

#### Seminar

#### Addressing Information Gaps in Business and Macro-Economic Accounts to Better Explain Economic Performance

New York, 23 – 24 June 2008 United Nations, Conference room C

Accounting for environmental management and environmental costs Estrella Domingo

#### **Accounting for Environmental Management and Environmental Cost**

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In recent years, industries have been feeling the pressure of reducing emissions to the environment. To industries, environmental protection is capital outlay (some of it are part of their operating cost) and therefore an added cost in the production process. Likewise, capturing environmental management and cost as an input to the estimation of national accounts is also difficult.

In 1999, the Philippines conducted a pilot Survey on Environmental Protection Expenditures Studies (SEPE). While the preliminary results showed interesting facts, there appears to be a lot of underestimation, given levels of the variables generated. One of the problems cited in the field operation is the inability of the respondents to provide the desired desegregation. This could be so, probably because of lack of understanding of EP concepts and because financial statements do not provide for the required details of the questionnaire.

In 2002, non-government organizations in the Philippines started to conduct seminar/workshop on environment management accounting with the end view of incorporating environmental cost in the internal accounting systems of different enterprises. With the release of the Fourth Assessment Report (AR4) of the Inter governmental Panel on Climate Change (IPCC) interest on the environment, particular climate change, resurfaced. The Department of Environment and Natural Resources (DENR), the Department of Energy (DOE), the World Resources Institute (WRI), the World Business Council for Sustainable Development (WBCSD), the Philippine Business for the Environment (PBE), and the klima Climate Change Center of the Manila Observatory (klima–MO) initiated the Philippine Greenhouse Gas Accounting and Reporting Program (PhilGARP). One of the primary objectives of the program is to create a reliable accounting and reporting system that provides the foundation for future national climate change policies and strategies.

There are various definitions of environment management accounting, but essentially, an environmental management accounting system can be thought of as a management accounting system that has been refined so as to enable users of the system to be provided with information that reflects the environmental performance of the organization. The United Nations Division for Sustainable Development has referred to environmental management accounting simply as "doing better, more comprehensive

management accounting, while wearing an environmental hat that opens the eyes for hidden costs.<sup>1</sup>

There have been a number of publications released about environmental management accounting the most prominent of which is the International Guidelines on Environmental Management Accounting (EMA) by the International Federation of Accounts (IFA)<sup>2</sup>. EMA as defined by IFA is the identification, collection, analysis, and use of two types of information for internal decision-making:

- Physical information on the use, flows, and fates of energy, water, and materials (including wastes); and,
- Monetary information on environment-related costs, earnings, and savings.

Managerial environmental accounting provides a comprehensive means for incorporating environmental considerations into business decision-making. The inclusion of internal environment costs in its accounting will assist accompany in working to maximize its current profitability. A firm can further be guided in maximizing, its long run profitability by taking into account external environmental costs, especially to the extent that it may be required to internalized these cost in the future. The adoption of these methods can help put a firm in a stronger competitive position in relation to firms that apply only conventional accounting. The extent of this advantage will depend on how extensively and creatively the firm makes use of these methods in its decision-making.<sup>3</sup>

Per case studies on environmental management accounting conducted by Chartered Accounts, incorporating environmental costs directly into accounting functions and business strategies proved that it could improve a business's competitive position. The issue is majority of managers within organizations have very little knowledge about the environmental costs associated with conducting their operations and this lack of information is, in large part, due to deficiencies in the accounting systems.<sup>4</sup> Moreover, studies showed that is not difficult or expensive to implement some effective changes in the accounting system.

Furthermore Chartered Accounts found out that from a financial perspective, capital investment decisions that ignore environmental cost are found to be relatively more costly in the long run. The case studies stress that organizations need to be clear about how they define environmental costs, and the scope of environmental costs to be considered in the early stages of an environmental management accounting project need to be kept within the manageable limits.

<sup>&</sup>lt;sup>1</sup>Chartered Accounts. 2003. Environmental Management Accounting: An Introduction and Case Studies for Australia. Found at: <a href="http://www.epa.vic.gov.au/bus/accounting/docs/final\_report.pdf">http://www.epa.vic.gov.au/bus/accounting/docs/final\_report.pdf</a>. Accessed date: June 21, 2008.

<sup>&</sup>lt;sup>2</sup> International Federation of Accountants. 2004. International Guidelines on Environmental Management Accounting (EMA).

<sup>&</sup>lt;sup>3</sup>Gale, Robert, J.P. and Stokoe, P. K. 2001. Environmental Cost Accounting and Business Strategy. Found at: <a href="http://www.ecological-economics.org/pages/environmental\_cost\_accounting.pdf">http://www.ecological-economics.org/pages/environmental\_cost\_accounting.pdf</a>. Accessed date: June 21, 2008 chartered Accounts.

With a "revised" business accounting system that will incorporate environmental management and cost, the information gaps in business and Macro economic accounts dealing with the environment can be filled up.

