

ELECTRICITY & GAS PRICES IN IRELAND

2nd Semester (July – December) 2018



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June 2019

Sustainable Energy Authority of Ireland

SEAI is Ireland's national energy authority investing in, and delivering, appropriate, effective and sustainable solutions to help Ireland's transition to a clean energy future. We work with Government, homeowners, businesses and communities to achieve this, through expertise, funding, educational programmes, policy advice, research and the development of new technologies. SEAI is funded by the Government of Ireland through the Department of Communications, Climate Action and Environment.

SEAI is the official source of energy data for Ireland. We develop and maintain 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. SEAI's core statistics 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.

Acknowledgements

SEAI gratefully acknowledges the cooperation of all the organisations, agencies, energy suppliers and distributors that provided data and responded to questionnaires throughout the year.

Key Highlights

There are a number of factors that influence energy prices in Ireland. These 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).

Business Electricity

The weighted average price of electricity to business consumers in Ireland has been above both Europe¹ and Euro Area² averages³ since the second half of 2011. In the current semester (July to December 2018) the weighted average price in Ireland increased by 2.4% and was 17% and 14% above the EU and Euro Area average respectively.

Table 1 summarises the key changes for the electricity consumption bands for business in Ireland for the period July to December 2018 and compares with the changes across the EU and Euro Area.

Table 1: Business Electricity Prices (ex-VAT) – 2nd Semester 2018

Band (GWh)	Band Share	Ireland c/kWh	Ireland relative to:		Ranking* in:		Semester price change:		
			EU	Euro Area	EU	Euro Area	Ireland	EU	Euro Area
IA (<0.02)	6.9%	21.1	111%	105%	5	5	4.1%	1.6%	0.5%
IB (0.02 – 0.5)	26.9%	16.1	115%	110%	4	4	2.9%	2.0%	1.7%
IC (0.5 – 2.0)	14.3%	13.5	117%	113%	6	5	2.1%	0.9%	-0.2%
ID (2.0 – 20)	24.9%	11.1	112%	110%	6	5	2.5%	1.4%	0.5%
IE (20 – 70)	7.8%	10.3	124%	127%	3	2	2.1%	2.1%	1.4%
IF & IG (>70)	19.1%	9.7	124%	127%	5	4	5.5%	5.4%	5.7%
Weighted Average	-	13.7	117%	114%	-	-	2.4%	2.0%	1.2%

Source: Eurostat and SEAI

* A ranking of 1 means most expensive

Since the last semester (January to June 2018), all consumption bands experienced increases in the price of electricity to business in Ireland ranging from an increase of 2.1% in band IC and IE to 5.5% in bands IF/IG. Price increased in all consumption bands in both the EU and the Euro Area.

Ireland's ranking in the EU varied from sixth most expensive for bands IC and ID to third most expensive for band IE.

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 13.3% and was 11% above the EU average and 7% above Euro Area average.

Table 2 summarises the key changes for the consumption bands in Ireland for the period July to December 2018 and compares with the changes across the Europe and EU Area.

Table 2: Business Gas Prices (ex-VAT) – 2nd Semester 2018

Band (GWh)	Band Share	Ireland c/kWh	Ireland relative to:		Ranking in:		Semester price change:		
			EU	Euro Area	EU	Euro Area	Ireland	EU	Euro Area
I1 (<0.28)	7.6%	5.6	113%	108%	6	4	25.9%	9.3%	8.9%
I2 (0.28 – 2.8)	14.3%	4.9	122%	114%	5	3	28.0%	7.2%	6.7%
I3 (2.8 – 28)	13.5%	3.9	124%	121%	4	3	13.5%	2.0%	0.9%
I4 (28 – 280)	30.7%	2.9	109%	107%	8	4	7.1%	5.2%	4.3%
I5 (280 – 1,100)	33.8%	2.7	107%	105%	7	4	..	9.9%	8.4%
Weighted Average	-	3.8	111%	107%	-	-	13.3%	6.9%	6.1%

Source: Eurostat and SEAI

* A ranking of 1 means most expensive

Prices increased in all consumption bands in Ireland, ranging from 7.1% in band I4 to 28% in band I2. Price increased in all bands in the EU and Euro Area but at much lower rates. Ireland's highest ranking in the EU was fourth most expensive in band I3 and the lowest was in band I5 at seventh most expensive.

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 across all consumption bands 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.

Household Electricity

Between 2011 and the end of 2015, the weighted average price of electricity to household consumers was above the EU average. In the first semester of 2016 it dropped below the EU average until the second semester of 2017 when it increased to EU average before falling below the average again in the first half of 2018. The weighted average price of electricity to households in Ireland increased by 11.5% in the second half of 2018 and went to 1% above the EU average.

Table 3 summarises the key changes for the electricity consumption bands for households in Ireland for the period July to December 2018 and compares with the changes across the EU and EU Area.

Table 3: Household Electricity Prices (all taxes included) – 2nd Semester 2018

Band (MWh)	Band Share	Ireland c/kWh	Ireland relative to:		Ranking in:		Semester price change:		
			EU	Euro Area	EU	Euro Area	Ireland	EU	Euro Area
DA (<1.0)	3.3%	38.9	103%	92%	8	6	1.1%	4.6%	5.7%
DB (1.0 – 2.5)	10.6%	32.7	137%	128%	3	2	6.9%	3.5%	3.3%
DC (2.5 – 5.0)	36.3%	25.4	120%	113%	4	3	7.2%	3.0%	2.5%
DD (5.0 – 15)	41.5%	21.6	111%	104%	7	6	10.2%	3.9%	3.1%
DE (>15)	8.4%	17.6	97%	90%	10	9	8.6%	2.4%	1.1%
Weighted Average	-	24.4	101%	93%	-	-	11.5%	3.6%	3.6%

Source: Eurostat and SEAI

* A ranking of 1 means most expensive

The price increased in all bands in Ireland ranging from 1.1% in band DA to 10.2% in band DD. Price increased in all bands in Europe and the Euro Area but on average at a lower rate than in Ireland. Ireland was 20% and 11% above the EU average in DC and DD respectively and was fourth and seventh most expensive respectively in the EU in these bands.

Households Gas

The weighted average price of gas to household consumers in Ireland was below both the EU and Euro Area since 2009. In the current semester it was at the EU average and 13% below Euro Area. The weighted average price of gas to households in Ireland increased by 21% in the second half of 2018.

Table 4 summarises the key changes for the consumption bands in Ireland for the period July to December 2018 and compares with the changes across the EU and EU Area.

Table 4: Household Gas Prices (all taxes included) – 2nd Semester 2018

Band (MWh)	Band Share	Ireland c/kWh	Ireland relative to:		Ranking in:		Semester price change:		
			EU	Euro Area	EU	Euro Area	Ireland	EU	Euro Area
D1 (<5.6)	5.8%	9.4	88%	75%	12	9	35.6%	21.4%	21.5%
D2 (5.6 – 56)	92.4%	7.6	114%	100%	8	6	20.4%	13.6%	15.0%
D3 (>56)	1.8%	6.7	115%	103%	5	3	10.8%	7.2%	7.4%
Weighted Average	-	7.7	100%	87%	-	-	21.1%	15.3%	15.9%

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 and the Euro Area. Price increased by 20% in Ireland compared with increases of 13.6% and 15% in the EU and the Euro Area respectively. Ireland's ranking moved to 8th most expensive in the EU and was 14% above the EU average and at the Euro Area in band D2.

*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 Regulation. 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 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.

Electricity and natural gas prices have been collected by Eurostat since 1990 to measure the progress of market liberalisation. Liberalisation was completed in 2007 and the methodology for collection of price statistics was adapted to better reflect the average price being paid. This report draws on the results of the 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 for the period July – December 2018, i.e. the second semester of 2018 (S2 2018). Revisions to Eurostat's data have been incorporated into this report. Eurostat data presented in this report are as posted on Eurostat's website¹ on 25 April 2019.

Also included is a disaggregation of electricity prices into the components of energy and supply, network costs, and taxes and levies for the second semester of 2018 (S2 2018). See *Sections 4.1.6, 4.2.5, 5.1.6, and 5.2.4*.

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 simple averages for the EU and Euro Area.
- *Section 4* focuses on electricity and gas prices paid by industrial and services customers (i.e. business consumers), 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 2018.

This is the twenty second 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 epsu@seai.ie.

Readers may also be interested in previous statistical analysis related to energy prices carried out by SEAI. The report *Energy in Ireland 2018 Report* tracks changes in aggregated energy prices from 2000, based on International Energy Agency (IEA) data, available from <http://www.seai.ie/>.

¹ <http://ec.europa.eu/eurostat/web/energy/data/database>

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, Ireland's electricity generating fuel mix, energy infrastructure investment costs and non-energy costs that affect energy prices (for example, taxes levied, employment costs, raw material and shipping costs).

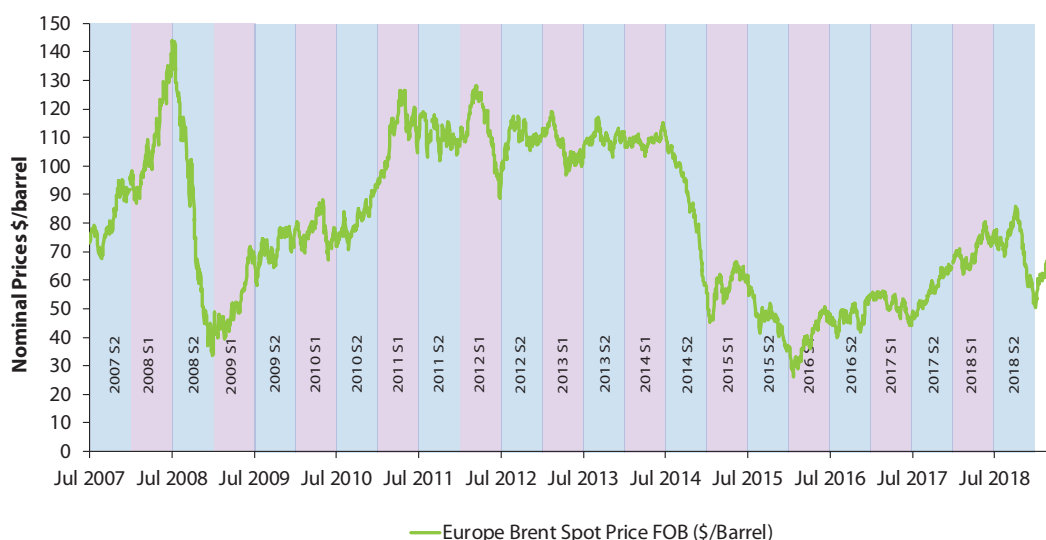
2.1 Global Energy Prices

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 a particular effect in Ireland due to our high dependence on oil at about 49% of our energy needs. In addition, there is the knock-on impact that global oil prices have on other energy prices, in particular natural gas from which approximately half of our electricity is generated, and as a consequence electricity prices.

According to Ireland's 2017² energy balance, oil accounts for 58% of Total Final Consumption (TFC)³, 96% of transport TFC, 37% of residential TFC, 20% of industry TFC, 18% of services TFC and 48% of Ireland's primary energy supply⁴. According to EU statistics⁵, 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 prices⁶ over the period 2007 – 2019. 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 a low of \$26/barrel in January 2016. Since then, the price has been rising generally and on average the price during the first half of 2018 was \$71/barrel and had risen as high as \$86/barrel at the start of October 2018 but fell to around \$51/barrel at the end of December. In 2019, the price has risen again to around \$70/barrel at the end of April.

Figure 1: Crude Oil Price Trend 2007 – to 29 April 2019



Source: EIA⁷

² For the latest energy balance see www.seai.ie/

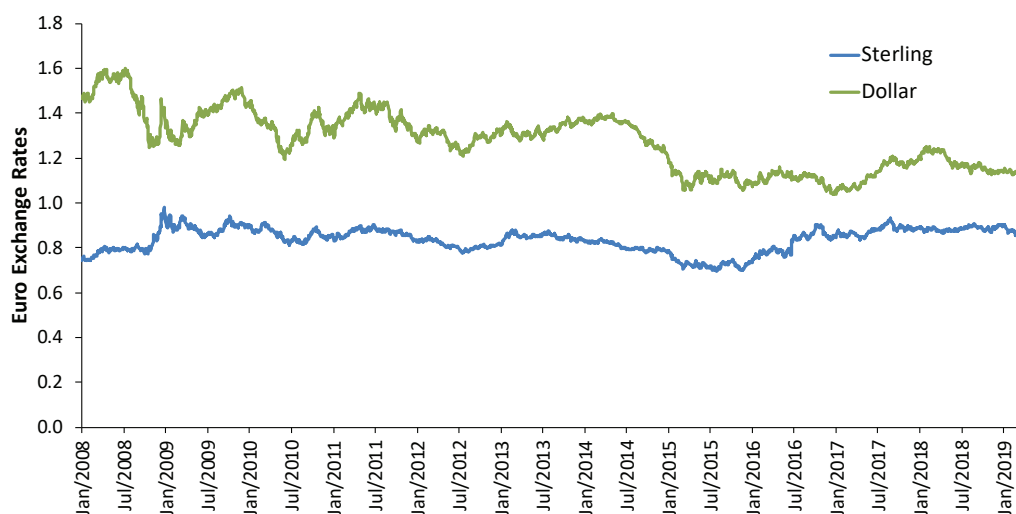
³ TFC represents all energy that end-users are billed for directly.

⁴ Primary Energy Supply is the TFC plus primary energy used in transformation (electricity generation, oil refining, peat briquetting, etc.)

⁵ Eurostat, Energy Statistics Database, <http://ec.europa.eu/eurostat/web/energy/data/database>.

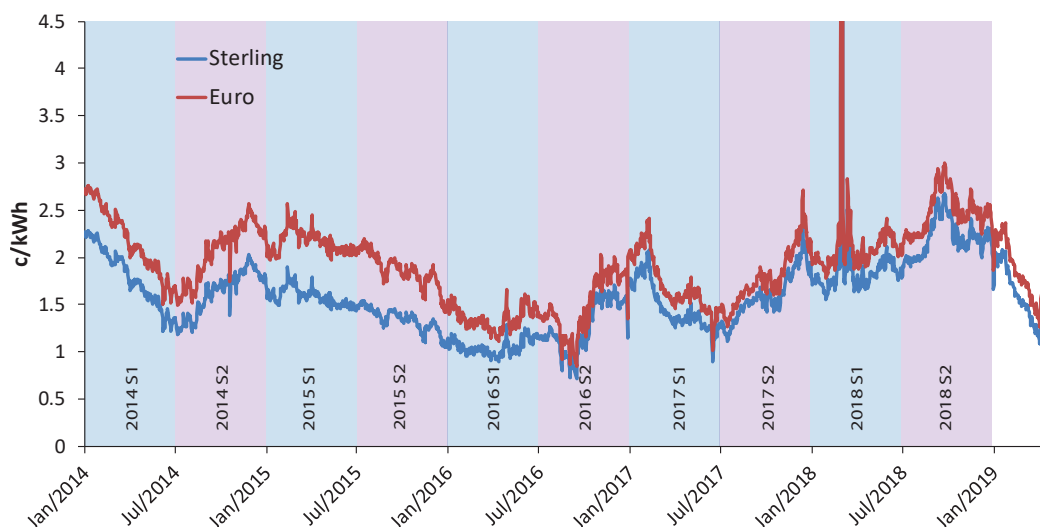
⁶ These prices are daily spot prices of Brent crude oil, a widely used benchmark to price European, African and Middle Eastern oil that is exported to the West.

⁷ 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 2 May 2019

Source: Central Bank of Ireland

Figure 2 tracks exchange rates from 2008 to 2019. These currency changes contributed to the changing cost of gas and, given our reliance on gas for electricity generation, on electricity prices in Ireland. When the value of the euro is weak against sterling, gas is relatively more expensive here and vice versa. During the first half of 2018 the euro increased against the dollar by 2.9% on average and fell against sterling by 1.5% on average compared with the previous semester. In the second half of 2018 the euro fell against the dollar by 4.8% but increased against sterling by 1.1% on average.

Figure 3: Natural Gas System Average Prices (p and c/kWh) (Actual Day UK Balancing Point) 2014 to 1 May 2019

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) mechanism⁸. 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 increased in the second half of 2018 up to the end of September when it was 48% higher than at the start of July. It then fell by 38% during the remainder of the semester finishing 8% lower than at the start.

On average during the second semester of 2018 the price of gas was 12.5% higher than the previous semester in sterling terms and 11.3% higher in euro terms. Compared with the same semester in 2017 prices were 38% higher in sterling terms and 38% higher in euro terms.

Note the spike in gas price on the 1st of March 2018 which coincided with the "Beast from the East" cold weather event when the price peaked at close to 13 c/kWh.

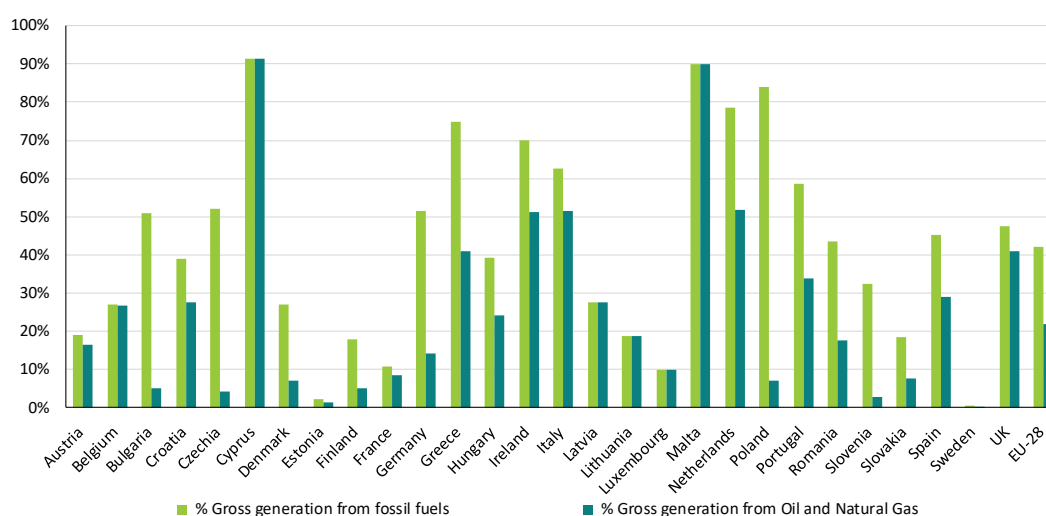
⁸ <http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=4518>

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 in Europe (2017)



Source: Based on Eurostat data

As highlighted in Table 5, Ireland has a high overall dependency of electricity generation on fossil fuels at 70%, behind the Greece at 75%, Netherlands at 78%, Poland at 84%, Malta at 90% and Cyprus at 91%. Ireland also has a high dependency on oil and gas generation, at 51%. Apart from Malta and Cyprus, Ireland, Italy and the Netherlands had the highest gas and oil generation dependency.

Ireland had the highest share of electricity generation from gas in Europe in 2016 at 51%.

Table 5: Percentage of Gross Electricity Generation from Fossil Fuels in Europe (2017)

Percentage electricity generated from:	Austria	Belgium	Bulgaria	Croatia	Czech Republic	Cyprus	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland
All Fossil Fuels	19%	27%	51%	39%	52%	91%	27%	2%	18%	11%	51%	75%	39%	70%
Gas and Oil	17%	27%	5%	28%	4%	91%	7%	1%	5%	9%	14%	41%	24%	51%
Gas	15%	27%	4%	26%	4%	0%	6%	0%	5%	7%	13%	31%	24%	51%

Percentage electricity generated from:	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	EU-28
All Fossil Fuels	63%	27%	19%	10%	90%	78%	84%	59%	44%	33%	18%	45%	1%	48%	42%
Gas and Oil	51%	27%	19%	10%	90%	52%	7%	34%	18%	3%	8%	29%	0%	41%	22%
Gas	48%	27%	15%	10%	78%	51%	6%	32%	17%	3%	6%	23%	0%	40%	20%

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/15/296⁹) and €2.7 billion for the distribution system (Decision Paper CER/15/295¹⁰).

According to the CER¹¹, the transmission average unit price (AUP) for the tariff period 1 October 2018 – 30 September 2019 is estimated to be 1.81 c/kWh, an 25.24% increase from the previous twelve-month period. For the distribution system the AUP for Distribution Use of System charge for the 1 October 2018 – 30 September 2019 period is 3.38 c/kWh. This is a 0.56% increase on the previous twelve-month period. The combined transmission and distribution adjustments resulted in the average annual residential customer's bill rising by €13.85 from October 2018, this will be offset by the reduced costs for capacity payments.

The natural gas transmission network in Ireland has been operated by Gas Networks Ireland (GNI) since 2008. The transmission network consists of 2,427 km of high pressure pipelines while the low pressure distribution networks is 11,745 km¹². The Irish system has three compressor stations, Beattock and Brighthouse Bay in southwest Scotland, 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 2018, Ireland's transmission network infrastructure has sufficient capacity to meet future gas flow requirements in the short to medium term.

For the natural gas network the weighted distribution network tariffs (CRU/18/101) decreased in nominal terms by 3.9% for the period 1 October 2018 – 30 September 2019. 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 customer's bill. The network tariff changes for 2018/'19 equate to approximately 1.25% decrease of an average residential gas customer's bill.

Transmission network tariffs (CRU/18/179) in nominal terms are down 6% versus 2017/'18. 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 customer's bill. The network tariff changes for 2018/'19 equate to approximately 0.55% reduction to an average residential gas customer's bill.

The combined effect of the gas transmission and distribution network tariffs for 2018/19 on an average residential gas customer's annual bill is a decrease of €13.67 (-1.8%).

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 business (non-households) and households. In Ireland's case there were no non-recoverable taxes on gas¹³ for business up to the second semester 2009 (S2 2009) but since 1 May 2010 carbon tax has been levied.

9 [http://www.cer.ie/docs/001043/CER15296%20Decision%20on%20TSO%20and%20TAO%20Transmission%20Revenue%20for%202016%20to%202020%20\(1\).pdf](http://www.cer.ie/docs/001043/CER15296%20Decision%20on%20TSO%20and%20TAO%20Transmission%20Revenue%20for%202016%20to%202020%20(1).pdf)

10 <http://www.cer.ie/docs/001044/CER15295%20Decision%20on%20DSO%20PR4%20Distribution%20Revenue%202016%20to%202020.pdf>

11 <https://www.cru.ie/wp-content/uploads/2017/09/CER17276-CER-Paper-on-2018-Transmission-Revenue-Final-to-publish.pdf>

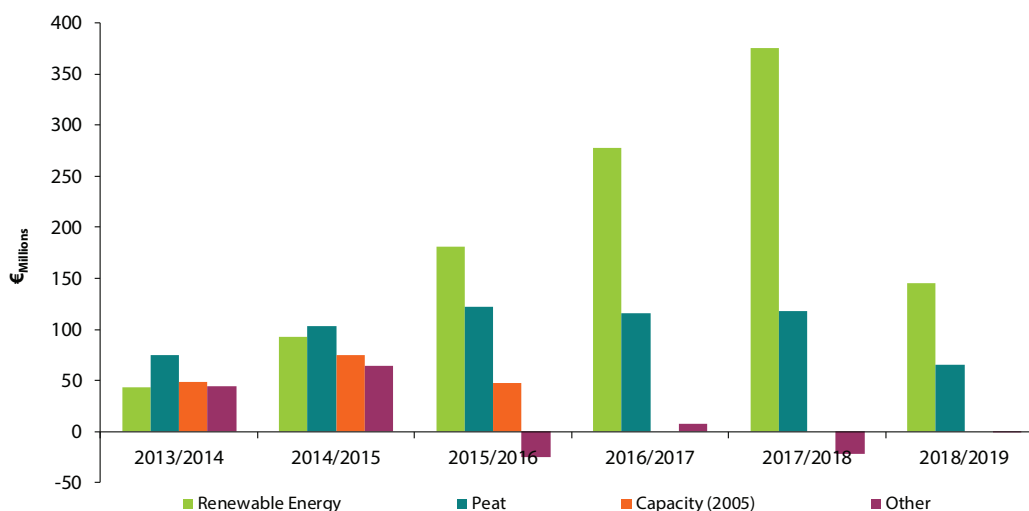
12 <https://www.cru.ie/wp-content/uploads/2018/12/CRU18269a-GNI-Network-Development-Plan-2018.pdf>

13 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.

There has been a small level of excise duty levied on non-household use of electricity¹⁴ 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 countries¹⁵.

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 the 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 2013 – 2019.

Figure 5: Public Service Obligation Levy Cost Breakdown 2013 – 2019



Source: Commission Regulation of Utilities (CRU)

For the year starting 1 October 2018, the CRU has calculated that the PSO Levy decreased by 56% in total on the previous year.

Peat accounted for 24% of the positive costs¹⁶ of the total PSO levy shown in *Figure 5* for 2017/18 and renewables 76%. For the 2018/19 period, renewables account for 69% of the positive costs, peat for 31%.

From October 2017 to September 2018¹⁷ domestic electricity consumers are charged a flat rate of €7.69 per month for PSO, a 27.7% increase on the previous year. Small business consumers have had a flat rate charge of €26.55 per month in 2017/18, an 35.4% increase on 2016/17. Medium and large business consumers are being charged at a rate of €3.64 per month per kVA of maximum import capacity – up 6.7% on the previous year.

From October 2018 to September 2019¹⁸ domestic electricity consumers are charged a flat rate of €3.48 per month for PSO, a 55% decrease on the previous year. Small business consumers have had a flat rate charge of €11.97 per month in 2018/19, an 55% decrease on 2017/18. Medium and large business consumers are being charged at a rate of €1.32 per month per kVA of maximum import capacity – down 64% on the previous year.

The CRU notes that the upwards drivers for the PSO Levy for 2018/19 were due to:

- Increased Renewables: 4,085 MW of mostly renewable will be supported by the 2018/19 PSO levy. This is an increase of 518 MW, or 15% more than 3,567 MW supported in the 2017/18 PSO period.
- Lower Capacity Payments: Due to the introduction of the capacity auction, actual remuneration is now deducted from ex-ante payments to be paid applicable suppliers. As anticipated, the new capacity market has resulted in intermittent generation receiving reduced capacity revenue through the new capacity market.

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

- Negative R-factor: The calculation of the PSO levy requires an ex-ante estimation of the monies recoverable in a given PSO period by suppliers plus the calculation of the monies that should have been recovered by such parties two PSO periods ago (in this instance 2016/17). This latter calculation is referred to as the “R-factor”. A 2016/17 R-factor of

¹⁴ This is not reflected in the basic price nor is it captured in the recoverable or non-recoverable taxes.

¹⁴ 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.

¹⁵ See *Table 8* and *Table 9*.

¹⁶ There can be some negative costs in the makeup of the PSO from contracts for difference and credits from overpayment in the previous year.

¹⁷ CRU (July, 2017), *Public Service Obligation 2017/2018* (CRU/17/241), www.cru.ie

¹⁸ CRU (July, 2018), *Public Service Obligation 2018/2019* (CRU/18/148), www.cru.ie

-€114.9 million is being included in the 2018/19 PSO levy calculation, which accounts for the difference between the costs and revenues estimated for 2016/17 ex-ante and actual costs and revenues for 2016/17 certified ex-post. The negative 2016-17 R-factor (i.e. -€114.9 million) has been the main driver behind the decrease in the 2018/19 PSO levy. This constitutes a decrease of €167.5 million in comparison to the 2017/18 R-factor (€52.6 million).

- Higher Benchmark Price: The forecast benchmark price of €61.17/MWh is higher than the benchmark price of €46.18/MWh used in calculating the 2017/18 PSO levy. This acts to reduce the overall levy by approximately €108.8 million relative to the 2017/18 PSO levy. This is because the higher forecast market revenue decreases the amount required from the PSO levy to compensate suppliers up to the guaranteed rates that they are obliged to pay to PSO supported generators.

