THE INFLUENCE OF CERTIFIED ENVIRONMENTAL MANAGMEENT SYSTEMS ON THE ENVIRONMENTAL AND ECONOMIC PERFORMANCE OF FIRMS

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Paper submitted for presentation at the EnviroInfo Vienna 2002 Conference, 25-27th September 2002

Keywords: environmental management systems, ISO 14001, EMAS, economic performance, environmental performance, empirical research, paper, electricity, manufacturing, sector, industry

- submitted as paper presentation (20 min. + additional time for discussion), preferably in the workshop on “EMAS and ISO 14000” or under the “Applications and Programmes” stream -

Abstract

The ISO 14001 and EMAS standards for environmental management systems are a major tool for companies in various industry sectors to improve their environmental performance. Many firms have introduced environmental management systems and subsequently reported positive effects on their economic performance. This is also the core of the Eco-efficiency concept, which proposes that firms can create win-win situations in which they simultaneously improve their environmental and economic performance. Recently, governments have very much embraced this concept as part of the wider movement of government environmental policy toward voluntary instruments.

Often, this is seen as a first step towards legal relief for environmentally proactive firms. This obviously raises the question whether the theoretical proposition of the Eco-efficiency concept can be supported by empirical evidence. This paper therefore analyses the influence of ISO 14001 certification or EMAS verification on the environmental and economic performance of firms in the European Union in defined industrial sectors.

The focus of analysis will be the degree of correlation between environmental performance, as measured by physical environmental performance indicators and

economic performance, based on a variety of financial indictors with EMAS verification and/or ISO 14001 certification. The focus on quantitative emissions data here enables an assessment of the real performance outcomes of the adoption of certified environmental management systems, rather than only assessing procedural improvements (i.e. continuous improvement of performance rather than systems).

Based on the results from data sets covering four EU countries (Germany, Italy, Netherlands and UK), the paper reports how ISO 14001 and EMAS relate to the environmental and economic performance of firms in several dimensions. This includes an assessment of significant differences between countries and across sectors, as well as a more detailed analysis of the direct relationship between environmental and economic performance of firms. Based on the results, important conclusions will be drawn for governmental policy-making and future development of environmental management systems standards.

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