#### Issues and Concerns to be addressed

- Need for rearticulating or revising the internal accounting system of institutional sectors to facilitate provision of required information on environmental management and cost
- Need for desegregation of environmental costs in financial statements
- Need to expand level of classification on ISIC to included environmental management and cost
- Need to incorporate environmental management and cost/expenditures of different institutional sectors in surveys conducted by government
- Need for Advocacy or Information, Education Campaign on Environmental Management Accounting among the different institutional sectors
- Need for more recommendations/guidelines in allocating environmental cost if these are integrated with the usual operation of businesses

# ACCOUNTING FOR ENVIRONMENTAL MANAGEMENT AND ENVIRONMENTAL COSTS

Seminar on Information Gap, SESSION 2
24 June 2008
UN Headquarter, New York City, USA

## By: ESTRELLA V. DOMINGO

#### **OUTLINE**

- I. INTRODUCTION- RATIONALE
- II.DATA FRAMEWORK: ENVIRONMENTAL MANAGEMENT AND ENVIRONMENTAL COSTS

# III.ACCOUNTING STANDARDS- CAN IT BE USED FOR STATISTICAL PURPOSES? IV.RECCOMENDATIONS

#### I. INTRODUCTION

1. Emerging practice among statistical agencies is to consider using administrative data as supplement or to complement statistical surveys for compiling macro-economic accounts.

(Administrative data are largely management reports, accounting and financial statements, among others)

#### I. INTRODUCTION

2. Environment is a critical concern that requires data (such as emissions, waste discharges, value of natural assets) that are hard to come by given its expansive and technical nature and multidisciplinary characteristic. These are difficult to collect through the regular surveys and censuses.

(These data need to be converted into accounting terms for analysis purposes.)

#### I. INTRODUCTION

- 3. Statistical agencies are just starting to incorporate environmental statistics into surveys and censuses.
- 4. The available environmental data at present applies different concepts, methods and classifications.
- 5. To ensure more environmental information for analysis in policy and decision making, using the business accounting system to generate these data is imperative.

#### I. INTRODUCTION

6. The use of accounting standards will facilitate the implementation of SEEA, ensure sustainability and improvement of data and contribute to the acceptability and use of environmental data for environmental management and efficient pricing.

## II. DATA FRAMEWORK: ENVIRONMENTAL MANAGEMENT AND ENVIRONMENTAL COSTS

7. The SEEA developed by the UNSD provides a suitable statistical framework for environmental management and environmental costs. It presents the environmental assets and how these input into production. The framework also shows the industries and their use of the environment as a sink for wastes.

- II. DATA FRAMEWORK: ENVIRONMENTAL MANAGEMENT AND ENVIRONMENTAL COSTS
- 8. The SEEA is designed as a satellite account of the 1993 SNA to allow its extension for dealing with alternatives outside of the conventional System of National Accounts (SNA)
- 9. Thus, the SEEA can generate indicators needed for environmental management such as the physical flows of resources, environmental costs, among others.

## III. ACCOUNTING STANDARDS- CAN IT BE USED FOR STATISTICAL PURPOSES?

10. Mainstreaming sustainable development into development planning and management decision process call for continuous monitoring of environmental conditions. This brings to fore the need for longer time series data, that are consistent and sustainable. This is effected through environmental statistics/indicators and accounts.

- III. ACCOUNTING STANDARDS- CAN IT BE USED FOR STATISTICAL PURPOSES?
- 11. Coming from a standard framework, these statistics and accounts provide a consistent and sustainable assessment and comparison of environmental conditions across time and space; between different processes or product lines; between divisions in an enterprise. Analysis of these data is a concern of environmental management.

- III. ACCOUNTING STANDARDS- CAN IT BE USED FOR STATISTICAL PURPOSES?
- 12. The data for these statistics and accounts are sourced from various data sources which do not necessarily follow the same concepts as presented by the framework, provide the required level of detail/disaggregation and use the same methods.

- III. ACCOUNTING STANDARDS- CAN IT BE USED FOR STATISTICAL PURPOSES?
- 13. Accounting standards can provide consistency in concepts, classifications and methods of data for compiling the SNA as well as for analysis. On the other hand, it can help improve the data needed for environmental management and environmental costs.

- III. ACCOUNTING STANDARDS- CAN IT BE USED FOR STATISTICAL PURPOSES?
- 14. The introduction of accounting standards in environmental management will somehow draw in the participation of accountants who are responsible for preparing the management and financial reports.

- III. ACCOUNTING STANDARDS- CAN IT BE USED FOR STATISTICAL PURPOSES?
- 15. Thus, integrating environmental concerns into accounting standards and system can lead to a stronger, more consistent and reliable environmental statistics and environmental accounts. It will to a large extent facilitate acceptability of the SEEA estimates.

#### IV. RECOMMENDATIONS

16. There are existing models of countries who have incorporated accounting standards into environmental statistics and accounts.

Countries can refer to and advocate these models as a best practice.

#### IV. RECOMMENDATIONS

- 17. For countries, this development will mean opening the SEEA to accountants and other experts which will mean more realiable data for the SEEA.
- 18.Linking the SEEA with the accounting standards will definitely popularize the accounts.

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## Thank you!

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