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 MWh¹⁹. The Member States are ranked in increasing order of the basic price plus non-recoverable taxes.

The non-recoverable tax varies from €0.04 in Sweden to €7.36 per 100 kWh in Germany, the latter representing 49% of the ex-VAT price of electricity. Non-recoverable tax on electricity to business in Ireland amounted to €1.09 per 100 kWh or 8.1% 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 33% of the ex-VAT price.

Table 6: Electricity Prices and Taxes for Industrial Consumers in Band IC (2nd semester 2018)

	Basic price plus non-recoverable taxes in € per 100 kWh	Basic price in € per 100 kWh	Non-recoverable taxes	Non-recoverable taxes as % of ex-VAT price
Finland	7.07	6.36	0.71	10.0%
Czech Republic	7.21	7.10	0.11	1.5%
Sweden	7.27	7.23	0.04	0.6%
Denmark	7.88	6.51	1.37	17.4%
Netherlands	8.09	6.23	1.86	23.0%
Hungary	8.22	7.37	0.85	10.3%
Bulgaria	8.46	8.35	0.11	1.3%
Luxembourg	8.46	7.54	0.92	10.9%
Romania	8.66	7.34	1.32	15.2%
Slovenia	8.66	6.98	1.68	19.4%
Norway	8.72	7.71	1.01	11.6%
Poland	8.84	6.49	2.35	26.6%
France	8.89	6.70	2.19	24.6%
Lithuania	8.99	7.62	1.37	15.2%
Estonia	9.24	7.90	1.34	14.5%
Austria	10.11	7.19	2.92	28.9%
Croatia	10.13	8.67	1.46	14.4%
Latvia	10.47	8.33	2.14	20.4%
Greece	10.59	7.88	2.71	25.6%
Spain	10.98	10.45	0.53	4.8%
Belgium	11.42	8.27	3.15	27.6%
Portugal	11.70	8.14	3.56	30.4%
Slovakia	12.01	8.19	3.82	31.8%
Ireland	13.49	12.40	1.09	8.1%
Malta	13.56	13.41	0.15	1.1%
United Kingdom	14.23	10.07	4.16	29.2%
Italy	14.34	8.85	5.49	38.3%
Germany	15.16	7.80	7.36	48.5%
Cyprus	18.11	17.03	1.08	6.0%
Euro Area	11.92	8.00	3.92	32.9%
EU-28	11.49	8.04	3.45	30.0%

Source: Eurostat

Table 7 shows the basic price for natural gas and the non-recoverable taxes for industrial gas consumers whose annual

¹⁹ Based on business electricity consumption band IC which accounts for 14.3% of business electricity consumption.

consumption is between 10,000 and 100,000 GJ (2,800 – 28,000 MWh) of gas per annum²⁰.

The non-recoverable taxes vary from zero in Romania to €1.79 per 100 kWh in Finland, representing 31% of the ex-VAT price of gas. Non-recoverable tax on gas to business in Ireland amounted to €0.36 per 100 kWh, or 9.3% of the ex-VAT price. The average non-recoverable tax on gas to business was 10.9% in the EU and 12.8% in the Euro Area.

Table 7: Gas Prices and Taxes for Industrial Consumers in Band I3 (2nd semester 2018)

	Basic price plus non-recoverable taxes in € per 100 kWh	Basic price in € per 100 kWh	Non-recoverable taxes	Non-recoverable taxes as % of ex-VAT price
Belgium	2.52	2.31	0.21	8.3%
Czech Republic	2.67	2.54	0.13	4.9%
United Kingdom	2.77	2.64	0.13	4.7%
Romania	2.81	2.81	0.00	0.0%
Croatia	2.83	2.78	0.05	1.8%
Hungary	2.85	2.70	0.15	5.3%
Bulgaria	2.89	2.79	0.10	3.5%
Italy	2.93	2.77	0.16	5.5%
Portugal	2.95	2.88	0.07	2.4%
Netherlands	2.97	2.34	0.63	21.2%
Spain	2.99	2.93	0.06	2.0%
Slovakia	3.08	2.95	0.13	4.2%
Poland	3.12	3.04	0.08	2.6%
Germany	3.15	2.75	0.40	12.7%
Latvia	3.24	3.12	0.12	3.7%
Estonia	3.25	2.77	0.48	14.8%
Luxembourg	3.32	3.28	0.04	1.2%
Greece	3.35	3.12	0.23	6.9%
Austria	3.40	2.77	0.63	18.5%
Slovenia	3.43	2.96	0.47	13.7%
Denmark	3.84	2.88	0.96	25.0%
Lithuania	3.87	3.42	0.45	11.6%
Ireland	3.88	3.52	0.36	9.3%
France	3.90	3.16	0.74	19.0%
Sweden	4.81	3.99	0.82	17.0%
Finland	5.86	4.07	1.79	30.5%
Euro Area	3.21	2.80	0.41	12.8%
EU-28	3.13	2.79	0.34	10.9%

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 annum²¹. The VAT charges are shown separately from other taxes for the purposes of comparison.

There are two Member States listed in *Table 8* which apply VAT charges only to residential customers. Total taxes (VAT plus other taxes) vary from €0.77 per 100 kWh (Malta) to €20.07 per 100 kWh (Denmark), or between 5.9% and 64% of total prices. For Ireland, on average, taxes and levies account for 21% of the final electricity prices to household consumers. The average non-recoverable tax on electricity to households in the EU was 37%, and in the Euro Area it was 39% of the ex-VAT price.

²⁰ Based on business gas consumption band I3 which accounts for 13.5% of business gas consumption.

²¹ Based on household electricity consumption band DC which accounts for 36.3% of electricity consumption in households.

Table 8: Electricity Prices and Taxes for Residential Consumers in Band DC (2nd semester 2018)

	Price including all taxes in € per 100 kWh	Basic price	Other taxes (excl. VAT) in € per 100 kWh	VAT	All taxes as % of total price
Bulgaria	10.05	8.38	0.00	1.67	16.6%
Lithuania	10.97	7.71	1.35	1.91	29.7%
Hungary	11.18	8.80	0.00	2.38	21.3%
Malta	13.06	12.29	0.15	0.62	5.9%
Romania	13.17	9.64	1.43	2.10	26.8%
Croatia	13.21	10.28	1.41	1.52	22.2%
Poland	13.96	8.89	2.46	2.61	36.3%
Estonia	14.18	10.48	1.34	2.36	26.1%
Slovakia	14.62	8.49	3.69	2.44	41.9%
Latvia	15.11	10.41	2.08	2.62	31.1%
Czech Republic	15.86	12.99	0.12	2.75	18.1%
Slovenia	16.38	11.25	2.17	2.96	31.3%
Greece	16.46	11.25	3.33	1.88	31.7%
Luxembourg	16.91	13.02	2.64	1.25	23.0%
Finland	16.98	11.44	2.25	3.29	32.6%
Netherlands	17.07	12.12	2.08	2.87	29.0%
France	17.99	11.68	3.69	2.62	35.1%
Norway	19.07	13.82	1.80	3.45	27.5%
Sweden	19.90	12.87	3.05	3.98	35.3%
Austria	20.12	12.65	4.11	3.36	37.1%
United Kingdom	20.24	14.01	5.26	0.97	30.8%
Italy	21.61	14.16	5.48	1.97	34.5%
Cyprus	21.83	17.45	1.05	3.33	20.1%
Portugal	22.93	10.28	8.36	4.29	55.2%
Spain	24.77	19.47	1.00	4.30	21.4%
Ireland	25.39	20.06	2.31	3.02	21.0%
Belgium	29.37	19.98	4.31	5.08	32.0%
Germany	30.00	13.78	11.43	4.79	54.1%
Denmark	31.23	11.16	13.83	6.24	64.3%
Euro Area	22.42	13.76	5.26	3.40	38.6%
EU-28	21.13	13.29	4.81	3.03	37.1%

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 annum²². As in the case of electricity, the taxes applied to residential customers generally exceed those applied to industrial customers.

For residential customers there are six Member States that apply zero non-VAT tax to gas prices. Total taxes (VAT plus other taxes) vary from €0.44 per 100 kWh (Luxembourg) to €5.16 per 100 kWh (Sweden), or 10.3% to 42% 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 €1.27 per 100 kWh and accounted for 17% of the gas price paid by Irish households in S2 2018 (band D2).

On average, the non-recoverable tax on gas to households in the EU was 27%, and in the Euro Area it was 31%, of the ex-VAT price.

²² Based on household gas consumption band D2 which accounts for 92.4% of gas consumption in the household sector.

Table 9: Gas Prices and Taxes for Residential Consumers in Band D2 (2nd semester 2018)

	Price including all taxes in € per 100 kWh	Basic price	Other taxes (excl. VAT) in € per 100 kWh	VAT	All taxes as % of total price
Hungary	3.47	2.73	0.00	0.74	21.3%
Romania	3.54	2.97	0.00	0.57	16.1%
Croatia	3.60	2.88	0.00	0.72	20.0%
Lithuania	4.05	2.97	0.38	0.70	26.7%
Estonia	4.25	3.06	0.48	0.71	28.0%
Luxembourg	4.29	3.85	0.11	0.33	10.3%
Bulgaria	4.37	3.64	0.00	0.73	16.7%
Latvia	4.50	3.55	0.17	0.78	21.1%
Poland	4.50	3.64	0.02	0.84	19.1%
Slovakia	4.59	3.83	0.00	0.76	16.6%
United Kingdom	5.18	4.64	0.29	0.25	10.4%
Czech Republic	5.69	4.70	0.00	0.99	17.4%
Slovenia	5.77	4.06	0.67	1.04	29.6%
Germany	6.08	4.51	0.60	0.97	25.8%
Belgium	6.25	4.95	0.22	1.08	20.8%
Greece	6.54	5.65	0.03	0.86	13.6%
Austria	7.01	5.14	0.70	1.17	26.7%
Ireland	7.61	6.34	0.37	0.90	16.7%
France	7.63	5.53	1.04	1.06	27.5%
Portugal	7.84	5.86	0.51	1.47	25.3%
Netherlands	8.61	4.16	2.95	1.50	51.7%
Spain	8.75	6.99	0.24	1.52	20.1%
Denmark	9.13	4.17	3.14	1.82	54.3%
Italy	9.51	6.21	1.68	1.62	34.7%
Sweden	12.23	7.07	2.71	2.45	42.2%
Euro Area	7.61	5.25	1.12	1.24	31.0%
EU-28	6.70	4.90	0.83	0.97	26.9%

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 a 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%

A number of typical consumers are then used to construct semi-annual bills based on typical supplier costs for both standard rates and discounted rates²³. 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*.

²³ 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*²⁴ 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.

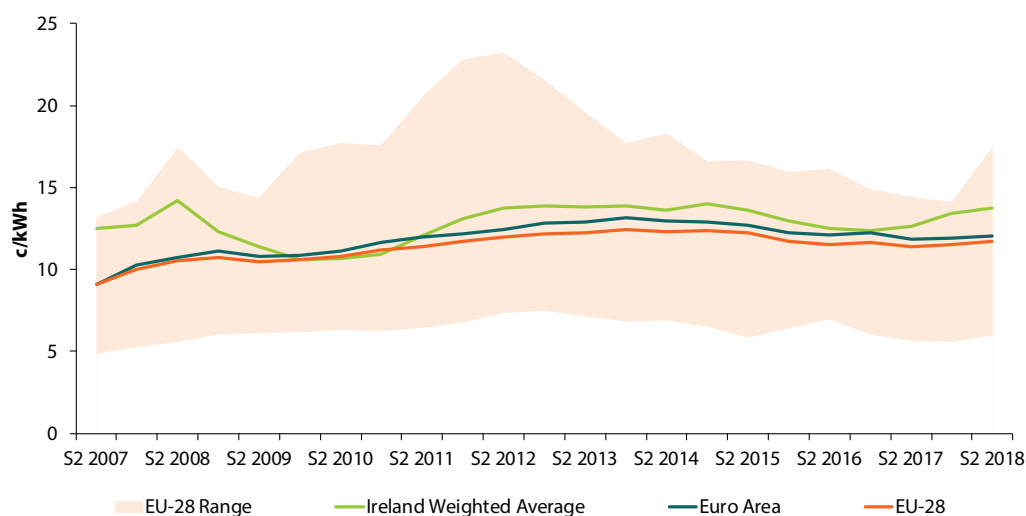
For instance, a single weighted average price for electricity to business can be constructed by weighting the price in each band by the consumption of electricity in that band in a given semester. This calculation is possible for Ireland now but weightings for other countries are not currently published by Eurostat. They become available for all other EU Member States and the EU and Euro Area in 2018 but only for annual data currently.

In the meantime, we present weighted average prices for Ireland together with a 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

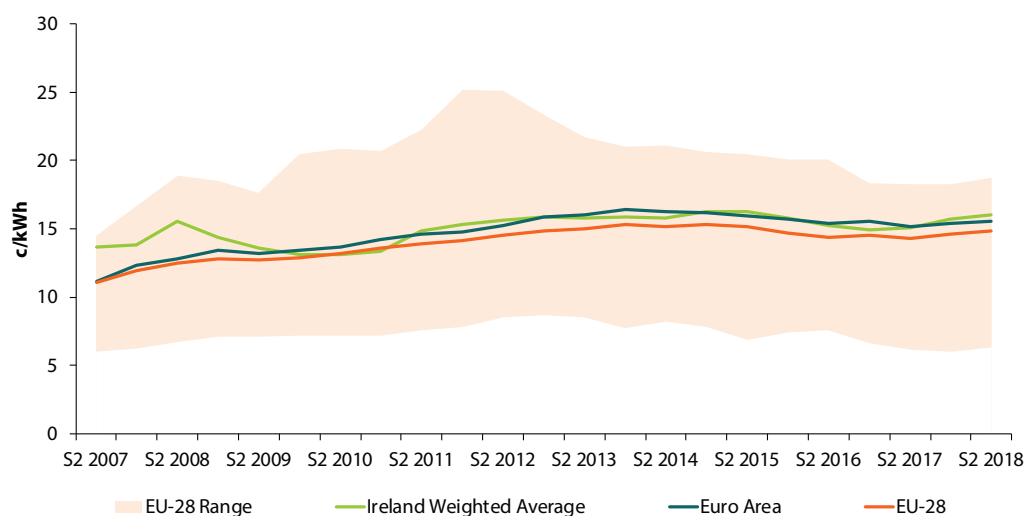
Figure 6 and Table 13 show the average electricity price to business across all consumption bands in the Euro Area and the EU-28 and the weighted average across all bands in Ireland. Given the caveat that the weighted average is not fully comparable with the normal average, it can be seen that the price 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 2018 it was 16% and 14% above the EU and Euro Area respectively.

²⁴ <http://www.dcae.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 2015	S2 2015	S1 2016	S2 2016	S1 2017	S2 2017	S1 2018	S2 2018
Ireland (weighted average)	14.00	13.58	12.97	12.53	12.37	12.61	13.39	13.71
Euro Area (average)	12.90	12.68	12.21	12.12	12.21	11.84	11.91	12.06
EU-28 (average)	12.38	12.22	11.68	11.52	11.64	11.37	11.51	11.74
Ireland relative to;								
Euro Area	108.5%	107.1%	106.2%	103.4%	101.3%	106.5%	112.5%	113.8%
EU-28	113.1%	111.2%	111.0%	108.7%	106.3%	110.9%	116.4%	116.8%

Source: Eurostat

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

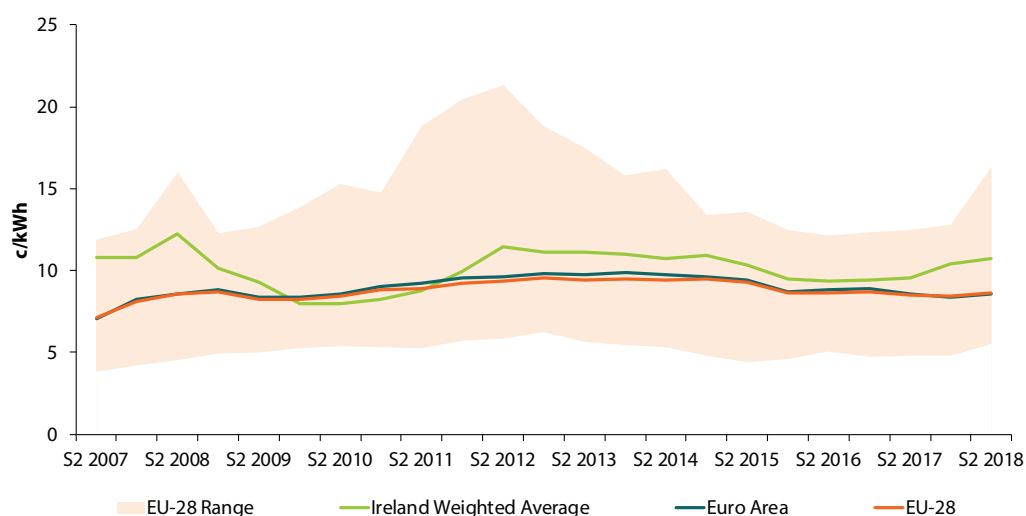
Source: SEAI based on Eurostat data

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 the second half of 2011. In the second half of 2018 it was 8.3% above the EU and 3.3% above 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 2015	S2 2015	S1 2016	S2 2016	S1 2017	S2 2017	S1 2018	S2 2018
Ireland (weighted average)	16.29	16.24	15.75	15.23	14.95	15.08	15.71	16.05
Euro Area (average)	16.20	15.96	15.71	15.43	15.55	15.12	15.42	15.53
EU-28 (average)	15.29	15.13	14.70	14.40	14.55	14.26	14.59	14.82
Ireland relative to;								
Euro Area	100.6%	101.7%	100.3%	98.7%	96.2%	99.7%	101.9%	103.3%
EU-28	106.6%	107.4%	107.1%	105.8%	102.8%	105.7%	107.7%	108.3%

Source: Eurostat

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

Source: SEAI based on Eurostat data

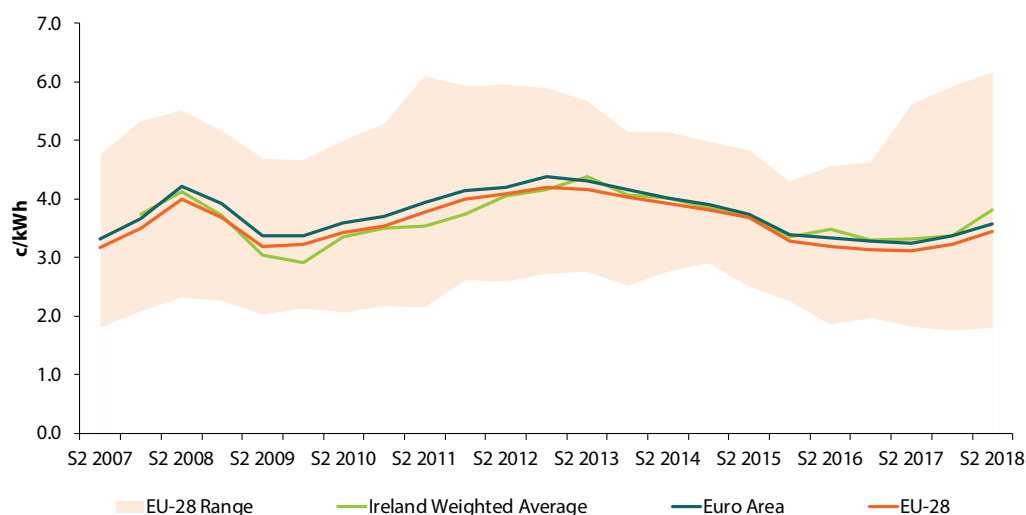
Figure 8 and Table 15 show the average electricity price to business in the Euro Area and the EU-28 and the weighted average for the high consumption bands ID, IE and IF in Ireland. Given the caveat that the weighted average is not fully comparable with the normal average, it can be seen that the price 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 2018 it was 24% and 25% 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 2015	S2 2015	S1 2016	S2 2016	S1 2017	S2 2017	S1 2018	S2 2018
Ireland (weighted average)	10.92	10.32	9.46	9.35	9.41	9.57	10.43	10.73
Euro Area (average)	9.61	9.39	8.71	8.80	8.88	8.56	8.39	8.58
EU-28 (average)	9.47	9.31	8.66	8.64	8.73	8.48	8.42	8.66
Ireland relative to;								
Euro Area	113.6%	109.9%	108.5%	106.3%	105.9%	111.8%	124.3%	125.0%
EU-28	115.3%	110.9%	109.2%	108.2%	107.8%	112.9%	123.9%	123.9%

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

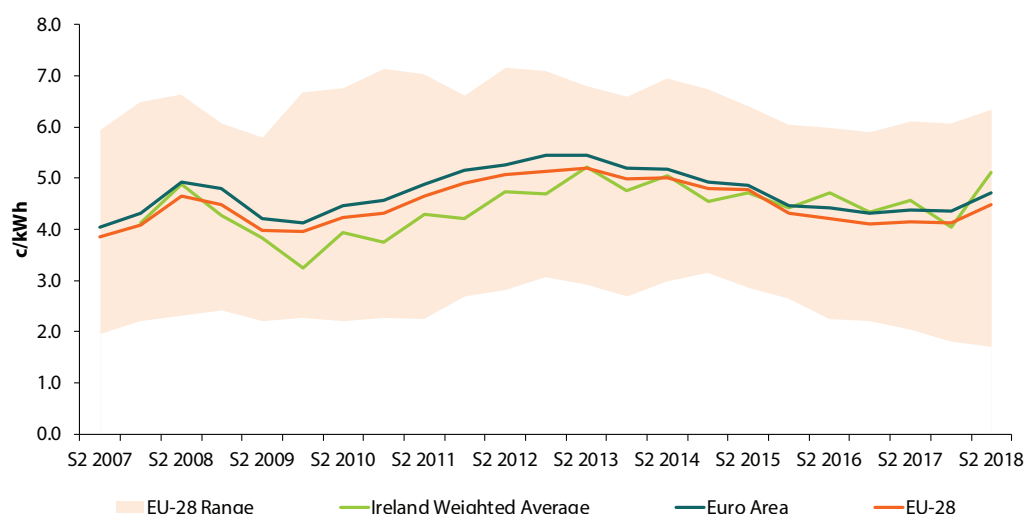
Figure 9 and Table 16 show the average gas price to business across all consumption bands in the Euro Area and the EU-28 and the weighted average across all bands in Ireland. Given the caveat that the weighted average is not fully comparable with the normal average, it can be seen that the price of gas 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 2018 it was 10.6% above the EU and 6.8% above the Euro Area average.

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

Gas prices to Business (ex-VAT) c/kWh	S1 2015	S2 2015	S1 2016	S2 2016	S1 2017	S2 2017	S1 2018	S2 2018
Ireland (weighted average)	3.85	3.68	3.36	3.48	3.29	3.32	3.37	3.82
Euro Area (average)	3.90	3.73	3.38	3.33	3.28	3.25	3.37	3.57
EU-28 (average)	3.82	3.68	3.28	3.19	3.14	3.11	3.23	3.45
Ireland relative to;								
Euro Area	98.9%	98.6%	99.3%	104.3%	100.4%	102.1%	100.0%	106.8%
EU-28	100.9%	100.1%	102.5%	109.1%	104.9%	106.7%	104.4%	110.6%

Source: Eurostat

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



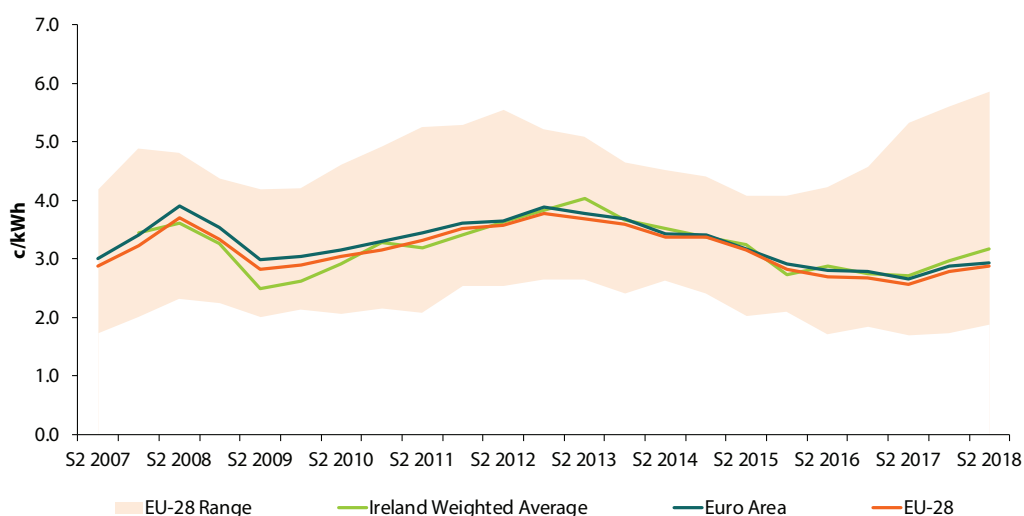
Source: SEAI based on Eurostat data

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. In S2 2014 price in Ireland went above the EU average and was above both EU and Euro Area in S2 2016 until S2 2017. In the second half of 2018 it increased to 14.4% and 8.8% 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 2015	S2 2015	S1 2016	S2 2016	S1 2017	S2 2017	S1 2018	S2 2018
Ireland (weighted average)	4.54	4.71	4.42	4.72	4.33	4.57	4.04	5.12
Euro Area (average)	4.93	4.87	4.47	4.43	4.31	4.37	4.36	4.71
EU-28 (average)	4.80	4.78	4.31	4.22	4.10	4.15	4.13	4.48
Ireland relative to;								
Euro Area	92.2%	96.7%	98.8%	106.6%	100.5%	104.6%	92.7%	108.8%
EU-28	94.7%	98.5%	102.5%	111.9%	105.8%	110.3%	97.9%	114.4%

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 3.2% and 5.7% below the EU and Euro Area respectively but in the second half of 2016 it went above both by 7.2% and 3% respectively. In the second half of 2018 it was 10.3% and 7.9% above the EU and Euro Area average respectively.

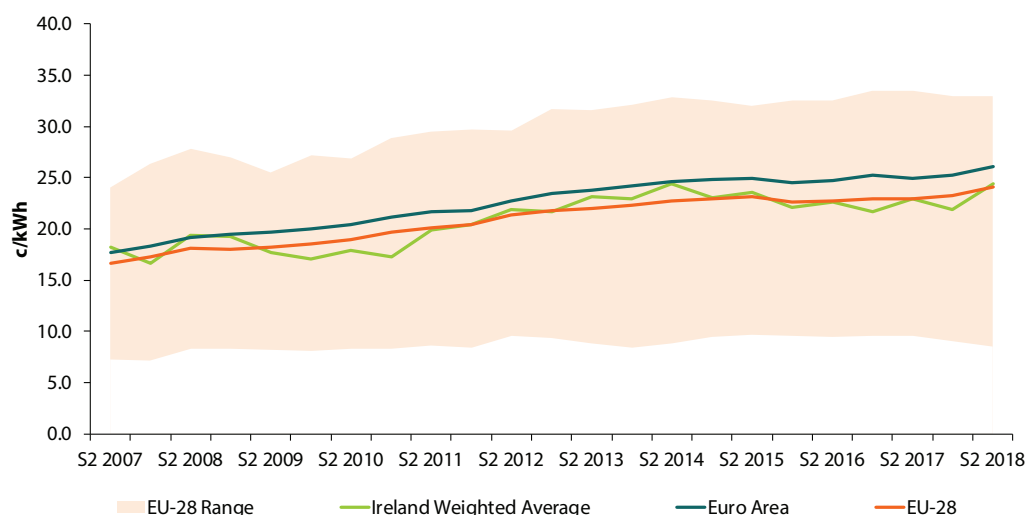
Table 18: Average Gas Prices (ex-VAT) to Business – High Consumption Bands (I3 & I4)

Gas prices to Business (ex-VAT) c/kWh	S1 2015	S2 2015	S1 2016	S2 2016	S1 2017	S2 2017	S1 2018	S2 2018
Ireland (weighted average)	3.38	3.24	2.74	2.88	2.74	2.71	2.96	3.17
Euro Area (average)	3.41	3.18	2.91	2.80	2.78	2.66	2.87	2.94
EU-28 (average)	3.37	3.15	2.83	2.69	2.68	2.57	2.78	2.88
Ireland relative to;								
Euro Area	99.1%	102.1%	94.2%	103.0%	98.7%	101.8%	103.1%	107.9%
EU-28	100.4%	102.9%	96.8%	107.2%	102.6%	105.6%	106.4%	110.3%

Source: Eurostat

3.3 Average Electricity Price to Households

Figure 12: Average Electricity Prices (all taxes included) 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 2018 it was 1.2% above the EU average and 6.7% below the Euro Area.

