Energy is crucial for economic and social development; yet over 1.2 billion people still lack access to electricity worldwide. Meeting the world’s growing need for power involves numerous challenges in power generation, distribution, and transmission, as well as energy efficiency.

During the past two decades, many developing countries, in an attempt to ensure sustainable supply of energy and improve the quality and reliability of electricity services, have been liberalizing and introducing private sector participation in their electricity markets.

For over 20 years, IFC has been a trusted advisor to governments on structuring public-private partnership (PPP) transactions, working on over 350 projects in 99 countries, including many of the world’s poorest. IFC’s advice in power projects helps to increase access to electricity, improve quality of supply and distribution, and reduce government budget outlays. The projects listed herein illustrate how IFC supports the establishment of partnerships with the private sector to improve living conditions and increase productivity, while supporting a sustainable future.

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.
PPP TRANSACTIONS

ALBANIA: HPP PRIVATIZATION (2013)
As part of a broader energy sector reform effort, IFC advised the Albanian Ministry of Economy, Trade and Energy to privatize four hydropower plants (HPP) with a combined capacity of 76.7 MW—HPP Ulëz, HPP Shkopot, HPP Bistrica I, and HPP Bistrica II. The Turkish company, Kürüm International, was awarded the two tenders for the four plants. Kürüm is planning to rehabilitate HPP Ulëz to improve the reliability of power supply. All four HPPs will be operated in compliance with strict environmental conditions.

KOSOVO: ELECTRICITY DISTRIBUTION (2013)
The successful unbundling and privatization of electricity distribution in Kosovo was a key component of the government’s economic development strategy. IFC acted as the lead advisor in the privatization of Kosovo Electricity Distribution and Supply (KEDS), a transaction expected to improve access to electricity for 1.8 million people. A decrease in power outages will help stimulate economic development and investment, while reduced technical and commercial energy losses will lead to a significant reduction in greenhouse gas emissions.

INDIA: GUJARAT ROOFTOP SOLAR (2012)
IFC provided advice to the government of the state of Gujarat on introducing a PPP in solar-based power generation by exploring and recommending the appropriate PPP structure and facilitating a pilot project. Two private sector companies won a 25-year concession for a 2.5 megawatt solar rooftop project each in the capital city of Gandhinagar. Under the agreement, the companies installed solar panels on the rooftops of public buildings and private residences and connected them to the grid. Over 10,000 people are expected to benefit from increased access to power. IFC is advising on the replication of this successful pilot in five other cities in the state.

INDONESIA: CENTRAL JAVA IPP (2011)
As the demand for electricity in Indonesia has grown quickly in the last decade, the government sought to increase power generation capacity, in part by encouraging private sector investment. In 2005, the government of Indonesia designated a proposed greenfield coal-fired power plant in Central Java as one of 10 model infrastructure projects. IFC was appointed as transaction advisor to PT Perusahaan Listrik Negara (PLN), the state-owned energy corporation, in this project. A consortium won the bid for a 25-year contract to build, own, operate, and transfer the new facility using highly efficient ultra-supercritical technology. The project consists of a 2,000 megawatt power plant and transmission facilities. The project is expected to facilitate $3.5 billion in private investment and improve electricity services to 7.5 million people.

LIBERIA: LIBERIA ELECTRICITY CORPORATION, LEC (2010)
In April 2010, IFC concluded the tendering of a five-year management contract for LEC, the electricity utility serving Liberia’s capital city of Monrovia. Manitoba Hydro International (MHI) of Canada was awarded the management contract and took over LEC operations on July 1, 2010. At the time LEC had approximately 4,500 connections. A minimum of 33,000 new connections are expected to be set up during the term of the contract, which would result in an additional 150,000 residents of Monrovia having electricity for the first time since the war. The management contract will also result in LEC’s improved operational performance over the long term. All investments in transmission and distribution, as well as operator’s fees, are being financed by donors.

PHILIPPINES: OLONGAPO CITY POWER DISTRIBUTION (2010)
IFC advised Olongapo City—an autonomously-administered region of the Philippines—in reviewing, structuring, and implementing the upgrading and sustainable operation of the Olongapo City Distribution Utility System through the introduction of private sector participation. The private sector investor—with established financial standing and experience in electric power distribution services—is expected to reduce technical losses and provide improved services to 200,000 people.

