Chapter 11
Project Maturity Analysis in the Energy Sector

ABSTRACT

This chapter will show a macrosystemic view of the energy sector, highlighting its particularities and challenges for the implementation of projects in the sector. The objective of this analysis is to bring enough elements to compose a panorama of the sector in the country, highlighting points in common with organizations related to the theme in the world, allowing establishing justifications for the result found in the maturity research contained in this work.

PROBLEMATIZATION

Electricity is considered a basic consumer item, but it carries in its systemic structure a complexity that goes far beyond the availability and consumption of the resource. Companies that project their growth proportionately also need to scale their infrastructure to receive enough energy, otherwise they will face a major constraint in the energy consumption chain that is not trivial to solve.

Countries recognized for being major investors in infrastructure, before dared to project their production at equally bold levels by forcing the division of the globe into groups that also reflect their goals. Groups that were formerly known as first, second, and third world, have seen their classification changed at least four times in the last century.

At the date of publication of this book the capitalist vision is the one that dictates the tonic of the relations of consumption in the globe. Launching supply and demand as a mantra for investments and profit margins, for the energy industry is no different.

The bottleneck and free flow vision also applies to the energy market, all sectors are now dependent, from farming to service delivery, considered a growth limiting parameter or one of the agents that most cooperate with increasing efficiency in the production of the market.

What is the level of maturity in the management of projects in an energy company in Minas Gerais? It is based on the central question of this proposed maturity evaluation through which one intends to investigate.

As a secondary question, based on the research carried out in these companies, will be evaluated the impacts created by the maturity obtained in the stakeholders network of the evaluated company.

In the next section, it is reported a profile of the mining sector in the State of Minas Gerais, Brazil.

**THE ENERGY SECTOR**

According to CEMIG (2017), one of the main concerns of countries that wish to be recognized for their high capacity is the diversification of energy sources, in particular, the generation of electricity. CEMIG is an important player in Energy Sector in Brazil.

The businesses requirements that are relevant to the industry, can be considered as major responsible for the maturity in the energy industry, are delimited:

- Capability of investment planning based on market growth;
- The allocation of resources for the provision of infrastructure projects;
- The importance of investment in renewable energies;
- Understand the business life cycle considering generation, transmission and distribution;
- The level of compliance with public and market policies.

Besides these important drivers mentioned above, we can highlight the growth in the use of renewable energies. Being regenerative with time,
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