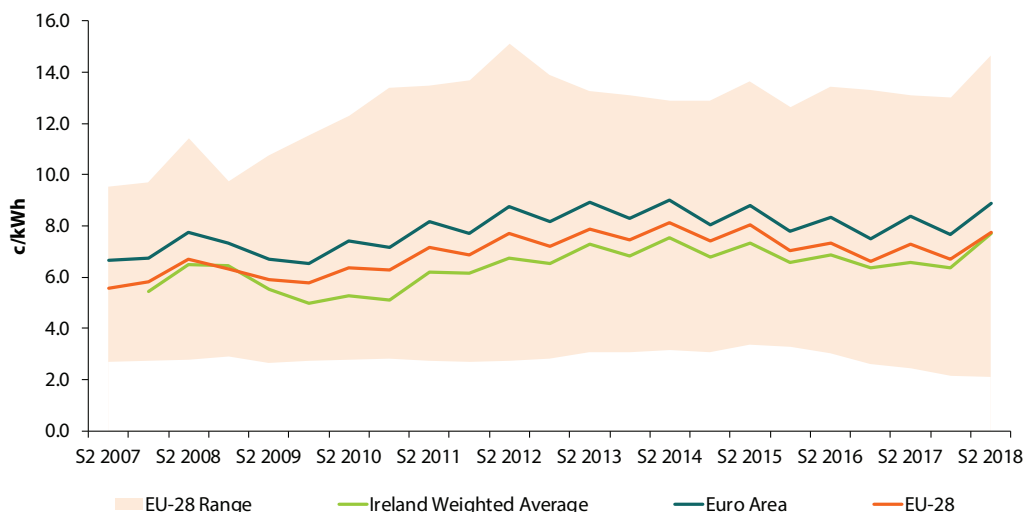
Table 19: Average Electricity Prices (all taxes included) to Household – All Consumption Bands

Electricity prices to households (all taxes included) c/kWh	S1 2015	S2 2015	S1 2016	S2 2016	S1 2017	S2 2017	S1 2018	S2 2018
Ireland (weighted average)	23.00	23.60	22.09	22.64	21.65	22.94	21.84	24.36
Euro Area (average)	24.79	24.89	24.55	24.68	25.21	24.90	25.22	26.12
EU-28 (average)	22.99	23.19	22.65	22.77	22.96	22.93	23.22	24.06
Ireland relative to;								
Euro Area	92.8%	94.8%	90.0%	91.7%	85.9%	92.1%	86.6%	93.3%
EU-28	100.0%	101.8%	97.5%	99.4%	94.3%	100.0%	94.1%	101.2%

Source: Eurostat

3.4 Average Gas Price to Households

Figure 13: Average Gas Prices (all taxes included) 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 second first half of 2018 it was 0.4% and 13.2% 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 2015	S2 2015	S1 2016	S2 2016	S1 2017	S2 2017	S1 2018	S2 2018
Ireland (weighted average)	6.77	7.33	6.56	6.86	6.37	6.57	6.36	7.70
Euro Area (average)	8.03	8.80	7.79	8.32	7.50	8.39	7.65	8.87
EU-28 (average)	7.41	8.05	7.04	7.34	6.62	7.28	6.71	7.73
Ireland relative to;								
Euro Area	84.3%	83.2%	84.3%	82.5%	84.9%	78.3%	83.1%	86.8%
EU-28	91.4%	91.0%	93.2%	93.5%	96.2%	90.3%	94.8%	99.6%

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 service sector 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 – 2018
	Lowest	Highest	
Band IA		< 20	6.9%
Band IB	20	< 500	26.9%
Band IC	500	< 2,000	14.3%
Band ID	2,000	< 20,000	24.9%
Band IE	20,000	< 70,000	7.8%
Band IF & IG	70,000	<= 150,000	19.1%

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 2018. 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.

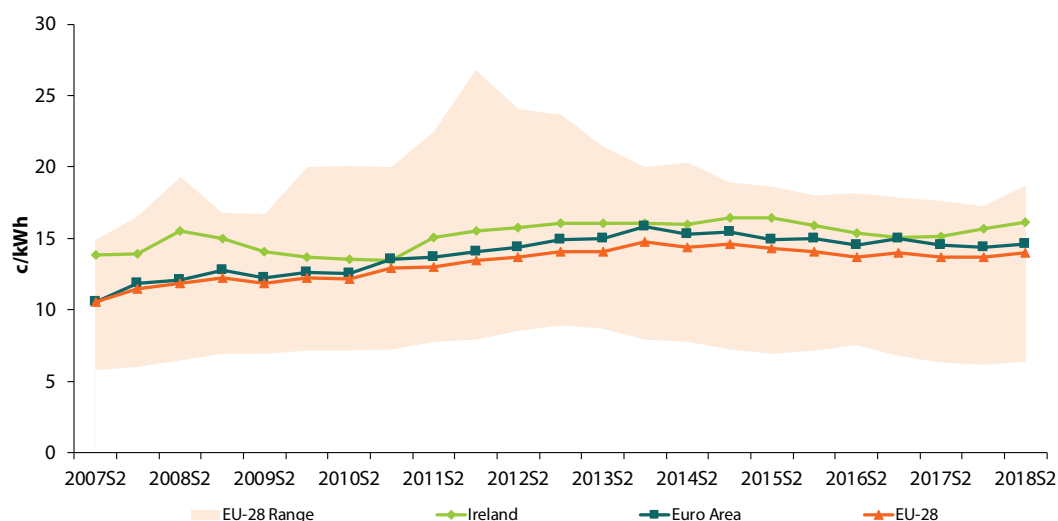
Data and analysis are highlighted here for three consumption bands, IB, IC and ID. IC with 14% of the market share in Ireland is the band typically reported on by Eurostat for international comparison, but as band IB and band ID have market shares of 27% and 25% respectively in Ireland they are analysed 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 27% 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 until the second half of 2015, fell until the middle of 2017 and increased in the last 3 semesters.

Figure 14: Business Electricity Prices (ex-VAT) in Band IB (2nd semester 2007 to 2nd semester 2018)



Source: Eurostat

In the second half of 2018 prices in this band increased by 2.9%, while prices in the EU increased by 2.0% and by 1.7% in the Euro Area. This resulted in prices in Ireland moving to 15% above the EU average and to 10.3% above the Euro Area average, as shown in Figure 14. Price changes in S2 2018 ranged from a 23% 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 2016 and the second half of 2018 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 are available.

Over the 12-month period S2 2017 – S2 2018 price changes varied from a 25% increase in Norway to an 8.9% decrease in Greece. Ireland experienced an increase of 6.5% over the 12-month period. This increase for Ireland compares with a 2.3% increase in the EU and a 0.6% increase 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 2018 was the fourth 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.

Table 22: Business Electricity Prices in Band IB in Europe (S2 2016 – S2 2018)

Band IB	without VAT (c/kWh)					% change				
	July '16 – Dec '16	Jan '17 – Jun '17	July '17 – Dec '17	Jan '18 – Jun '18	July '18 – Dec '18	S2 '16 – S1 '17	S1 '17 – S2 '17	S2 '17 – S1 '18	S1 '18 – S2 '18	12 months to S2 '18
Austria	12.10	11.92	12.19	12.19	12.34	-1.5%	2.3%	0.0%	1.2%	1.2%
Belgium	15.75	16.02	15.53	14.10	15.39	1.7%	-3.1%	-9.2%	9.1%	-0.9%
Bulgaria	9.46	8.91	9.38	9.42	9.68	-5.8%	5.3%	0.4%	2.8%	3.2%
Croatia	10.48	10.39	10.81	11.45	11.45	-0.9%	4.0%	5.9%	0.0%	5.9%
Cyprus	14.70	16.65	15.29	15.24	18.67	13.3%	-8.2%	-0.3%	22.5%	22.1%
Czech Republic	11.65	11.17	11.86	12.46	12.93	-4.1%	6.2%	5.1%	3.8%	9.0%
Denmark	9.98	10.17	10.02	10.24	10.10	1.9%	-1.5%	2.2%	-1.4%	0.8%
Estonia	9.61	9.37	9.42	9.57	10.36	-2.5%	0.5%	1.6%	8.3%	10.0%
Finland	8.44	8.41	8.23	8.33	8.69	-0.4%	-2.1%	1.2%	4.3%	5.6%
France	11.11	12.26	11.81	12.63	12.05	10.4%	-3.7%	6.9%	-4.6%	2.0%
Germany	17.23	17.83	17.61	17.21	17.42	3.5%	-1.2%	-2.3%	1.2%	-1.1%
Greece	15.44	14.46	16.21	13.98	14.77	-6.3%	12.1%	-13.8%	5.7%	-8.9%
Hungary	9.39	9.22	9.29	10.07	9.93	-1.8%	0.8%	8.4%	-1.4%	6.9%
Ireland	15.38	15.03	15.12	15.65	16.10	-2.3%	0.6%	3.5%	2.9%	6.5%
Italy	18.15	17.46	17.02	15.92	16.81	-3.8%	-2.5%	-6.5%	5.6%	-1.2%
Latvia	13.60	13.46	13.35	12.98	12.89	-1.0%	-0.8%	-2.8%	-0.7%	-3.4%
Lithuania	9.94	9.38	9.34	9.35	10.29	-5.6%	-0.4%	0.1%	10.1%	10.2%
Luxembourg	10.16	10.07	9.86	10.30	10.62	-0.9%	-2.1%	4.5%	3.1%	7.7%
Malta	15.57	15.21	15.24	15.20	15.23	-2.3%	0.2%	-0.3%	0.2%	-0.1%
Netherlands	10.21	13.66	9.33	14.36	10.56	33.8%	-31.7%	53.9%	-26.5%	13.2%
Norway	8.18	7.25	7.17	7.89	8.93	-11.4%	-1.1%	10.0%	13.2%	24.5%
Poland	10.66	11.40	11.26	11.41	11.41	6.9%	-1.2%	1.3%	0.0%	1.3%
Portugal	14.99	15.39	15.20	14.92	14.95	2.7%	-1.2%	-1.8%	0.2%	-1.6%
Romania	9.06	8.88	9.01	9.40	9.76	-2.0%	1.5%	4.3%	3.8%	8.3%
Slovakia	13.44	13.30	13.13	13.47	13.75	-1.0%	-1.3%	2.6%	2.1%	4.7%
Slovenia	10.26	9.89	9.82	10.56	10.59	-3.6%	-0.7%	7.5%	0.3%	7.8%
Spain	14.10	13.70	13.85	11.94	14.20	-2.8%	1.1%	-13.8%	18.9%	2.5%
Sweden	7.64	7.63	8.00	7.94	8.54	-0.1%	4.8%	-0.8%	7.6%	6.8%
Turkey	7.55	6.74	6.34	6.16	6.39	-10.7%	-5.9%	-2.8%	3.7%	0.8%
United Kingdom	14.24	14.49	14.26	15.16	15.91	1.8%	-1.6%	6.3%	4.9%	11.6%
Euro Area	14.53	14.95	14.51	14.36	14.60	2.9%	-2.9%	-1.0%	1.7%	0.6%
EU-28	13.66	14.01	13.69	13.72	14.00	2.6%	-2.3%	0.2%	2.0%	2.3%
Ireland relative to:										
Euro Area	105.8%	100.5%	104.2%	109.0%	110.3%					
EU-28	112.6%	107.3%	110.4%	114.1%	115.0%					

Source: Eurostat

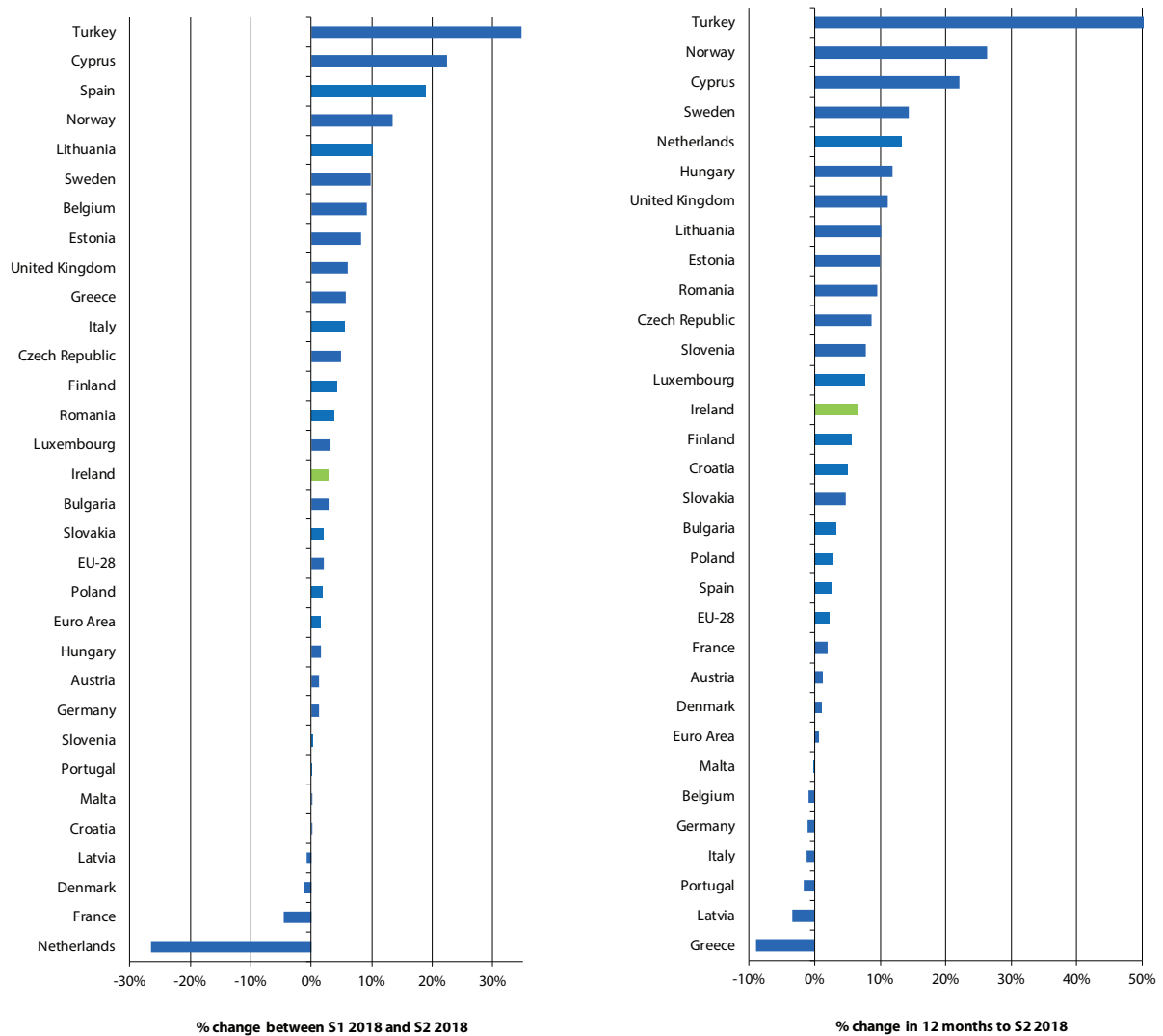
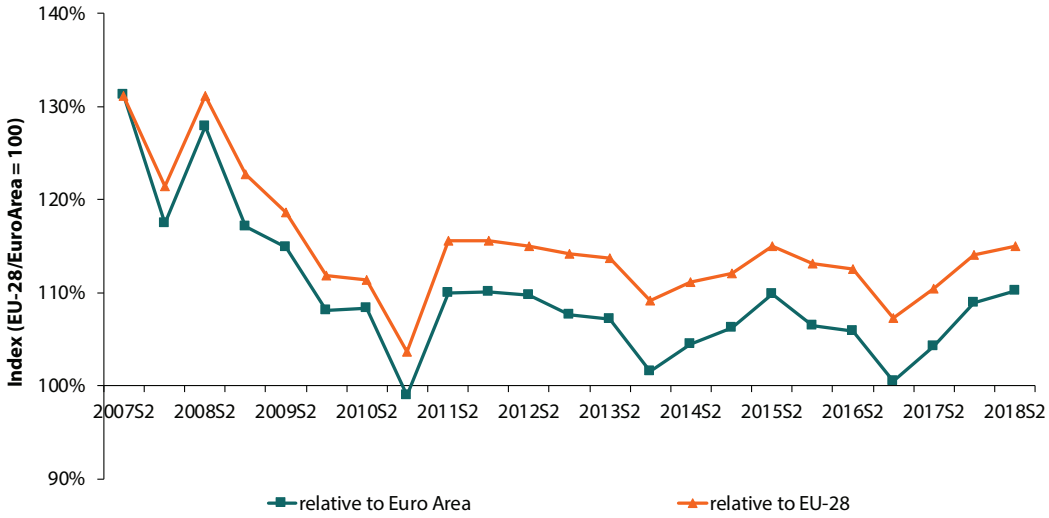
Figure 15: Percentage Change (national currency) in Business Electricity Price (band IB) – Semester and 12 Months

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 31% 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 15% above the EU average, up from 14% above in the previous semester.

Prices were also above the Euro Area average for most of the period, ranging from 27% above average in the second half of 2008 to a low of 1.0% below in the first half of 2011. During the latest semester prices were 10.3% above the Euro area average, up from 9% above in the previous semester.

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



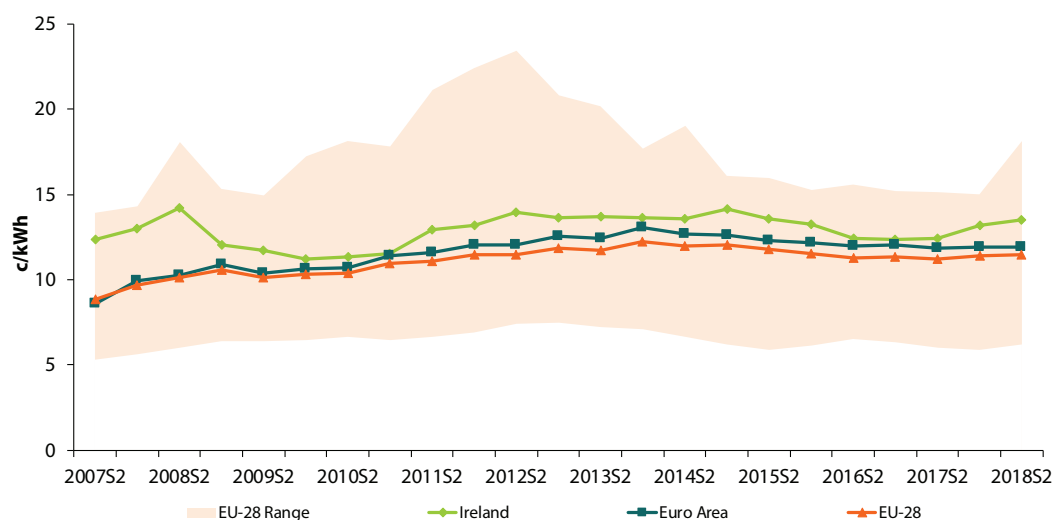
Source: Based on Eurostat data

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 14% 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, until the second semester of 2017.

Figure 17: Business Electricity Prices (ex-VAT) in Band IC (1st semester 2007 to 2nd semester 2018)



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 2016 and the second half of 2018 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 are available.

Price changes in S2 2018 ranged from a 29% increase in Cyprus to a 9.5% price decrease in France. Ireland experienced a 2.1% increase in the semester. The EU as a whole experienced a 0.9% increase in the first half of 2018 and the Euro Area a 0.2% decrease.

Over the 12-month period S2 2017 – S2 2018 price changes varied from a 30% increase in Cyprus to a 11% decrease in Greece. The price in this band increased by 8.7% in Ireland over the 12-month period. This compares with a 2.8% increase experienced in the EU and a 0.7% increase in the Euro Area.

Ireland's ranking for its price of electricity in this business consumption band (see Table 26) in the second half of 2018 was 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.

Table 23: Business Electricity Prices in band IC in Europe (S2 2016 – S2 2018)

Band IC	without VAT (c/kWh)					% change				
	July '16 – Dec '16	Jan '17 – Jun '17	July '17 – Dec '17	Jan '18 – Jun '18	July '18 – Dec '18	S2 '16 – S1 '17	S1 '17 – S2 '17	S2 '17 – S1 '18	S1 '18 – S2 '18	12 months to S2 '18
Austria	10.04	9.30	9.97	9.97	10.11	-7.4%	7.2%	0.0%	1.4%	1.4%
Belgium	11.58	11.04	10.87	10.85	11.42	-4.7%	-1.5%	-0.2%	5.3%	5.1%
Bulgaria	7.88	7.63	7.90	8.10	8.46	-3.2%	3.5%	2.5%	4.4%	7.1%
Croatia	8.77	8.74	9.20	9.94	10.13	-0.3%	5.3%	8.0%	1.9%	10.1%
Cyprus	12.95	14.14	13.92	14.05	18.11	9.2%	-1.6%	0.9%	28.9%	30.1%
Czech Republic	7.32	6.88	7.10	7.33	7.21	-6.0%	3.2%	3.2%	-1.6%	1.5%
Denmark	9.36	8.45	8.46	8.07	7.88	-9.7%	0.1%	-4.6%	-2.4%	-6.9%
Estonia	8.96	8.70	8.46	8.65	9.24	-2.9%	-2.8%	2.2%	6.8%	9.2%
Finland	6.94	6.67	6.76	6.81	7.07	-3.9%	1.3%	0.7%	3.8%	4.6%
France	9.03	9.78	9.20	9.82	8.89	8.3%	-5.9%	6.7%	-9.5%	-3.4%
Germany	14.92	15.19	15.14	14.99	15.16	1.8%	-0.3%	-1.0%	1.1%	0.1%
Greece	11.15	10.73	11.90	10.29	10.59	-3.8%	10.9%	-13.5%	2.9%	-11.0%
Hungary	7.96	7.72	7.79	8.40	8.22	-3.0%	0.9%	7.8%	-2.1%	5.5%
Ireland	12.45	12.37	12.41	13.21	13.49	-0.6%	0.3%	6.4%	2.1%	8.7%
Italy	15.56	14.77	14.49	14.23	14.34	-5.1%	-1.9%	-1.8%	0.8%	-1.0%
Latvia	12.01	11.79	11.59	10.39	10.47	-1.8%	-1.7%	-10.4%	0.8%	-9.7%
Lithuania	8.82	8.37	8.25	8.38	8.99	-5.1%	-1.4%	1.6%	7.3%	9.0%
Luxembourg	8.58	7.80	8.03	8.33	8.46	-9.1%	2.9%	3.7%	1.6%	5.4%
Malta	13.99	13.51	13.64	13.46	13.56	-3.4%	1.0%	-1.3%	0.7%	-0.6%
Netherlands	8.05	8.22	7.64	8.63	8.09	2.1%	-7.1%	13.0%	-6.3%	5.9%
Norway	8.13	7.11	7.03	7.78	8.72	-12.5%	-1.1%	10.7%	12.1%	24.0%
Poland	8.15	8.66	8.62	8.76	8.84	6.3%	-0.5%	1.6%	0.9%	2.6%
Portugal	11.32	11.45	11.47	11.23	11.70	1.1%	0.2%	-2.1%	4.2%	2.0%
Romania	7.71	7.69	7.86	8.31	8.66	-0.3%	2.2%	5.7%	4.2%	10.2%
Slovakia	11.12	11.18	11.13	11.66	12.01	0.5%	-0.4%	4.8%	3.0%	7.9%
Slovenia	8.32	7.84	7.84	8.60	8.66	-5.8%	0.0%	9.7%	0.7%	10.5%
Spain	10.29	10.61	10.32	10.59	10.98	3.1%	-2.7%	2.6%	3.7%	6.4%
Sweden	6.56	6.48	6.47	6.84	7.27	-1.2%	-0.2%	5.7%	6.3%	12.4%
Turkey	7.25	6.34	6.01	5.89	6.21	-12.6%	-5.2%	-2.0%	5.4%	3.3%
United Kingdom	12.78	12.64	12.46	13.37	14.23	-1.1%	-1.4%	7.3%	6.4%	14.2%
Euro Area	11.95	12.03	11.84	11.94	11.92	0.7%	-1.6%	0.8%	-0.2%	0.7%
EU-28	11.29	11.33	11.18	11.39	11.49	0.4%	-1.3%	1.9%	0.9%	2.8%
Ireland relative to:										
Euro Area	104.2%	102.8%	104.8%	110.6%	113.2%					
EU-28	110.3%	109.2%	111.0%	116.0%	117.4%					

Source: Eurostat

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

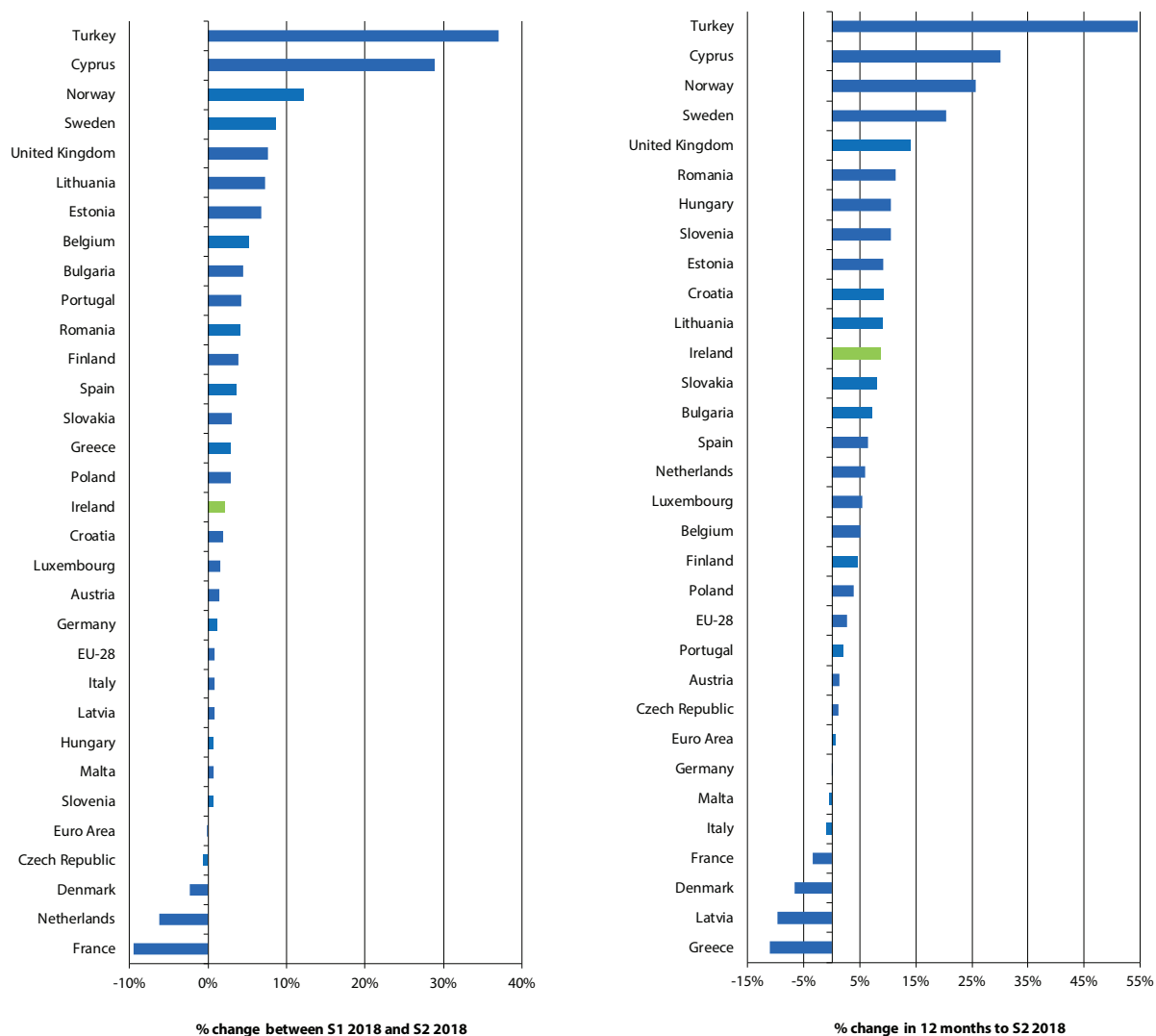
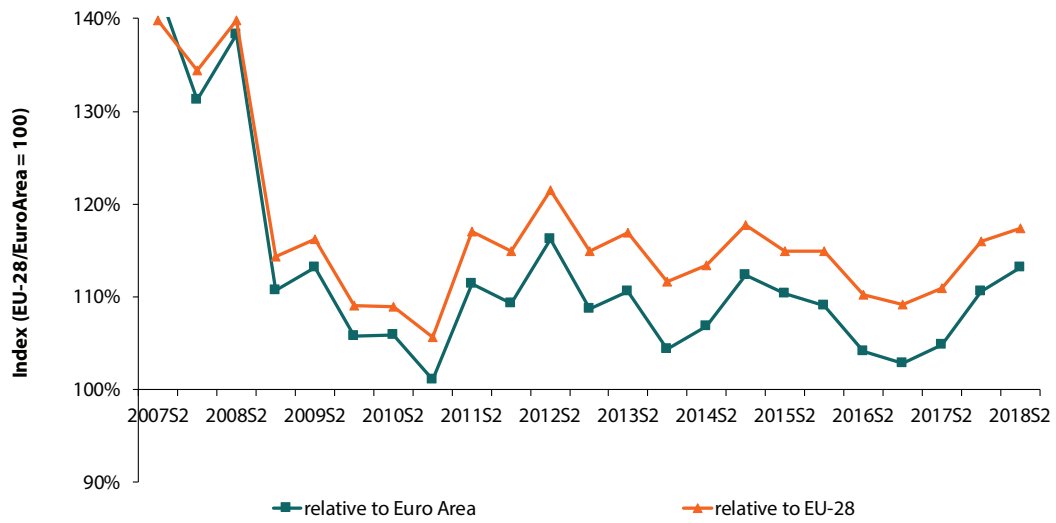


Figure 19 shows the ex-VAT price for electricity in Ireland for band IC consumption levels relative to the EU and the Euro Area as an index over the period. The price in Ireland was above the EU average price during the period, ranging from a high of 39% above average in the second half of 2008 to 5.6% above in the first half of 2011. The price in Ireland in the second half of 2018 was 17% above the EU average up from 16% above in the previous semester.

