

The Problems of China's Processing Trade Under Low-Carbon Economy and Relative Countermeasures

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Abstract

Since various countries actively develop low-carbon economy, these countries will set low-carbon standards on the import products on the way to be low-carbon. From the low-carbon perspective, China's processing trade still has many problems. This paper will systematically explore and analyze the problems of China's processing trade under low-carbon economy and the response of China and put forward relative suggestions.

Key words: Low-Carbon economy; Processing trade; Low-Carbon barriers

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INTRODUCTION

How to establish strategies for economy to develop along with natural environment has been paid attention to by governments, organizations and enterprises around the world. Low-carbon economy is one of the focuses. The World Bank figured out in World Development Report 2010 that the interaction between two systems of the international trade and climate change has special significance for developing countries. Therefore the research on how low-carbon economy influences China's processing trade not only has great importance.

1. THE PRESENT SITUATION OF CHINA'S PROCESSING TRADE

1.1 Product Mix

The main products of China's processing trade have been labor-intensive products such as garments, textiles, footwear and toys for years. At present, although China's processing trade product structure is in the continuous optimization, it remains relatively backward. Middle and low-end goods are the main export products while at the same time the new industry is on the rise. For example, "middle and low-end manufactured goods account for more than 60% of the 2010 Shandong province processing trade export products, while high-tech products take up the rest though their proportion has been increased".

1.2 Enterprise Mix

As shown in figure 1, total volume of import and export processing trade from January, 2011 to March, 2011 is \$4.51028 trillion. The share of foreign investment enterprise reaches 51%, that of the state-owned enterprise occupies 21% and that of collective, private and other enterprise are 28%. It can be found drawn that foreign direct investment enterprises are the main part of China's processing trade.

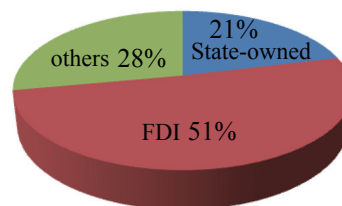


Figure 1
The Enterprise Mix of China's Processing Trade
Source: General Administration of Customs of the People's Republic of China

1.3 Export Markets

China's most important trade partners are the United States of America (USA), the European Union (EU) and Japan. Figure 2.2 shows that USA occupies 29% of 2011 China's main exports, Japan and South Korea account for 20% and EU takes up 16%. Highly centralized export markets make the development of China's processing trade has to depend on these countries. The low carbon policies of these countries will play a vital role on China's processing exports

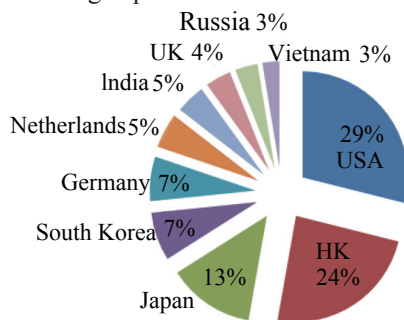


Figure 2
2011 China's Main Export Markets
Source: General Administration of Customs of the People's Republic of China

1.4 Carbon Emissions

The fact that China's processing trade industry discharges huge amount of carbon is serious. A study found that "processing exports grow, industrial waste discharge will increase; vice versa. Although industrial waste discharge in some extent lags behind in processing trade, it is still obvious that the processing export is related to industrial waste discharge". Furthermore, "since 2002, the consumption of China's fuel coal and raw coal has kept a double-digit growth except 2008. So that coal and other fossil fuels act as the main energy in China will not fundamentally change for quite a long time". Moreover, the main industry of China's processing trade is manufacturing industry, which makes the feature of high carbon emission more obvious.

1.5 Region Distribution Characteristics

The product structures of processing trade in different regions are very clear. Developed coastal regions have been shifting to mainly develop manufactured goods and technology intensive products and the proportion of new high-tech products continuously increases. But inland provinces still rely on resource advantage and primary products are the main and almost only processing exports. "Mechanical and electrical products and new high-tech products account for 88.2% and 66.2% respectively in 2010 Jiangsu processing exports". The situation in Shanxi Province is "the main processing trade products are primary products such as iron, and alumina rubber; mineral products have been account for more than 80% of the processing trade products; the proportion of mechanical and electrical products is relatively low".

The feature that manufacturing industry acts as the main industry of China's processing trade makes China emit large amount of carbon. Although related laws and regulations of environmental management have been involved, the difference between east and west is still obvious. "Analyzing data about processing export and industrial sewage water, exhaust gas and solid waste from 1995 to 2007, we can find that processing trade in both east and west has long-term positive correlation with environment pollution, and the scale effect of the east is more significant. The environmental improvement of the east works well but the current environmental policies are against environmental protection of the middle and west area, according to the empirical results".

2. PROBLEMS OF CHINA'S PROCESSING TRADE

2.1 Increase of the Cost

Based on the above analysis, China's processing trade is facing more and more serious cost problems. In a low-carbon economy age, the comparative advantage of low cost is suffering.

The situation that processing trade mainly focuses on manufacturing industry and low value-added products results in limited profits so that enterprises have to control cost, especially the energy cost, which takes up a great proportion of the cost of low technical products. Moreover, the international requirements on carbon emission gradually increase. To comply with this trend, China has to invest on reducing carbon emission so that environment cost also increases.

