

# ***Research on the New Business Trend under the Background of “Double Carbon”***

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**Abstract:** With the rapid development of the social economy, more and more greenhouse gases are produced due to economic activities, which leads to huge changes in global climate, phenomena like global climate change, climate warming and so on happen frequently. In order to solve these global climate problems, plenty of solutions have been found by experts and government. In the aspect of technology, some clean energy such as electric energy, solar energy and so on are taking the place of the use of fossil fuels which will lead to a lot of greenhouse gas emissions. Besides that, some policies and regulations are also helpful in promoting enterprises' and individuals' environmental awareness and taking part in emission reduction work. Take carbon emission as an example, as a policy-based emission reduction tool, it uses the market economy to raise the cost of greenhouse gas emissions, which will improve the bad trend of atmospheric environment resources. In order to achieve the goal of energy saving, emission reduction and environmental production, the adoption of the Kyoto Protocol is an important turning point for global control of greenhouse gas emissions. And the truth is, with the rapid development in developing countries, there are more and more greenhouse gases discharged by them.

**Keywords:** Carbon emission market, new future business, greenhouse gases

## **1. Introduction**

At the General Debate of the 75th session of the UN General Assembly, the “30.60” goal was proposed by President Xi Jinping, making a commitment to the world to reach peak carbon neutrality on time [1]. In 1998, China signed the Kyoto Protocol and approved it in 2002. The Kyoto Protocol didn't discuss emission restrictions in developing countries because of the bad influence on the development of developing countries, but these countries should also protect the atmosphere and environment [2]. The national carbon emission trading policy is one of the core policy tools to achieve the goal of carbon peaking and carbon neutrality. It can achieve the goal of diversifying and transferring risks and is conducive to the green transformation development of enterprises. China officially launched a pilot carbon emissions trading program in 2012 and officially launched online trading in the national carbon emissions trading market in 2021. In the past decade, significant achievements have been made in various pilot carbon emissions trading projects in China. While there is still a long way to go. According to the detailed report of “China's Long-term Green Development Strategy and Transformation and Innovation Path” from the Institute of Climate Change and Green Development of Peking University, about 138 trillion yuan is needed to support green and

low-carbon development [3]. However, by the end of 2020, the financing scale of China's green industry will only be close to 12.8 trillion yuan, which is far from meeting the financing needs of nearly hundreds of trillion green industries. In the case of such a large funding gap, government funds alone are not enough, and market funds must be fully involved. Until now, China's emissions trading market, though, includes only the power sector, but as time goes on, more and more sectors will be involved. Against this background, how to start some new business that can support the low-carbon emission economy and attract more finance into it is the most important thing. And this research is about some predictions and suggestions for some new type of business maybe in 30 or 60 years.

## **2. Analysis of Carbon Emission Market**

The basic mechanism of the carbon emission market is that, through trading, the marginal cost of emission reduction between different entities is finally reached, thus reducing the total cost of emission reduction for everyone.

### **2.1. Categories of Carbon Emission Market**

There are two types of the market---global market and domestic market [4]. As for the global market, it reduces one of the costs of meeting established global targets by allowing different countries to cooperate on emissions reduction. In other words, at the same cost of reducing emissions, global carbon emissions should be increased reduction efforts.

### **2.2. Importance of Carbon Emission Market**

Take the EU carbon emission market as an example, in the 15 years from 2005 to 2019, carbon emissions decreased by 40%, coal consumption decreased by about 32%, and oil consumption decreased by about 29%, but the proportion of renewable energy increased by 60%. The EU carbon trading market has made an important contribution to the EU's low-carbon transformation and the development of a new energy industry [5]. So, China should make greater efforts to develop new energy, which also needs some new financing mechanisms and incentive mechanisms, so as to produce spillover effects and crowding-out effects. The carbon emissions trading market is such an institutional tool.

