

Carbon Credit: A Step Towards Green Environment

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Received: 7 February 2011 Accepted: 7 March 2011 Published: 20 March 2011

Abstract

In today's scenario Global Warming is costing a lot of money, so Green Environmentalist aims to promote policy and business that works for the environment. As we all know, carbon dioxide, the most important greenhouse gas produced by combustion of fuels, has become a cause of global panic as its concentration in the Earth's atmosphere has been rising alarmingly. This has created an opportunity for the trade of carbon credits both within and outside of the regulated area, thereby creating a global "carbon market". In this system of carbon trading, controls are imposed on GreenHouse Gas (GHG) emissions under the Kyoto Protocol, and the pre-decided emission limits are then allocated across countries, which have to control the greenhouse gas emissions from the various industries and commercial units operating within them. The objective of the paper is to discuss the basic concepts and importance of carbon credit. It also emphasizes on the methods used to save the environment. This paper also discusses the business opportunities in the global emissions market in Indian context.

Index terms— Carbon Trading, Kyoto Protocol, GreenHouse Gas(GHG) emissions

1 INTRODUCTION

In the last few years, the reason of the sky being darkened is nothing but the lasting effects of all the carbon dioxide being thrown into the atmosphere and radically changing our climate. This continuous accumulation of carbon dioxide in the atmosphere has contributed to what is known today as Global Warming.

The several other causes besides burning of fossil fuel which has increased the level of carbon dioxide in the atmosphere are the systematic clearing of forests to make way for more factories and various other human structures. The growing awareness about harmful levels of Greenhouse Gases (GHG) and the resulting Worldwide Warming phenomena, has forced the government authorities and private organizations to implement systems that would help in reducing the amount of carbon dioxide in the atmosphere.

2 II.

3 ABOUT KYOTO PROTOCOL

The Kyoto Protocol was initiated by the United Nations Framework Convention on Climate Change and ratified by 181 countries and the European Union as a whole, individual entity in 1997, and was put into effect in 2005. About : Lecturer, Teerthanker Mahaveer University, Moradabad. Email: yuvika.tmu@gmail.com This protocol was proposed by the international community to address and reduce greenhouse gas emissions that have led to global climate change. The Protocol makes it mandatory for commercial entities emitting above the permitted limit of carbon dioxide to cut down their emissions to prescribed levels, or they should buy carbon credits certificates which can be transacted in the market, or alternatively pay a charge for the emissions, which is referred to as carbon tax.

4 III.

5 WHAT IS CARBON CREDIT?

International treaties have set quotas on the amount of GHG countries can produce, which in turn set quotas for businesses. Instruments like carbon credits and carbon offset were introduced in order to improve the scenario by encouraging firms to be more environment friendly in conducting their business. One carbon credit allows one tonne of carbon dioxide or a corresponding amount of other greenhouse gases to be discharged in the air. Businesses that are over their quotas must buy carbon credits for excess emissions, while those below can sell their remaining credits. This exchange of credits between businesses has encouraged carbon trading globally. These credits can be exchanged between businesses or bought and sold in international markets at prevailing market price at two exchanges, namely the Chicago Climate Exchange and the European Climate Exchange. The Multi-Commodity Exchange of India (MCX) may soon become the third exchange in the world to trade in carbon credits. The amount of global emissions can be controlled through the buying and selling of carbon credits in the carbon trading method. It is quite simple and convenient to purchase Carbon Credits from a number of firms, just like any other monetary instrument, as they are traded in an open market. Carbon trading is used when the company's emissions exceed its quota of carbon credits, forcing it to purchase credits from other companies which have spare carbon credits. As a result, the worldwide carbon emissions stay within permissible levels, and the companies come up with ecologically sustainable ways of conducting business. The system also motivates the organisations to be more eco friendly so that they can increase their earnings by selling carbon credits. As carbon credits are freely traded in the market, they make it very easy for businesses to follow the system. There are no complex rules or procedures to adhere to, which enhances their acceptance and makes the system highly successful. Carbon credits can also be purchased even if you are not a part of any organisation in order to lower your own carbon footprint. The money that you put in this manner is routed to fund ecological projects in any region on the planet so that the emissions made as a result of your activities can be neutralized. This sale and purchase in carbon credits helps limit the unchecked emissions of greenhouse gases throughout the world. Organizations responsible for atmospheric pollution are made to pay for their acts while ones taking positive steps are rewarded. In the present scenario, the market of carbon credits has a direct impact on the firm's financial analysis. This has caused firms to actively seek ways to decrease their emissions and adopt cleaner ways of doing business. Thus, the whole system motivates companies and governments to promote environment friendly processes that reduce greenhouse gas emission. Carbon trading, also referred as emissions transacting, it is a joint effort designed to limit the amount of carbon that businesses, organizations and other entities produce over a specific period of time. The ones who are selling are companies that use clean technology and those buying are the world's polluters. In future, the menace of global warming can be effectively handled by this system.

