

Analysis of Financing Problems of New Energy Industry in Liaoning Province

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Abstract: As a renewable resource, the development of new energy has an important role in protecting the environment and promoting economic development. The development of new energy industry in Liaoning Province has certain geographical and resource advantages. However, as an emerging industry, due to its large investment and high debt, its competitiveness is weak, which has caused many obstacles in industrial financing, which have restricted the smooth development of the new energy industry in Liaoning Province. Therefore, we need to analyze the financial support of the new energy industry in Liaoning Province, and apply the right medicine in order to make the new energy industry in Liaoning Province continue to grow and develop and become a new economic development engine in Liaoning Province in market competition.

1. Basic Situation of New Energy Industry Development in Liaoning Province

Liaoning Province, as an important production base of China's traditional energy, has made great contributions to China's economic construction through decades of resource extraction and export. However, the non-renewable nature of traditional energy sources has made this development model unsustainable and restricted the economic growth of Liaoning Province. Therefore, through the continuous development of new energy as a substitute for traditional energy, Liaoning Province has been transformed from a large province to a strong province in resource development and utilization. The climate of Liaoning Province has obvious monsoon climate characteristics. The annual average wind speed in Liaoning Province is 3-4 m / s in most areas. The wind energy resources are abundant, and the technology developable capacity is about 230 million kilowatts, ranking fourth in the country. In recent years, the installed capacity of wind power has maintained rapid growth, currently reaching 5.68 million kilowatts, accounting for 20% of the province's total installed power generation capacity. The topographical distribution of Liaoning Province belongs to the five-mountain, one-water, one-grass three-field field, with a large terrain drop and abundant water energy. At the same time, as China's main food production base, forest coverage is also high, and agricultural and forestry wastes are high. Raw materials for biomass power generation are also abundant, and these resources have provided favorable guarantees for new energy development in Heilongjiang Province. 《Liaoning New Energy and renewable energy industry development plan (2010-2020)》"proposed that by 2020, wind power installed capacity will reach 10,000 MW,

hydropower installed capacity will reach 2 650 MW, and biomass power installed capacity will reach 1 200 MW. All these have enabled Liaoning Province to maintain a competitive advantage in its energy strategy, promote industrial upgrading, and ensure strong economic development. As of the end of 2018, the total installed capacity of wind power and photovoltaic power generation reached 8.065 million kilowatts, and the wind power generation capacity was 12.463 billion kilowatt-hours, a year-on-year increase of 15.4%; the total photovoltaic power generation capacity was 2.027 billion kilowatt-hours, a year-on-year increase of 254.1%. At present, the energy structure of Liaoning Province is changing from a single petrochemical energy source to a diversified one. Energy development is also changing from traditional energy growth to cleaner new energy growth. The process of clean and low-carbonization is accelerating.

However, as a capital-intensive industry, the development and construction of new energy requires huge funds. During the introduction period of any industry, high-speed development, high investment, and high risk co-exist, and so does the new energy industry. The huge financing capacity of financial markets plays an important role in the development of the energy industry. How to use the market mechanism to obtain effective financial support for new energy development is the key to sustainable development of new energy in Liaoning Province.

2. Analysis of Financing Problems in the Development of New Energy Industry in Liaoning Province

2.1. New Energy Companies Have A Single Financing Channel and High Financing Risks

At present, financial institutions' support for the development of new energy industries in Liaoning Province is still based on traditional loans, and other new financing methods are lacking, such as financial leasing, private equity financing or venture capital, and long-term bond investment. This has led to the debt ratio of new energy companies is relatively high. The general characteristics of new energy companies are large capital investment, long construction cycles, and slow cost recovery[1]. These mismatches in revenue and cost will inevitably lead to shortages of new energy companies' liquidity and excessive financial risks. Taking wind power projects as an example, the investment in wind power is generally RMB 7,000-8,000 per kilowatt. A wind power project of 50,000 kW is estimated to require more than 350 million yuan. General wind power is often erected on high mountains, and simple construction roads need to be built. Later assembly, commissioning, and proper grinding also take a long time and many technical personnel. During this period, cash flow is only a one-way flow. And wind power projects generally invest more than 80% of their debt financing, and debt repayment and interest payments are too concentrated. At the same time, due to the large number of existing loans for new energy industry projects, and the loan term is generally more than 15 years, the risk is relatively large. This has led to a decline in the enthusiasm of financial institutions for financing, especially if the external operating environment changes, it is very easy to generate systemic risks within the financial institution system. Therefore, the single financing method has a problem of excessive risks for both new energy companies and financial institutions.

