CLEAN DEVELOPMENT MECHANISM (CDM) – AN OPPORTUNITY OF REVENUE GENERATION

Dr. Kavitha Jayakumar*

Dr. VeertaTantia**

Abstract:

Carbon trading, sometimes called emission trading, is a market-based tool to limit Greenhouse Gases (GHGs). Nowadays in the cities and even towns of India, a new business has come into picture, which though related to trading, is a departure from the usual commodity or stock trading. It is the trading of polluting gases, which is also known as carbon trading. It is basically a commercial activity that aims at protecting the earth from the harmful emission of gases from industries. The emergence of this opportunity of revenue generation by taking up structured Clean Development Mechanism (CDM) projects has brought about a novel dimension to accounting and taxation. The present article focuses on the contours of Kyoto Protocol, highlighting the financial and accounting challenges being faced by companies in a developing country like India, where it is an emerging field.

Keywords: Clean development mechanism, Greenhouse gases, Carbon credit, Certified emission reduction, Kytoprotocal

* **Associate professor,** Department of Commerce, Christ University, Bangalore.

** **Assistant professor,** Department of Commerce, Christ University, Bangalore.

Introduction

The Kyoto Protocol, which came intoforce and became legally binding on 15thFebruary 2005 when Russia ratified thetreaty, demands a 5.2% cut in greenhouse gasemissions from the industrialized world as awhole by 2012. India, along with China and Brazil,has emerged as one of its largest beneficiariesin terms of new source of revenue. This is dueto Clean Development Mechanism (CDM),which is perhaps most exciting feature of thetotal scheme which allows 'Annex 1 countries'(A total of 36 countries are listed in Annex 1) tomeet their emission reduction targets bypayingfor greenhouse gas emission reduction in non-Annex 1 (developing) countries.

Most Annex 1 countries have legally binding greenhouse gas emission reduction requirements under the Kyoto Protocol. These countries, instead of reducing emissions of their own companies, can ‘buy’ emission reductions in non-Annex 1 countries. Article 12 of the Kyoto Protocol states: “The purpose of the Clean Development Mechanism shall be to assist Parties not included in Annex 1 in achieving sustainable development and in contributing to the ultimate objective of the convention, and to assist Parties included in Annex 1 in achieving compliance with their quantified emission limitation and reduction commitments.”

India, being a non-Annex 1 country, isnaturally one of largest beneficiaries of theKyoto Protocol. Studies by Crisil and CII estimatethe value of the Indian CDM market at morethan a billion dollars per annum.

Trading of Carbon Credits: Trading ofcarbon credits happens in the form of CERs orCertified Emissions Reductions. CERs are in theform of certificates, just like a stock. A CER isgiven by the CDM Executive Board to projectsin developing countries to certify that theyhave reduced greenhouse gas emissions by oneton of carbon dioxide per year. For example,if a project generates energy using wind powerinstead of burning coal, and in the process saves(say) 25 tons of carbon dioxide per year, it canclaim 25 CERs (One CER is equivalent to oneton of carbon dioxide reduced).

CDM Executive Board: A board comprising10 members supervises the operation of CDM.The Board has the final say on whether a projectis approved or not, and lays out procedures andguidelines for CDM.

Verification: A CDM project is monitored or'verified' after the project has been approvedor registered by the CDM Executive Board.After the project is registered by the ExecutiveBoard, the Designated Operational Entity (DOE)periodically checks (usually once a year) whetheremission reduction has actually taken place ornot. It is only after verification by the DOE thatCERs are delivered. There are presently 11 DOEsglobally, out of which five are represented inIndia.

Emergence of CER Credits: In March 2006,the United Nations Framework Conventionon Climate Change (UNFCCC) CDM RegistryAdministrator, for the first time, forwarded CERs to the holding account of a projectparticipant representing a milestone in theimplementation of the Kyoto Protocol's CDM.The forwarding of CERs to the holdingaccountsof project participants provides them with theend product of their efforts to reduce emissionsof greenhouse gases in developing countries.These CERs have a ready market, wheretransactions happen on arm's-length basis andprice quoted fluctuate as per the situation ofdemand and supply, and also according to thenegotiation skills of the two parties.

Financial Accounting Issues of CDMCredits in India

India is one of the major players in the globalmarket on the supply side of CERs. Indiancompanies have started getting credit of CERsand some of them have also entered into salearrangement with buyers in the internationalmarket. As this is a new concept, it has given riseto interesting financial accounting dimensions.Issues involved are (i) how to account forexpenditure on CDM projects, (ii) whether ornot to account for self-generated CERs held withregistry, (iii) if credits are to be accounted, atwhat point of time these should be recognized in books of accounts and at what value, and(iv) how to account for sale consideration ofCERs and its disclosure in accounts and notes.

