## Low Carbon Economy Highlight Social Responsibility of Businesses

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**Abstract** Low-carbon economy is greatly recommended and developed around the globe. Under this background, the social responsibilities of businesses are not only to make contributions or get rewards but also closely relate to their own development. Low-carbon economy is an economic model of low energy consumption, low environmental pollution and low waste emission. It cannot live without the support of businesses. Assuming the social responsibility of a low carbon economy is not only required by the times but also by the development of businesses. They can find opportunities during this process so to get good results with half the effort.

**Key words** Low carbon economy; Social responsibility; Opportunity; Core-competitiveness

#### 1 Introduction

"Low carbon economy" was first coined by the British government in its white paper Our Energy Future-creating a low carbon economy. This economic model is based on low energy consumption, low environmental pollution and low waste emission. It requires more economic output with the least natural resources consumption and environmental pollution. An increasing density of carbon dioxide in the atmosphere causes global warming. It is a severe challenge to the global environment which is vital to our survival and development. Visionary people from developed countries as well as developing countries are active in pursuing a solution to global warming. From the Kyoto Protocol in 1997 to Bali Road Map in 2007 and Copenhagen summit in December 2009, researchers at home and abroad have done lots of researches on low carbon economy. They have made a series of good results by conducting comprehensive researches from various perspectives on the urgency of a low carbon economy; the strategy and method of developing a low carbon economy; low-carbon techniques; low-carbon finance and its platform; the relationship between a low-carbon economy and consumption patterns, etc. Facing the reality of global warming, the international community voices its increasing demand on businesses to take the social responsibility of developing a low-carbon economy. Moreover, with the globalization, the market economy with capital as its working mechanism cannot live without low-carbon development. In order to enter this market, all the nations have to observe the game rules commonly recognized and formed during hundreds of years. Under this circumstance, businesses should take further steps to effectively assume their social responsibility of a low-carbon economy; otherwise they cannot survive and will be condemned by the international community.

#### 2 New Era highlight the Social Responsibility of Businesses

# 2.1 The construction of harmonious society requires businesses to share the cost of social responsibilities

One of the important aspects of building a harmonious society is to make businesses develop in harmony with the environment. It also requires businesses to put people at first during its development. At the time of making profits and protecting shareholders' rights, businesses are also responsible for the environment. "High-carbon" producers not only waste natural resources and damage the environment but also make a bad impact on people's physical and mental health. The consequence is they will be blamed by consumers and punished by the government. It's our responsibility to save our natural and biological resources in doom and constrain energy consumption and waste emission in order to protect the eco system[1]. It's the obligation of businesses to take this responsibility to cater for the development of a harmonious society.

## 2.2 Socially responsible businesses can get sustainable development

A lot of researches show that: the more emphasis businesses put on social responsibility, the more market share their products and services will get. Responsible businesses can obtain better credibility and social recognition and receive more publicity, which generates high sales volume and customer loyalty. In a competitive market economy, businesses which gain their advantage at the expense of product quality, labor &community rights or rely solely on cheap price, cannot guarantee stable and long-term growth and sustainable development. Responsible businesses promote their corporate culture while create business opportunities at the same time.

#### 2.3 China's reality reflects the timing of initiatively taking social responsibilities by businesses

In response to global climate change, the Chinese government promised to cut  $CO_2$  emission of 2020 by  $40{\sim}50\%$  compared with 2005 and make energy conservation contribute 85% to enhance the energy efficiency. This is an enormous challenge for the project of energy conservation and  $CO_2$  emission reduction. China is the largest energy producer and NO.2 energy consumer. A large proportion of industries are made of high energy consuming companies. China accounts for 18%  $CO_2$  emission of the whole world and has overtaken US to become biggest  $CO_2$  producer. This places a heavy burden on Chinese enterprises to  $CO_2$  emission. Businesses must initiate to cut  $CO_2$  emission and take the lead to achieve the target. By developing in an economical and clean way, businesses take a new road of low energy consumption and less environmental pollution. The improvement of social environment creates a better environment which is vital to the survival and development of businesses.

# 3 A Low-carbon Economy and Business Development Supplement With Each Other

Low-carbon economy is an economic model of low energy consumption, low environmental pollution and low waste emission, which is another major step forward after agricultural civilization of human society and industrial civilization. Now every country in the world is scrambling to develop low-carbon economy. It is a strategic decision made by human beings that they have to handle challenge and find opportunities under the pressure of climate crisis. It will bring a series of fundamental changes to the whole economy, society as well as corporation, and there is no exception of China. In the world, today's enterprises who are success of the low-carbon false start will find the lever fulcrum of the future economy. Low-carbon will be inevitably the trend of the future economy. Companies that are capable of acting on this opportunity will turn low-carbon into a magic weapon. Otherwise companies must be subject to this bottleneck.