Prices were also above the Euro Area average for most of the period, ranging from 38% above average in the second half of 2008 to a low of 1.0% above in the first half of 2011. During the latest semester prices in Ireland were 13.2% above the Euro Area average, up from 10.6% above in the previous semester.

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

Source: Based on Eurostat data

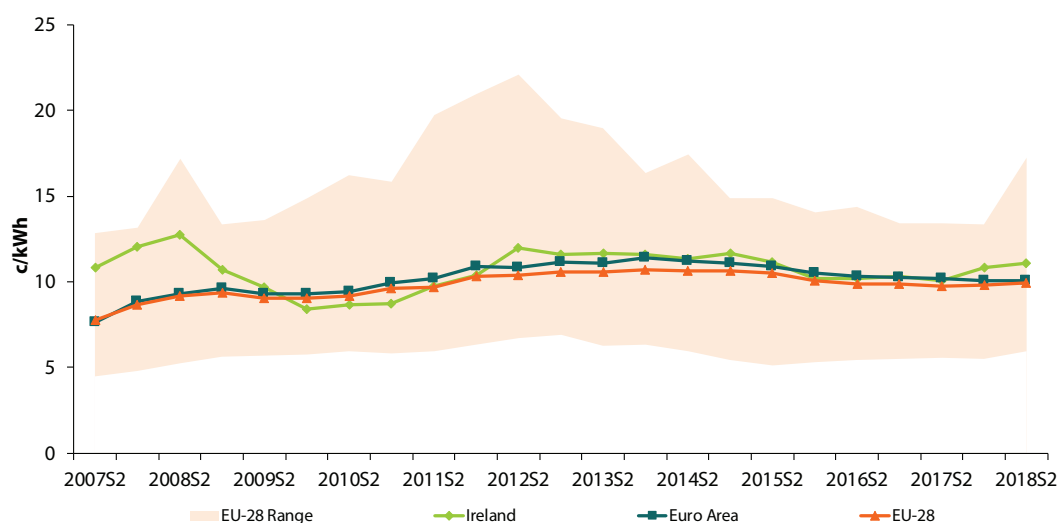
4.1.3 Business Electricity Prices in Consumption Band ID

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, the second semester 2016, the first semester 2017 and the first and second semester of 2018.

The price in Ireland in band ID increased by 2.5% during the second half of 2018. During the same period prices increased by 1.4% in the EU and by 0.5% in the Euro Area. For reference, band ID accounted for 25% of the electricity use in the business market in Ireland during the second half of 2018.

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 from the end of 2012 and were 15% lower in the second half of 2017 than in 2012. Price has risen in the last 12 months by 10.1% but is still 7.4% lower than in 2012.

Figure 20: Business Electricity Prices (ex-VAT) in Band ID (2nd semester 2007 to 2nd semester 2018)



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 2016 and the second half of 2018 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 2018 ranged from a 29% increase in Cyprus to a 6.3% price decrease in France. Ireland experienced a 2.5% increase in the semester. Price in this band in the EU as a whole increased in this semester by 1.4% and the Euro Area by a 0.5% increase.

Over the 12-month period S2 2017 – S2 2018 price changes varied from an 29% increase in Norway to a 12% decrease in Latvia. Ireland experienced an increase of 10.1% over the 12-month period. The increase in band ID for Ireland compares with an increase of 1.5% in the EU and a decrease of 0.9% in the Euro Area.

Ireland's ranking for its price of electricity in this business consumption band (see Table 26) in the second half of 2018 increased to sixth most expensive from seventh in the previous semester. 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.

Table 24: Business Electricity Prices in Band ID in Europe (S2 2016 – S2 2018)

Band ID	without VAT (c/kWh)					% change				
	July '16 – Dec '16	Jan '17 – Jun '17	July '17 – Dec '17	Jan '18 – Jun '18	July '18 – Dec '18	S2 '16 – S1 '17	S1 '17 – S2 '17	S2 '17 – S1 '18	S1 '18 – S2 '18	12 months to S2 '18
Austria	7.95	8.14	8.43	8.46	8.76	2.4%	3.6%	0.4%	3.5%	3.9%
Belgium	9.79	9.15	9.10	8.83	9.51	-6.5%	-0.5%	-3.0%	7.7%	4.5%
Bulgaria	7.01	6.81	7.05	7.46	7.66	-2.9%	3.5%	5.8%	2.7%	8.7%
Croatia	7.68	7.61	8.07	8.69	8.96	-0.9%	6.0%	7.7%	3.1%	11.0%
Cyprus	12.07	12.95	13.39	13.35	17.20	7.3%	3.4%	-0.3%	28.8%	28.5%
Czech Republic	6.29	6.20	6.30	6.38	6.36	-1.4%	1.6%	1.3%	-0.3%	1.0%
Denmark	9.09	8.26	8.30	7.95	7.69	-9.1%	0.5%	-4.2%	-3.3%	-7.3%
Estonia	8.06	7.74	7.55	7.49	7.95	-4.0%	-2.5%	-0.8%	6.1%	5.3%
Finland	6.67	6.38	6.51	6.50	6.79	-4.3%	2.0%	-0.2%	4.5%	4.3%
France	7.56	7.84	7.41	7.73	7.24	3.7%	-5.5%	4.3%	-6.3%	-2.3%
Germany	12.62	12.68	12.70	12.20	12.44	0.5%	0.2%	-3.9%	2.0%	-2.0%
Greece	8.62	9.02	9.99	8.77	8.97	4.6%	10.8%	-12.2%	2.3%	-10.2%
Hungary	7.49	7.28	7.40	7.68	7.60	-2.8%	1.6%	3.8%	-1.0%	2.7%
Ireland	10.19	10.32	10.06	10.81	11.08	1.3%	-2.5%	7.5%	2.5%	10.1%
Italy	14.35	13.44	13.24	11.90	12.16	-6.3%	-1.5%	-10.1%	2.2%	-8.2%
Latvia	10.72	10.33	10.27	8.64	9.04	-3.6%	-0.6%	-15.9%	4.6%	-12.0%
Lithuania	7.91	7.49	7.44	7.58	8.08	-5.3%	-0.7%	1.9%	6.6%	8.6%
Luxembourg	5.44	6.51	6.62	6.74	6.86	19.7%	1.7%	1.8%	1.8%	3.6%
Malta	12.33	12.03	11.99	11.98	11.95	-2.4%	-0.3%	-0.1%	-0.3%	-0.3%
Netherlands	7.66	7.74	7.58	7.79	7.97	1.0%	-2.1%	2.8%	2.3%	5.1%
Norway	6.82	5.91	5.84	6.61	7.54	-13.3%	-1.2%	13.2%	14.1%	29.1%
Poland	7.10	7.62	7.56	7.77	7.81	7.3%	-0.8%	2.8%	0.5%	3.3%
Portugal	10.27	10.31	10.43	10.48	10.90	0.4%	1.2%	0.5%	4.0%	4.5%
Romania	7.21	7.13	7.30	7.72	8.12	-1.1%	2.4%	5.8%	5.2%	11.2%
Slovakia	9.97	10.37	10.43	10.98	10.87	4.0%	0.6%	5.3%	-1.0%	4.2%
Slovenia	7.17	6.71	6.75	7.18	7.31	-6.4%	0.6%	6.4%	1.8%	8.3%
Spain	8.63	8.81	8.59	9.92	9.50	2.1%	-2.5%	15.5%	-4.2%	10.6%
Sweden	5.57	5.53	5.56	5.66	6.16	-0.7%	0.5%	1.8%	8.8%	10.8%
Turkey	6.58	5.85	5.68	5.51	5.98	-11.1%	-2.9%	-3.0%	8.5%	5.3%
United Kingdom	11.79	12.07	11.85	12.71	13.36	2.4%	-1.8%	7.3%	5.1%	12.7%
Euro Area	10.34	10.28	10.18	10.04	10.09	-0.6%	-1.0%	-1.4%	0.5%	-0.9%
EU-28	9.87	9.86	9.77	9.78	9.92	-0.1%	-0.9%	0.1%	1.4%	1.5%
Ireland relative to:										
Euro Area	98.5%	100.4%	98.8%	107.7%	109.8%					
EU-28	103.2%	104.7%	103.0%	110.5%	111.7%					

Source: Eurostat

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

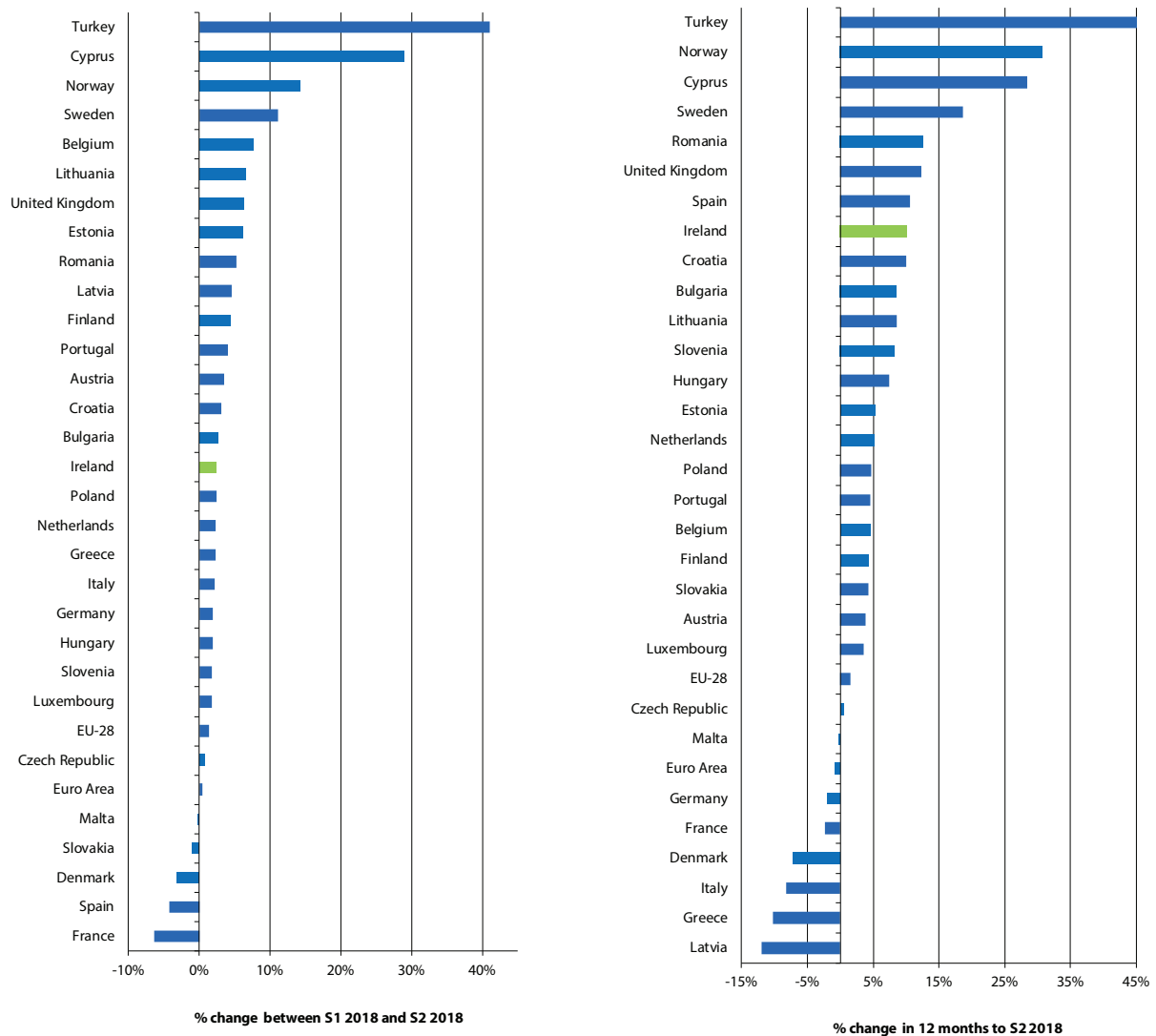
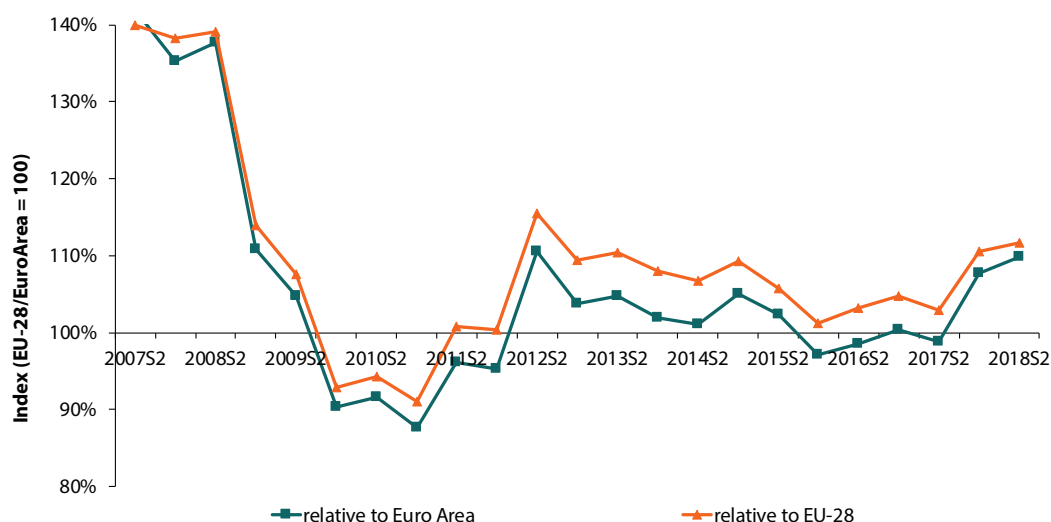


Figure 22 shows the ex-VAT price for electricity in Ireland for band ID consumption levels relative to the EU and the Euro Area as an index over the period. The price in Ireland was above the EU average price from the second half of 2007 until the second half of 2009 and has been again since the second 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 9.1% below in the first half of 2011. During the latest semester prices were 11.7% above the EU average, up from 10.5% above in the previous semester.

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 12.3% below in the first half of 2011. During the latest semester prices in Ireland were 9.8% above the Euro Area average, up from 7.7% above in the previous semester.

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 2018 with S1 2018 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 2018) – EU Comparison

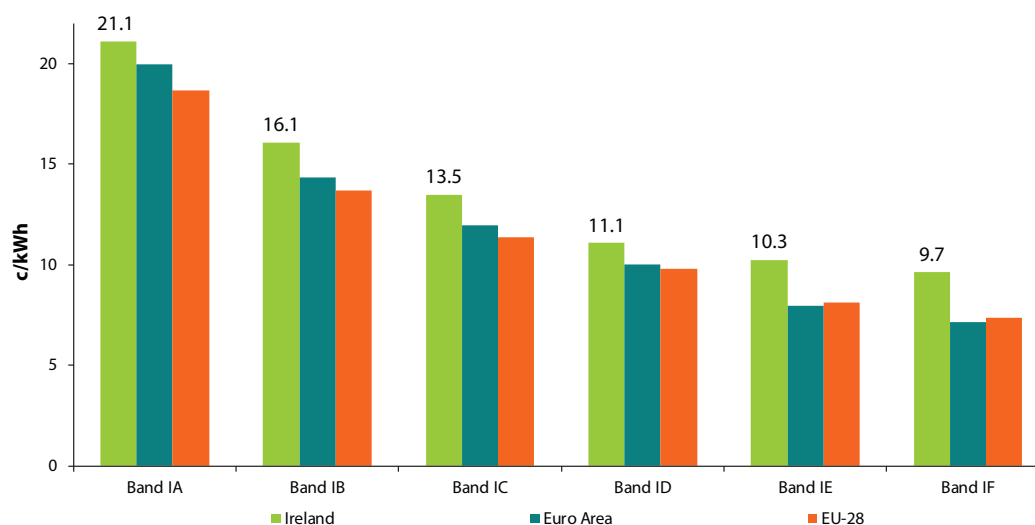
Electricity prices to business consumers (excluding VAT)	Price c/kWh	% change since last semester	Relative to EU average S2 2018	Relative to EU average S1 2018	Band share of market
Band IA	21.1	4.1%	111%	109%	6.9%
Band IB	16.1	2.9%	115%	114%	26.9%
Band IC	13.5	2.1%	117%	116%	14.3%
Band ID	11.1	2.5%	112%	111%	24.9%
Band IE	10.3	2.1%	124%	124%	7.8%
Band IF	9.7	5.5%	124%	124%	19.1%

Source: Eurostat

All consumption bands experienced increases in the price of electricity to business in Ireland in S2 2018 ranging from an increase of 2.1% in bands IC and IE to 5.5% in band IF.

The ex-VAT prices for business in Ireland are all above the EU average in all consumption bands, ranging from 11% above in band IA to 24% above in bands IE and IF.

In terms of market share, band IB is the most significant, accounting for 27% of the business electricity market, followed by band ID at 25%. When reporting on electricity prices for the EU, Eurostat normally uses band IC to compare prices between countries. This consumption band has a 14% share of the Irish business electricity market and was 17% above the EU average during the second half of 2018. Figure 23 shows graphically the position of the ex-VAT electricity prices to business during S2 2018.

Figure 23: Business Electricity Prices (ex-VAT) 2nd Semester 2018

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 2015 – S2 2018. 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 '15 – Dec '15	Jan '16 – Jun '16	July '16 – Dec '16	Jan '17 – Jun '17	July '17 – Dec '17	Jan '18 – Jun '18	July '18 – Dec '18
Band IA	6	9	6	9	6	6	5
Band IB	5	4	6	7	8	3	4
Band IC	6	5	6	6	6	6	6
Band ID	6	7	8	8	9	7	6
Band IE	7	6	9	8	7	4	3
Band IF	7	5	9	8	9	5	5
No. of Countries	30	30	30	30	30	30	30

Source: Eurostat

In the latest semester, the consumption band IE was the highest ranking, at third most expensive in the EU, band IB fourth, bands IA and IF fifth and bands IC and ID ranked sixth. Since the last semester, bands IA, ID and IE moved upwards in terms of ranking.

4.1.5 Business Electricity Prices – Euro Area Comparison

Among the Euro Area countries, business electricity prices in Ireland for the second half of 2018 were above the Euro Area average in all bands, ranging from 5% above in band IA to 27% above in bands IE and IF.

Table 27: Business Electricity Prices (cents) (2nd semester 2018) – Euro Area Comparison

Electricity prices to business consumers (excluding VAT)	Price c/kWh	Relative to Euro Area average S2 2018	Relative to Euro Area average S1 2018
Band IA (Consumption < 20 MWh)	21.1	105%	102%
Band IB (20 MWh < Consumption < 500 MWh)	16.1	110%	109%
Band IC (500 MWh < Consumption < 2,000 MWh)	13.5	113%	111%
Band ID (2,000 MWh < Consumption < 20,000 MWh)	11.1	110%	108%
Band IE (20,000 MWh < Consumption < 70,000 MWh)	10.3	127%	126%
Band IF (70,000 MWh < Consumption < 150,000 MWh)	9.7	127%	128%

Source: Eurostat

4.1.6 Disaggregation of Business Electricity Prices

In 2018, Eurostat began collecting more detailed data on the disaggregated components that make up electricity prices. *Table 28* shows the disaggregation of electricity prices to business weighted across all consumption bands for 2018.

With reference to *Table 28*, the energy and supply component in Ireland was 7.95 c/kWh or 57% of the total price. This was the third highest in Europe after Malta and Cyprus.

Network costs accounted for 31% of the price or 4.33 c/kWh in absolute terms. This was the highest in Europe.

Renewable energy taxes accounted for 6.9% of the price or 0.96 c/kWh. This was the 13th highest in Europe.

Environment taxes accounted for 0.4% of the electricity price to business in Ireland and ranked 16th highest in Europe.

Table 28: Disaggregated Business Electricity Prices 2018

Country	Disaggregate price in c/kWh					
	Energy and Supply	Network Costs	Renewable taxes	Capacity taxes	Environmental taxes	Other
Belgium	4.74	3.73	0.71	0.10	0.17	1.76
Bulgaria	6.37	1.43	0.00	0.00	0.10	0.00
Czechia	4.02	3.29	1.02	0.00	0.11	0.00
Denmark	4.23	2.67	1.65	0.00	12.25	0.00
Germany	3.92	3.83	0.00	0.00	0.00	0.00
Estonia	4.27	2.72	0.89	0.00	0.44	0.00
Ireland	7.95	4.33	0.96	0.33	0.05	0.25
Greece	6.53	1.37	1.15	0.00	0.00	1.53
France	4.78	2.91	0.00	0.21	1.96	0.00
Croatia	4.90	3.66	1.21	0.00	0.05	0.00
Italy	7.92	2.20	0.00	0.00	0.00	5.28
Cyprus	11.06	2.58	1.00	0.66	0.82	0.08
Latvia	4.30	3.30	2.05	0.00	0.00	0.06
Lithuania	4.34	2.72	1.14	0.22	0.02	0.00
Luxembourg	4.07	2.40	0.61	0.00	0.04	0.00
Hungary	4.78	2.49	0.53	0.00	0.10	0.29
Malta	11.16	2.40	0.00	0.00	0.15	0.00
Netherlands	4.51	2.35	0.62	0.00	1.91	0.00
Austria	4.09	3.03	1.09	0.00	1.48	0.08
Poland	4.13	2.59	0.66	0.62	0.91	0.09
Portugal	5.43	3.31	1.33	1.52	0.09	1.35
Romania	4.64	2.39	1.20	0.00	0.05	0.00
Slovenia	4.64	2.24	1.10	0.01	0.26	0.00
Slovakia	4.37	3.89	2.16	1.18	0.13	0.00
Finland	4.10	2.46	0.00	0.00	0.00	0.70
Sweden	4.26	2.71	0.35	0.00	0.05	0.00

Source: Eurostat

Figure 24 shows graphically the disaggregated components that make up the electricity prices to business in Europe for all bands and *Figure 25*.

