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Carbon credit financing- A global perspective

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ABSTRACT

In order to combat climate change, it became crucial for industrialised countries to swiftly decarbonize and reduce their emission levels. A novel financial tool called carbon financing gives carbon emissions a monetary value and enables companies who want to offset their own emissions to do so by purchasing carbon credits produced by eco-friendly projects. One tonne of carbon dioxide or an equivalent amount of another greenhouse gas may be emitted by the holder of a carbon credit, a sort of trading permit. By directing industrial processes towards less carbon-intensive approaches than those used when there is no cost associated with emitting carbon dioxide and other GHGs into the atmosphere, the government attempts to maintain a limit on the emissions of harmful greenhouse gases (GHGs) from its industries.

Keywords: Carbon Finance, Carbon Credits, Kyoto Protocol, Voluntary Emission Reductions, Certified Emission Reductions, CDM Products, CERS, Emission Trading Management, ETS, United Nations, UNFCCC, Paris Agreement, NCDEX, DNV, London ICE Futures Europe, Carbon Emissions, Carbon Offsetting, Tradable Licence, Taxation Rules.

1. OBJECTIVES

The objectives of this study are

1. To study the rationale behind carbon credits
2. To evaluate different carbon credit products
3. To analyse the functioning of carbon credit financing at global level
4. To get an insight into carbon credit trading in India

2. INTRODUCTION

Carbon credits are a set of tradable licences that businesses may purchase globally and use to emit a specific amount of carbon. Resources that are made available in order to purchase these marketable carbon credits are referred to as carbon finance. The goal of carbon financing, a subset of environmental finance, is to lower global carbon emissions. Tonnes of carbon dioxide are often used to quantify emission reductions. One carbon credit is equivalent to one tonne of carbon dioxide that is not released, giving it a value. One tonne of CO₂ is produced when a person drives a 22 mpg vehicle from New York to Las Vegas.

History of Carbon Credits

Given that carbon is one of the main causes of global warming, it is imperative that carbon levels worldwide are dramatically lowered. The melting of glaciers, an increase in the frequency of extreme weather events like droughts and floods, and a threat to 20 to 30 percent of animal and plant species were some of the negative implications of global warming highlighted by the intergovernmental Panel on climate change in 1988.

In wake of the above mentioned crises the United Nations organized the United Nations Framework convention on climate change (UNFCCC). It was here that through discussions one of the world's most effective and important policy of carbon credits was introduced. The United Nations urged the Annex I signatories (which consisted of 41 countries and the European Union) to commit on reaching the carbon reduction targets that were established for their respective country.

Following this event countries around the world established limits on the emissions that could be carried out by their domestic producers. Through their national registrar, which is overlooked by the UNFCCC, credits were assigned to local producers where each credit allowed the producer to emit approximately 1 tonne of carbon dioxide or other emission.

These manufacturers were very drawn to the idea of carbon credits. It inspired them to look for methods to lessen their carbon emissions so they could sell it to other businesses for a profit. These businesses utilised the money they made from this trade to support a range of initiatives and drive growth. The idea of carbon credits became so well-known that now a massive carbon market has emerged in nations all over the world, involving a number of parties interested in carbon finance.

In order to reduce emissions, the policy of carbon credits set a monetary value for the cost of air pollution. With the help of carbon credits, the cost of emissions was absorbed and made apparent on the company's financial sheet. It had a major effect. Following the Kyoto Treaty, countries were able to reduce greenhouse gases by an overall 12.5 percent, well above the 4.7 percent objective set by countries when the protocol was established.

Indian history of carbon credits

India has one of the fastest-growing carbon markets in the world. India was able to offer 35.94 million carbon credits between 2010 and 2022, which is a significant 17 percent of the voluntary carbon credits granted during this time. India controlled between 20 and 30 percent of the global carbon trade in 2011 and participated in profitable commerce with the industrialised and emerging nations of the United States, Germany, China, and Japan. India maintained its second-place ranking during this period in the UNFCCC's category for the number of CDM projects registered. India's carbon market was expanding more quickly than the nation's IT sector also.

