₹ 200 ISSN - 2249-555X
Volume : 1 Issue : 11 Aug 2012

Indian Journal Of Applied Research

Journal for All Subjects

www.ijar.in

Listed in International ISSN Directory, Paris.

ISSN - 2249-555X

Indian Journal of Applied Research

Journal for All Subjects

Editor,
Indian Journal Of Applied Research
8-A, Banans, Opp. SLU Girls College, New Congres Bhavan, Paldi,
Ahmedabad-380006, Gujarat, INDIA
Contact.: +91-9824097643 E-mail : editor@ijar.in

INDEX

Volume : 1 | Issue : 11 | August 2012 ISSN - 2249-555X

Research Paper Management

An Issues In Carbon Accounting Practices In India

* Mr. Akhilesh N Shukla

* Academic Associate,Business Policy –Area IIM-Ahmedabad

ABSTRACT

The emergence of the opportunity of revenue generation by taking up structured Clean Development Mechanism (CDM) projects has given a new dimension to Accounting Finance and Taxation. As the concept of Carbon Accounting is totally new, even at the international level, there are some issues to be settled before inward at a common opinion. This article takes an in-depth view of the concept.

Keywords :Carbon Trading, Carbon Finance and Accounting, Environment, Social Responsibility, CDM, CER, Corporate Carbon practices, etc...

Introduction:

Climate change is one of biggest threats faced by humanity. Temperature records back to the middle of the last century establish that recent temperatures are warmer than any since direct measurements began — all the 10 warmest years have occurred since 1990, including each year since 1995. Global warming is expected to lead to massive loss of the glaciers and ice-caps at the poles. The loss of land based arctic ice caps would cause rise in sea levels threatening countries like Maldives and coastal populations in many countries including India. Green-House gases (GHGs) such as CO2 are believed to be responsible for this and therefore the efforts to limit the CO2 concentration in the atmosphere below 550 ppm are underway. The one way to do so is to control rate of greenhouse gases emission into the atmosphere.

Certified Emission Reductions (CER) or carbon credits, earned through the reductions in emission of greenhouse gases can either be self generated or can be traded in the international carbon credit market. Typically carbon credits are purchased either through CER purchase agreements, trading on the stock exchanges or even by bidding for tenders floated by several governments. Looking at the huge demand for carbon credits in the developed nations, the developing nations have geared up for tapping the market.

A carbon footprint measures the total greenhouse gas emissions caused directly and indirectly by an individual, event, organization or product. Carbon accounting (also called GHG accounting) does assess the carbon footprint to help organizations adopt strategies aimed at fighting climate change. As with financial accounting and reporting, generally accepted carbon accounting principles are intended to underpin and guide carbon accounting and reporting to ensure that the reported information represents a faithful, true, and fair account of a company's carbon emissions.

Business community in India has started seeing value in undertaking carbon accounting and reporting it in public forums. Such forums include Carbon Disclosure Project (CDP) and company's Sustainable Development Reports. The number of companies which responded the CDP's information request on climate change strategy, risk and opportunities assessment and carbon accounting was answered by 37 companies in 2007. The number increased to 51 in 2008 and dropped marginally to 44 in 2009, partially explained by the global financial crisis.

There is still long way to go for Indian businesses on the path of carbon accounting and disclosures. Even in the top 200 firms in India (by market capitalization), the response rate in last few years has steadily increased and reached 20%, a rather dismal performance compared to developed markets.

There are a few sectors like the software and services which are clear leaders in being carbon-aware, accounting carbon emissions from their emissions, taking efforts in reducing it and communicating it to the stakeholders. Part of this can be explained given the fact that these companies are most export dependent and draw majority of their clientele and revenues from markets of US and EU. Clear laggards in efforts in this direction are companies in the field of banking & diversified financials, capital goods, real estate and retail. Very few companies in these sectors have responded to the CDP information request and have accounted for their carbon emissions. Part of the lack of drive can be explained by significant domestic base, relative inelasticity of demand to seemingly peripheral factors and relative less thought given to corporate social responsibility.

In the following discussion, we summarize the key issues that would become increasing relevant to Indian organizations and drive thorough and wide spread carbon accounting, reduction and disclosure efforts.