Figure 24: Disaggregation of Business Electricity Price Bands IA – IF in Europe

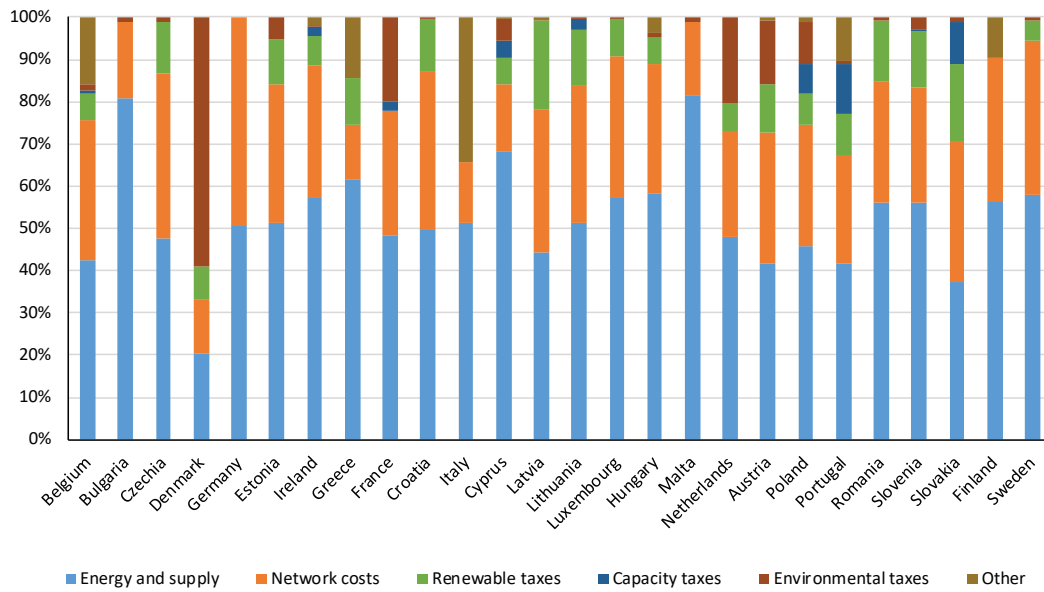
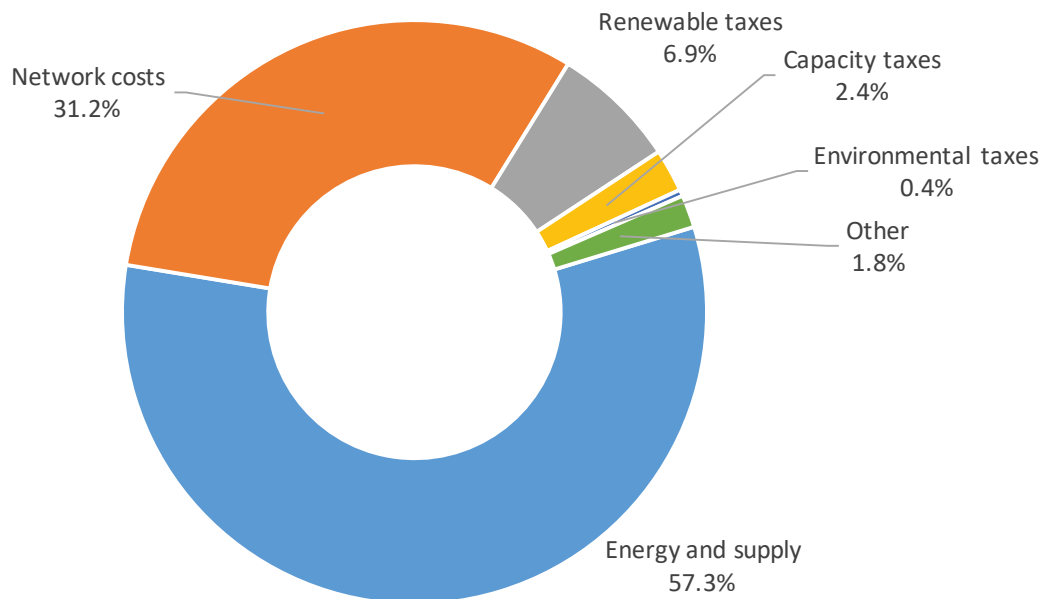


Figure 25: Disaggregation of Business Electricity Price Bands IA – IF in Ireland



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 2018
	Lowest	Highest	
Band I1		< 280	7.6%
Band I2	280	< 2,800	14.3%
Band I3	2,800	< 28,000	13.5%
Band I4	28,000	< 280,000	30.7%
Band I5	280,000	<= 1,100,000	33.8%

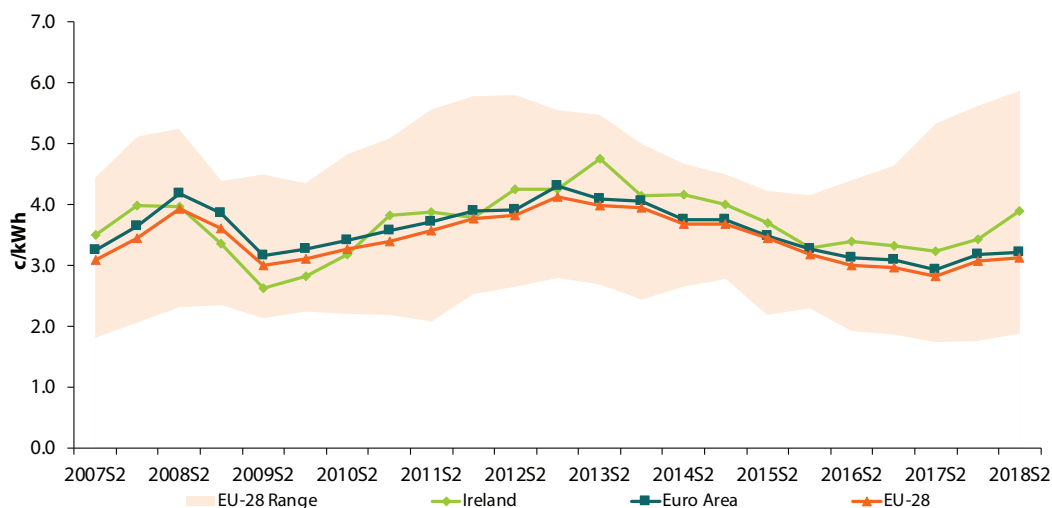
Data and analysis on gas prices in this section are based on the survey results from the Gas and Electricity Prices Regulation in respect of S2 2018. As with electricity prices, the average gas price *excluding VAT and other recoverable taxes* is used as this is the most relevant to business consumers. 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 44% of the non-domestic natural gas market.

4.2.1 Business Gas Prices in Consumption Band I3

As shown in *Figure 26*, 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 but increased again in the latest two semesters.

Figure 26: Business Gas Prices (ex-VAT) in Band I3 (2nd semester 2007 to 2nd semester 2018)



Source: Eurostat

For consumers in smaller consumption bands I1 and I2, prices in Ireland increased in S2 2018 by 26% and 28% respectively which saw Ireland moving to being 13% above the EU average price in consumption band I1, and 22% 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 2016 and the second half of 2018. 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 2018 ranged from an 19% increase in the Lithuania to a 23% price decrease in the Netherlands. Gas price increased by 13.5% in this consumption band in Ireland. The EU and the Euro Area experienced a 2% and 0.9% increase respectively in price in band I3 in this semester. Ireland moved to being 24% above the EU average, from 11% above in the previous semester.

Over the 12-month period S2 2017 – S2 2018 price changes varied from a 24% increase in the UK to a 2.4% increase in Austria. Ireland experienced an increase of 20% over the 12-month period, which compares with a 11% increase experienced in the EU and a 9.6% increase 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 27* 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 2016 – S2 2018)

Band I3	without VAT (c/kWh)					% change				
	July '16 – Dec '16	Jan '17 – Jun '17	July '17 – Dec '17	Jan '18 – Jun '18	July '18 – Dec '18	S2 '16 – S1 '17	S1 '17 – S2 '17	S2 '17 – S1 '18	S1 '18 – S2 '18	12 months to S2 '18
Austria	3.41	3.36	3.32	3.24	3.40	-1.5%	-1.2%	-2.4%	4.9%	2.4%
Belgium	2.57	2.35	2.29	2.31	2.52	-8.6%	-2.6%	0.9%	9.1%	10.0%
Bulgaria	1.92	2.18	2.53	2.56	2.89	13.5%	16.1%	1.2%	12.9%	14.2%
Croatia	2.75	2.46	2.47	2.56	2.83	-10.5%	0.4%	3.6%	10.5%	14.6%
Czech Republic	2.58	2.38	2.45	2.56	2.67	-7.8%	2.9%	4.5%	4.3%	9.0%
Denmark	3.24	3.33	3.35	3.73	3.84	2.8%	0.6%	11.3%	2.9%	14.6%
Estonia	2.34	2.76	2.77	3.06	3.25	17.9%	0.4%	10.5%	6.2%	17.3%
Finland	4.40	4.63	5.32	5.61	5.86	5.2%	14.9%	5.5%	4.5%	10.2%
France	3.78	3.32	3.45	3.52	3.90	-12.2%	3.9%	2.0%	10.8%	13.0%
Germany	3.32	3.17	3.07	3.17	3.15	-4.5%	-3.2%	3.3%	-0.6%	2.6%
Greece	2.83	2.83	2.75	2.91	3.35	0.0%	-2.8%	5.8%	15.1%	21.8%
Hungary	2.75	2.61	2.46	2.43	2.85	-5.1%	-5.7%	-1.2%	17.3%	15.9%
Ireland	3.39	3.32	3.23	3.42	3.88	-2.1%	-2.7%	5.9%	13.5%	20.1%
Italy	2.73	2.71	2.53	2.86	2.93	-0.7%	-6.6%	13.0%	2.4%	15.8%
Latvia	2.48	2.70	2.85	3.00	3.24	8.9%	5.6%	5.3%	8.0%	13.7%
Lithuania	2.45	2.46	3.31	3.26	3.87	0.4%	34.6%	-1.5%	18.7%	16.9%
Luxembourg	3.30	3.23	3.14	3.19	3.32	-2.1%	-2.8%	1.6%	4.1%	5.7%
Netherlands	2.85	3.65	2.69	3.84	2.97	28.1%	-26.3%	42.8%	-22.7%	10.4%
Poland	2.61	2.73	2.76	3.04	3.12	4.6%	1.1%	10.1%	2.6%	13.0%
Portugal	2.76	2.79	2.71	2.73	2.95	1.1%	-2.9%	0.7%	8.1%	8.9%
Romania	2.62	2.56	2.56	2.59	2.81	-2.3%	0.0%	1.2%	8.5%	9.8%
Slovakia	3.12	2.82	2.91	2.89	3.08	-9.6%	3.2%	-0.7%	6.6%	5.8%
Slovenia	3.26	3.09	3.20	3.18	3.43	-5.2%	3.6%	-0.6%	7.9%	7.2%
Spain	2.60	2.73	2.67	2.90	2.99	5.0%	-2.2%	8.6%	3.1%	12.0%
Sweden	3.84	4.13	4.66	4.81	4.81	7.6%	12.8%	3.2%	0.0%	3.2%
Turkey	2.24	1.87	1.73	1.76	1.88	-16.5%	-7.5%	1.7%	6.8%	8.7%
United Kingdom	2.49	2.51	2.24	2.62	2.77	0.8%	-10.8%	17.0%	5.7%	23.7%
Euro Area	3.13	3.08	2.93	3.18	3.21	-1.6%	-4.9%	8.5%	0.9%	9.6%
EU-28	2.99	2.96	2.82	3.07	3.13	-1.0%	-4.7%	8.9%	2.0%	11.0%
Ireland relative to:										
Euro Area	108.3%	107.8%	110.2%	107.5%	120.9%					
EU-28	113.4%	112.2%	114.5%	111.4%	124.0%					

Source: Eurostat

Figure 27: Percentage Change (national currency) in Business Gas Price (band I3) – Semester and 12 Months

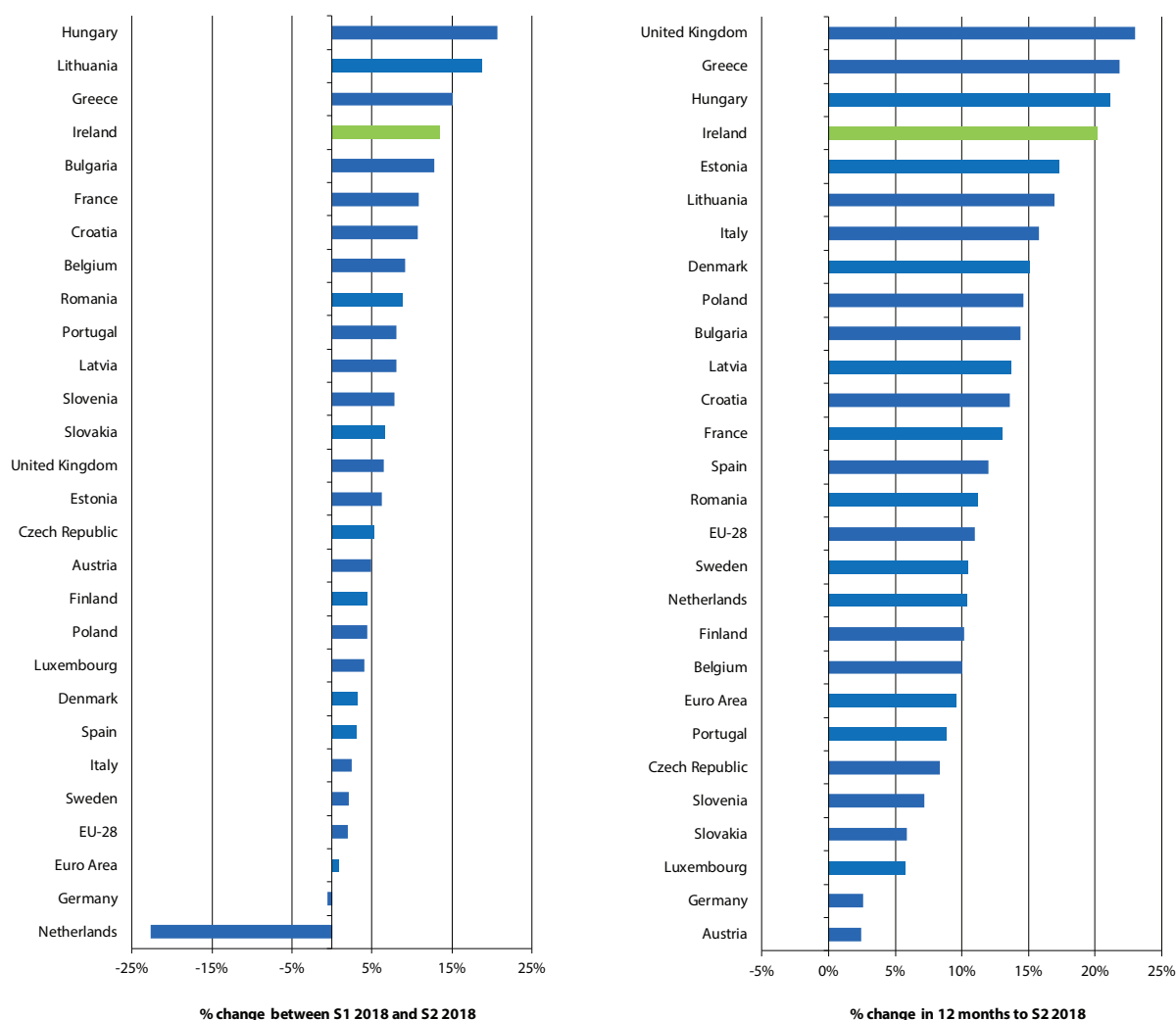


Figure 28 shows the ex-VAT price for gas in Ireland for band I3 consumption levels relative to the EU and the Euro Area as an index over the period. The price in Ireland was above the EU average price for the periods: second half of 2007 to the second half of 2008; the first half of 2011 to the current semester. Prices relative to the EU average ranged from a high of 19.1% above average in S2 2013 to a low of 12.3% below average in the second half of 2009. In the second half of 2018 the price in this band reached a new high of was 24% above the EU average.

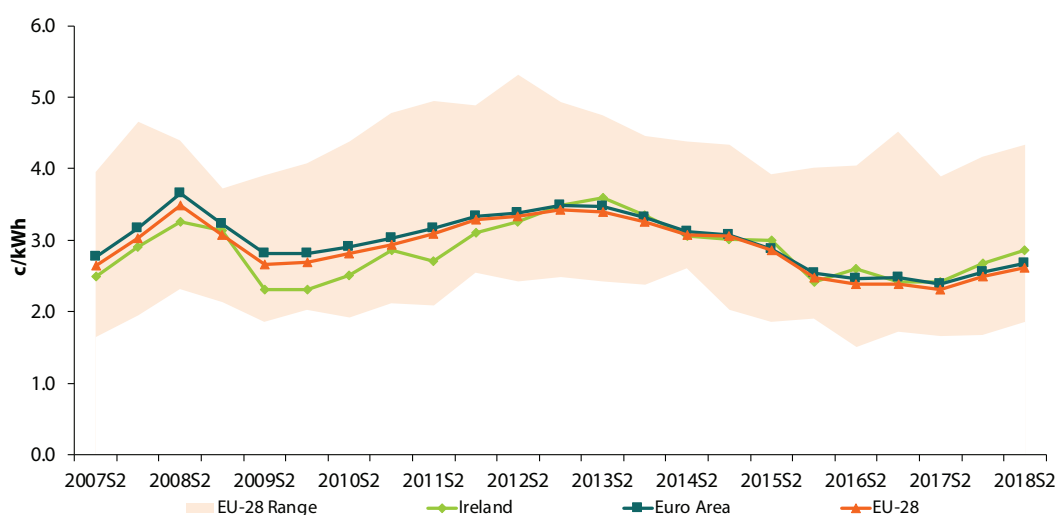
The trend for the Euro Area average was similar to the EU trend with prices ranging from 15.9% above average in S2 2013 to a low of 16.8% below in the second half of 2009. Prices in Ireland were 21% above the Euro Area average in the second half of 2018.

Figure 28: 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 29*, 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 but fell again in the first half of 2017 and remained the same in the second half of 2017 before increasing again in the last two semesters.

Figure 29: Business Gas Prices (ex-VAT) in Band I4 (2nd semester 2007 to 2nd semester 2018)

Source: Eurostat

Table 31 shows prices in band I4 for the five semesters between the second half of 2016 and the second half of 2018. Also shown is the price change for each country between each subsequent semester, and for the most recent 12 months for which data are available.

Price changes in S2 2018 ranged from an 18% increase in Bulgaria to a 4.9% price decrease in the Netherlands. Gas prices increased by 7.1% in this consumption band in Ireland. The EU and the Euro Area both experienced price increases of 5.2% and 4.3% respectively in band I4 in this semester.

Over the 12-month period S2 2017 – S2 2018 price changes varied from a 30% increase in Estonia to a 3.9% increase in Germany. The price in Ireland increased by 18% compared with 12 months previously and compares with an increase of 13% in the EU and a 12% increase 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 30* 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 2016 to S2 2018)

Band I4	without VAT (c/kWh)					% change				
	July '16 – Dec '16	Jan '17 – Jun '17	July '17 – Dec '17	Jan '18 – Jun '18	July '18 – Dec '18	S2 '16 – S1 '17	S1 '17 – S2 '17	S2 '17 – S1 '18	S1 '18 – S2 '18	12 months to S2 '18
Austria	2.84	2.76	2.80	2.66	3.00	-2.8%	1.4%	-5.0%	12.8%	7.1%
Belgium	2.05	2.01	1.95	2.04	2.18	-2.0%	-3.0%	4.6%	6.9%	11.8%
Bulgaria	1.50	1.72	1.99	2.02	2.38	14.7%	15.7%	1.5%	17.8%	19.6%
Croatia	2.40	2.27	2.20	2.34	2.66	-5.4%	-3.1%	6.4%	13.7%	20.9%
Czech Republic	2.26	2.23	2.35	2.41	2.58	-1.3%	5.4%	2.6%	7.1%	9.8%
Denmark	2.60	2.76	2.76	3.09	3.38	6.2%	0.0%	12.0%	9.4%	22.5%
Estonia	2.25	2.76	2.58	2.96	3.35	22.7%	-6.5%	14.7%	13.2%	29.8%
Finland	4.04	4.52	..	..	..	11.9%	..	..	..	..
France	2.40	2.47	2.36	2.83	2.81	2.9%	-4.5%	19.9%	-0.7%	19.1%
Germany	2.64	2.61	2.55	2.57	2.65	-1.1%	-2.3%	0.8%	3.1%	3.9%
Greece	2.52	2.69	2.53	2.60	3.03	6.7%	-5.9%	2.8%	16.5%	19.8%
Hungary	2.57	2.48	2.37	2.48	2.80	-3.5%	-4.4%	4.6%	12.9%	18.1%
Ireland	2.60	2.42	2.42	2.67	2.86	-6.9%	0.0%	10.3%	7.1%	18.2%
Italy	2.32	2.27	2.23	2.43	2.67	-2.2%	-1.8%	9.0%	9.9%	19.7%
Latvia	2.33	2.54	2.64	2.71	3.06	9.0%	3.9%	2.7%	12.9%	15.9%
Lithuania	1.85	2.26	2.98	3.03	3.45	22.2%	31.9%	1.7%	13.9%	15.8%
Luxembourg	2.43	2.31	2.11	2.33	2.43	-4.9%	-8.7%	10.4%	4.3%	15.2%
Netherlands	2.38	2.53	2.30	2.63	2.50	6.3%	-9.1%	14.3%	-4.9%	8.7%
Poland	2.16	2.34	2.19	2.41	2.63	8.3%	-6.4%	10.0%	9.1%	20.1%
Portugal	2.36	2.39	2.29	2.38	2.72	1.3%	-4.2%	3.9%	14.3%	18.8%
Romania	2.28	2.20	2.19	2.30	2.48	-3.5%	-0.5%	5.0%	7.8%	13.2%
Slovakia	2.77	2.51	2.46	2.50	2.64	-9.4%	-2.0%	1.6%	5.6%	7.3%
Slovenia	2.46	2.53	2.47	2.53	2.76	2.8%	-2.4%	2.4%	9.1%	11.7%
Spain	2.39	2.44	2.38	2.47	2.78	2.1%	-2.5%	3.8%	12.6%	16.8%
Sweden	3.55	3.34	3.89	4.16	4.33	-5.9%	16.5%	6.9%	4.1%	11.3%
Turkey	2.13	1.80	1.66	1.68	1.86	-15.5%	-7.8%	1.2%	10.7%	12.0%
United Kingdom	1.96	1.91	1.81	2.09	2.20	-2.6%	-5.2%	15.5%	5.3%	21.5%
Euro Area	2.46	2.48	2.39	2.56	2.67	0.8%	-3.6%	7.1%	4.3%	11.7%
EU-28	2.38	2.39	2.31	2.49	2.62	0.4%	-3.3%	7.8%	5.2%	13.4%
Ireland relative to:										
Euro Area	105.7%	97.6%	101.3%	104.3%	107.1%					
EU-28	109.2%	101.3%	104.8%	107.2%	109.2%					

Source: Eurostat

Figure 30: Percentage Change (national currency) in Business Gas Price (band I4) – Semester and 12 Months

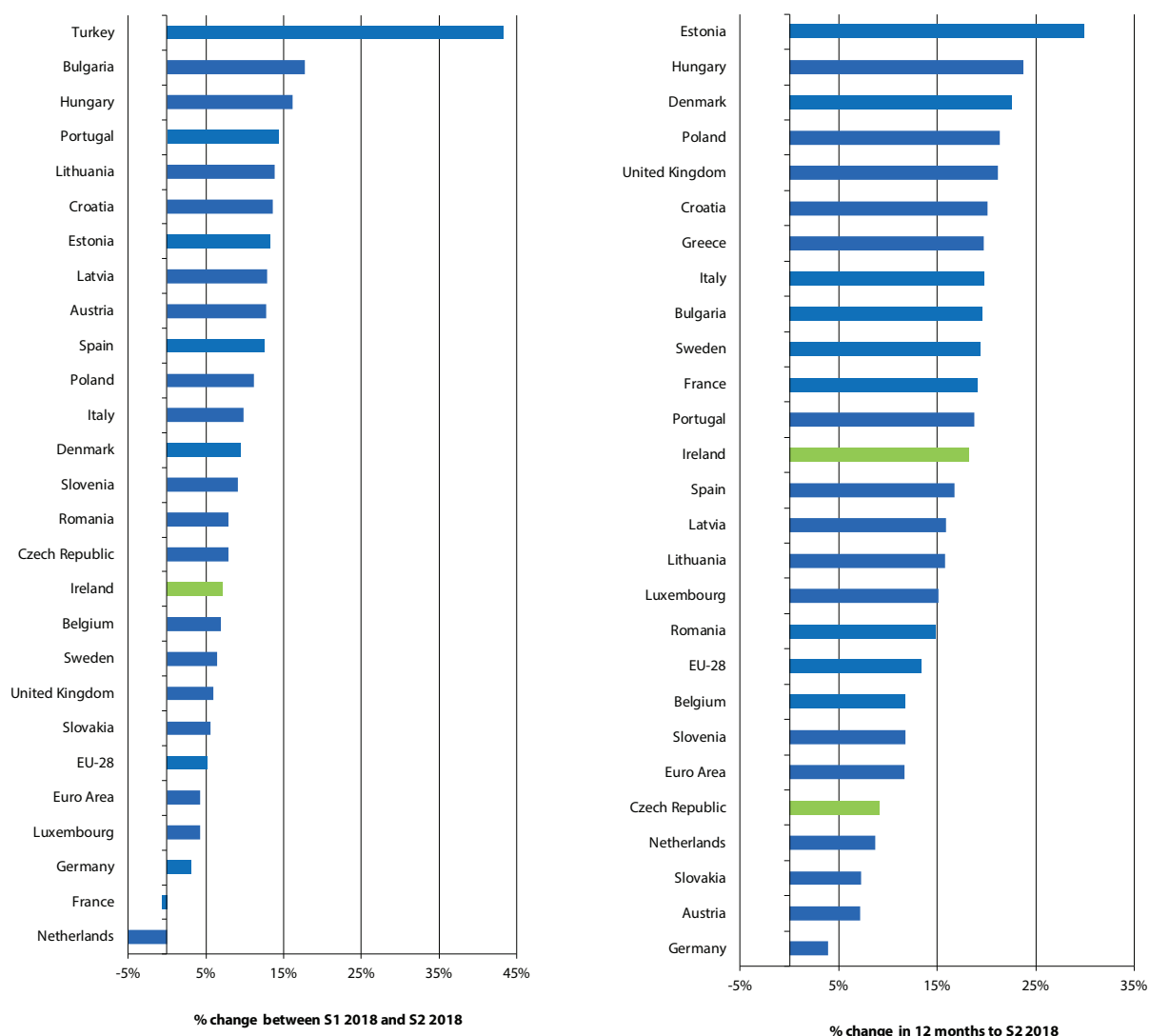
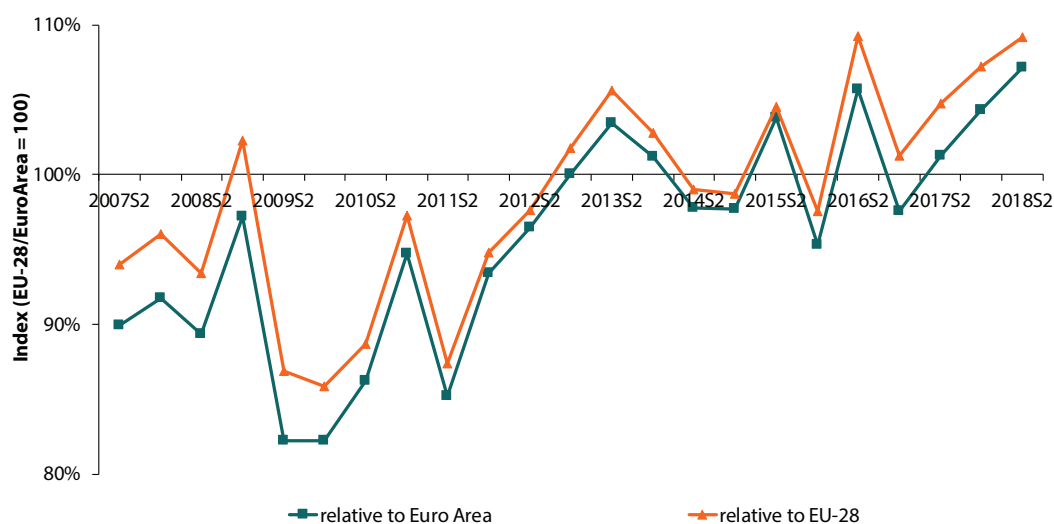


Figure 31 shows the ex-VAT price for gas in Ireland for band I4 consumption levels relative to the EU and the Euro Area as an index over the period. The price in Ireland was below the EU average price for most of the period, with the exception of the first half of 2009 and the three semesters between the start of 2013 and start of 2014. Prices relative to the EU ranged from a high of 5.6% above average in the second half of 2013 to a low of 13.8% below average in the first half of 2010. The price was 9.2% above the EU average in the second half of 2018.

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 3.5% 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 2018 were 7.1% above the Euro Area average.

