



Carbon Emissions And Its Implication On Accounting And Taxation Of Companies: A Case Study of Uttarakhand

¹Dr. Namrata Prakash, ²Dinesh Chandra Pandey

¹Associate Professor, School of Management Graphic Era Hill University Dehradun.

²Associate Professor, Department of Management Studies, Graphic Era Deemed to be University, Dehradun, Uttarakhand, India, dineshchandra@geu.ac.in

Abstract

The easiest way to control greenhouse gas discharges is to stop using fossil fuels. However, it is not profitable or commercially viable. Reducing carbon emissions seems very difficult because the government does not want to reduce its own growth rate. In this way, a realistic overall plan for systematically reducing greenhouse gas discharges is developed. It doesn't have to change your current lifestyle. This step is called CO₂ trading. When starting a business, accounting and taxation are required. This study focuses on the accounting and taxation of companies (acquired through Clean Development Discharges Credits). The main objective of this study was to understand how carbon credits are tariff-ed. Primary data was collected from 151 participants. Chi-square test was used to test the hypothesis. Based on these responses, 74% of the respondents believe that CER should be rated below cost or net potential rate. 42.46% thought that it is appropriate to include the revenue from the social responsibility application in the column "Enterprise activity revenue".

Keywords: CO₂ Credit, Clean Development Credit, Trading, Accounting and Taxation.

Introduction

Today, the phrases "Worldwide climate change," and "environmental degradation," and "environment pollution" are most frequently employed. Environmental issues are a top priority for world governments. Recently, the issue of global climate change (GCC) has been seriously taken into account and the increasing concentrations of greenhouse gases must be reduced. The European Accounting Review's decision to publish a special discussion forum on CO₂ trading implies that "CO₂" means something important in terms of a company's accountability to its stakeholders for financial performance and as well as non-financial aspects. In particular, the area of interest of the special discussion forum is not the issue of CO₂, but concerns about the level of global anthropological climate change (referred to as GCC (Global Climate Change) increase in the concentration of greenhouse gases and its

emission in the atmosphere. Governments and international organizations like United Nations, European Union, etc. are trying to react to the threat posed by the GCC by developing scientific knowledge domain in the field, as well as developing diminution policies to tackle the threat of the GCC and an adapting its response to the GCC. The response strategy to the GCC has been diverse, including: (i) raising awareness of desired behavioral changes among the population.

The impact of CO₂ trading on accounting and reporting procedures is then covered in the paper. In its most basic form, CO₂ accounting necessitates the valuation of both obligations and assets, such as contamination rights (if the organization needs to buy extra discharge certificates). But altogether, this essay looks at many ways accounting can participate in a more extensive transition process. In the study, business outcome is a dependent variable. The generally accepted quantitative indicators of financial indicators are accounting and market indicators (Gentri.S.2010).

Measuring CO₂ footprint is inconvenient for local and industrial companies. (Clarkson.LeePinnuck&R.son., 2015). This suggests that sector and firm-level characteristics are important regulatory factors in the relationship betwixt CO₂ discharge and business performance. It also makes sense for stakeholders to demand discharge reductions for companies operating in sectors known to be harmful to the environment. The study includes several financial variables to control the age of a company is presented as a control, as the performance of a company often depends on the length of the company. A lender's interest rate (lev) is expressed as the ratio of liabilities to assets. A Capital Strength Policy (CAPI) has been added to include total assets in total revenue.

CDM project In Uttarakhand

As part of the Clean Development Mechanism, Uttarakhand companies have launched a project to reduce greenhouse gas discharges for energy production. Generate CO₂ credits and revenue. Companies that want to carry out CDM project activities for CO₂ production The loan goes through several stages. Companies wishing to start a clean development mechanism project and generate CO₂. The project then needs to be registered with the UNFCCC (The United Nations Framework Convention on Climate Change) committee in order to raise money. The board of directors developed the procedures and policies. The corporation first suggested additional release cuts, as well as a idea design (PCN) that described each aspects of the construction MD program, including its viability. Make a project document. The project proposal must be certified by a Registered Organization after getting major approval (DOE). An independent assessor recognized by the DM Council will review the PDD to ensure that the proposed project meets Clean Development Mechanism standards. Around 71 percent of all clean development mechanism projects worldwide are located in Asian countries.

Objectives: -

1. To comprehend the Certified emissions reduction (CER) accounting and tariff difficulties.
2. To study the respondent's perception on CER accounting and taxation issues.

Hypotheses

H1: There is no evident difference between the two methods of CER identification in books of accounts.

H2: The valuations of CERs stored for inventories are not materially different.

H3: Different techniques for recognizing returns from the trading of CERs in book-keeping do not significantly differ from one another.

