## СЕКЦІЯ 16. СУЧАСНІ ТЕХНОЛОГІЇ В ЕКОНОМІЦІ ТА МЕНЕДЖМЕНТІ

## GEOLOGICAL AND INDUSTRIAL COAL RESOURCES IN LEADING COAL PRODUCER COUNTRIES

## Ferenc Kovács

## University of Miskolc, Hungary

Nowadays (2008, 2010), the rate of coal in the world's electricity production of  $20 \cdot 10^{12}$  kWh/year is a round 40%. It is similarly high in leading coal producer countries: 47% in both the US and Germany. For the future (2020, 2030, 2050), long-term forecasts/plans predict a similarly high rate: 38% in the U an, a round 50% in Germany. with the world average being predicted to be 43% in 2035 with a production of  $35 \cdot 10^{12}$  kWh/year.

The present (2010) coal production of 6.3 billion t/year may increase to 11 billion t/year by the end of the 21st century with the century average amounting to 8 billion t/year.

On the basis of official reports and expert estimations, the forecast data for both geological and, in greater detail, explored industrial coal resources (that can be economically exploited) are analysed. The wide range of professional estimations give approximately identical figures: the world's industrial coal resources are 700 -1,000 (1,200) billion tons while estimated geological resources amount to 5,000 - 8,000 (15,000) billion tons.

On the basis of the production (demand) data forecast for the 21st century, the average period of supply in industrial resources is 200-300 years in the large coal producer countries (over 1,000 years in Russia) while the world average is 160 years due to China's figure of 40 years attributable to exceptionally intensive production there. The average of the 8 leading coal producer countries (China's 40 year figure included) is approximately identical with this while the average of 7 countries (China excluded) is a round **400 years**.

On the basis of the estimated geological resources (5,000 - 8,000 billion tons) and subject to further successful explorations, period of supply may even be 500-800 years.

With a 10 Mt/year production volume, Hungary has supplies for 330 years, and with an unjustifiably low 4 Mt/year production volume, for 800 years.

Included of the Ukrainian economy in European and world the economic systems are objective and irreversible a process. Place, that in this system occupies Ukraine is largely determined by ability of enterprises to compete not only at the internal market but also on foreign markets. Thus there are many problems that require an urgent decision. Than before will be worked out these problems, the before Ukraine will be able to go out to the international market, enter to the European concord and take in him the proper place in a global economic environment.

For including of the Ukrainian enterprises to the international market it is necessary to decide the row of problems, in particular establishing connections and collaboration of domestic enterprises with foreign, to conduct development, perfection and modernization of economic clear zones of ménage. For the decision of problem data, it is necessary:

• to define essence and maintenance of integration of enterprises, as an economic category;

• to work out methodological approaches in relation to adaptation of positions of major theoretical conceptions of integration of enterprises to the home terms;

• to work out conceptions of realization of structural changes on an enterprise with the aim of his integration to the world system of ménage.

• to conduct an analysis and examination of modern methods of estimation of efficiency of administrative decisions; to work out the methods of estimation of integration level of activity of enterprises on their basis; to estimate his efficiency, and also measures in relation to restructuring of enterprise;

• to define influence of investments and innovations on the level of integration activity of enterprise and ground priority directions of investing with the aim of his increase;

• to ground the organizationally-economic mechanisms of providing of international economic integration of domestic enterprises.

In the process of research of aims and decision of tasks, it is necessary to learn and investigate the theoretical and methodological base of substantive provisions of economic theory, worked out by home and foreign authors. In particular, it is necessary to investigate the theories of monopolistic advantage, theory of direct foreign investments, expediency of functioning of the special and free economic zones in Ukraine and them positive influence on the integration process of the Ukrainian enterprises.