

Analysis on the Status of Energy Saving

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Abstract—In the increasingly serious environmental and energy issues today, the city expand a new idea in the development of models . But it still faces many common problems, such as industry, high pollution, high energy capacity control. Therefore, For continuing to promote its low-carbon economy,the introduction of various types of energy saving policies is an important means of sustainable urban development. The impact of urban energy conservation policy is a multi-dimensional, including environmental protection, industrial restructuring, international relations, economic growth, social stability, and other aspects of sustainable development.This paper analyzes the necessity of energy conservation, energy conservation achievements made abroad, the problems of energy saving, as well as how to really do the analysis of the importance of energy saving energy saving aspects. The analysis showed that the full implementation of energy conservation is very necessary, is the only way to sustainable development.

Keywords- *environmental; energy; economy; conservation; sustainable development.*

I. INTRODUCTION

The term refers to the protection of power system protection technology and protection systems composed by a variety of protection devices. Relay is a complete system, including power system fault analysis, and implementation of the principle of protection, protection configuration design, relay operation and maintenance and so on. Work is complete circuit protection relay core functions, including the power to obtain information on the voltage, current transformer secondary circuit, through a variety of protection devices to trip coil with a set of equipment, the power supply and the necessary communications equipment[1].

In the increasingly serious environmental and energy issues today, the city in the development of models to expand a new idea, but it still faces many common problems, such as industry, high pollution, high energy capacity control. Therefore, the introduction of various types of energy conservation policy and continue to promote its low-carbon economy is one of the important means of sustainable urban development.

Separate from one dimension to the evaluation of the energy conservation policy is clearly not sufficient, as a single from the environmental point of evaluation, no matter how strong policies on environmental protection, and if these policies restricting economic growth, it becomes a source of water may occur; simply focus on economic growth, not pay attention to energy conservation

and environmental protection, economic growth will be pinned; even if energy saving policies, economic growth will work, but if the technical transformation and industrial upgrading effect is small, you will gradually slow economic growth, environmental protection Relying lost; on the contrary, only pay attention to energy security, laying the foundation for sustainable development, ignoring the existing economic growth may stamina is enough, but the economy can support full play to its advantages, there is a problem. So how in the dimension of the evaluation of energy conservation policy is an issue to be studied[2]. This paper attempts to evaluate the establishment of a multi-dimensional space to evaluate the city's energy conservation policy system.

II. NECESSITY OF ENERGY CONSERVATION

It can effectively enhance the economic benefits of energy conservation through the study of energy conservation is an important aspect of the problem to solve business in its growth process needs attention, it can solve the energy supply and demand of enterprises, so as to effectively reduce production costs and transaction costs, while improving its economic efficiency greatly enhance its market competitiveness. Cost of doing business, the energy occupies an important proportion. Especially productive enterprises. If its high energy costs, the price will lose the advantage of their products, which would make its market competitiveness will be greatly reduced, the long run, the economic benefits of their businesses will be subject to restrictions. Companies can sustainable development will also be questioned. From our case study can be seen, our current business utilization of energy is generally low, at least 20 years behind the developed countries, about 35%[3]. But if 35% of the energy efficiency of the combined mining, domestic energy utilization efficiency will be lower, about half the developed countries. Such low energy efficiency reflects about 90 percent of China's energy waste in its mining, processing, conversion, transport, and end the use of terms. In addition, because each business in its early years, funding aspects of their energy use is limited by various factors, which will make China's energy use is restricted waste. Enterprises are important cellular market economy, the ability to achieve energy conservation will directly affect the economic growth of the entire socio-economic system transformation in its production process.

Implementation of energy conservation policy can provide the fundamental way to achieve sustainable development of energy conservation is essentially alleviate resource conflicts, taking a new road to industrialization, and ultimately the most basic prerequisite for sustainable

development and measures the road. From a production standpoint, the energy saving issue essentially contains two aspects of energy saving and emission reduction. On the one hand, enterprises must implement effective energy saving solutions, on the other hand, the production of its enterprise business emissions of waste gas, waste water purification, etc. have a good program. From the theoretical perspective, enterprises can improve their energy efficiency in its implementation of energy conservation programs, energy consumption can produce more goods and services, so that one can directly result from excessive carbon monoxide, sulfur dioxide emissions, waste etc. On the other hand, can greatly reduce energy consumption per unit of production cost savings, thereby improving per unit of product and market competitiveness of the service, and ultimately can achieve a sustainable development path[4].

Implementation of energy saving policies in order to ensure national energy security can make a positive contribution to energy saving concerns to some extent is to ensure national energy security and make a positive contribution. On the one hand the total amount of energy can be directly related to the power and potential of the region's social and economic development, on the other hand, energy is essential to ensure the protection of areas of social life.

III. DOMESTIC AND FOREIGN RESEARCH RESULTS OF ENERGY CONSERVATION

A. *Energy conservation outcomes study abroad*

Abroad for research energy saving and emission reduction can make the following points are summarized:

Worked out in accordance with national conditions and relevant laws and regulations, so as to manage the energy conservation law. From the world of energy extraction, conversion, transportation and utilization of all links have developed a set of practical programs, and these programs have in social practice to keep improving..

