World chemicals sales: geographic breakdown

- World chemicals turnover was valued at €2353 billion in 2010. Data for 2010 confirms that solid recovery of the chemicals industry occurred during the year. Sales in value terms were up in 2010 by 26.9 per cent compared with 2009, a year when the economic and financial crisis was in full swing. Emerging economies contributed largely to the worldwide recovery of the sector in 2010.

- The European chemicals industry, including the European Union and the Rest of Europe, is still in a strong position, posting sales of €578 billion in 2010, one-fourth of world chemicals sales in value terms. Worldwide competition is getting fiercer, however, witnessed by the European Union losing its top ranking in terms of sales to China for the second consecutive year. Chemicals sales in Asia are more than double that of the European Union. Taken together, Europe, Asia and North American Free Trade Area account for 92.7 per cent of world chemicals turnover.

Source: Cefic Chemdata International

* Rest of Europe = Switzerland, Norway and other Central & Eastern Europe

Unless specified, chemicals industry excludes pharmaceuticals

Unless specified, EU refers to EU-27
Emerging economies outpace industrial countries in chemicals production

- Developments during the previous 10 years from 2000 to 2010 indicate that the European Union was the clear leader in terms of world chemicals sales, but the region has gradually lost ground to China and Asia (excluding Japan).
- The European Union contribution to world chemicals sales declined in 2010 by 8.3 percentage points compared with 2000. In fact, the total value of sales in the European Union has been growing continuously, but overall world chemicals sales are growing at an even faster clip. The level of world chemicals sales in value terms increased by 63.7 per cent in 2010 compared with 2000.

Source: Cefic Chemdata International

*Asia excluding China and Japan

Unless specified, chemicals industry excludes pharmaceuticals

Unless specified, EU refers to EU-27

World Sales

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage share</th>
<th>2000: €1437 billion</th>
<th>2010: €2353 billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU-27</td>
<td>29.2</td>
<td>1437 billion</td>
<td>2353 billion</td>
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<tr>
<td>NAFTA</td>
<td>20.9</td>
<td>1397 billion</td>
<td>2257 billion</td>
</tr>
<tr>
<td>Japan</td>
<td>19.1</td>
<td>1325 billion</td>
<td>2081 billion</td>
</tr>
<tr>
<td>Rest of Asia*</td>
<td>12.0</td>
<td>1270 billion</td>
<td>1948 billion</td>
</tr>
<tr>
<td>China</td>
<td>14.6</td>
<td>1540 billion</td>
<td>1990 billion</td>
</tr>
<tr>
<td>Latin America</td>
<td>6.5</td>
<td>306 billion</td>
<td>472 billion</td>
</tr>
<tr>
<td>Rest of Europe</td>
<td>6.4</td>
<td>300 billion</td>
<td>475 billion</td>
</tr>
<tr>
<td>Rest of the world</td>
<td>24.4</td>
<td>1595 billion</td>
<td>1815 billion</td>
</tr>
</tbody>
</table>

Source: Cefic Chemdata International

*Asia excluding China and Japan
Chemicals Industry Profile

Chemicals sales by country: top 30

1. Chemicals Industry Profile
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   World chemicals sales by region
   Chemicals sales by country: top 30
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China – the biggest chemicals producer in 2010

- In 2010, the 30 largest chemical-producing countries had a combined turnover of €2103 billion.
- Twelve of the top 30 major countries are Asian, generating chemicals sales of €1026 billion. This figure represents nearly 49 per cent of the top 30 and 43.6 per cent of the share of world chemicals sales.
- Eleven of the top 30 major countries are European, generating chemicals sales of €506 billion. This figure represents 24 per cent of the top 30 and 21.6 per cent of the share of world chemicals sales.

Source: Cefic Chemdata International

Unless specified, chemicals industry excludes pharmaceuticals
Unless specified, EU refers to EU-27
Eight countries account for 90 per cent of EU chemicals production

- Germany remains the largest chemicals producer in Europe, followed by France, Italy and the Netherlands. Together, these four countries generated in 2010 64 per cent of EU chemicals sales, valued at €315 billion. The share rises to 88.9 per cent, or €437 billion, when including the United Kingdom, Spain, Belgium and Poland.

- The other 19 EU countries in 2010 generated 11.1 per cent of EU chemicals sales, valued at €54 billion, half of which was attributable to four EU countries – Sweden, Austria, Czech Republic and Finland.

Sources: Eurostat and Cefic Chemdata International

Unless specified, chemicals industry excludes pharmaceuticals

Unless specified, EU refers to EU-27
The European Union is the world's top exporter and importer of chemicals

- In 2010, the key trading regions were the European Union, Asia – including China and Japan – and the market comprising North American Free Trade Agreement countries.

