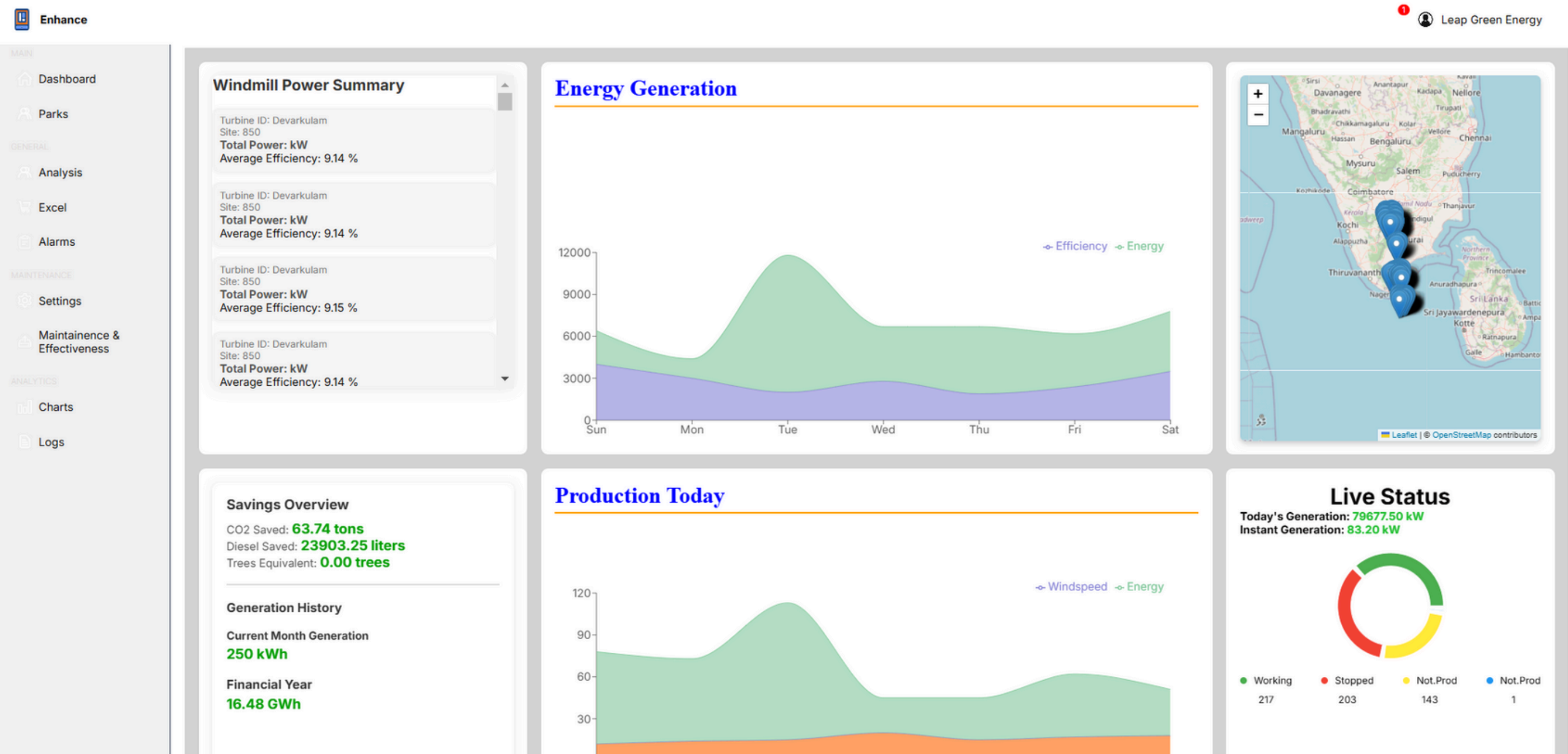# Wind Turbine DashBoard

**Leap Green Energy Pvt. Ltd.**

DashBoard

This dashboard monitors windmill operations, showcasing power generation, efficiency, and live status. It includes graphs for energy trends, a map of windmill locations, and environmental savings.

