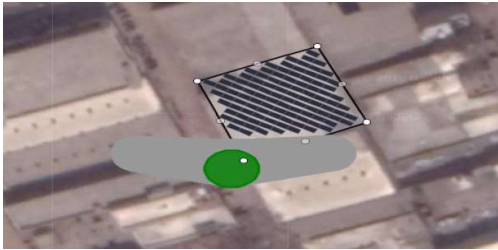
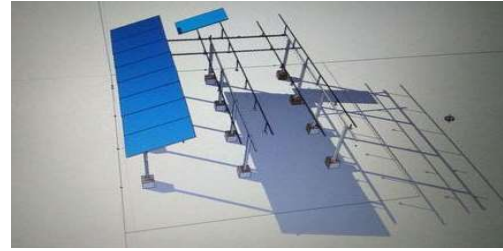


## SUN ANALYZER—DESIGN A SOLAR PLANT

### NEED FOR THE SUN ANALYZER

Shading analysis is a very crucial step in finalizing Solar Panel locations in distributed Photovoltaic (PV) solar installation. The extent of the rooftop area required by a solar PV plant is a factor of panel efficiency and extent of shading. Any kind of shading is detrimental to the performance of the entire solar PV plant. Solar panels are mostly arranged in strings to meet voltage requirements. A shade in one panel not only reduces the efficiency of that panel but cuts short supply from entire string. A shadow falling on a panel blocks the flow of solar energy and eventually, the panel gets damaged through heating. The efficiency of a panel at any time reduces in direct proportion to the area of the shadowed part of the panel. Sometimes even panels not in shadow zone get heated as they try to compensate for the power loss. Most often the damaged panels are not covered under warranty, adding to the operations cost of the plant.



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### FEATURES OF SUN ANALYZER

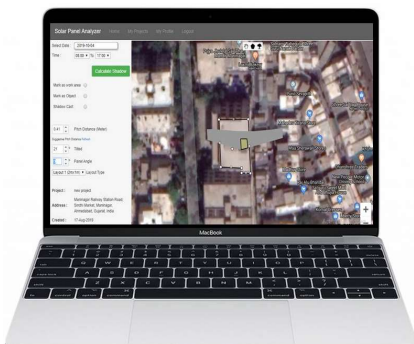


With **Google Map Interface**, draw line, polygons or any shape for a simple modeling and creating a roof plan for work area & shadow objects like parapet walls, water tanks, exhaust vents, panel shading, trees, etc.

**View and Edit** a Project site, make structures for obstructions on roofs, nearby buildings, trees and hoardings. Create multiple buildings in one frame.



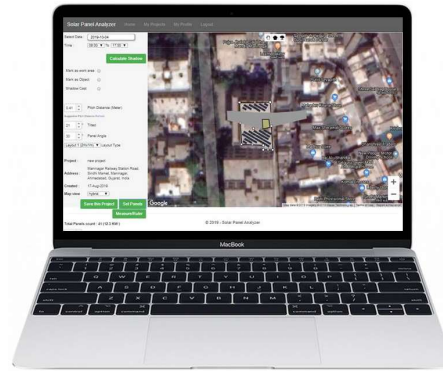
Use the Sun Analyzer Tool, **Simulate** the shadows on roof for any day of the year and record impact of shading caused by parapet walls, water tanks, exhaust vents, panel shading, trees, etc.



Change the number of hours of the sunlight on the roof and record the impact

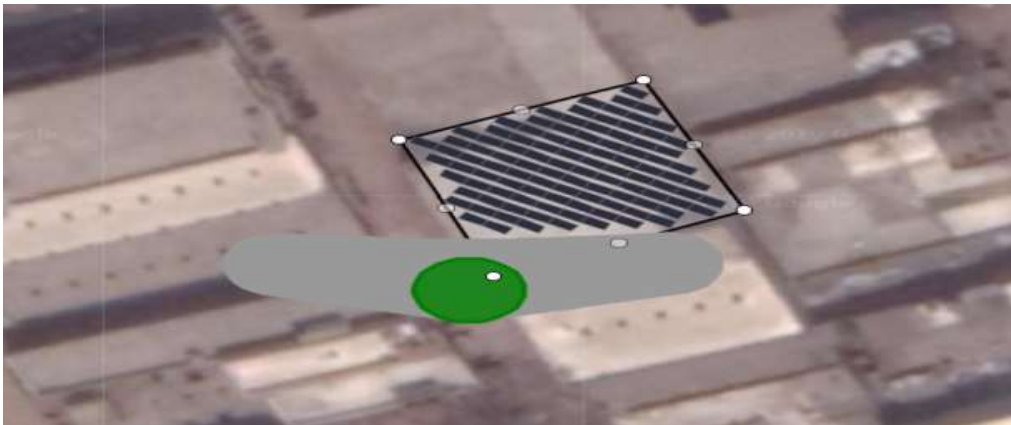
The **Optimization Process** to design a Solar PV system

Place solar PV panels automatically on the Rooftop area without in the shadow free area



**Generate Plant Layout & Shadow Analysis Report** Screen shot of buildings, shadow and PV panels are imported to generate a Plant layout & Shadow Analysis report in 'PDF' format.

## WHAT MAKES US DIFFERENT FROM OTHERS:



- Easy to Use User Interface
- User defined settings like panel specifications, spacing, tilt and azimuth characteristics
- Simulate and design solar PV plant in 10 mins
- Prepares Array Layout with the solar PV power plant
- Calculates energy generation
- Generate a report within minutes with plant layout details, monthly production values, etc.
- Integrated with AHA Rooftop Solar Helper Pro (A Digital Work Management Tool specific for Solar Rooftop Industry)
- No Complex data entering or setting the parameters for hours.