



ROTTERDAM SCHOOL OF MANAGEMENT, ERASMUS UNIVERSITY

The future for energy markets

In discussion with Wolfgang Ketter

Ecological sensemaking and climate change

The business school that thinks

and lives in the future

by Gail Whiteman

The age of the consumer innovator

by Jeroen de Jong

The psychology of ethical leaders

by Niek Hoogervorst

 Customer empowerment in new product development

by Christoph Fuchs & Martin Schreier

Why do firms go public?

by Abe de Jong, Carel Huijgen, Teye Marra & Peter Roosenboom



RSM 2 afus ERASMUS





Proactive environmental strategies pay off

by Melek Akin Ates, Jacqueline Bloemhof, Erik van Raaij & Finn Wynstra

Although there is contradicting evidence on the impact of a company's proactive environmental strategy on its environmental performance, recent research shows such an approach can indeed make a difference.

> Increasing awareness of environmental problems has created a new competitive environment for firms forced to include stakeholders' concerns in their corporate plans. Whether it be from "green consumers", business customers, suppliers or shareholders, external pressures are motivating firms to adopt a more proactive environmental strategy environmental objectives, plans and procedures that go beyond mere compliance with laws and regulations.

> Moreover, internal pressures also drive this process, and forwardthinking firms increasingly invest in proactive strategies, not just to improve their environmental performance - defined as the reduction of environmental impact by minimising waste, material and energy usage - but also to gain and maintain competitive advantage. We define environmental investments as the combination of internal investments (made in areas of environmental design, production and logistics), and external investments (made in collaboration with suppliers and related to these same areas).

All of this underscores the strategic importance and implications of environmental issues to business.

Testing key hypotheses

The objective of our recent research has been to investigate the impact a proactive environmental strategy has on environmental performance, what is needed for it to work, and its business implications. Based on a study of past literature on environmental strategy adoption, we arrived at five hypotheses:

- 1. Environmental investments have a positive effect on environmental performance.
- 2. Proactive environmental strategy has a positive effect on environmental investments.
- 3. Customer pressure has a positive effect on environmental investments.
- 4. Customer pressure has a positive effect on proactive environmental strategy.
- 5. Organisational commitment has a positive effect on proactive environmental strategy.

We also identified three possible influencing factors: the role of the customer and especially customer pressure; organisational commitment; and the role of supply-chain partners. To test these hypotheses, we surveyed 97 medium and large enterprises from the chemicals and plastics, food and beverages and machinery sectors in Turkey, one of the biggest emerging economies.

Companies, take note

Our results confirm that a proactive environmental strategy does lead to higher environmental investments, internally and externally. The results also show that these investments are required to achieve this performance, underscoring the need for firms to invest both in their internal processes and in their collaboration with suppliers. Surprisingly, the latter investments did not play as significant a role as we had assumed. In fact, the importance of internal investments was twice as large as that of external investments. We had envisioned at least an equal role, if not a slightly larger one than internal investments. Of course, the relative importance of internal versus external investments may differ from country to country.

In addition, the findings support our hypothesis that environmental investments act as a mediating variable between proactive environmental strategy and environmental performance, and that without environmental investments there would be no environmental performance. The results also show that customer pressure and, particularly, organisational commitment, positively impact the extent to which firms adopt a proactive environmental strategy.

Our conclusions are equally striking. Results suggest that proactive environmental strategies with internal and external environmental investments do pay off. Furthermore, organisational commitment and customer pressure are key factors. Organisational commitment seems to play a major role in pro-activeness, which is in line with our expectations.

implications. For example, just formulating proactive strategies is not sufficient to achieve a higher performance. This should be followed by actual environmental investments. If the company and its suppliers do not make the necessary investments, there is hardly any gain from proactive environmental strategies. Moreover, even though internal investments impact environmental performance more than external investments, this impact is not negligible.

In particular, firms that outsource large parts of their production should involve suppliers more in their strategies by jointly setting environmental goals and sharing environmentally related personnel and equipment, and establishing joint environmental

"...proactive environmental strategies with internal and external environment investments do pay off."

We found companies without a proactive strategy were making environmental investments purely as a reaction to customer pressure. This reactive approach has a significantly weaker effect on performance than the proactive one.

Importantly, our results highlight some significant managerial

programmes. Finally, managers need to remember that a successful proactive strategy needs organisational commitment, from both top management and employees. To this end, firms might consider encouraging cross-functional co-operation between departments, and offering employees environmental training.



Melek Akin Ates is a Ph.D candidate, Department of Management of Technology and Innovation, Rotterdam School of Management, Erasmus University. Email: mates@rsm.nl Web: www.rsm.nl/people/melek-akin-ates

Jacqueline Bloemhof is Associate Professor of Sustainable Supply Chain Management, Wageningen University.

Erik van Raaij is Assistant Professor of Purchasing and Supply Management, Rotterdam School of Management, Erasmus University. Email: eraaij@rsm.nl

Web: www.rsm.nl/people/erik-van-raaij

Finn Wynstra is Professor of Purchasing and Supply Management, Rotterdam School of Management, Erasmus University.

Email: fwynstra@rsm.nl

Web: www.rsm.nl/people/finn-wynstra

This article is based on the paper Proactive environmental strategy in a supply chain context: the mediating role of investments, which was published in the International Journal of Production Research.