



RENEWABLES

THE GLOBAL GOAL IS TO ACHIEVE 36% RENEWABLES BY 2030

Renewable power is key to achieving inclusive and sustainable growth. IFC is helping governments around the world generate environmentally-friendly wind, solar, and hydro power to light homes, power industry, and secure a clean, sustainable energy future.

\$1.3
BILLION

In private sector investment generated through IFC's PPP projects for renewable power in developing countries.

1.3
GW

Renewable energy capacity created through IFC's PPPs.

10
MILLION

People have access to improved power through our projects.

1.5
MILLION

Tons of greenhouse gas emissions saved through IFC's renewable PPPs.

In partnership with Australia, Austria, Brazil, Canada, France, Ireland, Italy, Japan, Kuwait, Netherlands, Norway, Spain, Sweden, Switzerland, the United Kingdom, the United States, the Public-Private Infrastructure Advisory Facility, the Global Partnership on Output-Based Aid, the Private Infrastructure Development Group, the African Development Bank, the Asian Development Bank, the Brazilian Development Bank, the Caribbean Development Bank, the Central American Bank for Economic Integration, the European Investment Bank, the European Bank for Reconstruction and Development, the Inter-American Development Bank, the Infrastructure Consortium for Africa, and the Islamic Development Bank.

ZAMBIA: SCALING SOLAR 2016

Challenge: Years of drought led to a national power crisis in Zambia and made diversifying the energy mix a priority. But a small, untested market made it risky for solar developers to enter, and costly for Zambia to close solar projects.

Solution: IFC designed Scaling Solar for countries like Zambia, to make procuring solar IPPs easier and more affordable. Scaling Solar is a WBG solution, with IFC helping countries structure and tender projects that reduce risks, increase competition, and secure low tariffs.

Results: The Scaling Solar tender in Zambia set the benchmark for low solar tariffs in sub-Saharan Africa (outside South Africa) and the 75MW projects will fill 18% of the country's energy deficit. IFC has signed Scaling Solar mandates in Zambia, Ethiopia, Madagascar, and Senegal for a total capacity of 1.2GW of solar energy.

INDIA: REWA ULTRA MEGA SOLAR PARK 2017

Challenge: India set an ambitious goal to generate 100 GW of solar energy by 2022. But, solar power was historically more expensive than coal-fired energy, making it hard to reach that goal.

Solution: IFC helped the Government of Madhya Pradesh state structure and tender a PPP for the 750MW Rewa solar park, one of the world's largest single-site solar plants. IFC also created an innovative power distribution model enabling the Delhi Metro to take energy straight from the park to power its trains.

Results: The PPP secured the lowest solar tariffs in India's history, making solar as cheap as coal for the first time. Rewa will bring \$550 million in private investment and avoid a million tons of GHG emissions per year, creating a new market for large solar projects across South Asia.

SERBIA: BELGRADE WASTE TO ENERGY 2017

Challenge: Belgrade generates 500,000 tons of waste per year but its 40-year-old city landfill in Vinča was filled with untreated waste that polluted the air and groundwater, and caused fires at the landfill.

Solution: Concerned with the massive environmental impact of its growing waste problem, Belgrade asked IFC to design a PPP for a partner to build and operate a new waste treatment and disposal complex, including a waste2energy plant that will produce electricity and heat for the city.

Results: Serbia's first large-scale PPP will lead to EUR330 million in private investment, introduce EU standards in waste management, resolve an environmental threat, and reduce pollution and GHG emissions. The operator will also recover energy from waste and generate about 30MW of renewable energy at a combined heat and power plant for the city.

UGANDA: NYAGAK HYDRO 2016

Challenge: Only 20% of Uganda's people have access to electricity, and many rely on expensive and polluting firewood and diesel for energy and heating. The country needed affordable clean energy alternatives to meet its citizens' needs.

Solution: IFC structured a PPP to build a hydropower plant on the Nyagak River in the West Nile region that will contribute to Uganda's national energy plans.

Results: The 5.5MW Nyagak III hydro plant will connect 15,000 people to the grid and produce clean energy for two million West Nile residents, 43% of whom live below the poverty line. The PPP will also help avoid over 11,000 metric tons of greenhouse gases per year, and generate \$8 million in private investment.

JORDAN: TAFILA WIND 2013

Challenge: Jordan has to import over 90% of the energy it consumes. Supply disruptions or fluctuations in energy prices can have a major impact on its economy.

Solution: Jordan set out to more than double its renewable energy capacity by 2020. But it was difficult to attract private wind and solar developers to an untested market. IFC helped a local energy firm develop a set of bankable contract documents that worked for both public and private partners, and mobilized the project's entire debt package.

Results: The Tafila Wind Farm was Jordan's first major wind power project, generating 117MW of clean power, over \$280 million in private investment, reducing GHG emissions by 224,000 tons annually, and providing power to the grid at 25% below wholesale electricity prices.

INDIA: ROOFTOP SOLAR 2012

Challenge: India's Odisha State needed to increase energy production to meet rising demand. With the grid suffering losses of about 41%, the state wanted to harness the power of the sun and boost clean energy production.

Solution: Using virtually no state subsidies, IFC helped the Government of Odisha develop a pilot rooftop solar project, with a replicable and bankable business model that would also help rooftop owners earn extra income.

Results: The project will attract \$7 million in private investment, reduce greenhouse gas emission by 5,000 tons per annum, and improve energy services for 8,000 people. IFC is scaling up the PPP model across 10 other cities in Odisha and developing systems to help consumers install rooftop solar units.