

The Influence of Low-carbon Economy on Economic Major Teaching and Its Measures

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Abstract: In recent years the market economy is developing at a rapid pace, large amount of energy has been produced and consumed by us, which results in global warming and environmental degradation problems and various chain of events of adverse effects have been caused one such thing is smog. As a new economic development model, low-carbon economy model has received much attention at home and abroad. China is keen and gives great importance to the development of low-carbon economy. With the continuous development and progress towards the low-carbon economy, a new economic profession has been promoted, which has also brought about a certain degree of influence on the current economic professional teaching. In the low-carbon economy, existing economic professional teaching must be considered and explored, effective measures should be taken to respond. The author explores and analyzes the impact of low-carbon economy on economic professional teaching, and proposes the development measures of economic professional teaching in low-carbon economy.

Keywords: *low-carbon economy; economics major; influence; development measures*

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0 Introduction

Our objective are sustainable development, low-carbon economy which greatly reduces the usage of coal, oil and other energy consumption through industrial transformation, continuous innovation of technology, and

vigorous development and use of new energy by control measures. This not only helps in improving the ecological environment but also helps to achieve sustainable socio-economic development. However, the low-carbon economy has also brought great influence to the economics of higher education institutions. In order to cope with the impact of low-carbon economy, it is necessary to adjust and improve the economic professional teaching to adapt to the development of low-carbon economy.

1 The impact of low-carbon economy on economic professional teaching

1.1 With the development of a low-carbon economy, a new economic profession was born

Due to rapid development of low-carbon economy, new economic professional operations such as carbon emissions trading, corporate carbon management consulting, carbon finance, energy conservation management, carbon emissions trading and carbon finance are the two economic priorities of higher education institution class professionals^[1]. In recent years, the global climate has gradually warmed up. Table 1 shows statistics on greenhouse gas emissions from 1990 to 2000. It is very obvious to see that global warming poses threat to humanity, and many countries around the world have signed the Kyoto Protocol. The signing of the protocol has played an important role in the development of quota-type carbon emissions and project-based carbon emissions trading markets. Quota-type carbon emissions' trading refers to the trading of emission reduction units in order to control the total amount of carbon emissions. Project-based carbon emissions' trading is for the implementation of emission reduction projects and emission trading units. With

the rapid development of the carbon emission trading market, the demand for senior economic management talents is becoming more and more intense. Therefore, various institutions of higher learning have successively

opened new economic specialties related to carbon emissions trading and carbon finance to meet the low demand. The urgent need for professionals in the carbon economy market.

Table 1. Gas emissions from the United States from 1990 to 2000 (unit: million tons of carbon equivalent)

Greenhouse gases	1990	1992	1994	1996	1998	2000	2000/1990
carbon dioxide	1355	1367	1425	1488	1511	1583	1.168
Methane	199	200	194	188	181	177	0.889
Nitrous oxide	94	98	106	101	99	99	1.053
Other greenhouse gases	30	29	32	39	46	47	1.567
Total	1678	1694	1757	1815	1836	1906	1.130

1.2 Impact on the teaching of economic majors that have been established so far

The emergence of a low-carbon economy has had a certain degree of impact on the original social and economic activities, which means that it will affect the economic professional teaching that has been established in higher education institutions^[2]. With the rapid development of low-carbon economy, higher requirements are aimed on carbon dioxide emissions. When carbon dioxide is emitted, the carbon footprint of production products should be fully considered. The carbon footprint refers to the total amount of carbon dioxide emitted by the product during production, consumption, and transportation, as well as some other greenhouse gases. Under the influence of a

low-carbon economy, China's climate-friendly products have developed rapidly. Climate-friendly products directly control greenhouse gas emissions. For example: wind turbines, optical components, etc. are typical representatives of climate-friendly products^[3]. With the continuous development of low-carbon economy, trade in climate-friendly products has continued to develop, which has had a certain impact on traditional international trade and economic development. If traditional international trade and economy want to be further developed, they need to make reasonable adjustments[Table 2]. This will inevitably have a certain impact on the economic education that has been established in higher education institutions^[4].

