

# RIGHT TO POLLUTE? ; AN UNDERSTANDING ON THE IMPLICATIONS OF INTERNATIONAL CARBON TRADING MARKET

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**Abstract:** The nature has laid down the very foundation of our being on this planet and we in this rat race to compete amongst ourselves have ignored the very existence of our natural life support. This era of industrialization has swept the green cover of our planet and turned into a land of concrete jungles producing the black fumes with the mere intention to meet the ever growing greed of the nations. In this blind folded race, citizenry of the world nations became oblivious that their greed had to be fulfilled at the cost of the very nature, which is the source of their own existence. People boorishly ignored the fact that proceeding further would be unfeasible without striking the required equilibrium between the development and the nature. The potential of a human mind to create is incontestable, the potential to destroy cannot be annulled either. The consistency in the callous annihilation by the human race seems to be the accepted norm in fulfilling the undesirable aspiration of becoming the super-powers.

It was only in the late 1980s that the concept of sustainable development was recognized by the intellectuals among the world citizenry. They realized that nature is not capable of replenishing by itself considering the exponential increase in the rate at which development is taking place. One amongst the many steps taken since then to mitigate this danger of compromising our environment and promoting sustainable development is the Kyoto Protocol. This concept gave a new dimension in the understanding of sustainable development. It disclosed a manner in which the nations could proceed with the procession on their conduit of development. However this procession had an impediment. This impediment was nothing but a very clever move by the policy makers of materializing the language well understood by the callous world citizenry, the language of money. The concept brought in a unique collaboration between the means and methods in producing and serving of a financial constraint on it. The idea behind this concept cannot be negated if one says it to be one of the most

creative and unsurpassed ideas of all time to address the issue on sustainable development.

This measure introduced the concept of 'carbon credit' which intended to serve on the issue of ever rising carbon emissions by the industries. This enormous rise in carbon concentration acted heavily on the environment. The environmentalist feared that this rise would in turn increase the temperature of the globe that shall lead to numerous undesirable consequences. This system in Kyoto Protocol binds the member countries to a 'cap' for the emission of carbon. It also provides for a provision of trading these caps. This technique contributed in multiple ways in dealing with the reduction agenda of carbon by the big money houses, but it did bifurcate the world nation controversially on the basis of development. How-so-ever pioneering this brain-child proved to be, the scantiness weren't far behind. In due course of time the money-makers penetrated these loopholes in their best interest. However, these loopholes as they say are not beyond the scope of rectification. This article discusses the complex working of the concepts in the Kyoto Protocol. It also discusses the implications of the same and probable solutions to the blemishes concerning it in an international echelon.

**Keywords:** carbon credit, emission, Kyoto Protocol, loopholes, sustainable development

## INTRODUCTION

The environment has been the major contributor of the emergence of mankind on this planet. It is the very nature that has provided that forum on which the human race could grow and nurture themselves. The human minds have ever since incorporated all their intelligence in order to evolve the comportment of living. Be that the transformation in the modes of transport from horse carts or the supersonic air transport, or fans to the air conditioners, this era of entire human civilization has been the witness to the greatest creativity of the

human intelligence. But somewhere in this utilization of intelligence to meet the needs of the world citizenry, the greed within the every soul of the same humans has emerged out. This greed grew to an extent where in this rat race of emerging as the world power or leader, the deference of the Mother Nature was put to stake. In due course of time the extent of destruction grew to an exorbitant rate yet the conscience within an individual could not control it, until the beginning of 1980s. The environmentalists then expressed their great concerns towards the rising global temperature, melting of the polar caps and the harsh impact it would create on the human civilization. The seriousness of the damage that these circumstances could cause in devastating the ecosystem and the very existence of mankind was not realized.

Stockholm Conference on Human Environment of 1972 was the first instance wherein the importance of environment and its connection to development and the quality of human life were addressed on a global level. It was realized by the intelligentsia of a few intellectuals there was a heavy deterioration of the human environment and natural resources and that nature is not capable of replenishing by itself considering the exponential increase in the rate at which development is taking place. A step further in this course was the World Commission on Environment and Development, also known as the Brundtland Commission. The mission of this commission was to bring in unity among the world nations to pursue the noble idea of 'sustainable development' together. The Brundtland Commission released *Our Common Future*, in October 1987, a document which coined, and defined the term "Sustainable Development". Theoretically the conference contributed significantly in the protection of environment. It was in here that the concept of sustainable development was born. The human intellect realized that the human race could seek that mandate of equilibrium between the activities to meet human needs while indefinitely preserving the life support systems of the planet.

