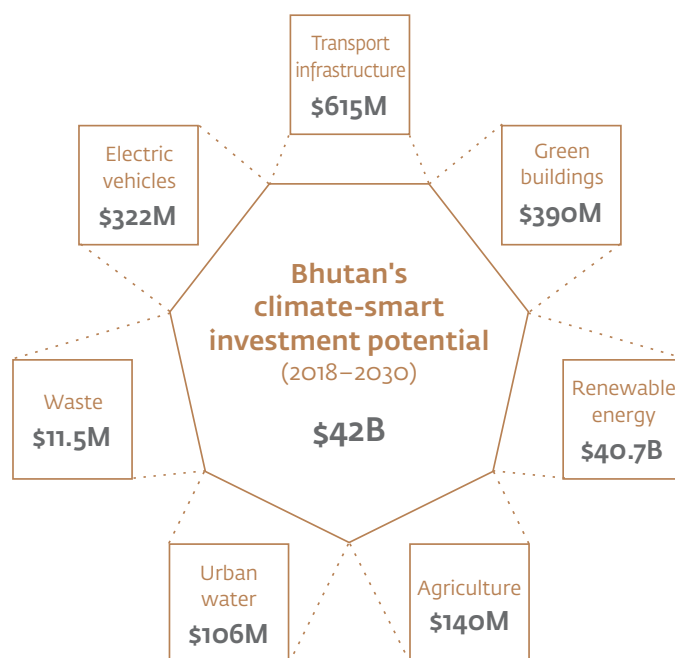


Climate Investment Opportunities in South Asia

Bhutan

Bhutan is Asia's fastest-growing economy, with GDP expected to increase by 8.2 percent in 2017. This growth is driven primarily by investments in hydropower, which contributes about a fifth of GDP.

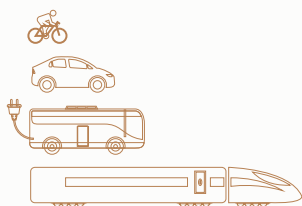
Rather than focusing on GDP, however, Bhutan uses gross national happiness as a well-rounded metric to assess its people's welfare, which embeds sustainability within the constitution, the culture, and every economic activity of the country. Bhutan's commitments under the Paris Agreement also reflect this emphasis on sustainability, building on the country's commitment to remain carbon neutral. It outlines the development of a low-carbon transport system, diversification of its renewable energy sources, sustainable waste management and zero-waste practices, and climate-smart agriculture and livestock farming practices, all of which open up opportunities for private sector investment. The country is a significant exporter of hydropower, and has developed 6 percent of an estimated 25,000 MW of commercially viable potential hydropower resources, signaling scope for further investment. Bhutan recognizes its vulnerability to the adverse impacts of climate change, and thus also places great emphasis on enhancing resilience across all sectors.



IFC estimates a total climate-smart investment opportunity of \$42 billion in Bhutan from 2018 to 2030:



\$40.7 BILLION IN RENEWABLE ENERGY to reach 25,000 MW of installed hydro capacity, as well as accomplish energy diversification targets via other renewable sources as per the 2013 Alternative Renewable Policy



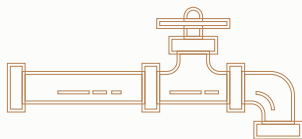
\$615 MILLION TO DEVELOP BHUTAN'S LOW-CARBON TRANSPORT INFRASTRUCTURE and **\$322 MILLION IN ELECTRIC VEHICLES** to green Bhutan's fleet in accordance with the government's goals to reduce fossil fuel imports



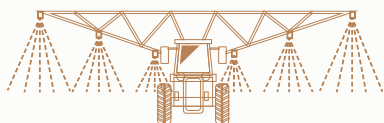
\$390 MILLION IN GREEN BUILDINGS supported by Bhutan's voluntary Green Buildings Guidelines to achieve 15 percent penetration in residential buildings and 20 percent in the commercial sector



\$11.5 MILLION IN MUNICIPAL SOLID WASTE to adopt a planned integrated waste management approach and promote the reduce, reuse and recycle principles



\$106 MILLION IN CLIMATE-SMART URBAN WATER, to bring urban wastewater treatment levels up to 64 percent from zero currently, and meet its Paris Agreement priority for water security and management



\$140 MILLION IN CLIMATE-SMART AGRICULTURE to meet the National Irrigation Master Plan's targets for irrigation-related infrastructure and services



Priorities for Bhutan to Attract More Climate-Smart Investment

Diversifying the economic base from hydropower to focus on “Brand Bhutan,” transport infrastructure and clean manufacturing require policies to encourage private sector participation in the country’s development. Implementing demonstration projects as public private partnerships (PPPs) and green procurement policies that streamline processes, particularly for the construction sector, will support investment in infrastructure, increase business confidence, and enable further replication and scale. Involving private companies in establishing charging stations for electric vehicles through tenders or partnerships will provide the necessary infrastructure to encourage the greening of the fleet. Making the Green Building Guidelines binding will encourage investment and further strengthen implementation.

IFC Advisory and Investment Spotlights



MOUNTAIN HAZELNUT VENTURE PRIVATE LIMITED (2015)

IFC, in partnership with the Asian Development Bank and Global Agriculture and Food Security Program, provided a \$12 million financing package in 2015 for Mountain Hazelnuts to expand its hazelnut production. This was IFC’s first project in Bhutan’s agribusiness sector.

Mountain Hazelnuts aims to plant 10 million new hazelnut trees across Bhutan that will help store up to 1.5 million metric tons of carbon dioxide and improve the local environment. The company provides farmers with shrubs, agricultural inputs, and training, and arranges for farmers without land to lease plots from the government. Staff monitors regularly visit the farms to record data that they send to headquarters via smartphones to ensure rapid response to issues with irrigation or pests. The trees are planted on degraded land and deforested foothills to reduce erosion. The project is expected to help enable Mountain Hazelnuts to integrate 15,000 farmer households, mostly located in Bhutan’s poorer eastern regions, into the international supply chain. These farmers will sell their nuts at a guaranteed price that is expected to double their incomes. In addition, the project will help create 400 direct jobs while supporting 12,000 indirect jobs. Up to 15 percent of Bhutan’s population is expected to directly benefit from the project.



THIMPHU PARKING PPP (2014)

The government of Bhutan aims to create an efficient, safe, and equitable urban transport system to encourage use of public transportation. Thimphu City, the capital of Bhutan, is growing quickly and faces severe congestion. To address these challenges and prepare for future growth, the Thimphu City Municipality, partnered with IFC to develop multi-level car parks, offering at least 550 parking spaces. The project opens up vital road space by augmenting the off-street parking supply and creating road space for deploying mass public transportation. The project is also expected to generate \$230,000 of revenue for the city each year.

IFC developed a larger, city-wide parking plan for Thimphu and managed the bidding of the PPP tender process. The project will mobilize about \$8 million of private sector investment.

Thimphu Parking is the first PPP to develop urban infrastructure in the country, and has cleared the way for more projects in this area, including mass public transportation vital to sustainably growing the city. More importantly, it has reduced congestion and made life easier for the 110,000 Bhutanese who live in Thimphu.

This factsheet summarizes details from the Climate Investment Opportunities in South Asia report, which covers Bangladesh, Bhutan, India, the Maldives, Nepal and Sri Lanka. <http://world.bg/PgpC30gS88e>



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