

Research on the Development Strategy of New Energy Economy Based on the Background of the Belt and Road

Xiaoyan Gao

Liaoning Institute of Science and Technology, Liaoning, China

Abstract: Nowadays, the Belt and Road has become an important platform for China's opening up and an important mechanism for China's economic development. Under the environment of vigorously developing new energy sources such as wind power and photovoltaic in the world, China can give full play to its advantages in the field of new energy, rely on the Belt and Road, actively cooperate with countries along the route in new energy cooperation, and promote the development of China's new energy economy. This paper mainly explores the strategy of new energy economic development under the background of the Belt and Road.

Keywords: The Belt and Road; New Energy; Economic Development; Strategy

1. Introduction

The global energy demand is increasing year by year, but the global climate change is faster and the environmental problems are more and more serious, which makes many countries and regions begin to pay attention to the development of new energy economy. The good development of new energy can improve energy security to a certain extent, promote regional economic growth, and is conducive to energy conservation and carbon reduction. To this end, China can take effective strategies to develop a new energy economy in the context of the Belt and Road.

2. The Significance of the Belt and Road to the Development of New Energy Economy

Countries along the Belt and Road have a variety of new energy sources such as oil, natural gas, hydrogen, hydropower, wind energy and solar energy. Cooperation and exchanges between countries along the Belt and Road are conducive to complementing each other's energy resources and meeting the energy demand of each country, which is

conducive to reducing the country's dependence on a single energy and improving the security of energy supply. Through effective cooperation, countries along the line jointly build and carry out new energy projects and jointly explore new energy technologies, which is conducive to the upgrading of the new energy industry [1]. Under the trend of sustainable development, the country should pay attention to the development of green low-carbon economy, accelerate the development of clean energy, and gradually reduce the use of traditional energy. For example, the country can scientifically use renewable energy in power production, reduce the use of fossil fuels, and control carbon emissions, so as to better deal with the problem of climate change. The energy transmission and storage of the Belt and Road need the support of infrastructure, which will promote the country to continuously improve the energy infrastructure, so as to speed up the efficiency of energy transmission and ensure the good stability of energy supply. In addition, countries along the Belt and Road actively promote energy trade and investment, which can effectively optimize the allocation of energy resources and bring more economic benefits. The sustainable development of energy trade can also enhance the core competitiveness of energy, which is conducive to opening up the energy market, reducing energy prices and benefiting all industries and people [2].

3. New Energy Economy Development Strategy Under the Background of the Belt and Road Initiative

3.1 Enhance Energy Interconnection and Cooperation

Under the background of the Belt and Road initiative, countries along the route can actively promote the construction of energy infrastructure such as natural gas pipelines and

transmission lines, and promote the improvement of energy flow efficiency. Countries can also further increase capital investment in new energy fields such as hydropower, solar energy, wind power, hydrogen energy, and provide support for the construction of new energy fields [3]. The country has carried out demonstration projects such as hydropower stations, solar power stations, wind farms and green hydrogen, aiming to expand the production capacity of clean energy and realize the sustainable supply of energy. The state can further strengthen the construction of hydrogen transmission pipelines, constantly upgrade and build new power grids, maximize the transmission capacity of clean energy and maximize the utilization of clean energy. The state can continuously improve the power grid transmission lines and carry out cross-border networking projects to extend the transmission distance of new energy. At the same time, the state can also take effective strategies to transform the smart grid and fully dispatch new energy, so as to better manage the use of new energy. Countries can actively develop new technologies such as water pump energy storage and battery energy storage, and develop energy storage equipment with advantages, so that new energy can be well stored and the energy system can remain stable. Countries along the Belt and Road can increase the construction of hydrogen fuel stations, charging piles and other facilities to facilitate transportation vehicles such as hydrogen fuel cell vehicles and electric vehicles, which can promote the development of new energy transportation to a certain extent. Countries along the route can also exchange for energy cooperation and jointly carry out energy projects such as cross-border oil and gas pipelines, hydrogen transmission pipelines and transmission lines, so that countries' energy can be interconnected and share energy resources, so as to promote the energy economic development of countries [4]. When building infrastructure, the country needs to highlight the concept of green building and practice the development road of sustainable urbanization. The state vigorously promotes renewable materials, intelligent control systems, energy-saving equipment, etc., so as to reduce the energy consumption of buildings and cities as much as possible. The state will

create "waste free" cities and green demonstration cities to develop low-carbon cities. In addition, the country can also build more hydropower stations and do a good job in the operation of hydropower stations, so that water resources can be fully utilized and water resources and clean energy can be sustainable development.

