

# Eastern Industries Turn to Solar as Grid Power Falters

Mounting outages and rising costs push factories in the Sunsari-Morang corridor to embrace solar as a long-term energy strategy.

## ■ NewBiz Report

► **Frustrated** by chronic low voltage, erratic supply, and repeated feeder cuts, industries in the Sunsari-Morang Industrial Corridor are making a decisive shift toward solar power. With the Nepal Electricity Authority unable to ensure consistent, high-quality electricity—particularly during the dry winter months—factory owners are increasingly investing in rooftop solar systems to safeguard production and reduce long-term costs.

More than 40 large and medium-sized industries in the corridor have already installed solar plants, transforming factory rooftops into power-generation hubs. What began as a stopgap measure to cope with unreliable supply is fast becoming a strategic investment decision driven by economics as much as necessity.

According to Amit Rathi, member of the Morang Chamber of Commerce and Industry, solar power now costs industries roughly Rs 4 per unit to generate—about half the average rate charged by the national utility. “Especially in the dry season, when supply disruptions are frequent, solar has proven both reliable and cost-effective,” he said.

The financial case is compelling. Installing a 1-megawatt (MW) solar plant requires an investment of around Rs 38–40 million, excluding VAT. By comparison, the annual electricity bill for consuming 1 MW from the national grid can exceed Rs 80 million. Solar systems can carry full operational loads from 8 a.m. to 3 p.m., allowing factories to rely on grid electricity only during evening and

nighttime hours.

Several major manufacturers have already embraced the transition. Installations are underway at Asian Thai Foods, Asian Biscuits, Premier Wire and Pashupati Synpack Industries, with combined capacity expected to reach about 3 MW.

Mahesh Jaju, Director of Asian Thai Foods, said work on the company’s 2 MW solar plant is progressing swiftly. Within a month, he expects the factory to meet all its daytime electricity needs through its own solar generation. He noted that during the dry season, industrial feeders are often cut as priority is given to domestic supply, while low voltage and irregular power further disrupt operations. “Solar energy has become an effective and practical solution to these recurring problems,” he said.

Technical teams from Prime Renewable Company are also installing systems at Arihant Multifiber, Arihant Polypack, and Premier Wire, with additional projects lined up at Swastik Rolling, Swastik Polymer, Swastik Rice & Dal, Laminar Industries, and Pashupati Iron & Steel. Company officials estimate that a 1 MW plant costs between Rs 38–40 million, excluding VAT.

Interest in solar peaked at the recent Birat Trade Expo organized by the Morang Trade and Industry Association, where agreements were signed for plants totaling approximately 6 MW. According to Amit Sharada, the expo coordinator, two of his own four factories have already gone solar, with installations

planned for the remaining two.

For some businesses, the benefits are already well established. Suyash Pyakurel, Director of MM Plastic Industry in Biratnagar, said his factory has been using solar energy for the past four years. The shift has ensured reliable power supply and significantly reduced production costs. “When hydropower output declines during the dry season, solar becomes a dependable alternative,” he said.

Policy support has further accelerated adoption. The Nepal Electricity Authority offers a net-metering facility for industrial rooftop projects, allowing factories to feed surplus electricity into the national grid. Most industries are opting for grid-connected systems, which channel solar power directly into the grid rather than storing it in batteries.

Chudamani Bhattarai, Director General of the Chamber of Industries Morang, said business owners now see solar not merely as a seasonal backup but as a cornerstone of long-term energy planning. Industries can generate their own power, lower operating costs, and even earn additional income by selling excess electricity back to the authority.

With a price difference of about Rs 4 per unit between grid electricity and solar generation—and with the authority purchasing solar power at up to Rs 5.94 per unit—the financial incentives are clear. Subsidy programs could further increase returns, potentially adding Rs 7–8 per unit in additional benefit.

In eastern Nepal’s industrial heartland, solar power is no longer viewed as an alternative. It is steadily becoming the backbone of a new, self-reliant energy model. ■