



**FactoryTalk DataMosaix
: Effective Tool for
Performance Analysis**



- As we all know : AI is future, so it is in manufacturing operations also.
- The manufacturing industry is facing unprecedented challenges in terms of sustainability and profitability. In order to remain competitive and meet the demands of consumers, manufacturers are turning to advanced technologies such as analytics and AI.
- With this thought and vision, we at “Dalmia Bharat Cement Limited” initiates to go for installing this technology in order to make better decisions, optimize our operations, and ultimately achieve greater sustainability and profitability.
- By leveraging data and insights, we can have a competitive edge and drive innovation in our industry

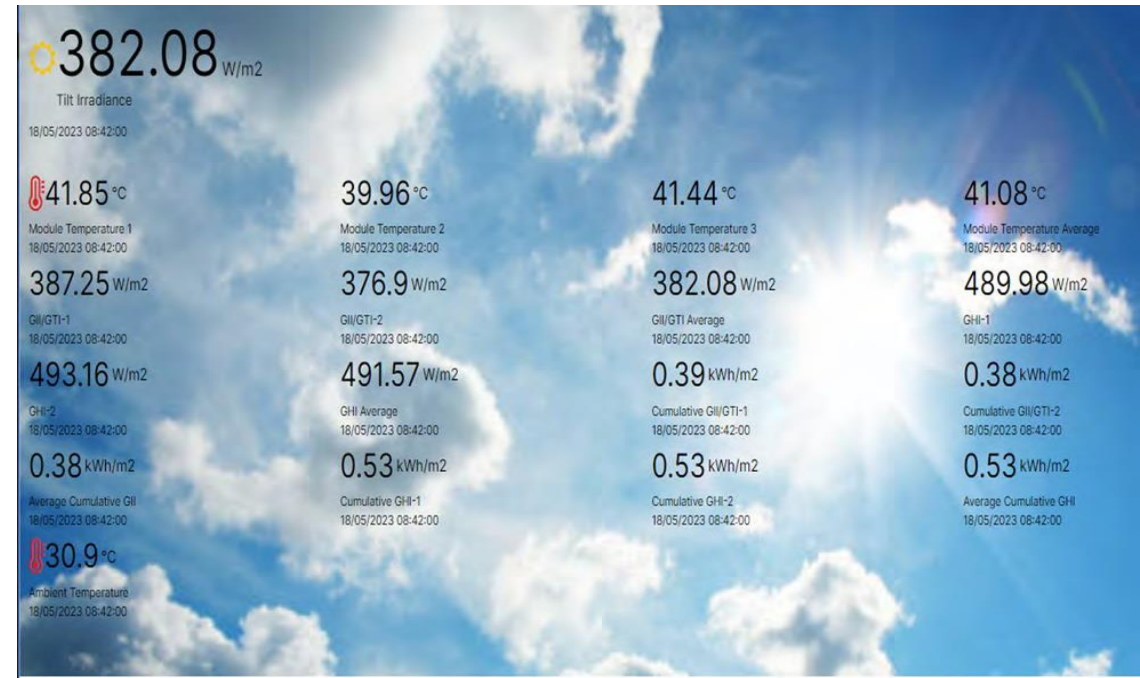
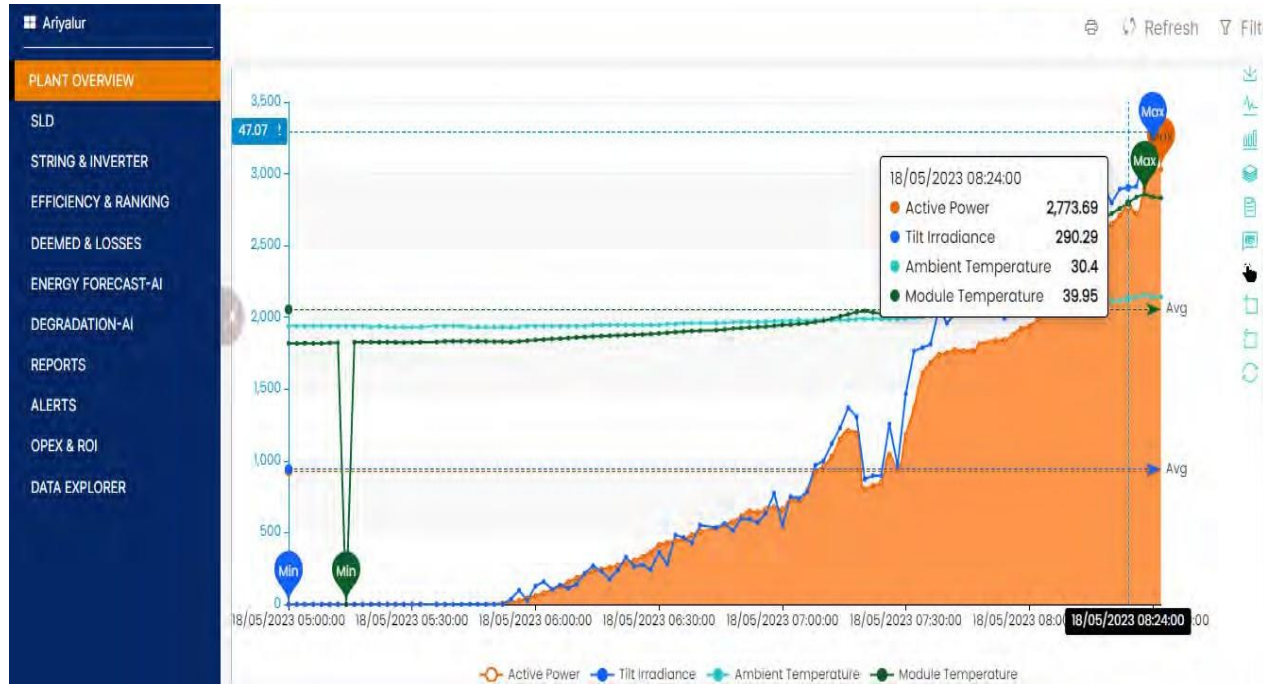
What we got from FactoryTalk DataMosaix

