

 Early Warning System

ADB-58408-001

Bhutan : Promoting Energy Export Diversification Project



Quick Facts

Countries	Bhutan
Financial Institutions	Asian Development Bank (ADB)
Status	Proposed
Bank Risk Rating	U
Borrower	Government of Bhutan
Sectors	Energy, Hydropower, Industry and Trade, Technical Cooperation
Investment Type(s)	Advisory Services



Project Description

As stated by the ADB, the TA is proposed to develop Bhutan's overall power dispatch options and strategies for domestic electricity consumption and international power trade. It will look into strategic views to maximize power export from various potential energy sources of hydropower, solar power, and wind power while meeting growing domestic electricity consumption. Coupled with the strategic frameworks, the TA will help conduct comprehensive due diligence studies for two hydropower schemes, namely, the Bunakha and the Nyera Amari projects, which are being supported by the Asian Development Bank's (ADB) project readiness financing (PRF) for detailed engineering studies including safeguard and climate resilient design.¹ Following more findings from both the PRF and this TA, the ensuing projects will be assessed for ADB financing; therefore, each ensuing project's concept note will be separately prepared based on more detailed assessments.

In response to the winter power shortage issue, the Druk Green Power Corporation (DGPC), the government-owned power generation company, intends to expand solar power generation as an alternative power source. Solar power facilities offer the advantage of rapidly increasing capacity during the dry winter seasons when there are more sunny days. However, the potential feasible solar power capacity is not sufficient to cover the current domestic power deficits. Therefore, the DGPC maintains its development strategy of promoting hydropower development for both domestic consumption and power exports while diversifying its power generation types, including reservoir, pumped storage, and small hydropower plants, alongside solar power development. The Bunakha project is designed as a reservoir type (180 megawatt [MW]), primarily to address power deficits during the dry season and promote complementary operation with forthcoming solar projects. It will effectively function as a large battery storage system and help stabilize intermittent generation from solar and wind power. It can also export excess power to India during the wet season. The Nyera Amari project is a run-of-river type (404 MW), but it remains crucial for the DGPC to continue increasing its generation capacity for power exports, which will help sustain the government revenue and the national economy. Through the mix of these different power generation sources, the government aims to develop strategies to optimize overall power generation and supply for both domestic consumption and power trading.

ADB has supported Bhutan in designing and developing two sustainable hydropower projects. First, the Dagachhu hydropower plant (126 MW) marked a significant milestone as Bhutan's first publicprivate partnership in Bhutan's infrastructure sector. It also gained global recognition as the world's first cross-border Clean Development Mechanism project. Second, ADB has supported the Nikachhu hydropower project (118 MW) through a syndication with Indian commercial banks. While these plants became operational, both projects experienced delays in implementation. In preparing the Bunakha and Nyera Amari projects, therefore, the PRF was provided to conduct more detailed engineering studies in advance to enhance readiness for implementation.³ These design studies prioritize climate-adaptive approaches, minimizing safeguard impacts and risks, reducing life-cycle costs, and maximizing operational efficiency to ensure sustainable and resilient hydropower development. Furthermore, ADB has supported a series of solar power projects, placing it in a strong position to offer comprehensive strategies for diversifying and integrating different power sources.



Investment Description

- Asian Development Bank (ADB)

Information on investment amount not provided at the time of disclosure.



Private Actors Description

As stated by Bloomberg, Druk Green Power Corporation Limited generates electricity through hydropower plants.

Druk Green Power Corporation Limited is a government-owned power generation company.



Private Actor 1	Private Actor 1 Role	Private Actor 1 Sector	Relation	Private Actor 2	Private Actor 2 Role	Private Actor 2 Sector
-	-	-	-	DRUK GREEN POWER CORPORATION LTD	Contractor	Energy



Contact Information

ADB Team Leader:

Kaoru Ogino - Principal Energy Specialist

No contacts available at the time of disclosure.

ACCESS TO INFORMATION

You can submit an information request for project information at: <https://www.adb.org/forms/request-information-form>

ADB has a two-stage appeals process for requesters who believe that ADB has denied their request for information in violation of its Access to Information Policy. You can learn more about filing an appeal at: <https://www.adb.org/site/disclosure/appeals>

ACCOUNTABILITY MECHANISM OF ADB

The Accountability Mechanism is an independent complaint mechanism and fact-finding body for people who believe they are likely to be, or have been, adversely affected by an Asian Development Bank-financed project. If you submit a complaint to the Accountability Mechanism, they may investigate to assess whether the Asian Development Bank is following its own policies and procedures for preventing harm to people or the environment. You can learn more about the Accountability Mechanism and how to file a complaint at: <http://www.adb.org/site/accountability-mechanism/main>.