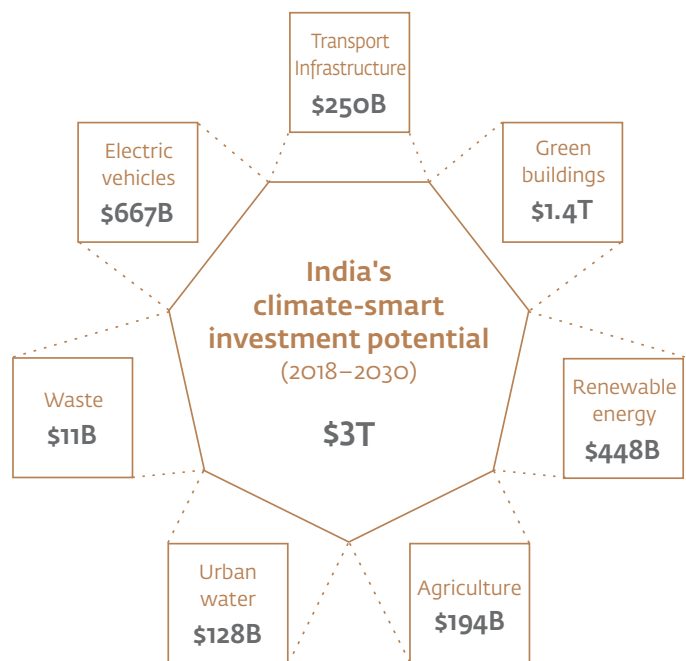
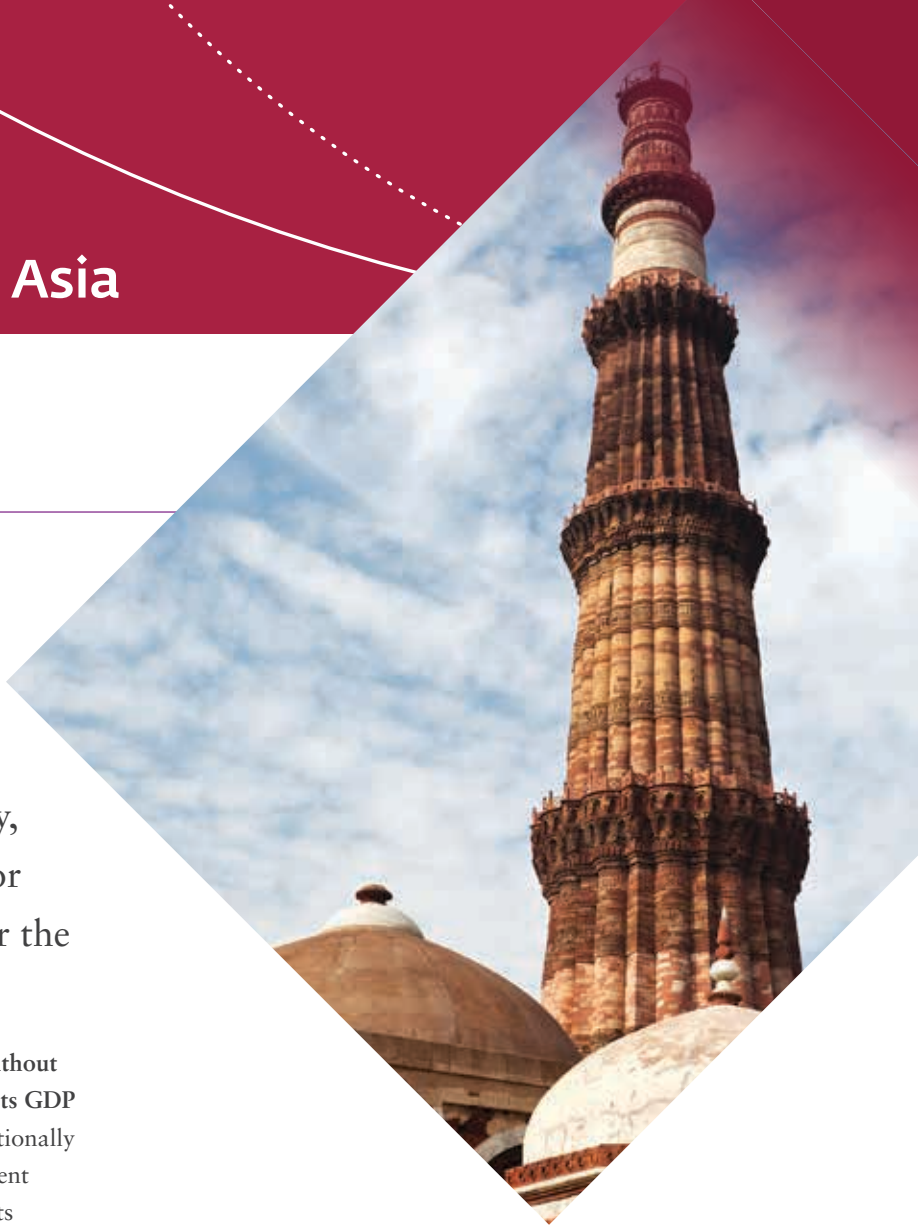


