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EMISSION TRADING RIGHTS IN INDIA

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ABSTRACT

"While We Need Robust Regulations, We Need Lesser Regulators"[1]

In the era of rising concerns for climate change and excessive greenhouse gas emission, emission trading system is playing a major role in providing satisfactory solutions worldwide. Implementation of emission trading system will provide for a prominent policy instrument in fulfilling India's international environmental obligations. India has started taking the first step towards it by making a bill for the formation of carbon markets in India under Energy Conservation (Amendment) Bill, 2022.

The research commences by understanding the concept of emission trading and the historical evolution of the concept. It subsequently attempts to explain various mechanisms of emission trading. Furthermore, it explains India's obligations as a member party of Kyoto Protocol. The study then assesses the efficacy and experiences of already existing systems of emission trading systems in various countries. Also, study the international impact of establishing India's own carbon market. Furthermore, this research studies the provisions of the Energy Conservation (Amendment) Bill, 2022, that has recently been introduced in India.

KEYWORDS: Carbon Credits, Carbon Markets, Emission Trading System, Environmental policy making, Global Economic Growth, Kyoto Protocol, Law and Economics.

INTRODUCTION

Emission trading system (hereinafter ETS) is the newly added member of environmental sustainability plan worldwide, it basically proposes to setup a carbon market which will provide permits to the carbon emitting industries and in return they will earn carbon credits. Emission trading rights allows a firm to trade their rights in exchange of emitting pollutants in the air.

[1] ESTHER DUFLO ET. AL, *Towards an Emissions Trading Scheme for Air Pollutants in India: A Concept Note*, INDIA ENVIRONMENT PORTAL, (Aug. 24, 2010), http://www.environmentportal.in/files/towards-an-emissions-trading-scheme-for-air-pollutants.pdf.

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Herein, carbon credits are treated as a commodity and the reduction in the carbon emission is the amount payable for the purchase of the commodity, which can be measured by calculating the actual cost incurred by the industry in reducing their carbon emission from their previous year by improving their cost of production.

The idea was first explored in the form of 'Command and Control' approach which suggested measures and techniques that must be practised by the industries to control pollution, later on this approach was replaced by the 'Cap and Trade' approach which would set a cap on allowable emission and permits would be traded out to the industries. Article 17 of the Kyoto Protocol mentions that [2] *"The Conference of the Parties shall define the relevant principles, modalities, rules and guidelines, in particular for verification, reporting and accountability for emissions trading. The Parties included in Annex B may participate in emissions trading for the purposes of fulfilling their commitments under Article 3. Any such trading shall be supplemental to domestic actions for the purpose of meeting quantified emission limitation and reduction commitments under that Article."* Hence, it obliges the member parties to either set up their own domestic carbon market or buy the permits from other countries which have excess capacity. In current European Union has the largest carbon market prevalent worldwide.

When the economy grows, the supply of carbon pollutants increases as well because the polluters do not have the emission ceiling and they can keep on polluting the environment but when a ceiling has been set then even when the economy grows, the demand for emission rights increases but due to the ceiling on the level of pollution, the supply for such rights remains constant. Hence, the external costs of climate change are then internalised by increasing the cost of production, so the actual cost of a particular pollutant firm remains the same and it might even get lesser by adopting the mechanisms and guidelines.

Currently, India has taken its first step towards fulfilling its obligation towards this international protocol by introducing the Energy Conservation (Amendment) Bill, 2022 which suggests that India shall set up its own domestic carbon market and start its journey with the 'Cap and Trade' approach to control pollution from the excessive industrialisations.

RESEARCH DESIGN

A. RESEARCH PROBLEM

India is obliged to establish an ETS in India in accordance with the conditions mentioned in

[2] Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 10, 1997, 2303 U.N.T.S. 162.

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the Kyoto Protocol, but it has many key components associated with it which makes the implementation a complex process. The most suitable approach must be determined so that it compliments with the economic and political scenarios of India.

B. RESEARCH QUESTIONS

1. What is Emission trading and how it will help India in reducing carbon emissions?
2. What are the components of ETS in India?
3. What are the contents of Energy Conservation (Amendment) Bill, 2022 and how it will comply with the Economic and Political background of India?