- Availability of real-time monitoring of Critical Process Parameters
- Real-time Alerts to Operators.
- Plant Corporate & Management have a consolidated KPI Dashboards for their multi- plant operations under a single view.
- Production Process Monitoring & KPI Dashboards
- Performance Indicators of Utilities
- Proactive control enabled to monitor Critical Process Parameters and trigger Alerts
- Reduced Operational Risk through triggering of Alerts for deviations, to be actioned by Plant team.

Business Outcome & ROI

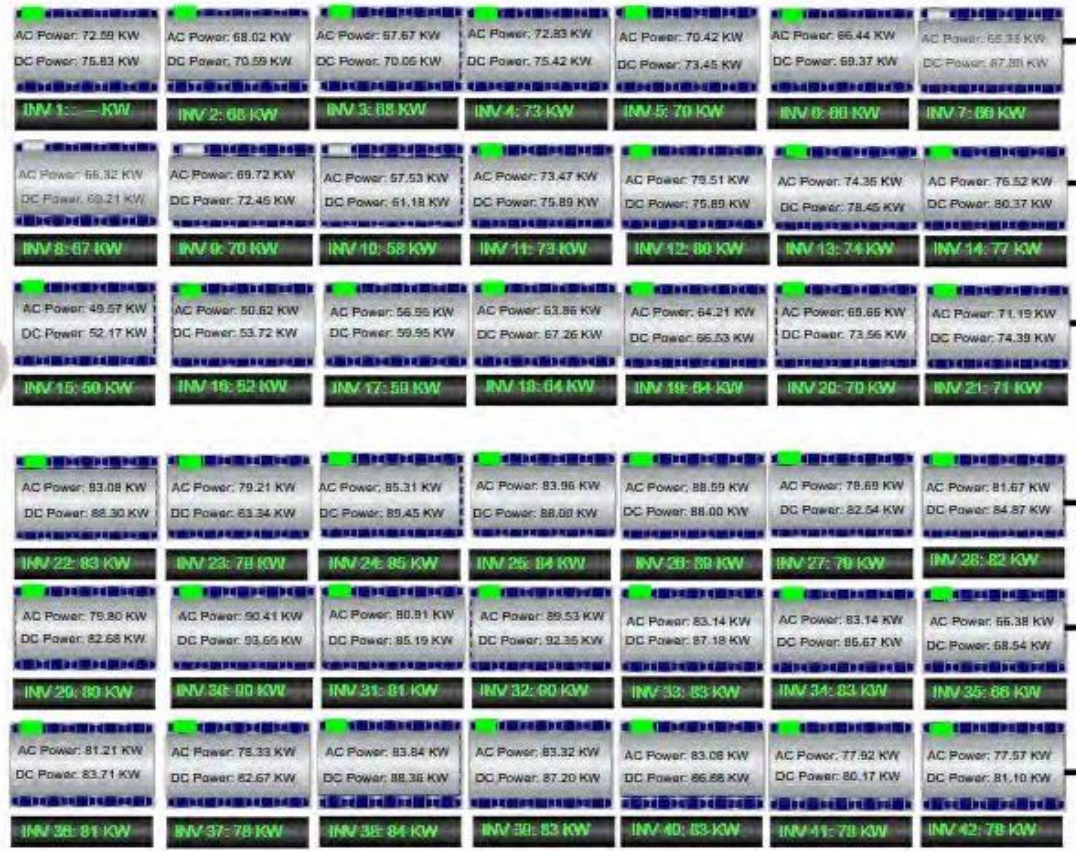
- Improvement in Worker Productivity
- Downtime Reduction through proactive alerting for KPI deviations
- Elimination of Manual Data recording by Operators

