
CARBON CREDITS: A CHALLENGE ISSUE IN BUSINESS ORGANISATION

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Abstract

The burning of fossil fuels is a major source of green house gas emission for power, steel, textile, fertilizer and cement and many other industries which will rely on fossil fuels (coal, electricity, derived from natural gas and oil). The major green house gases are emitted by these industries are carbon dioxide, methane nitrous oxide, hydrofluoro carbon (HFC's) etc., all which increases the atmosphere's ability to trap infrared energy and thus affect the climate.

To overcome this problem, the UNFCCC has passed the rule in which all organisations that are related with emission of carbon should be penalized. So Carbon credit is a licence or permit to emit 1 metric tonne of Carbon in the atmosphere. The main goal of this paper is to find the problems and also create the solutions regarding it.

Keywords: Carbon, gas, emission, atmosphere etc.

Introduction

A carbon credit is a generic term for any tradable certificate or permit representing the right to emit one tonne of carbon dioxide or the mass of another green house gas with a equivalent to one tonne of carbon dioxide. Carbon Credits and Carbon markets are a component of national and international attempts to mitigate the growth in concentration of green house gases (GHG's)

It is one of the policy instruments that has been shown to be environmentally effective in the industrial sector, as long as there are reasonable level of predictability over the initial allocation mechanism and long term price.

The concept of Carbon Credits came into existence as a result of increasing awareness of the need for controlling emissions. The IPCC (Intergovernmental panel on climate change) has observed that:

" Policies that provide a real or implicit price of carbon could create incentives for producers and consumers to significant invest in low GHG product technologies and process, such policies could include economic instruments, government funding and regulations."

What is Carbon Credit?

Carbon Credit is a license / permit to emit 1 tonne of carbon dioxide in the atmosphere. As everyone is aware Carbon dioxide (CO₂) is the major contributor to global warming. Everyday more and more CO₂ and other green house gases (GHG's) are pumped into our atmosphere.

This is causing rapid climatic changes, much against human welfare. To address the issue of global warming.

The United Nation Framework convention on climate change UNFCC was adopted in 1992. To supplement the UNFCC, the Kyoto Protocol was enforced to maximum amount of GHG's as a country can emit into the atmosphere. This limit is presently applicable to 41 developed countries which are partly to Kyoto protocol. Carbon emission credits issued by UNFCC in DEMAT form therefore it can be traded just like shares in stock and commodity exchange

As per the Kyoto Protocol there are three types of protocols with three different purpose:

Types of Protocol

Assigned Amount Unit (AAU)	Emission Reduction Unit (ERU)	Certified Emission Reduction (CER)
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- ❖ **Assigned Amount Units :** According to Kyoto protocol each annex 1 country is allotted a fixed amount of AAU by the UNFCC in DEMAT form. This represents that the maximum GHG's the annex 1 country can emit into atmosphere.
The annex 1 country in turn will distribute the AAU's to industrial organisation jurisdiction who want to emit carbon into atmosphere.
- ❖ **Emission Reduction Unit :** In this concept a developed country can set up the projects that reduce carbon emission in another developed country, to earn carbon credits from UNFCC. The Carbon Credit so earned is called emission reduction unit. These ERU represents the amount of Carbon emission saved by the project ERU can be used by developed country to setoff against its own emission. This process setoff is called Carbon offset(used).
- ❖ **Certified Emission Reduction :** The Third type of Carbon emission is most interesting of all types, that is certified emission reduction or CER. This Type of Carbon credit involves the developing and least developed countries which are not parties to carbon reduction commitment. This ensures Carbon emission reduction and enables sustainable development. The projects undertaken by the developing countries which reduce carbon emission allotted by UNFCC. The process of obtaining CER is known as Clean Development Mechanism or CDM.

Emission Markets

For trading purposes, one allowance or CER is considered equivalent to 1 metric tonne of Co2 emission. These allowance can be sold privately or in the international market at the prevailing market price. Each integration transfer is validated by the UNFCC.

- Carbon prices are normally quoted in Euro per tonne of Carbon dioxide or its equivalent and other green house gases can be traded.
- Currently these are five exchange trading in Carbon allowances the European climate Exchange, NASDAQ, OMX Commodity, Europe power net commodity exchange, European commodity exchange.
Many companies now engage in emission abatement offsetting programs to generate credit that can be sold on one of the exchange, at least one electronic market has been established in 2008.

How Buying Carbon Credit may reduce Emission?

