The Future of the Chemical Industry by 2050

In 2010, the largest chemical market was China, with 25% of the global sales and $763 billion, followed by Europe with 21% ($651 billion) and the U.S. with 17% ($524 billion). The REST group was also significantly large with 23% of the global chemicals sales and almost $720 billion. By 2050 and under the business-as-usual scenario (BAU) modified scenario several changes are expected. The REST group will be the largest market for chemicals with 28% of the world, accounting for almost $4.2 billion. China will be the largest single market, excluding the REST group, with 27% of the market $4 billion market.

However Europe and the U.S. will see their global presence in favor of India. The EU will move from being the second largest chemical market in the world in 2010 to being the fifth largest when including the REST Group with just 9% of the market and $1.3 billion.

In a similar pattern, the U.S. will move from being the third largest chemical market to being the fourth when including the REST, with 9% of the total and $1.3 billion. India is expected to become the second largest individual market after China, excluding the REST group, with 20% of the global chemical sales, accounting for almost $3 billion by 2050.

In every scenario, India is expected to become the world's largest chemical market during the period 2030 to 2040, when it will surpass the EU and the U.S.; the U.S. is expected to pass Europe by 2040.

Brazil is also expected experience major growth and transformation, becoming the fifth largest chemical market in the world by 2030, after surpassing Japan. Brazil's chemical market will grow from $100 billion in 2010 into $477 billion by 2050. The Russian chemical market is also expected to surpass the Canadian chemical market during this decade. The Russian chemical market is expected to grow from $42 billion in 2010 into $208 billion by 2050.
Pharmaceuticals

The pharmaceutical market is also expected to undergo a huge structural shift, with an unprecedented change of focus from the advanced economies into BRIC.

As in the previous cases, massive increases in market size will be the result of a combination of large populations and in increases in per capita demand; however, there will still be large difference in per capita demand among the different countries and areas of our analysis.

In 2010, 75% of the world pharmaceuticals sales were in the advanced economies, with the U.S. alone accounting for more than one third of the world pharmaceutical
sales and EU-27 for another 28%.

By 2050 and under the modified BAU scenario, several changes are expected, although the advanced will still have the world's largest pharmaceutical market. The U.S. is expected to remain as the largest pharmaceutical market in the word with 24%, and accounting for $925 billion by 2050. In other words, the whole U.S. pharmaceutical market in 2050 will be as big as the world pharmaceutical market was in 2010.

China, with 19% of the world demand and $752 billion, will be the second largest pharmaceutical market. Europe will follow with a 14% ($566 billion) and India will take over fourth place with 12% of the world demand ($456 billion).

Japan, despite increasing the total size of its market by a staggering $43 billion - from $71 billion in 2010 to 114 $billion in 2050 - will lose its third position (2010) in the world pharmaceutical markets to China and India. Despite the massive growth expected in pharmaceuticals sales in the BRIC and REST economies, there will still be significant differences among the different economic groups and countries in pharmaceutical demand on a per capita basis.

(Excerpt from the Wiley book *The Future of the Chemical Industry by 2050* by Rafael Cayuela Valencia)

See also:

**Chemical Industry in Transition**

Wiley Author Rafael Cayuela Valencia Examines Long-term Trends

**Development of Pharmaceutical Sales**

![Graph showing the development of pharmaceutical sales by 2010 and 2050.](source: Future of the Chemical Industry by 2050 by Rafael Cayuela Valencia)
Pharmaceutical industry
in billion SUS (2009 dollar)

Source: Future of the Chemical Industry by 2050
by Rafael Cayuela Valencia © CHEManager Europe

Autor(en)

Rafael Cayuela Valencia