One of the biggest companies engaging in carbon trading in India is JSW steel. JSW steel is a steel producer based in Mumbai and has established itself as the flagship company of the JSW group which is led by one of India's leading entrepreneurs Sajjan Jindal. Other companies engaged in carbon trading include the likes of Powerguda which is set in Andhra Pradesh, Indian aluminium, Grasim industries and many more who have the vision of reducing carbon levels in the country and take a step towards reducing pollution and environmental problems.

Current carbon credit trading in India

The MCX and NCDEX are two exchanges that enable the trade of carbon credits in India. The main commodities derivatives exchange in India is the multi commodity exchange (MCX), which was founded in 2003 and is owned by the government of India's ministry of finance. Another commodities exchange owned by the Indian government is the NCDEX, which was established in the same year. The commodities that are traded on the two markets are the fundamental distinction between them. While NCDEX mostly deals in agricultural products, MCX also trades in silver and gold.

India has been focusing on its carbon policy from a quite a long time. To abide by the promises made at the Paris agreement in 2015 which include the drastic reduction of carbon the Indian government is now intending to forbid exports of carbon credits which may stimulate the formation of a booming national carbon market which is projected to have a widespread impact on demand and hence price on carbon credits.

While this measure is expected to reduce the development of fossil fuel generation capacity, it is certainly going to prove as a boon for the firms engaged in the buying, selling and consulting of carbon credits. Carbon credits is expected to spearhead economic activity while keeping India's promises at Paris agreement in perspective.

Furthermore India has a promising future in carbon trading with India's biggest companies namely Reliance, Ambuja, Birla and Bajaj already taking interest in CDM products. The market size and growth has already attracted people to involve themselves in India's booming carbon market. However challenges still exist in the Indian markets which need immediate attention. Firstly how carbon emission can be reduced to gain more carbon credits and this should be accounted for. Tackling these issues will enable India to gain technological support and advancements as the World Bank will be more keen and likely to partner up with the IDFC to manage the carbon projects in India.

Carbon Finance products

There are two different kinds of carbon credits: certified emission reductions and voluntary emission reductions. While certified emissions depend on emission units that are created through a legal organisation with the aim of decreasing carbon emissions in an economy, voluntary emission reductions are carbon credits that are sold in the voluntary market of credits. It is a certification given out by the UN to its members with the aim of reducing carbon emissions via the use of clean development techniques.

Voluntary emission reductions have made a strong case for themselves as an effective, generally recognised, and acknowledged method to cut carbon emissions. It is governed by DNV, which aids in setting and communicating objectives and aids in a nation's total reduction of carbon emissions. One of the fundamental features of voluntary emission reductions is that they are not required but rather stem from an organization's own willingness to combat climate-related issues. As a result, businesses may be more eager to engage in R&D to decrease carbon emissions and enhance economic wellbeing. The advantages of voluntary emission reductions are distinct. They facilitate the process of managing corporate social responsibility, they improve the overall flexibility of carbon management, and they support and advance public relations.

Voluntary emission reduction credits are priced differently for each project. The primary variables influencing the price of voluntary emission reduction credits are investment costs, which include capital expenditures to finance the carbon reduction project, operating costs, which include expenses for transportation, maintenance, training, and monitoring, and carbon costs, which include expenses for project audits, certifications, and external validation.

The certified emission reduction is created by the clean development Mechanism executive board. CERS trade in both primary, market which is the market which is purchased from an original party which makes the offset, and the secondary markets where the CERS is resold from the market.

There are two types of exclusive CERS that are used in forest projects which are the temporary CERS and the Long CERS. The temporary CER is created for a reforestation activity under the control of the CDM and which terminates at the end of a specific period after which it was issued. The long CER on the other hand is a CER which is used for a reforestation project just like the Temporary CER but it terminates at the end of its issued crediting period.

It is primarily used by annex 1 countries to deal with achieving emission limitation targets and by installation operators under the EUETS to adhere with their obligations to give EU allowances. The CERS can be stored by private corporations and the government on electronic accounts operated by the UN. In 2008 CER maintained its strong position of 20 dollars a tonne but due to the European debt crises that arose in 2012 which reduced industrial activity its price plunged down to 5 dollars per tonne. Leading newspapers like the economist and the guardian describes CDM as a complete tragedy. In the same year CERS saw their record low price of 1.36 euros a tonne as recorded on the London ICE Futures Europe. There were many predictions in the past as well concerning the price of CERS. Point carbon predicted that the prices of certified emission reductions would drop to as low as 50 cents for instance. The pricing of credits generated from these projects also depend on socio economic benefits that they provide to the society they exist within.

