

# **DYNAMIC CAPABILITIES FOR ENVIRONMENTAL SUSTAINABILITY (DCES): ANTECEDENTS AND CHARACTERISTICS**

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## **ABSTRACT**

The development and marketing of green products represent a way for firms to both contribute to the achievement of environmental sustainability and be successful. However, developing green products while being successful require development of unique dynamic capabilities that enable the integration of sustainability issues into product development. Dynamic capabilities for environmental sustainability are defined here as the firm's ability to integrate, build, and reconfigure internal and external resources to address environmental sustainability challenges for developing green products. This study proposes a dynamic capabilities perspective of green product development, identifying dynamic capabilities for environmental sustainability and suggesting that both firm's internal motivation and external forces drive the deployment of these dynamic capabilities. Based on literature and interviews with several companies, we identify three types of dynamic capabilities for environmental sustainability, develop multi-item scales and empirically test our research hypotheses. We completed a survey of Italian manufacturing firms and used Structural Equation Models for hypotheses testing. Our results from a sample of 189 firms support the dynamic capabilities theory providing empirical evidences that dynamic capabilities are driven by both firm's internal motivation (specifically, environmental orientation plays a more relevant role than top management commitment, as the latter leads only to the integration of external environmental resources) and external forces (turbulence in green markets leads to the building and reconfiguring of environmental resources). The present study provides several theoretical and managerial implications. This research contributes in providing empirical evidence to the dynamic capabilities theory by studying the antecedents of dynamic capabilities, and by developing and validating measures for dynamic capabilities for environmental sustainability. This study also provides directions to managers on how to integrate environmental sustainability into product development.

(References available upon request)