

ASIA CLEAN ENERGY FORUM 2025

2–6 June | ADB Headquarters, Manila



Case Study on G9211-BHU Alternative Renewable Energy Pilot Project Bhutan

Sonam Zam
Project Officer, Bhutan Resident Mission

ACEF 2025_ALTERNATIVE RENEWABLE ENERGY PILOT PROJECT_BHUTAN

118 MW Nikachhu Hydropower Project, Trongsa



Potential: 33,000 MW
 Installed Capacity: 3,491 MW
 Firm Power: 650-700 MW

SN	Power Plants/Projects	Installed Capacity (MW)
1	Embedded Generation	9
2	Chhukha	336
3	Kurichhu	60
4	Basochhu Upper Stage	24
5	Basochhu Lower Stage	40
6	Tala	1,020
7	Dagachhu	126
8	Mangdechhu	720
9	Nikachhu	118
10	Punatsangchhu II*	1,020
11	Suchhu	18
		3,491

ACEF 2025_ALTERNATIVE RENEWABLE ENERGY PILOT PROJECT_BHUTAN

Potential: ~100 MW
Installed Capacity: 0.6 MW

Wind turbines at Rubesa



Potential: 12,000 MW
Installed Capacity: ~1.5 MW

Rooftop solar at Dungkhar dzong



Need for Diversification:

- Rural Renewable Energy Development Project (2010-2019)
- **Alternative Renewable Energy Pilot Project (2020-2026)**
- Renewable Energy For Climate Resilience Project (2022-2026)
- Distributed Solar For Public Infrastructure Project (2024-2030)

Grant 9211-BHU: Alternative Renewable Energy Pilot Project

Japan Fund for Prosperous and Resilient Asia and the Pacific US\$ 3.00 million

Milestones

Approval	Signing Date	Effectivity Date	Closing	
			Original	Revised
21 Oct 2020	06 Nov 2020	26 Jan 2021	30 Jun 2025	30 Dec 2026

ACEF 2025_ALTERNATIVE RENEWABLE ENERGY PILOT PROJECT_BHUTAN

Aim: To demonstrate the viability of solar power as a sustainable energy source and an income-generating opportunity for rural communities.

Scope: 3kW grid-tied solar PV systems on 514 households along with livelihood skills training and equipment support to maximize benefits of abundant solar electricity.

Criteria: National Multidimensional Poverty Index (MPI), geographical condition, atmospheric conditions, technical viability, and availability of telecommunication and other infrastructures.

Sustainability: Prosumer agreement, Insurance, Bank Setup