Apart from these main factors other factors are also at play while determining the price of these carbon credits such as project location and quality of these projects. Project quality is assessed through standards by which it is validated Location is also an important consideration because credits generated in regions which lack proper infrastructure, labour and other developmental resources often tend to be more costly. The date at which these credits were issued also play a huge role in price determination. The older the carbon credits generated the cheaper their price.

Leading Global Carbon Markets

The leading global carbon markets around the world include china and the European Union. In 2011 the Chinese government launched a pilot carbon emission trading system which operated in around 7 provinces which include Beijing, Tianjin, Shanghai, Guangdong, Shenzhen, Hubei and Chongqing. With over 7 pilot programs launched in china in the next two years the trading volume was able to reach a huge figure of 200 million tCO₂e.

The total value of the trading hit as high as 45.1 billion dollars. Over the years the growth of the carbon market in China has followed a fast upward trend. In china the interim Measures for the carbon Emissions Trading management was responsible for laying the foundation of the country's carbon market. The existence of continuous carbon emissions monitoring, reporting and establishment of appropriate rules has helped develop the carbon market even more in china in the recent years. The Chinese government has continued to strengthen its carbon market with the opening of eight national carbon capacity building centres as well as promising the establishment of more developed infrastructure.

Only a year back in 2021 one of the greatest development happened in china which was the establishment of China national carbon emission trading system.

The first emission trading scheme ever established was established by the European Union in 2005. The EU is committed not only on reducing carbon emissions but emission of other greenhouse gases as well such as nitrous oxide and per fluorocarbons. One of the most successful measures so far the European ETS was successful in reducing emissions by 35 percent between 2005 and 2019. Always willing to collaborate with other compatible systems and willing to take in ideas The EU is ever ready to continue the development of the ETS as well as work with other countries around the world to reduce carbon and other emissions.

One of the most emerging carbon markets is the Korean carbon market. Launched in 2015 the KETS covers around 66 percent of Korea's total greenhouse emissions. The growth of the Carbon market in Korea has been so rapid that it has already established itself as the third largest carbon market in the world. The major reason for increased emphasis on carbon reduction in Korea has been the worsening of the climate with average temperatures increasing by 1.5 degree. The Korean government in wake of this crises and with the objective of promoting the countries green industries aims to continue the development and influence of its emission trading schemes.

Pros and cons of carbon credit

When businesses trade carbon credits, they can earn a variety of advantages. The improvement of the company's reputation in society is one of the largest benefits. Credit-based carbon offsetting benefits initiatives that couldn't secure money on their own. Second, the carbon offset system provides authorities with a means of implementing strict environmental regulations. Thirdly, companies who participate in carbon offset projects may make the claim that they are carbon neutral or even carbon negative, which can substantially boost their reputation in society and encourage other companies to do business with them.

Although one of the most cutting-edge methods of lowering emissions in the twenty-first century is carbon offsetting through credits, this approach is not without drawbacks. The absence of regulation is one of the main drawbacks. According to a Financial Times article, people buying carbon offsets are not allowed to declare who is using the offsets or how much they are using them, which makes the practise incredibly unregulated. The inconsistent nature of carbon offsetting programmes is another drawback. Sometimes

they only have a temporary effect on carbon emissions, and when they are not utilised, there is no long-term change in the amount of carbon in the atmosphere.

Challenges in Carbon Credit Financing

Taxation rules, correct accounting practises, and paperwork relating carbon credit exports are the key issues that plague carbon credit finance. Since there is no precise category of revenue under which carbon trading earnings should be classified, reporting those earnings on taxable income statements is one of the biggest issues businesses face globally. Therefore, this money is classified as other income by the majority of businesses worldwide.

