



## **Energy production vs. Environment in Southeastern Europe**

by Alexis Pramagioulis and Sophia Papageorgiou \*, February 2007

The energy sector is considered to be of vital importance to competitiveness and the economic growth of Europe. In the last years the European Union is in front of new challenges, by setting the basic guidelines of energy policy on the issues of environment and sustainable development. The recent European Council presidency (Brussels, 8-9 March 2007) supports a sustainable energy policy practice. A uniform approach on the energy and climate policy of the EU is regarded as necessary on the basis of three strategic targets:

- to guarantee supply
- to secure the European economies competitiveness and the energy competency at reasonable prices
- to promote environmental sustainability and confront climate change

In order to achieve the targets set by the European Policy for Europe (EPE), a overall energy action plan has been approved for the years 2007 - 2009, which sets a number of guidelines that aim at the increase of energy efficiency and the RES percentage, the development of energy technology, as well as at measures for the supply security and the reinforcement of enterprise competitiveness. The main task of EPE is the action against climate change, expressed by the commitment to decrease greenhouse gases emissions by at least 20% by 2020 compared to 1990 levels. This commitment acknowledges the variety of socioeconomic statuses among the member states, as well as the respective differences, also due to objective circumstances.

The implementation of this policy will have significant consequences not only amongst EU members, but also in Southeastern Europe (Serbia, Bosnia & Herzegovina, Croatia, Albania, FYROM, UNMIK), since the latter countries are bound by the Energy Community Treaty for SE Europe (October 2005) to implement the Community interest for Energy and Environment.

The Community interest for environment enforces the compliance with the Kyoto Protocol, the implementation of EU Directive for the integrated control and prevention of pollution and various directives on energy and environment, as the decrease of sulfur in liquid fuel and the restriction of air emissions for large combustion plans. At the same time the community interest for the use of renewable energy sources (RES) in the internal energy market and the rational use of energy is being enacted.

It is apparent that these obligations define significant limitations in the development of the national energy markets in the SE Europe region, since they are confronted with the vast and increasing demand for energy production so as to support their economical growth and the convergence with EU standards. The most optimistic evaluations regarding energy demand in the region indicate a yearly average increase for the already installed power of



700 MW till 2020. Investment wise, the most inexpensive solutions in the region at this time are limited to nuclear, coal or lignite combustion plants, as well as natural gas combined cycle units. The investment potential for RES is relatively low, as they are considered financially less competitive compared to conventional combustion units. It is anticipated that the percentage of solid fuel in the regional electricity production will be over 55% by 2020.

Under this framework, the local states are obliged to make a strategy choice: inexpensive energy for rapid economical growth, regardless of the environmental impacts, or less inexpensive energy, along with possible import dependencies, in favor of environmental preservation. Kosovo is a typical case of this dilemma; lignite is Kosovo's main mineral asset in quantities and qualities that suffice new power plants of over 3000MW in total, over-satisfying domestic demand and enabling energy exports in neighboring countries at competitive prices. Still, construction and development of mines and large combustion plants would undoubtedly evoke serious risks for the population and the environment, but also contradict the EU strategies for climate change and sustainable development.

The liberalization of the energy market creates competitive conditions of opposing interests in the whole chain of production, transfer, distribution and commission that are spread beyond national borders to a regional level. In such an environment, central regulation is necessary to account for market deficiencies and unbalanced power plays in national and regional markets.

In an economy based on competitiveness and in such cases, in which the environmental cost is transferred totally to the final consumers, effective measures are necessary to secure the supply of energy for all consumers at a bearable cost, and simultaneously to build up environmental consciousness as well as to sustain a healthy competitive European energy market. In such circumstances, EPE promotes a plan of measures and regulations for the development of low-carbon-use technologies, overcoming obstacles to energy efficiency, as well as measures for information, education and consciousness. The implementation of such measures will reinforce the efforts for the increase of RES potential use, will improve the action against the greenhouse effect, and will promote the sustainable use of domestic conventional solid fuels and the decrease of energy dependency and the development of national industry. The long-term goal of incorporating the environmental costs of energy production in the final cost of electricity, as a sustainability principle, is to provide equivalent choices in the energy provision market and at the same time to clarify to the public the social cost of each choice. On the other hand it is almost certain that the incorporation of the environmental cost in the final prices of products, through the environmental tax reform, trade methods or other measures of this sort, is a long term process and the effect it will have on the protection of the environment is yet to be defined in the actual cases.

The Council requests from the Commission, among others, to:

- enforce similarity on the competencies and reinforce the independence of the local national regulatory authorities



- elaborate in cooperation with the member states mid and long term forecasts on electricity supply and demand, as well as identify the additional investments needed for satisfying EU strategic demands

The above described disposition of the Council shows an important change of views towards an amplified coordination and more intense implementation of central planning and control, since the market itself and the decentralized regulation do not seem to be as efficient as expected, especially in the rational use of energy and the protection of environment. On the contrary, the rationalization of pricing and the reduction in the cost of energy as a result of competitiveness, when observed, mainly caused the increase of consumption in certain categories, or at least it slowed down energy sparing.

At the present level of development of the energy market, the role of regulatory authorities is crucial regarding the relation between energy and the environment. An integrated approach to this issue is a necessity and the scope of the competent authorities has to be defined in time and in relevance to the general public planning.

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