
# 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:

$$∆Energy Costs=\left(real\right) output effect+\left(real\right) energy intensity effect+price effect+residual$$

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,** whichincludes 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 1: Fruit and vegetables



Figure 2: Grain mill and starch products



Figure 3: Manufacture of beverages



Figure 4: Textiles



Figure 5: Wood



Figure 6: Pulp, paper and paperboard manufacture



Figure 7: Paper and paperboard articles



Figure 8: Refineries



Figure 9: Man-made fibres



Figure 10: Pharmaceutical products



Figure 11: Plastics



Figure 12: Glass



Figure 13: Refractory products



Figure 14: Clay building materials



Figure 15: Ceramics



Figure 16: Cement



Figure 17: Stone



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