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35. ENVIRONMENTAL ACCOUNTING AND MANAGEMENT

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INTRODUCTION

There is a worldwide debate on the issue of environmental management, stemming from a flow of evidence about ecological degradation caused by economic development. Now, due to cost pressures, customer awareness, supply chain relations and activities of environmental campaigners encourage the companies to go for environmental initiatives. The society particularly from developed countries highly concern about the impacts on the quality of their life due to the pollution of air, land and water. To evaluate the applicability of the proposed five stages framework for Environmental Management System.

PROBLEMS OF ENVIRONMENTAL ACCOUNTING

In the context of environmental disclosure in company's annual report, it has been noticed and reported that there are:

- Lack of awareness and understanding on the nature and extent of the adoption of environmental management system practices and organization's environmental accounting function.
- Lack of understanding and commitment of companies for the needs in the environmental disclosure

OBJECTIVES OF ENVIRONMENTAL ACCOUNTING

- To determine and assess the effect of environmental accounting on the improvement of environmental and overall organization's performance.
- To determine the extent of environmental disclosure as a part of social responsibility.
- To determine the effectiveness of environmental cost accounting system for environmental audits and performance improvements.

FORMS OF BUSINESS ACTIVITY

This study focuses on the use of environmental accounting system to monitor the baseline parameters in the environmental management system as an effective tool to monitor and evaluate organization's commitment to environmentally sustainable forms of business activity.

ENVIRONMENTAL ACCOUNTING SYSTEM

As environmental management in business has evolved over time, interest has grown in developing a better understanding of environmental-related financial costs and

benefits as input to conventional management accounting. The main stimulus is growing evidence that focus on environmental related factors can enhance the profitability and financial position of a business. Environmental accounting is used to assess full environmental costs associated with activities and/or products. Environmental performance of organizations' in more measurable manner. The key areas for monitoring are aggregated emission to air, water effluent discharge, soil contamination and boundary noise level.

A TOOL OF EVALUATE ENVIRONMENT

In the past, environmental accounting systems were used as a tool to evaluate and disclose environmental impact reduction effects to environmental conservation costs. However, in fact now the EMS in business has evolved, interest has grown in developing a better understanding of environmental related financial costs and benefits as an input to conventional management accounting. For example, the internal costs associated with air emission to the environment are often not identified within conventional management practices. As a result, cost savings relating to environmental pressures frequently remain hidden. So need to establish and adopt the environmental accounting.

DECISION MAKING PROCESS

Most companies had recognized the superiority in principle of pollution prevention at source over end-of-pipe solution, and were seeking to prevent pollution by integrating EMS into their complex environmental decision-making processes, which eventually lead to sustainable management. This tool to internally measure and evaluate the profit obtained from business activities It is necessary to measure and identify the environmental cost impact such as air emission, waste disposal, waste water. The organizations also need to measures and evaluates environmental conservation costs paid by product line and process, whether the costs work toward advancing social effects and corporate profits, and whether the environmental impact of business activities as a whole suits the organization's business size which leads to the establishment of a framework for environmental accounting.

LACK OF ENVIRONMENTAL AWARENESS

Sixty eight percent of companies surveyed claimed that their activities had no significant impact toward environment, and therefore there is no need for any disclosures. Further, many companies believed that environmental issues claimed that environmental impacts are unknown.

LACK OF PERCEIVED BENEFIT

A large number of non disclosing companies did not believe that investment in environmental initiative offered them either opportunity for cost saving or improved support from shareholders. Only half existing reporting companies indicating that disclosure would be regular practices in their annual report further underline this belief.

LACK OF GOVERNMENT PRESSURE

One of the most prominent factors that are able to drive companies for environmental disclosure is the government. The government enforcement for mandatory environmental reporting is very important. The government is ranked above the influence of business associations and was seen to be more important the resource or shareholders and investors pressure. Strong instruction and enforcement is needed to overcome resistance and perceptions that environmental reporting is an unnecessary cost burden.

ENVIRONMENTAL AUDIT

Environmental auditing is a generic term, which encompasses a wide range of management activities, including environmental compliance audit, environmental risk assessments, and environmental review (Rezaee and Elam, 2000). In ISO 14001, environmental audit defined as “the systematic, documented verification process of objectively obtaining and evaluating audit evidence to determine the reliability of an assertion with regards to environmental aspects of activities, events and conditions as to how they measure established criteria, and the communicating such result to the client” (cited in Taylor et al., 2001). According to Taylor et al. (2001), the best EMS auditor is the auditor with an accounting background. The total estimated damage caused to the natural environment in one day according to the Germany Federal Environmental Agency (Letmathe and Doost, 2000) is given by:

- The destruction of 55,000 hectares of tropical forest;
- The reduction of arable land by 20,000 hectares;
- The extinction of 100 to 200 species;
- Emission of 60 million tons of carbon dioxide into the atmosphere

PREVENTION STRATEGIES

- Design products, which generate less

waste or emission during their life cycle.

- Technologies that uses less power and produce less waste which subsequently will decrease the expensive “end-of-the-pipe” clean-up operations (Banerjee, 2001)
- Substitute materials that can reduce waste or indirect effect
- Modify operating processes to reduce wastes
- Develop continual waste and energy minimizing program
- Develop method to reuse or recycle waste rather than sent for disposal (recovery). Us
- Conservation – minimize depletion of natural resources by establishing effective control measures or prevention measures
- Use the recycled material

LIMITATION OF RESEARCH

In past, many researchers have identified the difficulties or limitations in establishing good environmental accounting are; difficult in forecasting future environmental related cost, type of the likelihood action or effort need to be taken, and failure to see the benefit of environmental accounting to companies. The amount of resource allocation in term of manpower, money and others by organizations towards environmental initiatives needs further investigation. In the area of environmental auditing, the depth of audit conducted either by external or internal auditors in determining the relationship between EMS and the environmental accounting need for further research.

CONCLUSION

The relationship between the organization and the environment is receiving increasing attention. Currently, debate on global climatic change and biodiversity is becoming more commonplace in corporate world, together with concern over water, air and soil pollution. Although the sustainability of economical development is a shared responsibility of organization, government and consumers, but the organizations can play vital role in slowing down the environmental degradation. It is possible because an organization has financial resources, technological knowledge and institutional capability and long-term vision to find environmental solutions. Thus, the programs or activities for keeping pollution under control, zero waste or design for environment such as product life cycle analysis (LCA), total quality environmental management and others. In this way, the organization can lead to an improvement in overall environmental performance, customers’ satisfaction and company performance.

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