

Environmental Accounting and International Financial Reporting Standards (IFRS)

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Abstract

As financial globalization proceeds, international financial reporting and auditing standards are increasingly becoming important instruments of integration. This has been observed in both the London and Pittsburg summits of the G20 leaders in 2009. The G20 leaders reinforced the influence of International Financial Reporting Standards (IFRS) in that they called for the implementation of global accounting standards by 2011. By the end of 2008, there were over 100 countries that had adopted IFRS. Another parallel summit was the United Nations special summit on the environment which was held on 22 September 2009. The United Nations' summit underscored the link between environment and finance. This research paper makes a critical appraisal of the contemporary environmental accounting literature and examines the applicable and relevant paragraphs of the global financial reporting standards (IFRS). The relevant paragraphs for environmental accounting have been analyzed in relation to the environmental financial reporting.

Keywords: Environmental reporting, IFRS, Environmental financial reporting, Environmental costs

Introduction

Worldwide growth of public concern for the natural environment has been one of the most important developments in recent decades. Globalization has helped connect societies and their environmental fates more closely than ever before. At the same time, environmental problems increasingly transcend national borders and pose serious challenges to the health of the planet. The development of more effective environmental laws and legal systems throughout the world has thus become critical to directing economic development and growth onto a path of environmental sustainability.

As financial globalization proceeds, international financial reporting and auditing standards are increasingly becoming important instruments of integration. This has been observed in both the London and Pittsburg summits of the G20 leaders in 2009. The G20 leaders reinforced the influence of International Financial Reporting Standards (IFRS) in which they called for the implementation of global accounting standards by 2011. By the end of 2008, there were over 100 countries that had adopted IFRS (Cabrera. 2008; Barth. et al 2008). Another parallel summit was the United Nations special summit on the environment which was held on 22 September 2009. The United Nations' summit underscored the link between environment and finance in the said summit.

Now a days, most of the organization invokes trans-boundary and non-trans-boundary environmental issues into the earnings quality literature. It is because of the absence of provisions for decommissioning and rehabilitations in the various environmental laws and global accounting standards. The same situation is with the reserves set aside for contingent liabilities for activities that are related to the firm's past and present activities. Consequently, earnings inflation by domestic and transnational companies. Hence, there is a paucity of research on the link between accounting quality studies and environmental accounting studies.

This research paper makes a critical appraisal of the contemporary environmental accounting literature and examines whether international financial reporting standards (IFRS) can contribute towards the monitoring and protection of the environment. In this research, the relevant paragraphs of international accounting standards

presently known as international financial reporting standards for environmental accounting have been analyzed as discussed below.

1. Framework for the preparation and presentation of Financial Statement

Financial statements are prepared and presented for external users by the entities around the world. The definition of financial statements not only restricted to financial statements, now a days. But it has been extended to environmental financial reporting for most of the business entities. The environmental financial reporting covers all those activities associated with the presentation of financial and non financial environmental information. Although such environmental financial statements may appear similar from country to country, there are various differences due to variety of social economic and legal circumstances and by different countries having in mind the needs of different users of financial statements when setting national requirements.

1.1 Accountability of Information

According to Paragraph 14 of the Framework, the preparation and presentation of financial statement is the responsibility of the management. The management should report all the relevant figures and informations which may affect the decisions of its users or material from the management point of view. Those users who wish to assess the stewardship or accountability of management do so in order that they may make economic decisions. These decisions may include even the replacement of management.

1.2 Relevancy of Information

The management should disclose all information which may be useful for its users. Information must be relevant to the decision-making needs of users. The disclosed information has the quality of relevance when it influences the economic decisions of users by helping them evaluate past, present or future events or confirming. or correcting, their past evaluations (Para – 26).

1.3 Materiality

The materiality of information is based upon the requirement of legislation or any other relevant factors. Sometime the small amount is material whereas a large amount is not material. Such as sitting fees paid to directors are the material information and it must be disclosed separately in financial statement. Therefore, the relevance of information is affected by its nature and materiality (Para – 29 & 30). In the context of environmental accounting, the management should measure and disclose the contingent liabilities in financial statement for those activities which may arise in futures based upon the past experience as foot note.