Mobile App Dashboards for KPI Monitoring



Plant Performance Monitoring

Data Last Refreshed On : May 18, 2023, 8:36:00 AM



LT Panel 1

AC Power: 1249.74 KW
DC Power: 1304.87 KW
Today Generation: 1289.30 KWH

LT Panel 2

AC Power: 1569.00 KW
DC Power: 1642.13 KW
Today Generation: 1526.50 KWH



Active Power 3178.47 KW

Today Energy-Inverters: 3.23 MWH

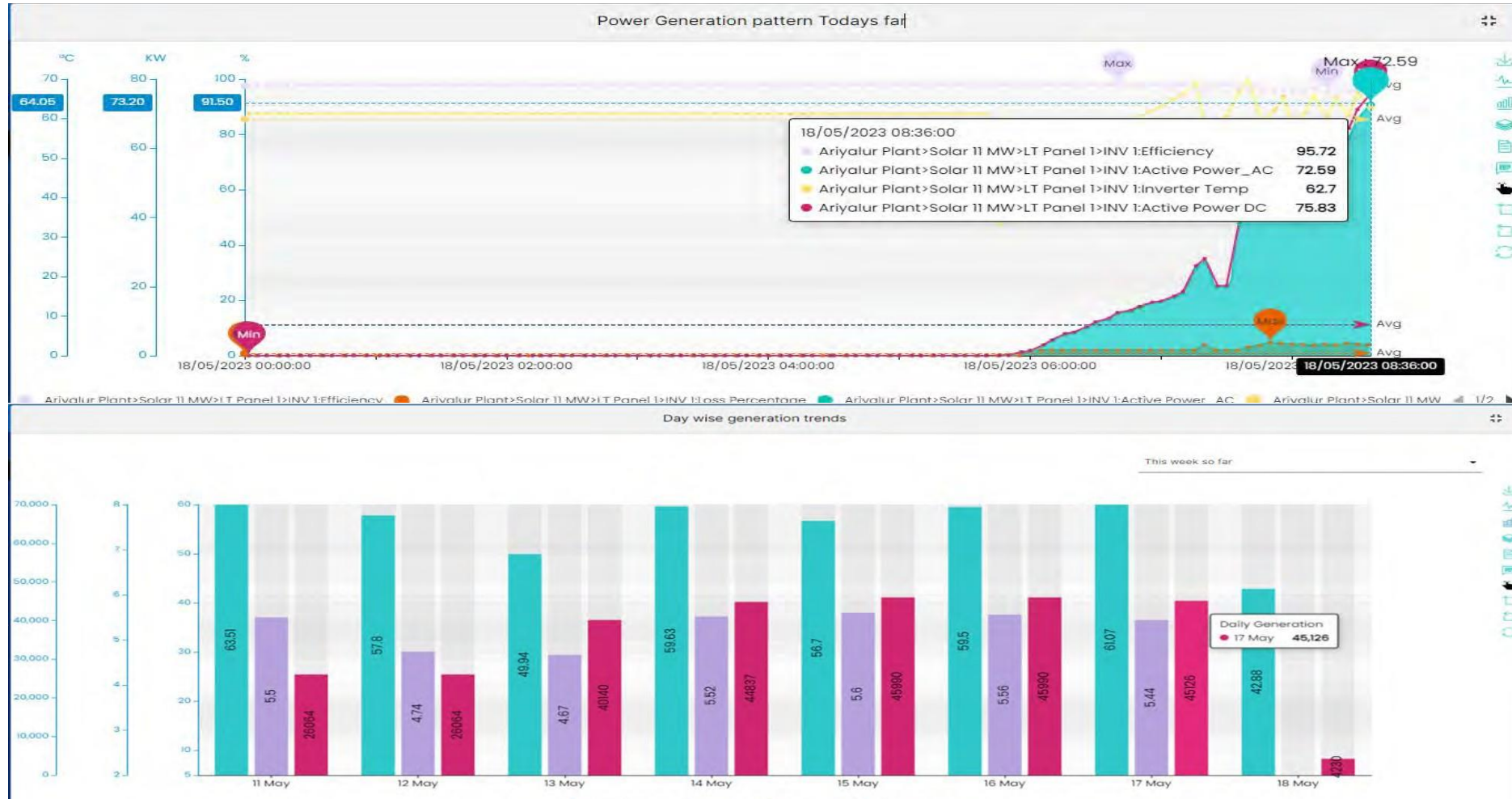


Today Export 3298.00 KWH

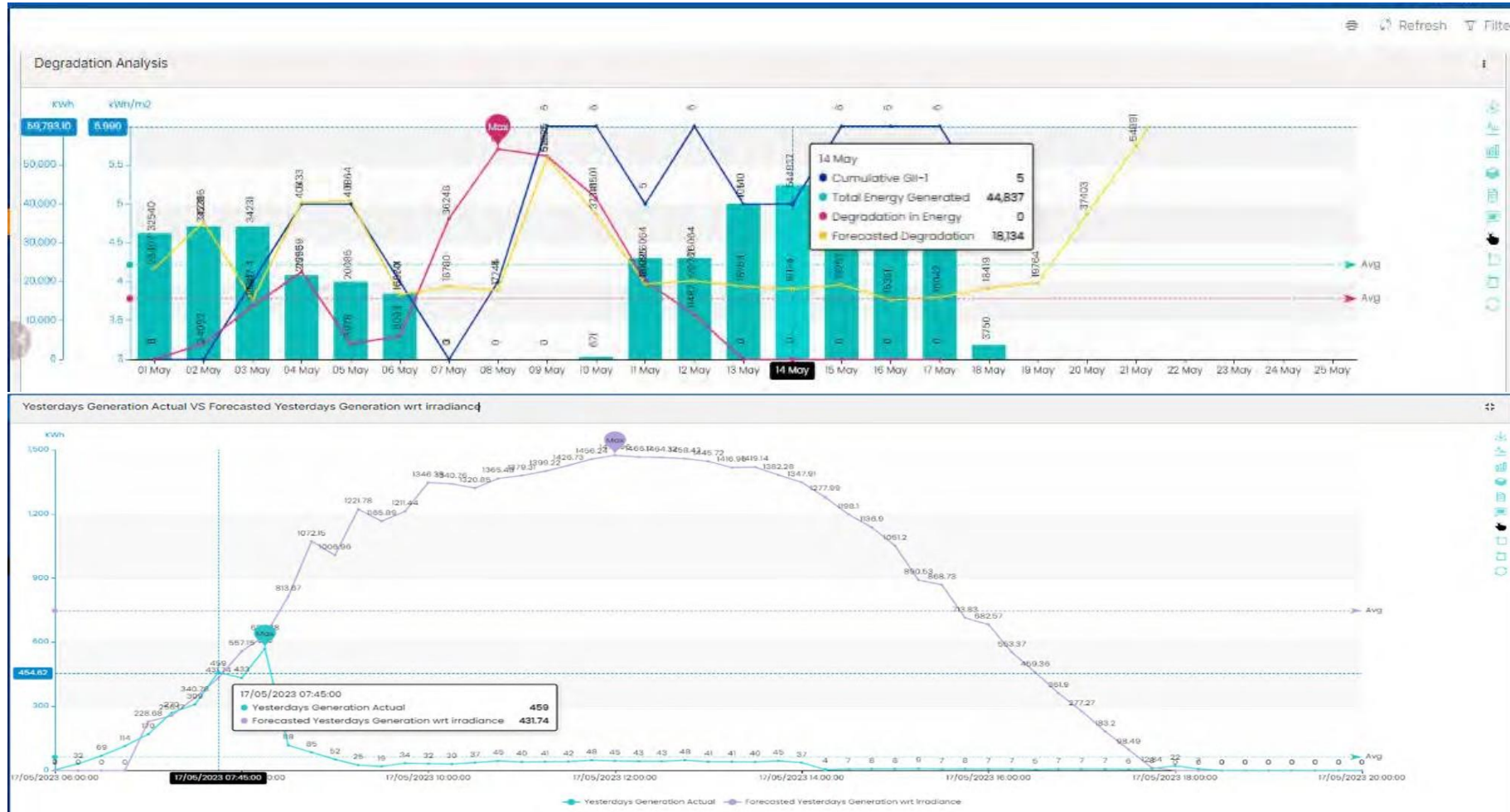
LV-1 Temperature: 39.80 °C
LV-2 Temperature: 41.68 °C
Oil Temperature: 39.80 °C
HV Temperature: 40.72 °C