Ø Corporate Carbon Accounting

Corporate Carbon Accounting is an approach suited for an organization which wishes to take an overview of the entire organization's GHG footprint. This approach is suited to all types of organizations irrespective of their domain or nature of operations. A robust approach to establish corporate GHG inventory is GHG Protocol Corporate Accounting and Reporting Standard developed by WRI and WBCSD. This approach has been in use since 2004 and organizations worldwide including Nike, Shell, IBM and DuPont have tested this approach for robustness and used it for reporting their own GHG emissions.

Agneya Carbon Ventures can help the organization in establishing its corporate GHG inventory by identifying the business goals for the GHG inventory, setting a suitable organizational and operational boundaries, selecting an appropriate base year, creating a robust data collection, and preparing plan for data quality management and assurance. The outcome of these activities can be presented to the stakeholders as a summary report containing carbon disclosure and emission reduction targets. This report can be used for communicating the inventory to voluntary disclosure programs such as the Carbon Disclosure Project. The robust systems and processes established can be verified independently by

a designated third party and can possibly lead to ISO-14064 certification for the developing organization.

Corporate Carbon Accounting can help the organization identify its emissions and communicate the same to the stakeholders. Communication of the emissions and reduction targets taken (if any) can boost the corporate image by demonstrating the commitment to measure (and reduce) GHG emissions. Within an organization, Corporate Carbon Accounting assignment is best handled by the Corporate Communications and Corporate Branding – the personnel responsible for communication of organizations' initiatives and activities to the stakeholder community.

Ø Corporate Carbon Accounting practices in India

Indian companies are increasingly focusing on their corporate GHG emissions. Tata Motors, Tata, Chemicals, Asian Paints, Infosys, Wipro, ACC, ONGC, Tata Steel, Aditya Birla Group, Ashoka Buildcon Ltd, among other have established corporate carbon accounting system and have disclosed their GHG emissions on Carbon Project Disclosure. Ashoka Buildcon Ltd has become India's first infrastructure company to get ISO 14064 certification.

Government of India has committed to reduce its Carbon Intensity by 20% by 2020 in recent Copenhagen Climate Summit. Also it has allowed for monitoring, measuring, and reporting of GHG emissions for foreign funded projects. Such initiatives from government side would put increasing pressure on corporate sector to go for Carbon Accounting at corporate or project or product (service) level. Most of the developed world already has or going to have regulations which would put limit on the GHG emissions. Europe has EU-ETS, and soon USA would have Waxman-Markey Bill, which would regulate GHG emissions in their domestic industry. These regulations will impact the trade of the goods and services with these countries.

Some of the world's leading organizations have started asking their suppliers to disclose their GHG emissions. Wal-Mart has asked its all suppliers to start measuring GHG emissions and report the same. Carbon emissions information is playing crucial role in business deals, joint ventures, and collaboration decisions. These are game changing challenges and opportunities, and winners would be the organizations which can capitalize on these opportunities and mitigate any risks in their value chain.

Ø Future Policy in Carbon Finance:

Industries such as steel and textiles could soon face a carbon entry barrier, one way or the other, while exporting goods to markets where the country has enacted regulations stipulating guidelines for the domestic industry. The domestic industry, to maintain its competitiveness would ensure that less efficient (and therefore more carbon intensive) products entering into the economy pay for the difference in carbon levels by 'carbon tax' or equivalent.

Though these regulations may take some time to be widely implemented, it makes business sense for companies in select sectors to be prepared with a clear understanding of where they stand with respect to competition from developed countries and other developing countries such as China, Brazil or Vietnam.

Developing countries such as India, Brazil, China and South Africa (BASIC) are facing increasing pressure from the developed world to monitor and report their GHG emissions. This is due to the fact that the growth in GHG emissions worldwide in foreseeable future will come from these economies, thanks to their contribution to world economy and increasingly so. In order to make sure that the developed countries continue to finance emission reduction projects, energy efficiency and other technology development, the BASIC countries may have to undertake monitoring, reporting and verification of their national GHG inventories. When such an mechanism becomes a part of internationally negotiated agreement, carbon accounting and reporting would become statutory requirement like the annual financial reporting and auditing.

