



Implementation of the EU legislation on Romanian power industry. Romanian legislation: achievements and shortcomings

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Abstract

In the last decade, Romania drew up specific integration and EU directives implementation programs for main economy sectors. The paper aims to present: (1) structural changes of power sector; (2) main pieces of Romanian legislation regarding the interaction between energy conversion technologies and environment; (3) evolution trends of the pollution generated by thermal power units; (4) difficulties encountered in the process of alignment to the EU provisions.

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1. Introduction

On medium term, the development of the Romanian power sector will mainly focus on some strategic areas. Removing payment arrears, improving the activity of the most inefficient energy end-users, creating the institutional frame, consolidating energy market mechanisms compatible with the EU norms and directives, and investing to modernize and rehabilitate the equipment are the most important.

The continued existence of state monopolies in all sub-sectors of the energy field resulted in a lack of stimuli for energy saving, a shortage of financial funding for the acquisition of high-efficiency equipment and technology, and a preponderance of energy-intensive industrial enterprises with obsolete equipment.

The rehabilitation of the Romanian energy sector will be a costly task. As presented in the National Strategy of the Energy Sector Development on Medium Term [1], a total amount of

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5 billion US dollars has to be devoted to new investments in the energy sector that would come from external sources, the proceeds from privatization and the state budget. The power production efficiency is of 33% due to the age of plants' equipment: 73% of them are more than 20–40 years old, while the technologies in use are from 1970. This situation, together with the extra costs from loans for fuel acquisition resulted in a 400 million US dollars loss in 2001 for Termoelectrica (the main coal and hydrocarbons fired power plants electricity producer).

The Law for Energy Efficiency [2] entered into force in 2000 but energy consumption optimization is relatively new for the Romanian economy. To accomplish this goal, the government intends to spend 10% of its income on an energy development fund. Recently, the Romanian Fund for Energy Efficiency (FREE) was created [3]. Acting as a non-governmental association, FREE will provide reimbursable financial support to private companies for energy efficiency improvement projects.

In addition to the difficulties of economic transition, most Eastern Europe countries, and particularly Romania face a new problem, which arose in its acute form only recently—the interaction between energy conversion technologies and environment.

Most Romanian power units were designed and put in operation at a time when environmental problems were condoned or not considered thoroughly. The power industry's long-term effect upon the environment was underestimated if not neglected completely since the priority, dictated politically rather than on rational scientific ground in a global context, was economic effectiveness.

However, acute problems did not cease to occur; these were treated individually, incoherently, without considering the ensemble, the global, cumulative and synergic effects. Romania is definitely a special case, an example to avoid in this respect. On the other side, it is worthy to mention that in the period of the steepest development of the Romanian power industry (1965–1980), the legislative constraints were quite loose. This was a consequence of a lack of knowledge about pollution generated by industrial activities. Only when serious environment perturbations (especially global climate changes) were noticed was the impact realized. As a result, the legislation imposed tighter standards and companies had to either change the technologies or to invest in equipment for mitigation of pollution.

The industrial development continued at high rates as compared to the progress made in the respect of environment protection so that pollution generated by industrial activities reached high quotas by the end of 1980s. After 1990, in the context of European integration programs, the decision factors decided to adapt the Romanian legislation to the European pattern, but the correspondent provisions' implementation encountered serious drawbacks due to the lack of financial resources.

2. Restructuring of energy sector

Two of the major objectives of Romania's energy sector integration into the EU are introducing competition to the energy sector through restructuring and privatization and adjusting energy prices to international prices. These issues remain as important now as they were in the early years of transition.

At the beginning of the restructuring process, the National Power Company reshaped the former RENEL (National Electricity Authority) by separating the nuclear sector, design and

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