How deregulation of the U.S. electric utility industry paved the way for green energy

EXECUTIVE SUMMARY
This study examines whether deregulation offered U.S. electric utilities an opportunity to build a competitive advantage by differentiating themselves from the more conventional energy producers. The authors found that, following deregulation between 1998 and 2000, firms expanded their supply of green energy in response to ‘new’ customer segments.

BACKGROUND
Deregulation in the electricity market triggered increased production of ‘green’ power. Not surprisingly, this was even more the case in states with an environmentally conscious population. Deregulation changes firms’ sets of options and incentives. When electric utility firms were regulated, they were guaranteed a return on normal activities, so were not incented to innovate. Following deregulation, some firms, like Montana Power Company, focused on low-cost power. By contrast, Portland General Electric offered customers several green power options focusing on salmon restoration, or wind energy. This research aims to uncover the relationship between deregulation, differentiation and ‘green’ power in the electric utility industry.

FINDINGS
- After deregulation, firms produced more green energy. Why? Deregulation allowed new customers groups to emerge. Customers that were previously just industrial, commercial, or residential were further segmented by their preferences for alternative energy.
- Deregulated firms responded to the needs of environmentally conscious consumers and offered more green energy. They benefited most directly from reputation effects.
- Firms that were invested in coal producing technologies were less likely to move into green energy. In contrast, firms that were relatively inefficient at producing coal, shifted more towards green energy because it provided an opportunity.
- Larger and younger firms also expanded their production of renewable energy more rapidly.

IMPLICATIONS FOR MANAGERS
- Regulated industries may suppress the interests of the green consumers.

IMPLICATIONS FOR RESEARCHERS
One limitation of this research is the short time frame – 1998-2000. Information on the price premiums being charged for green power would allow for a more robust specification of the cause and effect mechanism at play.

METHODS
The authors used data on 114 utilities from the 1998 to 2000 period during which electric utilities were deregulated across the U.S. The data was obtained using combination of databases, including the Federal Energy Regulatory Commission Form Number 1. The researchers examined changes in the proportion of green energy relative to total energy produced using a pooled OLS regression.

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