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Driving China's Fossil Fuel SOE Reform in Support of a Low-Carbon Transition

—Roles of Green Finance and Transition Finance

EXECUTIVE SUMMARY

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In recent years, both carbon emissions and global temperature have shown a clear upward trend. In 2020, the global annual average temperature is about 1.2°C higher than the pre-industrial period. To cope with the negative impact of climate change, the 2015 Paris Agreement established a global climate change governance system with “Nationally Determined Contributions” as the main vehicle. In this context, in September 2020, China proposed at the United Nations General Assembly that China's carbon dioxide emissions should strive to peak before 2030, and achieve neutrality by 2060.

First, the low-carbon transition of China's fossil fuel energy state-owned enterprises (SOEs) is the key to achieving the Paris Agreement and China's commitments. Globally, fossil fuel energy investment from state-owned enterprises/ governments accounts for about half. SOEs are also the main source of China's fossil fuel energy supply. As one of the main sources of global and Chinese carbon emissions, achieving the "dual carbon" goal must, first, reduce carbon emissions related to fossil fuel energy SOEs. China is a major producer and consumer of fossil fuel energy. The low-carbon transition of China's fossil fuel energy SOEs can become references for other countries. The low-carbon transition of fossil fuel energy SOEs requires the financial system to provide necessary investment and financial support. The role of China's fossil fuel energy SOEs in the low-carbon transition and related product and service innovation are of great significance to China and other countries in responding to climate change and achieving carbon neutrality goals.

On the basis of systematically combing and analyzing the reform process, characteristics and obstacles of China's fossil fuel energy SOEs, the report takes three typical large-scale fossil fuel energy SOEs in China—National Energy Group, Sinopec Group and China Coal Group as typical cases. Based on discussions of their business layout, low-carbon practices, as well as the difficulties and challenges faced in the process of low-carbon transition, it is found that China's fossil fuel energy SOEs mainly promotes the low-carbon transition by eliminating and shutting down outdated ways of production, promoting the clean use of fossil fuel energy, and developing clean energy. However, the share of fossil energy is still high, with that of the low-carbon energy being low. Furthermore, from the perspective of cost and security, coal power is comparatively still the more economical and convenient peak-shaving power source in China at this stage—there

is still a considerable room of improvement. Some fossil fuel energy SOEs have not yet formulated a clear low-carbon transition strategy, and seldom use green financial tools to support the low-carbon transition. Therefore, it is necessary to strengthen the policy, investment and technology support for the low-carbon transition of fossil fuel energy SOEs.

Currently, the modality and means to promote the low-carbon transition of China's fossil fuel energy SOEs mainly include: 1) government-led policy guidance and the use of tools, including administrative, legal, and economic means; 2) green finance models and product services, including green credit, green bonds, green funds, green mergers and acquisitions, green trusts, carbon trading, and transition finance products and services. Through case analysis of their application and role in supporting the low-carbon transition of China's fossil fuel energy SOEs, the report found that current green financial tools contribute limited support for low-carbon transition of fossil fuel energy SOEs. The next step is to focus on the development of carbon finance and transition finance on the basis of improving existing green financial tools.

While analyzing the low-carbon transition of China's fossil fuel energy SOEs, the report draws on the successful, partially successful, and unsuccessful cases of large-scale energy enterprises in the international low-carbon transition, including ENGIE , Ørsted , BHP Billiton , ENI , Royal Dutch Shell , BP , ExxonMobil , and ONGC. Through analyzing the business models of various international energy giants, the external risks of green financial policies and measures, and the internal use of green financial tools, this report found that the overall low-carbon transition of the global fossil fuel energy industry is not aligned with the Paris Agreement. Most successful cases are the European companies, the positive results are relevant to European environmental information disclosure laws, mandatory pollution liability policies, EU carbon trading mechanisms, renewable energy subsidies, and stakeholder groups and NGOs' pressure on oil and gas giants. At the same time, it is found that the application of green financial policies and tools will encourage companies to formulate higher and more specific and effective carbon neutrality commitments. Although there is still a gap between practical performance and their commitments, it still provides useful experience for the low-carbon transition of China's fossil fuel energy SOEs.

Lastly, this report rests in the context of China's carbon neutrality goal, acts in response to the problems and challenges in the low-carbon transition of China's fossil fuel energy SOEs, and aims at addressing shortcomings of existing means to support the low-carbon transition of fossil

fuel energy SOEs, learns from the experiences of domestic and foreign fossil energy companies using green finance policies and tools to support low-carbon transitions. This report provides advise recommendations from the perspectives of government policies, regulatory agency systems, financial institution products and services, corporate strategy and environmental information disclosure, and risk management of various entities. Recommendations include putting the development emphasis on carbon finance and transition finance. This includes developing the Chinese standard for transition finance, promoting transition finance top-level design, strengthening the risk identification and management of fossil fuel SOEs' low-carbon transition, advancing and promoting innovation of existing transformational finance products and services, etc.