Table 2. Impact on the current established economic major impacts

Influences	Specific contents
Talents cannot adapt to market requirements	If the existing economics students are as skilled as the students before, they only need to get adapted to the knowledge of talents in the low-carbon economy and the market, and they will need to master the knowledge system related to climate change. For example: calculation of the carbon footprint of a product.
The market puts new demands on economic talents	Existing economics students also need a comprehensive understanding of climate change regulations related to international trade. The low-carbon economy has put forward new requirements for economic talents, which has brought certain influence to the existing economic professional teaching in various institutions of higher learning.

2 The innovation of economic professional teaching under the low-carbon economy

2.1 Implementing interdisciplinary training

Whether it is the newly established one related to carbon emissions trading in higher education institutions and the economic professional teaching of carbon finance, or the traditional economic professional teaching already established by higher education institutions, under the influence of low-carbon economy, it is necessary to bring in innovative teaching. Integrate economic and environmental disciplines^[5].

For example, for the international economics and trade majors of higher education institutions under the influence of the low-carbon economy, if they want to develop better after graduation and adapt to the market demand for talents, they need to have a solid grasp of relevant international economic aspects. Professional theoretical knowledge and international trade practices, but also need to be familiar with the relevant knowledge of climate change, only in this way, can obtain a certain development space in the process of employment, not to be eliminated by society. Therefore, under the influence of the low-carbon economy, the newly established

carbon emissions related trading and carbon finance economic and traditional economic majors in higher education institutions should implement the teaching model of cross-cultivation of economic disciplines and environmental disciplines.

2.2 Strengthening the joint training of schools and enterprises

The low-carbon economy is a new economic development model that is still in the exploratory stage. It is precisely because it is a new economic development model. The talent market is relatively blank, which makes the demand for relevant economic talents more urgent^[6]. Therefore, the economics majors of higher education institutions are facing new development opportunities as well as new development challenges. Since the low-carbon economy is still in the exploratory stage, neither the relevant theoretical knowledge nor the practice has not yet matured. Under such circumstances, there are certain difficulties in setting up relevant carbon emissions trading and carbon finance new economics majors in higher education institutions. For example, the lack of quality professional teachers and the rapid changes in regulations related to climate change. Therefore, institutions of higher learning should actively establish cooperative relationships with related companies, because companies in this area often hold the most cutting-edge theory and practice.

3 The development measures of economic professional teaching under the low-carbon economy

3.1 Formulating the development plan for economic professional teaching

With the rapid development of the low-carbon economy, the demand for economic talents continues to increase. China's education sector should strengthen the overall planning of economic professional development^[7]. This will provide an important guarantee for the economic profession to better cope with the impact and development of the low-carbon economy, and effectively avoid the blind development of economic professional teaching.

3.2 Financing the development of economic professional development funds through various channels

Under the influence of the low-carbon economy, it is necessary not only to add new economic majors,

but also to rationally adjust the established economic majors, which requires a large amount of funds as a basic guarantee. At this stage, China's colleges and universities are in a relatively tight state of education funding^[8]. Therefore, the financial department of the government of our country should increase financial support for the development of economic professional development. In addition, institutions of higher learning should also raise funds for the development of economic professional teaching in a low-carbon economy through various channels. For example, institutions of higher learning can finance with related companies or expand sources of funds through social donations. It is even possible to apply for support for emission reduction assistance to more developed countries in the world. Because, for international aid relief, its main goal is to help countries like China that are developing to help them improve their ability to reduce emissions and adapt to climate change.

3.3 Strengthening the establishment of a team of high-quality professional teachers

The quality professional teacher's team is an important prerequisite and foundation for economic professional teaching to cope with the impact of low-carbon economy. Therefore, all institutions of higher learning should strengthen the establishment of a team of quality professional teachers. The specific practices are shown in Table 3.

