

## Domestic Fuels Comparison of Energy Costs

01 Jul, 2017

### Notes:

- All prices are inclusive of 13.5% VAT.
- Estimated average price to consumers countrywide.
- Prices include delivery for bulk purchase
- Prices include those from a selection of suppliers that publish their prices online.
- Oil prices assuming 1000L delivered.
- Prices represent scheduled prices, exclusive of any discounts that may be available.
- Prices include those from a selection of suppliers that publish their prices online. Prices vary depending on delivery location.
- Price per unit does not include standing charge.
- Gas prices are VAT Incl prices from the EU Price Directive Survey & represent prices for 01/07/2016 to 31/12/2016. (Prices updated every 6 mths) For methodology and more details please see the following : [http://www.seai.ie/Publications/Statistics\\_Publications/Electricity\\_and\\_Gas\\_Prices/](http://www.seai.ie/Publications/Statistics_Publications/Electricity_and_Gas_Prices/)
- Electricity prices are VAT Incl prices from the EU Price Directive Survey, & represent prices for 01/07/2016 to 31/12/2016. (Prices updated every 6 mths) For methodology and more details please see the following report : [http://www.seai.ie/Publications/Statistics\\_Publications/Electricity\\_and\\_Gas\\_Prices/](http://www.seai.ie/Publications/Statistics_Publications/Electricity_and_Gas_Prices/)
- From 1/10/16 the Public Service Obligation (PSO) levy was increased from €5.01 to €5.90 per customer per month. See [www.cer.ie](http://www.cer.ie) for details
- To avail of lower night rate electricity a second meter is required. The rate quoted is estimated for unit consumption costs only. Actual costs may be higher due to higher standing charges for night rate electricity.
- Wood fuel prices may vary from the average, given the fragmented supplier network at present.
- Firewood prices provided by certified members of the Wood Fuel Quality Assurance Scheme. See <http://www.wfqa.org/>
- Minimum delivery conditions may apply. Discounts may apply for larger quantities.

### DISCLAIMER:

While every effort has been made to ensure the accuracy of these statistical publications and/or reports, they are subject to revisions and changes from time to time. The Sustainable Energy Authority of Ireland is not liable for losses suffered, whether direct or consequential, arising out of any reliance on these data. It is the responsibility of each individual or entity to independently verify such information if the intention is to use such information in any form for personal or commercial purposes. The Sustainable Energy Authority of Ireland reserves the right to change the methodology in collecting, presenting and publishing these statistics and/or report.

Fuel	Form	Unit of Supply	Average Price per Unit (€) <sup>1</sup>	Gross Calorific Value (kWh/unit)	Delivered Energy Cost cent/kWh	Percentage change since 1 April, 2017	Percentage Change since 1 July, 2016
Peat <sup>2</sup>	Briquettes, Baled	Bale	4.75	67.0	7.09	-	-
Coal <sup>3</sup>	Nuggets (Lignite)	Tonne	399.00	5763.5	6.92	-	-
	Premium Coal, bulk	Tonne	442.00	8267.2	5.35	-	-
	Premium Coal, bag <sup>4</sup>	40 kg Bag	18.33	330.7	5.54	-	+0.2%
	Standard Coal, bulk	Tonne	422.00	7900.0	5.34	-	-
	Standard Coal, bag <sup>4</sup>	40 kg Bag	17.47	316.0	5.53	-	-1.8%
	Standard Anthracite	Tonne	509.00	8735.2	5.83	-	-
	Grade A Anthracite	Tonne	549.00	8960.0	6.13	-	-
Oil <sup>5</sup>	Ovoids (Low Smoke), bulk	Tonne	484.00	8850.0	5.47	-	-
	Ovoids (Low Smoke), bag <sup>4</sup>	40 kg Bag	20.75	354.0	5.86	+0%	-1.2%
	Gas Oil (schedule) <sup>6</sup>	Litre	0.75	10.55	7.09	-5.4%	+2.9%
	Gas Oil (typical discounted price) <sup>7</sup>	Litre	0.63	10.55	5.93	-0.1%	+2.9%
L.P.G.	Kerosene (schedule) <sup>6</sup>	Litre	0.72	10.18	7.06	-5.4%	+2.9%
	Kerosene (typical discounted price) <sup>7</sup>	Litre	0.58	10.18	5.71	-2.1%	+3.3%
	Bulk L.P.G. <sup>8</sup>	Litre	0.71	7.09	9.95	-	+9.7%
	Bottled Butane	11.35 kg Cylinder	30.23	155.7	19.41	-	+3.7%
Natural Gas <sup>9</sup>	Bottled Propane	34 kg Cylinder	81.23	471.0	17.25	-	+4.5%
	Bottled Propane	47 kg Cylinder	112.98	651.0	17.35	-	+4.5%
	Band D1: <=5,556 kWh per annum	kWh	0.083	1.0	8.29	-	+13.7%
Electricity <sup>10,11</sup>	Band D2: >=5,556 <55,556 kWh per annum	kWh	0.068	1.0	6.78	-	+4.0%
	Band D3: >=55,556 kWh per annum	kWh	0.060	1.0	5.99	-	-1.6%
	Band DA: <1,000 kWh per annum	kWh	0.44	1.0	44.33	-	+8.3%
	Band DB: >=1,000 <2,500 kWh per annum	kWh	0.30	1.0	29.79	-	+5.2%
	Band DC: >=2,500 <5,000 kWh per annum	kWh	0.23	1.0	23.38	-	+0.8%
	Band DD: >=5,000 <15,000 kWh per annum	kWh	0.20	1.0	19.92	-	+0.0%
Wood <sup>13,14</sup>	Band DE: >=15,000 kWh per annum	kWh	0.17	1.0	16.59	-	-3.7%
	Night rate <sup>12</sup>	kWh	0.09	1.0	9.13	-	-
	Pellets Bulk Delivery <sup>15</sup>	kg	0.29	4.8	5.97	-1.0%	-1.0%
	Pellets Bagged	kg	0.36	4.8	7.40	-0.4%	-0.7%
	Briquettes	kg	0.38	4.8	7.82	-0.3%	-0.3%
	Hardwood, Small Bag, 20% moisture, Collected	kg	0.50	4.16	12.10	-	-
	Softwood, Small Bag, 25% moisture, Collected	kg	0.34	3.86	8.75	-	-
Hardwood, Full Pallet, 20% moisture, Delivered	kg	0.41	4.16	9.79	-	-	
Softwood, Full Pallet, 25% moisture, Delivered	kg	0.29	3.86	7.62	-	-	
Softwood, Bulk (loose), 25% moisture, Delivered	kg	0.20	3.86	5.11	-	-	

