

Bhutan's Dorjilung Hydropower Project Sets Benchmark for Large-Scale, PPP-Led Energy Delivery

May 5, 2026



Bhutan has formalised financing for the 1,125 MW Dorjilung Hydroelectric Power Project, marking a decisive shift from ambition to execution in one of the country's most significant infrastructure programmes to date.

With total project costs estimated at \$1.7 billion and initial financing agreements of \$515 million now in place, Dorjilung is structured as a long-term, multi-stakeholder project designed to deliver energy security, economic growth and regional impact.

A flagship project with defined strategic outcomes

Positioned within Bhutan's 13th Five-Year Plan, Dorjilung is not simply an energy asset; it is a national transformation project with clear, measurable objectives:

- Deliver 4,500 GWh of clean electricity annually
- Close seasonal energy shortages, particularly in winter
- Enable large-scale power exports to India
- Increase national GDP by an estimated 2.4%

The project's scale is notable; once operational, it will account for roughly one-third of Bhutan's total electricity generation capacity.

Structured financing designed for delivery, not burden

A defining feature of Dorjilung is its financing model. Rather than relying heavily on sovereign debt, the project is structured as a public-private partnership, combining multilateral and private capital.

The financing package includes:

- \$300 million from the International Development Association, including \$150 million in grants
- \$215 million from the International Bank for Reconstruction and Development
- Up to \$300 million from the International Finance Corporation
- Additional private capital expected to reach \$900 million

This structure limits Bhutan's direct credit exposure to \$150 million while enabling full delivery of the \$1.7 billion project. Over a 30-year period, the model is expected to generate around \$4 billion in national revenue through taxes, dividends and free power.

From a project perspective, this is a clear attempt to balance scale with fiscal discipline.

Delivery model anchored in a special purpose vehicle

Execution will be managed through Dorjilung Hydro Power Limited, a dedicated project entity jointly owned by:

- Druk Green Power Corporation (60%)
- Tata Power (40%)

This SPV structure provides operational clarity, risk allocation and governance discipline—critical factors for a project of this scale and complexity.

Economic and regional impact built into the project design

Beyond energy generation, Dorjilung is designed to act as a catalyst for broader economic activity. Reliable, affordable electricity is expected to unlock growth across manufacturing, tourism and small business sectors.

At a regional level, the project strengthens energy trade between Bhutan and India, with around 80% of generated power expected to be exported during peak periods.

It also carries a clear environmental mandate, with an estimated reduction of 3.3 million tonnes of CO₂ emissions annually, reinforcing Bhutan's carbon-negative position.

A project aligned to long-term system resilience

One of the less visible but critical elements of Dorjilung is its role in grid flexibility. Seasonal variability has long been a structural challenge for Bhutan's energy system.

The project is designed to:

- Manage seasonal supply fluctuations
- Reduce reliance on energy imports
- Stabilise long-term energy planning

This moves the project beyond capacity expansion into system optimisation.

From infrastructure to economic platform

Leaders across government and delivery partners have positioned Dorjilung as more than an infrastructure investment.

Prime Minister Tshering Tobgay described it as a “cornerstone” of national development, while World Bank representatives emphasised its role as a model for sustainable infrastructure financing.

The emphasis is consistent; this is a project intended to reshape how Bhutan funds, delivers and scales large infrastructure.

A replicable model for future projects

Dorjilung's significance lies as much in its structure as its output. The integration of concessional finance, private capital and SPV-led delivery offers a template that could be replicated across Bhutan's hydropower sector and beyond.

If execution meets expectations, the project will stand as a reference point for how smaller economies can deliver large-scale infrastructure without overextending public balance sheets.

In practical terms, Dorjilung is not just a power project. It is a test of whether complex, multi-partner infrastructure can be delivered with discipline, clarity and long-term value at its core.