



Bhutan: Promoting Clean Energy Development in Bhutan

Project Name	Promoting Clean Energy Development in Bhutan
Project Number	47275-001
Country	Bhutan
Project Status	Active
Project Type / Modality of Assistance	Technical Assistance
Source of Funding / Amount	TA 8630-BHU: Promoting Clean Energy Development in Bhutan Norwegian Grant (w/ LoA) US\$ 5.67 million
Strategic Agendas	Environmentally sustainable growth Inclusive economic growth
Drivers of Change	Governance and capacity development Partnerships Private sector development
Sector / Subsector	Energy - Energy sector development and institutional reform
Gender Equity and Mainstreaming	No gender elements
Description	The technical assistance (TA) aims to support hydropower and other renewable energy resources development in Bhutan by providing assistance in (i) investment projects preparation; (ii) policy formulation and enabling environment development; and (iii) institutional capacity strengthening for the implementing agencies of the TA.
Project Rationale and Linkage to Country/Regional Strategy	Hydropower is the backbone of Bhutan's economy, generating 99% of the country's electricity supply, and accounting for 18% of total national revenue and 20% of gross domestic product in 2013. At present, only 5% of hydropower potential in Bhutan has been developed. The government recognizes hydropower's central role in Bhutan's development and set out in its Eleventh Five Year Plan to accelerate expansion of hydropower capacity. The excessive dependence on the single resource of hydropower imperils Bhutan's energy security. Bhutan will, according to its Alternative Renewable Energy Policy (2013), develop alternative renewable energy resources to enhance energy security, alleviate overdependence on hydropower, reduce conventional fuels consumption and minimize greenhouse gas emissions. From the demand side, it is necessary to formulate a strategic national energy efficiency policy to promote the use of efficient technologies, processes, and products throughout the energy supply and consumption chains.
Impact	Enhanced clean and sustainable energy development in Bhutan.

Project Outcome

Description of Outcome	Improved enabling environment for the development of hydropower and other renewable energy resources.
Progress Toward Outcome	Implementation is on track. A review mission was fielded in June 2016.
Implementation Progress	
Description of Project Outputs	1. Investment projects prepared. 2. Policy formulated and enabling environment developed. 3. Institutional capacity strengthened.
Status of Implementation Progress (Outputs, Activities, and Issues)	Four consulting firms have been engaged by ADB to undertake distinct sets of activities: (i) Package 1: Prefeasibility Study of 3 Hydropower Projects; (ii) Package 2: Renewable Energy Master Plan; (iii) Package 3: Energy Efficiency Policy; and (iv) Package 4: Measurement, Reporting, and Verifications (MRV). Given the complexity of the TA, 3 individual consultants have been engaged to assist in project implementation.
Geographical Location	

Summary of Environmental and Social Aspects

Environmental Aspects

Involuntary Resettlement

Indigenous Peoples

Stakeholder Communication, Participation, and Consultation

During Project Design Bhutan government agencies, such as Ministry of Finance, Department of Renewable Energy and Department of Hydropower and Power Systems under the Ministry of Economic Affairs, and the National Environment Commission, have involved in identifying or conceptualizing the assistance. The donor of this grant, the Government of Norway has been consulted during the project design.

During Project Implementation

Business Opportunities

Consulting Services The TA will be implemented over 3 years from the date of effectiveness. It will require 262.25 person-months of consulting services from both firms and individuals, comprising 183.25 person-months from international consultants and 79.00 person-months from national consultants. The consultants will have expertise in such areas as hydropower engineering; geology; hydrology; electromechanical design engineering; economic and financial analysis; renewable energy; energy efficiency; climate change; public-private partnership; energy law, regulation and standards, environmental and social safeguards; project coordination; and project implementation. Due to the complexity of the assignments, four consulting firms will be engaged using the quality- and cost-based selection approach with a 90:10 quality-cost weighting based on a full technical proposal. Individual consultants will be required for specialized and country-specific expertise. ADB will engage all consultants in accordance with its Guidelines on the Use of Consultants (2013, as amended from time to time).

Procurement TBD

Responsible Staff

Responsible ADB Officer	Zhang, Hongwei
Responsible ADB Department	South Asia Department
Responsible ADB Division	Energy Division, SARD
Executing Agencies	<i>Department of Renewable Energy, Ministry of Economic Affairs Thimphu, Bhutan</i>

Timetable

Concept Clearance	13 Dec 2013
Fact Finding	-
MRM	-
Approval	31 Mar 2014
Last Review Mission	-
Last PDS Update	06 Mar 2017

TA 8630-BHU

Milestones					
Approval	Signing Date	Effectivity Date	Closing		
			Original	Revised	Actual
31 Mar 2014	23 Apr 2014	23 Apr 2014	01 Apr 2017	-	-

Financing Plan/TA Utilization							Cumulative Disbursements	
ADB	Cofinancing	Counterpart				Total	Date	Amount
		Gov	Beneficiaries	Project Sponsor	Others			
0.00	5,674,265.00	0.00	0.00	0.00	0.00	5,674,265.00	31 Mar 2014	4,068,725.10

Project Page	https://www.adb.org/projects/47275-001/main
Request for Information	http://www.adb.org/forms/request-information-form?subject=47275-001
Date Generated	06 July 2017

ADB provides the information contained in this project data sheet (PDS) solely as a resource for its users without any form of assurance. Whilst ADB tries to provide high quality content, the information are provided "as is" without warranty of any kind, either express or implied, including without limitation warranties of merchantability, fitness for a particular purpose, and non-infringement. ADB specifically does not make any warranties or representations as to the accuracy or completeness of any such information.