Information is considered material if its omission or misstatement could influence the economic decisions of users taken on the basis of the financial statements. Materiality depends on the size of the item or error judged in the particular circumstances of its omission or misstatement. Thus, materiality provides a threshold or cut-off point rather than being a primary qualitative characteristic which information must have if it is to be useful.

1.4 Substance over Form

If information is to represent faithfully the transactions and other events that it purports to represent. it is necessary that they are accounted for and presented in accordance with their substance and economic reality and not merely their legal form. The substance of transactions or other events is not always consistent with that which is apparent from their legal or contrived form (Para – 35).

1.5 Neutrality

To be reliable, the information contained in financial statements must be neutral. i.e. free from bias. Financial statements shall not be neutral where the selection or presentations of information influence the making of a decision or judgment in order to achieve a predetermined result or outcome (Para – 35).

1.6 Prudence

The preparers of financial statements have to contend with the uncertainties that inevitably surround many events and circumstances such as the collectability of doubtful receivables the probable useful life of plant and equipment purchased for pollution control any other environmental liabilities claims that may occur. Such uncertainties are recognized by the disclosure of their nature and extent and by the exercise of prudence in the preparation of the financial statements. Prudence is the inclusion of a degree of caution in the exercise of the judgments needed in making the estimates required under conditions of uncertainty such that assets or income are not overstated and liabilities or expenses are not understated. However the exercise of prudence does not allow, for example, the creation of hidden reserves or excessive provisions the deliberate understatement of

assets or income or the deliberate overstatement of liabilities or expenses because the financial statements would not be neutral and, therefore, not have the quality of reliability (Para – 37).

1.7 Capital maintenance adjustments

The revaluation or restatement of assets and liabilities gives rise to increases or decreases in owner's fund. While these increases or decreases meet the definition of income and expenses, they are not included in the income statement under certain concepts of capital maintenance. For example, any amount which is incurred in the preceding financial year and omitted from recording shall be adjusted from the capital. In the latest case of Coca Cola, India the company has been penalized for Rs. 276 Crores for violating the environmental laws shall not be adjusted from the current year result. However it shall be adjusted from the capital funds.

2. IFRS 6 - Exploration & evaluation of mineral resources

IFRS 6 permits a mining company to select an accounting policy of either immediately expensing or capitalizing exploration or evaluation (E&E) expenditures provided the policy is applied consistently between periods and to similar items and activities. The policy to expense or capitalize should reflect the extent to which the type of E&E expenditure can be associated with finding specific mineral resources. This means that Canadian mining entities will most likely be able to retain their existing Canadian GAAP accounting policy for eligible E&E expenditures.

IFRS 6 does not cover expenditures incurred before or after the E&E phase. Entities must therefore adopt policies for pre-exploration (typically incurred before obtaining the legal rights to explore a specific area) and development activities (after the technical feasibility and Commercial viability of extracting a mineral resource is demonstrable) which are consistent with the IASB Framework.

IFRS requires that decommissioning provisions be recognized when a present obligation from a past event exists and it is probable that future costs will be incurred to restore or rehabilitate a property or other long-lived asset. The definition of a provision under IFRS is broader. IFRS requires a liability to be recorded even when only a constructive obligation exists which may have been created by promises or established patterns of carrying out similar activities. In addition, measurement of the liability under IFRS differs in several respects including use of a current discount rate specific to the liability and presentation of accretion of the discount as interest expense in the income statement.

In accordance with IAS 37 Provisions, Contingent Liabilities and Contingent Assets an entity recognizes any obligations for removal and restoration that are incurred during a particular period as a consequence of having undertaken the exploration for and evaluation of mineral resources (Para – 11).