C. RESEARCH OBJECTIVES

1. To quantify carbon emission in India per year and trace the role of ETS in India.
2. To examine the components of ETS.
3. To examine the contents of the Energy Conservation (Amendment) Bill, 2022 and its effect on the economic and political background of India.

D. LITERATURE REVIEW

1. *E.J.L. Chappin and G.P.J. Dijkema.*[3]

The author in this article has mainly focussed on the impact of CET implementation in the power generating sector in Europe. Firstly, they introduced the new carbon emission trading (CET) policy implemented in EU in accordance with Kyoto protocol. Herein they have discussed how this policy intends to regularise the highest carbon emitting sector, in the power generation sector, electricity generation alone is responsible for one third of the carbon emission in Europe. They mentioned about the "agent-based model" that has been effectuated in Europe and they have reported as to how this particular system would operate and would simplify the implementation cost and complications on a long-term basis. In order to compare CET and No-intervention strategy, they have included statistical quantification methods to try simulation runs on both the methods with an equalized period of 75years each. The literature gap present in this article shows

[3] E.J.L. CHAPPIN AND G.P.J. DIJKEMA, *On the Impact of CO2 Emission-Trading on Power Generation Emissions*, 76 TECH. FORECASTING AND SOCIAL CHANGE 358, 370 (2009), https://www.sciencedirect.com/science/article/abs/pii/S0040162508001443.

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that they have only considered a particular sector in Europe for their research. They have neither included other sectors like mining and quarrying sector or chemicals and petrochemicals sectors, nor they have discussed the carbon emission trading of other countries.

2. *Subrata Gorain et. al.*[4]

The author in this article have mainly focused on the emissions from Greenhouse gases and how much India have contributed to the total world's emission. Later on they have emphasized on the carbon emissions from Indian agricultural sector due to the practice of burning of the crops in parts of Haryana, Bengal, Bihar, Madhya Pradesh, Himachal Pradesh, Maharashtra, Gujarat Chhattisgarh, Jharkhand, Tamil Nadu, Uttaranchal and Karnataka. Further, they have introduced an econometric model to determine the effect of carbon trading. The literature gap in this article is that they have not mentioned about the Energy Conservation (Amendment) bill, which has recently been introduced in both the houses of the parliament, but the assent of the president is awaited.

3. *Esther Duflo et. al.*[5]

The authors have explained the ETS and how it could benefit India in reducing pollution emission at low overall cost. They have suggested various ways and key components to achieve the ETS with reference to the Indian background. Thereafter, they have suggested different methods to implement these theories and turn them into reality while comparing the already existing systems of EPA in countries like U.S, Chile, European Union, Singapore and Canada, while stressing on the basis of purpose, emission cap, implementation, trading, monitoring, commodity, period and outcome. They have used various statistical data and graphs to suggest how this scheme can be beneficial as well as necessary and feasible for India. Here, the literature gap is that it has not mentioned the recent bill introduced in August,2022, The Energy Conservation (Amendment) Bill, 2022, which seeks to implement a carbon market system in India.

[4] SUBRATA GORAIN ET. AL., *An Analysis of Carbon Market and Carbon Credits in India*, 39(2) ASIAN JOURNAL OF AGRICULTURAL EXTENSION, ECONOMICS & SOCIOLOGY 40, 49 (2021) https://www.researchgate.net/publication/350379169_An_Analysis_of_Carbon_Market_and_Carbon_Credits_in_India.

[5] ESTHER DUFLO ET. AL., *Towards an Emissions Trading Scheme for Air Pollutants in India*, MIT CENTER FOR ENERGY AND ENVIRONMENTAL POLICY RESEARCH, (2010-08) https://dspace.mit.edu/handle/1721.1/59465.

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E. HYPOTHESIS

1. The implementation of ETS is the best suitable approach for India.
2. The introduction of ETS will help India in achieving the conditions of Kyoto Protocol.
3. The Energy Conservation (Amendment) Bill, 2022 will ensure the proper implementation of ETS in India.

F. RESEARCH METHODOLOGY

This is a non-doctrinal research, which is mainly qualitative in nature, but it may contain quantitative elements for data analysis purpose. This study will adopt secondary data from sources like government emission reports and various international organisation data and from various other reliable sources.