16 Table	Inverter No : 8 & 10
18 Table	Inverter No : 22, 26,30,32, 36 to 40
17 Table	Remaining Inverter

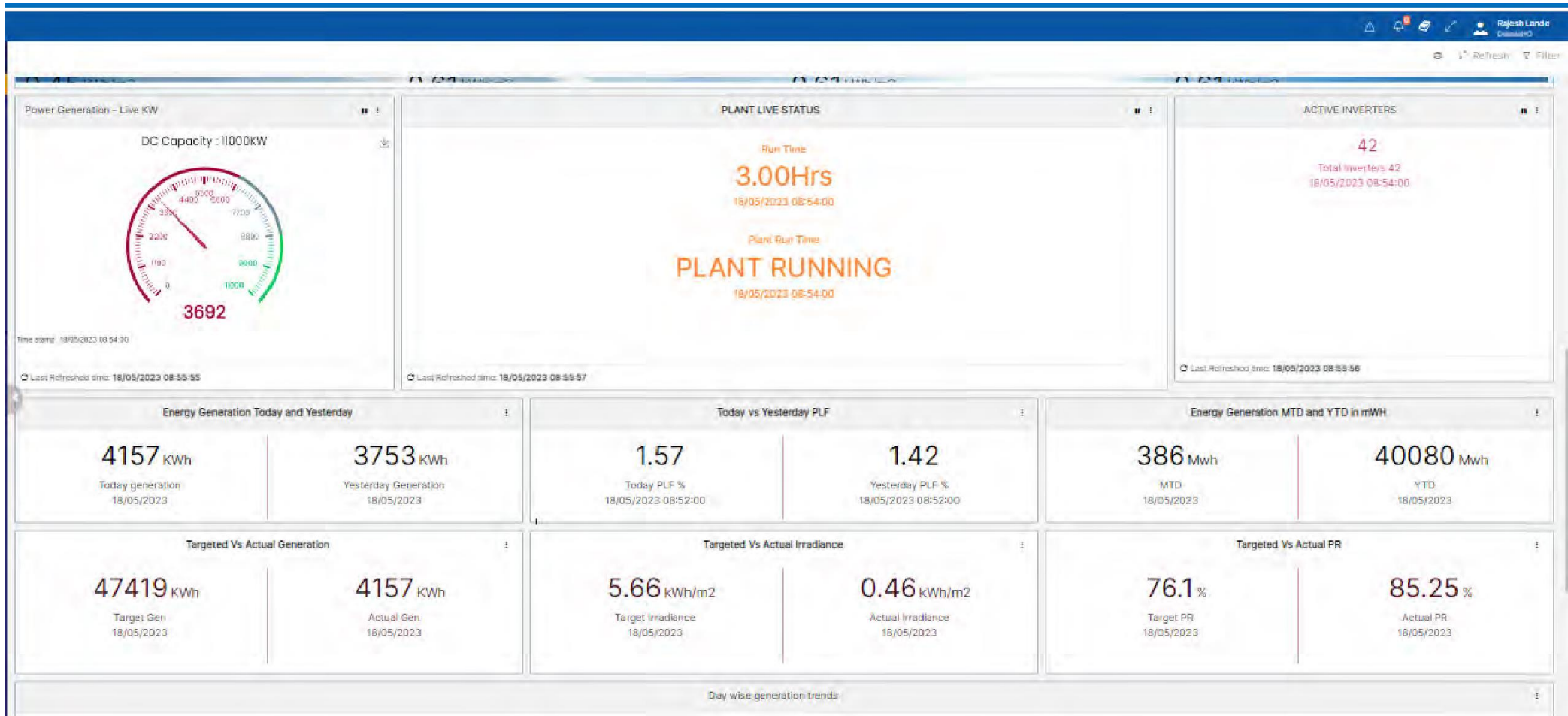
Inverter Level Performance & Generation Monitoring