After reform and opening up, Chinese economy grows rapidly, but we must realize that it is the consumption of environmental resources that promotes the industrial growth. Over the past 30 years, An annual 10% economic growth is achieved at the expense of consuming our natural resources on a large scale such as the occurrence of extreme weather events, and the frequency and intension of disaster significantly increased, losses increased, the unbalance of regional water resource intensified, the ecological environment degenerated, the instability of crop production increased and so on. That is to say, industrial growth is at a certain expense of environmental resources [2]. But this kind of growth model can not last too long. There is no doubt that profit maximization is the goal of enterprises, but their behavior is not just an individual one in the modern society, it may affect society and economy overall. Under these conditions, it is self-seeking and lacking of vision for enterprises to pursue profit maximization, while firms should burden a certain social responsibility. Due to changes of country's developing model, we should not consider social responsibility as corporate cost, but also as corporate capital. Especially under the overall situation of developing low carbon economy, the Chinese government also pushes ahead with the structural adjustment, speeds up eliminating backward production capacity, restrains the two high industries grew excessively, reduces the level of energy consumption, promotes the low-carbon economy, and these will create good conditions for enterprise's promotion.

Therefore, the Chinese Government keeps improving policy of the cadres, and puts green GDP index, human development index and the binding targets of reflecting the constraint of resources and environment into the Performance Appraisal System; the Chinese Government makes requirements on market access more rigorous, and makes necessary access policies and corresponding regulations, including advanced technical and economic indicators and environmental protection index and so on, it also reduces and limits projects enter into project phase and production field, which are high energy consumption, low state standards on environmental protection and significant in non-economic external; it makes favorable or prohibitive policies, improves the system of energy conservation and environmental protection technology standards and monitoring system, improves enterprisers' renovation in terms of energy saving. Energy saving and environmental protection standards in the future may become an key entry standardization in the green barrier. Only those enterprises that pay enough attention to the development of low-carbon economy can maintain exuberant vitality.

 $<sup>^{\</sup>odot}$  The State Council notice requirements to ensure to achieve targets of "Shiyiwu" energy-saving and emission reduction. http://www.chinanews.com.cn/cj/news/2010/05-05/2264636.shtml. 2010.5.5 (In Chinese )

#### 4 Enterprise Seeks for Opportunities in Developing Low-carbon Economy

Dealing with climate change drive to low-carbon technology's and industry's development and newly developing will be general trend of the future economy, enterprise should know opportunities and reforms posed by global trends in advance and grasp it. The future economy must be low-carbon one, and future competition must be based on the competition of low-carbon products and technology[4]. Where are opportunities in the future? The author thinks that enterprises should find opportunities from governmental aspect, consumer as well as corporate themselves.

#### 4.1 The Chinese Government encourages enterprises to develop low-carbon economy

The Chinese Government has incorporated development of low-carbon economy into the Twelfth Five-Year Plan (2011-2015) of economic and social development. In order to support development of low carbon industries, the Chinese Government has introduced a series of supportive policies. Such as policies of encouraging enterprises to go on low-carbon innovation, reduce energy and renewable energy's use and implementing on tax breaks, financial subsidies, government procurement, green credits and so on. The Chinese Government is in the support of grants and discount loans to support the key enterprises of key industries to implement adjustment of industrial structure, and technical upgrading by technological transformation, and then promoting sustainable development to industry[3] Shanghai Pudong Development Bank sets up a "green credit operations" recently which is used to supports enterprises in developing low-carbon economy. The Chinese Government encourages and supports investors and professionals who should be strong, reputable and qualified to enter energy saving technical services market. The Chinese Government uses the market mechanism, and cultivate and introduce all kinds of energy-saving technical services institutions. It also provides a full service to energy-saving projects, such as evaluations, design, financing, construction, running, management and so on. Then promoting application of energy saving and emission reduction in production. The Chinese Government also actively adjusts financial policies, such as strengthening outreach of pre-tax on R & D(research and development) cost, allowing enterprises to carry over the current and R & D cost, it can offset the taxable income for future period of time, and promotes enterprises to form internal motivational mechanism of independent innovation; Encourages and supports SME(Small and Medium Enterprise) to establish technical center and increase R & D investment, to improve the level of technology and innovation ability. Now more and more firms have gain benefits which were brought by low-carbon economy from the government's supports.