Figure 31: 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 2018) – EU Comparison

Gas prices to business consumers (excluding VAT)	Price €/GJ	Price c/kWh	% change since last semester	Relative to EU average 2018 - S2	Relative to EU average 2018 - S1	Band share of market
Band I1	15.42	5.6	25.9%	113%	98%	7.6%
Band I2	13.59	4.9	28.0%	122%	102%	14.3%
Band I3	10.78	3.9	13.5%	124%	111%	13.5%
Band I4	7.94	2.9	7.1%	109%	107%	30.7%
Band I5	7.55	2.7	..	107%	..	33.8%

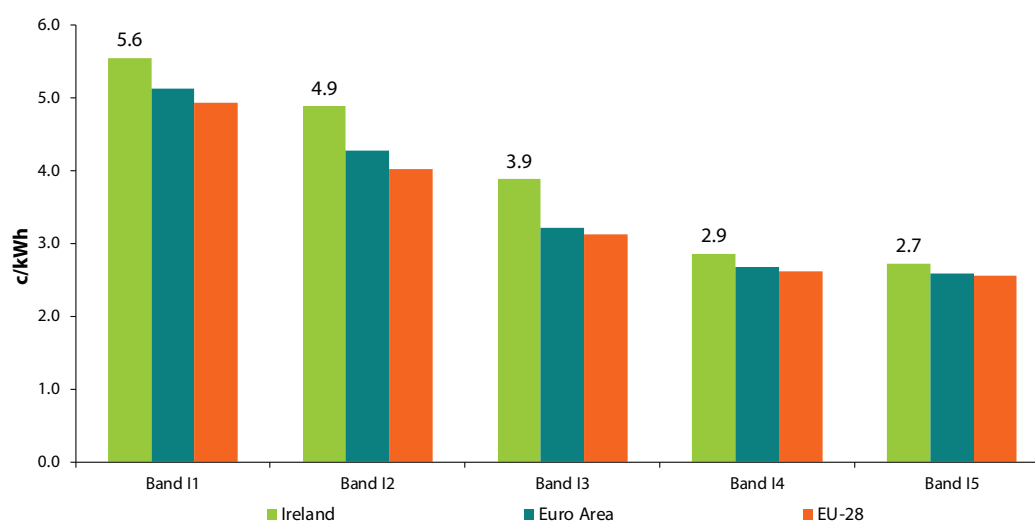
Source: Eurostat

Table 32 shows Ireland's position relative to the EU average gas prices to business for S2 2018 with S1 2018 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 between 7.1% in band I4 and 28% in band I2. Price increased by 26% in band I1 and by 13.5% in band I3.

With reference to Table 32, Ireland's position, compared with the EU average gas prices to non-households, was above the EU average in all bands, ranging from 7% in band I4 to 24% above in I3.

Figure 32 shows graphically the position of the ex-VAT gas prices to business in each consumption band during S2 2018.

Figure 32: Business Gas Prices (ex-VAT) 2nd Semester 2018

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'15 – Dec'15	Jan'16 – Jun'16	July'16 – Dec'16	Jan'17 – Jun'17	July'17 – Dec'17	Jan'18 – Jun'18	July'18 – Dec'18
Band I1	7	8	6	7	6	9	6
Band I2	11	10	6	6	5	10	5
Band I3	8	10	5	6	7	6	4
Band I4	9	18	6	15	11	7	8
Band I5	..	..	18	..	..	..	7
No. of Countries	27	27	27	27	27	27	27

Source: Eurostat

During S2 2018 in band I3, the band on which Eurostat reports, Ireland was ranked fourth most expensive, moving up two places in ranking compared with the previous semester. This band represents 14% of the business gas market in Ireland. Since 2007, the average ranking for Ireland in this band was 9th most expensive.

In the higher consumption band I4, during the second half of 2018 out of 27 countries, Ireland's ranking fell 1 place from seventh to eighth most expensive. Since 2007, the average ranking for Ireland in this band was 15th most expensive.

Bands I1's ranking moved from ninth to sixth and band I2 from tenth to fifth place in the second half of 2018.

4.2.4 Business Gas Prices – Euro Area Comparison

Business gas prices in Ireland for the second half of 2018 were above the average for Euro Area countries in all consumption bands as shown in *Table 34*. This ranged from 5% above in band I5 to 21% above in band I3.

Table 34: Business Gas Prices in Ireland (2nd semester 2018) – Euro Area Comparison

Gas prices to business consumers (excluding VAT)	Price €/GJ	Price c/kWh	Relative to Euro Area average 2018 - S2	Relative to Euro Area average 2018 - S1
Band I1 (Consumption < 280 MWh)	15.4	5.6	108%	94%
Band I2 (280 MWh < Consumption < 2,800 MWh)	13.6	4.9	114%	95%
Band I3 (2,800 MWh < Consumption < 28,000 MWh)	10.8	3.9	121%	108%
Band I4 (28,000 MWh < Consumption < 280,000 MWh)	7.9	2.9	107%	104%
Band I5 (280,000 MWh < Consumption < 1,100,00 MWh)	7.5	2.7	105%	..

Source: Eurostat

4.2.5 Disaggregation of Business Gas Prices

In 2018, Eurostat began collecting more detailed data on the disaggregated components that make up natural gas prices. *Table 35* shows the disaggregation of gas prices to business weighted across all consumption bands in 2018.

With reference to *Table 35*, the energy and supply component in Ireland was 2.12c/kWh or 60% of the total price. This was the 18th highest in Europe.

Network costs accounted for 31% of the price or 1.09 c/kWh in absolute terms. This was the highest in Europe.

Environment taxes accounted for 8.5% of the electricity price to business in Ireland and ranked 8th highest in Europe.

Table 35: Disaggregated Business Gas Prices 2018

Country	Disaggregate price in c/kWh				
	Energy and Supply	Network Costs	Capacity taxes	Environmental taxes	Other
Belgium	2.14	0.41	0.04	0.08	0.04
Bulgaria	1.93	0.41	0.00	0.06	0.00
Czechia	2.02	0.58	0.00	0.12	0.01
Denmark	2.34	0.67	0.00	2.87	0.00
Estonia	2.15	0.51	0.00	0.48	0.00
Ireland	2.12	1.09	0.00	0.30	0.00
Greece	2.34	0.56	0.00	0.00	0.31
France	2.39	0.71	0.04	0.56	0.00
Croatia	2.19	0.59	0.00	0.08	0.00
Latvia	2.20	0.70	0.00	0.14	0.00
Lithuania	2.40	0.62	0.33	0.05	0.00
Luxembourg	2.36	0.37	0.00	0.02	0.00
Hungary	2.18	0.37	0.07	0.07	0.00
Netherlands	2.18	0.25	0.00	1.30	0.00
Austria	2.07	0.53	0.00	0.58	0.03
Poland	2.16	0.70	0.00	0.05	0.01
Portugal	2.15	0.90	0.00	0.05	0.09
Romania	1.88	0.60	0.00	0.00	0.00
Slovenia	2.17	0.53	0.00	0.18	0.00
Slovakia	2.06	0.84	0.00	0.13	0.00
Finland	2.43	0.95	0.01	1.11	0.00
Sweden	2.79	0.96	0.00	2.71	0.00
United Kingdom	2.15	0.52	0.00	0.12	0.00

Source: Eurostat

Figure 33 shows graphically the disaggregated components that make up the gas prices to business in Europe for all bands and *Figure 34*.

Figure 33: Disaggregation of Business Gas Price Bands I1 – I5 in Europe

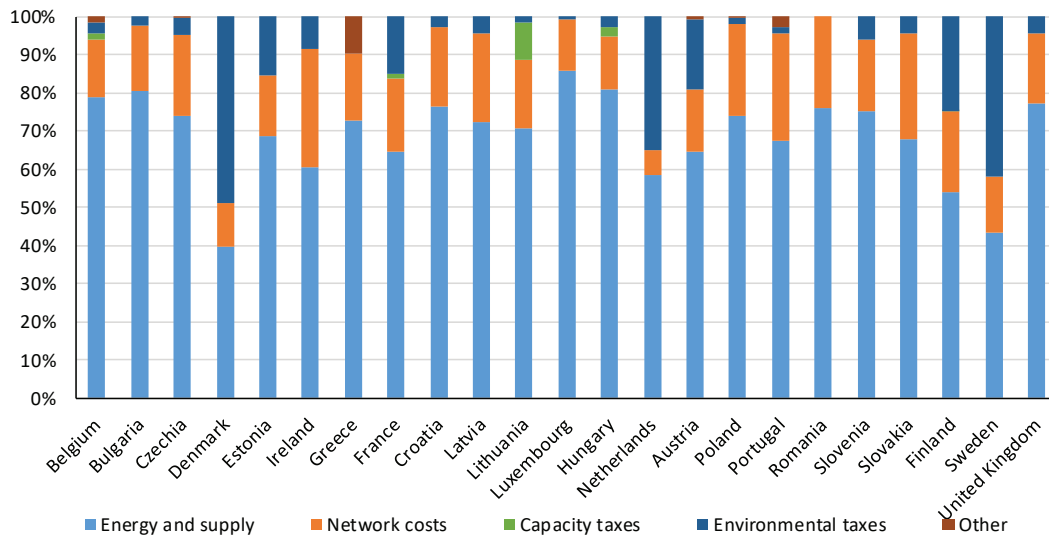
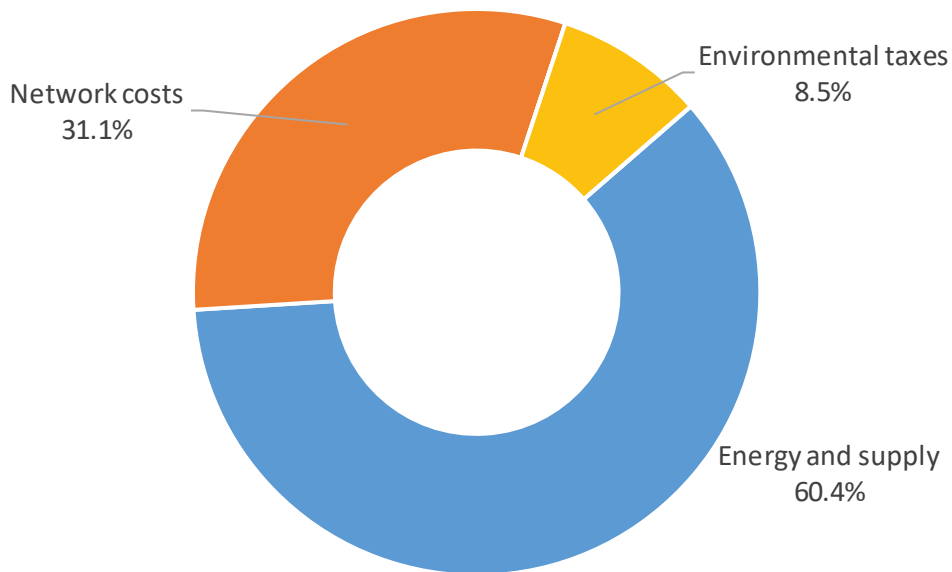


Figure 34: Disaggregation of Business Gas Price Bands I1 – I5 in Ireland



5 Energy Prices for Households

5.1 Residential Electricity Prices

The data collection for households is based on the methodology 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. Member States develop and implement cost-effective procedures to ensure the establishment of a representative data compilation system based on the rules described below.

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 36*:

Table 36: Categories for Residential End-Use of Electricity

Household end-user	Annual electricity consumption (kWh)		Band share of residential electricity consumption in Ireland S2 2018
	Lowest	Highest	
Very small (DA)	<1,000		3.3%
Small (DB)	1,000	2,500	10.6%
Medium (DC)	2,500	5,000	36.3%
Large (DD)	5,000	15,000	41.5%
Very large (DE)	≥15,000		8.4%

This section contains 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 2018 (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.

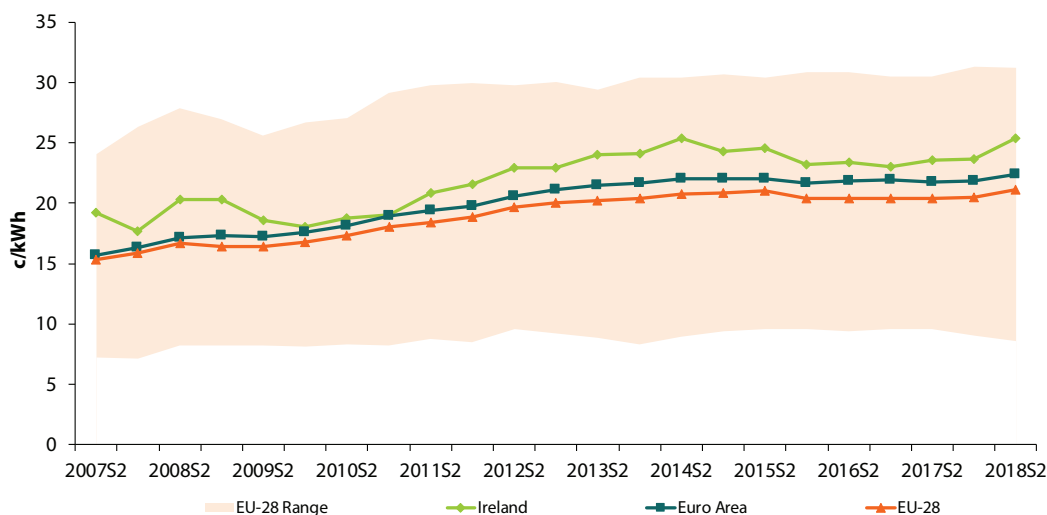
With regard to consumption bands, the most relevant for the majority of residential consumers are the DC band (2,500 – 5,000 kWh per annum) and the DD band (5,000 – 15,000 kWh per annum). In the lower consumption bands the average price per kWh is higher because the standing charges and network charges 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 35 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 36% of the electricity use in the residential market in Ireland during the second half of 2018 (see Table 36).

The average price in the EU and the Euro Area has been steadily increasing over the whole period shown in Figure 35, with the price being, respectively, 38% and 43% higher at the end of the period compared with the start while the price in Ireland was 32% higher.

Figure 35: Residential Electricity Prices (all taxes included) in Band DC (2nd semester 2007 to 2nd semester 2018)



Source: Eurostat

In S2 2018 Ireland was 20% above the EU average, up from 15% above in the previous semester.

Table 37 shows prices in band DC for the five semesters between the second half of 2016 and the second half of 2018 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 2018 ranged from a 15% increase in Cyprus to a 6.6% price decrease in Slovakia. Ireland experienced a 7.2% price increase in this consumption band during the second half of 2018. Price in this band increased by 3% in the EU and by 2.5% the Euro Area in the semester.

Over the 12-month period S2 2017 – S2 2018 price changes varied from a 20% increase in Cyprus to a 10.6% decrease in Turkey. Ireland experienced an increase of 7.8% over the 12 months, while the EU experienced a price increase of 3.5% and the Euro Area an increase of 3.1%.

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 DC in Europe (S2 2016 – S2 2018)

Band DC	all taxes included (c/kWh)					% change				
	July '16 – Dec '16	Jan '17 – Jun '17	July '17 – Dec '17	Jan '18 – Jun '18	July '18 – Dec '18	S2 '16 – S1 '17	S1 '17 – S2 '17	S2 '17 – S1 '18	S1 '18 – S2 '18	12 months to S2 '18
Austria	20.10	19.50	19.78	19.66	20.12	-3.0%	1.4%	-0.6%	2.3%	1.7%
Belgium	27.45	28.57	28.77	27.33	29.37	4.1%	0.7%	-5.0%	7.5%	2.1%
Bulgaria	9.38	9.55	9.83	9.79	10.05	1.8%	2.9%	-0.4%	2.7%	2.2%
Croatia	13.31	11.96	12.36	13.11	13.21	-10.1%	3.3%	6.1%	0.8%	6.9%
Cyprus	16.21	18.63	18.26	18.93	21.83	14.9%	-2.0%	3.7%	15.3%	19.6%
Czech Republic	14.21	14.38	14.88	15.73	15.86	1.2%	3.5%	5.7%	0.8%	6.6%
Denmark	30.84	30.49	30.10	31.26	31.23	-1.1%	-1.3%	3.9%	-0.1%	3.8%
Estonia	12.38	12.07	13.19	13.48	14.18	-2.5%	9.3%	2.2%	5.2%	7.5%
Finland	15.45	15.81	15.99	16.12	16.98	2.3%	1.1%	0.8%	5.3%	6.2%
France	17.11	17.04	17.56	17.48	17.99	-0.4%	3.1%	-0.5%	2.9%	2.4%
Germany	29.77	30.48	30.48	29.87	30.00	2.4%	0.0%	-2.0%	0.4%	-1.6%
Greece	17.23	19.36	16.20	16.72	16.46	12.4%	-16.3%	3.2%	-1.6%	1.6%
Hungary	11.25	11.25	11.34	11.23	11.18	0.0%	0.8%	-1.0%	-0.4%	-1.4%
Ireland	23.38	23.05	23.55	23.69	25.39	-1.4%	2.2%	0.6%	7.2%	7.8%
Italy	22.61	21.32	20.80	20.67	21.61	-5.7%	-2.4%	-0.6%	4.5%	3.9%
Latvia	16.24	15.86	15.82	15.31	15.11	-2.3%	-0.3%	-3.2%	-1.3%	-4.5%
Lithuania	11.71	11.16	11.07	10.97	10.97	-4.7%	-0.8%	-0.9%	0.0%	-0.9%
Luxembourg	16.98	16.15	16.18	16.71	16.91	-4.9%	0.2%	3.3%	1.2%	4.5%
Malta	12.74	13.28	12.98	12.85	13.06	4.2%	-2.3%	-1.0%	1.6%	0.6%
Netherlands	15.92	15.62	15.56	17.06	17.07	-1.9%	-0.4%	9.6%	0.1%	9.7%
Norway	16.31	16.42	16.05	17.51	19.07	0.7%	-2.3%	9.1%	8.9%	18.8%
Poland	13.52	14.46	14.51	14.10	13.96	7.0%	0.3%	-2.8%	-1.0%	-3.8%
Portugal	22.98	22.84	22.30	22.46	22.93	-0.6%	-2.4%	0.7%	2.1%	2.8%
Romania	12.33	11.98	12.89	13.33	13.17	-2.8%	7.6%	3.4%	-1.2%	2.2%
Slovakia	15.37	14.35	14.42	15.66	14.62	-6.6%	0.5%	8.6%	-6.6%	1.4%
Slovenia	16.29	16.09	16.13	16.13	16.38	-1.2%	0.2%	0.0%	1.5%	1.5%
Spain	22.84	22.96	21.77	23.83	24.77	0.5%	-5.2%	9.5%	3.9%	13.8%
Sweden	19.62	19.36	19.93	18.91	19.90	-1.3%	2.9%	-5.1%	5.2%	-0.2%
Turkey	12.05	10.48	9.59	9.04	8.57	-13.0%	-8.5%	-5.7%	-5.2%	-10.6%
United Kingdom	18.31	17.66	18.56	18.87	20.24	-3.5%	5.1%	1.7%	7.3%	9.1%
Euro Area	21.79	21.90	21.75	21.88	22.42	0.5%	-0.7%	0.6%	2.5%	3.1%
EU-28	20.38	20.35	20.42	20.52	21.13	-0.1%	0.3%	0.5%	3.0%	3.5%
Ireland relative to:										
Euro Area	107.3%	105.3%	108.3%	108.3%	113.2%					
EU-28	114.7%	113.3%	115.3%	115.4%	120.2%					

Source: Eurostat

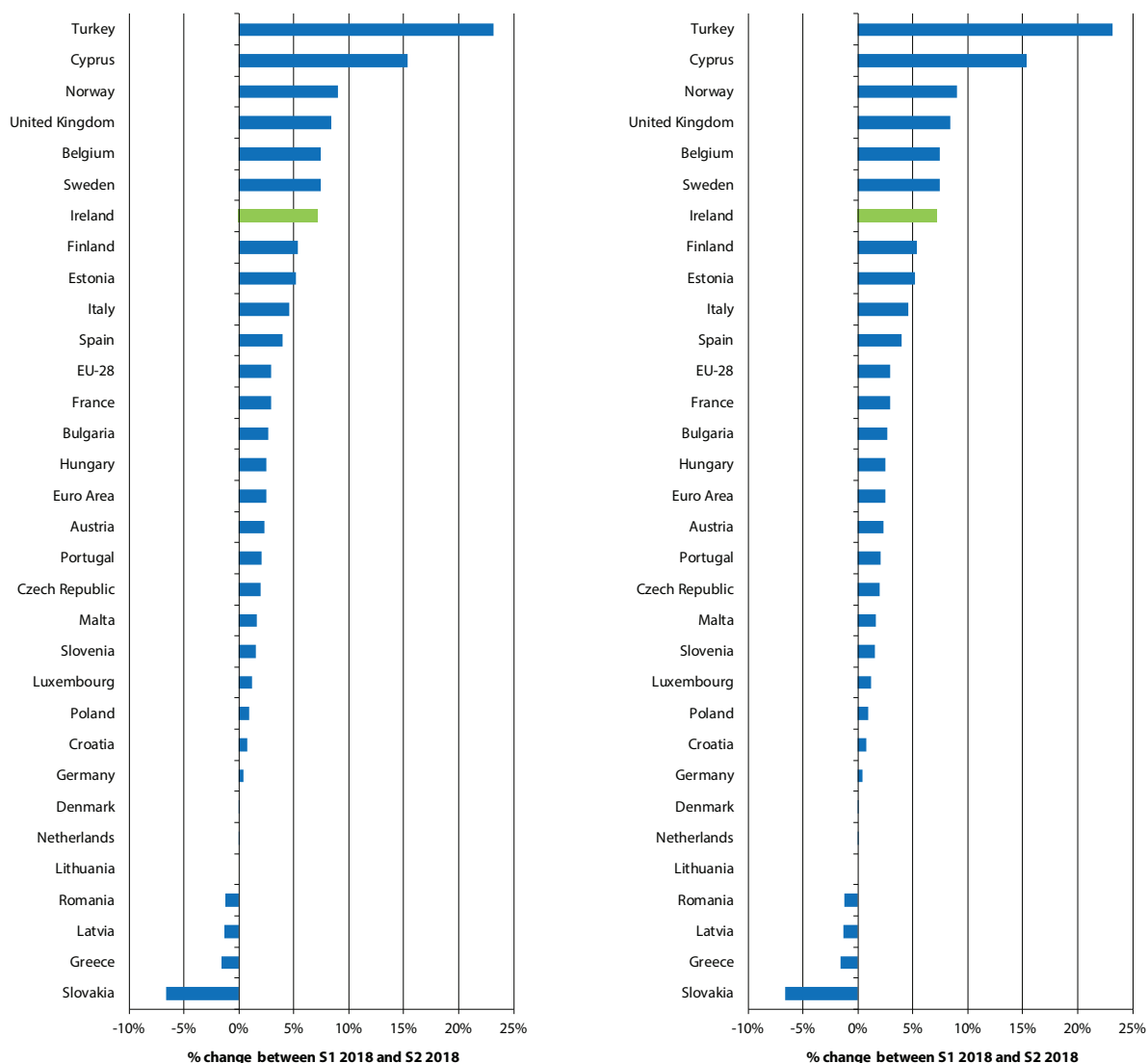
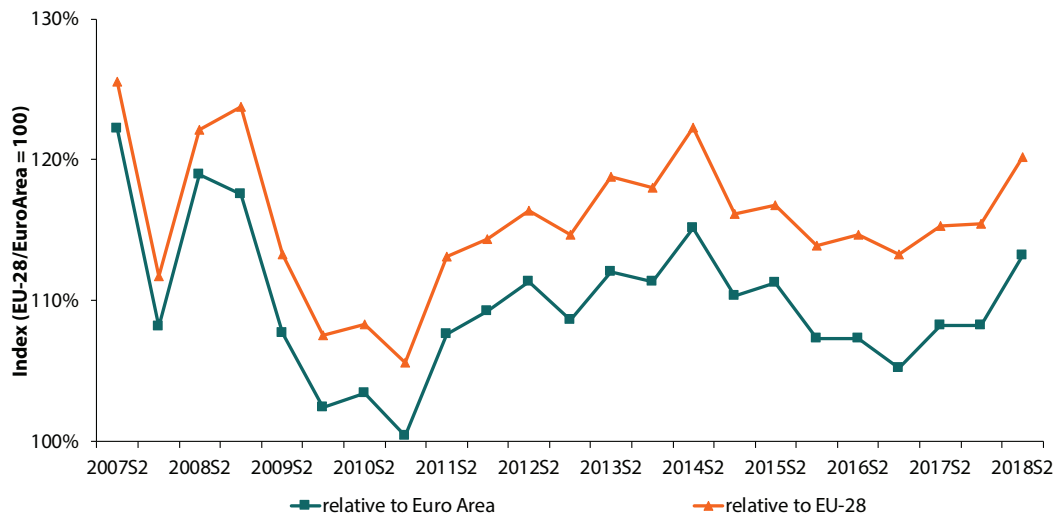
Figure 36: Percentage Change (national currency) in Household Electricity Price (band DC) – Semester and 12 Months

Figure 37 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, to a low of 5.4% above in the first half of 2011. During the latest semester prices were 20% above the EU average.

Prices were also above the Euro Area average for most of the period, ranging from 18.2% above average in the second half of 2008 to 0.2% below the Euro Area average in the first half of 2011. During the latest semester prices were 13% above the Euro Area average.

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

Source: Based on Eurostat data

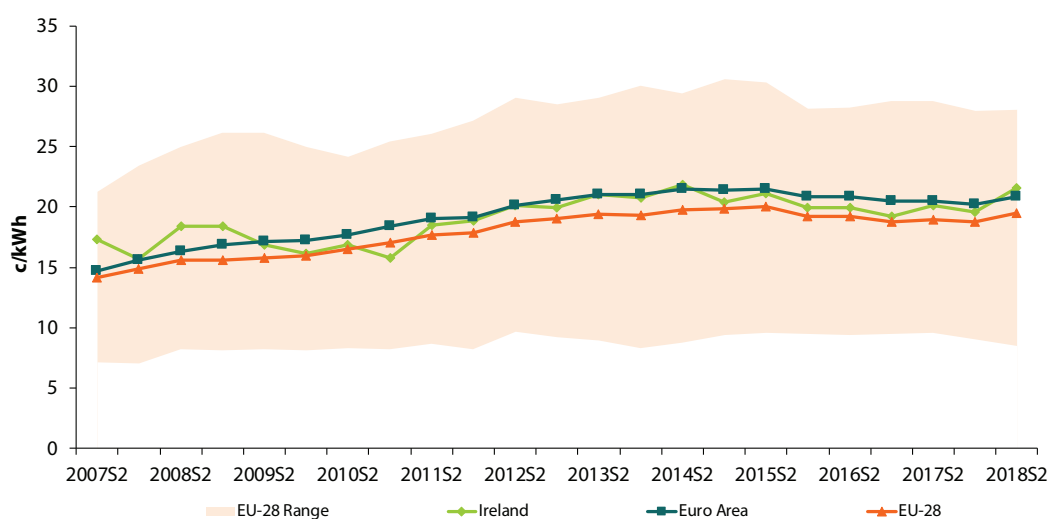
5.1.2 Residential Electricity Prices in Consumption Band DD

Figure 38 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 38 the price being 38% and 43% respectively higher at the end of the period compared with the start. The price in Ireland was 32% 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 2018.

Figure 38: Residential Electricity Prices (all taxes included) in Band DD (2nd semester 2007 to 2nd semester 2018)



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 10.7% above the EU average during the second half of 2018. Compared with the Euro Area, prices in this band were 3.6% above average in S2 2018.

Table 38 shows prices in band DD for the five semesters between the second half of 2016 and the second half of 2018, 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 2018 ranged from an 18% increase in Cyprus to a 5.2% price decrease in Turkey. Ireland experienced a 10.2% increase in this consumption band during the second half of 2018. The EU as a whole experienced on average a 3.9% increase in price, and the Euro Area an increase of 3.1%, in band DD.

Over the 12-month period S2 2017 – S2 2018 price changes varied from a 23% increase in Norway to a 16% decrease in Greece. Ireland experienced a 7.3% increase in electricity prices to households in this band over the 12 month period; this compares with a 3.1% increase in the EU and a 1.8% increase in the Euro Area during the 12 months.

Note that the percentage price change shown in Table 38 is calculated from the published Eurostat euro values for each country. Percentage price changes in national currencies may differ considerably from these. Figure 39 shows graphically the percentage change in national currencies, arranged in increasing order of price change.

