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China on a New Journey of Modernisation

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Panel Session 6 - Venue IV

Boosting the New Peak Goals and Carbon Neutral Vision (2)

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Speakers
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Synopsis
Under the United Nations Framework Convention on Climate Change, climate governance has entered the global spotlight, with initiatives including the Kyoto Protocol and Paris Agreement, and December 2020's Climate Ambition Summit. Peak carbon and carbon neutrality are essential to China's sustainable development. To enable China's comprehensive green transformation, cooperation between government and non-governmental organizations (NGOs), and multi-national collaboration, must be promoted.

Peak carbon and carbon neutrality are systematic projects in which the power generation industry has a vital, historic mission. According to the International Energy Agency, China's carbon emissions in 2019 reached 11.3 billion tons, of which the electricity sector accounted for 37%. In recent years, China's transformation to low-carbon power has achieved impressive results. Its new energy industry (including onshore and offshore wind power and photovoltaics) has formed an integrated industry chain and supply chain covering research and development, production and manufacturing. The cost of new energy generation has tumbled.

China has also made substantial strides in electricity replacement, accelerating the replacement of coal and oil by electricity. Ultra-high voltage (UHV) technology has provided strong support for large renewable energy projects. Clean and efficient coal power has also been developed. Re-electrification (a comprehensive upgrade of traditional electrification) will be key to China achieving Peak Carbon and Carbon Neutrality, but it will also pursue the substitution of electricity in energy consumption.

With electricity at its center, the established power system as a platform, and by pursuing de-carbonization, electrification, digitization and standardization, China will build a clean, low-carbon, safe and efficient energy system. China is also developing a new, renewable energy-centered power system with four prominent features: extensive interconnection, intelligent interaction, flexibility, and safety controls.

Reducing supply chain carbon emissions in consumer goods manufacturing and other industries is also crucial. A brand like Budweiser, which has integrated sustainability into its business, needs to have a positive impact on local communities along its value chain. To that end, it is creating more climate-adaptive value chains, including by only purchasing power from 100% renewable energy sources, and putting smart agriculture, water conservation, recycled packaging and climate action at the core of its business. By controlling carbon emissions from production and storage to transportation, and through innovative collaboration between companies and accelerators, China and the global economy can recover and strengthen community resilience in the post-pandemic era.

Achieving the "2 carbon goals" (Peak Carbon and Carbon Neutrality) also requires new technological innovations on the supply and demand sides of the economy. China is still undergoing industrialization and urbanization, so faces more pressure on carbon emissions reduction. According to Tsinghua University, to achieve a transition based on the Paris Agreement's 2 degrees Celsius target, China would need to invest RMB100 trillion, or 1.5% to 2% of GDP, in its energy system from 2020 to 2050. To achieve the 1.5 degree Celsius target, about RMB138 trillion of new investment would be needed, accounting for more than 2.5% of annual GDP. However, the cost will be worth it, because China's energy transition will create new sources of economic growth and new jobs to support high-quality economic development.

Financial institutions are also indispensable to promoting investment in green energy, green finance and accelerating industrial transformation. According to Boston Consulting Group (BCG), USD100 trillion to USD150 trillion of investment will be needed to meet the Paris Agreement goals. China must continue to invest in photovoltaic power and solar energy, nuclear power generation and carbon capture

and storage. According to BCG, the impact of comprehensive de-carbonization on consumer prices will be manageable. Companies should therefore reach agreements with upstream and downstream enterprises to optimize procurement strategies through supplier data modeling. This will enable them to procure more environmentally friendly raw materials, and work with suppliers to develop de-carbonization opportunities, according to BCG.

The world is at a crucial stage of transition from high carbon to low carbon and onwards to zero carbon. The green economic recovery in the aftermath of the pandemic presents substantial opportunities for PE/VC institutions. Hillhouse Capital factors environmental, social and governance issues into its investment decisions, has established a climate change investment team, and launched a green fund to combat climate change. It has also established an institute for industry and innovation, and plans to support the training of climate change and new energy talent.

It is now vital that the de-carbonization of financial institutions and their invested enterprises be accelerated. Governments can help by directing social capital to carbon neutral areas such as green investment, helping other stakeholders work towards mutually beneficial social and economic value in the pursuit of sustainable development goals through continuous innovation.

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