Ø Investor requirements

Having realized the crucial importance of good disclosure and corporate governance practices, investors across the globe are demanding companies to disclose their climate change strategies, perceived risks and opportunities created by climate change, contribution to climate change and efforts taken to minimize corporate carbon footprint. To reduce the transaction costs of responding to individual investors in unique format and vice-versa, Carbon Disclosure Project (CDP) has been created as a not-for-profit non-governmental organization. Active since 2006, in 2010 CDP sent out information request to more than 3500 organizations across sectors and scales around the globe. In India, the information is sought from top 200 companies by market capitalization. The responses from companies in relation to their climate change strategies, perceived risks and opportunities and carbon footprint of their operations will be analyzed, compiled in a report and sent to more than 530 investors across globe. Investors also become aware if the organization chooses not to respond to such an information request or decline to participate. The list of investors who get seek such information from corporations through CDP includes Goldman Sachs, Bank of America, JP Morgan Asset Management among others.

Such investor-facing communication should be taken seriously taken by companies and pursued pro-actively even if organization does not receive information request.

Ø Impact to the National Policy

Though the carbon accounting and disclosure efforts of an individual company may not have a direct bearing on the climate policy decisions taken by the Indian government, a wide participation by India Inc. in activities in the area of carbon accounting, emission reductions and reporting can send a strong signal that Indian industry is proactively engaging in the climate change dialogue and response process. Such activities will contribute towards political process through analysis and reporting. For example – the release of CDP India 2009 report coincided with landmark session in parliament where the environmental Minister Mr. Jairam Ramesh announced that India will reduce its carbon intensity levels by 20-25% on its 2005 over the next 11 years. The Economic Times carried an article quoting the CDP India report and saying that India Inc. is well positioned to achieve the 20-25% emission intensity reduction targets given that companies are already voluntarily disclosing their carbon footprints and undertaking measures to reduce them.

Ø Accounting issues – Exposure Draft on Guidance Note on accounting for carbon credits by ICAI

Generation and trading in carbon credits has gained a lot of momentum but there remains lot of ambiguity for the accounting treatment to be rendered. Questions on accounting for expenditure on the CDM projects, accounting for self generated CERs, accounting for sale consideration and so on. The answers are to be sought in the existing accounting standards as there are no separate accounting standards for accounting, measurement and disclosures of carbon credits.

Some of the countries suggest recognition of carbon credits as government grant; however this approach would be inappropriate as government grants are received by an organization on concessional or nominal rates or free of cost, wherein government would grant or allocate some concessional benefit to an entity. In case of CERs, it is not any benefit that is provided by government or any affiliated authority, it is an incentive provided to entities for doing well to the environment.

To resolve the accounting issues, International Accounting Standards Board (IASB) had issued an interpretation IFRIC 3 on Emission Rights but had later withdrawn the same, continuing to debate on the appropriate treatment for CERs. The

Accounting Standard Board of the Institute of Chartered Accountants of India (ICAI) has also issued an Exposure Draft of the Guidance Note on Accounting for Self-generated Certified Emission Reductions in 2009 enumerating the accounting principles for CERs generated by an entity. The exposure draft provides for accounting principles relating to recognition, measurement and disclosures of CERs generated under the Clean Development Mechanism.

Clean Development Mechanism being the relevant mechanism adopted in India for reduction in carbon emissions, it is pertinent to mention that in a CDM mechanism, a developed nation may invest in a project in developing nation, which would result in emission reduction. The emission reductions once certified by the CDM Executive Board, under the protocol are called certified Emission reductions (CERs) or carbon credits and are used to meet nation's commitments under the Protocol.

While undertaking a CDM project an entity has to go through a lot of research and development, documentation and approvals process. Accounting treatment for CERs taking in consideration the exposure draft issued by ICAI should be done in the following manner:

