

**ENVIRONMENTAL MANAGEMENT SYSTEMS: DO THEY IMPROVE
ENVIRONMENTAL PERFORMANCE?**

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ABSTRACT

The increasing reliance of environmental policy on market-based incentives has led firms to shift from regulation-driven management approaches to proactive strategies involving the voluntary adoption of management practices through environmental management systems (EMSs). We apply an instrumental variable approach on survey data of S&P 500 firms to examine the impact of adoption of EMSs on total and disaggregated toxic emissions. Results show that a higher quality EMS leads to lower toxic emissions for firms with inferior environmental records in the past. We also find that EMSs result in reductions in off-site transfers and regulated pollutants. Regulatory factors increase off-site emissions while firms decrease on-site discharges in response to consumer pressures. Financial health, cost of new equipment and innovativeness also have a positive impact on emission levels. Results suggest that the impact of EMSs goes beyond reductions of regulated pollutants and towards increased pollution prevention and abatement efforts.

JEL classification: L5, Q2