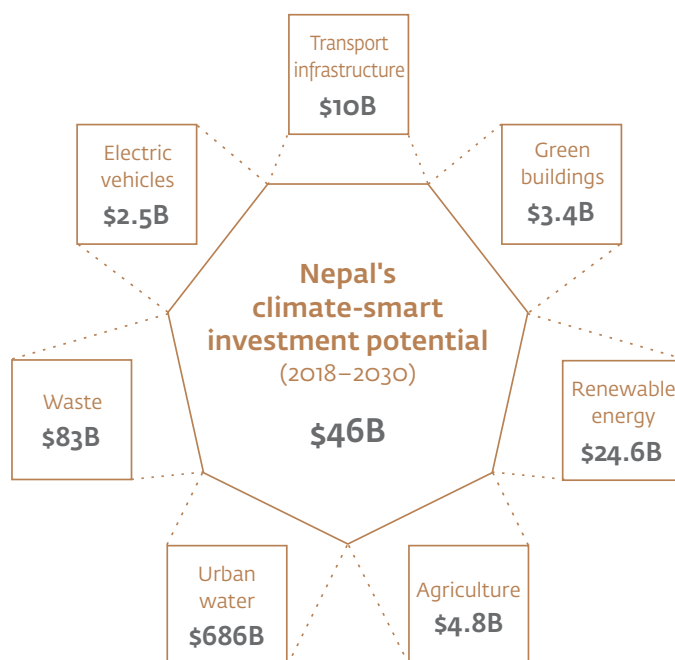


Climate Investment Opportunities in South Asia

Nepal

A mountainous, landlocked country recovering from two severe natural disasters since 2015, Nepal has shown the resilience of its people and economy, and is expected to have GDP growth of 7.5 percent in 2017, fueled by investment in rebuilding and a revitalized agricultural sector.

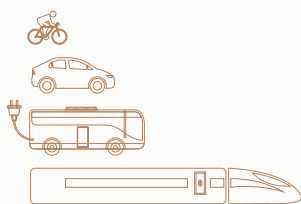
Nepal's government has prioritized reconstruction and resilience to future disasters in its budget, policies, and its Nationally Determined Contribution (NDC) under the Paris Agreement. Nepal's NDC emphasizes its development agenda and seeks to manage its vulnerability to climate change to improve the socioeconomic conditions of its population. Priority actions identified encourage green energy, sustainable transport, climate-friendly agricultural practices, waste management, and institutional changes to implement its low-carbon economic development strategy. It also highlights the role of the private sector in helping the country achieve sustainable development. The government issued a public private partnerships (PPP) policy in 2015 and plans to establish a PPP center to facilitate investment in infrastructure and services. PPP engagement has been concentrated in key urban areas, with scope to further increase involvement in untapped sectors such as transport.



IFC estimates a total climate-smart investment opportunity of \$46 billion in Nepal from 2018 to 2030:



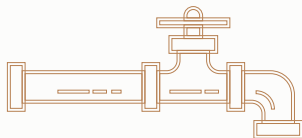
\$24.6 BILLION IN RENEWABLE ENERGY, to reach an installed capacity of 12,000 MW in hydropower as well as in other forms of renewable energy including solar and biomass to meet its clean energy goals



\$10 BILLION IN TRANSPORT INFRASTRUCTURE to enhance connectivity and upgrade urban transport, and **\$2.5 BILLION IN ELECTRIC VEHICLES (EVs)**, drawing from the NDC target of 20 percent growth of EVs from 2010 levels by 2020



\$3.4 BILLION IN GREEN BUILDINGS to green the planned reconstruction, repair and retrofitting of earthquake-damaged buildings, and additional building stock to meet the demands of a growing urban population



\$686 MILLION IN CLIMATE-SMART URBAN WASTEWATER, to increase the volume of treated wastewater from negligible levels currently to 54 percent by 2030



\$83 MILLION IN MUNICIPAL SOLID WASTE MANAGEMENT to increase waste collection up to 100 percent by 2030 with the addition of 159 new municipalities in FY15



\$4.8 BILLION IN CLIMATE-SMART AGRICULTURE to promote efficient technologies and local crops in an effort to make the sector more climate-friendly



Priorities for Nepal to Attract More Climate-Smart Investment

Successful demonstration PPP projects and creating awareness about the financial benefits of climate-smart investment can help mobilize finance by banks. Standardizing power purchase agreements for independent power producers and initiating auctions to develop the country's hydropower potential could provide a major revenue source through exports of electricity to India and Bangladesh. Easing procurement and processes, strengthening alignment between planning, policy, and budgeting, and using consistent technical screening and appraisal criteria in financing decisions will help facilitate PPPs. Clarifying the electric vehicle target, building charging infrastructure, and developing consistent standards will inform potential investors and buyers of the scale of the opportunity. Implementing and enforcing green and resilient building codes will enable new construction to be climate-smart.

IFC Advisory and Investment Spotlights



BUTWAL POWER COMPANY LIMITED (2010–2014)

Butwal Power Company is a leading hydropower company in Nepal, supplying power to the national grid and directly to almost 48,500 domestic and industrial customers. Across two projects from 2010 to 2014, IFC has committed \$25.8 million in loans, mobilizing an additional \$65.3 million to support the construction and development of new and existing hydropower generation capacity.

In 2010, IFC provided the company with a \$6.5 million long-term loan to expand its 5.1 MW Andhikhola Hydropower Project to 9.4 MW. This financing was critical for the company given the limited, financing capacity of local commercial banks at the time. IFC also provided the company with advanced training in environmental and social management to attract investors.

Following the Andhikhola project, IFC committed \$19.3 million, alongside \$19 million from the IFC-Canada Climate Change Program, to finance Nepal's first project-financed hydropower plant, the 38 MW Kabeli plant. Blended finance helped the project reach financial close by improving its debt service coverage ratio, which had deteriorated due to significant delays in implementation. The government of Nepal and Kabeli Energy Limited (a project company owned by Butwal) have signed a project development agreement, which includes a concession period of 35 years, during which Kabeli Energy will build, own, and operate the project. After the concession period, ownership will be transferred to the government. The project is a first step towards addressing Nepal's energy deficit.



UPPER TRISHULI 1 HYDRO (2012)

In 2012, IFC invested \$3 million in equity in the Nepal Water and Energy Development Company to finance the development, construction, and operation of a 216 MW run-of-river hydropower plant on the Trishuli River in Nepal. IFC has been co-developing the \$550 million project as a shareholder with a 15 percent stake in the company alongside its lead sponsor, the Korea South East Power Company.

The project will be the first large domestic independent power producer in Nepal and, once constructed, one of the largest operating hydropower plants in the country – estimated to be capable of meeting up to 50 percent of domestic electricity demand.



THE NEPAL PILOT PROGRAM FOR CLIMATE RESILIENCE (2013)

IFC is working with agribusiness firms in Nepal to promote improved agricultural and water management practices, helping small farmers producing rice, maize, and sugarcane to improve their resilience against climate change. The Nepal Pilot Program for Climate Resilience, funded in part through the Climate Investment Funds, is expected to help 15,000 people improve their climate resilience. By starting small and proving the viability of a climate-smart business model, IFC has laid the foundation for future investments that promote resilience without sacrificing productivity.

Recognizing that 91 percent of Nepal's employed women work in agriculture (64 percent of men), the project has tailored its training and other services to the needs of women farmers, such as recruiting women farm extension workers and arranging training schedules that suit their availability.

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>



IFC

**International
Finance Corporation**
WORLD BANK GROUP

Creating Markets, Creating Opportunities

2121 Pennsylvania Ave., NW
Washington, D.C. 20433, USA

www.ifc.org