Table 38: Residential Electricity Prices in Band DD in Europe (S2 2016 – S2 2018)

Band DD	all taxes included (c/kWh)					% change				
	July '16 – Dec '16	Jan '17 – Jun '17	July '17 – Dec '17	Jan '18 – Jun '18	July '18 – Dec '18	S2 '16 – S1 '17	S1 '17 – S2 '17	S2 '17 – S1 '18	S1 '18 – S2 '18	12 months to S2 '18
Austria	17.66	17.11	17.40	17.21	17.68	-3.1%	1.7%	-1.1%	2.7%	1.6%
Belgium	25.00	25.88	26.11	24.94	26.86	3.5%	0.9%	-4.5%	7.7%	2.9%
Bulgaria	9.36	9.47	9.88	9.73	10.11	1.2%	4.3%	-1.5%	3.9%	2.3%
Croatia	12.75	11.47	11.93	12.64	12.75	-10.0%	4.0%	6.0%	0.9%	6.9%
Cyprus	16.17	18.08	18.21	17.97	21.19	11.8%	0.7%	-1.3%	17.9%	16.4%
Czech Republic	11.32	11.43	11.83	12.16	12.37	1.0%	3.5%	2.8%	1.7%	4.6%
Denmark	24.23	23.96	23.42	24.26	25.58	-1.1%	-2.3%	3.6%	5.4%	9.2%
Estonia	11.86	11.23	12.31	12.62	13.56	-5.3%	9.6%	2.5%	7.4%	10.2%
Finland	13.32	13.56	13.68	13.82	14.50	1.8%	0.9%	1.0%	4.9%	6.0%
France	15.94	15.59	16.00	16.05	16.29	-2.2%	2.6%	0.3%	1.5%	1.8%
Germany	28.20	28.76	28.74	27.95	28.05	2.0%	-0.1%	-2.7%	0.4%	-2.4%
Greece	18.35	20.76	20.40	18.03	17.19	13.1%	-1.7%	-11.6%	-4.7%	-15.7%
Hungary	10.97	10.91	11.04	10.94	11.02	-0.5%	1.2%	-0.9%	0.7%	-0.2%
Ireland	19.92	19.19	20.11	19.58	21.57	-3.7%	4.8%	-2.6%	10.2%	7.3%
Italy	25.91	22.22	21.20	20.74	21.67	-14.2%	-4.6%	-2.2%	4.5%	2.2%
Latvia	15.91	15.34	15.36	14.52	14.47	-3.6%	0.1%	-5.5%	-0.3%	-5.8%
Lithuania	11.29	10.73	10.68	10.53	10.57	-5.0%	-0.5%	-1.4%	0.4%	-1.0%
Luxembourg	15.61	14.16	14.14	14.44	14.64	-9.3%	-0.1%	2.1%	1.4%	3.5%
Malta	14.97	15.62	15.12	15.08	15.17	4.3%	-3.2%	-0.3%	0.6%	0.3%
Netherlands	17.29	17.28	17.24	18.47	18.69	-0.1%	-0.2%	7.1%	1.2%	8.4%
Norway	11.81	11.84	11.63	12.79	14.34	0.3%	-1.8%	10.0%	12.1%	23.3%
Poland	12.87	13.26	13.46	12.99	12.97	3.0%	1.5%	-3.5%	-0.2%	-3.6%
Portugal	22.25	21.92	21.56	21.44	21.83	-1.5%	-1.6%	-0.6%	1.8%	1.3%
Romania	12.11	11.80	12.61	13.04	12.87	-2.6%	6.9%	3.4%	-1.3%	2.1%
Slovakia	13.37	12.19	12.43	13.38	12.74	-8.8%	2.0%	7.6%	-4.8%	2.5%
Slovenia	14.19	13.98	13.99	13.87	14.24	-1.5%	0.1%	-0.9%	2.7%	1.8%
Spain	19.95	19.30	18.84	19.24	21.59	-3.3%	-2.4%	2.1%	12.2%	14.6%
Sweden	16.15	15.39	16.24	15.67	17.52	-4.7%	5.5%	-3.5%	11.8%	7.9%
Turkey	12.03	10.49	9.58	9.00	8.53	-12.8%	-8.7%	-6.1%	-5.2%	-11.0%
United Kingdom	17.06	15.86	16.82	17.08	18.46	-7.0%	6.1%	1.5%	8.1%	9.8%
Euro Area	20.88	20.50	20.45	20.20	20.82	-1.8%	-0.2%	-1.2%	3.1%	1.8%
EU-28	19.21	18.72	18.90	18.74	19.48	-2.6%	1.0%	-0.8%	3.9%	3.1%
Ireland relative to:										
Euro Area	95.4%	93.6%	98.3%	96.9%	103.6%					
EU-28	103.7%	102.5%	106.4%	104.5%	110.7%					

Source: Eurostat

Figure 39: Percentage Change (national currency) in Household Electricity Price (band DD) – Semester and 12 Months

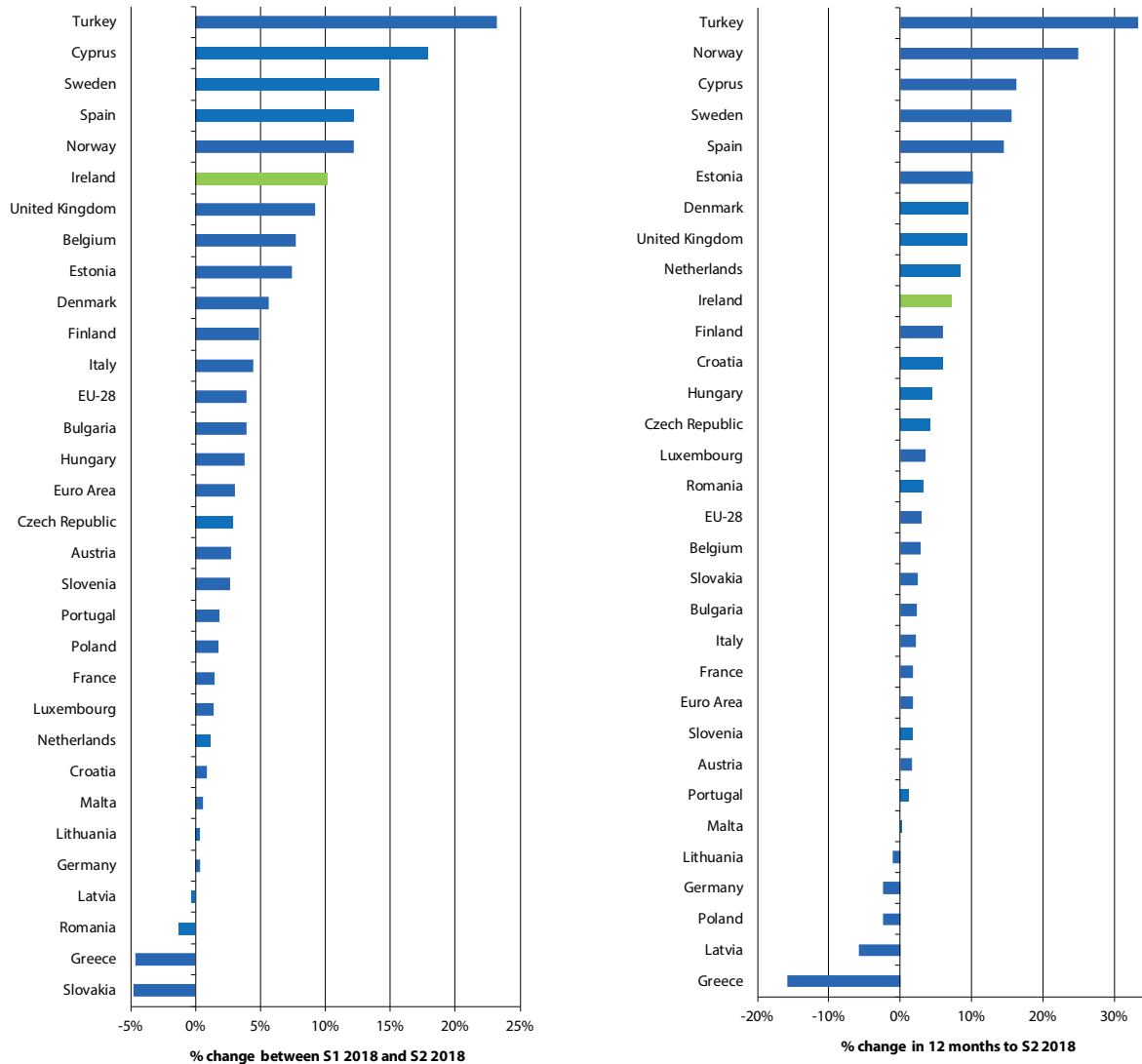
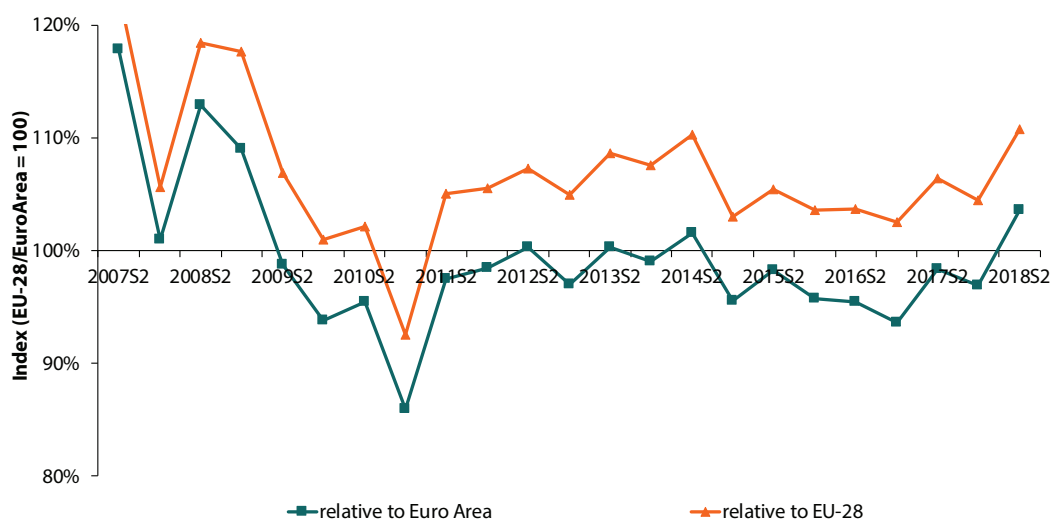


Figure 40 shows the tax-inclusive price for electricity in Ireland for band DD consumption levels relative to the EU and the Euro Area as an index over the period. The price in Ireland was above the EU average price during the period, with the exception of the first half of 2011, ranging from a high of 18.4% above average in the second half of 2008 to a low of 7.7% below in the first half of 2011. During the latest semester prices were 10.7% 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 12.1% above average in the second half of 2008 to a low of 14.6% below in the first half of 2011. During the latest semester prices were 3.6% above the Euro Area average.

Figure 40: 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 39 shows Ireland's position compared with the EU average residential electricity prices for S2 2018, with S1 2018 shown in grey. Ireland's position compared with the EU average improved in all consumption bands between the two semesters with the exception of band DC.

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.

In the second half of 2018 Ireland was 20% above the EU average in band DC, up from 15% above the previous semester, and in band DD Ireland was 11% above the EU average up from 4% above in the previous semester.

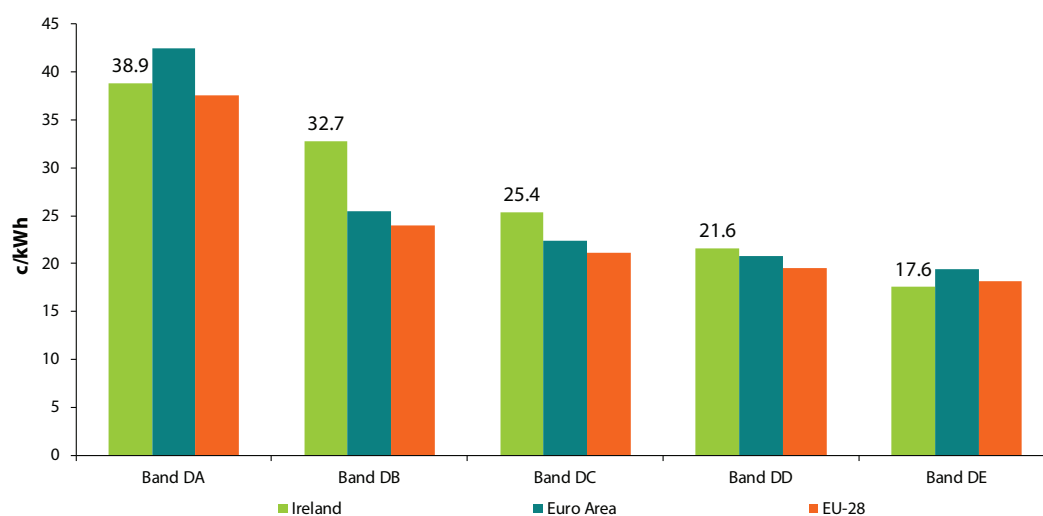
Table 39: Residential Electricity Prices (cents) (all taxes included) in Ireland (2nd semester 2018) – EU Comparison

Electricity prices to residential consumers (all taxes included)	Price c/kWh	% change since last semester	Relative to EU average 2018 S2	Relative to EU average 2018 S1	Band share of market
Band DA	38.9	1.1%	103%	107%	3.3%
Band DB	32.7	6.9%	137%	132%	10.6%
Band DC	25.4	7.2%	120%	115%	36.3%
Band DD	21.6	10.2%	111%	104%	41.5%
Band DE	17.6	8.6%	97%	91%	8.4%

Source: Eurostat

Also shown in Table 39 are the market shares by volume for each band. Consumers in bands DC and DD accounted for 78% of the residential electricity market, with band DD being the largest at 41% of the market, and DC less at 36%.

Figure 41 shows graphically the position of the tax-inclusive electricity price to households during S2 2018.

Figure 41: Residential Electricity Prices (all taxes included) 2nd Semester 2018

Source: Eurostat

Table 40 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 40 should be read in conjunction with the market share of each band as shown in Table 39.

Table 40: Ireland's Ranking in EU for Residential Electricity Prices (all taxes included)

Electricity prices to residential consumers (all taxes included)	July '15 – Dec '15	Jan '16 – Jun '16	July '16 – Dec '16	Jan '17 – Jun '17	July '17 – Dec '17	Jan '18 – Jun '18	July '18 – Dec '18
Band DA	2	3	4	4	4	7	8
Band DB	3	3	4	4	4	3	3
Band DC	3	6	4	4	4	5	4
Band DD	5	6	7	8	7	6	7
Band DE	11	10	10	10	10	9	10
No. of Countries	30	30	30	30	30	30	30

Source: Eurostat

During S2 2018 in band DC, the band on which Eurostat reports, Ireland was ranked fourth most expensive, one place higher since the previous semester. Since 2007, the average ranking for Ireland in this band was 5th most expensive.

In consumption band DD Ireland's ranking was at 7th most expensive of 30 countries which was an improvement of one place 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 1% below the average in the most significant consumption band DD. In band DC, Ireland is 7% above the average.

Table 41: Residential Electricity Prices at Purchasing Power Parity (2nd Semester 2018) – EU Comparison

Electricity prices to residential consumers (all taxes included)	Price c _{PPP} /kWh	Relative to EU average S2 2018	Relative to EU average S1 2018
Band DA (Consumption < 1 000 kWh)	34.8	92%	96%
Band DB (1,000 kWh < Consumption < 2,500 kWh)	29.3	122%	118%
Band DC (2,500 kWh < Consumption < 5,000 kWh)	22.7	107%	103%
Band DD (5,000 kWh < Consumption < 15,000 kWh)	19.3	99%	93%
Band DE (Consumption > 15,000 kWh)	15.7	86%	82%

Source: Eurostat

Table 41 shows Ireland's position, relative to the European average electricity prices to households in PPPs for S2 2018, with S1 2018 shown in grey. Using a straight euro comparison, Ireland (see Table 39) was 16% above the EU average in band DC; however, using PPPs Ireland was 7% above. Similarly, in Band DD, using a straight euro comparison Ireland was 11% above the EU average, but using PPPs Ireland was 1% below.

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

Table 42 shows Ireland's position, relative to the Euro Area average electricity prices to households for S2 2018, with S1 2018 shown in grey. Focusing on just the Euro Area countries, Ireland was 20% above the Euro Area average in band DC. In the higher consumption band DD Ireland was 11% above the Euro Area average and in band DE Ireland was 3% cheaper.

Table 42: Residential Electricity Prices (€) in Ireland (2nd semester 2018) – Euro Area Comparison

Electricity prices to residential consumers (all taxes included)	Price c/kWh	Relative to Euro Area average S2 2018	Relative to Euro Area average S1 2018
Band DA (Consumption < 1 000 kWh)	38.9	103%	107%
Band DB (1,000 kWh < Consumption < 2,500 kWh)	32.7	137%	132%
Band DC (2,500 kWh < Consumption < 5,000 kWh)	25.4	120%	115%
Band DD (5,000 kWh < Consumption < 15,000 kWh)	21.6	111%	104%
Band DE (Consumption > 15,000 kWh)	17.6	97%	91%

Source: Eurostat

5.1.6 Disaggregation of Household Electricity Prices

In 2018, Eurostat began collecting more detailed data on the disaggregated components that make up electricity prices for households. Table 43 shows the disaggregation of electricity prices to households weighted across all consumption bands in 2018.

With reference to Table 43, the energy and supply component in Ireland was 10.9 c/kWh or 47% of the total price. This was the 4th highest in Europe.

Network costs accounted for 32% of the price or 7.34 c/kWh in absolute terms. This was the 3rd highest in Europe.

Value added tax (VAT) accounted for 11.8% of the price or 2.73 c/kWh. This was the 11th highest in Europe.

Renewable supports taxes accounted for 5.6% of the electricity price to households in Ireland and ranked 13th highest in Europe.

Table 43: Disaggregated Household Electricity Prices 2018

Country	Disaggregate price in ¢/kWh								
	Energy and Supply	Network Costs	Total taxes, fees and levies	VAT	Renewable Taxes	Capacity taxes	Environment taxes	Nuclear taxes	Other
Belgium	8.39	10.73	8.71	4.72	1.04	0.11	0.22	0.10	2.52
Bulgaria	5.85	2.42	1.66	1.66	0.00	0.00	0.00	0.00	0.00
Czechia	6.09	4.57	4.72	2.66	1.94	0.00	0.12	0.00	0.00
Denmark	5.03	5.47	17.28	5.56	1.95	0.00	9.77	0.00	0.00
Germany	6.71	7.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Estonia	5.05	4.73	3.56	2.22	0.89	0.00	0.45	0.00	0.00
Ireland	10.90	7.34	4.98	2.73	1.31	0.52	0.00	0.00	0.43
Greece	8.76	2.64	6.00	1.95	2.27	0.00	0.00	0.00	1.78
France	5.98	5.02	6.15	2.57	0.00	0.41	3.17	0.00	0.00
Croatia	5.91	4.52	2.95	1.54	1.41	0.00	0.00	0.00	0.00
Italy	11.46	5.52	7.46	2.25	0.00	0.00	0.00	0.00	5.21
Cyprus	11.59	3.19	5.55	3.09	0.97	0.67	0.74	0.00	0.08
Latvia	4.90	5.74	5.14	2.74	2.40	0.00	0.00	0.00	0.00
Lithuania	3.50	4.12	3.23	1.88	1.13	0.22	0.00	0.00	0.00
Luxembourg	5.25	7.17	3.85	1.21	2.54	0.00	0.10	0.00	0.00
Hungary	4.48	4.31	2.37	2.37	0.00	0.00	0.00	0.00	0.00
Malta	12.22	2.40	0.89	0.74	0.00	0.00	0.15	0.00	0.00
Netherlands	6.42	5.83	4.61	2.89	1.35	0.00	0.37	0.00	0.00
Austria	6.07	6.12	7.24	3.24	2.34	0.00	1.50	0.00	0.17
Poland	4.52	4.67	5.18	2.69	0.62	0.77	1.10	0.00	0.01
Portugal	5.32	5.24	13.37	4.48	6.07	1.32	0.10	0.00	1.41
Romania	5.65	4.11	3.47	2.11	1.26	0.00	0.10	0.00	0.00
Slovenia	5.44	5.53	4.90	2.86	1.72	0.01	0.30	0.00	0.00
Slovakia	4.46	4.65	6.22	2.56	2.16	1.18	0.00	0.32	0.00
Finland	4.54	4.88	5.05	2.80	0.00	0.00	0.00	0.00	2.25
Sweden	4.84	4.95	6.69	3.30	0.35	0.00	3.05	0.00	0.00
UK	9.44	4.05	5.71	0.91	1.81	0.13	0.00	0.00	2.84

Source: Eurostat

Figure 42 shows graphically the disaggregated components that make up the electricity prices to households in Europe for all bands and Figure 43.

Figure 42: Disaggregation of Business Gas Price Bands DA – DE in Europe

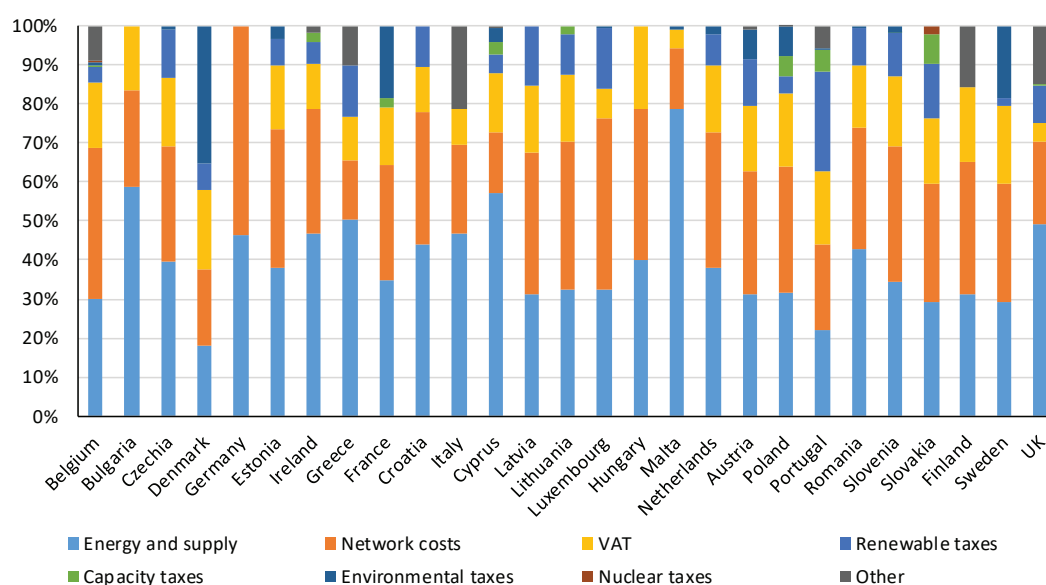
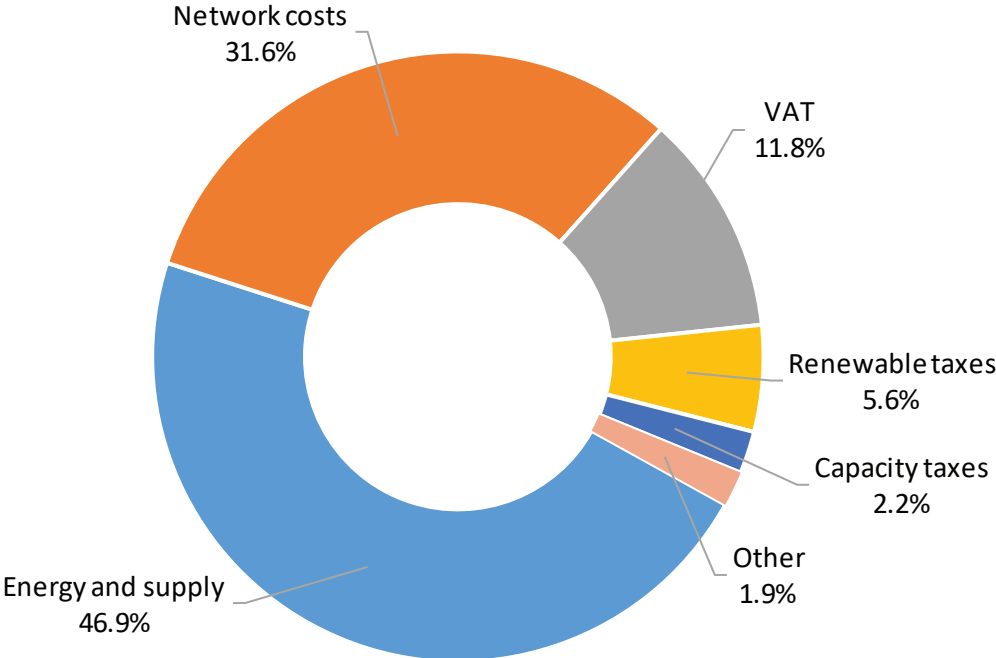


Figure 43: Disaggregation of Household Electricity Price Bands DA – IE in Ireland



5.2 Residential Gas Prices

The data collection for households is based on the methodology 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 44*:

Table 44: Categories for Residential End-Use of Natural Gas

Residential end-users	Annual gas consumption (kWh)		Band share of residential gas consumption in Ireland S2 2018
	Lowest	Highest	
D1 - Small	0	< 5,600	5.8%
D2 - Medium	5,600	< 56,000	92.4%
D3 - Large		≥ 56,000	1.8%

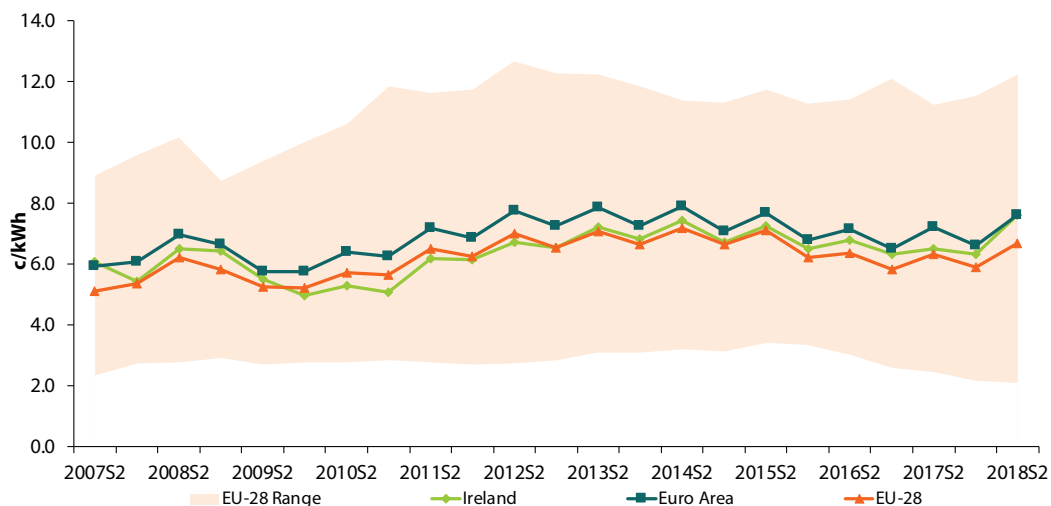
Historically the CRU sanctioned changes in the regulated price of gas to take effect in October. While these changes were applied mid-way through the semesters, the full effect of these increases was almost fully reflected in the average price for the semester. This is because the start of the heating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

This section contains 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 2018 (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 44: Residential Gas Prices (all taxes included) in Band D2 (2nd semester 2007 to 2nd semester 2018)



Source: Eurostat

Figure 44 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 13.6% above the EU average. Since the start of 2008 the price has been below the average Euro Area price and was at the Euro Area average in the second half of 2018.