KEY PROCEDURES OF ETS

There are several key components involved in the process of establishing a carbon market. These components are such which will be the blueprint for the desired results and they are lined up in such a manner so that the process could be more efficient and effective.

1. **Determination of pollutants**: The first and the foremost component suggests that any particular country wanting to establish carbon markets shall first determine the pollutants that has the adverse impact on the environment of the country. The various kinds of air pollutants discovered so far are Carbon Monoxide (CO), Sulphur Dioxide (SO_2), Nitrogen Dioxide (NO_2), Carbon Dioxide (CO_2), Ozone (O_3), Particulates (PM), Lead (Pb), NOx etc. "*In India the prominent air pollutants causing ruckus are PM_{10}, NO_2, CO, and O_3, the only pollutant to comply the national standards is SO_2.*"[6] Hence, the abovementioned identified pollutants can be taken as the determined targeted pollutants for India.

Table 1: Indian National Air Quality Standards (units: µg/m^3 unless mentioned otherwise)

Pollutant	SO_2	NO_2	$PM_{2.5}$	PM_{10}	O_3	CO (mg/m^3)	Pb	NH_3

[6] NAVROZ K DUBASH, *Air pollution in Indian cities: Understanding the causes and the knowledge gaps*, CENTRE FOR POLICY AND RESEARCH (Nov. 15, 2023, 4:54 PM), https://cprindia.org/air-pollution-in-indian-cities-understanding-the/.

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Averaging time (hr)	24	24	24	24	1	8	1	8	24	24
Standard	80	80	60	100	180	100	4	2	1	400

Source: CPCB (2015).[7]

2. **Setting emission ceiling**: This is the most important component as this part would later decide the outcome of this project, setting the cap would require focus on the intrinsic details to air pollution. The cap so set should be such which neither increases the cost of productions of the firms and nor should it result in negligible emission reductions as the main goal of our project is to make a win-win situation for all the parties involved. There are two ways in which we can ensure the effective cap setting, they are average emission cap and ambient targets. The average emission cap first collects the emission data for the last 10 years and the average of them all becomes the ceiling for the next 5 years and thereafter the reduced average of the next 10 years would constitute the cap for the next five years and this procedure would keep on evolving. This method best suites for the experimental trials as this would help ignite an easy procedure and agreed parties to the project as a sudden extremely reduced cap would lead to the distress of the industries and the resultant can be disagreements and protests. But this method can also have the disadvantage as the historical baseline were mainly set by the industries based on their preferences and so as to reduce the baseline would take years to reach its targeted form. The second method is the ambient targets which involves the local data of emission sources and their relation to the ambient targets. *"As an example of this method, suppose that industry is responsible for 50% of particulate emissions and transport the other 50%. The current total level of emissions is 100 tonnes and it is estimated that emissions of 60 tonnes would yield the desired ambient level of air quality. Then the cap introduced for industry would be 30, a reduction of 20 from the baseline level."*[8] This method can prove to be very efficient in reducing pollution in a very short span of time as it sets broad targets based on ambient standards. However, the linkage of emission to various sources and ambient pollution concentration would require the monitoring system established for this

[7] CPCB, *National Air Quality Index*, CENTRAL POLLUTION CONTROL BOARD (2015), https://cpcb.nic.in/displaypdf.php?id=bmF0aW9uYWwtYWlyLXF1YWxpdHktaW5kZXgvRklOQUwtUkVQT1JUX0FRSV8ucGRm.
[8] ESTHER DUFLO ET. AL., *supra* note1.