Research Methodology

Sample Size: - 200 questionnaires were given out in total, and 151 of them were completed. So, 151 responses are selected as a sample size. Statistical tool used is Chi Square test is used to examine the null hypothesis.

Listing 1: Commonly Enquired

Enquiries	Yes	No	Neutral	Respondents
Q1. Are you acquainted with the idea of Certificated Discharge Reduction?	151	0	0	151
Q2. The potential for producing certified discharge reductions (CERs) in Uttarakhand is enormous, right?	135	11	5	151
Q3. Are you familiar with the clean development mechanism projects that produce CERs?	130	21	0	151
Q4. Do you believe a company's financial statements should show the overall amount of CERs it generates annually?	140	9	2	151

The Fig.1 above provides answers to frequently asked questions about the CO2 bazaar scenario. It can be seen that all answerer (100%) is familiar with the idea of CER. This demonstrates how widely accepted climate change is and how crucial its components are. Knowingness of climate change and its effects is growing. The chart also reveals that more than 90% of respondents think Uttarakhand has a great deal of opportunity for certified discharge reductions. The same has been stated in the paper "The Impact, Administration,

and Development of CDM" by the Federation of Uttarakhand Economic affairs (FICCI) (2012). Uttarakhand is ranked as one of the top eight in this survey (in order of certified discharge reduction issuance). It ended up being one. 72% of all CERs produced by the bazaar. This displays that Uttarakhand is experiencing strong development in the upcoming CO2 bazaar.

Figure No. 2

As Current assets	As an intangible Asset	As a contingent liability contingent	Total	Premeditated Chi Square Rate	Significant or Not
61	81	9	151	63.01501	Yes
41.50%	51.40%	7.10%	100%	5.991 is the coefficient rate at the 5% significant level for the initial level of flexibility.	

The Fig. above answers frequently asked questions about the CO2 bazaar scenario. It can be seen that majority of answerers know the idea of certified discharge reduction. This displays that the acceptance and underlying drivers of climate change are becoming increasingly important. People are becoming more aware of climate change and its effects. At the climate conference, you will have an up-to-date knowledge of the CO2 dioxide bazaar and its ideas. Additionally, the chart shows that further nearly 91% of respondents think Uttarakhand has a lot of opportunity for certified discharge reductions. It ended up being one. 72% of both the total PTMV bazaar granted. This demonstrates that Uttarakhand is expanding quickly in the coming CO2 marketplace.

Fig. No. 3

Cost price of CER	Net Realizable rate of CER	Cost or Net realizable value whichever is Less	Total	Premeditated Chi Square Rate	Significant or Not
11	5	47	151	45.8	Yes
19.5%	5.40%	75.1%	100%	5.991 is the rate at the 5% significant level for the second level of freedom.	

In Fig. 3, the chi-square rate of 44.8 exceeds the chi-square rate in the Fig. (5,991) at the 5% level of significance with two degrees of freedom. The null hypothesis is rejected. This indicates that there is considerable variation in the assessment of CER when considered as inventory. It is important to think of CER as a stock. 75.35% of the answerer believe that CER should be measured by cost or realizable net rate, whichever is lower. The CER is not recognized as an instrument up to this stage, as it is developed under the ICAI guidelines when charged under the UNFCCC. In accordance with AS 2, assets are respected at cost or net realizable rate if this is lower. Therefore, the answerer agrees with it.

Fig. No. 4

Earnings before interest and tax	Sale of Products or services	Other Revenues	Total	Premeditated Chi Square Rate	Significant or Not
9	57	85	151	57.1512	Yes
6.5%	35.40%	58.1%	100%	Fig. 5.991 is the rate at the 5% significant level for the second level of freedom.	

In Fig. 4, chi-square rate 56.2 is 5% of the two-freedom sense level, which is greater than the tabular chi-square rate (5.991). The null hypothesis is rejected. This shows that there is a big difference in the way revenue is deducted from CER sales. It shows that more than 56% of the respondents believe that revenue should be included as other CER revenue. With regard to revenue recognition, the ICAI guidelines state that the CER is recognized as a warehouse and that companies must use AS 9 (Revenue Recognition) to detect revenue from CER sales. The tariff collected by these companies can be used to store CO2 and promote green technology in Uttarakhand.

When collecting tariff, the question arises of what kind of tariff should be collected.

Fig. No. 6

	Direct Tariff	Indirect Tariff	Total
No of Answerer	95	50	145
Percentage	66.28	33.72	100%

Based on the Fig. in 6 above, of the 145 answerer who agreed to pay VAT in CER, approximately 66.28% of the answerer thought that this revenue should be tariff directly, 33.72% thought that this revenue should be earned Indirectly effect of revenue. Revenue can

again be divided into several categories. The tariff rates vary depending on the head of the tariff office. So where to enter CER sales revenue is again important. In which jurisdiction should direct tariff be tarified?