2.1 IFRIC 5 - Decommissioning restoration & environmental rehabilitation funds

The purpose of decommissioning restoration and environmental rehabilitation funds hereafter referred to as 'decommissioning funds' or 'funds' is to segregate assets to fund some or all of the costs of decommissioning plant (such as a nuclear plant) or certain equipment (such as motor cars), or in undertaking environmental rehabilitation (such as rectifying pollution of water or restoring mined land) together referred to as 'decommissioning' (Para – 1). The contribution in the above funds may be through voluntary or regulatory obligations. The funds may have any of the following structures.

- (a) Funds that are established by a single contributor to fund its own decommissioning obligations whether for a particular site or for a number of geographically dispersed sites.
- (b) Funds that are established with multiple contributors to fund their individual or joint decommissioning obligations when contributors are entitled to reimbursement for decommissioning expenses to the extent of their contributions plus any actual earnings on those contributions less their share of the costs of administering the fund. Contributors may have an obligation to make additional contributions for example in the event of the bankruptcy of another contributor.
- (c) Funds that are established with multiple contributors to fund their individual or joint decommissioning obligations when the required level of contributions is based on the current activity of a contributor and the benefit obtained by that contributor is based on its past activity. In such cases there is a potential mismatch in the amount of contributions made by a contributor (based on current activity) and the value realizable from the fund (based on past activity).

The contributor shall recognize its obligation to pay decommissioning costs as a liability and recognize its interest in the fund separately unless the contributor is not liable to pay decommissioning costs even if the fund fails to pay (Para – 7).

2.2 Accounting for obligations to make additional contributions

When a contributor has an obligation to make potential additional contributions, for example in the event of the bankruptcy of another contributor or if the value of the investment assets held by the fund decreases to an extent that they are insufficient to fulfill the fund's reimbursement obligations. this obligation is a contingent liability that is within the scope of IAS 37. The contributor shall recognize a liability only if it is probable that additional contributions will be made (Para – 10).

3. IAS 8 Accounting policies changes in accounting estimates and errors

In the absence of an IFRS that specifically applies to a transaction other event or condition management shall use its judgment in developing and applying an accounting policy that results in information that is:

- (d) relevant to the economic decision-making needs of users. and
- (e) reliable. in that the financial statements
- (f) represent faithfully the financial position. financial performance and cash flows of the entity
- (g) reflect the economic substance of transactions, other events and conditions and not merely the legal form.

3.1 Retrospective application

When a change in accounting policy is applied retrospectively in accordance with paragraph 19(a) or (b), the entity shall adjust the opening balance of each affected component of equity for the earliest prior period presented and the other comparative amounts disclosed for each prior period presented as if the new accounting policy had always been applied (Para – 22). However the provisions of para 22 is subject to para 23 of the said IAS.

3.2 Changes in accounting estimates

As a result of the uncertainties inherent in business activities, many items in financial statements cannot be measured with precision but can only be estimated. Estimation involves judgments based on the latest available reliable information. For example, estimates may be required of:

- (a) Provision for cleanup costs.
- (b) Provision for rehabilitation costs for mining industries.
- (c) Provision for contingency claims.
- (d) Provision for other environmental related costs such as air pollution, noise pollution, toxic gases and hazardous waste materials.
- (e) Provision for acquisition of equipments for pollution control.

The use of reasonable estimates is an essential part of the preparation of financial statements and does not undermine their reliability (Para – 33).

Under this reporting standard the entity provides the statistics about emissions production of pollutants toxic waste disposal systems ground water pollution & land degradation depletion industrial accidents and environmental impact studies from the various raw data during the compilation.

3.3 Errors

Errors can arise in respect of the recognition measurement presentation or disclosure of elements of financial statements. Financial statements do not comply with IFRSs if they contain either material errors or immaterial errors made intentionally to achieve a particular presentation of an entity's financial position financial performance or cash flows. Potential current period errors discovered in that period are corrected before the financial statements are authorized for issue. However material errors are sometimes not discovered until a subsequent period and these prior period errors are corrected in the comparative information presented in the financial statements for that subsequent period (paragraphs 42–47).

