

INSIGHT

How Private Financing is Moving the Needle on Renewables in Central and West Asia



The Navoi project site—Uzbekistan’s first large-scale, privately developed and operated renewable power plant—will resemble the terrain of this ADB-financed solar power project. Photo credit: ADB.

PPPs in renewable energy create more investment and jobs and help bring countries closer to their sustainable goals.

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Introduction

Sustainable Development Goal (SDG) 7, which aims for affordable and clean energy for all by 2030, is a substantial challenge for many developing countries trying to achieve their nationally determined contributions (NDCs) to the Paris Agreement.

Many of the Asian Development Bank’s (ADB) developing member countries lack the funds to invest in large energy infrastructure projects, especially after the economic downturn, increased public spending, and decreased domestic revenues that followed the coronavirus disease (COVID-19) pandemic.

In Central and West Asia, most countries are pleased with their current and projected growth rates that, on average, show a healthy post-COVID-19 pandemic rebound. However, the countries face a growing demand for electricity as the subregion regains its pre-pandemic momentum and productivity. Many of

these countries are still dealing with aging and overloaded power supply systems.

Switching to Renewables

Central and West Asia countries are fortunate to have a wide variety of energy resources at their disposal—not only fossil fuels like natural gas, oil and coal, but also renewable energy sources, such as hydro, solar, wind, and biomass.

Increasing renewables in the energy mix is a way for countries to fulfill their NDCs, and many are taking the leap. In Uzbekistan—one of the fastest-growing economies in the subregion—32% of firms say the country's unreliable power supply is a major constraint to doing business. In response, the government adopted enabling policies to aid its transition from fossil fuels and to reach its target share of 25% renewables in total generating capacity by 2030.

Pakistan will pursue dynamic goals in its alternative and renewable energy policy. Pinning its hopes on its abundant hydropower resources, the country aims for at least 25% renewable energy by 2025 and 30% by 2030.

Kazakhstan is developing its 2060 Long-Term Low-Carbon Development Strategy. It is an ambitious plan that includes a gradual abandonment of coal-fired power plants to complete the phaseout of coal-fired production by 2050. Coal-fired plants account for roughly 50% of its current energy mix.

Azerbaijan wants to reduce greenhouse gas (GHG) emissions by 35% by 2030 compared to the 1990 level. The government issued a series of policies supporting decarbonization and the delivery of renewable energy to the grid. Azerbaijan started its policy overhaul in 2019 with Presidential Order 1209 or the Acceleration of Reforms in the Energy Sector.

But there are some constraints that hamper countries from pursuing renewable energy generation. For one, countries such as Armenia, Azerbaijan, and Uzbekistan prioritize sovereign investments in their national power distribution systems, such as improving access and modernization. These investments aim to enhance reliability and reduce energy loss.

With the huge up-front cost of new renewable generation plants using emerging and innovative technology (e.g., storage), involving the private sector can mobilize resources and relieve public spending. But making such investments attractive for private sector financing entails a good investment climate and a reliable funding framework.

Private Financing Moves the Needle

Over the past decade, ADB experienced that supporting innovative local or early mid-size projects can help attract private sector collaborators for renewable energy generation projects even in challenging markets.

Pathfinder projects show the success of a new or innovative solution. For private sector partners,

pathfinder projects, which are often small but can be scaled up, are an opportunity to enter new markets and find profitable investment opportunities. Proven commercial investments ensure that projects are economically and contractually viable in terms of construction, financing, and operation risks, with stable returns and a fair risk–reward balance.

Countries can modernize their infrastructure, pursue climate targets, and add more power to their local and national energy grids without increasing public debt.

Uzbekistan’s Ministry of Investment and Foreign Trade and Ministry of Energy worked with ADB, Canadian Climate Fund, and World Bank to fund the Nur Navoi Solar project—making it the first public–private partnership on renewable energy in the country. The International Finance Corporation played an advisory role. The Nur Navoi plant, a 100-megawatt (MW) solar power plant, started operating in December 2021. It is expected to create a total of 922 jobs during construction and operation. The project also helps diversify the country’s generation sources and in achieving its NDC target.

After the success of the Navoi project, Masdar—its sponsor based in the United Arab Emirates, has continued to develop several non-ADB-affiliated renewable power projects in Uzbekistan. These include a build, operate, and transfer project for a 500-MW wind farm in Zarafshan, Navoi region—likely the biggest wind farm in Central Asia. As an independent power producer, Masdar also won a public–private partnership tender for a 457-MW utility-scale solar power plant in Sherabad, Surkhandarya region. ADB is providing a credit facility to mitigate the associated risks.

Pathfinder projects may also open up regions to new investments and provide opportunities to local communities. ADB supported a project in Pakistan, the Zorlu wind farm, which successfully started operations in July 2013, and set a benchmark for wind power investments in the country. With its success, more wind power projects followed, including the Foundation Wind Energy I and Foundation Wind Energy II power plants with a combined capacity of 100 MW, and the Triconboston Wind Power Project that operates three 50-MW wind power plants. Apart from more clean power, these wind farms created several hundred new jobs for the community.

Blueprint for Success

Early successes in pathfinder projects can lead to other successes down the line. As more deals are processed, sponsors and lenders can build on lessons learned on these projects, like developing project development concepts, legal structures, or financing tools to save development time and cost.

With private developers having a higher comfort level with new technologies, the increasing proliferation of renewable projects can fuel advancements in technology, such as integration of storage facilities, improvements in plant capacity and utilization factors, and lower operations and maintenance costs.

By developing renewable energy sources, nations can reduce their dependence on fossil fuels and their associated price volatility. Local workers may also benefit from the construction and operation of renewable energy projects as they bring in jobs and new skills and knowledge transfers that come from training a workforce in a new industry.

Most importantly, private sector investments in renewable energy projects will accelerate the development of and access to affordable, sustainable, and secure energy in Central and West Asia and bring its populations closer to their [SDG targets](#).

Resources

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extreme poverty. Established in 1966, it is owned by 68 members—49 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

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