

ANALYSIS OF ENERGY DEVELOPMENT PERSPECTIVES

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Energy consumption in the world has increased very rapidly over the last 50–60 years mainly due to increasing population and economic development

The main sources of primary energy used in the world are the fossil fuels: oil, coal, natural gas and oil shale. About 80-90% of the energy consumption is derived from the combustion of fossil fuels.

The first problem on energy supply is that the resources of fossil fuels are limited and they are decreasing every year.

The second problem of fossil fuels is the pollution of environment that concur with combustion of organic fuels.

The present environmental policy is very active, but its bases are not proved by scientific methods. Because the applying of the compulsion measures (quotas, taxis of CO₂ emissions and others) are not justified. The quotas and taxis of CO₂ emissions are particularly harmful for the countries having only fossil energy resources as, for example, Estonia.

Short-term energy supply problems are usually solved by comparing individual variants for individual countries considering energy strategy and also political directions of the country.

The long-term energy supply problems are more complicated and these topics have not been studied sufficiently

In 2050 the consumption of energy in the world may be over 2 times more and in 2100 over 3 times more than nowadays. Therefore the resources of fossil fuels will rapidly decrease and pollution of the environment will increase.

The current thesis is concentrated on the analysis of problems and long-term (time horizon is 50–70 years) perspectives in the controlling and planning of energy supply processes.



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