


Chapter 12

Organizational Green Technology Innovation

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ABSTRACT

This study has the purpose to analyze the different relations between the green innovation and the green technology leading to the green technology innovation processes. It is assumed that both elements green innovation and green technology are closely interrelated in the development of green technology innovation in organizations. The method employed is the meta-analysis supported by the reflective and descriptive methods used in the conceptual, theoretical and empirical literature reviews on the topics. Finally, some conclusions are presented to confirm the strong relationships between the green innovation and the green technology to create and

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develop the green technology innovation in organizations.

INTRODUCTION

The different sustainable green practices include a combination of green innovation (Asadi *et al.*, 2020), green HRM (Mousa & Othman, 2020), Green marketing (Chung, 2020) and green supply chain management (Centobelli *et al.*, 2020). Green innovation increases sustainability although is riddled with complexity stemming from uncertainty and difficulty with surrounding aligned activities to develop green innovation (Afeltra *et al.*, 2021). The context management of the complexity of green innovation development and activities aligned along value chain.

The high levels complexity of organizational green innovation requires diverse analysis of activities at different levels, create the need to identify and align practices to manage. (Chapman & Hyland, 2004; Sihvonen & Pajunen, 2019). The complexity of value chain green innovation projects spans multiple actors and require systemic innovation activities and entailing alignment of actors' cooperation (Chadha, 2011; Dangelico *et al.*, 2017; Prajogo *et al.*, 2014). Green innovation technology improves competitiveness by developing institutional framework, innovative processes, materials, goods, etc.

Organizations have a complex set of alternatives to develop green innovation (I-nigo and Albareda, 2016). Organizations combine innovation activities to create green innovation. Organizations favoring working conditions encourage employees to acquire advanced green knowledge and technology for operations including innovation, technology transfer, supply chain integration, etc. Green innovation adoption stimulates organizations to get involved in production and consumption model concerning the stakeholders. However, difficulties in hardware and software in using innovative green technologies and may hinder the green innovation adoption.

Green innovation poses several challenges in relation to it various forms range from incremental, radical and systemic change creating organizational complexity due to the alignment and coordination of innovation activities (Carrillo-Hermosilla *et al.*, 2010; Petruzzelli *et al.*, 2011; Kim & Wilemon, 2003).

The study begins with the analysis of green innovation followed by the analysis of green technology innovation in organizations and their relationships. Finally, some concluding remarks are presented.

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