

Does ISO 14001 Lead the Way?

Investigating the Application of relevant Sustainability Management Tools

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The introduction and certification of a management system according to the ISO 14001 standard has been assessed to support companies in creating many benefits from improving the environmental performance to reducing costs and satisfying customer pressures and requests (cf. Rondinelli & Vastag 2000; Morrow & Rondinelli 2002; Neugebauer 2012). Additionally, an ISO 14001 certified environmental management system is often seen as a key approach which builds the foundation to further operationalize environmental and sustainability management in an organization (Hillary 2000; Burke & Gaughran 2007).

Until now, little is known about the interplay between implementing ISO 14001 and the application of related tools to manage environmental and sustainability performance which are mentioned in the ISO 14001 standard. Tools related to ISO 14001 are those explicitly mentioned in the ISO 14001 standard and mostly have their ‘own’ ISO standard whereas unrelated tools are neither mentioned in ISO 14001 nor does an own ISO standard exist. Examples of sustainability management tools related to ISO 14001 and an ISO standard include environmental labels (14020), environmental audits (14031) and life cycle assessment (ISO 14040) (International Organisation of Standardisation 2014), while examples of unrelated sustainability management tools include sustainability balanced scorecards, social audits, reports, etc. (Schaltegger et al. 2002; 2007).

The literature has so far not investigated whether ISO 14001 is most commonly implemented by companies that apply many sustainability management tools anyway or whether companies that have implemented ISO 14001 only apply the tools required by ISO 14001 and do not see the necessity or benefits of a more comprehensive approach towards sustainability management. Our paper aims to compare companies that have implemented ISO 14001 to those that have not, and quantitatively investigates the three following issues:

- (1) How do ISO 14001 companies differ from companies without 14001 with regard to the application of the tools required by the ISO 14001 standard?
- (2) How do ISO 14001 companies differ from companies without 14001 with regard to the application of sustainability management tools that are mentioned in the ISO 14001 standard but not required for implementation?
- (3) How do ISO 14001 companies differ from companies without 14001 with regard to the application of additional sustainability management tools that are not mentioned in the ISO 14001 guidelines?

Each step will be addressed in a separate statistical analysis, based on a large empirical datasets. The results will reveal whether and to what degree ISO 14001 is effective in motivating companies to implement certain sustainability management tools (i.e. those required by and those mentioned in ISO 14001). Furthermore, the results will show whether

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ISO 14001 is rather an approach to fulfill minimum standards, or whether an ISO 14001 certification is used by companies which choose comprehensive approaches towards sustainability management anyway and thus incidentally meet the criteria required for ISO 14001. In addressing and discussing these questions, we will draw implications for practitioners as well as for public policy.

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