

Energy prices and costs report – European Commission, 22 January 2014 Main findings for the ceramic industry (Cerame-Unie's summary)

1. NATURAL GAS - Trend of prices within the EU

- a. Bricks and roof tiles
- > Pages 102/3: The average price of natural gas has increased by 30% between 2010 and 2012

Table 22 Descriptive statistics for natural gas prices paid by the 13 sampled EU producers of bricks and roof tiles (€/MWh)

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Natural Gas price (€/MWh)	2010	2011	2012	% change 2010- 2012	
EU average	30,4	33,2	39,5	29,9	

b. Wall and floor tiles

Page 106: The average price of natural gas has increased by 27% between 2010 and 2012

Table 24 Descriptive statistics for natural gas prices paid by 12 sampled EU producers

of wall and floor tiles (€/MWh)

Natural Gas price (€/MWh)	2010	2011	2012	% change 2010-2012
EU average	25,0	26,2	31,7	26,8

- c. Comparison with other energy intensive industries within the EU
- Page 101: The difference in the price of natural gas paid by an average producer of bricks and an average producer of ammonia is of 7.0 €/MWh (i.e. around 28%)

Table 20 Average natural gas prices and median consumption in various sectors (69 plants)

	Bricks	Tiles	Steel	Glass	Ammonia
Average price (€/MWh)	34.0	32.0	32.1	27.0	26.5
Median consumption (GWh)	44.3	142.5	288	406.2	4,446.3

Source: CEPS, calculations based on questionnaires

2. ELECTRICITY - Trend of prices within the EU

a. Bricks and roof tiles

> Page 49: Average electricity prices producers have increased by about 13% between 2010 and 2012

Table 7 Descriptive statistics for electricity prices paid by the 13 sampled brick and roof tile producers in the EU (€/MWh)

Electricity price (€/MWh) €c/kWh	2010	2011	2012	% change 2010- 2012
EU average	90,4	93,4	102,4	13,3

Page 50: Electricity price components: energy still represents the most significant component but its share of the total price has decreased in 2010-2012. This development is related to



the stronger increase in other components, with grid fees going up by 21%, other non-recoverable taxes and levies increasing by 28.4% and RES levy by 73.0%. Between 2012 and 2012, the share of components other than energy in the total average electricity price went up from 35% to 42%.

b. Wall and floor tiles

➤ Page 52: The average electricity price has increased by more than 20% between 2010 and 2012

Table 9 Descriptive statistics for electricity prices paid by the 12 sampled EU wall and floor tile producers (€/MWh)

Electricity price (€/MWh)	2010	2011	2012	% change 2010-2012
EU average	80,8	88,8	97,6	20,8

- ➤ Electricity price components: energy still represents the most significant one although its relative weight for the whole sample decreased from 70% to 63% in 2010-2012. This is mainly the consequence of the strong increase of the RES levy component which increased by 119%. Grid fees and other non-recoverable taxes also increased but at a lower pace (about 20%)
- c. <u>Comparison with other sectors</u>
- Page 45: "An average aluminium producer pays 42.9 €/MWh, that is 63.7 €/MWh less than an average bricks producer" (i.e. 1.5 times higher)

Table 4 Average electricity prices and median consumption in various sectors (89 plants)

	Bricks	Tiles	Glass	Amm.	Chlorine	Steel	Alum.
Average price (€/MWh)	106.5	94.7	79.3	71.7	58.2	66.1	42.9
Median consumption (GWh)	5.3	12.7	27.4	83.2	384.8	436.0	1,915.0

Source: CEPS, calculations based on questionnaires

3. ENERGY COSTS

a. Bricks and roof tiles (Page 144)

Table 35- Breakdown of production costs for bricks and roof tiles (EU estimated average)

Energy	30%-35%
Labour	25%-30%
Raw materials	20-25%
Other production costs	15%-20%
Total	100%

Source: Cerame-Unie (2013)



b. Wall and floor tiles (Page 146)

Table 38 Breakdown of production costs for wall and floor tiles (EU estimated average)

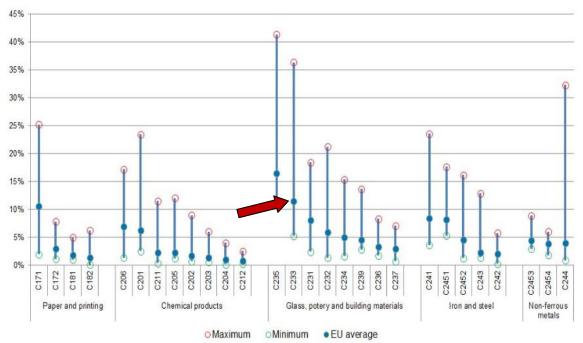
Energy	25%-30%
Labour	25%-30%
Raw materials	30-35%
Other production costs	10%-15%
Total	100%

Source: Cerame-Unie (2013)

c. <u>Comparison with other sectors (page 135)</u>

The figure shows that the ceramic sector 233 (Clay building materials, i.e. bricks & roof tiles and wall & floor tiles together) is the **second most energy-intensive sector**

Figure 90 Share of energy-related costs among the production costs in some selected sub-sectors of energy intensive industries (lowest, highest Member State values and EU averages, 2010)



Source: Eurostat, Structural Business Statistics The name of the codes in the chart can be found in the legend below:

4. INTERNATIONAL COMPARISON

a. <u>Natural gas</u>

- Bricks and roof tiles (Page 178): The case study shows that two EU-based producers pay about 3.7-3.9 times as much for gas as a similar plant in Russia. The comparison of two other EU-based plants point that these pay for gas 2.8-3 times as much as a similar US-based plant.
- > Wall and floor tiles (Page 179): The case study shows that two EU-based pay about **3-4 times** as much for gas as a similar plant in **Russia**. The comparison between two EU-based plants and a **US**-based plant point to a natural gas price difference in the range of **3.6-3.7 times**.



b. <u>Electricity</u>

- ➢ Bricks and roof tiles (Page 176): A comparison of 2 EU-based brick and roof tile producers shows that in 2012 one of these plants paid 42% more for electricity than the Russian plant with comparable characteristics, while the other EU-based plant paid almost twice as much as the Russian plant. Comparison of two EU-based brick and roof tile producers in 2012 shows that one of these paid for electricity 2.7 times as much as a US-based plant, while the other paid 10% more than the US-based competitor.
- Wall and floor tiles (Page 177): electricity prices paid by two EU-based producers were 2.2 to 2.6 times these in the plant in the US. The price gap between one Russian plant and the two EU-based plants is in the range of factor 8.5 to factor 10.