IV.

6 ROLE OF INDIA IN CARBON TRADING

India is emerging as a serious player in the global carbon credits market. This has prompted originator, developer and trader of carbon credits, to set up office in India. Carbon credit is very emerging domain now a days especially in India but very few corporate are aware of this emerging segment. At present it is quite essential to create awareness about this business segment. As, India's GHG emission is below the target and so, it is entitled to sell surplus credits to developed countries. India is considered to claim about 31% of the total world carbon trade, which can give \$25bn by 2010. This is what makes trading in carbon credits such a great business opportunity. Foreign companies which cannot fulfil the norms can buy the surplus credit from companies in other countries. Many Indian companies have been re-rated on the stock markets on the basis of the bonanza that will accrue to them when carbon trading kicks off. SRF Ltd and Shell Trading International have entered into sale and purchase Credit Emission Reduction. Suzlon Energy and Shriram EPC have business in wind energy which is eligible for carbon credit benefits. Shree Renuka Sugars is also expected to benefit from carbon credits. Gujarat Flourochemicals was among the early companies to register for Clean Development Mechanism (CDM) project. India has emerged as the dark horse in this race as more than 200 Indian entities have applied for registering their CDM Project for availing carbon credits. The 800 million farming community in India has also a unique opportunity where they can sell Carbon Credits to developed nations. The India's Delhi Metro Rail Corporation (DMRC) has become the first rail project in the world to earn carbon credits because of using regenerative braking system in its rolling stock. DMRC has earned the carbon credits by using regenerative braking system in its trains that reduces 30% electricity consumption.

It is believed that it is not the penalty awarded to erring companies, but the rewards and recognition given to green firms is what makes this system so popular and exclusive.

This means that companies with limited emissions will devise strategies to further reduce emissions so that they can sell more carbon credits in the international market and thereby increase their profits. Thus, the system keeps on de-polluting the environment increasingly.

V.

7 CARBON OFFSET -METHODS TO SAVE THE ENVIRONMENT

Carbon offset is another financial solution to reduce greenhouse gas emission, which works on a similar strategy. A carbon offset credit is equivalent to reduction of one metric ton of CO₂ or equivalent greenhouse gas in the atmosphere. It immensely aids in promoting renewable and green energy options like solar energy and wind energy, and in funding projects on nature conservation and reforestation. Using cleaner and renewable energy sources like wind and tidal energy helps to achieve this crucial reduction. Even individuals are also using this method and are buying carbon offset to make the environment cleaner and to spread awareness about environment conservation. Buying carbon offset is straightforward and can be conveniently executed on the internet through one of the several carbon offset provider websites. But we must keep in mind that simply buying carbon offset does not take away our responsibilities, as all of us can play an important part in decreasing our carbon footprints by bringing small modifications to our daily lives. These small modifications can be of immense help in preventing further environmental degradation. We should adhere to certain fundamental practices like switching off lights and other electronic equipments when not needed, using low-energy bulbs and LED lighting, and opting for renewable fuels like biodiesel. According to the calculator on westnet.com if the average motorist does 400kms per week in a 2L petrol car then 19 trees should be planted to absorb all the CO₂ created. As the car drives, the trees grow.

Planting 19 trees will offset all your vehicle's emissions for as long as you live, as long as the trees are not felled of course. There are certain few things that we can do to greatly reduce our carbon waste like carpooling, it cuts half of the cost and saving can also be done. The another way to reduce the footprint is by eating vegetarian food because it takes much more energy to produce animal protein than vegetable protein. We can also reduce carbon waste by reducing the size of our landfills i.e. don't take anything that can not be eaten or reusable. A few simple changes can really make a difference, especially if all 6.75 billion of us started to adopt them.

VI.

8 CONCLUSION

Carbon offset and carbon credit still needs to find its place in layman's vocabulary. Thus, mass awareness on the issue through widespread education is required, to provide our future generations the better cleaner environment. But still the increased demand flowing to carbon credits and the introduction of newer financial instruments for emission trading are all signs of heightened activity. It can also be concluded that India is an emerging leader for the developing countries in designing innovative strategies and portfolios for carbon trading.^{1 2}

¹Global Journal of Management and Business Research Volume XI Issue V Version I ©2011 Global Journals Inc. (US) April

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