OVERVIEW:
Leading retailer Walmart India Private Limited has partnered with Amplus Energy Solutions to provide green energy across its wholesale operations in the country. The agreement was to install and commission rooftop solar plants for 13 Best Price outlets located across six states and will be made up of 15,900 Trina Solar PD14 modules.

SITUATION
Walmart India Private Limited is a wholly owned subsidiary of Walmart Stores Inc., an American multinational retailing corporation that operates a chain hypermarkets, department stores, and grocery outlets. For over a decade, the company has sought to improve and increase energy efficiency globally with a goal to be 100% supplied by renewable energy most notably solar and wind.

In India, Walmart has pledged to meet 50% of energy needs through renewables. Partnering with Amplus Energy Solutions, the two companies signed a power purchase agreement (PPA) for rooftop PV plants that generate approximately 5MW. These were installed for 13 Best Price wholesale outlets across six states – Punjab, Uttar Pradesh, Madhya Pradesh, Rajasthan, and Andhra Pradesh and Chattisgarh.

The PPA has been a highly effective model allowing Walmart to leverage their scale and buying power to accelerate its renewable deployment. By carefully managing the engineering, procurement, and construction process, Amplus Energy Solution minimised disruption to business operations, guaranteeing both financial savings and environmental benefits over the course of the project.

PRODUCT SOLUTION
Certified to withstand challenging environmental conditions, over 15,000 modules of the Trina Solar TSM PD14 were installed on 13 project sites. This 72-cell multicrystalline modules provide more than 16.0% efficiency and is highly reliable as a result of strict performance standards and stringent quality control that include over 30 internal verification test standards.
As one of the few suppliers who have successfully developed a vertically integrated business model from the production of monocrystalline and multicrystalline ingots, wafers and cells to the assembly of high quality modules, Trina Solar fulfilled the criteria set by Amplus Energy Solution in choosing to work with high quality, top rated suppliers with a proven track record.

RESULTS

The first implementation came online in September 2016. When completed the project is expected to reduce emissions by 172,000 tons of carbon dioxide. This is equivalent to planting 215,000 trees and reducing consumption of 1,275,000 barrels of crude oil. Savings from solar energy are estimated to be INR 839 million over the life of the plant which is about 46% over the variable grid cost of electricity.

As a leading distributed solar generation company in India, Amplus Energy Solutions values customer satisfaction and places its customer at the heart of its business. Together with Trina Solar, Amplus Energy Solution is able to commit to high impact projects that provide its customers long term commercial savings and contributes significantly towards environmental sustainability.