Answers to these questions are found withinexisting pronouncements of ICAI as well as Schedule VI requirements. Taxation issues willnaturally follow.

CDM is a Journey, not a Destination: Developing a CDM project should not beviewed as a commercial transaction. It is not ahuge business but simply a profitable way ofmaking business environmentally conscious.A CDM project cannot be undertaken onlyon the basis of generation of expected CERspoints and its market value. To be sustainable,the project must be financially sound by itself.There are several benefits of undertaking CDMprojects, starting from reduced energy bills byusing energy-efficient equipment, additionaldepreciation on capital equipmentinstalledfor CDM projects, reduced regulatory oversight,image of a responsible corporate citizen,advance preparation for such time when Indiawill be given targets to reduce greenhouse gasemissions on its own account, and so on.The availability of a mechanism of recognitionof carbon credits and its marketability providesadditional revenues, and makes businessesmore competitive in the global market. As ofnow, there are no separate Indian accountingstandards to measure income and expenditurefrom carbon reducing projects. The existingstandards can well account for new capitalinvestments, its depreciation, recurring costsand sale proceeds of CERs. Some experts feelthat CDM projects should be accounted foras a separate segment under AS-17 (segmentreporting). This line of thought does notappear practical if the concept of ‘journey, notdestination’ is properly followed. A CDM projectcannot be a profit center or cost center in itself.In a multi-segment industry, any CDM projectcan be identified with its parent segment.

CERs are Goods: CER credits are consideredgoods, as they have all the attributes thereof.As held by the apex court in *TATA ConsultancyServices v. State of Andhra Pradesh [2004] 141Taxman 132/ 271 ITR 401*, while dealing withissue of levy of sales tax on computer software,“a ‘goods’ may be a tangible property or anintangible one. It would become goods providedit has the attributes thereof having regard to (a)its utility; (b) capability of being bought andsold; and (c) capability of being transmitted,transferred, delivered, stored and possessed.”This approach was reiterated by apex courtin *BSNL v. UOI [2006] 152 Taxman 135/ 282 ITR273/ 145 STC 1*.

CER Sale is Other Income, Not Turnover:

We can safely conclude from the discussionabove that sale proceeds of CER credits cannotbe included in Turnover. Section 43A(11) of theCompanies Act, 1956, defines ‘Turnover’ as “theaggregate value of the realization made fromthe sale, supply or distribution of goods or onaccount of services rendered, or both”. Part II ofSchedule VI to the Companies Act, 1956, requiresa separate disclosure of “profits or losses in respectof transactions of a kind, not usually undertakenby the company or undertaken in circumstancesof an exceptional or non-recurring nature, ifmaterial in amount".Though CERs are goods, their sale isundertaken, if not in exceptional circumstances,certainly on non-recurring basis. We havealready seen that a CDM project cannot be aprofit/cost center in itself, and, therefore, it isneither possible nor desirable to attempt to workout separate profit or loss of any CDM project,with an accuracy expected from accountants. Acombined reading of Section 43A and ScheduleVI of the Companies Act clearly establishes thatsale proceeds of CERs should be disclosed as aline item in schedule of other income, if amountis material.

Revenue Recognition on Sale of CERCredits:

As we have already concluded thatCER credits are goods, their sales proceeds haveto be recognized in financial accounts as perpara.11 of the Accounting Standard 9 ('revenuerecognition'). The conditions of para.11 are self-explanatory,and are reproduced below:"11. In a transaction involving the sale ofgoods, performance should be regarded asbeing achieved when the following conditionshave been fulfilled:

1. the seller of goods has transferred to thebuyer the property in the goods for aprice or all significant risks and rewards ofownership have been transferred to thebuyer and the seller retains no effectivecontrol of the goods transferred to a degreeusually associated with ownership; and
2. no significant uncertainty exists regardingthe amount of the consideration that will be derived from the sale of the goods."

