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Understanding transformation toward new sources of value creation and capture

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Sustainable energy innovation in power utilities: Understanding transformation towards new sources of value creation and capture

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The complex processes of incumbents’ response to the energy transition suggest nuanced adaptation trajectories when it comes to engaging in sustainable energy innovations.

We study the utilities’ business ecosystems as a relevant source of knowledge on organizational shifts to pursue transformative sources of value from sustainable energy innovations, and redefine sources of value creation.

METHODS

We study the business ecosystem reconfiguration for sustainable energy innovations of 21 power utilities by analysing their Mergers & Acquisitions, Joint Ventures, and Strategic Alliances in Europe from 1990 to 2019.

We analyse utilities’ corporate reports and press releases to understand how these engagements fit into the transformation of the utilities business model and its mechanisms for value creation and capture.

BACKGROUND

Renewable electricity
Wind, Solar, Biomass, Wave, Geothermal, Biomethane

Smart electricity management
Smart grids, meters, homes, cities, Energy Efficiency, Demand response

Sustainable mobility
Mobility and electric vehicles

Emerging technologies
Research and development, Storage, Fuel cells, Hydrogen, Carbon capture and storage, Heat pumps

FOCUS AREAS

SUSTAINABLE ENERGY TRAJECTORIES

VALUE FOR TRANSFORMATIVE INNOVATION POLICY

The project contributes to a better understanding on the role of utilities in transformative change towards sustainable energy systems.

We aim to provide an in depth analysis of utilities engagement in sustainable energy innovation as a source of value creation and capture.

We use our findings as guidance for energy and industrial policy making to be fit to deliver sustainable development.