The project overseeing the CDM is a rather complicated process that exclusively tends to benefit developed nations. The most urgent need for these programmes is in the poorest nations, which lack these tools. There are questions over whether carbon markets actually reduce carbon emissions. Companies merely purchase carbon credits without making any effort to reduce carbon emissions. Many businesses contend that purchasing carbon credits is far less expensive than investing in technology that reduce emissions.

3. REVIEW OF LITERATURE

1. **A review of carbon trading based on evolutionary perspective – Neng Shen** – Purpose of this research paper was to review the work of carbon trading from the point of view of evolution. This paper uses Cite Space and HistCite to arrange working of carbon trading schemes from 1998 to 2018 of four dimensions which include evolution, citation cluster evolution, citation path evolution and discipline. This paper comes to the conclusion that carbon trading have a specific evolution route along the named dimensions in which the largest change lies in the underlying math highlighted by the four disciplines. . Three major cluster were identified which are carbon prices, Carbon trading of China, carbon market and supply schedule. The paper also finds three major evolution path

2. **Carbon credit – A step towards Green environment- MS Yuvika gupta** - This paper aims to discuss the fundamentals and significance of carbon credits. Its primary focus lies to examine the various methods to save the environment and explore business opportunities in the global emission market in the Indian subcontinent. This paper comes to the conclusion that the term carbon credits is not known to a majority of the general population .this paper recommends mass awareness of carbon credits through education and other means. It does state that the increased demand of carbon credits and introduction of various financial instruments are strong indications of progressive activity in the carbon credit market. The paper further concludes that India is one of the most progressive among the developing countries in terms of producing innovative strategies for carbon trading.

3. **Analysis of the impact of Carbon trading policies on carbon emission and carbon emission efficiency- Yizhang He and Wei Song** – This paper uses data obtained from 30 provinces and cities of china to approximate carbon emission efficiency using the SMB model and uses the difference-in-difference method to examine the policy's influence. Based on the results the paper comes to the conclusion that carbon trading strategies and policies have a significant effect on the reductions of carbon emissions, states that the carbon policies have different impacts on carbon emission efficiency which is very much influenced by the pilot areas. The paper also states that there is a humungous effect that increases on a yearly basis and that the emission policies have a huge positive reduction effect on CO₂ and SO₂ respectively.

4. **The Growth of Carbon markets in Asia: The potential challenges for future development- Yukin Shi, Sudharshan Reddy Parama , Xiaohang Ren** – This research paper aims to provide an insight about the carbon markets operating around the Asian subcontinent in different economies with a primary focus of the Chinese Carbon market. The paper examines the interrelationship between the Shanghai and Shenzhen carbon offset markets. This paper finds the necessary evidence to establish the unidirectional impact of the Shanghai carbon market on the Shenzhen carbon offset market. This paper finds to its astonishment that in the long run and short run the future prices in the EU market have a very strong impact on the future prices of the Shenzhen and Shanghai carbon offset markets.

5. **A Review Paper on Carbon Trading – Kohli, Deepa and Sinha, Pankaj** – This study examines the climate change regime and goes through the idea of carbon credits and how the trading is going on presently with challenges that need to be addressed. The paper also discusses the rather disappointing results of the Kyoto protocol. The paper states that the climate change problem has increased drastically and requires an immediate solution to deal with it. The paper concludes that as more and more countries start the regulatory measures on their emissions by putting a cap the demand of carbon credits may increase enormously which will lead to an upward trend in the carbon credit prices. The paper states that the member countries of the Kyoto protocol despite facilitating corporation and pledging to work out emission targets still face many hurdles as global emission levels are situated at their record high. It appeals for the countries to address these problems and states that they still have a long way to go and hopes that Kyoto protocols next amendments will bring more successful.

6. **Impact of implementation of carbon emission trading on corporate financial performance – Meijuan Liu , Chang Zhou , Feifei Lu** – This study has taken data of some of the A shared listed companies in China in the period of 2009-2018. Difference in difference method to examine the effect of carbon trading on financial performance on the micro level. This paper comes to the finding that adoption of the carbon emission trading has drastically enhanced the total assets liability ratio even though it has reduced the current capital market. This paper further highlights that adoption of carbon emission trading could not promote Chinese enterprises to invest in R and D further. Finally it states that even though there has been an improvement in the non-business income its impact on investment income has not turned out to be that significant.