## **3. Analysis of Domestic Carbon Emission Market**

### **3.1. Current Domestic Carbon Market Development Degree**

The carbon market has played a very important role in promoting enterprises to reduce emissions. Survey feedback from enterprises: because of the influence of the carbon market, they have developed their own emission reduction targets and strategies. More than 80% of enterprises have designated a special enterprise or individual responsible for carbon trading. Most companies say they are already considering the impact of a carbon price in their production decisions and investments

Although only the power industry is included in China's carbon emission trading market, more than 7000 enterprises in all eight industries are required to collect, organize and report data every year, which has helped China collect all the annual emissions at the enterprise level since 2013 and helped enterprises understand their own emissions [6]. Knowing where reducing emissions also helps the government understand the emissions of our industries and the space and status of emission reduction in the international community.

The national carbon trading market needs a capital market that provides a larger scale, lower cost and longer period for the development of China's new energy industry. Carbon neutrality ultimately requires technological innovation, it requires money and accounting. For example, what are the future

benefits of investing in new energy sources or energy efficiency improvements in fossil fuels. How to calculate that? It cannot be made through the capital markets, bond markets or even credit markets. Only carbon markets can do that. The carbon market provides a clear and predictable price signal for the development of China's new energy industry and carbon-neutral technological innovation. Only a clear expectation can guide China's hundreds of trillions of carbon-neutral investments. The carbon market needs to provide a clear price signal to enable enterprises to achieve risk management and value discovery. However, the national carbon market is still in its infancy and still faces some challenges, the first one is that Carbon price is not authoritative enough. And secondly, Low trading activity. Thirdly, insufficient carbon finance innovation 4. Data fraud, etc. [7].

### **3.2. Design of Domestic Carbon Market**

China's carbon market is designed based on intensity rather than volume. That's because the operation of our carbon market needs to be coordinated with many other policies, many of which will affect the decisions of enterprises and carbon markets. So, reconciling these policies requires some compromise in the design of the carbon market. The number of emissions companies can emit won't be limited; companies are required to be more efficient. However, with the passage of time, 2030 and 2060 are approaching, and the institutional design of the national carbon market should also be adjusted accordingly.

At present, with the approach of 2030, some corresponding industries may also set their own emissions caps and even the total emissions of the country will be limited [8].

### **3.3. The Gap between China's Carbon Market and International Carbon Prices**

Since the launch of the EU in 2005, it has taken more than 15 years to raise the carbon price from a few euros to nearly 100 euros a ton, but the carbon price in China's carbon market does not mean that each row of carbon dioxide has to be paid 40 or 50 yuan [9]. The current carbon price is mainly the price traded in the secondary market, which is related to many factors, like supply and demand.

China's current carbon emission trading market is mainly free distribution, so it has not introduced auctions. Although some enterprises say that their quotas are not enough and they need to buy them in the market, its lack does not mean that it needs to be auctioned but comes from the fact that its emission level is relatively low compared with that of the same enterprises. So now in the initial stage of the carbon trading market, the lower carbon price is not a bad factor, it can encourage a wider range of people and businesses to participate earlier. At the same time, in the early stage of the carbon market, the most important purpose to achieve is to let everyone form such a concept of carbon emission as a price and form such a mechanism.

In the early stage of the formation of such a mechanism, the rise or fall of carbon prices does not affect the effectiveness of our market, but in the long run, China needs to "peak" and "neutralize" in the future, so carbon emission quotas will certainly become increasingly scarce.

### **3.4. Data Quality for Carbon Markets**

In the international carbon market, there is also data fraud, because sometimes it is not actively falsified, enterprises do not understand how to report in the early days, and sometimes there will be false positives, so for this situation, in fact, there are some precedents in the international carbon emissions trading market, there are fines, there are re-reporting and so on. This does not mean that the carbon market is a failure, but rather that the carbon market has played a very important role in improving the quality of China's national carbon market or carbon emission data [10].

At the same time, capacity building is very important, because China's emissions trading market is actually one of the earliest pioneers of climate policy. Internationally, it can be seen that other

countries may first establish a carbon emission trading data management system at the enterprise level before establishing a carbon market, so China is on the contrary, through the construction of a carbon market to build a carbon emission data management system at the enterprise level, so many problems people face are actually not the problems of the carbon market itself. It's a question of a regulatory system, and people should drive the quality of that data through the carbon market, which in turn not only helps the carbon market but also helps companies support themselves in the face of international competitive pressures

#### **4. Analysis of Voluntary Emission Reduction Trading of Greenhouse Gases**

Voluntary greenhouse gas emission Reduction Trading: also known as the "Nationally Certified Voluntary Emission Reduction CCER". According to the "Interim Measures for the Management of Voluntary Greenhouse Gas Emission Reduction Trading", the emission reduction participation in voluntary emission reduction needs to be registered by the competent national authorities in the national voluntary emission reduction trading register, and the recorded emission reduction becomes "China certified emission reduction" [11]. After the voluntary emission reduction project has been filed, it shall be traded in the registered trading institution.

