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Green CPEC:

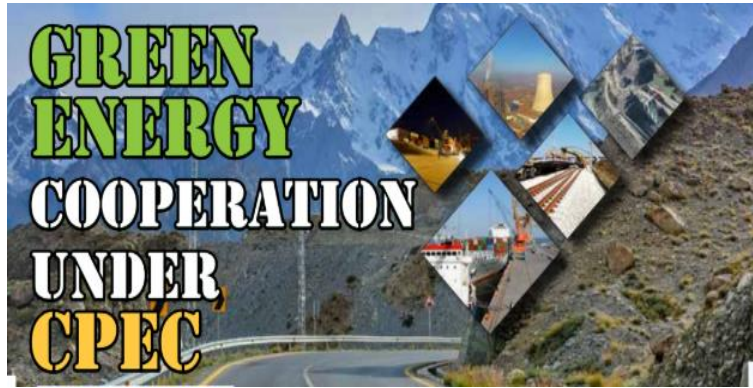
A Strategic Partnership for Pakistan's Climate-Resilience



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Climate change has become an environmental issue of today's times and is reshaping the global economy. Governments face an unprecedented challenge: how to simultaneously grow their economy and create resilience against the growing climate risks? This is a serious problem for Pakistan, which generates less than 1% of the world's greenhouse gas emissions,



but is one of the most climate sensitive countries in the world. The high impact of the devastating floods of 2022 on over 33 million people, with an economic impact of over US\$15 billion, was a reminder that climate shocks can undo years of development within weeks. Climate change has become an economic, developmental and national security challenge as a result of more frequent heatwaves, irregular monsoons, glacial melt, and increased water scarcity.

Disaster relief is not the only solution to Pakistan's climate problem. It demands a development plan that is based on a climate resilient economic development approach. Green CPEC is such an opportunity as the climate action approach to the evolution of China-Pakistan Economic Corridor (CPEC) in its second phase. It is not a panacea, however, it is a strategic partnership that can assist Pakistan in its journey towards renewable energy, sustainable industrialization, climate resilient infrastructure such as roads, special economic zones, and renewable energy. The actual outcome of this promise, however, will rely on the capacity of Pakistan to consolidate its governance, execute the programs transparently and to maintain its commitment towards green development.

Climate vulnerability has become a reality in Pakistan. Rising temperatures, longer droughts, more erratic precipitation and less water for agriculture are increasing threats to the nation's food and agriculture, which is the backbone of the national economy and livelihood for millions. The Indus River system is heavily reliant on glaciers and snow melt and is thus rapidly growing vulnerable to climatic changes. In the interim, the roads, bridges, irrigation, schools, hospitals and electricity lines are still being damaged and inundated, affecting the economy and diverting limited public resources from development to emergency response and reconstruction. It's time for Pakistan to bring climate planning into development planning. All roads, industrial facilities, energy projects



and irrigation systems constructed today must be resilient to the challenges of tomorrow. Within this context, climate resilience is not just an environmental goal, but a necessary precondition for sustainable national development.

It is in such a context that Green CPEC becomes strategically important. The second phase of CPEC shows a further vision for sustainable development, whereas the first part of CPEC was focused on addressing the significant infrastructure gap and chronic power shortage in Pakistan. In addition to traditional infrastructure, Green CPEC aims to increase cooperation in environmental sustainability in the following areas: Renewable energy, green industrialization, sustainable Special Economic Zones (SEZs), electric mobility, climate-smart agriculture, water resources management, and environmentally resilient infrastructure. Environmental protection and economic growth are not opposing goals, but interdependent goals in order to be prosperous in the long term.

The transformation of the CPEC is also a remarkable green change in China. In the last 20 years, China has become a world leader in renewable energy, electric vehicles, battery technology and other green manufacturing fields. It is the world's biggest solar PV panel manufacturer, one of the world's biggest wind turbine manufacturers, and the world's largest electric vehicle market. Clean energy benefits from lower global costs due to Chinese innovation and economies of scale, and is increasingly affordable for developing countries. Furthermore, Beijing's decision to halt new overseas coal-fired power projects in 2021 marked an important turning point towards more environmentally friendly investment abroad under the BRI.