4. RESEARCH METHODOLOGY

Research methodology is a set of actions intended to gather information and analyse it. It verifies the research and gauges its dependability. It is moving in the direction of how information will be gathered and evaluated. This study employs an exploratory research methodology based on prior literature from relevant journals, yearly reports, newspapers, and magazines that cover a large body of academic literature. The study mostly relied on secondary data that was readily available.

Types of Research Methodology

Descriptive research

Descriptive research is research that is aimed at systematically and accurately describing a situation or a phenomena. It can answer a variety of questions such as what, when, where, how but the only question it cannot answer is why. It is widely used to examine one or many variables. In this type of research the researcher does not control any of the variables and instead just observes and records his findings. There are many descriptive research methods such as surveys, observations, Case studies. Some of the characteristics of this design is that it is most of the times highly quantitative in nature and is many times used as a base for further research

Exploratory research

Exploratory research is research that is used to examine a problem that is not clearly established. It is carried out to have a enhanced understanding of the problem. However this type of research will not help get conclusive results. In this type of research the researcher keeps any of the general ideas as a base and explores it to determine prevalent issues that could be focused on in further research. In this methodology the researcher should be convinced and accepting of the fact that he may have to change his focus depending on the discovery of additional material .The characteristics of this type of research include that is in most cases result cost effective , is not categorised as a structured study and is very time consuming .

Statistical tools adopted:

The data was interpreted and analysed with the help of graphs and chart presentation.

Sampling technique:

This paper used a questionnaire which consist of 12 simple general questions. This questionnaire is made with the purpose of providing the data of most importance in nature to aid analysis of impact attributes.

Hypothesis:

The hypothesis proposed here is as mentioned below:

H0- Carbon credits cannot help in achieving sustainable developments in future.

H1- Carbon credit can help in achieving sustainable developments in future.

Data types and sources:

Primary data

Primary data is data that is directly obtained by the researcher from main sources through the mediums of interviews, questionnaires, and surveys etc .There are many advantages to the researcher of obtaining primary data. Firstly the primary data is up to date and very recent which gives the researcher idea of the current situation rather than secondary research obtained years earlier. Secondly the data is confidential meaning that only the researcher has access to the data which makes it relatively unique. Thirdly primary research can be controlled by the researcher in order to give fair results. However Primary research is time consuming and relatively expensive in some cases, secondly primary data covers only a small variety of topics compared to that of secondary data.

Secondary data

Secondary data is any data that is collected other than the ones collected by the primary user. These may include data obtained from government records, online articles and journals etc. There are many advantages of secondary data firstly it is very cost effective to obtain the data. Takes the researcher less time to obtain it and is extremely well structured data. However there might be disadvantages as well. Firstly secondary data might be outdated and not applicable, secondly the conditions under which they were obtained might be different and may include a bias element which can disrupt the findings of the study.

Population:

Maximum number of both males and females who are familiar with social stock exchange to which the results are applied.

Sampling frame:

For doing non-profitability sampling, a random list of various persons from the chosen area who work in various occupations was created.

Sample size:

Sample size of 68 respondents was selected to make the study meaningful.

Study area:

The study is counted throughout the city of Mumbai. Mumbai being the finance capital of India, is expected to have awareness on carbon credit financing..

Limitations:

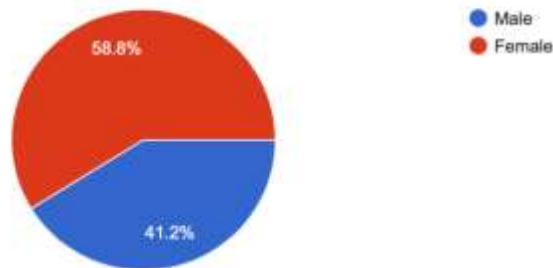
1. The data gathered may be impacted by respondents' limited knowledge.
2. Virtual methods have been the only ones used to acquire data.
3. The sample was restricted to Indian nationals.
4. Due to time and money restrictions, there is only one source of primary data used throughout this essay.
5. Respondents limited knowledge of technology may affect the filling of forms.

