

The Brazilian Energy Transition: An overview from a multilevel perspective

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Introdução

Energy, among the components of the infrastructure, is perhaps the one with the greatest range of interactions and environmental impacts. Economic growth and energy consumption are intrinsically related and tend to increase in emerging countries. Efforts to mitigate climate change, new energy sources, and technological developments are at the core of a transition movement. Brazil already invests in initiatives related to the energy transition. The country stands out on the world stage using three times more renewable sources than the average, though the process is still in motion.

Problema de Pesquisa e Objetivo

The analysis of the sociopolitical interactions between the actors involved in the potential changes in the Brazilian electricity industry provides a better understanding of the role of these actors in the transition paths. The guiding question that arises is: What are the main actors to foster the energy transition process in Brazil? This paper aims to contextualize and identify how actors involved in the process of energy transition in the Brazilian electricity sector relate in a multilevel perspective (MLP).

Fundamentação Teórica

The sociotechnical approach differs from more conventional innovation models, which often equate to innovation only with new technology. In larger transition processes, communities adjust their lifestyles to artifacts. Stakeholder Theory offers tools to prioritize the interests that will be decisive for promoting an energy transition. The Actor-Network Theory can help to define and coordinate functions within a social structure comprising both social and natural. Actors are anything that can act or change the actions of another through associations that change the state of things.

Metodologia

A documental case study was performed. In documentary research, the source of data collection is restricted to documents, written or not, constituting what is called secondary sources. It can be made when the fact or phenomenon occurs, or after. Data were organized using Microsoft Excel software. The focus of the content analysis was centered on the dynamics of the actors, which is why the statistical data present in the documents did not receive much emphasis in this research. The interpretative resource of the information is content analysis.

Análise dos Resultados

Analyzing the entire landscape of the Brazilian electricity sector, it is possible to categorize the actors by the affinity of functions and interests. The following categories of actors are noteworthy: Government & Institutional agents, Civil Society agents, financial agents, and Technological & Environmental agents. These categories of actors can coexist at the MLP levels, depending on their role in each case.

Conclusão

The impacts of legislative reforms are very important in the direction of the electricity sector, which is highly regulated. It is understood that in Brazil the large energy-generating concessionaires have great disruptive power, as they have access to resources, urgently demanded improvements, and are legitimated to act in the sector. The Brazilian energy transition identifies significant opportunities for efficient use of energy in various segments. It is hard to state whether the Brazilian energy transition process is top-down or bottom-up.

Referências Bibliográficas

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Palavras Chave

Energy Transitions , Stakeholder's Theory, Multilevel Perspective