Self-generated CERs Held with Registry:

Self-generated CERs held with registry cannot beincluded in Inventories as defined in AccountingStandard-2, as they are not held for sale in theordinary course of business. On the other hand,such credits meet all the criteria of 'IntangibleAsset' as defined in Accounting Standard-26i.e. (i) identifiability, (ii) control over a resource,and (iii) expectation of future economic benefitsflowing to the enterprise.Para 19 to 23 of Accounting Standard-26 dealwith recognition and initial measurement of anintangible asset. Para 20, which is the operatingportion of this section, provides that an intangibleasset should be recognized if, and only if:

(1) it is probable that future economic benefitsattributable to the asset will flow to theenterprise; and

(2) the cost of asset can be measured reliably.

Since we have already demonstrated thatavailability of CER credits is only an additional Benefit of a CDM project, it would be impossibleto measure the cost of self-generated CER assetreliably. Thus it can be concluded that thoughself-generated CERs held with registry areAssets (Intangible), they cannot be recognized in Accounts due to specific requirements ofAccounting Standard-26.

Accounting Carbon Credits as per AS-12:

Some experts, having admitted that thereare presently no guidelines/standards foraccounting of Carbon Credits, have suggestedthat they be accounted as Government Grant.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.” The logic forwardedappears to be misplaced, as in case of financial transactionsarising out of carbon credit, monetary consideration willnot flow from any government or government agency. Intotal gambit, UNFCC CDM registry acts as a Demat bankerrecognising CER credits and keeping an account of it. Thereis no grant at all from any agency. Further, as soon as CarbonCredits are accounted as Government Grants, AccountingStandard-9 ‘revenue recognition’ will cease to operate, leadingto other accounting and taxation complications.

Tax Planning

CER credits are indeed intangible assets, held with registry.CER credits acquired from other parties for the purposes oftrading are recognized in the books at the cost of acquisition,whereas self-generated CER credits are not reflected in financialaccounts. As issues for accounting of CER credits will appear forthe first time in Financial Year 2006-07, it’s important to disclosethe accounting policy adopted for this purpose. It would beappropriate to disclose units of CER held with registry in notesbi-furcating between purchased and self-generated.As CERs are capital assets, tax liability should be admittedunder the head Capital Gain, and claim for concessional rate oftaxation should also be made if credit is held for more than 36months immediately preceding the date of transfer. This givesan opportunity to take a decision about timings of sale of suchcredits, keeping a balance between cash flow needs, interestfactor and difference in rate of tax between long-term andshort-term holdings. As there would be no cost of acquisitionfor self-generated CER credits, section 55(2) of the Income TaxAct will come into operation, and total sale consideration willbe liable for Capital Gains Tax (long term/short term) accordingto the period of holding.In Indian circumstances, if sale of CER credits happen tooverseas buyers, of the property held overseas, such sale,though sale of 'goods', will not attract any sales tax.

Conclusion

It has been believed that GHGs will be slashed to a great extent and this novel mechanism will enable a host of developing countries to become self-sufficient in energy production resulting in revenue generation, leading thereby to improved living standards to their people. India will hopefully benefit from this mechanism and become even more environment friendly for its citizen as it was the main behind the development of this mechanism of carbon trading.

References

- Accounting for carbon, IETA
- Bothra Nidhi, "Carbon Credits – Unravelling Regulatory, Taxation & Accounting Issues".
- http://carbonukcredit.blogspot.com/carbon accounting and disclosure in India, may 17, 2011
- http://carbonukcredit.blogspot.com/may 6, 2011
- http://en.wikipedia.org/wiki/Carbon_credit
- http://siteresources.worldbank.org/INTCARBONFINANCE/Resources/State_and_Trends_2012_Web_Optimized_19035_Cvr&Txt_LR.pdf
- http://sivanesh.com/?p=294
- http://www.articles.timesofindia.indiatimes.com-Accounting norms on C-credit from July 1, Namrata Singh, TNN Jun 13, 2009,
- http://www.deloitte.com/energysolutions
- http://www.epcandi.com/Default.aspx,Shailendra Sharma, sept 2011
- http://www.globaladvisors.in/carboncredits.htm

- http://www.ijrcm.org.in
- http://www.itatonline.org/info/?dl_id=791
- http://www.scribd.com (Presentation by J K Dadoo, Secretary (Environment)-cum-Chairman (DPCC), Govt. of NCT of Delhi, CARBON CREDITS AND KYOTO
- http://www.wikipedia.com
- Kerr Stephen G., Bradley University, USA, "Accounting Policy And Carbon Credits", Journal of Business & Economics Research – August 2008 Volume 6.
- Murray E.V, "The emerging market for carbon trading: a new business opportunity for banks", Cab calling oct-dec, 2007.
- PROTOCOL, 16th October 2008)
- The Chartered Accountant October 2006