1. Expenses in the research and development phase: While undertaking the project for reduction in carbon emission, any cost incurred on development should be accounted for as enumerated in AS 26 for intangible assets. Cost incurred on receiving the CER is measured with certainty at the time of incurring those expenses 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.
2. CERs held with the CDM Executive Board – The exposure draft on guidance note on accounting for carbon credits states that when the CERs are in the approval stage, these should be accounted for as per the provisions of AS 29 as Contingent Assets and once approved should be recorded in the books as an intangible asset. There is an anomaly in the drafting as Para 30 of AS 29 says that an enterprise should not recognize a contingent asset. However, once the CER are approved by the Board, these should be recorded as intangible assets under AS 26 as they meet the criteria of 'Intangible Assets' as defined in the Standard, which includes 1) Identifiability, 2) Control Over Resources, and 3) expectation of future economic benefits flowing to the enterprise.
3. CERs held for sale – In case an enterprise possess CER which are to be traded in the ordinary course of business, i.e., the enterprise holds the asset as 'available for sale' then, these should be accounted for as Inventory under provisions of AS 2. Para 8 of the AS 26 states that if any item under this standard does not meet the definition of intangible assets, then the expenditure to acquire it or generate it is internally recognized as an expense when it is incurred.

The exposure draft of the guidance note clearly indicates that in case intangible asset is generated, expenses are to be capitalized as per AS 26, whereas in case CERs treated as inventory, costs relating to consultant fees, levies imposed by UNFCCC for approving of CERs are to be inventoried and are to be recorded as lower or cost or net realizable value as per the standard.

Ø Conclusion:

Despite several unresolved issues carbon credits have emerged as a sought commodity for trade and will continue to interest the country for sometime to come. As the issues for accounting of CER credits will appear for the first time in FY 2006-07, it will generate a fair amount of debate among accountancy professionals. ICAI may come up with some guidelines in due course. The views of taxation authorities would be another interesting dimension. This write-up may serve as a starting point for such discussions and debates.

It is evident that voluntary initiatives such as the CDP or company's sustainability reports highlighting their carbon emissions, reduction measures and targets are influencing policy decisions and in future will play a significant role in India's climate change strategy and policy.

REFERENCES

1.A eucalyptus tree absorbs approximately 16 kg of CO2 annually. Assuming car runs 15,000 KM in a year; its total emissions are 2.4 tCO2. | 2.Carbon Disclosure Project, an NGO, on behalf of its 475 financial institutions and investors signatories, asks leading organizations worldwide to disclose their GHG emissions and Corporate GHG strategy. | 3.Kadar Deshpande 'Managing Partner' in Ecologoc Consultancy Firm. | 4.Carbon Credits – Unravelling Regulatory, Taxation & Accounting Issues written by Nidhi Bothra Vinod Kothari & Company. | 5.ENERGY STAR for Computers. U.S. Environmental Protection Agency. | 6.http://www.energystar.gov/index.cfm?fuseaction=find_a_product.showProductGroup&pgw_code=CO | 7.lProduct and Supply Chain Standard. The Greenhouse Gas Protocol Initiative. | 8.http://www.ghgprotocol.org/standards/product-and-supply-chain-standard/lB. Sood, The CIO's Role in Enterprise-wide Environmental Responsibility, Gartner Briefing, Mumbai, July 2008 | 9.State of green business 2008 - Joel Makower from www.greenbiz.com | 10.Green IT a Natural Fit for Enterprise Executives, IDC Press Release, October 2007. | 11. http://www.idc.com/getdoc.jsp?containerId=prUS20932407 | 12.The Greenhouse Gas Protocol Initiative. http://www.ghgprotocol.org/lJ. G. Koomey, Estimating Total Power Consumption by Servers in the U.S. and the World, February 2007. | 13.http://enterprise.amd.com/Downloads/svrpwrusecompletefinal.pdf | 14.T. Schudi et al. High Performance Data Centers: A Research Roadmap. Lawrence Berkeley National | 15.Laboratory. http://hightech.lbl.gov/documents/DataCenters_Roadmap_Final.pdf | 16.Data Centers: Annotated Bibliography. | 17.http://hightech.lbl.gov/dc-bibliography.html | 18.Manufacturer's Association for Information Technology, 2008. | http://www.business--standard.com/india/storypage.php?tp=on&autono=42371 |

Sara Publishing Academy
Indian Journal Of Applied Research
Journal for All Subjects

Editor,
Indian Journal Of Applied Research
8-A, Banans, Opp. SLU Girls College,
New Congres Bhavan, Paldi, Ahmedabad-380006.
Contact.: +91-9824097643 E-mail : editor@ijar.in

Printed at Unique Offset, Novatsing Rupam Estate, Opp. Abhay Estate, Tavdipura, Shahibaug, Ahmedabad