A major step taken by the nations to implement the dogma of 'sustainable development' was the coming up of the United Nations Framework Convention on Climate Change. The objective of the treaty is to "stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system".[1] In furtherance of this convention the Kyoto Protocol contributed the most inimitable and ingenious concept that gave a new dimension in the understanding of sustainable development. It disclosed a manner in which the nations could proceed with the procession on their conduit of development. It was the mechanism of carbon credit.

### **CARBON CREDIT SYSTEM – AS A CONCEPT**

A Carbon Credit is created when the equivalent of one metric ton of carbon dioxide is prevented from entering the atmosphere.[2] Internationally known as Certified Emission Reductions, Emission Reduction Units, or Verified Emission Reductions, each carbon credit has a monetary value depending on the type and origin of the emission reduction produced.[3]

This is an umbrella term for a certificate or permit that allows an organization or a country to manufacture a fixed amount of carbon emissions which can be bartered if the full fixed allowance is not fully used.[4] Oxford dictionary defines Carbon Credit as "a permit which allows a country or organization to produce a certain amount of carbon emissions and which can be traded if the full allowance is not used." [5]

The United Nations have laid down a limit or a "cap" on the participant countries on the total amount of carbon emissions that are permissible. Based on those limits the countries are prearranged with the carbon credits and the same set of countries are divided into groups. In case a country wishes to expand its carbon emission limit, they can purchase the limit of any of the participating country as long as they have not exhausted their credits. These countries or organizations can either implement changes by developing emission reduction schemes and programs within their territorial bounds or they can deploy an equivalent emissions reduction scheme in the developing world and avail the economic benefits as it requires a fraction of the cost. It is this economic benefit that acts as an incentive for the developed country to take the course of international trade in 'carbon offsets', which is the process by which successful carbon emissions reduction produced in one geographical location is claimed by another. The intention of the intellectually stimulated policy makers was to steer the countries to lower their greenhouse gas emissions. [6] These intellectuals played very well by collaborating the ceiling of carbon emission to the weak nerve of nations that is money. The carbon caps that are not exhausted could be traded to the countries that require more of such credits for an appreciable value which served to be a blessing to those countries that had surplus credits. Also, the countries which could not cut down on their carbon emissions were heavily penalized by having to pay for more credits.

These carbon credits assign currency value to the price of polluting the atmosphere so that it can be construed as a commodity of internal cost by the money houses. The demand market across the nation will only increase and in order to survive in the market and yet earn profit, the business minds will be cautious in exhausting their carbon credit quota. This

in turn will forcefully stimulate the participating countries to incorporate alternative safer sources of energy. This was predicted to bring about a massive improvement in the global dynamics pertaining to the environment as in long run it would incorporate the ideology of sustainable development in its totality. In the USA, in order to win over the altruistic title, the major business houses such as the Ford, DuPont and IBM started incorporating means to make the most of this system. There are several benefits that the participating countries enjoy. They save on their financial expenditure by implementing carbon credit reduction techniques and the Companies based in the developing countries earn an extra income from this as they benefit from the investments of the developed countries. In the broadest construction of understanding the implication of this system it can be stated that carbon credits make a positive impact on global warming because it is implemented by all countries of the world.

#### **WORKING UNDER THE KYOTO PROTOCOL**

The threat of climate change due to the impact of humans on the climate resulted in the nations of the world coming together to create the United Nations Framework Convention on Climate Change, the international treaty spoken of previously. In 1995 these participating world nations in order to limit the harmful greenhouse gases which cause the global change and to create a legally binding force adopted the emission reduction mechanism under Kyoto Protocol for specifically defined timeline. As per the United Nations –“The Kyoto mechanisms: (a) Stimulate sustainable development through technology transfer and investment. (b) Help countries with Kyoto commitments to meet their targets by reducing emissions or removing carbon from the atmosphere in other countries in a cost-effective way. (c) Encourage the private sector and developing countries to contribute to emission reduction efforts.”[7]

