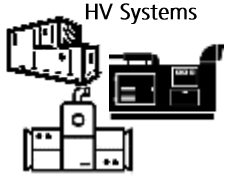
LTIMindtree
Energy NxT

# Energy : Detailed process overview & dashboards

Energy | NxT

## Step 1: Metering & Sensorization

HV Systems



Monitor Demand, THD, Relay monitoring, Unit consumption

HT Panel

Monitor Demand, THD, Relay monitoring, Unit consumption

Transformer

Oil temp |Winding temp| | Losses | | Efficiency |

Power Generator

Working hours |Idle Hours fuel| consumption| Pilferage |Peak & Avg Load |Operational Cost per unit

LT Panel

Voltage|Current|Power Factor|Frequency|| Unbalanced current | Unit consumed

## Step 2: Set up KPIs for monitoring

HVAC system

Load vs Energy| Blocks based on current| Cleaning of filters| THD identification| Performance comparison

Lighting and Motor load

Turn off reminders | LPD |Power factor |Feeder voltage|Unbalanced current| Over current|Single Phasing| Maintanence remainders

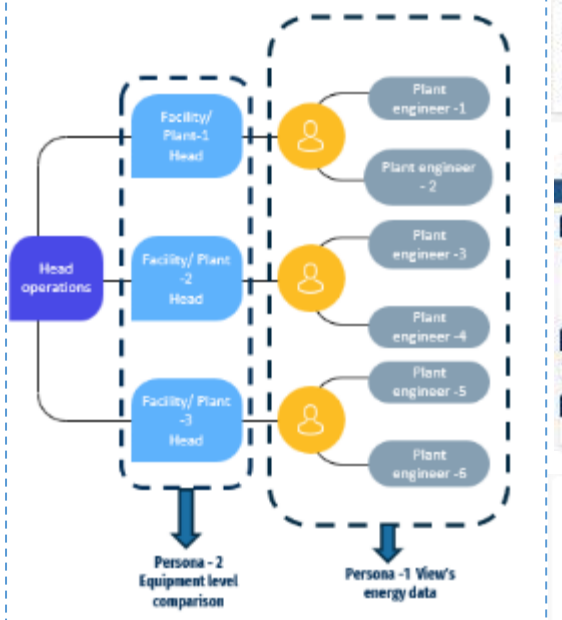
Lift and escalator

Idle Operation time| Idle operation load| Load based consumption| Turn off recommendation

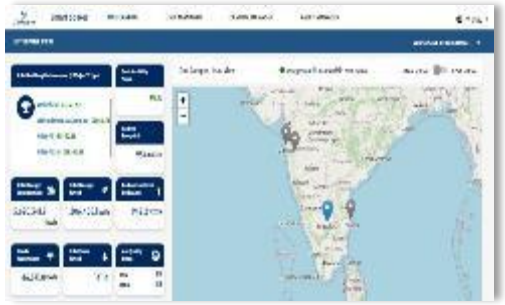
Compressor and crane

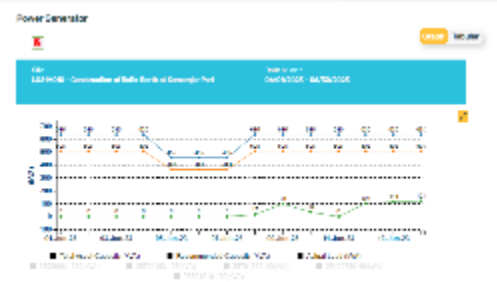
Load lifted vs Energy| data from drives| CFM vs Energy consumed
Production Vs Energy benchmarking

