
THE INTERNATIONAL
AND EUROPEAN FRAMEWORK

ELECTRICITY AND GAS PRICES IN THE EUROPEAN UNION
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GAS PRICES

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ELECTRICITY AND GAS PRICES IN THE EUROPEAN UNION

Eurostat statistics enable comparison of the prices Italians pay for electricity and gas—depending on type of customer, annual consumption, installed power and load factor—with those paid elsewhere in the European Union.

Italian prices are considered in relation to the European weighted average, calculated as a function of national volume-wise consumption in the year 2000 (separately for residential and business users). This allows for a fairer comparison of prices, since consumption varies considerably from one European country to another.

Prices are expressed in eurocents per kWh for electricity, and in eurocents per cubic metre for gas, by converting local-currency prices into euros at the fixed exchange rate in the case of eurozone countries and at the current exchange rate in the case of countries outside the zone.

Note that, according to the Eurostat definition, the price net of taxes has been stripped not only of bona fide taxes such as excise duties or VAT, but also of any other charge to the consumer that is not included in the industrial price (an “ecotax” is a good example). In Italy’s case this means that Eurostat, when reporting electricity prices, considers general system costs (components A and UC) to be fiscal components of the gross price and excludes them from the net figure. In addition, Eurostat prices do not include the initial hook-up charge.

The gradual demand-side opening of the electricity and gas markets and the structural changes in supply have led tariffs, once set by monopoly rule, to evolve toward more complex pricing systems. Today’s Eurostat statistics reflect this complexity to a very limited degree. Most of the prices it reports, in fact, are regulated or reference prices (maximum or recommended tariffs), and in rare cases only does it report the prices freely negotiated between the parties. Although prices should reflect the most representative market rates for a given supply of electricity or natural gas, often they are simply the prices charged by the former monopoly holder, which tend to lose significance as the incumbent loses shares of the market.

To improve the quality of its data, in 2002 Eurostat set up a task force that proposed an alternative price tracking method. Currently in a trial phase in various European countries, the method requires the tracking of average prices for various consumption categories, instead of actual prices for specific amounts consumed (standard consumers); it should also provide a more accurate view of the end prices paid by consumers who buy energy on the free market. If the trial phase is successful, the method should be fully incorporated as from 1 July 2007, coinciding with the complete liberalization of the electricity and gas markets.

ELECTRICITY PRICES

Prices for residential users Eurostat figures for residential users (Table 1) refer to four classes of annual consumption: 600 kWh, 1,200 kWh, 3,500 kWh and 7,500 kWh.

Prices for July 2004 confirm the Italian peculiarity of a progressive tariff structure (magnified by the tax system, which does not strike the lowest levels of consumption) by which the unit price of electricity rises with an increase in annual consumption.

TABLE 1 **ELECTRICITY PRICES BY CLASS OF CONSUMPTION: RESIDENTIAL USERS**

Prices in eurocents/kWh at current exchange rates as of 1 July 2004

ANNUAL CONSUMPTION	600 kWh		1,200 kWh		3,500 kWh		7,500 kWh	
	GROSS OF TAXES	NET OF TAXES	GROSS OF TAXES	NET OF TAXES	GROSS OF TAXES	NET OF TAXES	GROSS OF TAXES	NET OF TAXES
Austria	19.6	14.2	16.7	11.8	14.3	9.8	13.3	9.0
Belgium ^(A)	19.2	15.6	17.6	14.1	14.4	11.4	13.9	11.0
Denmark	32.8	17.3	26.6	12.3	22.5	9.1	21.3	8.1
Finland	19.5	15.2	13.8	10.6	10.6	7.9	8.9	6.6
France ^(A)	16.7	12.8	14.2	11.1	11.4	9.1	11.1	8.8
Germany ^(A)	25.9	20.3	21.1	16.1	17.2	12.8	15.8	11.5
Greece	8.4	7.8	7.9	7.3	6.7	6.2	7.6	7.0
Ireland	26.6	20.4	19.6	15.7	12.6	10.6	11.4	9.8
Italy^(B)	9.5	7.6	9.9	7.9	19.3	14.1	18.3	13.3
Luxemburg	24.3	22.2	18.3	16.5	13.7	12.2	12.5	11.1
Norway	42.7	33.3	24.2	18.4	12.0	8.6	8.7	5.9
Netherlands	21.1	19.9	19.3	14.1	18.4	10.4	18.0	9.3
Portugal	14.0	13.2	15.9	15.0	13.5	12.8	12.0	11.4
United Kingdom	19.9	18.9	15.0	14.3	8.4	8.0	7.8	7.5
Spain	13.8	11.3	13.8	11.3	10.8	8.9	9.9	8.1
Sweden	29.8	21.3	20.1	13.5	13.7	8.4	12.8	7.7
European weighted average^(C)	20.8	16.8	16.6	13.1	13.4	10.1	12.4	9.3
<i>Italy: differential^(D)</i>	-54.3%	-54.8%	-40.5%	-39.7%	44.3%	39.8%	47.7%	43.0%