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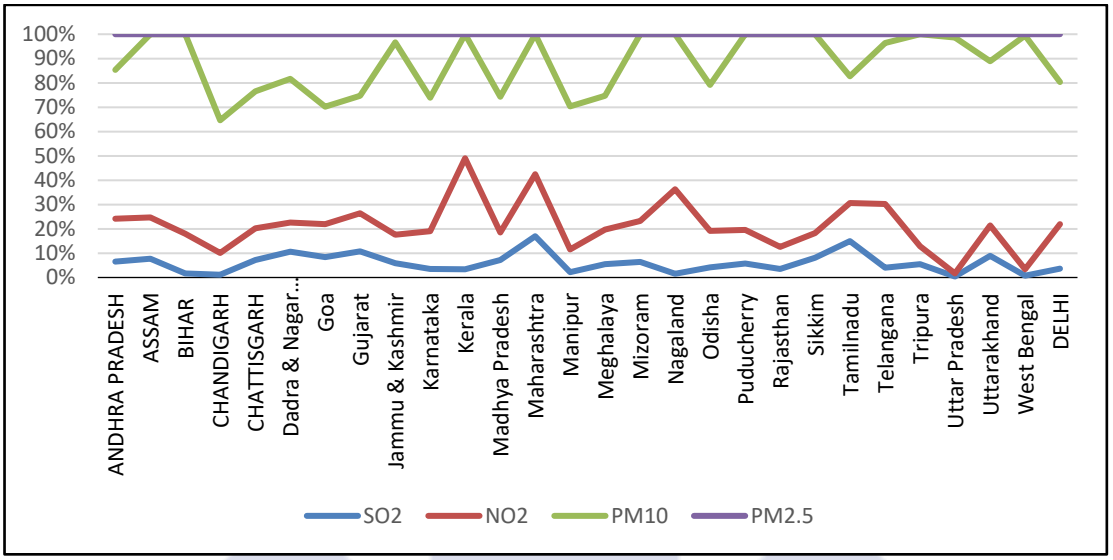
project to be used even before the setting of the cap or even Central Pollution Control Board (hereinafter CPCB) can provide most of the information therein required.

Figure 2: Ambient Air Quality Monitoring Data for The Year 2020



Source: CPCB (2020).[9]

3. **Implementation**: The proper implementation of the ceiling would be the complexities involved for the industries as compliance to these procedures would prove to be an investment for them and for which the return of investment would not be gained in the recent future. Hence, implementation can be a big blow to them if not properly done and considering the risks involved in their part. So, it is suggested that the initial emission permits shall be distributed free, working as an incentive and encouragement given to the industries to invest in this project. This strategy has been used by the countries having already existing systems of carbon markets. Otherwise, for a developing country having limited budget can send an invitation for auctioning the permits by the SPCB of each state and thereby distributing the permits in accordance with the ceiling priorly set. This strategy glorifies the principle of *"polluter pays the price"* abided by the Indian judiciary. The idea was first discovered by Ronald Coase in his theoretical work that was recognized with a Nobel Prize in Economics (Fowlie and Perloff, 2008).
4. **Trading**: This step would determine the value of the permits, how many units of pollution and the validity time period it will cover in a single permit so traded. *"The permit should be a commodity with a value that industry can easily measure to encourage trading. The*

[9] CPCB, NATIONAL AIR QUALITY INDEX, https://cpcb.nic.in/ (2020).

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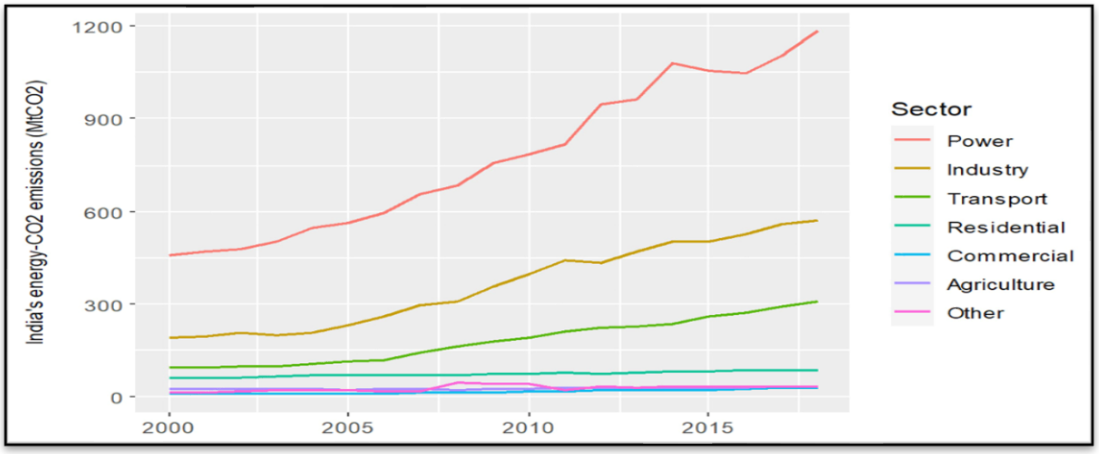
U.S. example of a permit being equivalent to 1 tonne of SO2 is a good benchmark. Permits are based on the total quantity of emissions, rather than their concentration."[10] The validity period shall be for a short duration for the ease of emission monitoring and after every. The carbon permit shall function for emitting industries just how the driving license works for any individual, new permits shall be provided only when the previous permits are handed back and they matched with the permitted units of pollution. The SPCB of each state shall be made responsible for the regulation of permits for which the rules would be provided by the CPCB. Fines can be levied on the industries not complying with the rules. The price of the permits shall be determined on the market price determinants (demand and supply) and too much government intrusion should not be permitted. Carbon credits can be provided to those industries having been complying to the rules and successfully reducing their emissions to 50% as this can be their return of investment as well as an incentive to further reduce their emission and be a role model for other of the kind.