China should certify that the resumption of voluntary emissions reduction is a high-quality restart, and where some projects can produce really high-quality emissions reduction, maybe people need to shift their focus to these technologies that require more economic investment, and more and more emission reduction technologies, such as renewable power generation, become economically viable. Knowing that the support of our voluntary carbon market is actually what people want to see in the future.

#### **5. Conclusion**

According to the current degree of the domestic carbon market, there are lots of problems that need to be solved. As for the data fraud, although it is known that was not active counterfeiting, some solutions are needed as soon as possible. Because the accuracy of carbon emission data plays a very important role in the development of China's carbon market. So maybe a professional company or a metering method that can accurately measure carbon emission data and establish a carbon emission data management system for each large enterprise will be a new business trend.

Besides that, there also are more chances in the carbon emission quota. China's current carbon trading market is dominated by free allocation, which can encourage a wider range of people and businesses to get involved earlier, but in the long run, China needs to "peak" and "neutralize" in the future, so carbon emission quotas will certainly become increasingly scarce. Against this background, no matter how advanced the technology used by enterprises, the carbon discharged by them is still higher than the maximum limit. What if people think further, not only the new or some more advanced technology can reduce an enterprise's carbon emission, but also some way that can neutralize the extra emission may be a good choice, such as plants absorbing carbon dioxide, the greenhouse gas that companies emit. In the future, the carbon dioxide absorption of forest farms may be traded for offsetting excess carbon emissions. So now the reclamation of the forest farm will be a new future business trend. This way is called Voluntary emission reduction trading of greenhouse gases. The carbon dioxide absorption of forest farms can be defined as voluntary emission reduction, which can be traded at a registered trading institution. In addition to this, more and more new emission reduction technologies which can also be traded in the institutions are some new business trends too.

## References

- [1] Chen Huizhen, *Research on the legal system of carbon emission Trading in China*. Beijing: Social Sciences Academic Press, 2017
- [2] Yan Fengyun, *Mechanism Design and Impact Assessment of carbon emission trading in China*. Beijing: Capital University of Economics and Business Press, 2017.
- [3] Cao Mingde, Liu Mingming, Cui Jinxing, *The Legal System of carbon emission trading in China*. Beijing: China University of Political Science and Law Press, 2016.
- [4] Xia Zixin, *Research on carbon emission rights*. Beijing: China Legal Publishing Press, 2016
- [5] Wang Yan, Zhang Lei, *Localization of a legal protection mechanism for carbon emission trading*. Beijing: Law Press, 2016.
- [6] Scott D. Deatherage. *Carbon Trading Law and Practice*. New York: Oxford University Press, 2011.
- [7] Haijun Z, Maosheng D, Peng Z, *Analysis of the impact of China's emissions trading scheme on reducing carbon emissions*, *Energy Procedia*, 2019.
- [8] Han Guoqing, Wu Xingyou, *Research on the construction of unified carbon market trading mechanism*. Xiamen: Xiamen University Press, 2020
- [9] Ding Liangke, Mei Xin, *The practical investigation and optimization approach of China's carbon emission trading legislation--the experience and inspiration of international carbon emission trading legislation [J]*. *Research on Government Modernization*, 2022(01)
- [10] Rong Chao, Chi Xiaotong, *Implications of EU carbon trading mechanism for Chinese market[J]*. *Contemporary County Economy*, 2020(04).
- [11] Chen Ziling, Pan Jiaping, LI Jiaqi, Zheng Chao, Luo Yuanhui, Yang Tianqing, *Analysis of the status quo, Problems and countermeasures of China's carbon trading pilot[J]*. *Economic Research Guide*, 2019(07).