(A) Average price in various sample locations.

(B) General system costs (tariff components A and UC) included in price gross of taxes.

(C) Average weighted to reflect national domestic consumption volumes in 2000

(D) Percent difference from European weighted average

Source: AEEG calculations on Eurostat data.

sumption, at least up to a certain point. Italians who consume less power—up to 600 and 1,200 kWh—are charged much lower prices (both gross and net of taxes), sometimes as little as half of other tariffs in Europe.

Those who consume more suffer the opposite: Italian prices are well above the European average, namely 44 percent higher in the 3,500 kWh class and 48 percent higher for consumption of 7,500 kWh per year (prices gross of taxes).

Considering prices net of taxes, compared with July 2003 the distance from the European weighted average for small-volume consumers (600 and 1,200 kWh), already favourable to Italians, has increased by about three percentage points, while for heavier users the gap—this time detrimental to Italian consumers—has shrunk by four percentage points for those in the 1,200–3,500 category and eight points for those consuming 3,500–7,500 kWh per year. In a year-on-year comparison, in fact, Italian prices (net of taxes) have fallen by more than 2.5 percent for minimal consumers, while the corresponding European average has increased by 3 to 4 percent. For larger users, the decrease in Italian prices net of taxes has been even more significant (over 4 percent), including in comparison with the European average, which has dropped by about one and a half percent.

Gross of taxes, the decline in Italian prices was slimmer due to the rise in general system costs. Compared with the European average, in any case, both small consumers and large ones have still profited from the trend, with prices for the former growing more distant from the average and those for the latter growing closer.

Prices for business users

Prices for business users (i.e. all users other than residential—in industry, services and agriculture) are compared on the basis of seven classes of consumption, from 50 MWh to 70 GWh per year (Table 2).

For Italian businesses, prices both gross and net of taxes are consistently above the European average. The differences are smaller for lower classes of consumption and larger for major consumers. In percentage terms the gap is widest for the three intermediate classes (2, 10 and 24 GWh per year).

In the year-on-year trend, Italian prices net of taxes have grown faster than the European average for smaller-scale business consumers, but decreased for large-scale consumers (10 GWh or more per year), despite a rise in the rest of Europe. Thus, the gap with respect to the European average has increased for the first three classes of consumption (up to 2 GWh) and decreased by over 8 percent for businesses consuming the most.

The trend has been similar for prices gross of taxes. As was the case for residential users, for business contracts the rise in general system costs has amplified price growth for small-scale consumers and limited the decline in costs for those in the upper consumption brackets.

TABLE 2 **ELECTRICITY PRICES BY CLASS OF CONSUMPTION: BUSINESS USERS**
Prices in eurocents/kWh at current exchange rates as of 1 July 2004

