Chapter 2

Environmental Management Accounting: A Business Perspective on the Policies, Analyses, and Benefits of Its Implementation

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ABSTRACT

This chapter provides a business perspective on the policies and benefits provided by implementing environmental managerial accounting in various areas of activity. The main objectives of this chapter are to present the evolution of the EMA and its policies, business analyses carried out by specialists, including the benefits of implementing the EMA. All of these objectives are transposed into a case study based on the ABC method performed at an energy company. The implementation steps specific to the ABC method are presented by establishing the list of main activities, cost drivers, allocation of indirect costs, and determining unit costs. The theoretical aspects presented the basic national and international studies in the literature. The case study is based on data obtained from the energy company. The chapter ends with the authors’ conclusions on the benefits of implementing EMA/ABC. This chapter contributes to the expansion of the theoretical and empirical framework of EMA and the methods used to implement it within various business companies.

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INTRODUCTION

The adoption by companies of cleaner or pollution prevention processes was due to: (1) internal pressures needed to use cleaner technologies, thus avoiding the costs of waste management, occupying a superior position on the national or international market; and (2) incentives to achieve corporate environmental performance that are being reviewed by investors, financial advisors, regulators and other stakeholders. In this respect, companies examine how external managerial reporting meets national and external social requirements and concerns. Environmental Management Accounting (EMA) is an essential tool in establishing an effective environmental management system. Considered a fundamental managerial tool, the EMA helps evaluate environmental efficiency alongside eco-labeling or life cycle analysis. Wide implementation and deployment of the EMA would have a major positive impact on companies in certain industries in terms of attitude towards environmental protection. If companies realized that waste treatment and disposal is less expensive than waste production, then companies would commit themselves to reducing costs by minimizing waste. This would motivate companies to strive to continuously improve their efficiency and profit levels and not just to comply with environmental regulations.

This chapter aims at discussing the various conceptual approaches of the EMA, the evolution and policies to promote it on national and international level. Also, EMA implementation factors and EMA tools used for cost analysis and performance management will be analyzed. In addition to these issues, the advantages and disadvantages of EMA implementation will be addressed and analyzed through a case study of an energy company using the ABC method.

The main objectives of this chapter are: (1) the presentation of EMA’s evolution and promotion policies, (2) the analysis of EMA implementation factors and environmental reporting; (3) the presentation of EMA tools for cost analysis, investment appraisal and performance management; (4) analyzing the benefits and barriers of EMA implementation; and (5) presenting a case study on the implementation of EMA to an electric industry company using the ABC method.

BACKGROUND

Environmental Management Accounting (EMA): Evolution

Coming from management accounting and developed from corporate accounting, Environmental Management Accounting (EMA) has experienced a dynamic evolution over the last 20 years. Environmental accounting (EA) comes from financial accounting under whose axis it develops and contributes to solving: environmental problems (Christmann, 2000; Fussel & Georg, 2000), insurance procedures (Dixon et al., 2004; Özbirecikli, 2007), financial performance (Gadenne et al., 2009, Moneva and Ortas, 2010) or practices of environmental information disclosure (Llena et al., 2007; 2009).

A lot of attempts to clarify the EMA concept have been made by specialists without achieving a concrete result due to the fact that EMA and EA are similar to subjects and tasks that overlap (UNSD, 2001; Jasch, 2003; Bennett et al., 2003 Dillard et al., 2005; Cullen & Whelan, 2006; Jonäll, 2008; Eugénio et al., 2010; Collins et al., 2011; Bowen & Wittneben 2011). Another element of confusion was the ambiguous nature of the information to be measured (Alcouffee et al., 2008), since EMA accounts for environmental costs.