COMMISSION STAFF WORKING DOCUMENT
Accompanying the document


Energy prices and costs in Europe
ANNEX 2 – FACTORS DRIVING ENERGY COSTS IN MANUFACTURING IN THE EU SECTORS

This annex contains the results of the energy costs decomposition analysis of the various sectors analysed between 2010 and 2015 in the Staff Working Document (see section 6.4).

The decomposition of energy costs is following the formula below:

\[ \Delta \text{Energy Costs} = (\text{real}) \text{ output effect} + (\text{real}) \text{ energy intensity effect} + \text{price effect} + \text{residual} \]

Where

- (real) Output effect: the effect of changes in real production (GVA),
- (real) Energy intensity effect: the effect of changes in energy per unit of real output (GVA) over time due to energy efficiency measures, behavioural changes and industry structural change;
- Price effects: the effect of changes in coal, gas and electricity prices.
- The residual, which includes the effect of unexplained data discrepancy with Eurostat SBS data on 'purchases of energy'.

Be aware that the residual can be rather significant in some specific cases for which the results of the analysis should be taken with precaution.
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Figure 2: Grain mill and starch products

Figure 3: Manufacture of beverages
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Figure 12: Glass
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Figure 14: Clay building materials

Figure 15: Ceramics
<table>
<thead>
<tr>
<th>C235 - Manufacture of cement, lime and plaster - EU28</th>
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<td>Contribution to change in energy costs over 2010-2015 (%)</td>
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<td>Price effect</td>
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<td>-13%</td>
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Figure 16: Cement

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<th>C237 - Cutting, shaping and finishing of stone - EU28</th>
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<td>Contribution to change in energy costs over 2010-2015 (%)</td>
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Figure 17: Stone

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<tr>
<th>C241 - Manufacture of basic iron and steel and of ferro-alloys - EU28</th>
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<td>Contribution to change in energy costs over 2010-2015 (%)</td>
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<td>Price effect</td>
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Figure 18: Basic iron and steel
Figure 19: Aluminium

Figure 20: Casting of Metals

Figure 21: Fabricated metal products
Figure 22: Electrical equipment

Figure 23: Machinery and equipment

Figure 24: Computer and electronic products
Figure 25: Motor vehicles and trailers

Figure 26: Transport equipment

Figure 27: Other Manufacturing
Figure 28: Machinery repair and installation

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<td>Contribution to Change in Energy Costs over Time</td>
<td>7%</td>
<td>8%</td>
<td>-22%</td>
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