Huaxia Bank Contributes to the Development of Energy Storage Industry

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NO.1 Development of Green Finance at Huaxia Bank
Green finance has become a development strategy of HXB

Well-established policy mechanisms and product systems

Green loans grow rapidly, with a green loan balance of nearly RMB 240 billion
HXB's Green Finance Business

World Bank China Energy Efficiency On-Lending Project

Beijing-Tianjin-Hebei Air Pollution Prevention and Control Financing Innovation Project

China Renewable Energy and Battery Energy Storage Promotion Project

Distinctive feature in international cooperation
NO.2
China Renewable Energy and Battery Storage Promotion Project
Part 1

Project Background

Energy Issues and Challenges in China

Achieve the goals of energy supply-side reform

Increase the share of clean energy in domestic energy consumption structure
The project was approved by the WB's Executive Board on June 12, completing the usual one-and-a-half year application process in just four and a half months.
By investing in the applications of battery energy storage in the power system and the innovative uses of renewable energy (RE), HXB aimed to promote the large-scale RE application, increase the RE use and reduce global GHG emissions, thereby contributing to the national energy revolution strategy.

**Increased grid-connected RE generation capacity**

**Incremental RE use from innovative RE applications**

**Co₂ emission reductions**

**Intermediate project objectives**

Installed capacity of battery storage systems, installed capacity of distributed RE, financing leverage, sub-project non-performing ratio
Part 2

Project Basics - Project Size and Mode of Operation

China Renewable Energy and Battery Storage Promotion Project

World Bank on-lending funds: €267.3 million

HXB matching funds: €401 million

Support for nationwide projects in the field of applications of energy storage (excluding pumped storage) in the power system and RE innovative uses
1. Energy storage projects
   a. Energy storage projects on the RE power side
   b. Energy storage projects on the grid side
   c. Energy storage projects on the consumer side
   d. Energy storage lithium battery recycling projects
   e. New energy storage facilities for existing power plants

2. Distributed new energy + energy storage projects
   a. Microgrid projects
   b. Multi-energy complementary projects
   c. PV + energy storage + charging projects
   d. Other projects aimed at developing and utilizing distributed new energy, supporting energy storage resources and providing integrated services for specific areas

3. Biomass gasification projects
By the end of October 2022, HXB had supported a total of 6 sub-projects that met the WB's loan criteria, covering such areas as consumer-side energy storage, grid-side energy storage, distributed PV + energy storage, and biomass for heating. A total of €13.38 million was invested, including RMB 42.83 million from HXB.
NO.3 Relevant Policies for China's Energy Storage Industry at the Present Stage
The Guiding Opinions on Accelerating the Development of New Energy Storage

By 2025, the new energy storage will be transitioned from the initial stage of commercialization to scale development, with an installed capacity of over 30 million kW;

By 2030, new energy storage will be fully marketized. The scale of the installed capacity will meet the needs of the new power system and become one of the key supports for carbon peaking and carbon neutrality in the energy sector.

The Implementation Plan for the Development of New Energy Storage during the 14th Five-Year Plan Period,

The Plan stipulates the key tasks for new energy storage in the 14th FYP period in terms of technological innovation, pilot demonstration, scale development, institutional mechanism, policy guarantee and international cooperation, aimed at accelerating the large-scale, industrial and market-oriented development of new energy storage.

The 14th Five-Year Plan for Renewable Energy Development

The Plan for the first time puts forward "RE non-electricity utilization target", that is, by 2025, geothermal energy heating, biomass heating, biomass fuel, solar thermal utilization and other non-electricity utilization scale reaches 60 million tce or above, which will expedite RE non-electricity utilization process in China.
NO.4 Takeaways and Challenges in Implementing Energy Storage Projects
Part 1  Takeaways

01  Gaining in-depth knowledge of the energy storage industry

02  Establishing a sound framework for E&S risk management

03  Green finance becomes a bank-wide strategic priority
At present, the energy storage market is in the incubation period and energy storage companies are in the exploration stage.

- Unstable business models
- Market rules not yet clear
- Lack of a sound standard system
- Further technology breakthroughs needed
- Rapid rise in euro funding prices
Part 2

Internal Challenges

- Lack of understanding of the complexity of energy storage systems
- Lack of sufficient project implementation experience and project O&M experience
- Lack of expertise
- Lack of comprehensive and effective detection capabilities and tools
Part 3

Next Steps

- Reinforcing Project Pipeline
- Improving the Approval Mechanism
- Strengthening Capacity Building
- Offering Favored Policies
- Developing Sound Risk Prevention Measures
NO.5
Perceptions and Experiences of International Cooperation
Perceptions and Experiences of International Cooperation

For implementing agencies

1. Entering new sectors and areas
2. Introducing new concepts and models
3. Promoting institutional & mechanism building
4. Accelerating product innovation
5. Paying increased attention to E&S risks
6. Leveraging the seed and leverage effects
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Green Huaxia Wonderful World

THANKS