### Special Notes:

Carbon Tax was introduced for Oil, L.P.G and Natural Gas on 1st May 2010. The Carbon Tax was extended to Coal and Peat on 1 May 2013. See [www.revenue.ie](http://www.revenue.ie) for more details.

# Domestic Fuels

## Comparison of Useful Energy Costs for Space Heating

**Notes:**

- 16. Use manufacturers recommended fuel for each appliance.
- 17. Delivered energy costs quoted are for the conditions stated overleaf.
- 18. Efficiencies quoted are bands of typical seasonal heating efficiencies.
- 19. Higher efficiency indicated (50-80%) applies to these fuels when used in stoves / closed room heaters
- 20. Higher efficiency indicated (60-70%) applies to these fuels.
- 21. These specific fuel rates incur standing charges which must be included in all total cost calculations.
- 22. DFE: Decorative fuel effect appliance in an open fire setting.
- 23. Appliances specifically designed as heating (rather than ambient or decorative) i.e. typically with manufactured firebox and convection chamber, with front fret and ashpit cover that provide a controllable air supply.
- 24. Adequate ventilation is required for flueless gas heaters.
- 25. Dwellings with electrically driven heat pumps are most likely to be in electricity consumption bands DD and DE. If a night rate electricity meter is also installed and if the heat pump is run during the night, a unit cost of approximately half that specified can be assumed in the calculations.
- 26. Seasonal Performance Factor is defined as the ratio of heat output from the heat pump and the electricity supplied to the heat pump over the heating season. SPFs quoted assume heat pumps are used in conjunction with low temperature systems such as underfloor heating.
- 27. The Home-heating Appliance Register of Performance (HARP) database contains exact performance specifications of the proposed/installed heating appliance. [www.seai.ie/harp](http://www.seai.ie/harp)

