

PV Insights™

Optimizing Plant Performance

Business Benefits

- ✓ *Single View of Operations* - Aggregate Data from sources
- ✓ *Generate Insights* - Extract value by identifying asset losses & performance degradations
- ✓ *Minimize NPT* - Streamline operational processes to increase availability and reduce maintenance costs
- ✓ *Maximize Profitability* - Real-time sharing of insights with stakeholders & third-party service providers

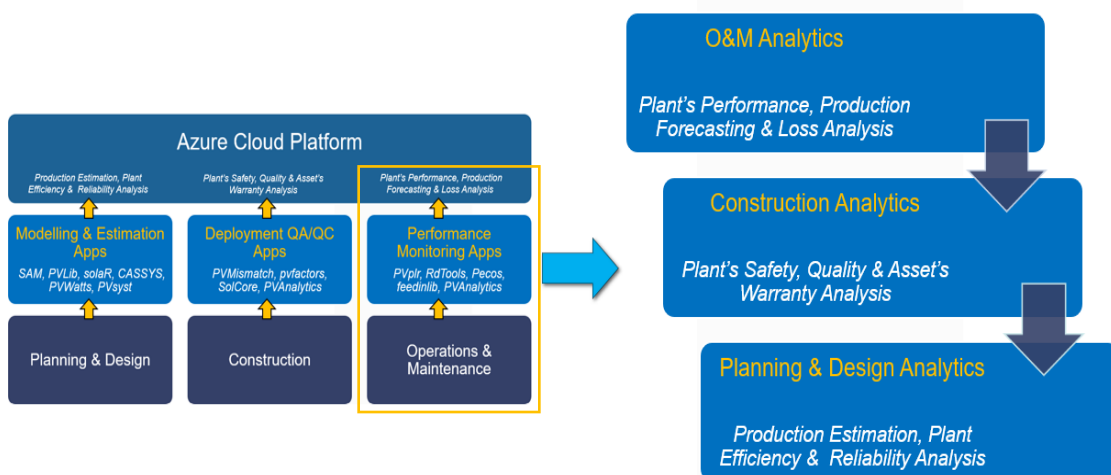
Key Features

- ✓ *Performance* - Inverter Ranking, Inverter Profiling, Anomaly Insights
- ✓ *Forecasting* - Daily Yield, DC Power, Weather impact on plant output, What-If Models
- ✓ *Losses* - DC to AC Power Loss, Clipping, Cable Losses, Soiling, etc.

PV Insights™ is a cloud-based, plug & play solar PV plant analytics solution that drives plant performance and targets to reduce O&M costs by using prediction & anomaly detection through its AI and ML models. PV Insights™ helps to drive digital transformation in the O&M phase for solar PV plants. The SaaS platform derives value by identifying asset losses & performance degradations using customized analytics. Key outcomes from this platform are to -

- Monitor and predict performance insights from plant assets
- Forecast daily yield, total yield, and power based on weather patterns
- Estimate annual energy production (AEP) from long-term gross energy & expected future losses

PV Insights™ API based modules support continuous performance monitoring, trend analysis, forecasting, and predictive analytics to ensure maximum plant performance and reduce plant downtime. The platform has the capability to monitor patterns and trends in data to better predict and potentially optimize future maintenance and performance activities. O&M managers can augment their solar PV plant's maintenance in the areas of preventative, corrective, and condition-based maintenance.



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Platform Availability

- ✓ Access to Daily Reports, O&M Insights, and Outlier Reports
- ✓ Run App as a Service from anywhere with access to view the dashboards and reports

PV Insights™ is part of a product portfolio of Renewable Insights Pvt. Ltd.

Sales & Marketing

US – Houston

India – Bangalore, Mumbai

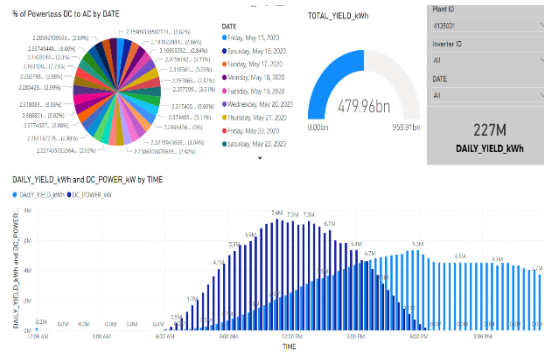
Services & Solutions Delivery

US — Houston

India – Bangalore, Mumbai

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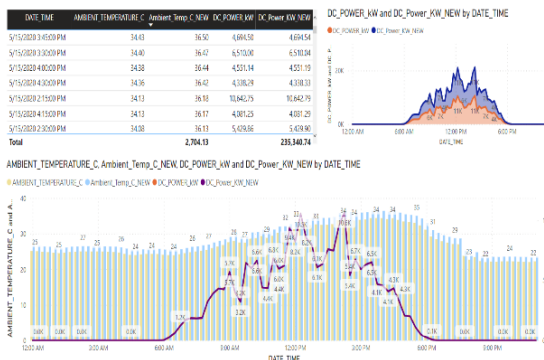
sales@renew-insights.com



Forecasting Models

PV Insights™ helps to forecast daily yield, total yield, and power, leveraging AI/ML models

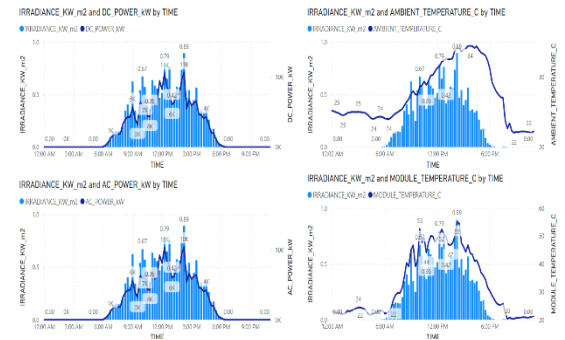
- ✓ Supports statistical, AI, and machine learning models
- ✓ PV power and yield forecasts based on what-if models running on weather parameters



Performance Analysis

PV Insights™ helps to monitor plant assets (e.g., Inverters, Combiner Boxes, MFM/Power Meters) and predict performance of the plant

- ✓ Real-time dashboard shows asset performance and allows confidence on the prediction of plant output
- ✓ Performance analytics reports on known threshold values for condition indicators that detect failure histories of similar assets
- ✓ Supports performance rankings, probability distributions and anomaly insights



What-If Scenarios

PV Insights™ helps to forecast AEP from long-term gross energy and expected future losses

- ✓ Estimating revenue, meter energy, and losses based on weather parameters
- ✓ Supports real-time KPI dashboards and energy production related visualizations