Climate Investment Opportunities in South Asia

India

With a population of 1.3 billion, the world's third-largest economy according to purchasing power parity, and a young, large, and growing labor force, India is a significant market for the private sector.

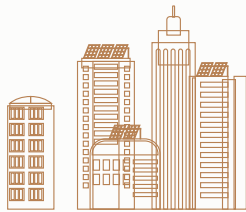
Its government is pursuing an agenda of “development without destruction”, aiming to reduce the emissions intensity of its GDP by up to 35 percent from 2005 levels by 2030. India's Nationally Determined Contribution (NDC) under the Paris Agreement reflects the government's ambitious domestic policy targets for renewable energy, urban infrastructure, and industry and recognizes the challenges that climate change will pose. As India works to deliver universal electricity access and address rapid urbanization, this creates business opportunities. The country's private sector is responding quickly to the opportunities created by the NDC and domestic policy goals and is taking every chance to make climate-smart investments marketable.



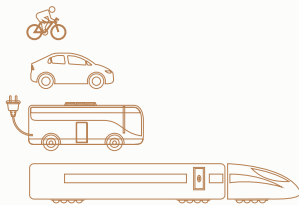
IFC estimates a total climate-smart investment opportunity of \$3.1 trillion in India from 2018 to 2030:



\$448 BILLION IN RENEWABLE ENERGY, created by the large scale, strong government commitment to install 175 GW of capacity by 2022, and the NDC target which aims for 40 percent of installed capacity to come from renewable sources by 2030



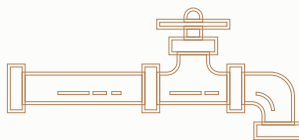
\$1.4 TRILLION IN GREEN BUILDINGS arising from rapid urbanization, policy incentives for green construction, and the fact that 70 percent of buildings needed by 2030 are yet to be built



\$250 BILLION IN TRANSPORT INFRASTRUCTURE to help achieve a modal shift from private to public transport, and **\$667 BILLION IN ELECTRIC VEHICLES** to meet the government's goal of electrifying all new vehicle sales by 2030



\$11 BILLION IN MUNICIPAL SOLID WASTE MANAGEMENT to bridge the gap between the significant amount of waste produced and the availability of appropriate infrastructure for solid waste management to 2030



\$128 BILLION IN CLIMATE-SMART URBAN WATER to collect, treat and manage urban wastewater, and help alleviate urban India's water stress



\$194 BILLION IN CLIMATE-SMART AGRICULTURE to boost agricultural productivity, enhance resource efficiency and resilience, and modernize India's agricultural sector



Priorities for India to Attract More Climate-Smart Investment

Implementing demand-side reforms, enhancing grid flexibility, minimizing curtailment rates, and clarifying the withdrawal of any incentives for renewable power will be essential to ensuring continued expansion of the sector. This will be further bolstered by enabling and promoting investments in energy storage to improve grid management. Involving private companies in establishing standardized supporting infrastructure for electric vehicles, will be important for the sector's development. Key to the development of the green buildings sector will be addressing the lack of public awareness and the high cost of borrowing, and better labeling and a voluntary disclosure approach would allow customers to distinguish between developers/buildings based on their compliance with green building codes.

IFC Advisory and Investment Spotlights



JAIN IRRIGATION SYSTEMS LIMITED (2007–2012)

In 2010, IFC partnered with Jain Irrigation Systems Limited, one of the world's largest manufacturers of micro drip irrigation systems and other agricultural products, to conduct a water footprint assessment. Jain Irrigation has received \$133 million in IFC-led investments since 2007. Use of the company's micro drip irrigation systems has resulted in annual yield increases between 60 percent and 130 percent, and income increases between \$500 and \$6,000 annually for client farmers. Growth in sales has more than tripled Jain Irrigation's consolidated revenues from \$315 million in 2007 to more than \$1 billion in 2012.



AZURE CLEAN ENERGY PRIVATE LIMITED (2009–2016)

As one of the first solar companies in the country, Azure Power has played a catalytic role in building a market that is now thriving. Supported by a broad range of IFC's financial products and services, the company's capacity has reached 500 MW distributed in 25 plants and several commercial rooftop projects. Azure aims to install 5 GW of solar power in India by 2022.

HERO FUTURE ENERGIES PRIVATE LIMITED (2017)

Partnering with the Global Infrastructure Fund—a private equity fund managed by IFC's Asset Management Company—IFC is investing \$125 million in equity, enabling the company to set up 1 GW of solar and wind plants in the next 12 months across India. These projects will contribute to the company's target to install 2.7 GW of renewable energy capacity by 2020 while creating jobs and promoting private sector development in renewable energy.



TATA CLEANTECH CAPITAL LIMITED (2017)

Tata Cleantech Capital Limited was established as a joint venture between Tata Capital and IFC in 2011. Since then it has funded more than 80 renewable energy projects with a total capacity of 3,500 MW. In July 2017, IFC signed an agreement to subscribe to \$40 million through a green bond issued by Tata Cleantech Capital Limited. Proceeds of the bond will be used to finance wind, solar, and other climate finance projects that meet green bond eligibility criteria. The green bond will be structured to be compliant with the 2016 Green Bond Principles, and Tata Cleantech Capital Limited is expected to become a signatory to the Green Bond Principles.



REWA ULTRA MEGA SOLAR PARK (2017)

In April 2017, the state government of Madhya Pradesh signed project agreements with solar power companies to begin building the 750 MW Rewa Ultra Mega Solar Park. IFC played a pivotal role advising the government of Madhya Pradesh, leading extensive negotiations with stakeholders and introducing internationally acceptable principles of project finance for renewable energy contracts in India. Due to unprecedented market interest and competitive bidding, for the first time solar energy tariffs fell lower than thermal power rates, without viability gap funding (a record low tariff of \$0.44 cents per kWh was offered). The 750 MW capacity project was auctioned in three packages of 250 MW each, which were won by Mahindra Renewables, ACME Solar, and Solenergie Power. Once commissioned, the plant will nearly double installed solar capacity in Madhya Pradesh, add 7.5 percent of India's total installed solar capacity as of 2016, and mobilize private sector investment of about \$500 million. In addition, the project will avoid 1 million tons of greenhouse-gas emissions each year.



PUNJAB NATIONAL BANK HOUSING FINANCE LIMITED (2016)

IFC committed to investing \$75.8 million in April 2016 in green bonds issued by Punjab National Bank Housing Finance Limited, India's fifth largest housing finance company, to help construct green residential buildings, develop affordable housing, and create more jobs. The bond is the first issuance designated to green buildings in India. The bank's funding of residential building projects is based on recognized green building standards, including the EDGE certification program. Projects financed through IFC's investment in this green bond are expected to reduce greenhouse-gas emissions by 1,500 metric tons of carbon dioxide each year and promote green building in India.

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://wurld.bg/PgpC30gS88e>



Creating Markets, Creating Opportunities

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

www.ifc.org