ALBANIA: ASHTA HYDROPOWER (2008)
IFC played a key role in helping structure and implement the Astha hydropower plant project, Albania’s first major hydropower plant construction in 30 years and the government’s first large PPP in the energy sector. Verbund, Austria’s largest electricity company, was the winning bidder of a concession to build and operate a new 53 megawatt hydropower plant expected to improve services for 170,000 people.

PHILIPPINES: RURAL ELECTRIFICATION (2005-2008)
In remote parts of the Philippines, IFC is helping the government meet the challenges of rural electrification through the introduction of private sector efficiency in power generation in off-grid areas covered by the Small Power Utilities Group (SPUG). IFC signed a comprehensive mandate with the Philippine government to open 14 areas covered by SPUG to private sector participation. To date, new power supply agreements between private generators and electricity cooperatives have been introduced on three islands: Romblon, Masbate, and Basilan. These transactions are expected to reduce generation costs and the subsidy burden, improve reliability and quality of supply, and help meet projected demand in off-grid areas.

CAMEROON: SOCIÉTÉ NATIONALE D’ÉLECTRICITÉ, SONEL (2001)
In the late 1990s the government of Cameroon reformed the power sector, which included privatizing the state’s power company, Société Nationale d’Électricité (SONEL), an integrated utility. IFC was appointed transaction advisor, and in July 2001, AES Corporation acquired 56 percent of SONEL’s equity and entered into a 20-year concession agreement to generate, transmit, and distribute electricity in Cameroon.

PANAMA: INSTITUTO DE RECURSOS HIDRAULICOS Y DE ELECTRIFICACION, IRHE (1999)
IFC advised the government of Panama on the restructuring and privatization of its vertically-integrated electricity utility. IRHE was unbundled into four generation companies, three distribution companies, and one transmission company. The successful privatization of the distribution and generation companies resulted in an immediate
private capital inflow of $600 million and reduced retail tariffs by 10 percent.

**BRAZIL: COELCE POWER UTILITY (1998)**
The government of Ceará appointed IFC as lead advisor to implement a modernization program in the power sector that included the privatization of Companhia Energética do Ceará (COELCE), the state power utility. One of the first large power sector privatizations in Brazil’s Northeast Region, COELCE’s privatization helped ensure that Ceara’s power needs were met, improved services, and gave the state a competitive advantage to attract private sector development. In addition, proceeds were used to support investment programs in infrastructure and to establish a pension fund for state government employees.

**GABON: SOCIÉTÉ D’ENERGIE ET D’EAU DU GABON, SEEG (1997)**
In 1997, Gabon privatized its electricity and water utility, Société d’Energie et d’Eau du Gabon (SEEG). IFC was the lead advisor to the government. The winning bidder, a consortium of Companie Générale des Eaux of France (currently Veolia AMI, an indirect subsidiary of the Veolia Environnement group) and ESB International of Ireland, became a majority shareholder with 51 percent of capital. The 20-year concession contract covers the production, delivery, and supply of drinking water and electricity primarily in the cities of Libreville, Port-Gentil, and Franceville, with quantifiable obligations to extend services to rural areas over the concession period.

Electrolima, Peru’s second largest electricity generator and Lima’s largest distributor, was restructured into three separate companies: one generation company, Edegel, and two distribution companies, Edelnor and Luz del Sur (formerly Edelsur). IFC advised the government on the unbundling process and the privatization of the created companies. Successfully privatized, the distribution companies showed an increase in productivity and efficiency, as well as a reduction in technical losses.

**STUDIES**

**MOROCCO: OUARZAZATE SOLAR POWER (2011)**
IFC helped the Moroccan Agency for Solar Energy to develop a pilot solar-power complex near the city of Ouarzazate, the first large scale solar program in the region. The complex will comprise one or more plants with an aggregate capacity of 500 MW to be commissioned by 2015. The project was awarded to a consortium led by ACWA Power from Saudi Arabia.

**INDIA: BIOMASS POWER GENERATION (2010)**
With concern about the impact of climate change increasing, the idea of using agricultural crop residues to generate electric power is gaining importance. In the state of Punjab, biomass-based power plants could not only provide new energy sources, but could also reduce the open burning of residual bio-wastes. IFC helped the government assess the potential of biomass-based power generation through PPPs.