Fuel <sup>16</sup>	Form	Delivered Energy Cost <sup>17</sup> (c/kWh)	Seasonal Efficiency Ratings <sup>18</sup>								Typical Seasonal Efficiencies <sup>26</sup>	
			100%	90%	80%	70%	60%	50%	40%	30%		20%
Peat	Briquettes, Baled	7.09					11.82	14.18	17.72	23.63	35.45	Open Fire, Solid fuel or Gas DFE <sup>22</sup> All 20-30%
Coal	Nuggets (Lignite)	6.92			6.65	9.89	11.54	13.85	17.31	23.08	34.61	Open Fire - Designed to Maximise Heating <sup>23</sup> Coal up to 32% Ovoids (Low Smoke) up to 37%
	Premium Coal, bulk	5.35			6.68	7.64	8.91	10.69	13.37	17.82	26.73	
	Premium Coal, bag	5.54			6.93	7.92	9.24	11.09	13.86	18.48	27.71	
	Standard Coal, bulk	5.34			6.68	7.63	8.90	10.68	13.35	17.81	26.71	
	Standard Coal, bag	5.53			6.91	7.90	9.22	11.06	13.82	18.43	27.65	
	Standard Anthracite <sup>19</sup>	5.83			7.28	8.32	9.71	11.65	14.57	19.42	29.13	
	Grade A Anthracite <sup>19</sup>	6.13			7.66	8.75	10.21	12.25	15.32	20.42	30.64	
	Ovoids (Low Smoke), bulk <sup>19</sup>	5.47			6.84	7.81	9.11	10.94	13.67	18.23	27.34	
Ovoids (Low Smoke), bag <sup>19</sup>	5.86			7.33	8.37	9.77	11.72	14.65	19.54	29.31		
Oil	Gas Oil (schedule)	7.09		7.88	8.87	10.14	11.82	14.19				Stove / Closed Room Heater (without Back Boiler) Peat 45-55% Coal 50-80% Gas 60-75%
	Gas Oil (typical discounted price)	5.93		6.58	7.41	8.47	9.88	11.85				
	Kerosene (schedule) <sup>20</sup>	7.06		7.85	8.83	10.09	11.77	14.12				
	Kerosene (typical discounted price) <sup>20</sup>	5.71		6.35	7.14	8.16	9.52	11.43				
L.P.G.	Bulk L.P.G. <sup>21</sup>	9.95		11.05	12.43	14.21	16.58	19.89				Stove / Closed Room Heater (with Back Boiler) All 65-85%
	Bottled Butane	19.41		21.57	24.27	27.73	32.35	38.82				
	Bottled Propane 34kg	17.25		19.16	21.56	24.64	28.74	34.49				
	Bottled Propane 47kg	17.35		19.28	21.69	24.79	28.92	34.71				
Natural Gas	Band D1: <5,556 kWh per annum	8.29	9.22	10.37	11.85	13.82	16.59	20.74	27.65	41.47	Oil Fired Boiler Gas Oil 55-75% Kerosene 60-75%	
	Band D2: >=5,556 <55,556 kWh per annum	6.78	7.53	8.48	9.69	11.30	13.56	16.95	22.60	33.90		
	Band D3: >=55,556 kWh per annum	5.99	6.66	7.49	8.56	9.98	11.98	14.98	19.97	29.95		
Electricity	Band DA: <1,000 kWh per annum	44.33	44.33	49.25							Gas Fired Boiler All 55-75%	
	Band DB: >=1,000 <2,500 kWh per annum	29.79	29.79	33.09								
	Band DC: >=2,500 <5,000 kWh per annum	23.38	23.38	25.98								
	Band DD: >=5,000 <15,000 kWh per annum	19.92	19.92	22.13								
	Band DE: >=15,000 kWh per annum	16.59	16.59	18.43								
	Night rate	9.13	9.13	10.14								
Wood	Pellets Bulk Delivery	5.97	6.63	7.46	8.53	9.95	11.94	14.92			Wood Product or Biomass Boiler All 55-87%	
	Pellets Bagged	7.40	8.22	9.25	10.57	12.33	14.80	18.50				
	Briquettes	7.82	8.69	9.77	11.17	13.03	15.64	19.54	26.06	39.09		
	Hardwood, Small Bag, 20% moisture, Collected	12.10	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
	Softwood, Small Bag, 25% moisture, Collected	8.75	10.94	12.50	14.59	17.51	21.88	29.18	43.76			
	Hardwood, Full Pallet, 20% moisture, Delivered	9.79	12.24	13.99	16.32	19.58	24.48	32.64	48.96			
	Softwood, Full Pallet, 25% moisture, Delivered	7.62	9.53	10.89	12.70	15.24	19.05	25.41	38.11			
	Softwood, Bulk (loose), 25% moisture, Delivered	5.11	6.39	7.30	8.52	10.22	12.78	17.04	25.55			

Electricity	Electricity used for Heat pumps <sup>25</sup>	Delivered Energy Cost <sup>17</sup> (c/kWh)	Seasonal Performance Factor (SPF) <sup>26</sup> for heat pumps								Typical SPFs for Heat Pump Types <sup>27</sup>
			2.5	3	3.5	4	4.5	5	5.5	6	
Electricity	Band DA: <1,000 kWh per annum	44.33	17.73	14.78	12.66	11.08	9.85	8.87	8.06	7.39	Ground source (horizontal) 2.7 - 4.5 Ground source (vertical) 2.7 - 4.5 Air/Air 2.5 - 4.2 Air/Water 2.5 - 4.0 Water/Water 3.0 - 5.6 Exhaust Air 2.5 - 4.2
	Band DB: >=1,000 <2,500 kWh per annum	29.79	11.91	9.93	8.51	7.45	6.62	5.96	5.42	4.96	
	Band DC: >=2,500 <5,000 kWh per annum	23.38	9.35	7.79	6.68	5.85	5.20	4.68	4.25	3.90	
	Band DD: >=5,000 <15,000 kWh per annum	19.92	7.97	6.64	5.69	4.98	4.43	3.98	3.62	3.32	
	Band DE: >=15,000 kWh per annum	16.59	6.64	5.53	4.74	4.15	3.69	3.32	3.02	2.76	
	Night rate	9.13	3.65	3.04	2.61	2.28	2.03	1.83	1.66	1.52	