2.2. Small and Medium-Sized New Energy Companies Lack Financing Advantages and Have Limited Financing Capabilities

At present, new energy companies in China supported by financial institutions in Liaoning Province have certain advantages in financing such as Datang and Huayu. Due to their high credit ratings, they can easily obtain guarantees or mortgages. The financing of these state-owned and state-owned enterprises crowded up a large amount of credit resources, which led to financial institutions' low

enthusiasm for financing small and medium-sized new energy companies. By the end of 2018, Liaoning Province's wind power industry or related enterprises reached 161, most of which were small private enterprises. Small businesses are often at a disadvantage in financing and lack the necessary financial support[2]. At present, the state-controlled commercial bank's policy for financing wind power enterprises is to support 10 million kilowatt-class wind power base projects. Small and medium-sized new energy companies are relatively weak in obtaining bank loans. Financing received by financial institutions only accounts for small and medium-sized new energy companies' financing needs the smaller part.

2.3. Financing Costs for New Energy Companies are Generally High

The financing cost of the new energy industry is mainly interest on loans, resulting in high financial costs after the completion of the project, and higher interest on loans that need amortization. New energy industry project loans currently implement fixed asset investment loan interest rates, which is also an important factor leading to high industrial financing costs. For example, GCL New Energy, which has an investment in Liaoning Province, is a well-known photovoltaic power generation company in China. At the end of 2018, GCL New Energy ranked second in the world. Its average borrowing rate was higher than 6%. In terms of financing costs, GCL New Energy No advantage at all. As photovoltaic power plants are capital-intensive industries, more than 50% of the construction of a photovoltaic power plant is a liability. GCL New Energy's financing costs in 2018 exceeded the RMB 2 billion mark, a surge of 59% year-on-year, which ultimately made GCL New Energy financially difficult and had to sell fixed assets to ease the tight cash flow. Therefore, higher financing costs and high financing rates have become a heavy burden for photovoltaic companies and even the new energy industry[3].

3. Countermeasures for Financial Support for New Energy Industry in Liaoning Province

3.1. Promote Financial Innovation Related to New Energy

As an intermediary institution for resource allocation, finance should rely on market mechanisms and be guided by the characteristics of the new energy industry, enhance the content and innovation of financial services, and provide sustainable financial support for the development of new energy industries. In financing, we should actively promote financing models applicable to different new energy industries, such as financial leasing, long-term debt, private equity, etc.; expand financing channels for new energy enterprises, and target equipment manufacturers, manufacturers and operations in the new energy industry. The characteristics of the company's own liquidity requirements launch various types of financial service methods such as online electronic bill trading, accounts receivable management, and bill discounting. Through the integration of financial services and new energy industries, the benign development of new energy industries and financial support are achieved. Interaction will ultimately achieve a win-win situation for both and maximize social benefits.

3.2. Financial Institutions Should Increase Support for the New Energy Industry

As an important carrier for financing support in the new energy industry, commercial banks should combine their business objectives with national new energy development strategic planning and industrial policies, be market-oriented, and develop prospects based on the actual characteristics of different regions and industrial competitive advantages. Good new energy industry projects will be given key support, especially in a special loan and agricultural loan line to support a number of

wind power and rural small and medium hydropower projects, and actively promote new energy industries such as biomass power generation, and steadily expand credit in the new energy sector Support range[4]. Only in this way can we combine our business goals with industrial development and achieve a mutually beneficial development model. Other types of financial institutions should also increase support for the new energy industry based on their business characteristics, provide comprehensive energy services for new energy companies through joint efforts, and make new energy an important mission of green finance to work hard to develop markets and vigorously Support the healthy development of China's new energy industry

3.3. Leveraging the Policy Advantages of Policy Banks

New energy has always been an industry strongly advocated by our government because of its clean and renewable nature. However, compared with the mature traditional petrochemical energy, its competitiveness in terms of cost and profitability is weak. It is difficult to make the development and expansion of resources based on market competition. This requires the participation of policy banks. Because policy banks have the advantages and characteristics of low interest rates, high loan quotas, and long-term loan periods, which are generally in the medium and long term, in line with the characteristics of the development of new energy industries, policy banks, especially China Development Bank, should actively intervene in the new energy industry. The development of the province's new energy industry played a supporting role. Policy banks can expand the financing scope of the new energy industry within the policy framework, invest more support funds in the new energy industry, and adopt policies such as low-interest loans, interest-free loans, priority loans, loan discounts, and extended credit cycles. We will increase policy credit support for the new energy industry to make up for the lack of credit in the construction of new energy infrastructure.

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