5. DATA ANALYSIS AND PRESENTATION

WE TOOK THE SURVEY: QUESTIONNAIRE METHOD AND RESULTS WERE AS FOLLOWS: WE GOT 68 RESPONSES TO THE COMPULSORY QUESTIONS ASKED BELOW:

What is your gender?

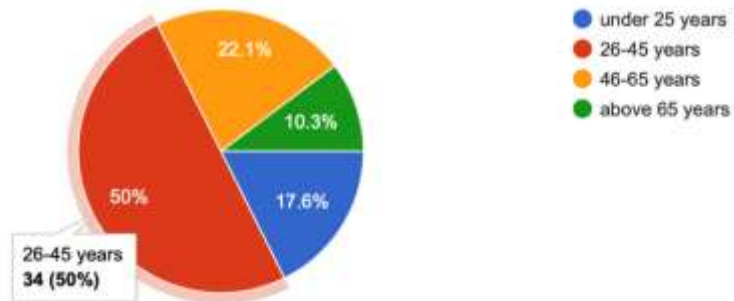
68 responses



This chart shows us that number of female that undertook the survey outnumbered the number of male that undertook the survey

What is your age group?

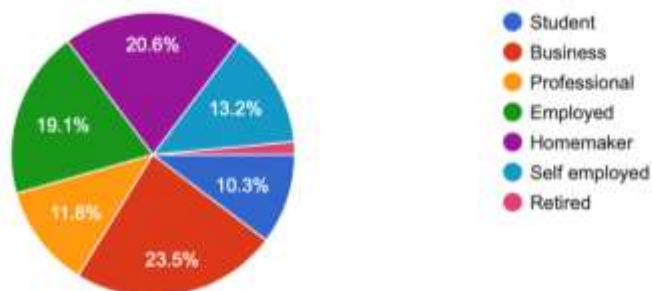
68 responses



The above chart shows us that the majority of respondents that filled the survey were in the age group of 26-45 years. The second most majority participants were between the ages of 46-65 years old

What is your profession?

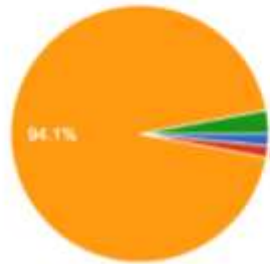
68 responses



The above pie chart tells us that people of various professions took part in the survey with the majority being those who started their own business who accounted for 23.5 percent of the overall responses.

What is carbon credit?

68 responses

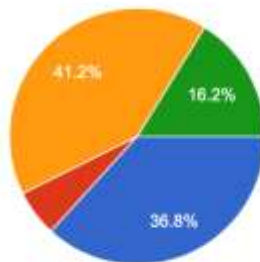
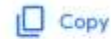


- A kind of leasing permit
- A kind of machine operating permit
- A credit for greenhouses emissions decreased or Eliminated from the environment by a programme to reduce emissions
- A credit for currency printing

The above chart shows that majority of the respondents which accounted for 94.1 of the total responses were well versed with the concept of carbon credits.

Carbon credit has to be as per _____

68 responses

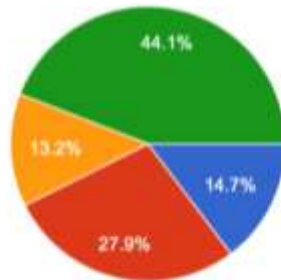


- United Nations standards
- International Monetary Fund standards
- Environmental standards
- As per individual country set standards

The above chart shows that majority of the participants (which accounted for 44.1 percent of the respondents) thought that carbon credits were based on environmental standards. However the only 36.8 percent people were correct of it being as per United Nations standard.

What is the value of 1 carbon credit?

68 responses

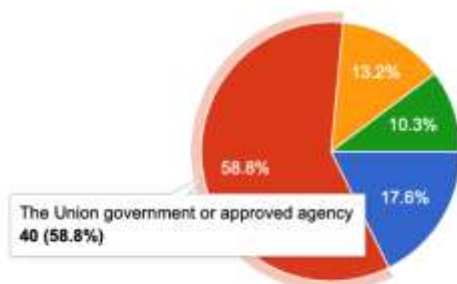


- =100 kg of carbon dioxide
- =10 kg of carbon dioxide
- =1 kg of carbon dioxide
- =1 tonne of carbon dioxide

The above pie chart shows that about 56 percent of the respondents dint know the value of 1 carbon credit. However the majority of the respondents were well versed with the value.

