
Table of Contents

The vast majority of utility solar projects are structured so that the utility does not own the generating assets, but rather the utility signs a long-term PPA to buy the electricity from the plant. Demand for utility PPAs is largely driven by (i) the utility's need to meet renewables mandates, (ii) energy demand growth and (iii) the retirement of existing generation assets.

Key drivers of solar energy growth

We believe the following factors have driven, and will continue to drive, the global growth of solar energy:

Grid parity. We define "grid parity" as the point at which renewable energy sources can generate electricity at a cost, excluding any government incentives or subsidies, equal to or lower than prevailing retail electricity prices.

The cost of solar energy has undergone a significant decline and is expected to continue to decline going forward. On a global basis, the average total installation cost of solar energy projects is expected to decline by more than 66% in the ten-year period ending in 2020. In 2010, the average installation cost per watt of capacity in the utility market was \$3.24 and fell to \$1.50 in 2014. By 2020, this number is expected to fall to \$1.09.

Conversely, we expect retail electricity prices to continue to rise primarily due to increasing costs of conventional sources of energy, required investments in transmission and distribution infrastructure and increasing regulatory costs for conventional energy sources. We believe accelerating industrialization, an expanding middle class and the need to develop energy grid infrastructure will continue to drive demand in our initial target markets for the foreseeable future. Rising retail electricity prices create a significant and growing market opportunity for lower-cost retail energy. Solar energy may be able to offer C&I customers clean electricity at a price lower than their current utility rate. Whether solar power generation has achieved grid parity is dependent upon a number of factors, including the scale of and technology utilized by the generation project, cost of capital, applicable installation costs and maintenance expenses, local electricity rates, local meteorological characteristics, transmission fees and taxes. As a result, we evaluate grid parity on a project-by-project basis at the time such project achieves its COD. None of our projects in our initial portfolio achieved grid parity at the time of their respective COD. We do, however, believe grid parity has been reached in certain areas within our target markets where our Sponsor is actively pursuing development activities. For example, we believe that grid parity has been achieved in certain Indian states, such as Maharashtra, for certain industrial customers based upon a comparison of energy pricing data provided by the Government of India and recent pricing contained in PPA offers made by our Sponsor. At this time, we do not know the specific timing as to when grid parity will be achieved for any new projects we acquire in our initial target markets.

Movement to distributed generation. Although some locations are more suitable than others, solar energy systems can generate electricity nearly anywhere. By contrast, hydro-electric power, wind or geothermal electricity generating systems are site-specific and location is critical. This means power generated by solar energy systems can sometimes be delivered at a relatively low cost to areas that were previously difficult to service, have high transmission and distribution charges, or have high load requirements. Solar power can, in some cases, defer transmission and distribution investments and replace or significantly reduce the use of expensive and environmentally detrimental on-site power generation technologies, such as diesel generators.

Distributed solar energy systems provide customers with an alternative to traditional utility energy suppliers. Distributed resources are smaller in unit size and can be constructed at a customer's site, removing the need for lengthy transmission and distribution lines. By bypassing the traditional utility suppliers, distributed energy systems delink the customer's price of power from external factors such as volatile commodity prices, costs of the incumbent energy supplier and transmission and distribution charges. This makes it possible for distributed energy purchasers to buy energy at a predictable and stable price over a long period of time.