What is Carbon Credit[1]

By Satyam Saxena[2]

The primary cause of Global warming is increase in CO_2 emission levels. Over the last century, increase in CO_2 emission occurred majorly because of the human activities relating to agriculture, industry, transportation, and changes in life styles that generated enormous demand for energy. These activities also caused release of greenhouse gases into the earth's atmosphere causing global warming. This has resulted into predictable and also unpredictable changes in the climatic pattern across the planet causing immense losses to nations, particularly the poorer countries. The melting polar ice might result into submerge vast area of coastal land and countries like Bangladesh and Maldives if global warming can continue in similar fashion. Scientists predict that by 2050 the planet earth will no longer remain suitable to human habitations.

To mitigate this, in 1992 United Nations Framework Convention on climate change was set up which started looking into the ways to address this issue and eventually in 1997, the global committee of nations signed off an agreement in Kyoto city of Japan known as Kyoto Protocol. Kyoto Protocol is targeted at establishing mechanism to contain concentration of greenhouse gases (GHG) in the atmosphere. It provided three mechanisms to abate climate change. One of the mechanisms under the Kyoto Protocol was promoting partnerships between the developed countries and the developing countries. It was envisaged that incorporation of the developing countries would help in undertaking projects that would result in reduced greenhouse gas emissions.

Under the Kyoto Protocol agreement, listed six gases that may cause adverse effect on the environment. Apart from carbon dioxide, the others were Methane, Nitrogen Oxide, Hydrofluorocarbon, Sulphur Hexafluoride and Perfluorocarbon. GHG reduction has been measured basis baseline scenario (that emission which would have occurred in the absence of launching of the carbon footprint reduction projects).

With these specific projects, if it results in reduction of GHG emission from baseline scenario of any of the six gases, emission reduction is measured for the same. And this emission reduction will be converted into Certified Emission Reduction (CER), where 1 unit of CER equals to 1 tonnes of CO_2 equivalent. Transfer of CER has become a common

---

[1] *Disclaimer: All views and information expressed in this article is solely of the author. The organisation is not responsible for any view or information in whatever way in this article.*

[2] *Working as Research Associate with Ascension Centre for Research and Analysis.*

practices between the developing and developed countries in recent past. Incorporations and government of developed countries which are unable to meet their GHG reduction can achieve it by purchasing the CER from the developed countries.

The quantum of CO_2 emissions by the industries in their manufacturing process can be reduced through introduction of new technologies. Implementation of new technologies, which results in energy efficiency production process and in turn reduction of CO_2emissions, will receive carbon credit equivalent to the amount of CO_2emission reduction. From business perspective, Kyoto Protocol placed caps on Co^2 emission in the developed world, which was called as Legally Binding Caps. In case, business in Europe need to reduce CO_2emission by 6 % to what they were in 1990's. So the options these countries had were either to de-grow from the 1990's growth standard over the last 20 years, or to implement environment friendly technology to reduce CO_2emissions. Kyoto Protocol came up with another option. It allowed the developed world to do contracts with industries of developing countries exclusively with those who had CER after the process of project registration. European industries could buy CER from Indian industries counts as their compliance. Most of the industries preferred this option because it is cost effective compared to other options. Therefore, they opted for this option to achieve the targets towardsCO_2 reduction. This entire mechanism is known as ***Carbon Credit***. Through carbon credit, countries like India earned significant revenue and to encourage this practice, governments reduces tax rate on income from carbon markets.

References for further reading

1. https://unfccc.int/resource/docs/convkp/kpeng.html
2. http://www.ipcc.ch/ipccreports/tar/wg3/index.php?idp=75
3. https://unfccc.int/process/the-kyoto-protocol/mechanisms
4. https://en.wikipedia.org/wiki/Carbon_credit
5. https://economictimes.indiatimes.com/news/economy/policy/budget-2017-tax-cut-on-gains-from-carbon-credit-sales-wont-benefit-much/articleshow/56944005.cmshttps://www.ripublication.com/gjfm-spl/gjfmv6n9_21.pdf
6. https://www.ripublication.com/gjfm-spl/gjfmv6n9_21.pdf