Who gives carbon credits in India?

68 responses



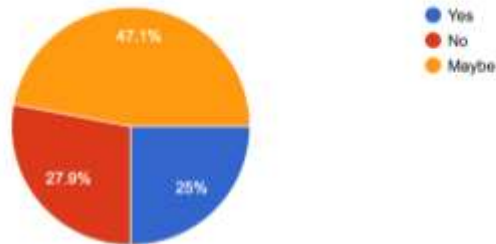
- The State government
- The Union government or approved agency
- The local authorities
- Municipal Cantonment board

The Union government or approved agency
40 (58.8%)

The majority of 58.8 percent respondents picked the correct answer of union government or approved agency. While majority were well versed with this information a lot of people did give varied responses among the other three options.

Do you think carbon credits are traded on Cryptocurrency platforms?

68 responses

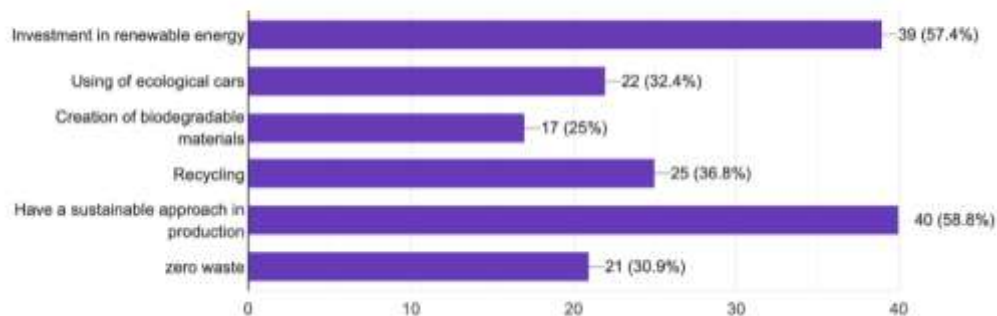


The above chart shows that about 47.1 percent of the participants were unsure of whether Carbon credits were traded on the cryptocurrency platforms. The minority which is 25 percent picked the right answer. This data shows that majority of the people were not aware of the answer to this question.

What can neutralise carbon emissions?

[Copy](#)

68 responses

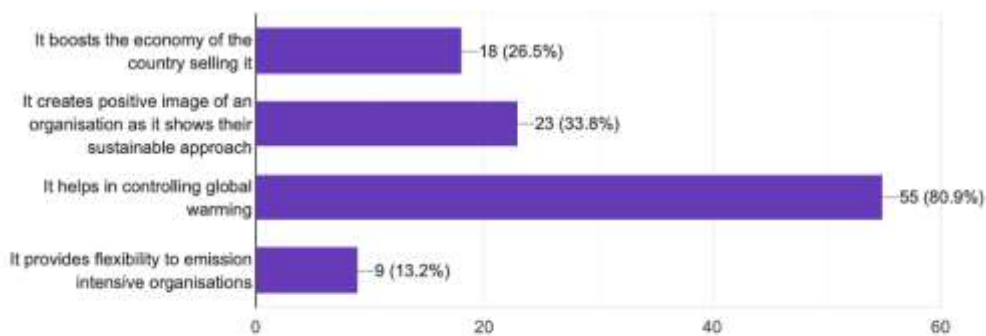


The above bar chart shows that a massive 58.8 percent believed that having a sustainable approach in production was the way to neutralise carbon emissions. Other popular choices included investment in renewable energy and use of ecological cars.

What is the advantage of carbon credit?

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68 responses



The above chart shows that about 55 percent of the people believed that the major advantage of carbon credit was that it controlled global warming. Other popular answers were that it improved the image of the company and boosted the country's economy selling it

What is the disadvantage of carbon credits?

