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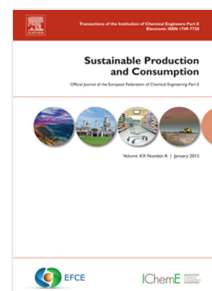
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Sustainability assessments and their implementation possibilities within the business models of companies

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Abstract

The companies having implemented sustainability concepts ensure that the sustainability issues are well understood and are acted on. But many of these issues are very complex and firstly they have to be identified. Further, the interrelations among these factors should be clearly defined. So, the main aim of the given study is to identify the factors influencing the sustainability of corporate businesses and to analyse the probable mechanisms to react upon changing boundaries making the businesses resilient towards both political and social pressures, as well as to the environmental changes.

For this analysis, (a) literature review on sustainability and resilience within the business models of the companies has been carried out, studying various indicator catalogues and sustainability indices; (b) trends and developments of sustainability practices in companies have been reviewed presenting various organizational sustainability models; (c) business models have been checked for their sustainability and innovation potentials.

In order to combine the analysis on business models and their innovation dependent on sustainability parameters, their interlinkages and dynamical changes, System Dynamics Model has been applied to capture the major feedback mechanisms within the system of business models, firstly building a mental Causal Loop Diagrams (CLD), afterwards transforming them into a Stock and Flow Diagram (SFD), which is then the basis for simulation. For simulation purposes an Energy Utility has been used as a case study.

The simulation results, showing that a sustainability transition delay has to be modelled with adjustment delay, refer to the fact that the lower adjustment delay time is, the more pressure is exerted on the system to adapt to the change, causing a turbulence within the implementation

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