In accordance with the requirements of the development of a regional energy saving energy saving incentive policies and restrictive policies. Faced with the problem of energy conservation, countries have formulated a series of energy saving incentive policies and restrictive policies. Encourage the development of the use of wind, solar and other renewable resources, optimizing the region's energy consumption structure. Some of these energy saving measures to promote through taxes, subsidies and other forms[5].

National public budget support for energy conservation continue to strengthen. The level of public support for the budget in the traditional sense of the legal system mainly includes rulemaking, public education, infrastructure construction, information services, research and investment. With the deepening of energy conservation issues, the countries of the relevant aspects of the energy put into the public budget began to gradually strengthen.

Extensive international trade in energy conservation activities. Since the signing of the "Kyoto Protocol" into effect, the developed countries in terms of energy savings began to actively seek international cooperation by supporting energy conservation information service, at home and abroad to carry out regular energy saving

aspects of publicity, education and training . Thereby increasing domestic and civic awareness for energy conservation. After the developed countries to fully exploit the potential of the domestic energy conservation through trade cooperation with countries in the region to achieve regional economic cooperation related to carbon dioxide and other gases, and ultimately achieve industrial energy saving projects successfully achieve the objectives.

B. *Domestic energy conservation research*

"Energy conservation" is to promote China's industrial restructuring, optimize the structure of China's economy, ease the contradiction between economic development and environmental protection, and to create a resource-saving and environment-friendly and effective way to society. For the study of energy conservation is mainly focused on the analysis of the main energy-intensive industries, energy conservation policy formulation and use of renewable energy sources. Our research for energy conservation is reflected in the following aspects:

Research related policies on energy conservation. In a study of our country's energy conservation policy scholars more results of the comparative analysis of some of the urgent need to improve energy conservation policies and regulations. Jin Ming Hung and other scholars from China's energy use standards and related system status and some problems of view, by contrast, summed up the country in terms of energy saving system construction and foreign large gap still exists. Liu Hong of the terms in the relevant foreign energy saving system introduces some flaws in the analysis of China's energy conservation policy that energy conservation does not simply rely on market self-regulation but needs the government macro-control level.

Depth study of energy development and use of renewable. Because renewable energy has little pollution, can make use of the advantages of space and attention of the world. Scholar Ren Dongming, Zhang Zhimin, etc. on the exploitation of domestic renewable energy sources are described in their academic work, the analysis of the current problems still exist[6]. Introduced and analyzed by the successful experience of foreign renewable energy, obtained in the domestic energy market to come to expand the domestic market, the market share of renewable energy to pass legislation to establish a form of long-term mechanism. Wang is also a focus of their research in the world and the development and use of domestic renewable energy, in his study more emphasis on solar, hydro, wind, biomass, geothermal and other renewable energy development and utilization of that country in the next 15 development and utilization of renewable energy sources during the year can be achieved unprecedented success.

Research on the index system of energy saving. Energy conservation indicators of socio-economic development of a binding target, aimed at reducing the use of energy-saving targets, energy consumption of resources, it may have some positive reduction role. Emission reduction targets appear directly requested by pollution, waste emissions for. At present, the evaluation index system for less energy, lack of support for a system. Zhou noted scholar in his study of international energy for sustainable development has made considerable progress, the country in terms of energy saving and should make the appropriate

results. Energy saving and emission reduction index system from an international perspective, currently more representative of the international energy industry, primarily in the United Kingdom the index system, the energy system of sustainable development indicators International Atomic Energy Agency, World Energy Council Energy Efficiency, EU energy efficiency targets system and so on. Domestic for research in this area is basically the study of international relatively mature energy reduction targets based system to make these[7].

IV. THE BASIC PROBLEM OF THE EXISTENCE OF ENERGY CONSERVATION

A. *Less evaluation system for the energy sector*

At present, energy saving and emission reduction index system more representative of a major international energy industry index system in the United Kingdom, the International Atomic Energy Agency Index System for Sustainable Development, the World Energy Council, energy efficiency, the EU's energy efficiency index system. Domestic for research in this area is essentially based on the study of international emission reduction targets more mature system to make these, less internal evaluation system for the energy sector, the lack of support for a system. We use this method can largely improve the power efficiency, improve energy utilization results.

