

Business models and sustainability transitions: The interplay of mediating and transforming roles

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This paper addresses business firms as potential catalyzers of sustainability transitions. We shed light on this catalyzing role of firms through an examination of the role business models play in sustainability transitions. The existing literature on sustainability transitions, with its reliance on the multi-level perspective, tends to emphasize the influence of technology and exogenous factors in explaining how sustainable innovations move from the niche into the regime. We instead focus on the endogenous factor of firms' agency to create and reconfigure business models that can accelerate the development and diffusion of sustainable innovations. We argue that business models have two fundamental properties that are instrumental in triggering sustainability transitions: i.e., mediating and transforming properties. Business models facilitate sustainability transitions by mediating between technology innovations and their receiving environment. Business models unlock a technology's latent value to help it meet its market without requiring any change of either the technology or the receiving environment. Business models also have transformative properties as they connect existing products and services to new situations of use and practices and thereby alter the fundamental values, norms and rules associated with traditional industries. Empirically, we analyze the transition towards a decentralized and decarbonized electricity system in the Netherlands from 2000 to 2016 using interviews and archival data. Our analysis focuses on the covert role of business models in creating the right conditions for the sustainability transition towards a decentralized and decarbonized energy system to gain momentum. Based on the analysis, we develop a heuristic model of the interplay of transforming and mediating roles at early stages of decentralization and decarbonization process.