

# A Study of Environmental Accounting

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## ABSTRACT

*Environmental accounting is a tool to supplement environmental management. The disclosure of environmental accounting data as one of the key elements in an environmental report enables those parties utilizing this information to get an understanding of the company's stance on environmental conservation and how it specifically deals with environmental issues. At the same time, a more comprehensive grasp of the companies and other organizations' environmental information can be obtained.*

**Key Words:** Environmental Accounting

There is no standard definition of natural resources and environmental accounting. The term environmental accounting could, in a general sense, be used to indicate taking account of the environment and changes in it, and integrating the results with the systems of national accounts (SNA) so as to provide a valuable information base for planning and laying policies for the integrated sustainable development and growth of the nation. Today businesses face a ladder of environmental regulations and industries from manufacturing to technology must now consider their ecologic and social impact. Businesses today are required to consider their larger footprint, and the smartest of those businesses learn how to do it in away that is not only ecologically and socially responsible, but also economically feasible and financially beneficial. Financial health and profitability seldom happen by accident, and without proper planning and foresight, navigating environmental legislation and social reporting could drain a business dry. Environmental and social accounting grew out of an imperative to balance a company's financial health with its broader obligations. Environmental accounting is a field that identifies resource use, measures and communicates costs of a company's or national economic impact on the environment. Costs include costs to clean up or remediate contaminated sites, environmental fines, penalties and taxes, purchase of pollution prevention technologies and waste management costs. An environmental accounting system consists of environmentally differentiated conventional accounting and ecological accounting. Environmentally differentiated accounting measures effects of the natural environment on a company in monetary terms. Ecological accounting measures the influence a company has on the environment, but in physical measurements.

## Objcatives

- a. Taking the total stock of assets or reserves related to environmental issue & changes therein.
- b. Estimation of the total expenditure protection or enhancement of environment.
- c. To identify that part of the gross domestic product which reflects the cost necessary to compensate for the negative impact of economic growth i.e. the so-called defensive expenditure to protect environment.
- d. Assessment of environmental costs & benefits: The decrease (depletion) in natural resources due to their use in production & final demand and The changes in environmental quality resulting from pollution & other impacts of production & consumption & other natural events on one hand, & the expenditure for environmental protection & enhancement of the environment on the other.
- e. Elaboration & measurement of indicators, relating to environmentally adjusted product & income which are disclosed by Environmentally Adjusted Net Domestic Product (EDP), i.e., Net Domestic Product minus Environmental costs.
- f. Analysis of EDP : It is to plan the use of resources by squeezing them & reducing waste to attain sustainable development.

## Function of Environmental Accounting

(a) Internal Functions: As one step of a company's environmental information system, internal function makes it possible to manage environmental conservation cost and analyze the cost of environmental conservation activities versus the benefit obtained, and promotes effective and efficient environmental conservation activities through suitable decision-making.

(b) External Functions: By disclosing the quantitatively measured results of its environmental conservation activities, external functions allow a company to influence the decision-making of stakeholders, such as consumers, investors, and local residents.



### **Environmental Conservation Benefit**

Environmental conservation benefit is measured in physical units and is the benefit obtained from the prevention, reduction, and/or avoidance of environmental impact, removal of such impact, restoration following the occurrence of a disaster, and other activities. By assessing the economic value of environmental conservation benefits which are measured in physical units, results are described in monetary values by some cases. Currently, in the field of environmental economics, a number of valuation methods are being developed for the purpose of determining the environment's economic value. However, there is no established valuation method suitable for environmental accounting. It has been pointed out that there are a wide variety of potential uses for integrating various environmental impacts into a single indicator as monetary value by valuating the economic benefits of environmental conservation activities. The advances in the development of such a method are expected.

### **Segment Environmental Accounting**

This is an internal environmental accounting tool to select an investment activity, or a project, related to environmental conservation from among all processes of operations, and to evaluate environmental effects for a certain period. The effect of investment on environmental conservation will be calculated based on the concept of "Return on Investment"(ROI). The calculation result is used internally for decision making in sustainable environmental management. Ricoh Group companies and divisions, such as its recycling business division, increasingly utilize segment environmental accounting for their operations.

### **Business Sector Environmental Accounting**

The Ricoh Group engages in environmental activities in many business sectors. This is an indicator of how such environmental activities contribute to environmental management conditions in respective business sectors. Because the properties of operations differ by business sector, we have repeatedly discussed which indicator would be appropriate for a given sector.

### **The need for Environmental Accounting at Corporate level**

It helps to know whether: corporation has been discharging its responsibilities towards environment or not. A company has to fulfill following environmental responsibilities.

- (a) Meeting regulatory requirements or exceeding that expectation.
- (b) Cleaning up pollution that already exists and properly disposing of the hazardous material.
- (c) Disclosing to the investors both potential and current, the amount and nature of the preventative measures taken by the management (disclosure required if the estimated liability is greater than a certain percent say 10% of the company's net worth).
- (d) Operating in a way that those environmental damages do not occur.
- (e) Promoting a company having wide environmental awareness.
- (f) Control over operational and material efficiency gains driven by the competition global market.

### **Scope of Environmental Accounting**

The scope of Environmental Accounting (EA) is very wide; it includes corporate, national and international levels. Here, the emphasis is given on the corporate level accounting. The following aspects are included in : From internal point of view, investments are made by the corporate sector for minimization of losses to environment. It includes investment made into the environment saving equipment devices. This type of accounting is easy as money measurement is possible. From external point of view all types of losses to the environment either occur directly or indirectly due to business operation /activities. It mainly includes: Degradation and destruction like soil erosion, loss of biodiversity, air pollution, water pollution, noise pollution, problem of solid waste, coastal and marine pollution. Depletion of non-renewable natural resources i.e., loss emerged due to over exploitation of non-renewable natural resources like minerals, water, gas, etc. Deforestation and Land uses.

## Conclusion

The quantitative management of environmental conservation activities is an effective way of achieving and maintaining sound business management. In other words, in carrying out environmental conservation activities, a company or other organizations can accurately identify and measure investments and costs related to environmental conservation activities, and can prepare and analyze this data. By having better insight into the potential benefit of these investments and costs, the company can not only improve the efficiency of its activities, but environmental accounting also plays a very important role in supporting rational decision-making. In addition, companies and other organizations are required to have accountability to stakeholders, such as consumers, business partners, investors and employees, when utilizing environmental resources, i.e. public goods, for their business activities. Disclosure of environmental accounting information is a key process in performing accountability. Consequently, environmental accounting helps companies and other organizations boost their public trust and confidence and are associated with receiving a fair assessment.

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