It is necessary to make estimates in applying an accounting policy to elements of financial statements recognized or disclosed in respect of transactions other events or conditions. Estimation is inherently subjective. and estimates may be developed after the reporting period. Developing estimates is potentially more difficult when retrospectively applying an accounting policy or making a retrospective restatement to correct a prior period error because of the longer period of time that might have passed since the affected transaction other event or condition occurred. However, the objective of estimates related to prior periods remains the same as for

estimates made in the current period namely for the estimate to reflect the circumstances that existed when the transaction other event or condition occurred.

4. IAS 1 Presentation of financial statements

Financial statements are a structured representation of the financial position and financial performance of an entity. The objective of financial statements is to provide information about the financial position financial performance and cash flows of an entity that is useful to a wide range of users in making economic decisions. Financial statements also show the results of the management's stewardship of the resources entrusted to it. To meet this objective financial statements provide information about an entity's:

- (a) Assets
- (b) Liabilities
- (c) Equity
- (d) Income and expenses, including gains and losses
- (e) Contributions by and distributions to owners in their capacity as owners
- (f) Cash flows

These informations along with other information in the notes assists users of financial statements in predicting the entity's future cash flows and, in particular their timing and certainty (Para – 9).

An entity cannot rectify inappropriate accounting policies either by disclosure of the accounting policies used or by notes or explanatory material (Para – 18).

4.1 Going concern

When preparing financial statements management shall make an assessment of an entity's ability to continue as a going concern. An entity shall prepare financial statements on a going concern basis unless management either intends to liquidate the entity or to cease trading or has no realistic alternative but to do so.

When management is aware in making its assessment of material uncertainties related to events or conditions that may cast significant doubt upon the entity's ability to continue as a going concern the entity shall disclose those uncertainties. When an entity does not prepare financial statements on a going concern basis it shall disclose that fact together with the basis on which it prepared the financial statements and the reason why the entity is not regarded as a going concern.

4.2 Information to be presented in the statement of financial position

As a minimum the statement of financial position shall include line items that present the following amounts:

- (a) property, plant and equipment
- (b) investment property
- (c) intangible assets
- (d) financial assets (excluding amounts shown under (e), (h) and (i))
- (e) investments accounted for using the equity method
- (f) biological assets
- (g) inventories
- (h) trade and other receivables
- (i) cash and cash equivalents
- (j) the total of assets classified as held for sale and assets included in disposal groups classified as held for sale in accordance with IFRS 5 - Non-current Assets Held for Sale and Discontinued Operations
- (k) trade and other payables
- (l) provisions
- (m) financial liabilities (excluding amounts shown under (k) and (l))
- (n) liabilities and assets for current tax, as defined in IAS 12 *Income Taxes*
- (o) deferred tax liabilities and deferred tax assets, as defined in IAS 12
- (p) liabilities included in disposal groups classified as held for sale in accordance with IFRS 5

- (q) non-controlling interests, presented within equity
- (r) Issued capital and reserves attributable to owners of the parent.

4.3 Sources of estimation uncertainty

According to Paragraph – 125, an entity should disclose information about the assumptions it makes about the future and other major sources of estimation uncertainty at the end of the reporting period that have a significant risk of resulting in a material adjustment to the carrying amounts of assets and liabilities within the next financial year. In respect of those assets and liabilities the notes shall include details of:

- (a) their nature
- (b) their carrying amount as at the end of reporting period.

5. IAS 41 – Agriculture

IAS 41 prescribes the accounting treatment financial statement presentation and disclosures related to agricultural activity. And any related matter not covered in other Standards. Agricultural activity is the management by an entity of the biological transformation of living animals or plants (biological assets) for sale into agricultural produce or into additional biological assets. IAS 41 prescribes among other things the accounting treatment for biological assets during the period of growth degeneration production and procreation and for the initial measurement of agricultural produce at the point of harvest.

It requires measurement at fair value less costs to sell from initial recognition of biological assets up to the point of harvest other than when fair value cannot be measured reliably on initial recognition. However, IAS 41 does not deal with processing of agricultural produce after harvest; for example processing grapes into wine and wool into yarn.

IAS 41 requires an entity to measure that biological asset at its cost less any accumulated depreciation and any accumulated impairment losses. Once the fair value of such a biological asset becomes reliably measurable an entity should measure it at its fair value less costs to sell.