5. **Monitoring**: This process involves monitoring emissions of each and every permit holding industries and maintaining the data of it. This is an executive part of the project wherein we will continuously monitor the permit holders and also make decisions for the future implementation of carbon markets. Under N.A.M.P., four air pollutants viz., Sulphur Dioxide (SO_2), Oxides of Nitrogen as NO_2, Respirable Suspended Particulate Matter (RSPM / PM_{10}) and Fine Particulate Matter ($PM_{2.5}$) have been identified for regular monitoring at all the locations.

Figure 2: Sector-wise trends in CO2 emissions from energy use (energy-CO2 emissions) in India.



[10] ESTHER DUFLO ET. AL., *supra* note 8.

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Source: Ideas for India (2022)[11]

The above shows the emission levels of different sectors in India, wherein we can see that the power and industry sector needs the highest levels of monitoring and by maintaining such data, we can vary the price of permits depending on the sector they are involved in, sector having highest emission would have to incur high rates of permits followed by other sectors having lesser emission rates. So, we see the monitoring part is an essential part as it would further determine the future strategies for the same.

6. **Outcome**: The outcome shall be analysed and recorded and further them to the government for review. Although the immediate outcome will not be satisfactory but the near future can definitely show the targeted achievements of this initiative.

KYOTO PROTOCOL

Kyoto protocol was adopted on Dec 11, 1997 and it came onto force since Feb 16, 2005, which is a part of United Nations Framework Conventions on Climate Change (hereinafter UNFCCC) and targets the reduction of greenhouse gases within the economies of the agreed parties to the convention mentioned in the annex. "*In its Annex B, the Kyoto Protocol sets binding emission reduction targets for 37 industrialized countries and economies in transition and the European Union. Overall, these targets add up to an average 5 per cent emission reduction compared to 1990 levels over the five-year period 2008–2012 (the first commitment period). In n Doha, Qatar, on 8 December 2012, the Doha Amendment to the Kyoto Protocol was adopted for a second commitment period, starting in 2013 and lasting until 2020. One important element of the Kyoto Protocol was the establishment of flexible market mechanisms, which are based on the trade of emissions permits. Under the Protocol, countries must meet their targets primarily through national measures."*[12]

Although India has been pardoned from the commitments as we are a developing nation and our contribution in the total carbon emission is quite trivial, but being a part of the UNFCCC and the world at large obliges us to reduce even the slightest of the reductions. As the saying goes a single drop can be turned into a cup, and from a cup into seas, even the slightest efforts from India can help enhance the ambience of the earth.

The Kyoto protocol has provided its member countries with three mechanisms, namely,

[11] MANISHA JAIN, *Carbon dioxide emissions from India's industries: Data sources and discrepancies*, IDEAS FOR INDIA (2022), https://www.ideasforindia.in/.
[12] Kyoto Protocol, UN Climate Change, https://unfccc.int/. (last visited Nov 14, 2023).

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International Emission Trading, Clean Development Mechanism (CDM) and Joint Implementation (JI). They suggest that these mechanisms should be adopted in both national as well as regional level. They have also suggested that the developing countries lacking sufficient finance can even export the emission trading rights from countries having an already existing system of carbon markets. India being a part of the UNFCCC requires it to comply with the targets set by them. The concept of emission trading introduced also mandates the requirement a rigorous monitoring system within the country to analyse the impact of the ETS. Hence, it's our duty to protect the environment in unison with the other environs.