3.2 Strengthen New Energy Technology Cooperation and Innovation

Countries along the Belt and Road can formulate long-term development plans in combination with the realities of new energy, such as formulating policy frameworks, designing development goals, and arranging important time points. In the planning process, we need to pay attention to measuring the technical strength and resource advantages of each country, clarify the important issues of developing clean energy, and clarify the specific development direction [5]. Each country can create a favorable investment environment and provide necessary policy support to attract investors and enterprises to support the construction of new energy projects. Encourage multinational companies to create new energy development industrial parks or new energy bases in areas along the line, continuously cultivate new energy talents and enhance technical cooperation among countries. At the same time, countries along the line can support enterprises to cooperate with scientific research institutions and universities to jointly develop and innovate new energy technologies. Through the sharing of resources such as enterprises, scientific research institutions and universities, technicians can work together to solve problems, so that scientific research achievements can be successfully transformed and new technologies can be applied in projects. The state can create a technology exchange platform, create a multidisciplinary R&D team, enhance technical cooperation, and strive to make breakthroughs in new energy technologies. In addition, countries can also formulate preferential policies for new energy innovation to encourage enterprises to innovate new energy technology. For example, the government can formulate tax relief, intellectual property protection, R&D subsidies and other support policies to reduce the R&D costs of enterprises. The country continues to

strengthen the R&D and innovation of new energy technologies, which can effectively promote the progress of new energy technologies, enhance the core competitiveness of the new energy industry, and improve energy security, which is conducive to the sustainable development of new energy [6].

3.3 Increase Investment and Financing Cooperation Among Countries

The development of new energy economy cannot be separated from the help of funds, but the traditional financing mode is difficult to provide sufficient financial support for the development of new energy, so it is necessary to innovate financial instruments. The state can effectively enrich financing channels, arouse investors' interest and promote the development of new energy economy. There are the following types of financial instruments: first, issue green bonds, which can be used for projects related to environmental protection and sustainable development [7]. After the investor purchases the green bonds, the funds can be used for new energy green projects. Therefore, green bonds can collect more funds for environmental protection projects, which is conducive to the financing of new energy economy. Second, establish a green fund, which is mainly used to invest in new energy and environmental protection projects and attract investors to inject funds into the development of new energy enterprises. Third, the establishment of renewable energy investment trust fund is mainly through the formation of renewable energy projects into a trust fund and the sale of shares, so as to attract the attention of investors and obtain funds. Fourth, the creation of financial instruments for energy storage is very important nowadays. Financial instruments help to win financing and improve the reliability of renewable energy. Fifth, establish preferential tax policies to encourage investors to invest in new energy projects, reduce the tax expenditure of projects, and enhance the investment attraction of new energy projects. Financial instruments can effectively promote the innovation of new energy technology, and also can effectively promote the development of the market, so as to drive the economic growth of new energy.

3.4 Carry Out Talent Training

Countries along the Belt and Road can set up

cross-border cooperation talent training programs, and cooperate with new energy related enterprises, scientific research institutions, colleges and universities to create more training and exchange opportunities for students. Countries can exchange students, and universities can also jointly carry out training programs to jointly cultivate professionals in new energy. It is suggested that research institutions in various countries cooperate to promote the development of new energy technology research and continuously innovate technology. The joint implementation of projects by research institutions can enhance the technical exchange among countries, which is conducive to the progress of new energy technology. At the same time, it can build an online interactive platform where new energy professionals can share their project experience and the latest technological achievements, which can effectively promote the international flow of talents. Regularly organize various countries to carry out new energy seminars and forums, where scholars from various countries can exchange experience and reach project cooperation intentions, which is conducive to the promotion of new technologies. Colleges and universities can create scholarship and funding programs to encourage students to actively invest in new energy work. At the same time, it can also create an industry tutor system, invite experienced new energy technology experts to carry out teaching tools, provide vocational training for students, and provide continuing education courses for new energy practitioners, so as to improve the quality of talent training, enhance the comprehensive quality of the new energy industry, improve the industry level, and promote the economic development of the industry.

4. Conclusion

From the above, it can be seen that the Belt and Road initiative is of great significance to the development of new energy economy. It can expand the new energy market and provide cooperation opportunities for the new energy industry. The countries along the Belt and Road can enhance the interconnection and cooperation of new energy resources through the platform of the Belt and Road initiative. At the same time, they can also promote the development of new energy technology and

promote the development of new energy economy through strategies such as new energy technology cooperation and innovation, increasing investment and financing between countries, and cultivating new energy talents.

References

- [1] Li Yicheng. Research on the development strategy of new energy economy under the background of the Belt and Road [J]. Sales and management, 2024, 23(2):12-14.
- [2] Zhang Na. Research on financial support strategy of new energy industry in Gansu Province based on the Belt and Road [J]. Modern economic information, 2019, 45(27):496.
- [3] Du Li, Ma Yaoyao. Research on green development performance and driving factors in countries along the Belt and Road [J]. Journal of Sichuan University (Philosophy and Social Sciences Edition), 2022, 56(1):173-183.
- [4] Meng Xiaomin. Analysis of the development status of China's new energy economy in the new era [J]. Modern economic information, 2021, 04(23):172-173.
- [5] Sun Chengfang. Analysis of new energy economic development strategy of electric power enterprises based on low carbon economy [J]. Electric power engineering technology innovation, 2024, 26(1):99-101.
- [6] Yun Hairong. Analysis of influencing factors and trend of new energy economy development in the new era [J]. Modern marketing, 2022, 44(26):139-141.
- [7] Chen Zhiyan. Analysis of energy conservation and emission reduction to promote the development of new energy economy [J]. Wen Yuan (high school edition), 2021, 56(10):2183-2184.