The Environmental Accounting: Experience from Oversea and Solutions for Vietnamese Enterprises

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Abstract:
At present, environmental accounting is gradually being implemented worldwide. It is the duty of companies to apply environmental accounting to the lives of individuals. The article summarizes some key points regarding environmental accounting, the introduction of environmental accounting in some countries around the world, and demonstrates some challenges in our country's application of environmental accounting to provide some solutions to boost the application of environmental accounting to Vietnamese businesses.

Keywords: Accounting, environmental accounting, enterprise, Vietnam

1. Introduction
A part of the business accounting system is environmental accounting. It is an invaluable business management tool, and it is essential for the protection of the environment. Environmental accounting remains a relatively recent idea in Vietnam and many companies and individuals have not really been involved in it.

Nevertheless, it has been present in the world for decades and concentrated in developed nations. In the United States, environmental accounting emerged first in 1972. At the time, it focused mostly on national accounting, but not on the corporate point of view. A project on environmental accounting was initiated by the Environmental Protection Commission in the United States in 1992 to facilitate and promote full understanding of all aspects of environmental accounting and related issues.

Creation and enforcement of environmental accounting on the basis of national environmental policy frameworks, such as the Environmental Cleaning Act, the Environmental Debts Act, the Water Purification Act, the Sarbanes-Oxley Act, the Recycling and Waste Act, the Dangerous Species Act, etc. Under the national environmental protection policy, US companies are starting to introduce new legislation related to environmental accounting. In compliance with the Financial Accounting Standards Board and the Securities Commission, companies must perform reports and disclose relevant details.

2. The Benefits of Environmental Accounting
Environmental accounting offers corporations and the whole community certain advantages. The basic advantages are as follows:

Firstly, the implementation of environmental accounting would lead to improving the image of the organization and improving its competitiveness.

Environmental accounting can help to assess performance with more reliable, complete and detailed information, thereby enhancing the reputation of the company with stakeholders, helping companies strengthen relationships with creditors, banks, shareholders, consumers ... By meeting international environmental standards, generating market benefits, enhancing credibility.

Second, it helps minimize production by applying an accounting environment. If the good plan for the environment is completed, it will be limited to the prefixed as a resource, resources, kernel is normal in the development of emissions, increase resource quality, increase profitability.

Third, effective environmental accounting allows managers to make important choices, such as reducing production costs, increasing efficiency, investing better and safer production machinery and equipment offering premium goods which leads to lower prices. In terms of selling rates and higher earnings, this would help corporations have a competitive edge and reduce legal issues.

Fourth, environmental accounting, through waste management associated with generation sources, helps to control operational costs, and enhance the environment.
Fifth, environmental accounting allows companies to fully define, accurately assess and appropriately assign environmental costs, thereby helping to price goods and assess accurate business outcomes. Based on this, organizations will make effective product strategy decisions as well as investments in equipment and technology.

Sixth, a healthy working atmosphere for accounting would lead to enhancing the business’s status, trying and satisfying relationships. Helping companies to incorporate more seamlessly into foreign markets in the course of growth and upgrading in domestic and global markets.

Good implementation of environmental accounting would satisfy and enhance trust with stakeholders because, in addition to environmental conservation, state agencies and environmental organizations are still involved in economic growth. Around the same time, by performing this job well, corporations would get a lot of benefits from state governments as well as environmental groups.

Seventhly, by the more scientific organization of the accounting information system and the incorporation of the information flow of operations from all areas of the company, environmental accounting also helps enhance the current accounting system.

3. Experience in Applying Environmental Accounting in a Number of Countries around the World

3.1. Experience of the United States

After the Conference on the Environment in Stockholm-Sweden in 1972, environmental accounting in the United States emerged in 1972. Accounting was originally based on national-level accounting. Environmental accounting at the enterprise level began its study from 1990 until 1992, when the US Environmental Protection Agency (EPA) carried out a project on environmental accounting with the goal of supporting and promoting full understanding of the aspects of environmental costs, the relationship.

Based on the synchronous legal framework of environmental accounting and the public's pressure on the environmental conservation campaign, corporations are forced to pay attention during their operations to environmental concerns. The environmental costs that corporations spend must be paid attention to.

In the United States, the application of environmental accounting focuses primarily on the topic of environmental costs for decision making by management and, at the request of the Certification Commission, focuses on the provision of environmental information.

3.2. Experience of Korea

South Korea is one of the first countries to be involved in introducing corporate-level environmental accounting. Some of Korea’s leading corporations have also begun to incorporate environmental accounting since the mid-1990s. The Korean government made great strides in the late 1990s to disseminate environmental accounting to businesses to encourage sustainable growth.

Korea’s environmental accounting system is designed and developed on the basis of a detailed legal system, coordinated by the following agencies: The Ministry of the Environment, the National Bank, the National Statistics System Office, the Korea Accounting Institute, leading Korean companies, the World Bank. In particular, in the production of environmental accounting at the national level, the National Bank and the National Statistical Office play an important role. In developing corporate environmental accounting, including environmental financial accounting and environmental accounting, the Ministry of the Environment, the Korean Accounting Institute, Korea’s leading businesses, and the World Bank play an important role.

