

The Promise of Different Types of Environmental Management Systems for Voluntary Governance

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Abstract

In spite of firms' global interest in adopting environment management systems (EMSs), there is little information about which types of EMSs are associated with greater environmental improvements. This research compares the environmental performance of facilities that adopt self-declared EMSs, complete EMSs, and ISO 14001-certified EMSs across multiple environmental impacts. We analyze these relationships using a two-stage model to control for selection bias, and OECD survey data for manufacturing facilities in Canada, France, Germany, Hungary, Japan, Norway, and the United States. Our findings indicate that adoption of all three EMSs is related to facilities' reductions in natural resource uses, solid waste, wastewater effluent, local air pollution, and global air pollutants. However, there lacks strong evidence that ISO 14001-certified EMSs lead to superior environmental improvements than other types of EMSs.

Keywords: Environmental management system, environmental performance, motivations, ISO 14001, EMS adoption