Vilas Gharat.
Managing Director.
Gharat & Associates.
www.gharatandassociates.com

Carbon Credit Information,

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 devil, however, is now turning into a product that helps people, countries, consultants, traders, corporations and even farmers earn billions of rupees. This was an unimaginable trading opportunity not more than a decade ago.

Carbon credits are a part of international emission trading norms. They incentives companies or countries that emit less carbon. The total annual emissions are capped and the market allocates a monetary value to any shortfall through trading. Businesses can exchange, buy or sell carbon credits in international markets at the prevailing market price.

India and China are likely to emerge as the biggest sellers and Europe is going to be the biggest buyers of carbon credits.

India is one of the countries that have 'credits' for emitting less carbon. India and China have surplus credit to offer to countries that have a deficit.

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Carbon, like any other commodity, has begun to be traded on India's Multi Commodity Exchange. MCX has become first exchange in Asia to trade carbon credits.

- **What is carbon credit?**

As Nations have progressed, we have been emitting carbon, or gases which result in warming of the globe. Some decades ago a debate started on how to reduce the emission of harmful gases that contributes to the greenhouse effect that causes global warming. So, countries came together and signed an agreement named the Kyoto Protocol.

The Kyoto Protocol has created a mechanism under which countries that have been emitting more carbon and other gases (greenhouse gases include ozone, carbon dioxide, methane, nitrous oxide and even water vapour) have voluntarily decided that they will bring down the level of carbon they are emitting to the levels of early 1990s.

Developed countries, mostly European, had said that they will bring down the level in the period from 2008 to 2012. In 2008, these developed countries have decided on different norms to bring down the level of emission fixed for their companies and factories.

A company has two ways to reduce emissions. One, it can reduce the GHG (greenhouse gases) by adopting new technology or improving upon the existing technology to attain the new norms for emission of gases. Or it can tie up with developing Nations and help them set up new technology that is eco-friendly, thereby helping developing country or its companies 'earn' credits.

India, China and some other Asian countries have the advantage because they are developing countries. Any company, factories or farm owner in India can get linked to United Nations Framework Convention on Climate Change and know the 'standard' level of carbon emission allowed for its outfit or activity. The extent to which I am emitting less carbon (as per standard fixed by UNFCCC) I get credited in a developing country. This is called carbon credit.

These credits are bought over by the companies of developed countries -- mostly Europeans -- because the United States has not signed the Kyoto Protocol.

- **How does it work in real life?**

Assume that British Petroleum is running a plant in the United Kingdom. Say, that it is emitting more gases than the accepted norms of the UNFCCC. It can tie up with its own subsidiary in, say, India or China under the Clean Development Mechanism. It can buy the 'carbon credit' by making Indian or Chinese plant more eco-savvy with the help of technology transfer. It can tie up with any other company like Indian Oil [Get Quote], or anybody else, in the open market.

In December 2008, an audit will be done of their efforts to reduce gases and their actual level of emission. China and India are ensuring that new technologies for energy savings are adopted so that they become entitled for more carbon credits. They are selling their credits to their counterparts in Europe. This is how a market for carbon credit is created.

Every year European companies are required to meet certain norms, beginning 2008. By 2012, they will achieve the required standard of carbon emission. So, in the coming five years there will be a lot of carbon credit deals.

Message from UNFCCCC

UN CLIMATE STATEMENT / 21 MAR, 2019

UNFCCC 25th Anniversary: Climate Action is More Urgent than Ever

Children at COP23 opening ceremony in Bonn, Germany

Credit: UN Climate Change

UN Climate Change News, 21 March 2019 - Today marks a special day in the history of global climate action: It marks the day when the UN Framework Convention on Climate Change (UNFCCC) first came into force. To celebrate the 25th anniversary of the entry into force, Patricia Espinosa, UN Climate Change Executive Secretary delivered remarks on this important milestone and encouraged greater ambition and action for a sustainable future. She said:

"While we've made enormous progress in 25 years, the world is still running behind climate change. Today, the urgency to address climate change has never been greater. But because of the work begun 25 years ago, we are also better coordinated to take it on. We have the Paris Agreement, and we have the guidelines strengthening that agreement. What we need now are results."

The EU's nationally determined contribution (NDC) under the Paris Agreement is to reduce greenhouse gas emissions by at least 40% by 2030 compared to 1990, under its wider 2030 climate and energy framework. All key legislation for implementing this target has been adopted by the end of 2018.