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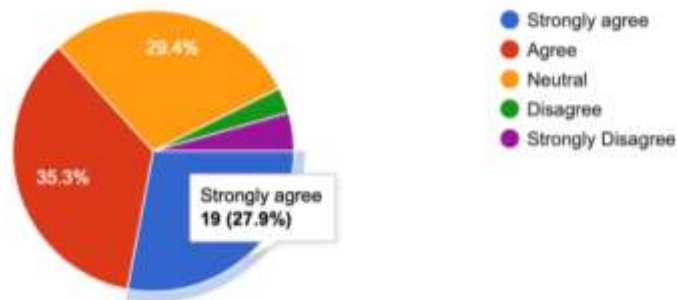
68 responses



A good number of people of about 45.6 percent believed that the major disadvantage was that institutions may not invest in emission reduction measures. However the other majority of 33.8 were also of the opinion that carbon credits turn out to be very costly.

Carbon credit leading to decarbonisation is essential to achieve sustainable development in future.

68 responses



The vast majority of the respondents which accounts for 63.2 in the survey agree or strongly agree with the given statement while only about 7.7 percent are of the opinion that it is not essential for achieving sustainable development In the future

6. CONCLUSION AND SUGGESTIONS

An evident hazard to our entire civilization is climate change. In the absence of immediate action, the impacts are already apparent and will be disastrous. We can bring about the essential reforms to safeguard the environment via education, innovation, and adherence to our climate obligations. These adjustments also provide enormous opportunity to update our infrastructure, which will lead to the creation of new employment and increased wealth for everyone on the planet.

The most major causes of climate change and global warming—greenhouse gas (GHG) emissions, particularly carbon dioxide emissions—can be combated through the use of carbon money. The goal of carbon financing is to develop climate action systems where carbon becomes quantifiable and incentives are developed to encourage people and companies to reduce their overall emissions.

Through the creation of a market where businesses may exchange emissions permits, carbon credits were developed as a strategy to lower greenhouse gas emissions. Companies are given a certain quantity of carbon credits under the scheme, which decrease over time. Any surplus might be sold to another business.

Companies have a financial incentive to cut their carbon emissions thanks to carbon credits. Those who find it difficult to minimise emissions can continue operate, but it will cost them more money. The carbon credit system, according to its proponents, results in quantifiable, independent emission reductions. Certainly, carbon credit alone is not sufficient to avert catastrophic climate change. Along with carbon financing a change in approach and attitude of industrialists is necessary for sustainable development.

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APPENDIX:

Questionnaire

Q1- What is your gender? *

- Male
- Female

Q2-What is your age group? *

- Under 25 years
- 26-45 years
- 46-65 years
- Above 65 years

Q3-What is your profession? *

- Student
- Business
- Professional
- Employed
- Homemaker
- Self employed
- Retired

Q4-What is carbon credit? *

- A kind of a leasing permit
- A kind of machine operating permit
- A credit for greenhouse emissions decreased or eliminated from the environment by a programme to reduce emissions
- A credit for currency printing

Q5- Carbon credit has to be as per _____ *

- United nations standards
- International monetary Fund standards
- Environmental standards
- As per individual country set standards

Q6- What is the value of 1 carbon credit? *

- 100 kg of carbon dioxide
- 10 kg of carbon dioxide
- 1 kg of carbon dioxide
- 1 tonne of carbon dioxide

Q7- Who gives carbon credits in India? *

- The state government
- The union government or approved agency
- The local authorities
- Municipal cantonment board

Q8- Do you think that carbon credits are traded on crypto currency platforms? *

- Yes
- No
- Agree

Q9-What can neutralise carbon emissions? *

- Investment in renewable energy
- Using of ecological cars
- Creation of biodegradable materials
- Recycling
- Have a sustainable approach in production
- Zero waste

Q10- What is the advantage of carbon credit? *

- It boosts the economy of the country selling it
- It creates a positive image of an organisation as it shows their sustainable approach
- It helps controlling global warming
- It provides flexibility to emission intensive organisations

Q11- What is the disadvantage of carbon credits? *

- It is very costly
- Institutions do not invest in emission reduction measures since they may purchase a limitless number of credits
- It is a temporary solution
- It doesn't remove greenhouse gases from the atmosphere

Q12- Carbon credits leading to decarbonisation is essential to achieve a sustainable development in future*

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree