

## **Analysis of Minimizing Investment Risks in Power and Energy Business Development by Combining Total Quality Management and International Financing Institutions Project Management Tools**

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**Abstract :** Region of Southeastern Europe has a substantial energy resource potential and is witnessing an increasing rate of power and energy project investments. This comes as a result of countries harmonizing their legal framework and market regulations to conform the ones of European Union, enabling direct private investments. Funding in the power and energy market in this region originates from various resources and investment entities, including commercial and institutional ones. Risk anticipation and assessment is crucial to project success, especially given the long exploitation period of project in power and energy domain, as well as the wide range of stakeholders involved. This paper analyzes the possibility of combined application of tools used in total quality management and international financing institutions for project planning, execution and evaluation, with the goal of anticipating, assessing and minimizing the risks that might occur in the development and execution phase of a power and energy project in the market of southeastern Europe. History of successful project management and investments both in the industry and institutional sector provides sufficient experience, guidance and internationally adopted tools to provide proper project assessment for investments in power and energy. Business environment of southeastern Europe provides immense potential for developing power and engineering projects of various magnitudes, depending on stakeholders' interest. Diversification on investment sources provides assurance that there is interest and commitment to invest in this market. Global economic and political developments will be intensifying the pace of investments in the upcoming period. The proposed approach accounts for key parameters that contribute to the sustainability and profitability of a project which include technological, educational, social and economic gaps between the southeastern European region and western Europe, market trends in equipment design and production on a global level, environment friendly approach to renewable energy sources as well as conventional power generation systems, and finally the effect of the One Belt One Road Initiative led by People's Republic of China to the power and energy market of this region in the upcoming period on a long term scale. Analysis will outline the key benefits of the approach as well as the accompanying constraints. Parallel to this it will provide an overview of dominant threats and opportunities in present and future business environment and their influence to the proposed application. Through concrete examples, full potential of this approach will be presented along with necessary improvements that need to be implemented. Number of power and engineering projects being developed in southeastern Europe will be increasing in the upcoming period. Proper risk analysis will lead to minimizing project failures. The proposed successful combination of reliable project planning tools from different investment areas can prove to be beneficial in the future power and engineering investments, and guarantee their sustainability and profitability.

**Keywords :** capital investments, lean six sigma, logical framework approach, logical framework matrix, one belt one road initiative, project management tools, quality function deployment, Southeastern Europe, total quality management

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