COMPARATIVE STUDY OF VARIOUS NATIONS

COUNTRIES	SECTOR	CAP	GHG	ALLOCATION	ALLOWANCE PRICE	TOTAL REVENUE
AUSTRIA	power, industry, buildings, transport, agriculture	No cap	Several gases	Fixed price until 2025; auctioning	EUR 30 (USD 31.59)	Estimated EUR 250 million (USD 263 million)
CHINA	power	~4,500 MtCO2	CO2	Benchmarking	CNY 55.30 (USD 8.20)	
EUROPEAN UNION (All EU Member States, plus Iceland, Liechtenstein and Norway (plus power generators in Northern Ireland)	Power, industry, aviation	1,529 MtCO2e	CO2, N2O, PFCs	Auctioning Benchmarking	EUR 78.91 (USD 83.10)/ EUR 80.82 (USD 85.11)	EUR 38.8 billion3(USD 40.8 billion) in 2022
GERMANY	Transport, buildings	291.1 MtCO2	CO2	Fixed price until 2025, auctioning	EUR 30 (USD 31.58)	EUR 6.4 billion (USD 6.74 billion)
KAZAKHSTAN	Power oil & gas, industry	163.7 MtCO2	CO2	Benchmarking	KZT 563 (USD 1.22)	

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MEXICO	Power, industry	273.1 MtCO2	CO2	Grandparenting	MXN 0 (USD 0)	
MONTENEGRO	Power, industry	3.2 MtCO2e	CO2	Grandparenting, Benchmarking, Auctioning		
NEW ZEALAND	Power, industry, aviation, transport, building, forestry, wastes	32.2 MtCO2e	CO2, CH4, N2O, SF6, HFCs, PFCs	Benchmarking Auctioning	NZD 75.88 (USD 48.11	NZD 2 billion (USD 1.3 billion)
KOREA	Power, industry, transport, building, aviation, waste	589.3 MtCO2e	CO2, CH4, N2O, HFCs, PFCs, SF6	Grandparenting, Benchmarking, Auctioning	KRW 23,243 (USD 17.99)	KRW 317.1 billion (USD 245.4 million)
SWITZERLAND	Power, industry aviation	4.5 MtCO2e 1.2 MtCO2e (aviation)	CO2, NO2, CH4, HFCs, NF3, SF6, and PFCs1	Benchmarking Auctioning	EUR 76.49 (USD 80.55)	EUR 43.6 million (USD 45.9 million)
UNITED KINGDOM	Power, industry, domestic aviation	147.2 MtCO2e	CO2, N2O, PFCs	Benchmarking Auctioning	GBP 75.42 (USD 92.96)	GBP 6.1 billion (USD 7.6 billion)

Source: ICAP Status Report (2023)[13]

European Union is the largest ETS, having successfully cooperated the system within the members of European Union as well as other added members importing the emission trading rights from them. This system operates at every level that is 6 cities, 20 states & provinces, 10 countries and 1 supranational. Almost the whole world either have in force ETS (28) or they are

[13] ICAP, *Emissions Trading Worldwide: 2023 ICAP Status Report*, INTERNATIONAL CARBON ACTION PLAN, (Mar. 22, 2023), https://icapcarbonaction.com/.

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under development (8) or under consideration (12). Now in 2023 almost 17% of GHG are covered by the ETS. This system has helped the countries earn a greater share of revenue while reducing the fossil fuel dependency, and that is the future gain we have been anticipating for India.

ENERGY CONSERVATION (AMENDMENT) BILL, 2022

In the year 2010 the ETS first curved its way into the columns of the esteemed journal of Centre for Energy and Environmental Policy Research, in the name of *"Towards an Emissions Trading Scheme for Air Pollutants in India"* written by Esther Duflo, Michael Greenstone, Rohini Pande and Nicholas Ryan. [14]Which was later turned into a discussion paper for the Ministry of Environment & Forest, Indian Government by the name of *"Towards an Emissions Trading Scheme for Air Pollutants in India: A Concept Note"*.[15]

Later in 2021, Bureau of energy efficiency of India presented a blueprint for the construction consideration of national carbon market which included both the aspects of carbon ceiling as well as carbon credits. In view of all the earlier articles and proposals the Lok sabha of India adopted the Energy Conservation (Amendment) Bill on July, 2022. Passed by the Rajya sabha, it still awaits the president's consent. The main aim of the bill is to further amend the Energy Conservation Act of 2001.