The first set of timeline that committed the participating countries for reduction in their carbon emissions began in 2008 and ended in 2012, and the second round began in 2013 and will end in 2020. The UNFCCC witnessed the participation of 195 countries; however the Kyoto Protocol was ratified by 191 countries among them. These countries in 2010 agreed adopting measures that would contribute on limiting the global temperature increase to below 2 degree Celsius. In order to implement these commitments the companies and organizations in these countries have adopted various environment-friendly methodologies which are either voluntary or non-voluntary to reduce the carbon emissions. amongst these the voluntary market mostly refers to the Corporate Social Responsibility Goals, where as

non-voluntary methodologies are those trading mechanisms under the umbrella of Kyoto Protocol which has created a mandate on the participating countries. However, a remarkable step was taken up by few countries which created there on carbon trading markets and received the appreciation of the world nations. Australia created the 'Clean Energy Regulator' and USA developed the 'Acid Rain Program'. Also, European Union Emissions Trading Schemes developed by the European Union has been declared as the largest emission trading scheme in operation. Further under the Protocol, the National Registry issues the limits which are known as 'Kyoto Units' or 'Assigned Amounts'. Within the bounds of these caps issued by the National Registry, the governmental departments or any such authority divides the quota of carbon emission between the companies and/or organizations. These organizations and companies do not exhaust the entire limit granted to them, they have the liberty to sell the balance quota to another organization or company which have either crossed their emission limits or which are likely to exceed in future. These balance quotas in the international carbon trading markets are termed as Carbon Credit Certificates.

UN came up with three mechanisms governing the international carbon market that would assist the participating countries in reducing the carbon emission, namely, International Emissions Trading, Joint Implementation and Clean Development Mechanism.

#### **International Emissions Trading (IET)**

Article 17 of the Kyoto Protocol to the United Nations Framework Convention on Climate Change provides for the scope of trading in the carbon emission by the parties that form a part of Annex B of the protocol. It also lays down the mandate on the Conference of Parties to negotiate and decide on the rules, guidelines, and principles or like issues relating to such international emissions trading. Another feature corresponding to this Article is that it has expressly mentioned the supplementary nature of such trading. The IET would only be supplemental to the domestic actions taken up by the Annex B countries for reduction of carbon emission and other incidental or connected commitments.

#### **Joint Implementation (JI)**

Joint Implementation is a mechanism which finds its scope within the bounds of Article 6 of the Kyoto Protocol to the United Nations Framework Convention on Climate Change. Under this, the developed countries which form the part of Annex I of the Kyoto Protocol are bestowed with the liberty to work in collaboration with other Annex-I countries to earn Emission Reduction Units (EMU). These can be

earned by sponsoring or implementing projects in a developed country which are environment friendly. A corollary to this effort is the reduction of carbon emission in consonance with their commitment towards the UNFCCC. This method not only enables the parties of such projects to earn carbon credits but also results in increasing the foreign direct investment and transferring of technologies within the nations.

### **Clean Development Mechanism (CDM)**

Clean Development Mechanism was the method that caught the attention the world audience. This was the philanthropic approach to reduce the carbon emission and promote sustainable development. Under Article 12 of the Kyoto Protocol to the United Nations Framework Convention on Climate Change, a party which is committed towards the reduction of carbon emissions can sponsor a project which is environment-friendly and aims towards reduction in carbon emission. One may always ask how it is any different from Joint Implementation Projects. The difference is the very philanthropic dimension of this methodology which mandates the requirement being that such Clean Development Mechanism Projects can only be sponsored in a Non-Annex I party, which mostly comprises of developing nations. Such a project is of benevolence to not only the sponsoring developed country but also the host developing country. The sponsoring developed country earns sale-able Certified Emission Reduction (CER) Credits, whereas, the developing country, though not bound to a cap for emitting carbon under the Kyoto Protocol, is benefited with the investment of technology and foreign direct investment. Furthermore, such a project prospers the economy of the developing country in consonance with the principles that guide the very existence of sustainable development.