Carbon credit creates a market for reducing green house emission by giving a monetary value to the cost of polluting the air. Emission become an internal cost of doing business are visible on the balance sheet along with raw material and other liabilities or assets.

For example: Consider a business that own a factory putting out of 1lac tonnes of GHG emissions in a year. It's government is an Annex 1 country that enacts to law to limit the emissions that a business can produce. So the factory is given a quota of say 80,000 tonnes per year. The factory reduces its emission to 80,000 tonnes or is required to purchase carbon credit to offset the excess. After costing up alternatives the business may decide that it is uneconomical or infeasible to invest on new machinery for that year. Instead it may choose to buy carbon credit on the open market from organisation that have been approved as being able to sell legitimate carbon credit.

Trading of Carbon Credit

The most important character of Carbon Credit is its Tradability. Carbon Credits can be bought and sold like any other commodity. Carbon Credit trading is channelized through stock/Commodity exchanges. In India Multi Commodity Exchange(MCX) currently allowed in Carbon Credit. An Organisation can buy and sell any types of Carbon credit just stock and shares. Even future, option and derivative transactions are allowed in Carbon credits. This trading does not only allow in developed countries to meet their reduction emission targets but also motivates developing countries to invest more in clean development projects. This in turn, directly or indirectly provides a gateway for sustainable development.

Issues in Accounting For Carbon Credits

In the Accounting Concept, the Carbon Credit is being a nascent concept, at present there is no uniform accepted accounting treatment for Carbon Credit internationally neither IASB, the issue of IFRS nor IFRIC(International financial reporting Interpretation Committee) have instilled clarity in the issue.

IFRIC-3 emission rights dealt with this issue withdraw ndue to variety of reasons. Hence effectively there is no internationally accepted guidance can this issue. This has resulted in divergent schools of thought for accounting carbon emission credits.

- Different entities have started Carbon credits in different ways. Some entities recognize revenue from carbon credits only when the is finally sold, that as other income is the Profit & Loss Account, while some other entities treat recognize them as intangible asset still others as government grants and account them according to AS-12 accounting for government grants.

Whether Carbon Credit is an Asset

The answer to this question is simple but it is not easy to answer. " The framework for the preparation and presentation of financial statements," issued by ICAI, define an asset as-

" a resource controlled by the enterprise as a result of past events from which economic benefits are expected to flow to the enterprise."

A CER can be generated when enterprise may be engaged with the CDM project. A long procedure has to be followed before any CER can be generated. First of all projects has to be

approved by National CDM authority and later will be verified by Designated operation entity only these procedures, UNFCCC will be able to grant CERs to the entity. This may not generate any CER's. this shows a high degree of uncertainty involved in generation of CER's.

Accordingly at this stage when emission reduction are take place, CER's can act at the best, it said to be the contingent asset- which defines the possible asset that arise from events the existence of which will be confirmed only by the occurrence or non occurrence of one or more uncertain future events not wholly with in the control of enterprise.

- ✓ This asset finds no place in the financial statement except the list in the notes to accounts.

What kind of Asset is CER?

As everyone is aware. CER does not have any physical form. It is allotted by the UNFCCC in DEMAT form. While considering this fact, CER should be concluded that it is an intangible asset. It have to apply Accounting principles presently by the AS-26 intangible Asset.

According to AS-26, it specifically exclude an intangible asset held for sale in the ordinary course of business. A CER is held for sale and not intended to be used in production.

- CER have to be accounted just like any other item of inventory.

Valuation of CER's

Any item of inventory has to be valued at cost or NRV(Net realisable value) whichever is lower. Accordingly CER's also have to be valued at cost of CER's and NRV of CER's are as follows.

Cost of CER's

As per As-2, all costs incurred in bringing the inventories to present location and condition have to included in the cost of inventories. Any enterprise that generate CER has to incur various steps set up a CDM project activity, operate CDM Project & generate CER's. We have to included only those expenses which have directly attributable to generation of CER's.

These Expenses are as follows:

- Fees paid to DOE for validation and Verification
- Cost incurred for preparing project report
- Fees paid to National CDM authority for approval
- Cost incurred for monitoring the reduction of emissions
- Cost incurred for certification of CER's
- Operating cost incurred to run the CDM project etc.
- Research and development cost for exploring way to reduce emission.

Conclusion

Carbon credit system seeks to reduce emission by emission reduction unit and carbon emission reduction unit project. So Carbon credit is indeed a great step towards environment protection, yet it must be modified from time to time to meet the existing needs of environment protection.



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