The statement of object and reasons were amended by adding 3(ii), (iii) and 5(b), wherein they introduced the concept and the need of establishing carbon market. Section 2(da) and (db) defines the terms "carbon credit certificate" and "carbon credit trading scheme", section 2(qa) defines registered entity as "means any entity, including designated consumers, registered for carbon credit trading scheme specified under clause (w) of section 14." In section 14(w) of the bill would specify the carbon credit trading scheme, in section 14A was amended by adding a proviso mentioning "Provided that any other person may also purchase energy saving certificate or carbon credit certificate on voluntary basis.". Section 14AA suggests that the appointed authority shall issue carbon credit certificates to the registered entities complying by the standard mentioned under the said act and such entities shall be permitted to sell the carbon credit certificate, but in accordance with carbon credit trading scheme mentioned under the bill.

The lacunae in the bill are the undisclosed picture of carbon credit trading scheme.

"With the passing of the Bill in Lok Sabha paving way for carbon markets in India, also came an announcement from the Hon'ble Cabinet Minister (Power, New & Renewable Energy), reported

[14] ESTHER DUFLO ET. AL., *supra* note 5.
[15] ESTHER DUFLO ET. AL., *supra* note 10.

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in the news, "Carbon credits are not going to be exported. No question. These credits will have to be generated by domestic companies, bought by domestic companies." The ban has not been made effective yet and the details of the ban are not known."[16]

According to the report issued by International Carbon Action Partnership, *"the voluntary market is expected to enter into force by July 2023, followed by the compliance market. According to current plans, the first compliance cycle would begin in 2024. The BEE is preparing a framework document on the Indian carbon market with further details which is expected to be published in the first quarter of 2023. On the state level, in May 2022 the government of Gujarat declared its intention to implement a cap-and-trade scheme. The proposed subnational carbon market is set to cover emissions from large industrial and power sector sources in the state. Details are currently being developed by the Gujarat authorities, with assistance from researchers from the University of Chicago, Yale University, and Abdul Latif Jameel Poverty Action Lab."*[17]

CONCLUSION

In conclusion, it is worth mentioning the words of the father of the nation, Mahatma Gandhi *"The earth provides enough to satisfy every man's needs, but not for every man's greed."* In our journey toward emission trading these words serves as the alarm of the delicate balance we must strike between environmental protection and economic growth of the nation.

The hypothesis given by Ronald Coase in his tradable permits theorem forced the economists as well as policy makers to review their concepts and see things from a different perspective, from there the concept of ETS emerged and now it has developed into a full-fledged premise showing the results it had promised in the beginning. India just like its venerable constitution can scoop up the best strategies of each ETSs around the world and thereafter make amendments to establish a versatile system which would better survive the economic and political conditions of the country. But what we rather did not see is the predicament of the small business sectors and the other domestic industries which are yet in a developing stage. They might not have the sufficient financial background to comply with the ETS requirements which may demand the usage of high-tech machineries and other advanced technologies. Although the government has taken many initiatives to promote the domestic industries of India, however, ETS can prove to be a big blow to their survival amongst the MNC's, which would then destroy the resolutions of the

[16] PAYAL AGARWAL, *Emission law amendments: Laying the framework for Carbon trading market in India*, VINOD KOTHARI CONSULTANTS (Nov. 15, 2023, 4:07 PM), https://vinodkothari.com/2022/08/laying-the-framework-for-carbon-trading-market-in-india/#_ftnref3.

[17] ICAP, *supra* note 13.

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government.

Giving theory is always rather easy than actually executing the same, ETS execution can be a lot more challenged as it might demand a change to the already existing policies related to environment, industrialisation and globalisation, the integration of all the related policies would require some compromise from each member and thereon, form a family. Moreover, the research has shed light on the vital requirement of an effective and efficient air quality monitoring system and verification mechanisms which would ensure the proper functioning of the national ETS.

As we venture on the journey of the greener and equitable India, we have to traverse various hurdles to reach the aimed destination and strive a harmonious coexistence with our ecosystem. The path to effective emission trading rights is a moral and ethical responsibility that transcends borders and generation.