In 2001, George W. Bush, who joined in as the President of the United State of America had rejected the Kyoto Protocol and thus USA joined in only as an observer to the 6th Conference of Parties. Subsequent to the negotiations, the final agreements to bring about a better implementation of mechanisms under the Kyoto Protocol was sought for. The participating Annex B nations agreed that there would be no ceiling on the quantitative amount that the nations could earn by implementing a Joint Implementation Project or a Clean Development Mechanism Project, provided that there is a significant effort by these Annex B countries within their territorial bounds to meet the targets as mentioned under the Kyoto Protocol. It was also agreed that credit would be granted for projects or schemes such as forest or cropland management or re-vegetation or any such projects that absorb carbon from the atmosphere.

Also, there would be no cap or limitation as to the amount of credit that these nations could earn from such Carbon Sinks projects. Apart from these there was also an agreement on establishment of 3 categories of funds in furtherance to the objective behind the establishment of UNFCCC and Kyoto Protocol. These funds aimed at providing assistance to Climate Change measures, voluntary contributions and National Adaption Programs of Action for the least developed nations.

The 13th Conference of Parties which took place in Bali, Indonesia, negotiated and the further agreed on to the timeline of post 2012 framework and the period of second commitment. However, in the 18th Conference of Parties which took place in Doha, Qatar, [8] produced a document collectively termed as "The Doha Climate Gateway". [9] Through this set of documents it was agreed that due to the lack of commitments from New Zealand, Ukraine, United States, Russia, Belarus, Japan and Canada, the scope of global carbon emissions would be of 15%. Also, the major reason behind such an amendment of having 15% as the cap was due to the fact that countries like India, Brazil and China, which is world's largest emitter of carbon, being developing country came under the purview of Non-Annex I party and thus, were not bound by the commitments or objectives of Kyoto Protocol. New Zealand's climate minister, Tim Groser, told the Associated Press in Doha: "This excessive focus on Kyoto, Kyoto, Kyoto, Kyoto, was fine in the 1990s. But given that it covers only 15% of emissions, I'm sorry; this is not the main game." [10]

### **SHORT - COMINGS OF THE SYSTEM**

The crux of the soul to the mechanisms discussed under Kyoto Protocol to the United Nations Framework Convention on Climate Change cannot be negated if one says it to be one of the most creative and unsurpassed ideas of all time to address the issue on sustainable development. It was a remarkable approach on addressing the issue of sustainable development as pollution is inevitable and so is the hue and cry to save the nature. Through these mechanisms the citizenry at the global forum could collaborate together in mitigating the danger on the sanctity of the environment. But how-so-ever pioneering this brain-child proved to be, the scantiness to the same weren't far behind. In due course of time the money-makers penetrated these loopholes in their best interest.

The working of the carbon trading system is based on the accumulating carbon credits and then selling it as carbon offsets to the voluntary initiatives or those business houses which have exceeded their emission caps. [11] However, the ground reality has been very well expressed by the big business houses by their

discontentment towards increasing the efficiency of technology and reducing the carbon emissions. Rather, these huge profit-centres choose on buying the carbon credits from other organizations. Also, it's easier and cheaper to pollute than to innovate the production processes. However, there are a few companies that have completely brought a make-over to the existing technology and modified the same into cost-saving technology. This transformation makes them save not only on money but also helps in generation of unused carbon credits, which are then traded at huge profits. This production of excess credits serves as a motivation for the business houses to elect on purchasing them, and then on bring a technological change. As per the reports of several experts and environmentalists, the carbon emissions have to be reduced by 80% from the base year of 1990, till 2050, in order to mitigate the impact of the global temperature rise. These standards of reduction seem to be a far-off dream with the voluntary cap and trade system. The population is expected to only rise in multiple folds in the consequent years, which will further cause exponential increase in the demands which will be met at the cost of the environment. In such a scenario, it would be unrealistic to expect the reduction in the carbon emission by the business houses until the reductions are mandated through the force of law with penal sanctions and also a global effort to keep the population growth in control. The another issue that draws the concern of the critiques is whether countries that have planned on entering the second round of the Kyoto protocol should be allowed to carry over emissions credits from the first phase. There are a few countries such as Ukraine, Poland and Russia that have large surpluses of credits which were generated because of the collapsing of communism along with the industrial base. Russia and the Ukraine are thought to have billions of unsold emissions credits. André Corrêa do Lago, head of the Brazilian delegation, told the Guardian: "The second phase has to have environmental integrity, and you will not have that if countries are allowed to carry over [the credits]. The second period will be completely compromised. This is not a way to have effective reductions." [12] Also, the second commitment which runs from 2013-2020 has witnessed a lower participation as the countries are now demanding for a new agreement at an international echelon that covers developed as well as the developing nations

A major flaw that has been unanimously accepted by many experts on environmental sciences is the non-involvement of developing nations to the legally binding commitments under the Annex B of the Kyoto Protocol to the United Nations Framework Convention on Climate Change and thus, they are not mandated legally to reduce their carbon emissions.