ANNUAL CONSUMPTION:	50,000 kWh (50 kW, 1,000 hrs)		160,000 kWh (100 kW, 1,600 hrs)		2 GWh (500 kW, 4,000 hrs)		10 GWh (2,500 kW, 4,000 hrs)	
COUNTRIES	GROSS OF TAXES	NET OF TAXES	GROSS OF TAXES	NET OF TAXES	GROSS OF TAXES	NET OF TAXES	GROSS OF TAXES	NET OF TAXES
Austria	14.0	9.6	12.5	8.4	9.0	5.4	7.8	4.5
Belgium ^(A)	15.5	12.0	14.4	11.2	9.6	7.4	9.0	6.9
Denmark	11.8	7.1	11.2	6.8	10.8	6.4	-	-
Finland	8.6	6.6	8.2	6.3	6.9	5.2	6.9	5.2
France ^(A)	10.9	8.4	10.0	7.7	6.9	5.3	6.9	5.3
Germany ^(A)	18.7	14.9	14.3	11.1	9.9	7.3	9.7	7.1
Greece	10.0	9.3	9.2	8.5	6.8	6.3	6.8	6.3
Ireland	16.1	13.1	13.5	11.3	9.2	7.9	8.8	7.5
Italy^(B)	16.1	11.6	13.7	9.9	12.1	8.6	10.7	8.1
Luxemburg	16.4	1.7	12.0	10.6	8.1	7.0	5.2	4.8
Norway	8.3	6.7	8.7	7.0	6.0	4.9	5.2	4.2
Netherlands	-	-	-	-	-	-	-	-
Portugal	10.8	10.3	8.9	8.5	7.1	6.8	7.1	6.8
United Kingdom	9.6	7.5	8.7	7.1	6.4	5.2	5.8	4.7
Spain	11.8	9.7	8.2	6.8	6.6	5.4	6.2	5.1
Sweden	7.2	7.2	6.5	6.5	5.5	5.5	5.1	5.1
European weighted average^(C)	13.1	10.3	11.0	8.6	8.3	6.3	7.8	6.0
<i>Italy: differential^(D)</i>	<i>22.9%</i>	<i>12.7%</i>	<i>24.1%</i>	<i>14.8%</i>	<i>45.9%</i>	<i>35.8%</i>	<i>38.0%</i>	<i>34.5%</i>

(A) Average price in various sample locations.

(B) General system costs (tariff components A and UC) included in price gross of taxes.

(C) Average weighted to reflect national business consumption volumes in 2000.

(D) Percent difference from European weighted average .

Source: AEEG calculations on Eurostat data.

GAS PRICES

Prices for residential users

For households where gas is used mainly for cooking, Italian prices gross and net of taxes are among the lowest in Europe (Table 3). Households that also use natural gas for heating see some of the highest rates gross of taxes, preceded only by Sweden and Denmark, with a differential of more than 50 percent on the average European price. Because of Italy's heavy fiscal charge on these classes of consumption (2,200 and 3,300 m³ per year), the gap net of taxes comes down to about 14-18 percent.

TABLE 3 NATURAL GAS PRICES BY CLASS OF CONSUMPTION: RESIDENTIAL USERS

Prices in eurocents/m³ at current exchange rates as of 1 July 2004; 1 GJ = 26.268 m³

ANNUAL CONSUMPTION	8.37 GJ (219.86 m ³)(A)		16.74 GJ (439.73 m ³)(A)		83.7 GJ (2,198.63 m ³)(B)		125.6 GJ (3,299.26 m ³)(B)	
COUNTRIES	GROSS OF TAXES	NET OF TAXES	GROSS OF TAXES	NET OF TAXES	GROSS OF TAXES	NET OF TAXES	GROSS OF TAXES	NET OF TAXES
Austria	80.6	57.2	65.3	45.2	50.9	33.9	49.5	32.8
Belgium	73.2	59.3	67.7	54.8	40.8	32.5	39.0	31.0
Denmark	138.5	77.1	94.4	41.7	94.4	41.7	94.4	41.7
France ^(C)	71.5	61.7	60.9	51.8	39.1	33.3	36.7	31.3
Germany ^(C)	86.1	68.4	69.8	54.3	48.9	36.3	46.4	34.2
Ireland	81.7	72.0	67.8	59.8	34.3	30.2	31.5	27.8
Italy^(C)	57.5	46.6	52.9	42.4	64.1	37.1	64.5	37.0
Luxemburg	54.2	51.1	47.2	44.6	27.4	25.9	27.0	25.4
Netherlands ^(D)	44.8	65.8	47.9	46.6	50.4	31.2	50.6	29.9
Portugal	72.4	68.9	66.5	63.3	46.9	44.6	45.3	43.1
United Kingdom	54.0	51.4	39.6	37.7	28.1	26.8	27.1	25.9
Spain	62.7	54.1	55.5	47.9	43.2	37.2	42.1	36.3
Sweden	91.6	51.5	81.3	43.2	74.0	37.1	73.5	36.8
European weighted average^(E)	65.7	57.9	54.6	46.0	43.9	32.6	42.8	31.4
<i>Italy: differential^(F)</i>	-12.4%	-19.4%	-3.1%	-7.7%	45.8%	13.7%	50.9%	17.9%

(A) For cooking and hot water.