B. *Energy conservation policies and regulations related to the level of lacking*

First, the domestic laws and regulations relating to the lack of an energy conservation standards. Domestic aspects of energy conservation has enacted a number of laws and regulations, but as a whole, these laws are more single, mutual convergence is also a certain lack of scientific and does not form a relatively close contact between the various laws, complementary coordination relationship. This easily makes the domestic rulemaking in terms of energy saving is difficult to form a relatively complete standard system. Secondly, domestic settings related to energy conservation management agency still needs to be improved. In China, the government leadership structure reflects a more linear local and central leadership. From the central to local levels of government energy conservation areas have the relevant provisions of the document, on this basis, have also set some centralized management leadership. But these governing bodies a certain lack of integrity and overall planning of the time and in the implementation of energy conservation plan so that different parts of the same level at all levels as well as advice on energy saving is not uniform, therefore, to return the country to achieve energy conservation work it is necessary to implement a management innovation agency regarding energy saving settings. Again, the domestic public budget support for energy saving needs to be strengthened. Lack of domestic public budget will make some domestic funds into a serious shortage of energy conservation, and the adequacy of the funds is directly related to efforts to implement energy saving measures in the country. Judging from the current domestic public budget for special funds arrangements for energy conservation point of view, and did not form a complete set of independent perfect incentive policies related to

energy conservation and fiscal and tax policies are relatively simple, the lack of flexibility.

V. IMPROVE ENERGY CONSERVATION

A. *Speed up industrial restructuring*

We should vigorously develop the tertiary industry, with specialization and improve the efficiency of society, focusing on the positive development of producer services; to meet people's needs and convenience of people's life as the center, to enhance the development of life of service; to develop the high-tech industry, adhere to the new road to industrialization, promote the upgrading of traditional industries, increase the proportion of high-tech industries in the industry. We should implement a "cage for a bird" strategy to speed up the elimination of backward production capacity, process, technology and equipment; errant phase-out of the enterprise, should be ordered to stop production or be closed[8].

To adjust and optimize the industrial structure, promote industrial restructuring and upgrading. National Development and Reform Commission proposed to take advantage of Forced mechanism of the international financial crisis, formed to resolve the overcapacity contradiction as industrial restructuring focus, by expanding domestic demand, foreign transfer, mergers and acquisitions, eliminate backward to resolve the overcapacity and adjust productivity layout and transformation of traditional industries combined, and strive to achieve tangible results as soon as possible.

B. *Vigorously develop the circular economy*

In accordance with the concept of recycling economy, speed up the park ecological transformation, promote ecological agriculture park construction, building cross-industry ecosystem, promote inter-industry waste recycling. To promote cleaner production and reduce waste generation at source, achieved by the end of the treatment to pollution prevention and control the whole production process change, promote enterprise energy consumption, industrial solid waste, packaging waste reduction and resource utilization, control and reduce emissions, improve resource utilization efficiency. The focus is on the development of circular economy, waste generated upstream industry chain, to become raw, burning material downstream products, so that the use of classification, reduce waste of resources, reduce waste emissions, and improve the overall economic value of additional industries[9].

C. *Technology Innovation*

To organize foster technological innovation-oriented enterprises, enhance regional capacity for independent innovation. Strengthen cooperation with scientific research institutions, to build R & D service platform, focus their efforts on building technical standard business model. We should focus on resource-efficient recycling, and actively carry out alternative technologies, reduction techniques, re-use key technology research techniques, resources and technology, systematic technology, breakthroughs in the development of recycling economy technological bottlenecks.

Production services industrial design and creative industries contribute to economic restructuring and

industrial upgrading, energy conservation from the source. Creative design, core technology, sales channels, brand pyramid top industry profits, lack of R & D has led China strategy is missing. Product design and product development has been China's weaknesses and enhance the soft power of China's comprehensive national strength necessary to establish R & D strategy. Chinese design and creative industries, industrial design is one of the most promising areas, while the most urgent need is the development of industrial design. Industrial design change of China's economy, "the world's manufacturing plant" role and achieve economic restructuring and upgrading. Industrial design company to create value by virtue of intelligence, product design and development in the field of industrial chain, by increasing the technological content and value-added products designed to improve the value of the products, thus improving product margins. But not high-tech products, companies only by increasing the content of industrial design products to enhance value-added products. The introduction of industrial design, industrial design to extend the industrial chain, to build a complete life cycle of the product chain, promote industrial upgrading the entire industry cluster[10].

D. Strengthen organizational leadership

To set up the development of recycling economy construction of a conservation-oriented social work agencies, study and formulate the development of recycling economy and building a conservation-oriented society of various policy measures. To set up the development of recycling economy and building a conservation-oriented society of special funds to support the development of circular economy projects, energy-saving activities, emissions reduction technology innovation subsidies. Should yuan GDP, total chemical oxygen demand and sulfur dioxide emissions into the national economic and social development of the annual plan; to establish a sound mechanism for energy conservation and environmental protection, the saving and emission reduction targets into the government target responsibility and cadres evaluation system.

VI. CONCLUSION

China's rapid economic growth, the construction has made great achievements, but also paid a costly resource and environmental destruction, the contradiction between the two has become increasingly acute, people reacted strongly to environmental pollution problems. This situation and the economic structure is irrational, is

directly related to growth. Do not speed up the adjustment of economic structure, change the mode of growth, resources can not support, environment fit, can not afford the social and economic development difficult. Only by adhering to conservation development, clean development, security and development in order to achieve fast economic growth. At the same time, greenhouse gas emissions cause global warming, much of the international community attention. Further strengthen energy conservation work, but also to address global climate change is an urgent need.

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