- The European Union was the leading exporter and importer of chemicals in the world, accounting for 41 per cent of global trade, defined as the total value of exports plus imports. This includes intra-EU trade, mainly for reasons of comparison with other regions, as these figures include this type of trade activity as well.
1. Chemicals Industry Profile

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Petrochemicals and polymers account for about half of EU chemicals sales

- Output from the EU chemicals industry covers three wide ranges of products: base chemicals, speciality chemicals and consumer chemicals.
- Base chemicals cover petrochemicals and derivatives and basic inorganics. They are produced in large volumes, and are sold within the chemicals industry itself or to other industries. In 2009, they represented 59.7 per cent of total EU chemicals sales, increasing in 2010 to 61.6 per cent.
- Specialty chemicals cover the auxiliaries for industry, paints & inks, crop protection, and dyes & pigments. Specialty chemicals are produced in small volumes but nevertheless represented 23.6 per cent of total EU chemicals sales in 2010.
- Consumer chemicals are sold to final consumers, such as soaps and detergents as well as perfumes and cosmetics. Together, they represented 12.8 per cent of total EU chemicals sales in 2010.

Comparing 2009 to 2010 on the contribution of each sector to EU chemicals sales, data show that the polymers and petrochemicals sectors increased their contributions in 2010 compared with 2009. This is due to polymers and petrochemicals being seriously affected by the economic crisis in 2009 and experiencing a strong recovery in 2010. Consumer chemicals and specialty chemicals were less affected by the crisis, however, and registered a less pronounced recovery.
Intra-EU trade increased significantly due to success of EU internal market

- EU chemicals sales were valued at €491 billion in 2010. Sales to EU partner countries have more than doubled during the period from 1995 to 2010 (261.6 versus 97.5).
- The European internal market during that 15-year period had a profoundly positive effect on the chemicals industry. Removing both trade and non-trade barriers inside the EU area has been a key driver for growth and competitiveness of the chemicals industry in the European Union.
- The internal market, today numbering more than 500 million consumers, is a key competitiveness factor. With the accession of new EU member states in 2004 and 2007, the internal market has received an intra-trade boost.

Sources: Eurostat and Cefic Chemdata International

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Intra-EU sales, excluding home country sales, account for more than half of total chemicals sales

- EU chemicals sales in 2010 were 48 per cent higher compared to the value in 1995. Over the period 1995-2010, EU chemicals sales have increased on average by 2.7 per cent per annum.
- By 2010, intra-EU sales – excluding domestic sales – accounted for more than half of total chemicals sales by the sector in the European Union.
- While intra-EU sales are rising, the importance of domestic sales is decreasing, however, only accounting for 18 per cent of total EU sales.
- Twenty-nine per cent of chemicals sales are exported outside of the EU market. European Union neighbour countries, the NAFTA trade bloc, and Asia are the three primary markets for EU chemicals exports.

Source: Cefic Chemdata International
1. Chemicals Industry Profile

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EU chemicals industry sales structure

Contribution of the chemicals industry to the EU economy

- The chemicals industry directly accounts for 1.1 per cent of total EU gross domestic product, down from 1.5 per cent in 1995
  - The chemicals industry’s contribution to EU gross domestic product, or GDP, amounts to 1.1 per cent. This may seem small at first, but should be reassessed taking into consideration both the shrinking contribution of industry as a whole to GDP in advanced economies along with a rise in the service sector. The manufacturing sector share of GDP in the European Union declined from 23.7 per cent in 1995 to 18.7 per cent in 2010.
  - There is a wide contribution of chemicals products that are present in all branches of the economy. For example, the chemicals industry in Germany is the most important supplier of innovative materials for manufacturing. Chemicals represent 10 per cent of the supply of input and intermediary products and they show an above average research & development content.

Sources: Eurostat and Cefic Chemdata International

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**Chemicals Industry Profile**

**Added value* in the EU manufacturing sector (2007)**

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**EU chemicals industry – the third largest manufacturing sector in terms of added value**

- Added value at factor costs is defined as the gross income from operating activities after adjusting for operating subsidies and indirect taxes. Value adjustments, such as depreciation, are not subtracted. (Source: EU Commission, SBS database)

- According to Eurostat data, 34.5 million people were employed in 2.3 million enterprises in the EU-27 manufacturing sector in 2007. Together they generated €1813 billion of added value.

- The chart above shows the largest three subsectors in 2007 in terms of added value, at the NACE division level. The three top subsectors were: machinery and equipment; food and beverages; and chemicals, including pharmaceuticals. Sectors such as tobacco, leather and office machinery & computers, however, contributed to less than one per cent of the EU manufacturing added value in 2007.

- There is great diversity between manufacturing subsectors in EU member states. Some manufacturing activities have relatively low labour productivity, personnel costs per employee and investment rates, such as the manufacture of textiles, leather products, wearing apparel, compared with those with considerably higher values for the same indicators, such as chemicals.