(B) For cooking, hot water and heating.

(C) Average price in various sample locations.

(D) Since 1 January 2001 all natural gas consumers receive a refund (in year 2003 it is of 96,00). For that reason, the price net of taxes may be higher than the gross price.

(E) Average weighted to reflect national domestic consumption volumes in 2000.

(F) Percent difference from European weighted average.

Source: AEEG calculations on Eurostat data.

In a 12-month comparison, Italian prices have decreased for all classes, both net of taxes (minus 2-3 percent) and gross (minus 1-2 percent). Net of taxes, the percent difference from the European average has doubled for small residential users and decreased slightly for other consumers. The trend in the European average was affected by price growth in the U.K. and Denmark, and, especially for large-scale consumers, by falling prices in France, Portugal and Spain.

Prices for business users

For business users, the latest price figures for Italy date to July 2003. At the time, for users consuming the least, Italian prices were among the highest in Europe: about 12 percent more than the European average gross of taxes and 20 percent more on a net-

of-taxes basis. On the other hand, unlike for residential rates, gas prices for business users differed less from the European average once they fell into the higher classes of consumption. For businesses consuming more than 10 million m³ per year, the price gross of taxes was 4.5 percent higher than the weighted average, while for those with an annual consumption of around one million m³ the gap was actually negative.

Elsewhere in Europe, where figures are up-to-date as of July 2004, data of note include high gross and net prices in Denmark for smaller consumers. The greatest gap with respect to the European average is in Sweden, where large-scale consumers pay over 35 percent more net of taxes.

TABLE 4 NATURAL GAS PRICES BY CLASS OF CONSUMPTION: BUSINESS USERS

Prices in eurocents/m³ at current exchange rates as of 1 July 2004; 1 GJ=26,268 m³

ANNUAL CONSUMPTION	418.6 GJ (10,995.8 m ³) ^(A)		4,186 GJ (109,958 m ³) ^(B)		41,860 GJ (1,099,578 m ³) ^(C)		418,600 GJ (10,995,785 m ³) ^(D)	
COUNTRIES	GROSS OF TAXES	NET OF TAXES	GROSS OF TAXES	NET OF TAXES	GROSS OF TAXES	NET OF TAXES	GROSS OF TAXES	NET OF TAXES
Austria	43.8	28.4	35.9	22.2	34.5	21.1	-	-
Belgium	36.4	28.9	28.2	23.3	23.9	19.8	17.3	14.3
Denmark	55.9	41.7	50.1	37.2	29.0	20.5	24.9	17.4
Finland	-	-	39.8	30.8	31.9	24.4	23.6	17.5
France ^(E)	32.7	27.5	27.4	22.9	25.6	20.9	19.6	15.3
Germany ^(E)	43.4	31.6	37.7	26.7	35.1	24.4	29.9	19.9
Ireland	33.5	29.5	26.7	23.5	-	-	-	-
Italy ^(E)	-	-	-	-	-	-	-	-
Luxemburg	26.7	25.2	24.9	23.5	24.5	23.1	16.0	15.1
Netherlands	45.6	28.1	42.3	27.4	22.8	16.1	18.1	13.9
Portugal	40.5	38.4	31.0	29.2	23.2	21.6	16.0	14.2
United Kingdom	26.3	21.2	23.2	18.6	21.5	17.2	15.5	12.9
Spain	33.5	28.9	19.6	16.9	18.6	16.0	17.2	14.8
Sweden	37.8	33.6	34.2	30.1	31.2	27.1	27.8	23.5
European weighted average^(F)	36.5	27.8	30.7	23.2	26.4	20.1	21.0	15.8
<i>Italy: differential^(G)</i>	-	-	-	-	-	-	-	-

(A) No load factor.

(B) With load factor of 200 days.

(C) With load factor of 200 days, or 1600 hours.

(D) With load factor of 250 days, or 4,000 hours.

(E) Average price in various sample locations.

(F) Average weighted to reflect industrial consumption volumes in 2000.

(G) Percent difference from weighted average.

Source: AEEG calculations on Eurostat data.