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## **Abstract**

### **Waste Cost Management**

- A step beyond conventional environmental cost accounting and environmental cost management -

Waste Cost Management is a new, fully developed management tool that has proven to be most effective in combining cost savings with pollution prevention in industry. It is an instrument well suited for driving a transition towards „eco-efficiency“, „pollution prevention pays“ or „cleaner production“ in industry.

Waste Cost Management consists of three main steps: cost analysis, cost reduction by direct measures and an adaptation of management systems for continuous and systematic reduction of waste streams.

In a first step, the existing approaches to environmental cost accounting are expanded while overcoming their theoretical and practical shortcomings. Elements of activity based accounting are incorporated. An analysis of a company's cost structure on this basis shows that „waste“ (used here as a summary term for solid waste, waste water, emissions to air and waste heat) typically causes 5-15% of company's total cost. Neither the magnitude nor the exact cause of these costs is known to industry because of deficits in their information and cost accounting systems. Identifying these costs results in a much stronger commitment of top management towards reducing waste streams.

The development of direct measures is then conducted in a structured, interdisciplinary process and supported by specific creativity techniques. Application of Waste Cost Management typically results in a reduction of waste streams by 20-40% **and** a net reduction in total cost of 1-2%.

The adaptation of management systems focuses on modifying the existing information systems (materials and cost accounting systems in SAP R/3 and other business administration software) and organisational processes (mainly product development, purchasing, production and waste management). Waste cost management can be integrated with EMAS and ISO 14001 environmental management systems to strengthen both the economic and environmental performance of these systems.

Waste Cost Management has been developed by the author over the past five years. It has proven to be effective in a wide variety of industries, both in Europe and in developing countries, in firms ranging from 90 to 10,000 employees. It has also been carefully analysed and substantiated from a scientific perspective. Several case studies for the cost management and cost accounting aspects are briefly presented.

Extrapolating the results to a macro-economic level, German industry is losing 100-300 billion DM a year through its waste streams. Savings potentials are 20-40 billion DM a year. Applying Waste Cost Management throughout industry will result in significant progress towards sustainable development.

These results are suited to refocus the environmental policy debate from „how much is **environmental protection** costing industry“ to „how much is **pollution** costing industry“ and thereby overcome some of the perceived conflict between economic self interest and environmental objectives.