## Step 3: Define organization & user hierarchy




## Step 4: Dashboarding & Reporting





**Note:**
Energy related detail offerings are separated in for plants in Energy NxT application, and for Building Management in Smart Spaces application. Depending on the business need they can be integrated into a single umbrella.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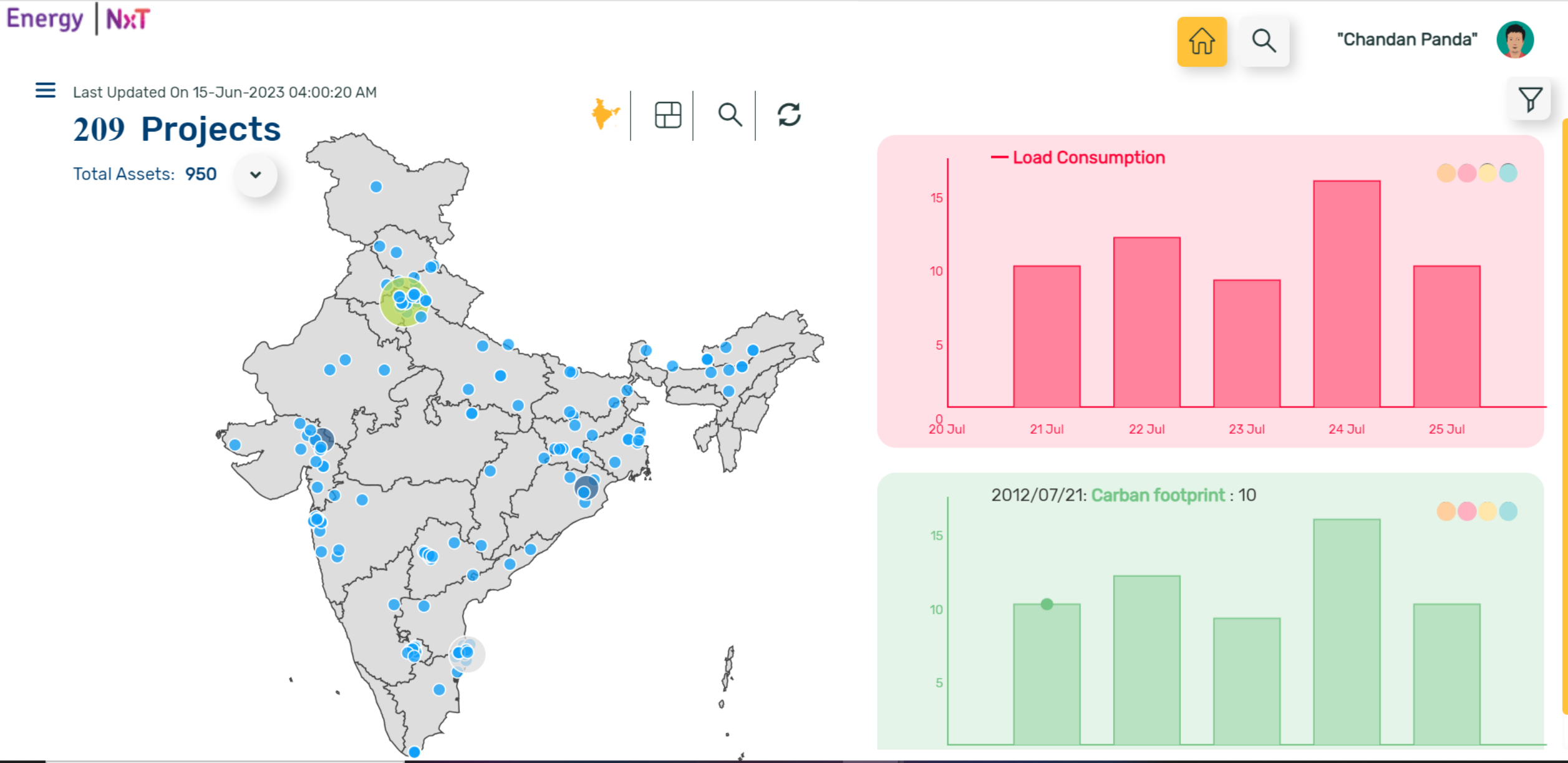
# Energy Monitoring Solution





