A Lecture on Carbon Credits

Dr. Sandeep Chauhan, Associate Professor of Chemistry delivered a lecture on the very less known concept of "Carbon Credits and Carbon Trade" on 22nd March, 2019 to the students of 6th Semester.

Abstract:

A carbon credit is a tradable permit or certificate that provides the holder of the credit the right to emit one ton of carbon dioxide or an equivalent of another greenhouse gas. The main goal for the creation of carbon credits is the reduction of emissions of carbon dioxide and other greenhouse gases from industrial activities to reduce the effects of global warming.

Carbon credits are market mechanisms of the minimization of greenhouse gases emission. Governments or some types of regulatory authorities set the caps on greenhouse gas emissions. For some companies, the immediate reduction of the emission is not economically viable. Therefore, they can purchase additional carbon credits to comply with the emission cap from companies that can reduce the emissions immediately. Companies that achieve the carbon offsets (reducing the emissions of greenhouse gases) are usually rewarded with additional carbon credits. The sale of the credits' surplus may be used to subsidize future projects for the reduction of the emissions.

The introduction of carbon credit was ratified in the Kyoto Protocol. The Paris Agreement validates the application of carbon credits to reduce emissions of the greenhouse gases and sets the provisions for the further facilitation of the carbon credits markets.

Types of Carbon Credits

There are two types of the carbon credits:

- **Voluntary emissions reduction (VER):** A carbon offset that is exchanged in the over-the-counter or voluntary market for credits.
- **Certified emissions reduction (CER):** Emission units (or Carbon credits) created through a regulatory framework with the purpose of offsetting a project's emission. The main difference

between the two is that there is a third party certifying body that regulates the CER as opposed to the VER.

Trading of Carbon Credits

Carbon credits can be traded on both private and public markets. Current rules of trading allow the international transfer of carbon credits.

The prices of carbon credits are primarily driven by the levels of supply and demand in the markets. Due to the differences in the supply and demand in different countries, the prices of the carbon credits fluctuate.

Although carbon credits are beneficial to the society, it is not easy for an average investor to start using them as investment vehicles. The certified emissions reductions (CERs) are the only product that can be used as investments in carbon credits. However, CERs are sold by special carbon funds established by large financial institutions. The carbon funds set up the minimum investment amounts of millions of dollars, which provide small investors with the opportunity to enter the market.

There are special exchanges that specialize in the trading of the carbon credits, including European Climate Exchange, NASDAQ OMX Commodities Europe, and European Energy Exchange.