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## **Attitudes of Small and Medium-Sized Enterprises to Environmental Protection**

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The article presented here is part of the two-year WAPO Project (Effectiveness of Waste Policy Instruments B Sustainable Production, Product Development and Consumption; Finnish Environment Institute 1998 B 1999). The empirical material consists of 42 theme interviews with Finnish SMEs carried out between August and December 1998. The main research questions of the study were as follows:

- What opportunities and obstacles for increasing material efficiency can be found in SMEs?
- What is the business environment in which SMEs operate? What are the roles of customers, owners and competitors with respect to meeting environmental challenges?
- Why do SMEs build up environmental management systems? How far are they genuinely concerned for the environment and what are the other motives for which SMEs develop environmental management systems?

We assigned the SMEs into four different categories according to their attitudes to environmental protection. An analysis of these four categories produces new information on what kinds of attitudes various SMEs have to environmental protection, and also on what the most effective governmental measures are. The analysis also explains why SMEs build up environmental management systems (EMS).

The most active and innovative enterprises (Categories One and Two) are building up EMSs under the pressure of stakeholder demands. The micro enterprises (Category Three) are very passive in environmental protection. The enterprises in Category Four follow the development of tightening legislation and the increasing significance of economic instruments.

Unfortunately, the EMS has very little to do with sustainable development. It does not usually result in any significant changes in the practices or the management strategy of an SME. Often an EMS can be reached very fast with little work. When an SME is a subcontractor and it has limited opportunities to decrease environmental impacts, one important way is to minimise material loss in production. An efficient use of materials reduces the amount of waste and also the need for virgin raw materials. In order to make progress in dematerialization current industrial production has to use its resources as effectively as possible. This important assumption also concerns SMEs.

Our interviews show that the increase of material efficiency is a natural aim of enterprises and it is not actually seen as an "environmentally friendly" activity. The waste costs, for instance, represent a small sum compared to the costs of raw materials lost in production and the minimisation of lost raw material is a key motivation for an enterprise. This reveals the complex character of environmental problems. Environmental policy instruments can solve them only partially. Effective use of materials is a way to combine competitiveness and sustainability.

In the debate on the role of SMEs in sustainable development the relation between the increasing of material efficiency and entrepreneurs' attitudes to environmental protection cannot be ignored. We shall discuss this at the end of the article.