The uneven distribution of China's processing trade in different areas results in low correlation of the industry, and the incoherent industries results in high manufacturing cost and transport cost. For example, processing trade enterprises gather in coastal provinces like Jiangsu, while inland provinces such as Shanxi have abundant energy resources, but mainly concentrate on primary products. Therefore, it is still difficult for enterprises to reduce cost by purchasing less expensive domestic raw materials and accessories. Emphasizing balanced development of different areas of processing trade is more important under low-carbon economy. In addition, the management and technology of those companies, which produce intermediate products, will greatly improved if processing trade enterprises purchase domestic downstream goods from them, thus the whole industry benefits.

On the condition of low-carbon economy, the comparative advantage of China's processing trade is experiencing a transformation process that the advantage of low cost is losing. The implement of the carbon trading market, the low carbon standard authentication, and carbon tariffs will have huge impact on the cost of China's processing trade.

2.2 Low Profits

Leading by FDI, China's processing trade companies exist the problems of lacking core brands developed independently, relying on FDI and less developed technology. Although the export volume of China's processing trade is high, profits are relatively low. Developed countries master the core technology and have a control of the price determination. Some enterprises in developed countries even control the whole value chain by designating production in a certain enterprise of a certain country. The export products of China's processing trade are not stable. This instability would certainly set restrictions for the development of processing trade industry.

Low-carbon economy has triggered new changes of international trade environment, such as low-carbon barriers, which has particularly significant influence on enterprises of low technology. The development of China's processing trade industry will be overwhelmed if only relies on simple processing and assembling when cost increases. So it is more urgent for companies to add value to technology and product in the low-carbon economy.

2.3 Carbon Emissions and Implied Carbon Emissions

China's most processing trade enterprises are engaged in labor-intensive processing programs. Labor-intensive manufacturing industry becomes the main body of China's processing trade and the manufacturing industry has a image of high carbon emissions.

China emits a large amount of carbon for other countries because the consumption of the processing products does happen in China. Chinese scholars found that the processing trade carbon emissions of China in 2002, which occupied 29.8% of the domestic carbon emissions, were equivalent to the sum of the domestic carbon emissions of Germany and Australia; the processing trade carbon emissions of China in 2007, which was 47.4% of total domestic carbon emissions, was more than two times of the domestic carbon emissions in Japan, and more than two times of the sum of domestic carbon emissions in Germany and France. Such large amount of carbon emissions should cause our attentions.

However, different from domestic carbon emissions, with processing trade carbon emissions leaving in China, the products of processing trade are export to other countries. Therefore, China undertakes much carbon emission for other countries, but in an adverse situation in the international climate talks.

2.4 Export Meets Low Carbon Barriers

China's processing trade export markets are mainly United States of America, the European Union and Japan. Excessively dependent on only these countries, China will suffer many restrictions and trade sanctions because

these countries are strict with carbon emissions and other environment requirements. But the ability of developing countries is not enough to reach that of the developed countries to control carbon emissions. So carbon tariffs and other low carbon barriers are discriminatory and will probably be new technical barriers of developed countries.

Once the carbon tariff is come into effect, it can be derived out more and more trade frictions. For example, "The US House of Representatives passed the American Clean Energy and Security Act on June 26, 2009, which permits the US to impose carbon tariff on energy-intensive products. The US launched trade remedy survey against China's nine kinds of high carbon-emission products in ten days". With the impletion of carbon tariffs expanding to other products, China's trade conditions will continue to deteriorate.

3. CHINA'S COUNTERMEASURES

The scale of China's processing trade is large, the distribution is decentralized, and the impact on China's economy is great. Low-carbon economy makes it even harder for China to adjust processing trade. Therefore, to upgrade China's processing trade cannot be achieved overnight. At present, China has taken active measures to ensure the adaptation of processing trade to low carbon economy. Following are the mainly aspects:

First of all, China has improved the management of commodity classification and adjusted the restricted category and prohibited list of processing trade. In accordance with national industrial development and environmental protection requirements, China has imposed restrictions on products, which are made by low processing technology and can easily cause trade disputes. Moreover, China has carried out some measures to control energy consumption. For example, the General Administration of Customs and the State Economic and Trade Commission issued the Color Photographic Paper Processing Trade Unit Consumption, which aims to regulate the processing trade unit consumption.

Second, the Ministry of Commerce guides processing trade to the central and western areas by using policies and laws and the Customs also takes measures to guide processing trade enterprises concentrated in areas under special customs supervision. "Since last year, a group of leading enterprises have entered into Midwestern areas under special customs such as Chongqing, Zhengzhou and Chengdu. The number of enterprises accumulated in these areas, which provided 1.5 million jobs, was 57,000 until February, 2011". These measures are great improvements to accumulate industrial cluster and to achieve economies of scale. Based on comparative advantage, the Midwest areas have low cost advantage and the processing trade industry is welcomed by the local governments. Making full use of the comparative advantages helps

balance the levels of development of processing trade industry in China and can also promote the domestic purchase of intermediate products so as to promote the competitiveness of the whole processing trade industry.

Third, China has established test sites to test the effects of transformation of processing trade. In August, 2011, the Ministry of Commerce took measures and issued the 59 “the Transformation and Upgrading of National Foreign Trade Professional Demonstration Base” to explore the direction of processing trade reformation. The measures include guiding companies to improve the technology, and create their own brands. These measures to some extent reflect the most difficult problems of China’s processing trade, and can help keep the sustainable development of it under low-carbon economy.

Above all, with China’s effort, the problems of China’s processing trade have been partly solved, but some are still remained. My suggestions are as follows: (1) Upgrade the national technology level and encourage the technological innovation of China’s processing trade companies. (2) Develop the education to improve the labor quality (3) promote the development of relative industries and expand

the processing trade industry chain to achieve the scale effect (4) Create better environment for the development of processing trade industry to attract foreign investment on setting up research and development centers in China.

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