

# ROOFTOP SOLAR PV

If you have a textile factory which is struggling with no grid connection or mostly dependent on diesel generators, it is time you need to diversify your energy sources. Bangladesh PaCT will support you in making an informed decision about installing rooftop solar photovoltaic (PV) system at your factory.

Bangladesh PaCT: Partnership for Cleaner Textile is a holistic program that supports textile wet processing factories in adopting Cleaner Production (CP) practices, and engages with brands, government, communities, financial institutions, and other stakeholders to bring about systemic, positive environmental change for the Bangladesh textile wet processing sector, its workers, and surrounding communities, and to contribute to the sector's long-term competitiveness and environmental sustainability. To date, 13 brands and two technology suppliers have partnered with PaCT.

Lack of a reliable energy supply has prompted the textile industry to look for alternative sources of energy. Solar rooftop has immense potential in the energy intensive operations of the textile industries in Bangladesh by way of utilizing vacant and shadow free rooftop space. Rooftop space can be utilized for solar PV installation provided a thorough feasibility has been carried out.

## BENEFITS

Utilization of free space

Modular design

Proven technology

Increased fuel savings

Security against rising energy cost

Diversification of energy sources

Environment friendly

Low maintenance

## What PaCT Offers

PaCT will organize technical and financial feasibility studies of rooftop solar PV in textile factories and support the factories in preparing bid documents, finalizing vendors, preparing an implementation plan and introducing them to IFC's partner FIs for financing.



Technical and financial feasibility studies by an international consulting firm



Bid document for RFP from vendors



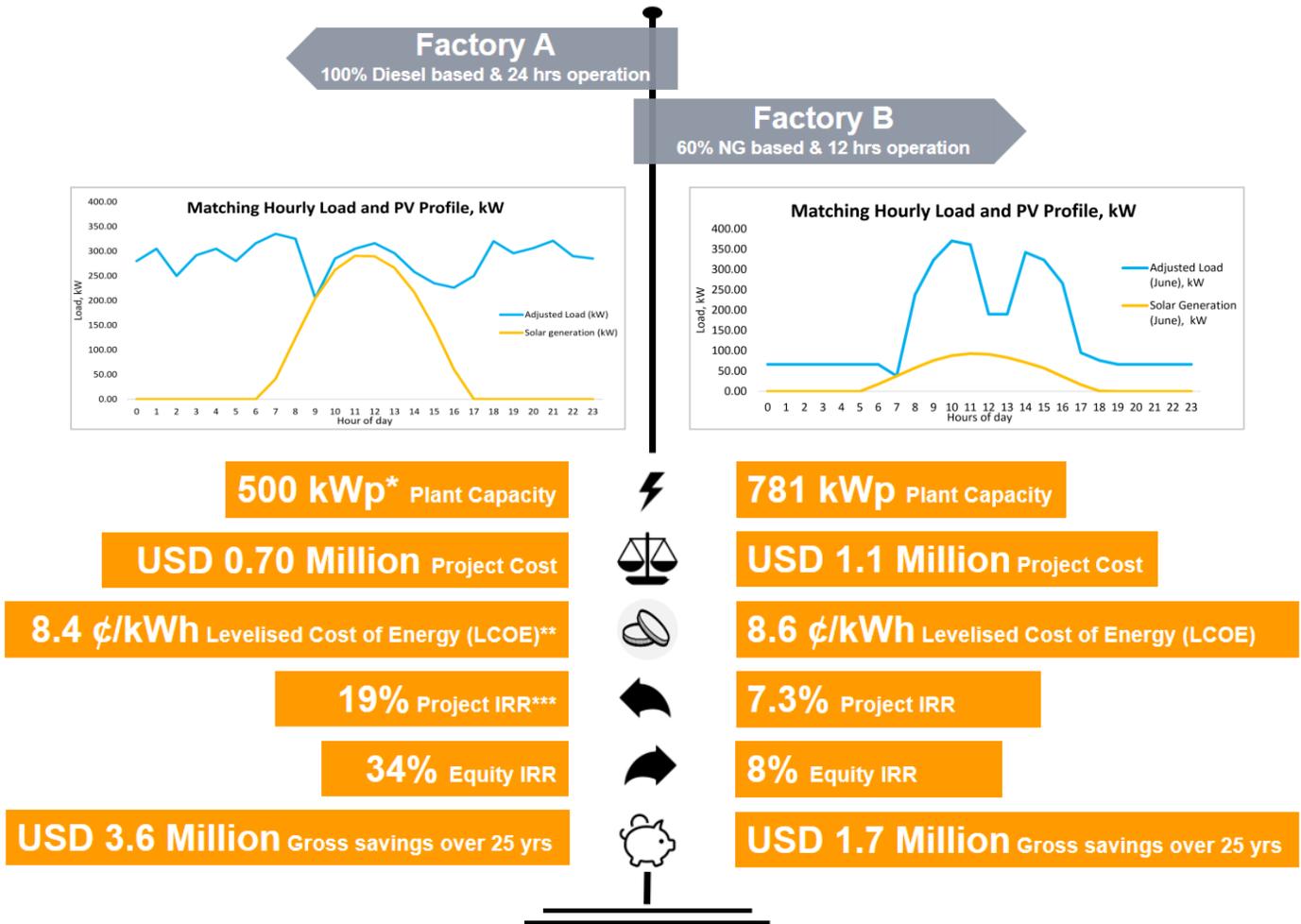
Vendor selection through bidding evaluation framework



Facilitating financing through IFC's partner financial institutions (FI)

# Side-by-side Comparison of the Outcomes of Feasibility Studies on Rooftop Solar PV at PaCT Partner Factories located near Dhaka

PaCT worked with two of its partner factories with different energy usage profiles to determine the technical and financial feasibility for optimum level of PV capacity addition at these factories, and provide a comprehensive analysis on various aspects of rooftop solar integration with the existing sources of energy. The consulting firm, appointed by the PaCT program, undertook site visits to the factories and collected data related to the type of rooftop, shadow free area, load details, electricity consumption pattern during operating hours, supply sources and other related details to analyze the technical and financial feasibilities of a rooftop solar project.



\*kWp: Kilo Watt Peak

\*\*Levelized Cost of Energy (LCOE): Total lifecycle cost of producing a kWh of power using rooftop solar PV

\*\*\*IRR: Internal Rate of Return

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