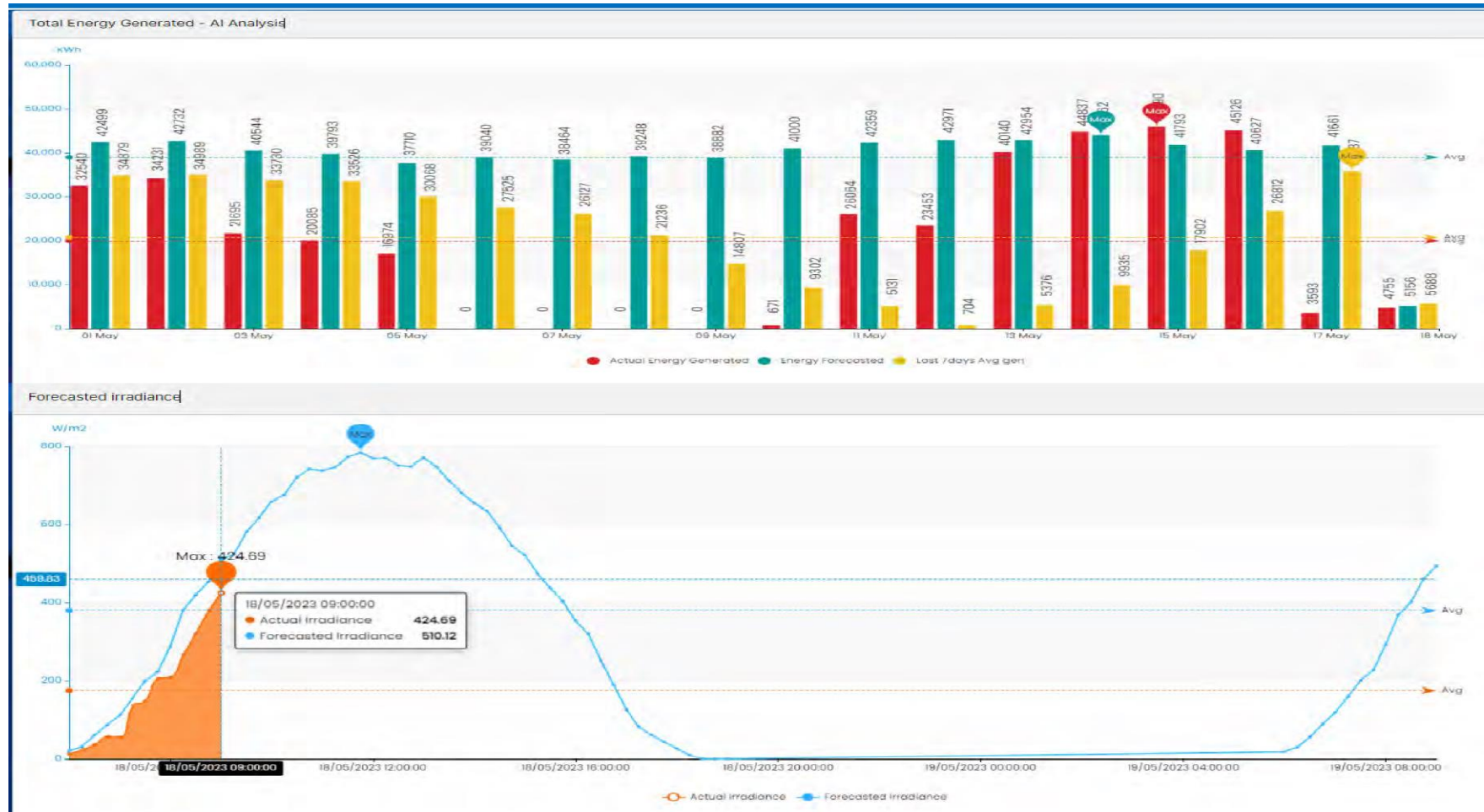
AI Tool For Generation Forecasting & Analysis



