

The Impact of Mergers on Green Innovation

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Abstract

Firms in the energy sector have been increasingly engaging in M&A as a strategy to deal with the growing pressure from the government and consumers to improve their environmental record and invest in environmental R&D. In this paper, we assess how M&A in the power and utilities sector affects the green innovation activities of the merging entities.

Previous academic literature has primarily studied the relationship between mergers and innovation, and the related topic of competition and innovation, from a theoretical perspective. The results of these studies indicate that whether or not mergers spur or hinder innovation depends on a number of factors. Thus, the impact of mergers on innovation in a specific context and industry is an empirical question.

Currently, there is very little empirical evidence on how mergers affect green innovation. Previous empirical research on mergers and innovation has focused predominantly on the biotech and pharmaceutical industry. In the face of climate change, identifying and understanding drivers in renewable and efficient energy development, as well as how to support green innovation, is crucial. Thus, it is of considerable interest from both an academic and policy perspective to understand how the upward trend in M&A activity in the energy sector has impacted on the development of sustainable energy technologies. The aim of this research is to fill this gap by empirically analysing how green innovation activities are affected post-merger.

Our analysis is based on a sample of M&A in the US power and utilities industry. Further, we collect patent applications assigned to the merging parties. The patent data is provided by the United States Patent and Trademark Office and offers a proxy for innovative activities. Green patents are classified using EPO's Y02-tagging scheme. Using a combination of matching techniques and a difference-in-differences approach we compare the green innovation output of merging and non-merging firms.

Keywords: Environmental Innovation, Mergers & Acquisitions, Competition Policy, Energy

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