

Scientific and Technological Innovation Supporting China's Energy Transition

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The impact of global climate change on economic and social development is escalating, with frequent extreme weather events like heatwaves, droughts, water scarcity, and severe cold, causing harm to our living environments, ecosystems, and posing threats to food security. Additionally, the Covid-19 pandemic, the Ukraine crisis, and other geopolitical shifts have introduced fresh uncertainties and complexities to the global energy transition. The landscape of global energy supply and demand is undergoing profound changes, with a more fragmented and polycentric energy supply, a politicized supply chain, and rising costs of energy security and non-technical expenses. Many countries and regions are grappling with economic pressures and the strain on people's livelihoods due to constrained energy supplies and soaring prices.

As the largest energy consumer in the world, China is actively pursuing an energy transition to achieve its carbon peak by 2030 and carbon neutrality by 2060. Scientific and technological Innovation holds the key to facilitating this transition. This report aims to illuminate the evolving situation and challenges confronting the global response to climate change and energy transition. It will delve into the pathway of

China's energy transition and showcase, through case studies, China's initiatives and experiences in driving this transition through scientific and technological innovation.