The Non-Annex I countries such as India and China have been calculated to emit 4,500 million metric tons of Carbon Di-oxide (International Energy Association, 2004) and yet they are not bound under the Kyoto Protocol to reduce the carbon emissions. This merely creates an ulterior hindrance in achieving the ultimate motive or objective behind creating the UNFCCC and violates the fundamentals governing sustainable development.

### THE SOLUTIONS

The solitary solution that can be sort for, in this era of rising concrete jungles and the cost of the green cover is to depart from the option of voluntariness. The initiative of UNFCCC is undoubtedly commendable and calls for appreciation, but considering the alarming admonishment of the current scenario, it is essential to work on the blemishes. The inception behind the emergence of carbon trading market is commendable and worth every smidgen of appreciation, however considering the goal that has been sought for and the ever increasing industrialization cover on the surface of earth, this market inadvertently creates hindrance. It is the need of the hour to understand the gravity of the situations prevailing in the current and future prospects and cease the carbon market as such provisions only motivates the aspiring business houses to further purchase credits provided their financial grasps. When there would be a mandate by a force of law on abiding by the carbon caps and strict punitive actions on violating them, it is then that the true colours behind the emergence of UNFCCC to reduce the carbon emissions which would further decipher the issue of rising global temperature would prosper.

The exclusion of developing countries from the first round of commitment towards the Kyoto Protocol has been in great debate ever since it was realized that these developing countries have contributed significantly to the carbon emissions and yet they are not legally bound by the commitments under the Kyoto Protocol. Though it cannot be denied that the developing countries are travelling through the road once travelled by the developed nations and so they should also have the freedom that was once enjoyed by the developed nations in their journey of transformation of developing to developed nation. However, considering the fragile nature of the environment and the ever increasing degradation such a liberty cannot be granted to the developing nations any further as this will only delay the journey to attain stability in the environment and this delay would be at what cost is still debatable. Thus considering the prevailing circumstances it is essential to form a new agreement which comprehensively covers the carbon emissions from developed as well as developing nations. The

exclusion of countries like India and China has been criticised by scholars, environmentalist and political thinkers. In dealing with issues of such a sensitive nature, giving advantage to one over the other will make the country on the losing end to become infuriated and develop a negative approach. It is essential to bring in the developing countries along with the developed countries within the purview of mandatory cap on carbon emission.

The British Legislation made a commendable effort of codifying of the principles imbibed in the United Nations Framework Convention on Climate Change that highlighted the initiative of the United Kingdom in contributing for the action to tackle the global rise in temperature due to carbon emissions. It enforced The Climate Change Act through which a framework was developed to establish an emission reduction scheme which could be economically plausible. The Act provides for reducing the emission of carbon by 80% in 2050 from the 1990 standards and commits United Kingdom for the same. Act coined the term 'carbon budgets' which is a cap on the amount of greenhouse gases that can be emitted over a period of five years and it shall be legally binding across the United Kingdom. This legislation provides for setting up of a Committee on Climate Change and to advise to the government on matters concerning the programs incidental to the issue of climate change. Also, it calls for a National Adaptation Plan that requires the government to assess risk from climate change and develop strategy to deal with them.

It is also observed that the Multi-national companies find it cheaper to buy the unused carbon credits that replace the existing technology. It is the call of the moment that such a Carbon Trading Market has to be regulated for the reason that it is the carbon emission that has to be reduced and not merely regulated. A reflection on the status of underdeveloped nation prima facie manifests that they shouldn't be covered under the veil of limiting the carbon emission, however, considering the present equation it is essential to call for seizing the emissions from these nations. These changes cannot be postponed for tomorrow as they should have been brought to implementation long back. The only way through which we can protect our planet from the greedy hands is by implementing such efficient and effective measures and alongside spread the awareness to disregard the bizarre perception that the nature will replenish itself.

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