat euro values for each country. Percentage price changes in national currencies may differ considerably from these. *Figure 33* shows graphically the percentage change in national currencies, arranged in increasing order of price change.

Note that tables for all electricity consumption bands are published in a separate annex which is available at http://www.seai.ie/Publications/Statistics_Publications/Electricity_and_Gas_Prices/.

Table 36 *Residential Electricity Prices in Band DC in Europe (S2 2014 – S2 2016)*

	all taxes included (c/kWh)					% change				
Band DC	*July '14 – Dec '14*	*Jan '15 – Jun '15*	*July '15 – Dec '15*	*Jan '16 – Jun '16*	*July '16 – Dec '16*	*S2 '14 – S1 '15*	*S1 '15 – S2 '15*	*S2 '14 – S1 '15*	*S1 '16 – S2 '16*	*12 months to S2 '16*
Austria	*19.87*	*20.09*	*19.83*	*20.34*	*20.10*	1.1%	-1.3%	2.6%	-1.2%	1.4%
Belgium	*20.43*	*21.26*	*23.52*	*25.44*	*27.45*	4.1%	10.6%	8.2%	7.9%	16.7%
Bulgaria	8.95	9.42	9.57	9.56	9.38	5.3%	1.6%	-0.1%	-1.9%	-2.0%
Croatia	*13.24*	*13.17*	*13.12*	*13.11*	*13.31*	-0.5%	-0.4%	-0.1%	1.5%	1.4%
Cyprus	23.56	*19.57*	*18.38*	*15.27*	*16.21*	-16.9%	-6.1%	-16.9%	6.2%	-11.8%
Czech Republic	*13.79*	*13.85*	*14.08*	*14.20*	*14.21*	0.4%	1.7%	0.9%	0.1%	0.9%
Denmark	*30.35*	*30.68*	*30.42*	*30.88*	*30.84*	1.1%	-0.8%	1.5%	-0.1%	1.4%
Estonia	*13.25*	*13.02*	*12.91*	*12.08*	*12.38*	-1.7%	-0.8%	-6.4%	2.5%	-4.1%
Finland	*15.38*	*15.52*	*15.30*	*15.41*	*15.45*	0.9%	-1.4%	0.7%	0.3%	1.0%
France	*17.02*	*16.76*	*16.82*	*16.85*	*17.11*	-1.5%	0.4%	0.2%	1.5%	1.7%
Germany	*29.74*	*29.51*	*29.46*	*29.69*	*29.77*	-0.8%	-0.2%	0.8%	0.3%	1.1%
Greece	17.85	17.67	17.71	*17.16*	*17.23*	-1.0%	0.2%	-3.1%	0.4%	-2.7%
Hungary	*11.46*	*11.27*	*11.45*	*11.14*	*11.25*	-1.7%	1.6%	-2.7%	1.0%	-1.7%
Ireland	**25.36**	**24.26**	**24.54**	**23.20**	**23.38**	**-4.3%**	**1.2%**	**-5.5%**	**0.8%**	**-4.7%**
Italy	*23.38*	*24.50*	*24.28*	*24.13*	*23.40*	4.8%	-0.9%	-0.6%	-3.0%	-3.6%
Latvia	*13.01*	*16.35*	*16.50*	*16.28*	*16.24*	25.7%	0.9%	-1.3%	-0.2%	-1.6%
Lithuania	13.19	12.56	12.43	*12.31*	*11.71*	-4.8%	-1.0%	-1.0%	-4.9%	-5.8%
Luxembourg	*17.38*	*17.67*	*17.67*	*16.98*	*16.98*	1.7%	0.0%	-3.9%	0.0%	-3.9%
Malta	*12.48*	*12.57*	*12.69*	*12.57*	*12.74*	0.7%	1.0%	-0.9%	1.4%	0.4%
Netherlands	*18.01*	*19.86*	*18.46*	*16.20*	*15.92*	10.3%	-7.0%	-12.2%	-1.7%	-13.8%
Norway	*16.61*	*16.14*	*14.34*	*15.15*	*16.31*	-2.8%	-11.2%	5.6%	7.7%	13.7%
Poland	*14.08*	*14.44*	*14.18*	*13.32*	*13.52*	2.6%	-1.8%	-6.1%	1.5%	-4.7%
Portugal	*22.31*	*22.79*	*22.85*	*23.50*	*23.64*	2.2%	0.3%	2.8%	0.6%	3.5%
Romania	*12.48*	*13.03*	*13.19*	*12.60*	*12.33*	4.4%	1.2%	-4.5%	-2.1%	-6.5%
Slovakia	*15.23*	*15.06*	*15.17*	*14.23*	*15.37*	-1.1%	0.7%	-6.2%	8.0%	1.3%
Slovenia	16.32	15.89	16.31	16.18	*16.29*	-2.6%	2.6%	-0.8%	0.7%	-0.1%
Spain	*23.67*	*23.09*	*23.70*	*21.85*	*22.84*	-2.5%	2.6%	-7.8%	4.5%	-3.6%
Sweden	*18.67*	*18.51*	*18.74*	*18.94*	*19.62*	-0.9%	1.2%	1.1%	3.6%	4.7%
Turkey	*13.10*	*13.60*	*12.22*	*12.67*	*12.05*	3.8%	-10.1%	3.7%	-4.9%	-1.4%
United Kingdom	*20.13*	*21.25*	*21.83*	*19.51*	*18.31*	5.6%	2.7%	-10.6%	-6.2%	-16.1%
Euro Area	*22.10*	*22.02*	*22.09*	*21.84*	*22.04*	-0.4%	0.3%	-1.1%	0.9%	-0.2%
EU-28	20.75	20.90	21.03	20.52	20.54	0.7%	0.6%	-2.4%	0.1%	-2.3%
Ireland relative to:										
Euro Area	114.8%	110.2%	111.1%	106.2%	106.1%					
EU-28	122.2%	116.1%	116.7%	113.1%	113.8%					

Source: Eurostat

Figure 33 *Percentage Change (national currency) in Household Electricity Price (band DC) – Semester and 12 Months*

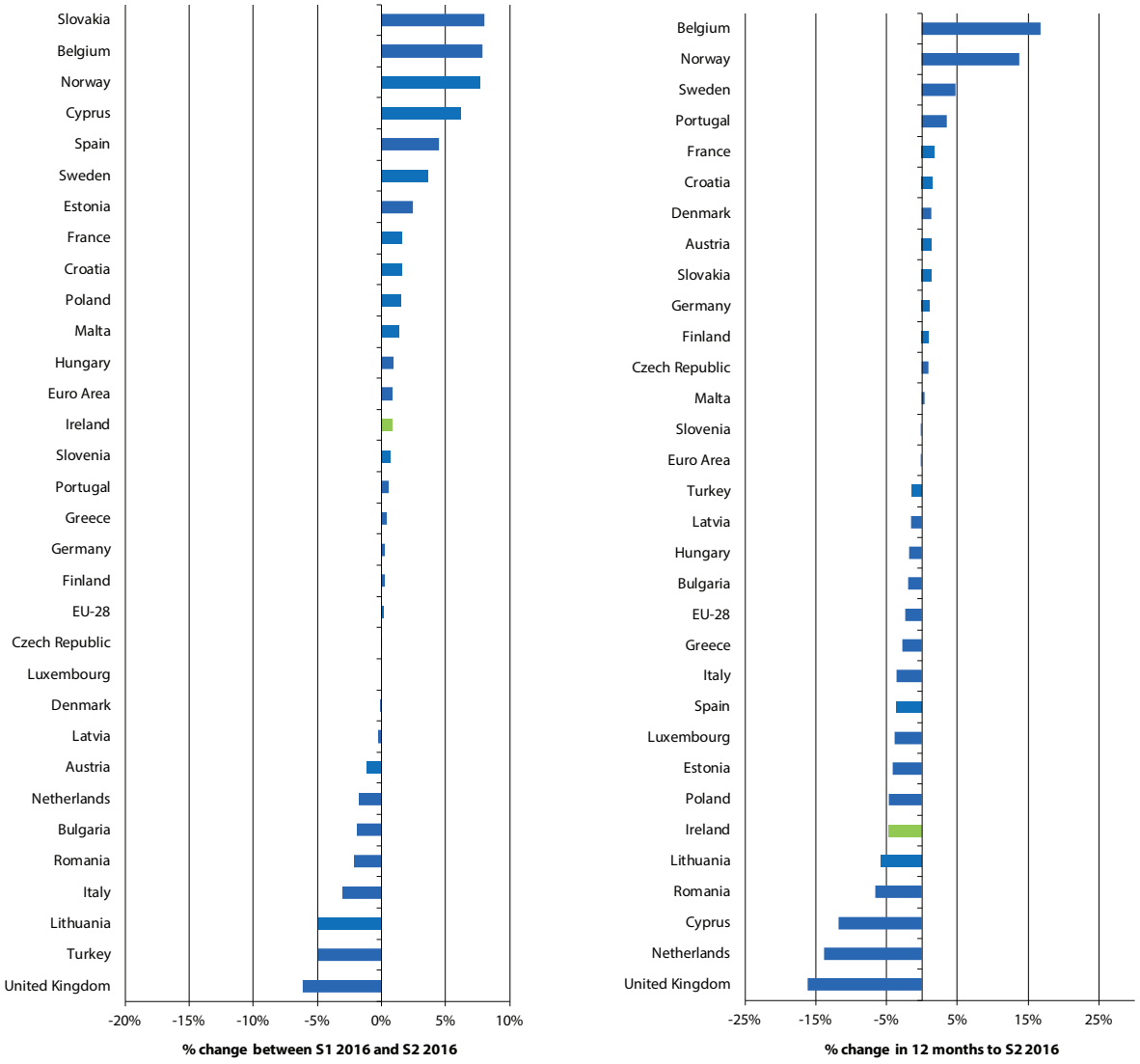
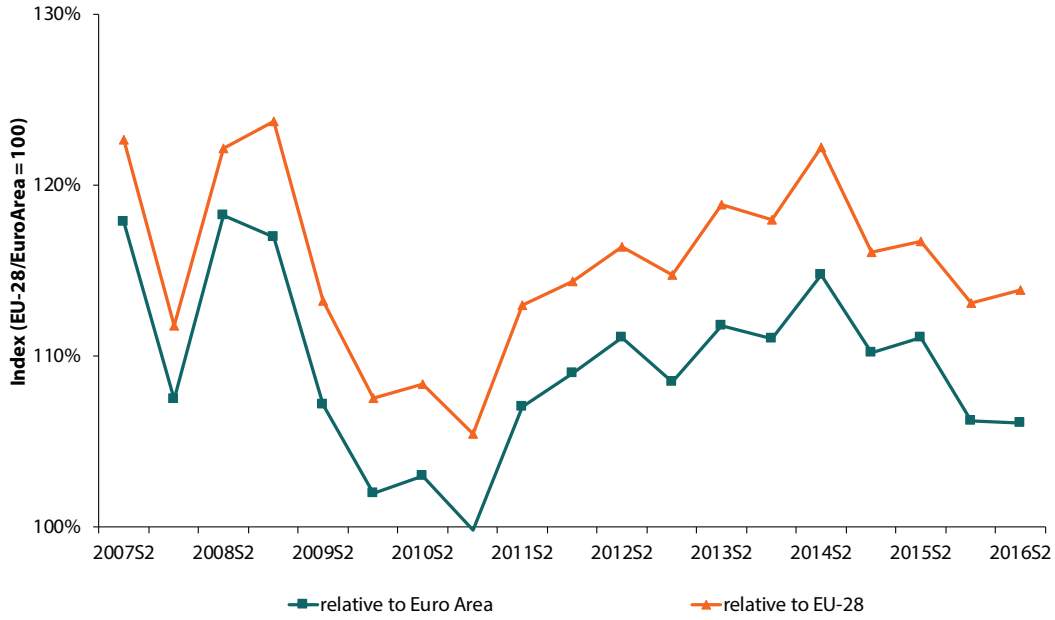


Figure 34 shows the tax-inclusive price for electricity in Ireland for band DC consumption levels relative to the EU and the Euro Area as an index over the period. The price in Ireland was above the EU average price during the period ranging from a high of 24% above average in the first half of 2009 and the second half of 2014, to a low of 5.8% above in the first half of 2011. During the latest semester prices were 13.8% above the EU average.

Prices were also above the Euro Area average for most of the period, ranging from 18.1% above average in the second half of 2008 to at the Euro Area average in the first half of 2011. During the latest semester prices were 6.1% above the Euro Area average.

Figure 34 *Residential Electricity Prices (all taxes included) in Band DC Relative to EU and Euro Area*



Source: Based on Eurostat data

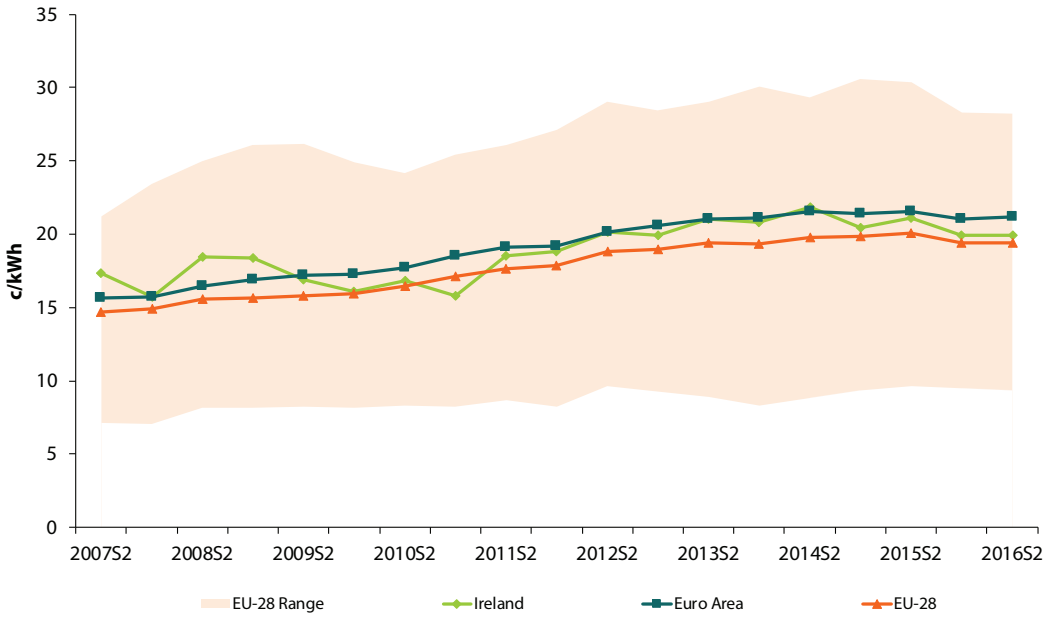
5.1.2 Residential Electricity Prices in Consumption Band DD

Figure 35 shows the trend in average electricity prices (inclusive of all taxes) in consumption band DD for Ireland, the EU and the Euro Area. Prices in Ireland in this band generally fell from the end of 2008 until the start of 2011. After that the price in Ireland generally increased until the end of 2014 when it was 38% higher than the first half of 2011.

The average price in the EU and the Euro Area has been steadily increasing over the whole period shown in *Figure 35* the price being 32% and 35% respectively higher at the end of the period compared with the start. The price in Ireland was 15% higher over the period.

For reference, band DD accounted for 41% of the electricity use in the residential market in Ireland during the second half of 2016.

Figure 35 *Residential Electricity Prices (all taxes included) in Band DD (2nd semester 2007 to 2nd semester 2016)*



Source: Eurostat

In S1 2011 Ireland was 7.5% below the EU average, but as a result of the higher rate of price rises in general since then, this changed to Ireland being 2.7% above the EU average during the second half of 2016. Compared with the Euro Area, prices in this band were 5.8% below average in S2 2016.

Table 37 shows prices in band DD for the five semesters between the second half of 2014 and the second half of 2016, and includes data revisions published by Eurostat. Also shown is the price change for each country between each subsequent semester, and for the most recent 12 months for which data is available.

Price changes in S2 2016 ranged from a 9.9% increase in Cyprus to a 5.3% price decrease in Italy. Ireland experienced a 0.1% increase in this consumption band during the second half of 2016. The EU as a whole experienced on average a 0.1% decrease in price, and the Euro Area an increase of 0.4%, in band DD.

Over the 12-month period S2 2015 – S2 2016 price changes varied from an 19.7% increase in Norway to a 15.3% decrease in the UK. Ireland experienced a 5.7% decrease in electricity prices to households in this band over the 12 month period; this compares with a 3.4% decrease in the EU and a 1.9% decrease in the Euro Area during the 12 months.

Note that the percentage price change shown in *Table 37* is calculated from the published Eurostat euro values for each country. Percentage price changes in national currencies may differ considerably from these. *Figure 36* shows graphically the percentage change in national currencies, arranged in increasing order of price change.

Table 37 *Residential Electricity Prices in Band DD in Europe (S2 2014 – S2 2016)*

	all taxes included (c/kWh)					% change				
Band DD	*July '14 – Dec '14*	*Jan '15 – Jun '15*	*July '15 – Dec '15*	*Jan '16 – Jun '16*	*July '16 – Dec '16*	*S2 '14 – S1 '15*	*S1 '15 – S2 '15*	*S2 '14 – S1 '15*	*S1 '16 – S2 '16*	*12 months to S2 '16*
Austria	18.15	17.80	17.53	17.92	*17.66*	-1.9%	-1.5%	2.2%	-1.5%	0.7%
Belgium	*17.91*	*19.26*	*21.05*	*23.30*	*25.00*	7.5%	9.3%	10.7%	7.3%	18.8%
Bulgaria	8.79	9.36	9.61	9.47	9.36	6.5%	2.7%	-1.5%	-1.2%	-2.6%
Croatia	*12.72*	*12.59*	*12.59*	*12.55*	*12.75*	-1.0%	0.0%	-0.3%	1.6%	1.3%
Cyprus	23.55	*19.04*	*18.39*	*14.72*	*16.17*	-19.2%	-3.4%	-20.0%	9.9%	-12.1%
Czech Republic	*10.97*	*10.94*	*11.12*	*11.32*	*11.32*	-0.3%	1.6%	1.8%	0.0%	1.8%
Denmark	*22.95*	*22.58*	*22.22*	*24.32*	*24.23*	-1.6%	-1.6%	9.5%	-0.4%	9.0%
Estonia	*12.88*	*12.28*	*12.39*	*11.35*	*11.86*	-4.7%	0.9%	-8.4%	4.5%	-4.3%
Finland	*13.43*	*13.58*	*13.34*	*13.32*	*13.32*	1.1%	-1.8%	-0.1%	0.0%	-0.1%
France	*15.69*	*15.48*	*15.65*	*15.70*	*15.94*	-1.3%	1.1%	0.3%	1.5%	1.9%
Germany	*28.27*	*28.01*	*27.97*	*28.12*	*28.20*	-0.9%	-0.1%	0.5%	0.3%	0.8%
Greece	18.92	18.95	18.80	*17.18*	*18.35*	0.2%	-0.8%	-8.6%	6.8%	-2.4%
Hungary	*11.11*	*11.03*	*11.17*	*10.86*	*10.97*	-0.7%	1.3%	-2.8%	1.0%	-1.8%
Ireland	**21.83**	**20.40**	**21.13**	**19.91**	**19.92**	**-6.6%**	**3.6%**	**-5.8%**	**0.1%**	**-5.7%**
Italy	*29.35*	*30.55*	*30.33*	*28.31*	*26.81*	4.1%	-0.7%	-6.7%	-5.3%	-11.6%
Latvia	*13.93*	*16.26*	*16.41*	*16.19*	*15.91*	16.7%	0.9%	-1.3%	-1.7%	-3.0%
Lithuania	12.84	12.11	12.03	*11.86*	*11.29*	-5.7%	-0.7%	-1.4%	-4.8%	-6.2%
Luxembourg	*16.00*	*16.29*	*16.29*	*15.61*	*15.61*	1.8%	0.0%	-4.2%	0.0%	-4.2%
Malta	*14.61*	*14.86*	*14.79*	*15.00*	*14.97*	1.7%	-0.5%	1.4%	-0.2%	1.2%
Netherlands	*19.92*	*20.84*	*19.95*	*17.58*	*17.29*	4.6%	-4.3%	-11.9%	-1.6%	-13.3%
Norway	*11.81*	*11.34*	*9.87*	*10.77*	*11.81*	-4.0%	-13.0%	9.1%	9.7%	19.7%
Poland	*13.64*	*13.81*	*13.66*	*12.74*	*12.87*	1.2%	-1.1%	-6.7%	1.0%	-5.8%
Portugal	*21.32*	*21.65*	*21.71*	*22.42*	*22.65*	1.5%	0.3%	3.3%	1.0%	4.3%
Romania	*12.34*	*12.85*	*13.04*	*12.12*	*12.11*	4.1%	1.5%	-7.1%	-0.1%	-7.1%
Slovakia	*13.56*	*13.13*	*13.21*	*12.55*	*13.37*	-3.2%	0.6%	-5.0%	6.5%	1.2%
Slovenia	14.53	13.97	14.27	14.06	*14.19*	-3.9%	2.1%	-1.5%	0.9%	-0.6%
Spain	*21.10*	*19.90*	*20.88*	*19.26*	*19.95*	-5.7%	4.9%	-7.8%	3.6%	-4.5%
Sweden	*16.07*	*15.27*	*15.47*	*15.31*	*16.15*	-5.0%	1.3%	-1.0%	5.5%	4.4%
Turkey	*13.17*	*13.56*	*12.18*	*12.67*	*12.03*	3.0%	-10.2%	4.0%	-5.1%	-1.2%
United Kingdom	*18.17*	*19.15*	*20.15*	*17.97*	*17.06*	5.4%	5.2%	-10.8%	-5.1%	-15.3%
Euro Area	*21.56*	*21.39*	*21.54*	*21.06*	*21.14*	-0.8%	0.7%	-2.2%	0.4%	-1.9%
EU-28	19.80	19.81	20.07	19.40	19.39	0.1%	1.3%	-3.3%	-0.1%	-3.4%
Ireland relative to:										
Euro Area	101.3%	95.4%	98.1%	94.5%	94.2%					
EU-28	110.3%	103.0%	105.3%	102.6%	102.7%					

Source: Eurostat

Figure 36 *Percentage Change (national currency) in Household Electricity Price (band DD) – Semester and 12 Months*

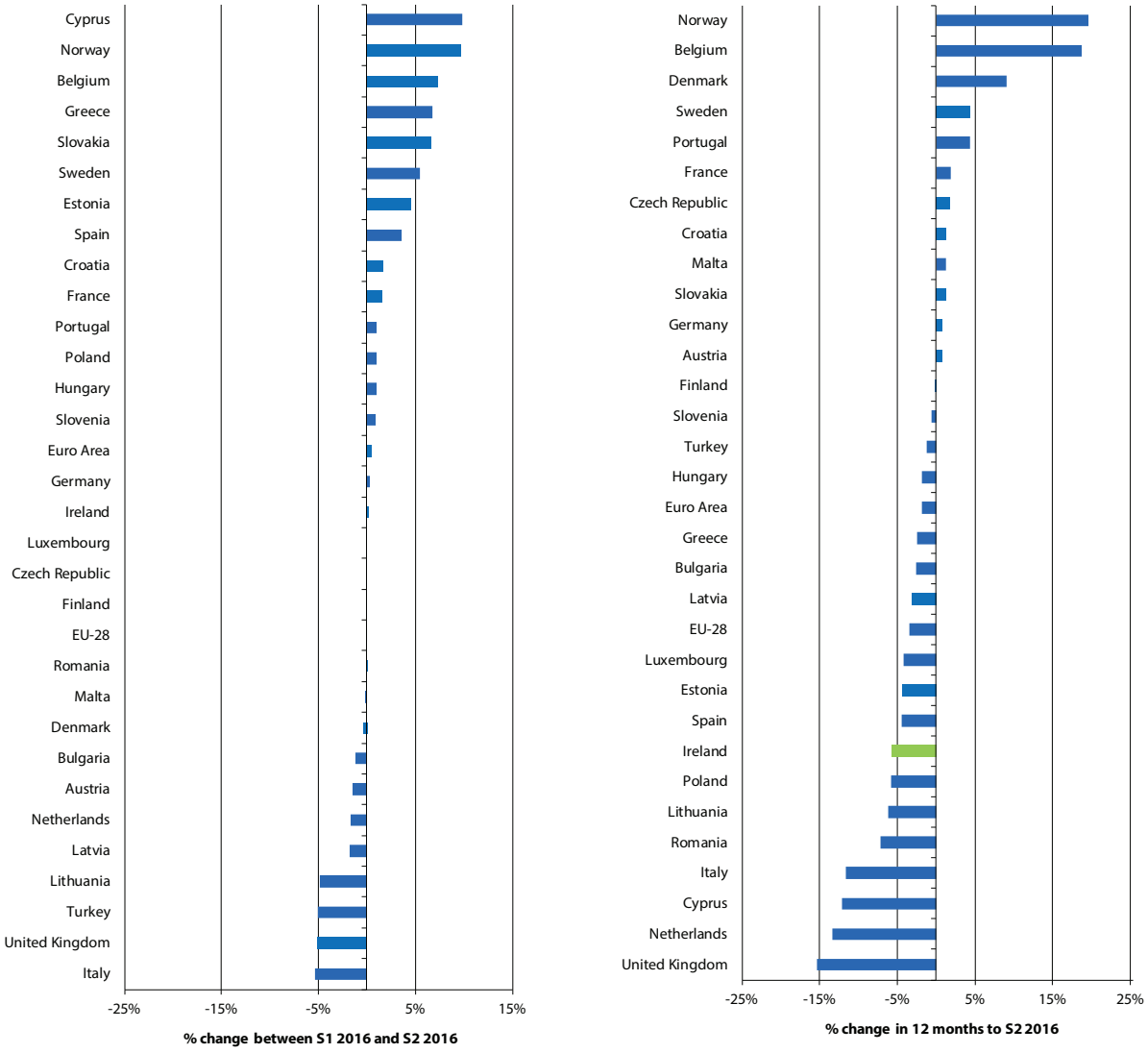
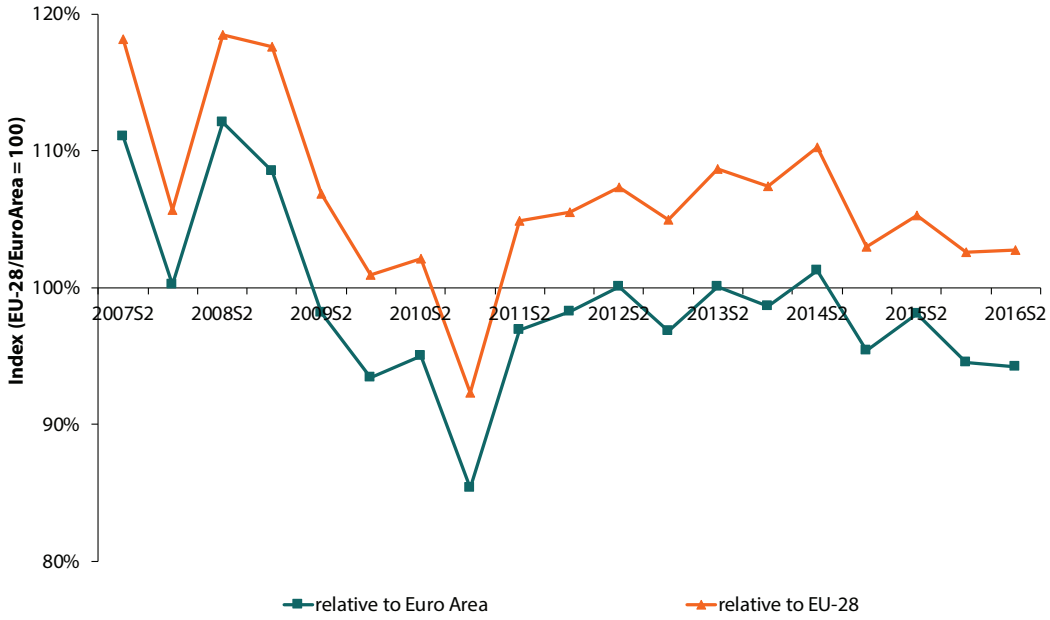


Figure 37 shows the tax-inclusive price for electricity in Ireland for band DD consumption levels relative to the EU and the Euro Area as an index over the period. The price in Ireland was above the EU average price during the period, with the exception of the first half of 2011, ranging from a high of 18.4% above average in the first half of 2008 to a low of 7.8% below in the first half of 2011. During the latest semester prices were 2.7% above the EU average.

Prices were above the Euro Area average from the second half of 2007 until the first half of 2009. Prices were below or at the Euro Area average between the second half of 2009 and the first half of 2014. Prices in Ireland in this band moved above the Euro Area average in the second half of 2014 but fell back in 2015. Prices over the period as a whole ranged from 12% above average in the second half of 2008 to a low of 14.8% below in the first half of 2011. During the latest semester prices were 5.8% below the Euro Area average.

Figure 37 *Residential Electricity Prices (all taxes included) in Band DD Relative to EU and Euro Area*



Source: Based on Eurostat data

5.1.3 Residential Electricity Prices – EU Comparison (in €)

Table 38 shows Ireland's position compared with the EU average residential electricity prices for S2 2016, with S1 2016 shown in grey. Ireland's position compared with the EU average improved in all consumption bands between the two semesters.

The price level in band DA is high compared with the EU average, but this is to be expected if there are a significant number of very low usage accounts such as holiday homes where the standing charges make up a large portion of the bills. Also note that from the second semester 2015 households with semester consumption of less than 50 kWh are excluded.

Bands DC and DD account for 79% of the market here. In the second half of 2016 Ireland was 14% above the EU average in band DC, up from 13% above the previous semester, and in band DD Ireland was 3% above the EU average, the same as in the previous semester.

Table 38 *Residential Electricity Prices (cents) (all taxes included) in Ireland (2nd semester 2016) – EU Comparison*

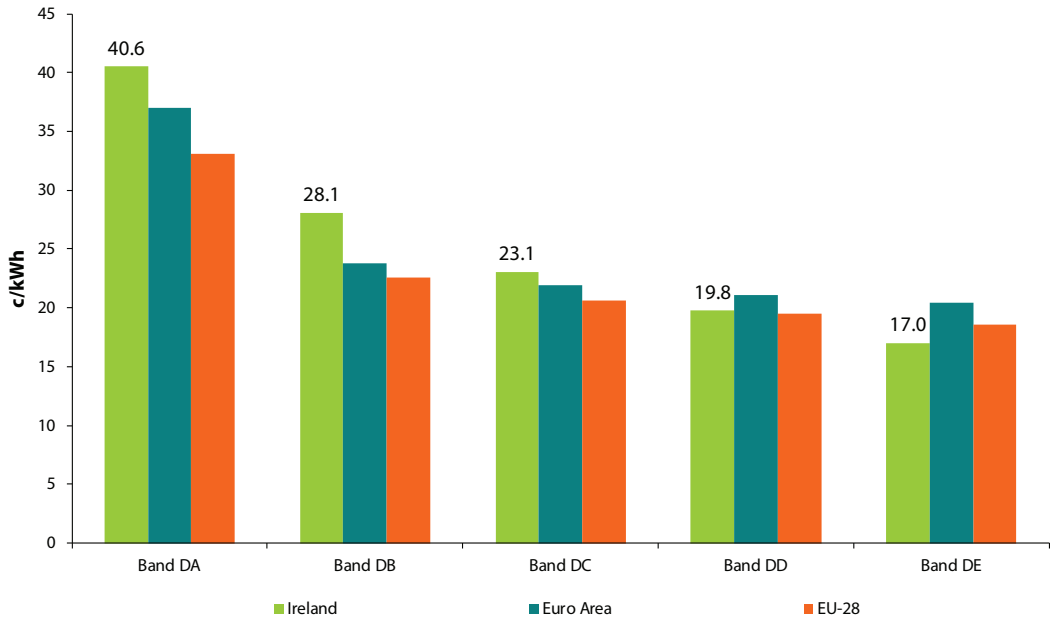
Electricity prices to residential consumers (all taxes included)	Price c/kWh	% change since last semester	Relative to EU average 2016 S2	Relative to EU average 2016 S1	Band share of market
Band DA	44.3	8.4%	**132%**	124%	2.1%
Band DB	29.8	5.2%	**131%**	126%	11.5%
Band DC	23.4	0.8%	**114%**	113%	37.8%
Band DD	19.9	0.1%	**103%**	103%	41.4%
Band DE	16.6	-3.7%	**90%**	93%	7.2%

Source: Eurostat

Also shown in *Table 38* are the market shares by volume for each band. Consumers in bands DC and DD accounted for 79% of the residential electricity market, with band DD being the largest at 41% of the market, and DC the second largest at 38%.

Figure 38 shows graphically the position of the tax-inclusive electricity price to households during S2 2016.

Figure 38 *Residential Electricity Prices (all taxes included) 1st Semester 2016*



Source: Eurostat

Table 39 shows Ireland's ranking in the EU for the tax-inclusive price paid by householders for electricity. A ranking of 1 means the most expensive. The bottom row of the table shows the number of countries on which the ranking is based. *Table 39* should be read in conjunction with the market share of each band as shown in *Table 38*.

Table 39 *Ireland's Ranking in EU for Residential Electricity Prices (all taxes included)*

Electricity prices to residential consumers (all taxes included)	July '13 – Dec '13	Jan '14 – Jun '14	July '14 – Dec '14	Jan '15 – Jun '15	July '15 – Dec '15	Jan '16 – Jun '16	July '16 – Dec '16
Band DA	1	1	1	1	2	3	**4**
Band DB	3	3	3	3	3	3	**4**
Band DC	4	4	3	4	3	6	**6**
Band DD	5	5	5	6	5	6	**7**
Band DE	10	9	9	10	11	10	**10**
No. of Countries	30	30	30	30	30	30	**30**

Source: Eurostat

During S2 2016 in band DC, the band on which Eurostat reports, Ireland was ranked sixth most expensive, the same as in the previous semester. Since 2007, the average ranking for Ireland in this band was 6th most expensive.

In consumption band DD Ireland's ranking improved one place to seventh most expensive, of 30 countries, compared with the previous semester. Since 2007, the average ranking for Ireland in this band was 7th most expensive.

5.1.4 Residential Electricity Prices – EU Comparison (in PPP)

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 this does not take into account the varying purchasing powers in each country. To correct for this Eurostat also publishes prices in PPPs.

When PPPs are applied, Ireland is 5% below the average in the most significant consumption band DD. In band DC, Ireland is 6% above the average.

Table 40 *Residential Electricity Prices at Purchasing Power Parity (2nd Semester 2016) – EU Comparison*

Electricity prices to residential consumers (all taxes included)	Price c_{PPP}/kWh	Relative to EU average S2 2016	Relative to EU average S1 2016
Band DA (Consumption < 1 000 kWh)	41.1	122%	115%
Band DB (1,000 kWh < Consumption < 2,500 kWh)	27.6	122%	117%
Band DC (2,500 kWh < Consumption < 5,000 kWh)	21.7	106%	105%
Band DD (5,000 kWh < Consumption < 15,000 kWh)	18.5	95%	95%
Band DE (Consumption > 15,000 kWh)	15.4	84%	86%

Source: Eurostat

Table 40 shows Ireland's position, relative to the European average electricity prices to households in PPPs for S2 2016, with S1 2016 shown in grey. Using a straight euro comparison, Ireland (see *Table 38*) was 14% above the EU average in band DC; however, using PPPs Ireland was 6% above. Similarly in Band DD, using a straight euro comparison Ireland was 2.7% above the EU average, but using PPPs Ireland was 5% below.

5.1.5 Residential Electricity Prices – Euro Area Comparison (in €)

Table 41 shows Ireland's position, relative to the Euro Area average electricity prices to households for S2 2016, with S1 2016 shown in grey. Focusing on just the Euro Area countries and excluding band DA, Ireland was 6% above the Euro Area average in band DC. In the higher consumption band DD Ireland was 6% below the Euro Area average and in band DE Ireland was 17% cheaper.

Table 41 *Residential Electricity Prices (€) in Ireland (2nd semester 2016) – Euro Area Comparison*

Electricity prices to residential consumers (all taxes included)	Price c/kWh	Relative to Euro Area average S2 2016	Relative to Euro Area average S1 2016
Band DA (Consumption < 1 000 kWh)	44.3	119%	111%
Band DB (1,000 kWh < Consumption < 2,500 kWh)	29.8	123%	119%
Band DC (2,500 kWh < Consumption < 5,000 kWh)	23.4	106%	106%
Band DD (5,000 kWh < Consumption < 15,000 kWh)	19.9	94%	95%
Band DE (Consumption > 15,000 kWh)	16.6	83%	84%

Source: Eurostat

5.1.6 Disaggregation of Residential Electricity Prices

Once a year Eurostat collects a disaggregation of electricity prices from Member States, breaking the average price in each consumption band into its components of energy and supply, network costs and taxes and levies. *Table 42* shows the disaggregation of electricity prices to business in consumption band DC for S2 2016 sorted by the share of energy and supply in the ex-tax price.

With reference to *Table 42*, the energy and supply component in Ireland was 12.4 c/kWh out of the 23.4 c/kWh total price. This represented 66% of the price exclusive of all taxes, it was the highest in absolute terms and the ninth highest, out of 33 countries, in terms of the share of the ex-tax price.

Network costs accounted for 34% of the ex-tax price or 6.4 c/kWh in absolute terms. This was the ninth highest in absolute terms and twenty-sixth in terms of the share of the ex-tax price.

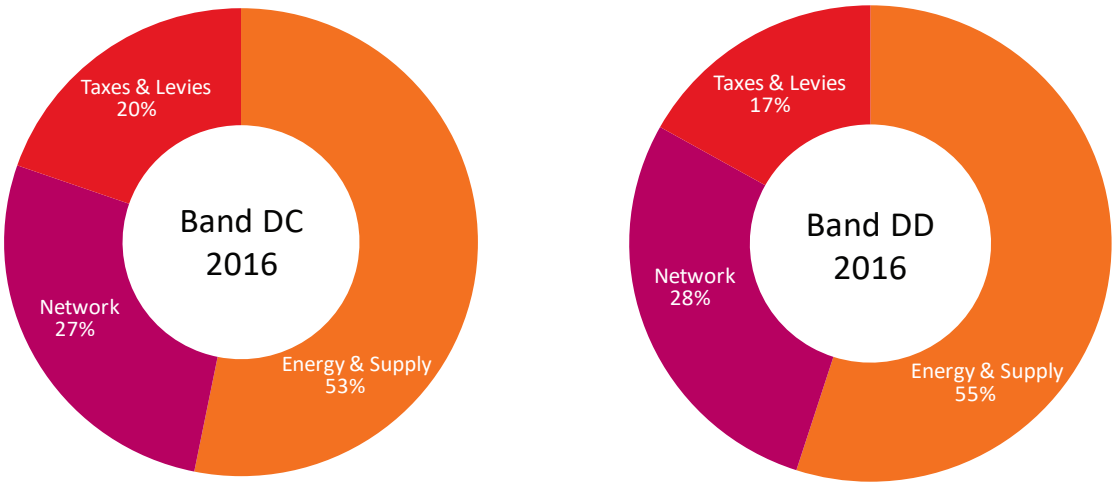
Table 42 *Disaggregated Residential Electricity Prices 2nd Semester 2016*

Country	Total Price c/kWh	Disaggregate price in c/kWh			Share in ex-tax price %	
		Energy and Supply	Network Costs	Taxes and Levies	Energy and Supply	Network Costs
Malta	12.7	9.9	2.2	0.6	81.9%	18.1%
Greece	17.2	9.0	2.8	5.4	76.0%	24.0%
Cyprus	16.2	9.1	3.8	3.4	70.8%	29.2%
Bulgaria	9.4	5.5	2.3	1.6	70.6%	29.4%
United Kingdom	18.3	10.2	4.6	3.5	68.8%	31.2%
Spain	22.8	12.3	5.7	4.9	68.5%	31.5%
Italy	**23.4**	**9.6**	**4.6**	**9.3**	**67.5%**	**32.5%**
Turkey	12.1	6.5	3.2	2.4	66.7%	33.3%
Ireland	23.4	12.4	6.4	4.6	66.2%	33.8%
Croatia	13.3	5.8	4.3	3.1	57.4%	42.6%
France	17.1	6.1	4.9	6.1	55.4%	44.6%
Portugal	23.6	6.8	5.7	11.2	54.7%	45.3%
Netherlands	15.9	6.5	5.4	4.0	54.2%	45.8%
Hungary	11.3	4.8	4.1	2.4	53.6%	46.4%
Germany	29.8	7.3	6.6	16.0	52.5%	47.5%
Poland	13.5	5.4	5.1	3.0	51.2%	48.8%
Slovenia	16.3	5.6	5.6	5.1	50.0%	50.0%
Romania	12.3	4.4	4.5	3.4	49.3%	50.7%
Lithuania	11.7	4.0	4.2	3.5	49.3%	50.7%
Austria	20.1	6.0	6.2	7.9	49.3%	50.7%
Finland	15.5	5.0	5.3	5.2	48.5%	51.5%
Montenegro	9.7	4.2	4.5	1.0	48.0%	52.0%
Latvia	16.2	5.1	5.7	5.5	47.2%	52.8%
Bosnia and Herzegovina	8.4	3.3	3.9	1.2	46.2%	53.8%
Estonia	12.4	4.4	5.2	2.8	46.1%	53.9%
Czech Republic	14.2	5.2	6.4	2.6	44.6%	55.4%
Serbia	6.6	2.2	2.8	1.5	44.1%	55.9%
Belgium	27.4	8.0	10.2	9.3	43.9%	56.1%
Luxembourg	17.0	5.8	7.5	3.7	43.8%	56.2%
Denmark	30.8	4.1	5.9	20.9	41.0%	59.0%
Norway	16.3	4.5	6.8	5.0	40.1%	59.9%
Iceland	14.8	4.4	7.2	3.1	37.9%	62.1%
Slovakia	15.4	4.7	7.8	2.9	37.5%	62.5%
Sweden	**19.6**	**4.6**	**8.2**	**6.8**	**35.6%**	**64.4%**

Source: Eurostat

Figure 39 shows graphically the disaggregated components that make up the electricity prices to households in Ireland for the two main consumption bands, DC and DD.

Figure 39 *Disaggregation of Household Electricity Prices by Consumption Bands in Ireland*



5.2 Residential Gas Prices

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 Regulation 2016/1952. The methodology for collecting household data was also changed so the prices collected in accordance with the revised Regulation are not directly comparable with those collected under the previous methodology prior to 2007.

For households, 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 included. The Member States develop and implement cost-effective procedures to ensure the establishment of a representative data compilation system based on the following rules:

The prices represent average prices weighted across the suppliers, using the market share of the natural gas suppliers as weighting the factor. 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. In Ireland the weighted average price is used and represents the full market.

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 pricing levels are to be reported to Eurostat:

- 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 categories of household end-user shown in *Table 43*:

Table 43 *Categories for Residential End-Use of Natural Gas*

Residential end-users	Annual gas consumption (kWh)		Band share of residential gas consumption in Ireland S2 2016
	Lowest	Highest	
D1 - Small	0	< 5,600	6.3%
D2 - Medium	5,600	< 56,000	91.9%
D3 - Large	≥ 56,000		1.8%

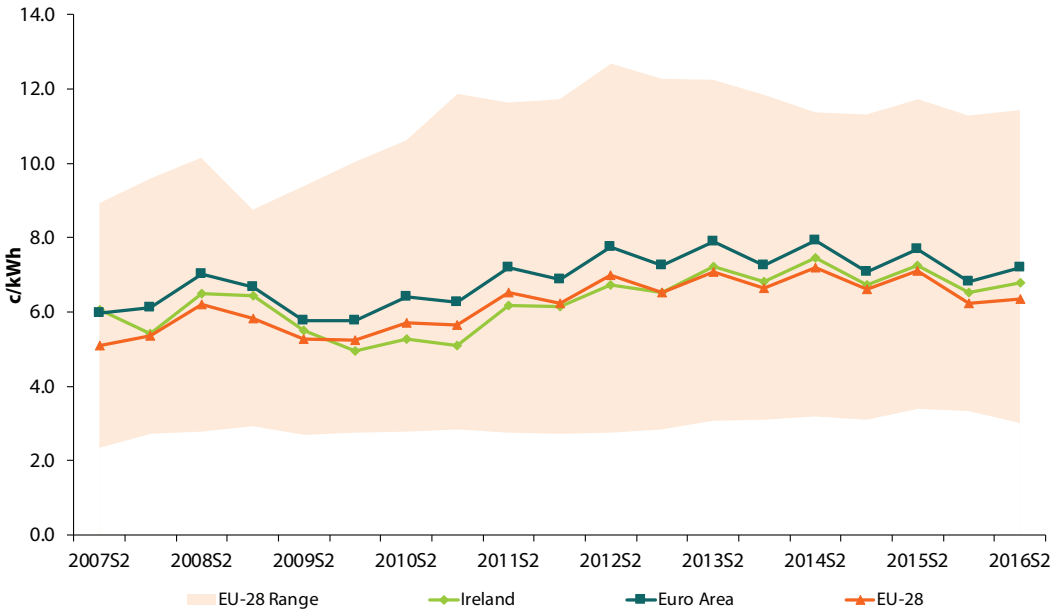
Historically the CER sanctioned changes in the regulated price of gas to take effect in October. While these changes were applied mid-way through the semesters, the full effect of these increases was almost fully reflected in the average price for the semester. This is because the start of the heating season skews the bulk of the gas demand towards the end of the semester.

There follows a comparison of gas prices to residential consumers in Ireland compared with the other EU Member States based on the survey results from the Gas and Electricity Prices Regulation in respect of S2 2016 (July – December). The analysis looks first at a basic comparison of residential gas prices in euro across all the countries and then refines this down to more relevant comparisons based on PPPs, before finally exploring a comparison based on Euro Area countries only. The price including all taxes, levies and VAT was used as this is the most relevant for residential consumers.

5.2.1 Residential Gas Prices – EU Comparison (in €)

With regard to consumption bands the most relevant for the majority of residential consumers is the medium band (5,600 – 56,000 MWh per annum) referred to as D2. In the lower consumption bands the average price per kWh is higher because the standing charges and network charges form a larger proportion of the annual costs.

Figure 40 *Residential Gas Prices (all taxes included) in Band D2 (2nd semester 2007 to 2nd semester 2016)*



Source: Eurostat

Figure 40 shows the trend in average gas prices (inclusive of all taxes) to households in Ireland and the EU. The gas prices to Irish households were higher than the EU average over the period S2 2007 – S2 2009. Between S1 2010 and S2 2012 the price in Ireland was below the EU average but has been either at or above the average since then. In the latest semester the price in Ireland was 6.6% above the EU average. Since the start of 2008 the price has been below the average Euro Area price.

Table 44 shows prices in band D2 for the five semesters between the second half of 2014 and the second half of 2016 and includes data revisions published by Eurostat. Also shown in *Table 44* is the price change for each country between each subsequent semester, and for the most recent 12 months for which data is available.

Price changes in S2 2016 ranged from a 27% increase in Spain to an 15% price decrease in Bulgaria. Ireland experienced a 4.0 increase in S2 2016 compared with the previous semester. The EU as a whole experienced an increase of 2.3% in gas prices in band D2, and the Euro Area a 5.6% increase.

Over the 12-month period S2 2015 – S2 2016 price changes varied from an 2.3% increase in Hungary to a 25% decrease in the UK. Ireland experienced a decrease of 6.4% over the 12-month period. This decrease for Ireland compares with a 10.5% decrease in the EU and a 6.6% decrease in the Euro Area.

Note that the percentage price change shown in *Table 44* is calculated from the published Eurostat euro values for each country. Percentage price changes in national currencies may differ considerably from these. *Figure 41* shows graphically the percentage change in national currencies, arranged in increasing order of price change.

Tables for all gas consumption bands in both GJ and kWh are published in separate annexes which are available at http://www.seai.ie/Publications/Statistics_Publications/Electricity_and_Gas_Prices/.

Table 44 *Residential Gas Prices in Band D2 in Europe (S2 2014 – S2 2016)*

Band D2	all taxes included (c/kWh)					% change				
	Jan '14 – Jun '14	*July '14 – Dec '14*	*Jan '15 – Jun '15*	*July '15 – Dec '15*	*Jan '16 – Jun '16*	*S1 '14 – S2 '14*	*S2 '14 – S1 '15*	*S1 '15 – S2 '15*	*S2 '14 – S1 '15*	*12 months to S1 '16*
Austria	7.30	7.30	7.11	6.90	6.74	0.0%	-2.6%	-3.0%	-2.3%	-5.2%
Belgium	6.50	5.84	6.21	5.47	5.34	-10.2%	6.3%	-11.9%	-2.4%	-14.0%
Bulgaria	4.84	4.77	3.91	3.68	3.11	-1.4%	-18.0%	-5.9%	-15.5%	-20.5%
Croatia	4.75	4.73	4.59	4.28	3.70	-0.4%	-3.0%	-6.8%	-13.6%	-19.4%
Czech Republic	5.63	5.74	5.83	5.83	5.63	2.0%	1.6%	0.0%	-3.4%	-3.4%
Denmark	8.78	8.02	7.64	7.17	7.41	-8.7%	-4.7%	-6.2%	3.3%	-3.0%
Estonia	4.94	4.56	3.84	3.46	3.28	-7.7%	-15.8%	-9.9%	-5.2%	-14.6%
France	7.62	7.01	7.33	6.50	6.76	-8.0%	4.6%	-11.3%	4.0%	-7.8%
Germany	6.81	6.76	6.81	6.61	6.42	-0.7%	0.7%	-2.9%	-2.9%	-5.7%
Greece	7.98	6.81	7.50	5.64	6.52	-14.7%	10.1%	-24.8%	15.6%	-13.1%
Hungary	3.51	3.53	3.52	3.44	3.60	0.6%	-0.3%	-2.3%	4.7%	2.3%
Ireland	**7.45**	**6.73**	**7.24**	**6.52**	**6.78**	**-9.7%**	**7.6%**	**-9.9%**	**4.0%**	**-6.4%**
Italy	9.51	7.66	9.05	7.31	8.38	-19.5%	18.1%	-19.2%	14.6%	-7.4%
Latvia	4.88	4.96	4.85	4.24	4.06	1.6%	-2.2%	-12.6%	-4.2%	-16.3%
Lithuania	4.99	4.23	4.36	4.13	3.87	-15.2%	3.1%	-5.3%	-6.3%	-11.2%
Luxembourg	5.14	4.96	4.82	4.54	4.18	-3.5%	-2.8%	-5.8%	-7.9%	-13.3%
Netherlands	8.20	7.56	8.03	7.79	8.08	-7.8%	6.2%	-3.0%	3.7%	0.6%
Poland	5.00	5.01	4.98	3.92	4.41	0.2%	-0.6%	-21.3%	12.5%	-11.4%
Portugal	10.39	9.76	9.82	9.13	8.26	-6.1%	0.6%	-7.0%	-9.5%	-15.9%
Romania	3.19	3.11	3.40	3.32	3.23	-2.5%	9.3%	-2.4%	-2.7%	-5.0%
Slovakia	5.19	4.96	4.95	4.60	4.45	-4.4%	-0.2%	-7.1%	-3.3%	-10.1%
Slovenia	6.34	6.29	6.09	5.99	5.63	-0.8%	-3.2%	-1.6%	-6.0%	-7.6%
Spain	9.59	7.31	9.56	6.77	8.57	-23.8%	30.8%	-29.2%	26.6%	-10.4%
Sweden	11.38	11.31	11.73	11.29	11.42	-0.6%	3.7%	-3.8%	1.2%	-2.6%
Turkey	3.73	3.78	3.47	3.36	3.01	1.3%	-8.2%	-3.2%	-10.4%	-13.3%
United Kingdom	6.46	6.35	6.68	5.53	5.01	-1.7%	5.2%	-17.2%	-9.4%	-25.0%
Euro Area	7.91	7.08	7.70	6.81	7.19	-10.5%	8.8%	-11.6%	5.6%	-6.6%
EU-28	7.19	6.62	7.11	6.22	6.36	-7.9%	7.4%	-12.5%	2.3%	-10.5%
Ireland relative to:										
Euro Area	94.2%	95.1%	94.0%	95.7%	94.3%					
EU-28	103.6%	101.7%	101.8%	104.8%	106.6%					

Source: Eurostat

Figure 41 *Percentage Change (national currency) in Household Gas Price (band D2) – Semester and 12 Months*

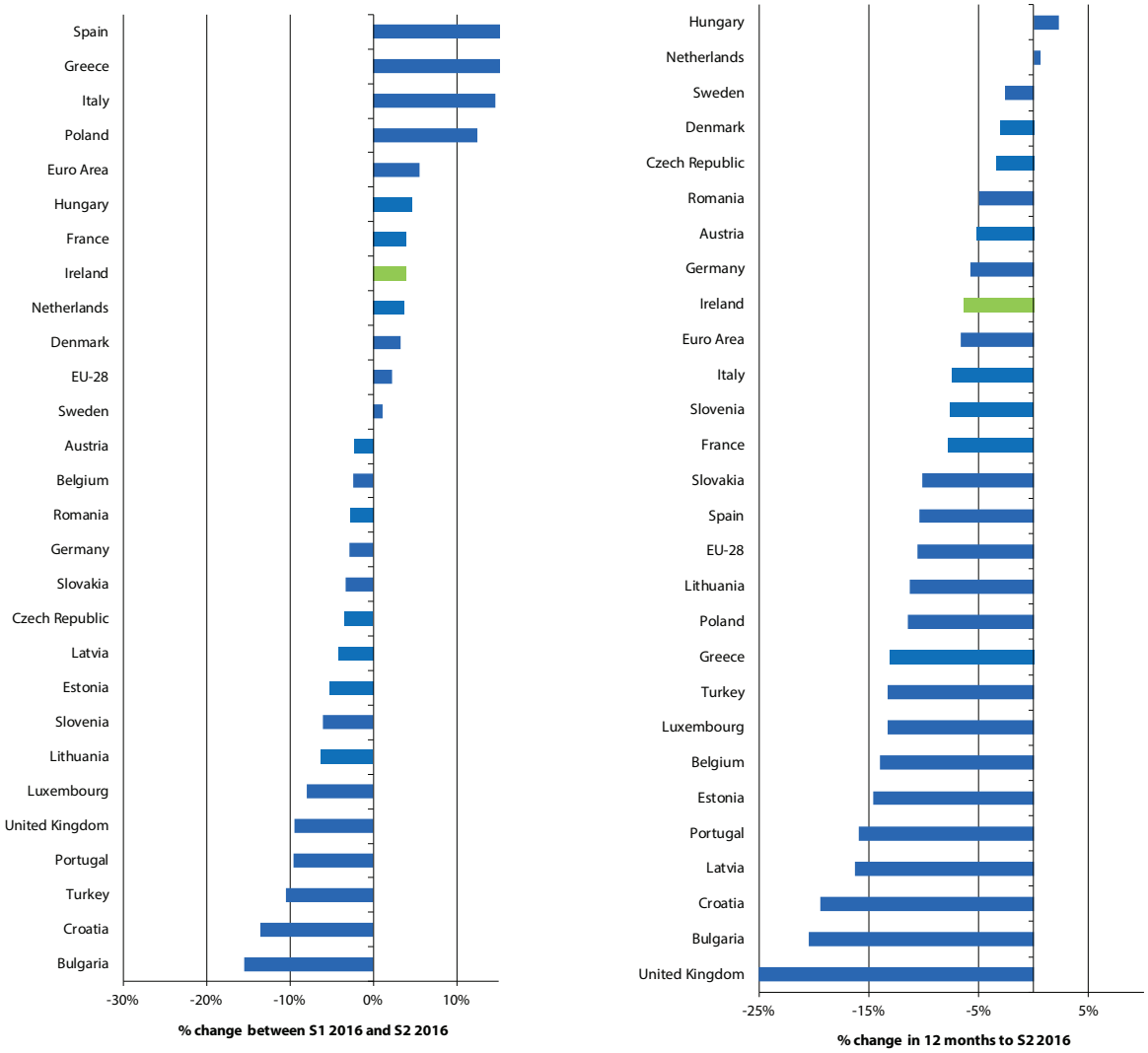
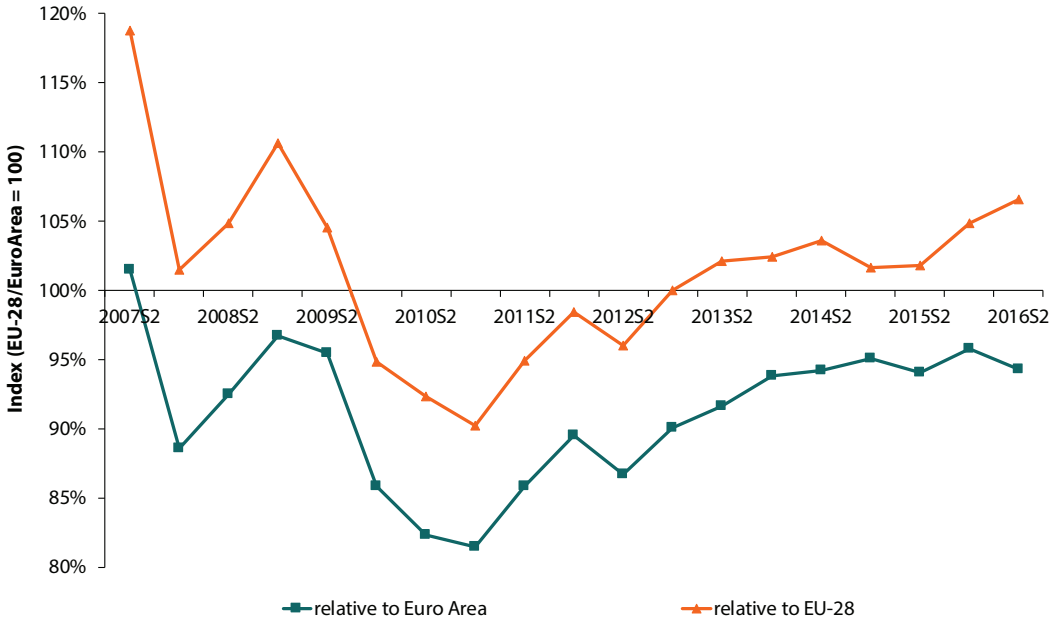


Figure 42 shows the tax-inclusive price for gas in Ireland for band D2 consumption levels relative to the EU and the Euro Area as an index over the period. The price in Ireland was above the EU average price during the period from the second half of 2007 until the second half of 2009, and again after the second half of 2013. Prices ranged from a high of 19% above average in the first half of 2007 to a low of 9.1% below in the first half of 2011. During the latest semester prices were 6.6% above the EU average.

Prices were below the Euro Area average over the period, with the exception of S2 2007. Prices over the period as a whole ranged from 1.8% above average in the second half of 2007 to a low of 17.9% below in the first half of 2011. During the latest semester prices were 5.7% below the Euro Area average.

Figure 42 *Residential Gas Prices (all taxes included) in Band D2 Relative to EU and Euro Area*



Source: Based on Eurostat data

Table 45 shows Ireland's position, relative to the EU average gas prices to householders for S2 2016 with S1 2016 shown in grey. Also shown in *Table 45* are the market shares by volume for each band.

Table 45 *Residential Gas Prices in Ireland (2nd semester 2016) – EU Comparison*

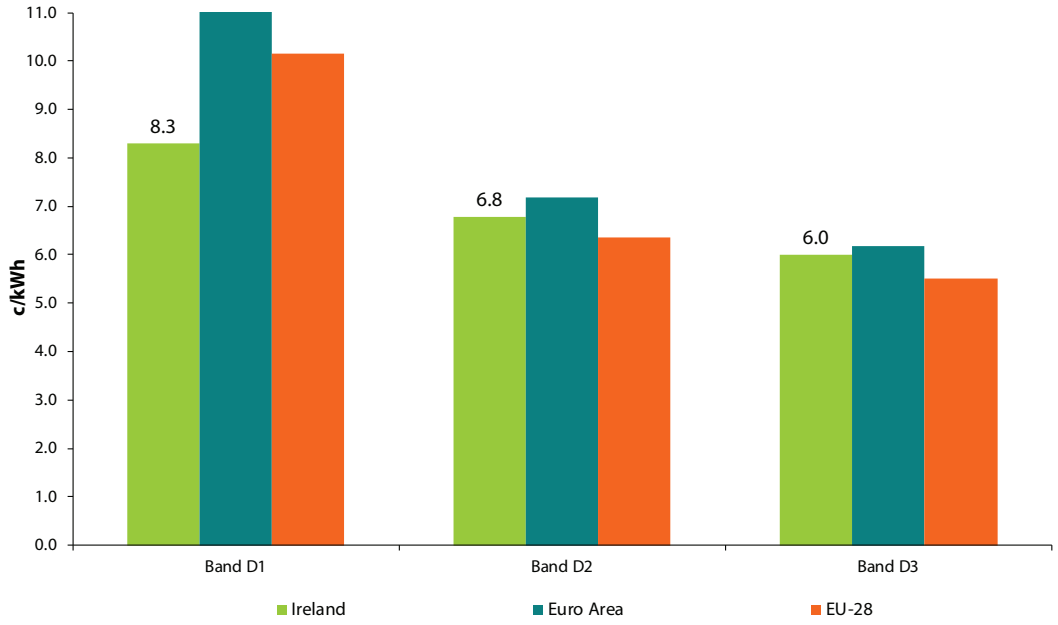
Gas prices to residential consumers (all taxes included)	Price €/GJ	Price c/kWh	% change since last semester	Relative to EU average S1 2016	Relative to EU average S2 2015	Band share of market
Band D1 – Small	23.0	8.3	13.6%	**82%**	80%	6.3%
Band D2 – Medium	18.8	6.8	4.0%	**107%**	105%	91.9%
Band D3 – Large	16.6	6.0	-1.6%	**109%**	106%	1.8%

Source: Eurostat

During S2 2016 consumption band D1 was below the EU average by 18% but bands D2 and D3 were above the average by 7% and 9% respectively.

Figure 43 shows graphically the position of the tax-inclusive gas price to households during S2 2016.

Figure 43 *Residential Gas Prices (all taxes included) 2nd Semester 2016*



Source: Eurostat

Table 46 shows Ireland's ranking in the EU for the tax-inclusive price paid by residential consumers for gas. A ranking of 1 means the most expensive. The bottom row of the table shows the number of countries on which the ranking is based. *Table 46* should be read in conjunction with the market share of each band as shown in *Table 45*.

Table 46 *Ireland's Ranking in EU for Residential Gas Prices (all taxes included)*

Gas prices to residential consumers (all taxes included)	July '13 – Dec '13	Jan '14 – Jun '14	July '14 – Dec '14	Jan '15 – Jun '15	July '15 – Dec '15	Jan '16 – Jun '16	July '16 – Dec '16
Band D1	14	17	12	17	13	14	**12**
Band D2	10	10	9	11	9	9	**7**
Band D3	10	9	9	9	7	7	**6**
No. of Countries	26	26	26	26	26	26	**26**

Source: Eurostat

In residential gas consumption band D1 Ireland ranked twelfth most expensive out of 26 countries, a deterioration of two places since the previous semester. In band D3 Ireland went to sixth most expensive.

During S2 2016 in band D2, the band on which Eurostat reports and the band that represents 92% of residential gas use here, Ireland was ranked seventh most expensive out of 26 countries, a deterioration of 2 places on the previous semester. Since 2007, the average ranking for Ireland in this band was 11th most expensive.

5.2.2 Residential Gas Prices – EU Comparison (in PPP)

As with electricity, the PPP indexed prices give a better basis for comparison of gas prices to residential consumers across the EU. 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 publishes prices in PPPs.

Table 47 *Residential Gas Prices (Purchasing Power Parity) (2nd semester 2016) – EU Comparison*

Gas prices to residential consumers at purchasing power parities (all taxes included)	Price c_{PPP}/kWh	Relative to EU average S2 2016	Relative to EU average S1 2016
Band D1 – Small	7.7	76%	72%
Band D2 – Medium	6.3	99%	94%
Band D3 – Large	5.6	101%	96%

Source: Eurostat

Table 47 shows Ireland's position, expressed in PPP, relative to the European average gas prices to households for S2 2016, with S1 2016 shown in grey.

When PPPs are applied, Ireland is below the EU average in gas consumption bands D1 and D2 for residential consumers, 24% to 1% below respectively, and 1% above in band D3.

5.2.3 Residential Gas Prices – Euro Area Comparison (in €)

Table 48 shows Ireland's position, relative to the Euro Area average gas prices to households for S2 2016, with S1 2016 shown in grey. When the focus is on just the Euro Area countries, Ireland is below the average in all bands, ranging from 3% to 29% below. In band D2 Ireland was 6% below the Euro Area average.

Table 48 *Residential Gas Prices in Ireland (2nd semester 2016) – Euro Area Comparison*

Gas prices to residential consumers (all taxes included)	Price €/GJ	Price c/kWh	Relative to Euro Area average S2 2016	Relative to Euro Area average S1 2016
Band D1 – Small	23.0	8.3	71%	71%
Band D2 – Medium	18.8	6.8	94%	96%
Band D3 – Large	16.6	6.0	97%	97%

Source: Eurostat

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Appendix 1 – Electricity and Gas Prices in Ireland

Table 49 *Business Electricity Prices – 2nd Semester 2016*

Business electricity prices (ex VAT) weighted average across all suppliers	c/kWh S2 2016	Change since S2 2016	Change in 12 months	Ranking EU (30)	Band Share of Market
Band IA Consumption < 20 MWh	19.6	1.3%	-4.1%	6	8.7%
Band IB 20 MWh < Consumption < 500 MWh	15.4	-3.4%	-6.3%	7	30.1%
Band IC 500 MWh < Consumption < 2,000 MWh	12.5	-6.2%	-8.3%	6	15.2%
Band ID 2,000 MWh < Consumption < 20,000 MWh	10.2	0.1%	-8.6%	8	26.5%
Band IE 20,000 MWh < Consumption < 70,000 MWh	8.6	-3.4%	-11.5%	9	10.2%
Band IF 70,000 MWh < Consumption < 150,000 MWh	7.8	-3.3%	-11.0%	9	9.3%
Weighted Average	**12.5**	**-3.4%**	**-7.8%**	-	-

Source: Eurostat

Table 50 *Business Gas Prices – 2nd Semester 2016*

Business gas prices (ex VAT) weighted average across all suppliers	c/kWh S2 2016	Change since S1 2016	Change in 12 months	Ranking EU (27)	Band Share of Market
Band I1 Consumption < 1,000 GJ	5.2	2.3%	-5.9%	6	10.4%
Band I2 1,000 GJ < Consumption < 10,000 GJ	4.4	10.6%	4.8%	6	16.7%
Band I3 10,000 GJ < Consumption < 100,000 GJ	3.4	3.4%	-8.4%	5	19.9%
Band I4 100,000 GJ < Consumption < 1,000,000 GJ	2.6	7.4%	-13.0%	6	36.5%
Band I5 1,000,000 GJ < Consumption < 4,000,000 GJ	2.0	..	..	18	16.5%
Weighted Average	**3.5**	**3.6%**	**-5.5%**	-	-

Source: Eurostat

Table 51 *Residential Electricity Prices – 2nd Semester 2016*

Household electricity prices (all taxes included) weighted average across all suppliers	c/kWh S2 2016	Change since S1 2016	Change in 12 months	Ranking EU (30)	Band Share of Market
Band DA Consumption < 1,000 kWh	44.3	8.4%	-7.8%	4	2.1%
Band DB 1,000 kWh < Consumption < 2,500 kWh	29.8	5.2%	-2.8%	4	11.5%
Band DC 2,500 kWh < Consumption < 5,000 kWh	23.4	0.8%	-4.7%	6	37.8%
Band DD 5,000 kWh < Consumption < 15,000 kWh	19.9	0.1%	-5.7%	7	41.4%
Band DE Consumption > 15,000 kWh	16.6	-3.7%	-8.2%	10	7.2%
Weighted Average	**22.6**	**2.5%**	**-4.1%**	-	-

Source: Eurostat

Table 52 *Residential Electricity Prices (Purchasing Power Parities) – 2nd Semester 2016*

Household electricity prices (all taxes included) weighted average across all suppliers	c_{PPP}/kWh S2 2016	Change since S1 2016	Change in 12 months	Ranking EU (30)	Band Share of Market
Band DA Consumption < 1,000 kWh	41.1	8.4%	-4.7%	7	2.1%
Band DB 1,000 kWh < Consumption < 2,500 kWh	27.6	5.3%	0.5%	6	11.5%
Band DC 2,500 kWh < Consumption < 5,000 kWh	21.7	0.8%	-1.5%	13	37.8%
Band DD 5,000 kWh < Consumption < 15,000 kWh	18.5	0.1%	-2.5%	17	41.4%
Band DE Consumption > 15,000 kWh	15.4	-3.7%	-5.1%	23	7.2%

Source: Eurostat

Table 53 *Residential Gas Prices – 2nd Semester 2016*

Household gas prices (all taxes included) weighted average across all suppliers	c/kWh S2 2016	Change since S1 2016	Change in 12 months	Ranking EU (26)	Band Share of Market
Band D1 Consumption < 20 GJ	8.3	13.6%	-6.4%	12	6.3%
Band D2 20 GJ < Consumption < 200 GJ	6.8	4.0%	-6.4%	7	91.9%
Band D3 Consumption > 200 GJ	6.0	-1.6%	-7.7%	6	1.8%
Weighted Average	**6.9**	**2.5%**	**-6.3%**	-	-

Source: Eurostat

Table 54 *Residential Gas Prices (Purchasing Power Parities) – 2nd Semester 2016*

Household gas prices (all taxes included) weighted average across all suppliers	c_{PPP}/kWh S2 2016	Change since S1 2016	Change in 12 months	Ranking EU (26)	Band Share of Market
Band D1 Consumption < 20 GJ	7.7	17.0%	-3.3%	16	6.3%
Band D2 20 GJ < Consumption < 200 GJ	6.3	7.2%	-3.2%	17	91.9%
Band D3 Consumption > 200 GJ	5.6	1.5%	-4.6%	17	1.8%

Source: Eurostat

Appendix 2 – Methodologies for Assessing Prices

The International Energy Agency (IEA) is 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, making 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 and 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 Directive 90/377/EEC of 29 June 1990 concerning a Community procedure to improve the transparency of gas and electricity prices charged to business end-users. This Directive obliges Member States to ensure that undertakings that supply electricity and gas to business 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 business end-users, the price systems in use, and the breakdown of consumers and the corresponding volumes by category of consumption. The Sustainable Energy Authority of Ireland (SEAI) 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, in order to take account in particular of the market liberalisation 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, Decision (2007/394/EC), has been applied since 1 January 2008. The electricity and gas price comparisons assessed in *Sections 4* and *5* 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 the 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 an allowance must be made for currency and purchasing power differences.

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