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Carbon Credit Accounting: A Step towards Green Accounting

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ABSTRACT

In the era of globalization we ate enjoying rapid industrial growth but as well as we are facing various problems. In these problems one of the most prominent problems is 'Global Warming'. We are facing serious environment degradation, so investment of probable solutions for such problems is necessary for human being. In the way of searching solution for these problems. Kyoto treaty provides one effective mechanism i.e. 'Clean Development Mechanism' (CDM).under CDM, developed countries try to reduce their emission through 'Carbon Trading'. But there is no specific way of accounting for carbon credit. In the study, an effort is made to find out how to generate carbon credit, what is practice pattern of its trading and challenges (recognition, measurement and reporting) faced by accountant at the time of carbon credit accounting and suggest probable solution related to carbon trading accounting. Present study is qualitative in nature and exploratory research design is used for solving the problems.

Key words: Globalization, Global Warming, CDM, Carbon Credit, Carbon Trading

INTRODUCTION

We want to see drastic industrial development in globalized era and it's also going on up to certain extent bit as well as we are facing serious environmental degradation. The major cause of that degradation is industrial emissions. Global warming issues have given a serious thought in the recent times and while it has become typical to reduce the emission levels. Industries are projecting to be taking initiatives to fulfill their social responsibility and entities would like to show responsible behavior towards the environment.

The initiatives gained momentum with the Kyoto Protocol wherein developed nations (Annex 1 countries) committed themselves to reducing the carbon emission levels by 5.2% below the 1990 baseline emission levels by the commitment period of 20087 to 2012. The prescribed targets under the protocol were not made applicable to the developing or least developed countries. It's like penalizing the developed countries for polluting the environment while spoiling the developing or less developed countries as they were allowed to continue to pollute. In the way, protocol provides three mechanisms to reduce emission i.e. Joint Implementation (JE), clean Development Mechanism (CDM) and International Emission Trading (IET), Carbon reduction through emission trading is one better way to reduce emission and provide opportunitiesof development to the developing and least developed countries as financial assistants.

Objectives of the Study: this paper focuses on trading and accounting practices of carbon credit. The whole study is divided into two parts-

A. To study the generation and reading pattern of carbon credit
B. To suggests the way for recognition, measurement and disclosures of CERs.

Carbon Credit: Carbon Credit is unit of Certified Emission Reduction (CER). One CER is equivalent to one ton of carbon dioxide reduction, it is in form of certified which awarded by CDM Executive Board to developing or least developed counties that are successful in reducing the emission that cause global warming. These awarded CERs are tradable in open market.

Generation Process of CER:
In generation of Certified Emission Reduction there are several steps involved which are as follows:

a. Submission of the project design document to the National CDM Authority.
b. Project registration in the host country.
c. Project monitoring by the host country.
d. Verification and certification.

Meaning of Carbon Trading
According to Kyoto Protocol, the target level of emission has been decided for Annexp-1 countries. In the reference respective national government also set emission target for their national companies. However, if these companies are not able to meet their emission targets, they have an alternative of purchasing CER from the market i.e. from someone who is successful in meeting these targets and who has a surplus lf these credits. This buying and selling process of CER is known as emission/carbon trading.

Carbon Trading is a market-based approach used to control pollution by providing economic incentive for achieving reduction in the emissions of pollutions.

Emissions trading as set out in Article 17 Kyoto Protocol, allows countries that emission units to spare- emissions permitted them but not used- to dell this excess capacity to countries that are over their targets.

How Carbon Credits can reduce Emissions?
International treaties have set quotas for amount of Green House Gases (GHG) that Annex-1 countries van emit and have countries set out quota for their own individual business according to their national quota. Business that are over their quotas, they have two options first, they can reduce their emission up to prescribed limit otherwise they must buy carbon credits for excess emissions, while those prescribed limit can sell their remaining credits. Carbon credits create a market for reducing greenhouse emissions by giving a monetary value to the cost of polluting the air. Its value is decided by market function of demand and supply of CERs. Emissions become an internal cost of doing business and are visible in the balance sheet. It can be understand through this example-

Consider a business that owns a factory putting put 150000 tons of GHS emissions in a year. Its governments are an Annex 1 country that enacts a law to limit the emissions that the business can produce. So the factory is given a quota of 1, 20,000 tons per year. The factory either reduces its emissions up to 1,20,000 tons or it's required to purchase carbon credits to offset the excess i.e. 30000 tons. After costing up alternatives the business make decide that it is uneconomical or infeasible to investment in new machinery for that year. Instead it may choose to buy carbon credits from open market.