Fig. No. 7

	Revenue from capital gain	Revenue from business/profession	Revenue from other sources	Sum	Premeditated Chi Square Rate	Significant or Not
No of Answerer	15	39	41	95	23.02501	Yes
Percentage	10.40%	42.10%	47.5%	100%	Fig. 5.991 is the rate at the 5% significant level for the second level of freedom.	

In Fig. 4, the chi-square rate is 56.2, which is larger than the chi-square rate (5.991) at the 5% significance level of two degrees of freedom. The null hypothesis was rejected. This shows that the way CER sales are perceived is very different. From the Fig. above, we can see that more than 56% of answerer feel that their revenue needs to be counted as other revenue from CER when calculating their revenue. According to ICAI guidelines, CER is treated as capital. In addition, companies must apply AS 9 (Revenue Recognition) when accounting for CER revenue. Of the 151 answerers, 145 answered "yes". CER revenue is considered tariff able. In recent years, companies that have avoided such revenue tariff without disclosing sales or sales information to the CER need to be subject to strict tariff rates and transparency. Tariff collected from such companies can be used to reduce CO2 discharges in Uttarakhand and promote green technology. Respondent (145) asked the following question and the results were as follows: What kind of tariff is required to sell a CER?

	Service Tariff	VAT	Import Duty	Excise Duty	Sum	Premeditated Chi Square Rate	Significant or Not
No of Answerer	37	0	3	10	50	72.5251	Yes
Percentage	73%	0%	7%	20%	100%	Fig. 5.991 is the value at the 5% significant level for the second level of freedom.	

Fig. No. 8, the estimated chi-square rate is 71.49611 (7,815) greater than the chi-square rate shown in the Fig., at a significance level of 5%, with three degrees of freedom. The null hypothesis is rejected.

Findings

Currently, Uttarakhand does not have generally accepted accounting principles or credible accounting practices based on US or international accounting standards. Here, CO2 sought to classify another book-keeping handling for recognition transactions. It is unnecessary to create distinct accounting rules for CO2 transactions, nevertheless. Taking into account CO2 credit. Money received from the selling of CERS It is recorded under the Business & Professional heading and is therefore taxed on capital gains from the sale of intangible assets, but in most cases

Uttarakhand companies come from CO2 credit transactions. We recognize the profits of the company as revenue. Subscribe from someone else. CER is traded on the bazaar or in futures contracts. Payment for the service will be processed on the exchange platform and will be processed once the contract is valid. Is subject to VAT. In general, CO2 credits are sold to foreign buyers in Uttarakhand. Therefore, these products do not include VAT.

References

- ChotaliyaMeghna (2014) Accounting for Carbon Credits in India, Indian Jotrnal of Applied Research, Volume: 4 Issue: 5 May 2014 ISSN-2249-555X.
- DharSatyajit (2012), "Carbon Emissions trading in India, A study on Accounting & Disclosures Practice", The Chartered Accountant Journal, December 2012, Pg85-91.
- Agrawal, S.K. (2006) Accounting and Taxation Aspect of Carbon Trading, Chartered Accountant, October, pp.510-513.
- Kerr, S.G. (2008) Accounting Policy and Carbon credits, Journal of Business and Economic Research, 6(8), pp.77-88.
- Lovell, H. and MacKenzi,, D. (2011). The Role of Accounting Professional Organisations in Governing Climate Change, Antipode, 43(3), pp. 704-730.
- Ratnatunga, J. (2008), Carbonomics: Strategic Management Accounting Issues, Journal of Applied Management Accounting Research, 6(3), pp. 1-8.
- Singh, S. and Koshy, J. (2008) India to have new accounting norms for carbon trading.
- Stern, N. (2006) The Economics of Climate Change: The Stern Review (Cambridge: Cambridge University Press).
- United Nations (1998) Kyoto Protocol to the United Nations Framework Convention on Climate Change. Available at: <http://unfccc.int/resource/docs/convkp/kpeng.pdf>
- UNWED (1987) Report of the World Commission on Environment and Development: Our Common Future (Oxford: Oxford University Press).

Rajendran G.- "Carbon Credit- Tool for Global Environmental Protection' Chartered Secretary, The Institute of Chartered Secretaries of India, New Delhi,vol. xxxvii, no.2,p179,February 2008.

Maheshwari Jitendra Basu Ambarish, "Carbon Credit" Chartered Secretary, The Institute of Chartered Secretaries of India, New Delhi, vol.: xxxvii, no.7, P892 .July 2007.

S. Gururaj, "Towards Greener Tomorrow- Understanding Carbon Credit' The Chartered Accountant, Journal of ICAI,New Delhi, Vol.55,No. 12,June 2007 p1943