3.4 Constructing a sound economic professional teaching system that adapts to a low-carbon economy

Under the influence of the low-carbon economy, the economic professional teaching that has been established in higher education institutions should be actively reformed, not only to teach students the traditional economic professional knowledge, but also to strengthen the cultivation of students' low-carbon awareness. Therefore, institutions of higher learning can offer basic teaching courses related to climate change and carbon emission reduction^[9]. At the same time, in a low-carbon economy, colleges and universities should actively create a low-carbon campus culture, advocate low-carbon life, low-carbon teaching, etc., and in a subtle way, encourage students to consciously give the low-carbon economy practitioners. Conditional institutions of higher learning can combine the development of low-carbon

trading markets with new economics majors in carbon emissions trading and finance. For higher education institutions that do not have sufficient conditions, they should add relevant courses on knowledge of change in the traditional economics profession^[10]. In addition, colleges and universities should also regularly exchange and cooperate with other institutions of higher learning. Colleges and universities can use advanced information technology to build a network communication and

interactive platform. Colleges and universities can target the development of low-carbon economy and economic professional teaching. To carry out exchanges and discussions, and in the platform, all colleges and universities can share resources, which not only help to provide the utilization and value of resources, but also helpful for the teaching of economics majors in colleges and universities to better cope with the impact of low-carbon economy.

Table 3. Specific practices on strengthen the establishment of a team of quality professional teachers

Strategy	Specific contents
Introducing talent	<ol style="list-style-type: none"> 1. Recruit high-quality professional teachers for the society 2. Invite relevant business professionals to work part-time 3. Retain professional teachers through better remuneration packages and campus cultural environment
Strengthen the training of existing teachers	<ol style="list-style-type: none"> 1. Screening some of the better teachers to go to more developed countries abroad for further study. Developed countries in foreign countries occupy a leading position in the field of low-carbon economy. The research on low-carbon economy is also the most comprehensive and in-depth. After studying in developed countries, teachers can master advanced theories in time and accumulate a large amount of experience. And some developed countries abroad also have low-carbon education and training institutions. 2. Organize relevant teachers to go to China's carbon exchanges or other institutions of higher learning that have established economic professional teaching under the influence of low-carbon economy to carry out further studies and study, so as to exchange experiences and learn from each other to build a quality professional. Teachers' team, thus providing teachers' support for the development of economic professional teaching in higher education institutions in a low-carbon economy

4 Conclusions

In summary, with the continuous development of low-carbon economy, the society's demands for new economic talents is increasing, which not only brings new development opportunities for economic professional teaching in higher education institutions, but also brings them certain challenges. Under the influence of a low-carbon economy, colleges and universities either need to establish new economic majors, or they must adjust the established economic education. Only in this way they can cope with the impact of low-carbon economy on economic professional teaching. For students of a class, under the influence of a low-carbon economy, they not only need to master the traditional economic professional knowledge system, but also need to master the knowledge and regulation of relevant climate change. Only in this way can we better adapt to the demand for talents in a low-carbon economy.

References

- [1] Duan Lina. Analysis of the Ways and Potentials of China's Low-carbon Economy Development[J]. China Collective Economy, 2019 (05): 8-9.
- [2] Shi Hongai. Analysis of the Interdisciplinary Applied Talents Training Curriculum System—Taking the Low-carbon Economy Major of Sun Yat-sen University Xinhua College as an Example[J]. Modern Business and Trade, 2018, 39(13): 173-174.
- [3] Cheng Yao, Zhou Mo. Research on The Development Model of Low-carbon Economy[J]. Times Finance, 2018 (12): 10+32.
- [4] Yuan Liu. Research on the Influence of "Sharing Economy" on the Teaching Paradigm of Economics in Colleges and Universities[J]. Chinese Market, 2017(13):318-319.
- [5] Song Wenjin. Economic Management Concept under Low-carbon Economy[J]. Science and Technology Economic Guide, 2018, 26 (05): 179.
- [6] Li Peng. The Impact of Low-carbon Economy on International Trade Rules and China's Countermeasures[J]. Shanxi Agricultural Economics, 2017(7): 41-41.
- [7] Zhang Linjie. Exploration of Thermal Energy and Power Engineering Construction Under the Background of Low-carbon Economy[J]. Shandong Industrial Technology, 2017(8): 47-47.
- [8] Zhang Jiakuan. The Theoretical Basis and Economic Value of Low-carbon Economy[J]. Modernization of Shopping Mall, 2017(7): 249-250.
- [9] Tao Xueqing, Huang Xiaoyu, Ling Yiyi. Research on Reverse Logistics Recycling Mode of Express Packaging under Low-carbon Economy—A Case Study of Shahe University City[J]. Modern Business & Industry, 2017(01): 40-42.
- [10] Xu Yajing. Theoretical Foundation and Economic Value of Low-carbon Economy[J]. Science & Technology Economic Market, 2017(3).