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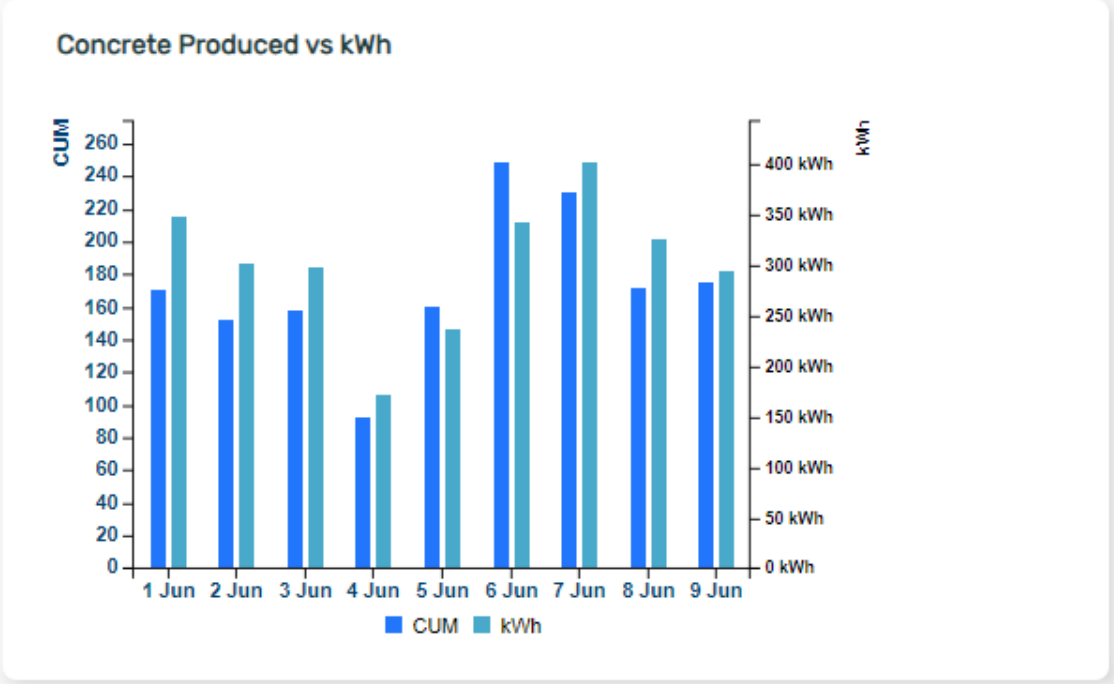
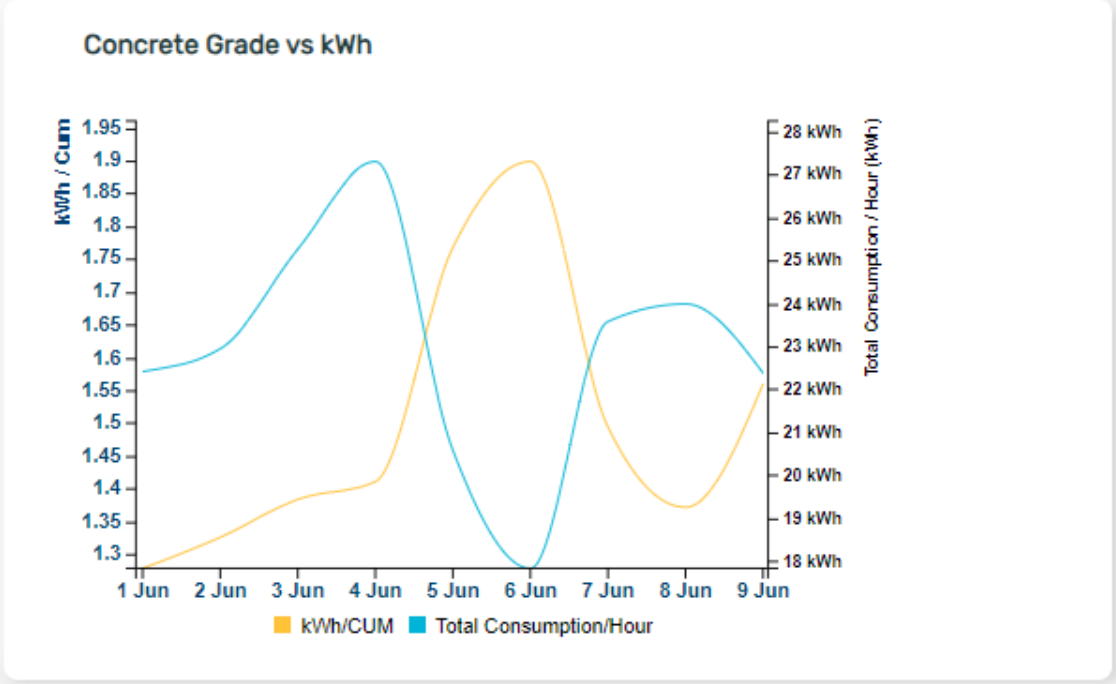
# Energy Monitoring Vs Concrete production

