

# What is Bhutan s solar air conditioner



## Overview

---

Discover how solar-powered air conditioning is transforming Bhutan's approach to thermal comfort while preserving its carbon-negative status. This article explores innovative design strategies, real-world applications, and the unique challenges of implementing renewable energy cooling systems in . Bhutan, a carbon-negative country, faces a growing threat to its environment due to climate change. It is historic, as we lay foundations for the construction of the 17. Deviating from our sole focus . As hydropower-rich Bhutan pursues solar to diversify its renewable energy source and maintain carbon neutral status, UNDP is supporting the government in shaping a private sector led energy market so the country can harness its 12 GW solar potential. 180-kW grid-tied solar photovoltaic (PV) plant . In the remote and breathtaking region of Lunana, nestled within the pristine landscapes of Bhutan, a pioneering initiative is underway to harness the abundant energy of the sun. Key Solar Irradiation Data: These levels make Bhutan suitable for off-grid PV, rooftop solar, and hybrid systems, especially in places where extending the grid .

## What is Bhutan's solar air conditioner

---



### [Harnessing Bhutan's solar potential with market-driven solutions](#)

As hydropower-rich Bhutan pursues solar to diversify its renewable energy source and maintain carbon neutral status, UNDP is supporting the government in shaping a private sector led

### [Delivering Clean and Sustainable Energy through Solar Power in Bhutan](#)

The Sephu Solar Project in Bhutan will be the first utility-scale alternative renewable power plant in the country and the first step to diversify the generation portfolio of Bhutan's hydropower dominated energy sector.



### **Rooftop solar PV in Bhutan: A systemic analysis of feed**

This study analyses the prospects of a feed-in-tariff program for solar PV systems in Bhutan. It is based on the analysis of a pilot project covering 361 households in rural areas of Bhutan.

### [MoENR advances solar initiatives with multiple pilot projects](#)

According to the Ministry's Department of Energy, a rooftop solar system at Dungkar Dzong in Pangbisa, Paro, was completed in 2024, with more initiatives planned under Phase-III of





## WORKING PAPER Alternative renewable energy in Bhutan

be prepared and promoted based on the local context. Established renewable energy technologies such as solar irrigation, solar water heaters, solar dryers, improved cooking stoves, and biogas can be



## [Bhutan Solar Air Conditioning Design: Sustainable Cooling Solutions](#)

From ancient dzongs to modern hospitals, Bhutan's solar AC revolution proves environmental stewardship and human comfort can coexist. As global temperatures rise, these mountain-forged



## Press Release

Deviating from our sole focus on hydropower, the project aims to enhance domestic capability, embrace emerging technologies, reinforce climate change resilience, and secure long



## [Solar power is helping Bhutan maintain its carbon-negative status for](#)

Solar installations in Bhutan provide good ROI, particularly for rural electrification, diesel replacement, and institutional use. Solar helps reduce diesel dependence and supports resilient development.



## Bhutan - Solar Power

Bhutan, a carbon-negative country, faces a growing threat to its environment due to climate change. Accelerated glacial melt and unpredictable river flows are impacting hydropower generation, the

## Contact Us

---

For catalog requests, pricing, or partnerships, please visit:  
<https://www.bartstudio.biz>