Day-wise Solar Dashboard



Day-wise Generation & Irradiation Forecasting Analysis



Problem Statement

- Unavailability of real-time monitoring of Critical Process Parameters
- Real-time Alerts to Operators was not available.
- Plant Corporate & Management Team didn't have a consolidated KPI Dashboards for their multi- plant operations under a single view.

What we provided

- Production Process Monitoring & KPI Dashboards
- Performance Indicators of Utilities
- Proactive control enabled to monitor Critical Process Parameters and trigger Alerts
- Reduced Operational Risk through triggering of Alerts for deviations, to be actioned by Plant team.

Business Outcome & ROI

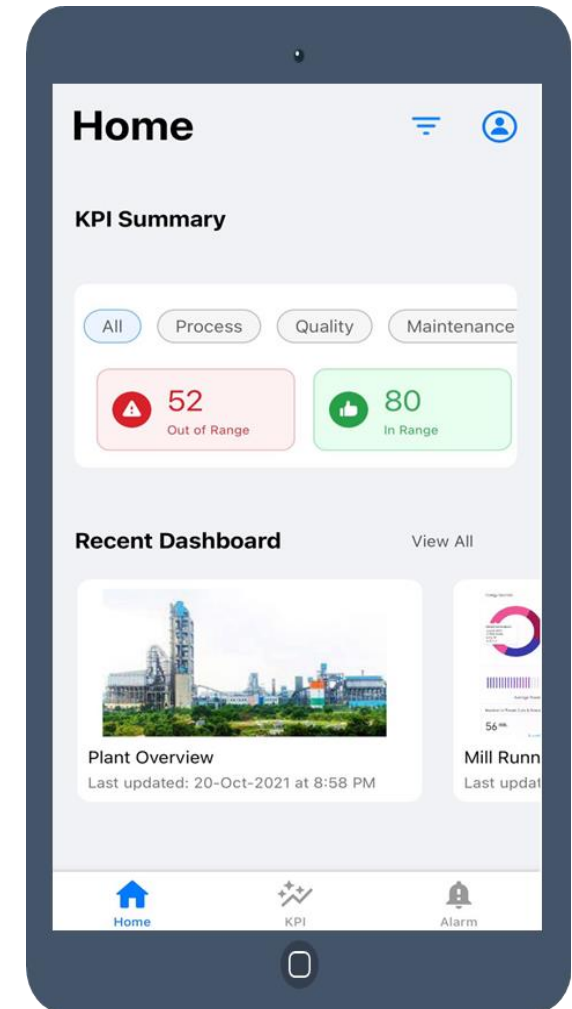
2x Improvement in Worker Productivity

40% Downtime Reduction through proactive alerting for KPI deviations

100% Elimination of Manual Data recording by Operators

Scalability

- Solution is repeatable and scaled to 14 Plants consisting of 25 Units consisting of Cement Integrated Units (CIU), Captive Power Plants (CPP), Waste Heat Recovery Plants (WHR)



Thank You