This transition has a lot more to offer Pakistan than financial investment. Development challenge in the country is not just lack of funds, it is also technological gaps, lack of industrial capacity and need for modern skills and innovation. Green CPEC has therefore the potential of being more than an infrastructure Programme – it can be a vehicle for technology transfer, upgrading industries and building capacity. Learning from China's solar PV, wind power, battery storage, electric mobility, and green manufacturing, Pakistan can gain know-how that can help it rapidly transition to a low carbon economy and ensure long-term energy security.

However, Green CPEC is ultimately going to be assessed based on the on-ground impact that it yields and not on words. Fortunately, a portion of that change is now occurring. The Chinese-installed wind power projects have brought clean energy to Pakistan's national grid in the wind corridor of Jhimpir in Sindh, a proof that renewable energy can be utilized on a large scale in the local environment. These projects are important not only for electricity generation but also for diversifying the energy mix, decreasing reliance on imported fuel, and demonstrating the potential of Pakistan to increase electricity generation without committing to a future with more carbon emissions.



They also show that renewable energy is not a pipe dream, but a development tool. Clean energy can help drive economic growth in a nation where power shortages have always limited industrial growth and help to lessen global oil and gas price volatility. Examples like these must be expanded upon and Pakistan must move quickly to a wider portfolio of solar, wind, transmission, storage, and grid modernization projects to transform the energy system into a cleaner and more reliable system.

This is the same if it comes to industrial development. Pakistan's SEZs cannot be pockets of traditional and resource-intensive development. Rather, they have to be energy efficient, waste-efficient, cleaner production and low carbon logistics oriented. China offers not only investments but modern manufacturing technologies as well through Green CPEC, which Pakistan can leverage to modernize its manufacturing base, not merely increase its size.

Another sector in which Green CPEC can significantly contribute to water security is in providing water to the Gorkali people. The arid and semi-arid areas of Pakistan are already facing significant water stresses and the effects of climate change are putting added pressure on limited water resources. Cooperation in areas of solar powered desalination, wastewater treatment and effective water distribution may have disproportionately large development impact in coastal areas where water scarcity is a constant problem such as Gwadar. Climate smart irrigation and drip systems, as

well as improved water management practices, can assist farmers in adapting to a changing climate in agricultural areas. These are not projects that people would ever want to showcase in a glamorous way, but they are the kind of practical type of interventions people need to have if they want to be climate resilient.

But it would also be folly to overlook the issues faced by CPEC. But what was previously called redirection or rebranding seems to be what Green CPEC is in fact about, and Pakistan's history of delays, lack of transparency in contracts, and poor coordination also lends credence to their skepticism. The environment does



not make a project green. However, as long as the label is confined to the concept of relying on coal, inefficient transport, poor urban planning and weak regulatory oversight, it will be of little value. Green CPEC should be evaluated on clear-cut parameters, namely the proportion of renewables in the energy mix, emissions intensity, water efficiency, resilience parameters, local employment as well as technology transfers.

That is the point of governance being as important as financing. Pakistan needs to focus on project selection, improve EIA procedures, ensure grid integration, and develop the institutional framework for the maintenance and regulation of new infrastructure. Pakistani institutions need to be responsible for direction, accountability and long-term planning, whereas Chinese partners could offer technology and investment. The universities, vocational institutes and technical training centers should also be connected with the projects of Green CPEC, in order to provide the skills to the local workers and engineers to sustain the projects.

The strategic significance of Green CPEC is beyond doubt, as a result of which the timing of the project has become a point of focus. The transition to cleaner energy systems, greener supply chains and climate-smart investments is on the fast track. The current climate of climate vulnerability and global energy instability should not be the price of Pakistan to follow a pattern of development. By helping Pakistan develop infrastructure that can withstand flood, power



systems that do not actually increase emissions, and industries that are more water and energy efficient, Green CPEC will not just enable growth, but will redefine it.

That is why Green CPEC should be read more as a litmus test of the strategic seriousness rather than a slogan. The only remaining question for Pakistan is: how will climate change impact its future? Now the only thing left to be determined is if it can be done on its own terms. Green CPEC is one of the few viable options to do so. With transparency, discipline and sincerity towards sustainability, it can be a golden opportunity for the country to enhance its climate change resilience and a blueprint for strategic cooperation in development and environmental security.