Connectio... | EM Manag... | Auto Mail ... | EMS Mail C... | Surrender ... | Energy Co... | Energy Ou... | Power Gen... | Batching P... | Energy Cost




1 Concrete Produced Vs Energy Consumption

2 Units required for Per cum of concrete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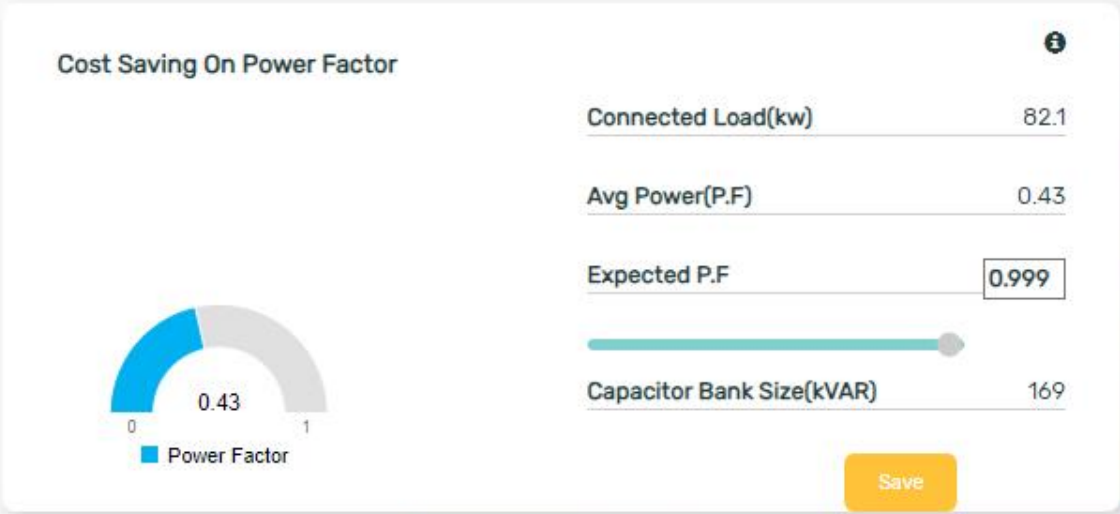
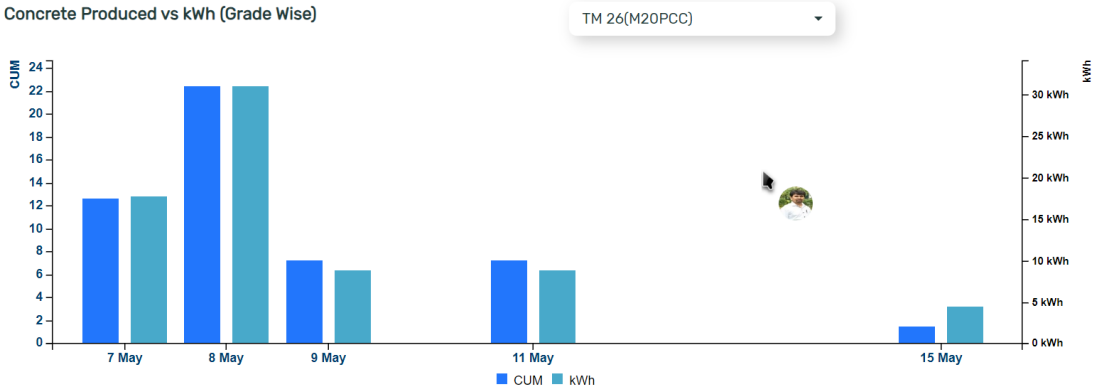
# Power Quality monitoring