The application of environmental accounting, according to the experience of Korean businesses, focuses on the calculation of environmental operating costs, in particular the costs of handling environmental waste, and the distribution of environmental costs on an operating basis (ABC), environmental benefits assessment and evaluation.

Korean corporations' environmental information is seen in the annual environmental report.

3.3. Experience of Germany

In the world, Germany is the most industrially developed country. At the same time, Germany is also facing several problems with the contamination of the atmosphere caused by industrial development activities. Promoting the German government’s legal policies is environmentally harmful.

In Germany, environmental accounting is carried out on the basis of ecological balance, so there is a lot of use of material data. To help make decisions about technological improvements, corporate management structures, product plans for green goods, the use of environmentally sustainable materials, companies use environmental accounting.

This shift leads to cost savings for raw materials, electricity, water, waste management costs, productivity, and quality improvements...The experience of German companies also indicates that the key objective of the implementation of environmental accounting is the accounting of resource flows, the study of the input output table and the calculation of the quantity of raw materials, resources, and water used. Determine the annual volume of waste gas, wastewater and solid waste on an annual basis.

3.4. Experience of Japan

Since 1999, environmental accounting has been extended to companies in Japan, allowing Japanese companies to achieve a great deal of cost saving performance, growing profits against the goal of sustainable growth. Japanese companies also draw the attention of the environmental cost assessment and reporting guide adopted by the Environment Committee in March 1999.
The launch ceremony of the Commission on Environmental Accounting under the Ministry of Industry and Trade (METI) took place in September 1999. The Organization of Environmental Governance for Industry (JEMAI) is the main office of the commission.

For three years, the association has been undertaking a research project to establish an effective environmental accounting method for Japanese companies. Japanese experience indicates that the government is interested in environmental accounting and issues several documents. In 2000, the Japanese Ministry of the Environment (MOE) announced the guidelines for environmental accounting to enable Japanese companies to voluntarily disclose environmental accounting details to the public through Environmental Reports.

This guide explains environmental accounting's governance feature, but it also puts more emphasis on making publicly accessible environmental reporting. In addition to the Environmental Accounting Standards, the Japanese Environment Ministry released in 2001 the Voluntary Environmental Reporting Guidelines Applicable to Japanese businesses.

In Japan, environmental accounting is used not only for the purpose of cost management in companies, but also for the purpose of helping to make strategic decisions on product design and development and the choice of long-term investment projects.

4. Current Situation of Research and Application of Environmental Accounting in Vietnam

Vietnam first enacted the Law on Environment in 1993 and the revised Law on Environmental Protection in 2005. The Government issued Decree No. 67/2011 / ND-CP dated August 8, 2011 on taxable, tax bases, tax declaration, tax calculation, tax payment and environmental protection tax refund; The Ministry of Finance issued Circular No. 152/2011 / TT-BTC dated 11/11/2011 guiding the implementation of Decree 67/2011 / ND-CP; Circular No. 159/2012 / TT-BTC dated September 28, 2012, amending and supplementing Circular No. 152/2011 / TT-BTC ... but our country has not issued an accounting regime related to the application; environmental accounting in the business.

There are no records in current accounting regimes that direct businesses to differentiate and track production and business costs, no accounts required to account for environmental costs ... There are not many state frameworks and regulations currently in place to enable companies and entities to research and enforce environmental accounting.

The study and application of environmental accounting in Vietnam is still recent, but the number of environmental accounting research projects is not extremely high. Most businesses have not arranged to quantify environmental costs and benefits with a full - time accountant and yet maintain the conventional accounting framework, not incorporating details.

5. Solutions to Develop Environmental Accounting for Vietnamese Businesses

Firstly, the creation of an environmental performance measurement index system needs to be completed. Information on environmental costs for business managers would be generated by the environmental management reporting system. Managers must base themselves on a system of metrics to measure environmental efficiency for the process of assessing environmental cost information. Therefore, corporations need to practice medium completion of the development of an ecosystem together with policy researchers.

Secondly, it is important to study the experiences of countries around the world, especially developed countries, in the application of environmental accounting, from which to draw lessons for Vietnam to achieve the highest efficiency in the application of environmental accounting for enterprises.

Thirdly, businesses need to raise awareness of the value of environmental accounting, to concentrate on analysis and the implementation of environmental accounting, and to accept environmental accounting as part of the joint accounting framework.

The power of the Industrial Revolution 4.0, the application of new advanced science and technology to the application of environmental accounting for high performance and for international integration must be brought into play. Fourth, more attention must be paid to the use 95 of environmental accounting in organizations by state management agencies.

Documents on how to implement environmental accounting, legislation to enable people, organisations and corporations to research environmental accounting issues and encourage businesses, implement environmental accounting should be researched and promulgated.

Vietnam 's Ministry of Natural Resources and the Environment should research, create and issue environmental accounting guidance documents and underline that this is an important method for managing the environmental performance of companies.

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