THE AHP APPLICATION FOR STRATEGIC AND TACTICAL MANAGEMENT OF RENEWABLE AND ALTERNATIVE ENERGY SOURCES PROJECTS

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ABSTRACT

The European Union's Operational Program "Environment", opened lot of initiatives concerning with the sustainable use of energy sources, particularly renewable and alternative energy sources (RAES). One of its long term objectives is to achieve a substantial increase in the use of renewable energy sources in electric power and heat generation and a greater use of waste heat. The major problem lies in the insufficient use of RAES and in the slow growth in energy conservation throughout the whole spectra of activities within a society. The system of investment support with regard to the availability of financial resources is also insufficient. Solutions may be difficult due to the limited experience with strategic and tactical management of RAES projects. Specifically, Project Portfolio management is very weak. To eliminate this weak point we developed a new approach to the Project Portfolio life cycle. This approach makes a distinction between strategic and tactical levels. AHP Method is applied at both levels but in different ways. The strategic level assumes the direct involvement of experts designing a criteria hierarchy and Project Portfolio investors prioritizing the project's objectives against these criteria. Criteria hierarchies are derived from the BMM and include External and Internal Influencers. Since we are dealing with a model that is based on future conditions, we must consider risk, i.e. the uncertainty of future events. The Strategic AHP Model incorporates the uncertainty of the general RAES business environment. This model has already been developed and tested in RAES Project Portfolio Management.

Keywords: AHP modeling, Enterprise management, Renewable Energy and Alternative Sources, Project Portfolio Management, Project Portfolios, Funding Optimization using the AHP Method.