## 1 Power factor values & Capacitor bank sizing

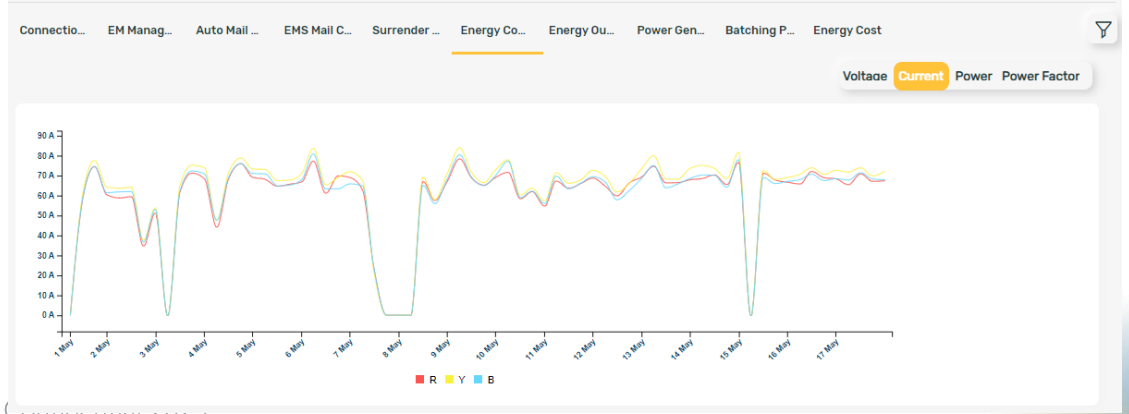



## 2 Voltage imbalances – Dip and Highs

## 3 Grade Versus units consumed

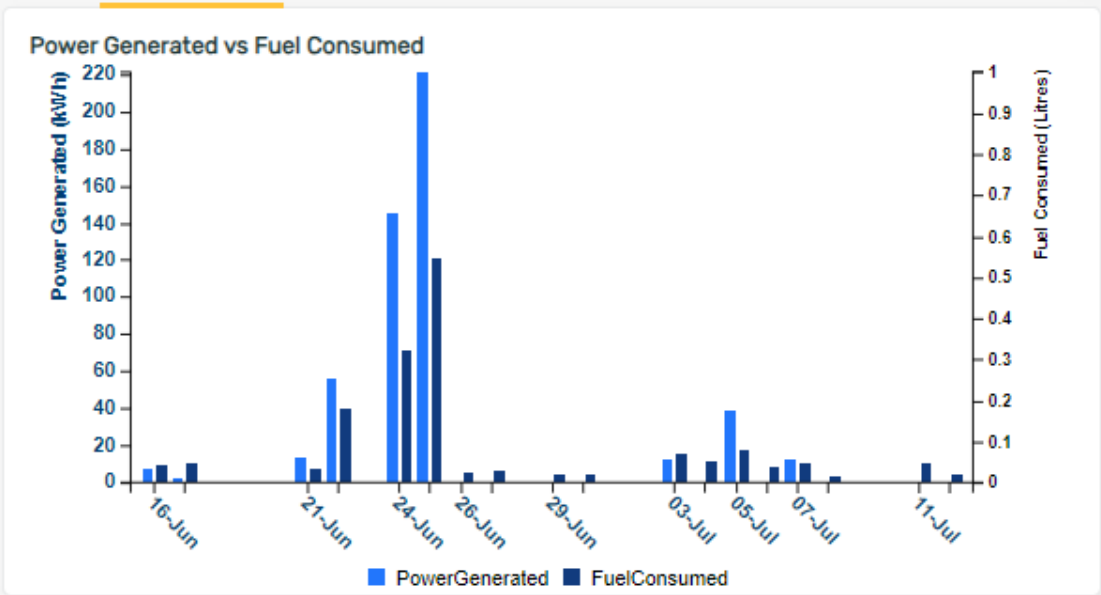