Under a transaction-based historical cost accounting model a plantation forestry entity might report no income until first harvest and sale perhaps 30 years after planting. On the other hand, an accounting model that recognizes and measures biological growth using current fair values reports changes in fair value throughout the period between planting and harvest.

IAS 41 requires an unconditional government grant related to a biological asset measured at its fair value less costs to sell to be recognized in profit or loss when and only when the government grant becomes receivable. If a government grant is conditional including when a government grant requires an entity not to engage in specified agricultural activity an entity should recognize the government grant in profit or loss when and only when the conditions attaching to the government grant are met. If a government grant relates to a biological asset measured at its cost less any accumulated depreciation and any accumulated impairment losses the entity applies IAS 20 Accounting for Government Grants and Disclosure of Government Assistance.

5.1 IAS 20 – Accounting for Government Grants and Disclosure for Government Assistance

Government grants including non-monetary grants at fair value shall not be recognized until there is reasonable assurance that:

- (a) the entity will comply with the conditions attaching to them; and
- (b) the grants will be received.

Once a government grant is recognized any related contingent liability or contingent asset is treated in accordance with IAS 37 Provisions, Contingent Liabilities and Contingent Assets There are two broad approaches to the accounting for government grants: the capital approach under which a grant is recognized outside profit or loss and the income approach under which a grant is recognized in profit or loss over one or more periods.

5.2 IAS 37 - Provisions, Contingent Liabilities and Contingent Assets Provisions

The Standard defines provisions as liabilities of uncertain timing or amount. A provision should be recognized when and only when

- (a) An entity has a present obligation (legal or constructive) as a result of a past event.
- (b) It is probable (i.e. more likely than not) that an outflow of resources embodying economic benefits will be required to settle the obligation; and

(c) A reliable estimate can be made of the amount of the obligation. The Standard notes that it is only in extremely rare cases that a reliable estimate will not be possible.

In rare cases, for example in a law suit, it may not be clear whether an entity has a present obligation. In these cases a past event is deemed to give rise to a present obligation if taking account of all available evidence it is more likely than not that a present obligation exists at the end of the reporting period. An entity recognizes a provision for that present obligation if the other recognition criteria described above are met. If it is more likely than not that no present obligation exists the entity discloses a contingent liability unless the possibility of an outflow of resources embodying economic benefits is remote.

The amount recognized as a provision should be the best estimate of the expenditure required to settle the present obligation at the end of the reporting period in other words the amount that an entity would rationally pay to settle the obligation at the end of the reporting period or to transfer it to a third party at that time.

If an entity has a contract that is onerous the present obligation under the contract should be recognized and measured as a provision. An onerous contract is one in which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it.

5.3 Contingent liabilities

The Standard defines a contingent liability as:

- (a) a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity; or
- (b) a present obligation that arises from past events but is not recognized because:
 - (i) it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation; or
 - (ii) The amount of the obligation cannot be measured with sufficient reliability.

An entity should not recognize a contingent liability. An entity should disclose a contingent liability unless the possibility of an outflow of resources embodying economic benefits is remote.

The above all discussed international Financial Reporting Standards and International Accounting Standards are discussed with a view to applicability in various situations in the environmental accounting. The accountant and the auditor are required to be familiar with the applicable paragraphs of the above said standards for the recording measurement and reporting in the financial statements.

6. Conclusion

On the basis of above discussion, it is concluded that environmental financial reporting practice are increasing day by day. Still the organization is required to enhance the scope of environmental financial reporting from the present reporting practices consistency of methodological approaches as recognition and measurement of environmental costs environmental benefits environmental assets and environmental liabilities. These should be based upon the relevant paragraphs of the standard prescribed by the International Financial Reporting Standards. Hence we believe that improvements in quality of environmental financial reporting are required. Further a formal set of recognized reporting principles and a standardized reporting framework not dissimilar in principle to those adopted in the Company law or to IASB framework. should help overcome any perception that reporting of social and environmental information lack credibility.

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