### 4.2 Consumers endorse enterprise's low-carbon products

Because of frequent natural disasters and environmental degradation in the recent years, people worried and debated climate change. Sustainable development and environmentalism has formed a certain influence. Consumers gradually improve their willingness to pay for climate-friendly products and service. Consumption propensity of consumers has obvious utility.

As to connatural products, consumers prefer low-carbon products. Therefore, in order to win recognition of consumer and marker, enterprise should actively produce low-carbon products, formulate and revise quota for energy consumption of high energy consumption standards and pollutant discharge standards, save resources, and decrease energy consumption. For example, the state-owned enterprises actively made a solemn commitment of saving resources to the whole society in "save the people, common action". State Grid Corporation of China first published green development white paper at home. China Mobile Communications Corporation apply "green packaging" in more than half of the country provinces (autonomous regions and municipalities), which has aroused a good response. China's Nine Dragons Paper has created a full set of low-carbon economic development model, through a series of measures such as abolition of recycling, energy saving and emission reduction, treatments of waste water and gas and so on, the use of the wood pulp reduced to 7%-8% from 20%,. This effectively promoted a rapid growth of Nine Dragons Paper. These enterprises closely follow up the completion of scheduled tasks, and have done analysis monthly and supervision quarterly. Some companies even take the initiative to sign an emission reduction agreement with the Chinese government. This demonstrates the corporate image, and their products have also been recognized by consumers. In fact, only when enterprises pay much attention to the construction of social responsibility can they grow strong in adversity, by taking responsibility to produce low-carbon products, taking higher effect of energy saving as breakthrough, establishing the firms' own brand, creating a virtuous circle, and enterprise has become the ultimate beneficiaries.

## 4.3 Developing low-carbon technology to enhance the core competitiveness of enterprises

If enterprise wants to succeed in the future competition, now it must seize opportunities and stand

in the forefront of low-carbon economy. Therefore, enterprise should implement energy conservation and emission reduction policies, create low-carbon technology, research and implement the low-carbon mode of production, reform the energy-saving technology, vigorously develop circular economy, and grasp the "plastic bag" work. To those enterprises with no advantages on technology and management, they should strengthen investments on low-carbon technology development, strengthen capability of technological innovation, focus on the cultivation and introduction of technology talents, increase spending on scientific research, develop and master key technologies with independent intellectual property rights, and build a low-carbon technology innovation system. In the personnel management, enterprise should increase training strength to promote senior management's knowledge, enable managers to realize the social effects of low-carbon economy in the future development, then the managers will be able to make the right business decisions for corporate fortunes; to enterprises with advantages on technology and management, they should strengthen promotion on technology, and give priority to the productive enterprises to use the new energy-saving technologies, new techniques and new products. Power plants should first guarantee renewable energy, the coal-fired units of high parameters, high-capacity and high-efficiency and the electricity by generating the heat and pressure power for people to get on the internet. Other energy companies can also vigorously develop the products with high-efficiency and low power, researching and developing the equipments of the third generation nuclear power, hydrogenation products, wind power and supercritical power equipment, at the same time, companies vigorously develop biomass energy and other renewable energy sources, including plant stalks, tidal power plants and geothermal. Firms should promote the technological transformation and technical progress of traditional industries, and promote the new energy-saving products as well as new energy-saving technologies. When enterprises conduct the low-carbon technological renovation, it also helps enterprises to promote their own status, and enhance the core competitiveness of enterprises fundamentally.

#### **5 Conclusion**

In conclusion, there is some inevitability for corporations to hold social responsibility of low carbon economic development. Construction of harmonious society, economic globalization as well as Chinese current status imminently requires firms to share this responsibility. Under this overall situation, firms can survive and have a better development only if they take the lead in developing low carbon economy. From governmental aspect, it should put forward policies to support firms; from consumers' aspect, they should hold rational consumption and buy low carbon products; from firms themselves' aspect, they should extensively develop low carbon technology to promote their core-competitiveness. Only by doing so, firms find opportunity in developing low carbon economy, use innovation of energy technology and emission reduction, adjust industrial structure, produce more low carbon products, and transform the mode of economic development and residents' consumption structures overall. Then we can set China's developing road which goes with the tide of the globe.

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