

# **Environmental Accounting:**

**a management tool for enhancing corporate  
environmental and economic performance**

by

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## Declaration by Student

I, PATRICK JAMES DE BEER, hereby declare that the work as contained in this document was compiled and set out by myself and it has not been submitted to any other university.

SIGNED ON THIS 23<sup>rd</sup> DAY OF FEBRUARY 2004.



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PATRICK JAMES DE BEER

I want to thank God for everyday strength and courage given in profusion. Thank You for the ability to learn and apply knowledge in the pursuit of future societal and environmental upliftment.

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## **a management tool for enhancing corporate environmental and economic performance**

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### **Synopsis**

Environmental accounting refers to the identification, measurement and allocation of environmental and social liability costs and the integration of these costs into business decisions. While environmental accounting now forms part of industrial decision making in first world countries, there is a lack of available and adequate South African environmental accounting systems. The EEGECOST model was developed to promote environmental accounting in South Africa. Implementation of the model will provide South African industries with the framework for corporate evaluation of alternative investments, projects and processes and for estimating economic and environmental performance in the present and especially the future. The model allocates internal and external environmental costs to five identified cost types, categorised into several environmental media groups. It also assists with risk valuation and the capital budgeting process for alternative investments. Applicability of the model was tested in a case study conducted on the life cycle assessment of a cigarette production process. The model proved that Types III to V costs, usually not considered in traditional fiscal accounting systems, can contribute significantly to the total production costs of one million cigarettes; however, implementation of suitable identified interventions and corrective actions can decrease this contribution. Benefit will be derived from further research and development of the model through case studies addressing a wider variety of industrial activities and application of the model during company planning and performance measuring cycles.

**KEYWORDS:** capital budgeting, environmental accounting, environmental media, external costs, internal costs, risk valuation

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