Table 45 shows prices in band D2 for the five semesters between the second half of 2016 and the second half of 2018 and includes data revisions published by Eurostat. Also shown in Table 45 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 2018 ranged from a 33% increase in Italy to a 3.2% price decrease in Turkey. Ireland experienced a 20% increase in S2 2018 compared with the previous semester. The EU as a whole experienced an increase of 13.6% in gas prices in band D2, and the Euro Area a 15% increase.

Over the 12-month period S2 2017 – S2 2018 price changes varied from an 17% increase in Ireland to a 14% decrease in Turkey. This compares with a 5.7% increase in the EU and a 5.5% price increase in the Euro Area.

Note that the percentage price change shown in Table 45 is calculated from the published Eurostat euro values for each country. Percentage price changes in national currencies may differ considerably from these. Figure 45 shows graphically the percentage change in national currencies, arranged in increasing order of price change.

Table 45: Residential Gas Prices in Band D2 in Europe (S2 2016 – S2 2018)

Band D2	all taxes included (c/kWh)					% change				
	July '16 – Dec '16	Jan '17 – Jun '17	July '17 – Dec '17	Jan '18 – Jun '18	July '18 – Dec '18	S2 '16 – S1 '17	S1 '17 – S2 '17	S2 '17 – S1 '18	S1 '18 – S2 '18	12 months to S2 '18
Austria	6.74	6.74	6.98	6.69	7.01	0.0%	3.6%	-4.2%	4.8%	0.4%
Belgium	5.34	5.22	5.52	5.36	6.25	-2.2%	5.7%	-2.9%	16.6%	13.2%
Bulgaria	3.11	3.30	3.75	3.79	4.37	6.1%	13.6%	1.1%	15.3%	16.5%
Croatia	3.70	3.59	3.66	3.68	3.60	-3.0%	1.9%	0.5%	-2.2%	-1.6%
Czech Republic	5.63	5.50	5.66	5.75	5.69	-2.3%	2.9%	1.6%	-1.0%	0.5%
Denmark	8.58	8.88	8.75	8.72	9.13	3.5%	-1.5%	-0.3%	4.7%	4.3%
Estonia	3.28	4.18	4.13	4.01	4.25	27.4%	-1.2%	-2.9%	6.0%	2.9%
France	6.76	6.39	6.95	6.65	7.63	-5.5%	8.8%	-4.3%	14.7%	9.8%
Germany	6.42	6.11	6.09	6.08	6.08	-4.8%	-0.3%	-0.2%	0.0%	-0.2%
Greece	6.52	5.60	..	5.32	6.54	-14.1%	..	..	22.9%	..
Hungary	3.60	3.52	3.65	3.58	3.47	-2.2%	3.7%	-1.9%	-3.1%	-4.9%
Ireland	6.78	6.32	6.49	6.32	7.61	-6.8%	2.7%	-2.6%	20.4%	17.3%
Italy	8.38	7.04	8.74	7.14	9.51	-16.0%	24.1%	-18.3%	33.2%	8.8%
Latvia	4.06	3.78	3.93	3.85	4.50	-6.9%	4.0%	-2.0%	16.9%	14.5%
Lithuania	3.87	3.65	3.95	3.99	4.05	-5.7%	8.2%	1.0%	1.5%	2.5%
Luxembourg	4.18	4.18	3.98	4.11	4.29	0.0%	-4.8%	3.3%	4.4%	7.8%
Netherlands	8.08	7.63	8.15	8.15	8.61	-5.6%	6.8%	0.0%	5.6%	5.6%
Poland	4.41	4.17	4.42	4.23	4.50	-5.4%	6.0%	-4.3%	6.4%	1.8%
Portugal	8.15	7.73	7.99	7.59	7.84	-5.2%	3.4%	-5.0%	3.3%	-1.9%
Romania	3.23	3.03	3.08	3.21	3.54	-6.2%	1.7%	4.2%	10.3%	14.9%
Slovakia	4.45	4.21	4.45	4.27	4.59	-5.4%	5.7%	-4.0%	7.5%	3.1%
Slovenia	5.63	5.53	5.32	5.47	5.77	-1.8%	-3.8%	2.8%	5.5%	8.5%
Spain	8.57	6.67	8.65	6.65	8.75	-22.2%	29.7%	-23.1%	31.6%	1.2%
Sweden	11.42	12.12	11.25	11.53	12.23	6.1%	-7.2%	2.5%	6.1%	8.7%
Turkey	3.01	2.58	2.43	2.16	2.09	-14.3%	-5.8%	-11.1%	-3.2%	-14.0%
United Kingdom	5.01	4.69	4.79	4.62	5.18	-6.4%	2.1%	-3.5%	12.1%	8.1%
Euro Area	7.15	6.50	7.21	6.62	7.61	-9.1%	10.9%	-8.2%	15.0%	5.5%
EU-28	6.35	5.83	6.34	5.90	6.70	-8.2%	8.7%	-6.9%	13.6%	5.7%
Ireland relative to:										
Euro Area	94.8%	97.2%	90.0%	95.5%	100.0%					
EU-28	106.8%	108.4%	102.4%	107.1%	113.6%					

Source: Eurostat

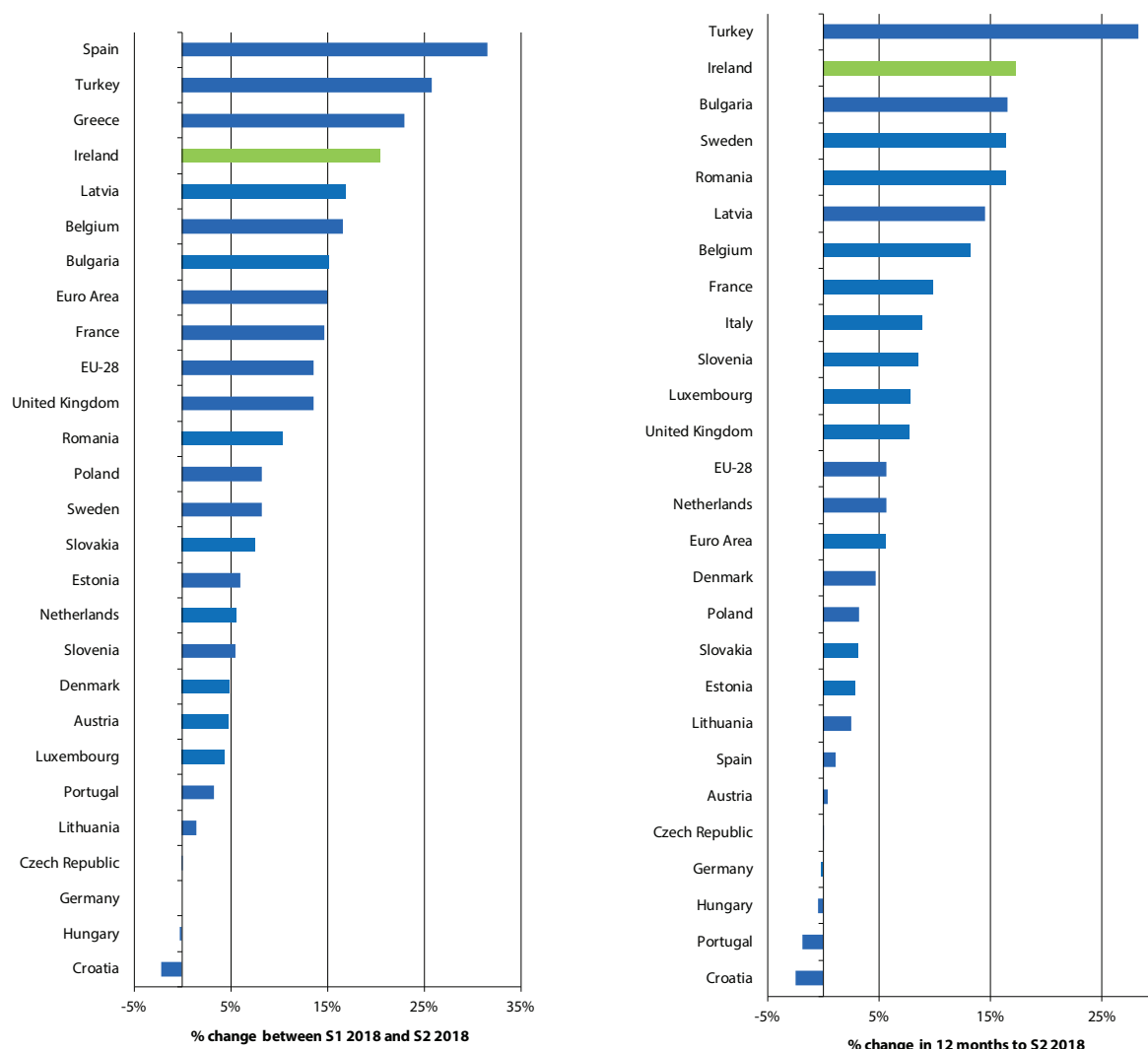
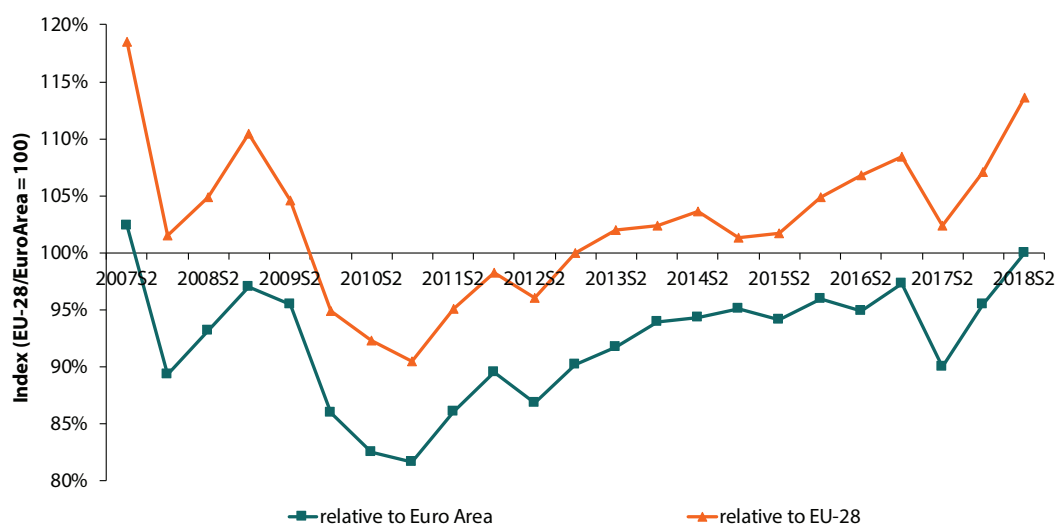
Figure 45: Percentage Change (national currency) in Household Gas Price (band D2) – Semester and 12 Months

Figure 46 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 9.9% below in the first half of 2011. During the latest semester prices were 13.6% 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 1.5% above average in the second half of 2007 to a low of 18.6% below in the first half of 2011. During the latest semester prices were at the Euro Area average.

Figure 46: Residential Gas Prices (all taxes included) in Band D2 Relative to EU and Euro Area

Source: Based on Eurostat data

Table 46 shows Ireland's position, relative to the EU average gas prices to householders for S2 2018 with S1 2018 shown in grey. Also shown in Table 46 are the market shares by volume for each band.

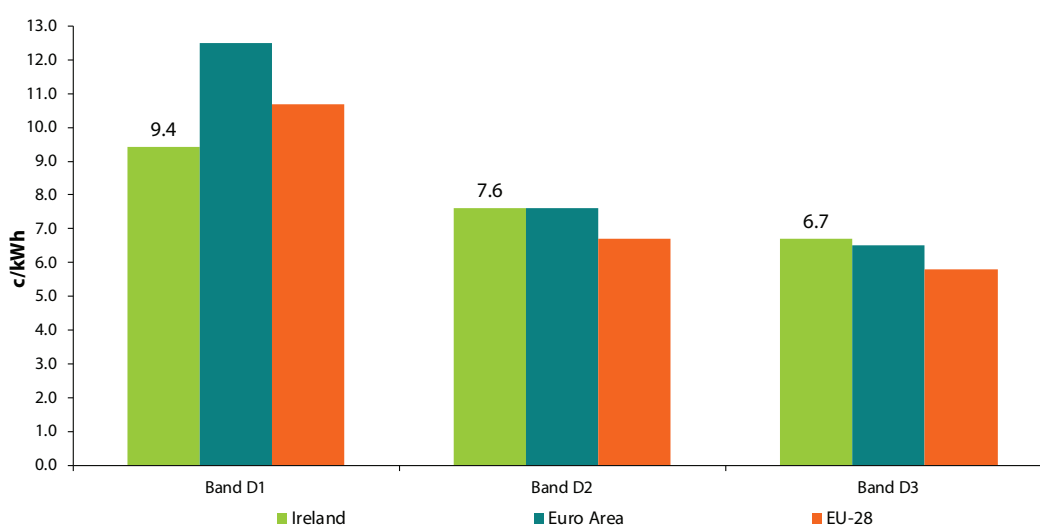
Table 46: Residential Gas Prices in Ireland (2nd semester 2018) – EU Comparison

Gas prices to residential consumers (all taxes included)	Price €/GJ	Price c/kWh	% change since last semester	Relative to EU average S2 2018	Relative to EU average S1 2018	Band share of market
Band D1 – Small	26.1	9.4	35.6%	88%	79%	5.8%
Band D2 – Medium	21.1	7.6	20.4%	114%	107%	92.4%
Band D3 – Large	18.6	6.7	10.8%	115%	111%	1.8%

Source: Eurostat

During S2 2018 consumption band D1 was below the EU average by 12% but bands D2 and D3 were above the average by 14% and 15% respectively.

Figure 47 shows graphically the position of the tax-inclusive gas price to households during S2 2018.

Figure 47: Residential Gas Prices (all taxes included) 2nd Semester 2018

Source: Eurostat

Table 47 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 47 should be read in conjunction with the market share of each band as shown in Table 46.

Table 47: Ireland's Ranking in EU for Residential Gas Prices (all taxes included)

Gas prices to residential consumers (all taxes included)	July '15 – Dec '15	Jan '16 – Jun '16	July '16 – Dec '16	Jan '17 – Jun '17	July '17 – Dec '17	Jan '18 – Jun '18	July '18 – Dec '18
Band D1	14	15	13	13	12	13	12
Band D2	9	9	7	9	9	9	8
Band D3	7	7	6	6	7	5	5
No. of Countries	26	26	26	26	25	26	26

Source: Eurostat

In residential gas consumption band D1 Ireland ranked twelfth most expensive out of 26 countries, an upward movement of one place since the previous semester. In band D3 Ireland remained at fifth most expensive.

During S2 2018 in band D2, the band on which Eurostat reports and the band that represents 92% of residential gas use here, Ireland was ranked eight most expensive out of 26 countries, an upward movement of one place since the previous semester. Since 2007, the average ranking for Ireland in this band was 10th 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 48: Residential Gas Prices (Purchasing Power Parity) (2nd semester 2018) – EU Comparison

Gas prices to residential consumers at purchasing power parities (all taxes included)	Price c_{PPP} /kWh	Relative to EU average S2 2018	Relative to EU average S1 2018
Band D1 – Small	8.4	79%	71%
Band D2 – Medium	6.8	102%	96%
Band D3 – Large	6.0	103%	100%

Source: Eurostat

Table 48 shows Ireland's position, expressed in PPP, relative to the European average gas prices to households for S2 2018, with S1 2018 shown in grey.

When PPPs are applied, Ireland is below the EU average in gas consumption band D1 for residential consumers by 21%, and above the average in bands D2 and D3 by 2% and 3% respectively.

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

Table 49 shows Ireland's position, relative to the Euro Area average gas prices to households for S2 2018, with S1 2018 shown in grey. When the focus is on just the Euro Area countries, Ireland is below the average in bands D1 by 25%. In bands D2 Ireland was at the Euro Area average and 3% above in band D3.

Table 49: Residential Gas Prices in Ireland (2nd semester 2018) – Euro Area Comparison

Gas prices to residential consumers (all taxes included)	Price €/GJ	Price c/kWh	Relative to Euro Area average S2 2018	Relative to Euro Area average S1 2018
Band D1 – Small	26.1	9.4	75%	68%
Band D2 – Medium	21.1	7.6	100%	95%
Band D3 – Large	18.6	6.7	103%	100%

Source: Eurostat

5.2.4 Disaggregation of Household Gas Prices

In 2018, Eurostat began collecting more detailed data on the disaggregated components that make up gas prices for households. Table 50 shows the disaggregation of gas prices to households weighted across all consumption bands in 2018.

With reference to Table 50, the energy and supply component in Ireland was 3.04 c/kWh or 44% of the total price. This was the 7th highest in Europe.

Network costs accounted for 10% of the price or 2.77c/kWh in absolute terms. This was the third highest in Europe.

Value added tax accounted for 10.4% of the price or 0.72 c/kWh. This was ranked 16th in Europe.

Environment taxes accounted for 5.4% of the gas price to business in Ireland and ranked 8th highest in Europe.

Table 50: Disaggregated Household Gas Prices 2018

Country	Disaggregate price in c/kWh						
	Energy and Supply	Network Costs	VAT	Renewable Taxes	Capacity taxes	Environment taxes	Other
Belgium	2.88	1.76	1.01	0.00	0.06	0.10	0.05
Bulgaria	2.09	1.33	0.68	0.00	0.00	0.00	0.00
Czechia	3.90	1.34	1.10	0.00	0.00	0.00	0.01
Denmark	2.59	1.40	1.78	0.27	0.00	2.87	0.00
Estonia	2.39	0.53	0.68	0.00	0.00	0.48	0.00
Ireland	3.04	2.77	0.72	0.00	0.00	0.37	0.00
France	3.17	2.30	1.04	0.00	0.24	0.84	0.00
Croatia	2.12	0.86	0.74	0.00	0.00	0.00	0.00
Latvia	2.30	1.24	0.78	0.00	0.00	0.16	0.00
Lithuania	2.16	1.03	0.75	0.00	0.39	0.00	0.00
Luxembourg	2.45	1.39	0.32	0.00	0.00	0.11	0.00
Hungary	1.83	0.91	0.74	0.00	0.00	0.00	0.00
Netherlands	3.05	0.92	1.45	0.01	0.00	2.94	0.00
Austria	3.04	2.00	1.15	0.00	0.00	0.58	0.12
Poland	2.46	1.20	0.85	0.01	0.02	0.01	0.00
Portugal	3.26	3.43	1.67	0.00	0.00	0.16	0.40
Romania	1.97	0.83	0.53	0.00	0.00	0.00	0.00
Slovenia	2.55	1.32	1.00	0.18	0.00	0.49	0.00
Slovakia	2.18	1.62	0.76	0.00	0.00	0.00	0.00
Sweden	4.05	2.98	2.43	0.00	0.00	2.71	0.00
UK	3.28	1.15	0.23	0.00	0.00	0.00	0.22

Source: Eurostat

Figure 48 shows graphically the disaggregated components that make up the electricity prices to business in Europe for all bands and Figure 49.

Figure 48: Disaggregation of Business Gas Price Bands DA – DE in Europe

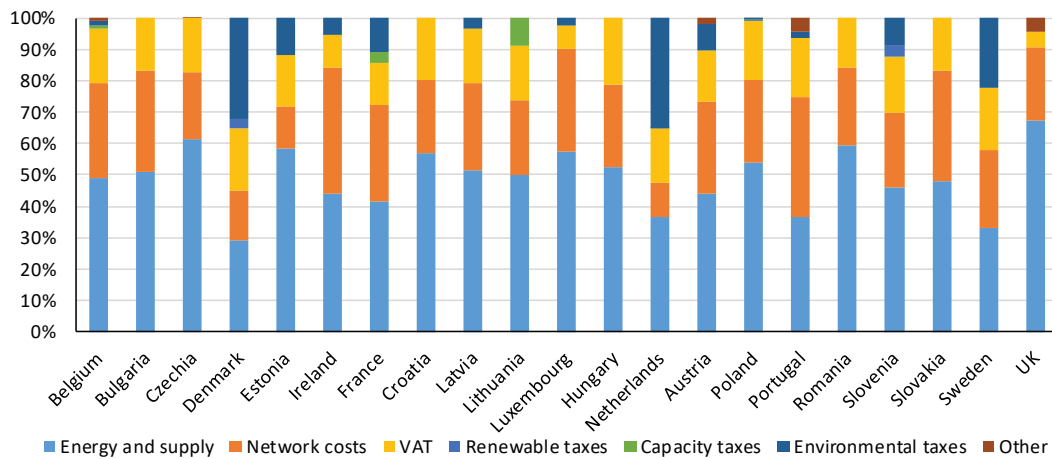
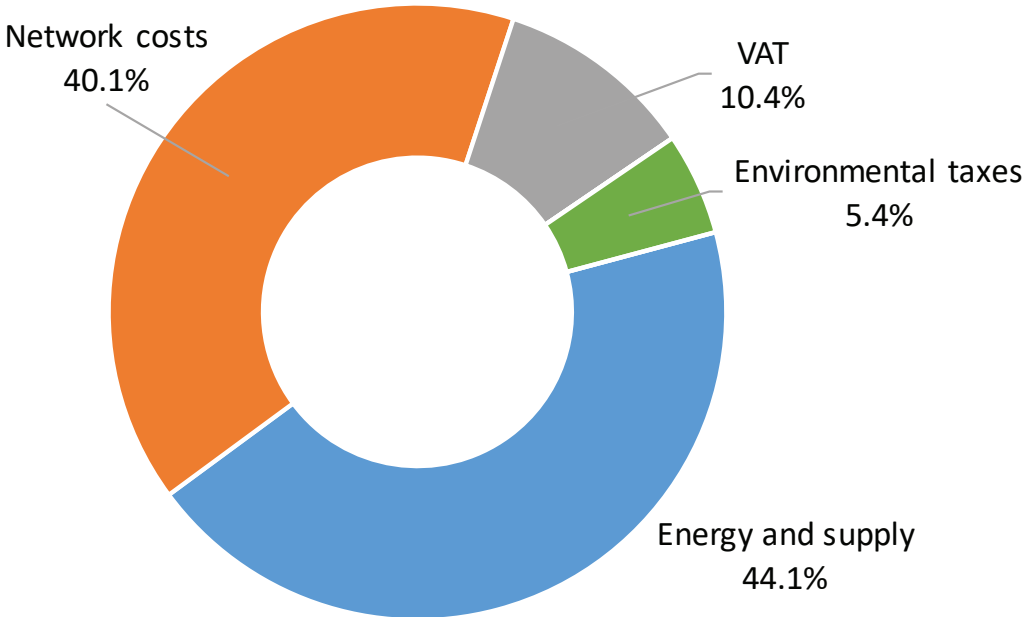


Figure 49: Disaggregation of Household Gas Price Bands DA – IE in Ireland



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Appendix 1 – Electricity and Gas Prices in Ireland

Table 51: Business Electricity Prices – 2nd Semester 2018¹

Business electricity prices (ex VAT) weighted average across all suppliers	c/kWh S2 2018	Change since S1 2018	Change in 12 months	Ranking EU (29)	Band Share of Market
Band IA Consumption < 20 MWh	21.1	4.1%	6.2%	5	6.9%
Band IB 20 MWh < Consumption < 500 MWh	16.1	2.9%	6.5%	4	26.9%
Band IC 500 MWh < Consumption < 2,000 MWh	13.5	2.1%	8.7%	6	14.3%
Band ID 2,000 MWh < Consumption < 20,000 MWh	11.1	2.5%	10.1%	6	24.9%
Band IE 20,000 MWh < Consumption < 70,000 MWh	10.3	2.1%	10.0%	3	7.8%
Band IF 70,000 MWh < Consumption < 150,000 MWh	9.7	5.5%	19.9%	5	19.1%
Weighted Average	13.7	2.4%	8.8%	30	-

Source: Eurostat

Table 52: Business Gas Prices – 2nd Semester 2018

Business gas prices (ex VAT) weighted average across all suppliers	c/kWh S2 2018	Change since S1 2018	Change in 12 months	Ranking EU (26)	Band Share of Market
Band I1 Consumption < 1,000 GJ	5.6	25.9%	7.4%	6	7.6%
Band I2 1,000 GJ < Consumption < 10,000 GJ	4.9	28.0%	15.3%	5	14.3%
Band I3 10,000 GJ < Consumption < 100,000 GJ	3.9	13.5%	20.1%	4	13.5%
Band I4 100,000 GJ < Consumption < 1,000,000 GJ	2.9	7.1%	18.2%	8	30.7%
Band I5 1,000,000 GJ < Consumption < 4,000,000 GJ	2.7	..	..	7	33.8%
Weighted Average	3.8	13.3%	15.0%	27	-

Source: Eurostat

Table 53: Residential Electricity Prices – 2nd Semester 2018

Household electricity prices (all taxes included) weighted average across all suppliers	c/kWh S22018	Change since S1 2018	Change in 12 months	Ranking EU (29)	Band Share of Market
Band DA Consumption < 1,000 kWh	38.9	1.1%	-7.0%	8	3.3%
Band DB 1,000 kWh < Consumption < 2,500 kWh	32.7	6.9%	8.4%	3	10.6%
Band DC 2,500 kWh < Consumption < 5,000 kWh	25.4	7.2%	7.8%	4	36.3%
Band DD 5,000 kWh < Consumption < 15,000 kWh	21.6	10.2%	7.3%	7	41.5%
Band DE Consumption > 15,000 kWh	17.6	8.6%	7.1%	10	8.4%
Weighted Average	24.4	11.5%	6.2%	30	-

Source: Eurostat

Table 54: Residential Electricity Prices (Purchasing Power Parities) – 2nd Semester 2018

Household electricity prices (all taxes included) weighted average across all suppliers	c _{PPP} /kWh S2 2018	Change since S1 2018	Change in 12 months	Ranking EU (29)	Band Share of Market
Band DA Consumption < 1,000 kWh	34.8	1.1%	-8.2%	11	3.3%
Band DB 1,000 kWh < Consumption < 2,500 kWh	29.3	6.8%	6.9%	5	10.6%
Band DC 2,500 kWh < Consumption < 5,000 kWh	22.7	7.2%	6.4%	10	36.3%
Band DD 5,000 kWh < Consumption < 15,000 kWh	19.3	10.2%	5.8%	14	41.5%
Band DE Consumption > 15,000 kWh	15.7	8.6%	5.6%	20	8.4%

Source: Eurostat

Table 55: Residential Gas Prices – 2nd Semester 2018

Household gas prices (all taxes included) weighted average across all suppliers	c/kWh S2 2018	Change since S1 2018	Change in 12 months	Ranking EU (25)	Band Share of Market
Band D1 Consumption < 20 GJ	9.4	35.6%	16.9%	12	5.8%
Band D2 20 GJ < Consumption < 200 GJ	7.6	20.4%	17.3%	8	92.4%
Band D3 Consumption > 200 GJ	6.7	10.8%	16.3%	5	1.8%
Weighted Average	7.7	21.1%	17.1%	26	-

Source: Eurostat

Table 56: Residential Gas Prices (Purchasing Power Parities) – 2nd Semester 2018

Household gas prices (all taxes included) weighted average across all suppliers	c _{PPP} /kWh S2 2018	Change since S1 2018	Change in 12 months	Ranking EU (25)	Band Share of Market
Band D1 Consumption < 20 GJ	8.4	35.6%	16.9%	16	5.8%
Band D2 20 GJ < Consumption < 200 GJ	6.8	20.5%	17.2%	14	92.4%
Band D3 Consumption > 200 GJ	6.0	10.7%	16.3%	13	1.8%

Source: Eurostat

¹ Note: Band share of market shown for IF refers to combined IF and IG market share but price shown is for IF only.

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, Directive (2008/92/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 revised 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.

Directive 2008/92/EC was recast in 2016 as Regulation (EU) 2016/1952 which made a number of changes to the methodology. The collection of data for households, which was voluntary under the Directive, became compulsory under the Regulation. It also provided for the detailed breakdown of consumption bands by their market shares and the collection of data on different components and sub-components of the natural gas and electricity prices.



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