- **What is Clean Development Mechanism?**

Under the CDM you can cut the deal for carbon credit. Under the UNFCCC, charter any company from the developed world can tie up with a company in the developing country that is a signatory to the Kyoto Protocol. These companies in developing countries must adopt newer technologies, emitting lesser gases, and save energy.

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Only a portion of the total earnings of carbon credits of the company can be transferred to the company of the developed countries under CDM. There is a fixed quota on buying of credit by companies in Europe.

- **How does MCX trade carbon credits?**

This entire process was not understood well by many. Those who knew about the possibility of earning profits, adopted new technologies, saved credits and sold it to improve their bottom-line.

Many companies did not apply to get credit even though they had new technologies. Some companies used management consultancies to make their plan greener to emit less GHG. These management consultancies then scouted for buyers to sell carbon credits. It was a bilateral deal.

However, the price to sell carbon credits at was not available on a public platform. It is traded on the European Climate Exchange. Therefore, you emit one ton less and you get credit. Emit less and increase/add to your profit.

We at the MCX decided to trade carbon credits because we are in to futures trading. Let people judge if they want to hold on to their accumulated carbon credits or sell them now.

MCX is the futures exchange. People here are getting price signals for the carbon for the delivery in next five years. Our exchange is only for Indians and Indian companies. Every year, in the month of December, the contract expires and at that time people who have bought or sold carbon will have to give or take delivery. They can fulfill the deal prior to December too, but

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most people will wait until December because that is the time to meet the norms in Europe.

Say, if the Indian buyer thinks that the current price is low for him, he will wait before selling his credits. The Indian government has not fixed any norms nor has it made it compulsory to reduce carbon emissions to a certain level. So, people who are coming to buy from Indians are actually financial investors. They are thinking that if the Europeans are unable to meet their target of reducing the emission levels by 2009 or 2010 or 2012, then the demand for the carbon will increase and then they may make more money.

So, investors are willing to buy now to sell later. There is a huge requirement of carbon credits in Europe before 2012. Only those Indian companies that meet the UNFCCC norms and take up new technologies will be entitled to sell carbon credits.

There are parameters set and detailed audit is done before you get the entitlement to sell the credit. In India, already 300 to 400 companies have carbon credits after meeting UNFCCC norms. Till MCX came along, these companies were not getting best-suited price. Some were getting Euro 15 and some were getting Euro 18 through bilateral agreements. When the contract expires in December, it is expected that prices will be firm up then.

On MCX we already have power, energy and metal companies who are trading. These companies are high-energy consuming companies. They need better technology to emit less carbon.

Vilas Gharat.
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Gharat & Associates.
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Carbon credits are a key component of national and international attempts to mitigate the growth in concentrations of greenhouse gases (GHGs). One Carbon Credit is equal to one ton of Carbon Dioxide or in some markets Carbon Dioxide equivalent gases. Carbon trading is an application of an emissions trading approach. Greenhouse gas emissions are capped and then markets are used to allocate the emissions among the group of regulated sources. The idea is to allow market mechanisms to drive industrial and commercial processes in the direction of low emissions or less "carbon intensive" approaches than are used when there is no cost to emitting carbon dioxide and other GHGs into the atmosphere. Since GHG mitigation projects generate credits, this approach can be used to finance carbon reduction schemes between trading partners and around the world.

There are also many companies that sell carbon credits to commercial and individual customers who are interested in lowering their carbon footprint on a voluntary basis. These carbon off setters purchase the credits from an investment fund or a carbon development company that has aggregated the credits from individual projects. The quality of the credits is based in part on the validation process and sophistication of the fund or development company that acted as the sponsor to the carbon project. This is reflected in their price; voluntary units typically have less value than the units sold through the rigorously-validated Clean Development Mechanism.

There are two distinct types of Carbon Credits: Carbon Offset Credits (COC's) and Carbon Reduction Credits (CRC's). Carbon Offset Credits consist of clean forms of energy production, wind, solar, hydro and biofuels. Carbon Reduction Credits consists of the collection and storage of Carbon from our atmosphere through bio sequestration (reforestation, forestation), ocean and soil collection and storage efforts. Both approaches are recognized as effective ways to reduce the Global Carbon Emissions "crises".