Present accounting practices and major issues of emission trading:
Carbon Credit reporting in financial statement is guided by the Accounting regulatory body of the concern countries and varies across the country. In some countries, it is not mandatory to include these earnings in the financial statement. In most countries accounting bodies as well as professionals are agreed to include the expenditure and revenue related to carbon trading in financial statement. But problem is occurred that there is no specific way or guideline to present these income and expenditures in financial statement. Therefore, some concern countries develop their own guideline for reporting the income and expenditure of carbon credits. There is a need of harmoni9sed reporting system which would be internationally acceptable and able to present true and fair position of financial statement. The major issues of carbon credit reporting are as follows:

A. How to account for expenditure on CDM project?
B. Whether CERs are goods or asset?
C. When to recognize CER as an asset?
D. How to recognize CERs in financial statements?
E. Accounting for sales consideration.

The answer of above questions are to be sought in the existing accounting standards as there are no separate accounting standards for accounting, measurement and disclosure of carbon credits.

Present scenario of Carbon Trading Reporting:
Some expertsaccounted for CDM project as a separate segment under AS-17 (segment reporting). Because the argued that project established under CDM is a separate project for its parent entity.

Another group of accounting professional are advocate that revenue generated through sale of CER should be reported in financial statement as ordinary course of business activity U/S-43A.In the exposure draft of ICAI, it's guided that CERs are treated as inventories of generating entity as they are generated and held for the purpose of the sale in the ordinary course of business AS-2

Some expert admitted that presently, there are no guidelines for accounting of carbon credit having suggested that revenue generated form CDM project accounted as government grants. There logic is based on the definition of the term government prescribed in Para 3.1 of AS-12, which reads: "Government refers to government, government agencies and similar bodies, whether local, national or international. "CER issued by UNFCCC i.e. an international agency.

Proposed Accounting Treatment For Carbon Credit:
Expenses in research and development phase: while undertaking the project for reduction in carbon emission, any cost incurred on development should be accounted for as mentioned in AS-26 for intangible assets. Costs incurred on receiving the CER is measured with certainty at the time of incurring those expended whereas revenue recognition will happen only at the time of sale of CERs. So there is a mismatch of in accounting for expenses and revenue. However, once the CERs are approved should be recorded as intangible assets under AS-26 as they meet the criteria of 'Intangible Assets' as defined in the standard.

An issue that arise while accounting for carbon credits is that whether the carbon credits generatedunder the CDM are goods or an asset ? if we see the definition of the Asset as given in exposure draft on 'framework for the Preparation and Presentation of financial Statement', issued by ICAI, we find that an asset have following features:

- It is resource controlled by entity
- It arise as a result of past event
- Future economic benefits are expected to flow to entity
- All these features are also exist in CER hence should be considered as an asset for accounting point of view. The second reason is that the generation and sell of CER is not ordinary course of business activity of generating entity.

When to Recognize CER as an Asset?
It is to be noted that issuance of CER is subject ot the verification process. If no request for reviews is received within the period of 15 days to the hosting country's project for certification of CER on UNFCCC website, they are automatically by UNFCCC to generating entity.

Benefits of Carbon Credit Accounting:
A. It is helpful in protecting the environmental degradation.
B. Carbon trading accounting is helpful to true and fair presentation of financial statement,
C. It will make easier for financial institution to provide credit for such project.
D. It provides opportunities for green development in coming future
E. It offer development opportunity for developing and least developed countries

Findings and Suggestions:
The scheme of carbon trading will help a lot of developing countries to become energy efficient, earn extra money and improve the living standard of their people. A strong trading and accounting system is a key pre-requisite tool for an emissions trading regime, to cooperate efficiently and to meet environmental targets, the system has ability to record the volume of emissions and it's trading in a systematic and harmonized pattern. At the stage I recommend the following things:

Accounting standards setters issue clear guidance on emission trading accounting by which the ambiguity of accounting practicesandare reduce.

Until and unless a specific accounting standard not issued and effective till the date all expenses and revenue related to CDM project should be guided by AS-26. That's why harmonization of accounting practices can be attained.

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