## 4 Current imbalance variance monitoring

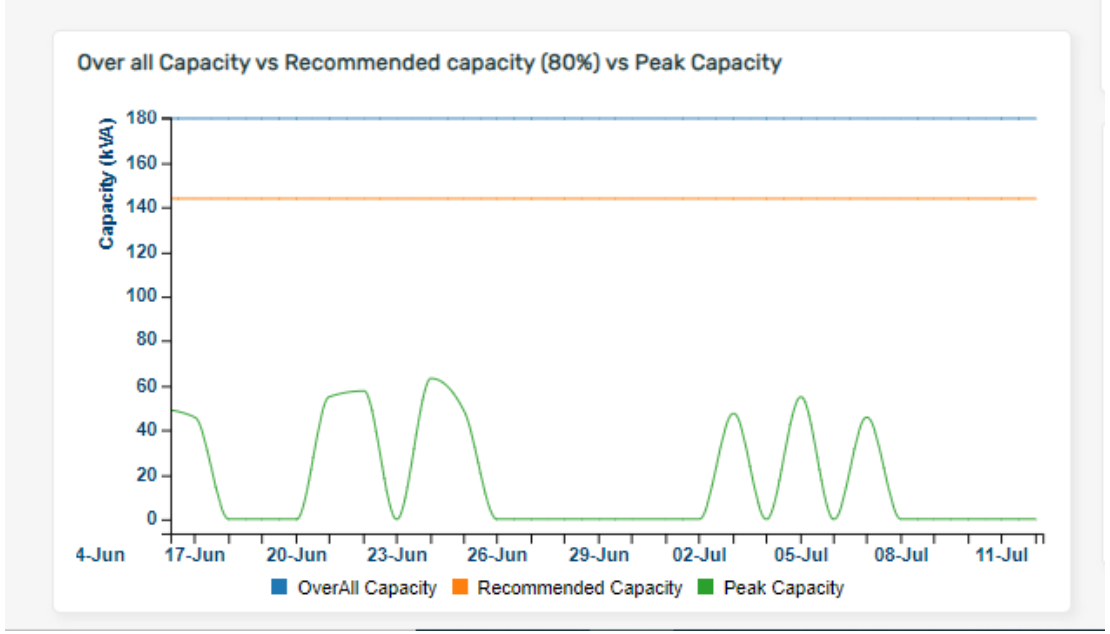


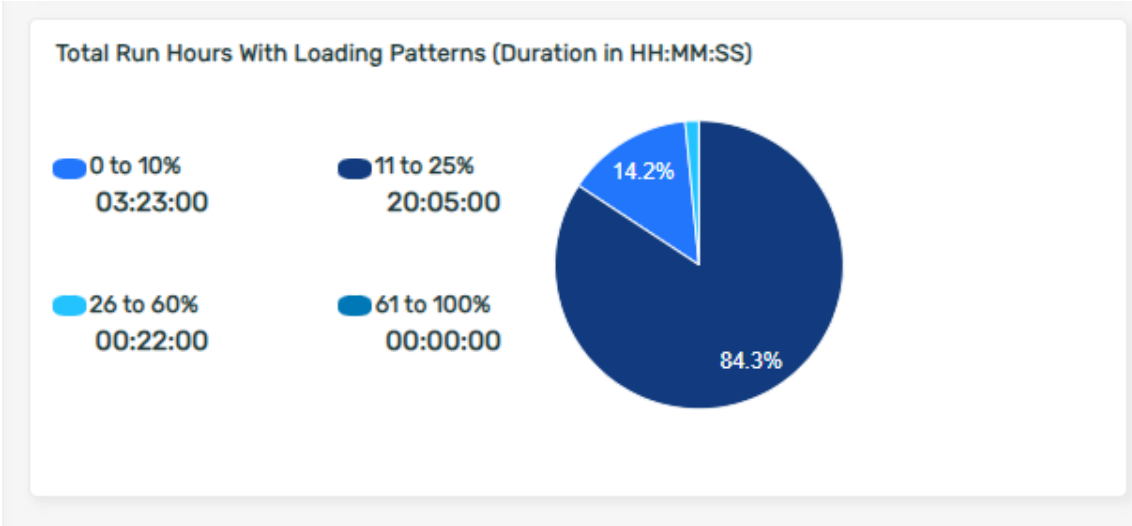
# Power Generator monitoring

## 1 Power generated Vs Fuel Consumed




## 2 Load Trend Pattern




## 2 Loading Pattern