“IFC enabled us to bring the best practices to the project, as well as the best technology partner. The proposal attracted tremendous response and because we went with the best practices, within six months to a year, we saw that rooftops across the city were full of solar panels ... The carbon footprint can be completely reduced, and we can see climate change effects cut back.”

— Mr. D.J. Pandian, Principal Secretary in the Energy and Petrochemicals Department for the Government of Gujarat
The Opportunity

The state of Gujarat, located in western India, has embraced the idea of renewable energy. The state government plans to develop 500 MW of solar power capacity by March 2014 to meet its energy needs, and to make its capital, Gandhinagar, a model solar city. However, many technical, regulatory, and commercial challenges confront it.

To pave the way for large-scale solar power, the government sought private sector participation to finance and build two 2.5 MW pilot solar projects in Gandhinagar that will use rooftop solar panels to generate a total of five MW annually. Although modest, the project will address issues constraining the adoption of solar power, provide extra power capacity to the grid, and contribute to the reduction of greenhouse gas emissions.

The government of Gujarat needed assistance in selecting the most appropriate technology, and in concluding suitable agreements with private investors and the power procurer.

Our Approach

Gujarat’s Department of Energy and Petrochemicals appointed IFC its lead transaction advisor to execute the pilot public-private partnership project in rooftop-based solar power. IFC’s Advisory Services in Public-Private Partnerships and IFC’s Sustainable Business Advisory leveraged their respective sector knowledge to successfully execute the project, lay the foundation for a long-term business relationship, and enhance IFC’s position as a global thought leader in this space. Besides providing transaction advice, IFC’s role included technical, legislative, analytical, and marketing support. Specifically, IFC’s support included:

• Analyzing the technical options for solar panels, for example, using concentrated solar power or photovoltaic solar panels; resolving connectivity issues; and determining maintenance requirements. IFC recommended using solar panels mounted on rooftops.

• Reviewing social, legal, and commercial issues related to renting rooftop space from residential and commercial buildings, and then developing terms for the rental agreements.

• Organizing an investors’ conference to discuss the project with potential investors and get their feedback. More than 40 firms attended, demonstrating strong interest in the project.

• Leading discussions with the client and the local private distribution company, Torrent, on the power purchase agreement. IFC helped broker the terms so that Torrent would purchase electricity generated by the rooftop panels.

Azure Power and SunEdison each won 25-year concessions for the 2.5 MW pilot solar projects. The two developers will install solar photovoltaic panels on the rooftops of public buildings and private residences and connect them to the grid.

IFC, a member of the World Bank Group, is the largest global development institution focused exclusively on the private sector in developing countries.