



## Carbon credit trading

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### Abstract

Greenhouse gases. CO<sub>2</sub> Dioxide Carbon CH<sub>4</sub> Methane. Nitrous oxide N<sub>2</sub>O. HFCs and SF<sub>6</sub> Sulfur Hexafluoride cause global warming. Since, CO<sub>2</sub> is the dominant Greenhouse gas these are generally referred as carbon gas. In order to save the world from global warming. United Nations framework conventions on climate changes (UNFCCC) was adopted in 1992 and Kyoto protocol was sign in 1997 as a follow-up measures. Which came into force from 2005 Kyoto protocol fixed sailing on the emissions of greenhouse gases (GHGs) by the developed countries. These countries have set limits to (GHG) emissions by there on industry's and others. The European union in meeting its commitment under Kyoto protocol. Three market based mechanism have been designed to encourage the reduction of greenhouse emission, which are Clean development mechanism (CDM) Joint implementation (JI) International emission trading (IET) The developed countries which are bound to reduce their emission can discharge their commitments by purchasing the carbon emission reduction entitlements (CERs) from the other countries which have implemented Greenhouse gas reduction project. The CERs Carbon credits are traded in the International and Indian commodity exchanges at market determined prices. In India multi commodity exchange (MCX) has become the first Asian exchange to trade in Carbon Credit. It has been reported that about 300 Indians companies are already trade in Carbon Credits MCX. This study analyses the factors which can affect carbon trading and hence the future Greenhouse gas emission.

**Keywords:** Climate change, greenhouse gases, sources of carbon

### Introduction

The International market for Carbon credits grew in value to an estimated US \$ 30 billion in 2006, three times greater than the previous year. It is predicted that, demand year predicted that demand will grow as countries in the developed World are unlikely to meet their Kyoto target to reducing their GHG emissions by an average of 5.2 % below 1990 levels by 2012. While the term carbon trading is used what is actually being traded in all cases are emissions rights measured in tones of CO<sub>2</sub>. While the concept of carbon trading has been on the radar screen. Since the signing of the Kyoto Protocol in 1997 it has only really started to gain Momentum over the last two year through the European emissions trading scheme (EU ETS). In addition to setting the first-ever international target for reducing Greenhouse gas emission the Kyoto protocol was groundbreaking as it established for the first time a means for developing countries to get involved in climate change mitigation enabling a market based solution to an environmental problem and bringing the issue of greenhouse gases to the mainstream of Clean Energy planning.

### AIM

Carbon trading is a market based system aimed at reducing greenhouse gases that contribute to global warming particularly carbon dioxide emitted by burning fossil fuels.

### Objective

The carbon trade originated with the 1997 Kyoto protocol with the objective of reducing carbon emissions and mitigation climate change at future global warming at the time. The major devised was intended to reduce overall

carbon dioxide emission to roughly 5% below 1990 level by between 2008 and 2012.

### Impact

Carbon trading essentially puts a price on a country's carbon emission as a means of encouraging a reduction in greenhouse gases.

### Hypothesis

Can a carbon trading system promote the transformation of a low-carbon economy under the framework of the Porter Hypothesis? Empirical analysis is based on the PSM-DID method.

### Research Methodology

**Simple design:** The universe is divided into four groups. The hundred respondents from highest carbon emission sector we are selected randomly as under

**Design scale:** In order to obtain reliable information from the respondent validated scales was selected for data collection. In this study survey instrument of attitude towards the global warming as the independent variable was adopted from the scale developed by Tiwari. The secondary data relating to Carbon Credit trade and carbon emission where collected from published report and articles.

**Variables:** Attitude towards the global warming

**Independent variable:** Attitude of Carbon Credit trade (CCT), Greenhouse gas emission (GGE) and clean development mechanism (CDM).

**Techniques:** The statistical technique like regression analysis, ANNOXA is used to analysis of data and hypothesis testing.

**Environment Ecosystem:** Environment ecosystem is the basic unit of the field of the scientific study of nature according to this discipline and Ecosystem is physically defined the environment made up of two inseparable components.

**The Biotope (abiotic):** A particular physical environment with specific physical characteristics such as the climate, temperature, humidity, concentration of nutrients or PH.

**Biosynthesis (biotic):** A set of living organisms such as animals, plants or microorganism that are the situation of independence.

**Environmental pollution and pollutants:** Pollutants after the physical and chemical composition of air, water and soil that are not feasible for organism and plants. Pollutants may change growth rate of plants or animals species or interfere with human amenities comfort and health.

#### Example

- a. Gases like CO<sub>2</sub>, SO<sub>2</sub>, and NO<sub>2</sub> etc.
- b. Solid substance like lead and mercury.
- c. Acid rain.

#### Result and Discussion

Carbon markets emerge when market based instruments take hold and trading of carbon emission certificates being market based instruments put a price. On emission of climate damaging greenhouse gases, thus promoting efficient climate change

To help make renewable energies as affordable as possible establishing global standards for industry so as to avoid scenarios whereby companies can claim a reduction in domestic manufacturing has been sent.

#### Suggestions

1. Make climate political decision.
2. Eat less red meat.
3. Purchase green electricity make your home and household Energy Efficient.
4. Buy energy and water efficient appliances.
5. Walk, use cycle or take public transport.
6. Recycle reuse and avoid useless purchases.
7. Telecommunication and teleconferences.

#### Conclusion

This study found that India has opportunity to reduce greenhouse gas and Supply excess CO<sub>2</sub> in the international carbon market but the study found that India will remain second position after china in carbon credit trade in 2030 on the basis of the above analysis. This study suggests increasing the carbon credit trading in India in future.

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