

Hydrocarbons Expected to Meet at Least 70% of the Growth in World Energy Consumption Up to 2020, Says Enerdata

Presenting its latest energy statistics and long-term projections, Enerdata indicated that the growth in world energy demand up to 2020 will mainly be covered by fossil fuels. It forecasts that global energy consumption will rise from 11.4 billion tons of oil equivalent (toe) per year to 14.5 billion toe/year between 2005 and 2020. Natural gas could account for more than 40% of that increase and oil for 30%, making a total of 70% for hydrocarbons. As for coal, it is expected to account for 15% of the growth in consumption. On the other hand, the share of nuclear-generated electricity and hydroelectricity is forecast to rise only "slowly". In addition, renewable energy sources are expected still to be making only a "modest" contribution in 2020.

China and India are expected to be the "two main engines" of energy growth during this period. Between them, they could generate one-third of the increase in world energy consumption up to 2030. Asia as a whole is forecast to account for a half of world energy consumption growth and the Americas for one-fifth, with the United States in particular contributing 8%. There will also be a "sharp upsurge" in the consumption of Africa and the Middle East. On the other hand, the growth prospects for the European Union and the former Soviet Union are poor, according to Enerdata.

As far as 2005 is concerned, Enerdata estimates that global oil consumption grew by 1.3%, whereas total energy consumption increased by 2.5%. In terms of world energy market share, oil shed 0.4 percentage points to 34.8% while coal gained 0.7 points to 25.4%, confirming the fact that this last energy source's penetration of the market "is accelerating." The share of natural gas was unchanged at 20.6%, as were those of biomass (10.2%) and nuclear and hydroelectricity (9% between them).

World oil consumption increased from 3.85 billion tons in 2004 to 3.89 billion tons last year, when demand in the OECD area showed "almost complete stability" and there was even a slight decline in the United States. Enerdata points out that, if China is excluded, last year confirmed the "relative stability of world [consumption] growth of 1.1% a year since 1990," despite the sharp rise in crude oil prices.

World oil demand, which has become very captive over the years, is concentrated today in the transportation sector and in non-energy applications (petrochemical production), which explains the "very low" degree of price-elasticity. Two figures cited by Enerdata illustrate this trend. The transport and petrochemical sectors represented 71% of world oil consumption (and 87% of North American consumption) in 2005, and these two sectors accounted for 90% of the growth in world demand between 2000 and 2005 (see charts).

World natural gas consumption rose to an estimated 2,840 billion cu m (2.84 trillion cu m) last year from 2.79

trillion cu m in 2004. Demand grew in all regions except North America, where the decline was "confirmed and accelerated." A new fact highlighted by Enerdata is that "it is principally Asia that is driving world demand growth," while there is growing confirmation of the buoyancy of European demand.

Enerdata also points out that the decline in energy intensity at a world level has slowed since 2001 due to a reversal of the trend in China, where intensity has been rising for the past four years, even though the increase in its intensity was lower in 2005 due to the price effect. Outside China, notes Enerdata, the energy consumption of almost all emerging and developing countries has increased less slowly than their gross domestic product since 2000, except in the Middle East. □

Contact: www.enerdata.fr