DashBoard Of A Particular Site

This dashboard shows the Akal site's windmill performance, including energy generation, turbine status, and machine availability. The map displays where the windmills are located, making it easy to track them. It also includes park performance, alarms, and live updates for better monitoring.
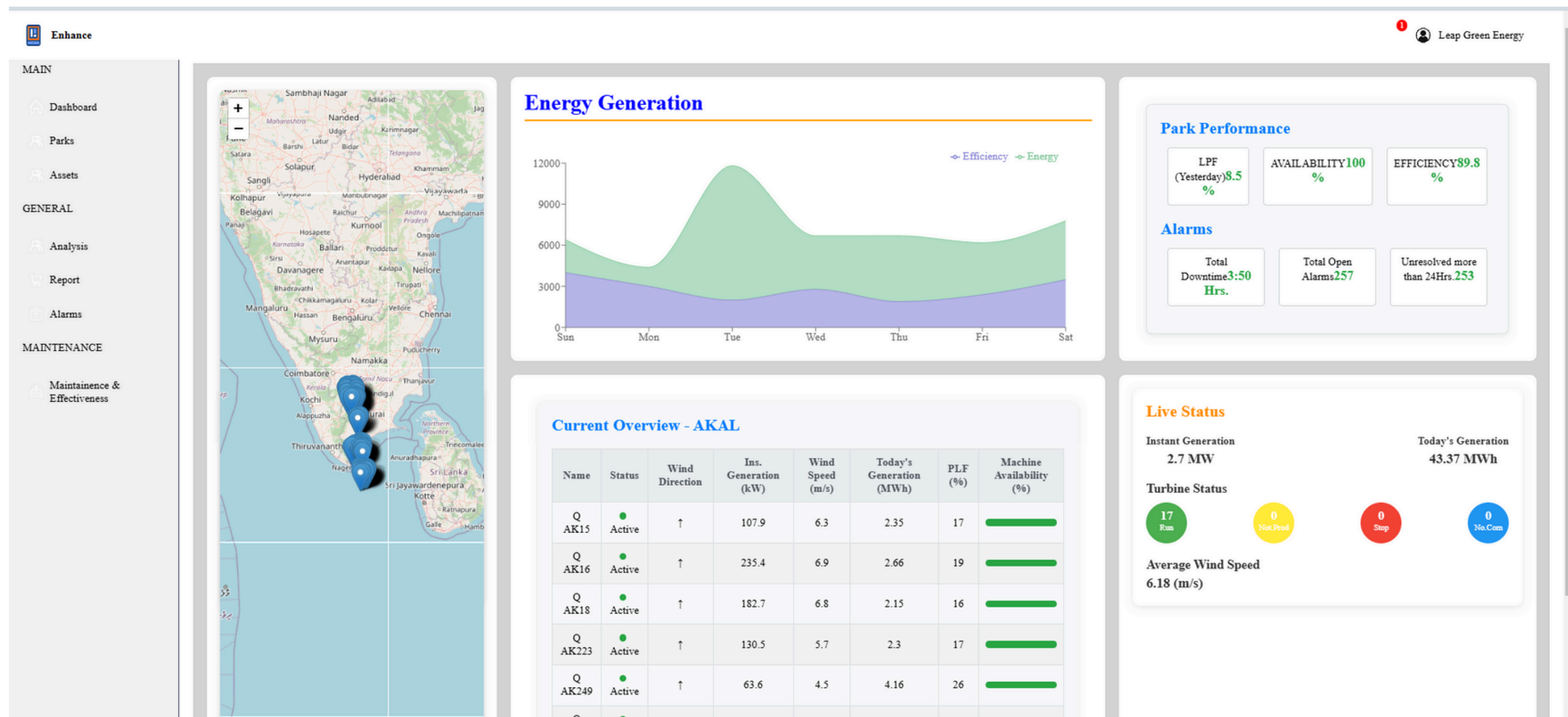
Overview of The Site AKAL

The image shows a dashboard overview of wind turbines in a wind farm (AKAL). It provides details such as turbine names, operational status, wind direction, instantaneous power generation (kW), wind speed (m/s), daily generation (MWh), plant load factor (PLF %), and machine availability (%).

Current Overview - AKAL

Name	Status	Wind Direction	Ins. Generation (kW)	Wind Speed (m/s)	Today's Generation (MWh)	PLF (%)	Machine Availability (%)
Q AK15	●	⌄	107.9	6.3	2.35	17	100
Q AK16	●	⌃	235.4	6.9	2.66	19	100
Q AK18	●	⌄	182.7	6.8	2.16	16	100
Q AK223	●	⌃	130.5	5.7	2.3	17	100
Q AK249	●	◤	63.6	4.5	4.16	26	100
Q AK25	●	⌃	88.4	6	1.55	12	100

Turbine Data Analysis

This page displays turbine data analysis, including details like control time, modified time, turbine status, and power metrics such as active and reactive power input/output. It helps monitor turbine performance and energy flow. The table organizes key metrics for easier evaluation and decision-making.

Turbine Data Analysis

Turbine	Control Time	Modified Time	TurOk	Active Power In	Active Power Out	Reactive Power In	Reactive Power Out
BA882E94-8620-4249-AE5E-00951053EAFF	2024-02-15T23:40:00	2024-02-15T18:24:00	123683.8	17611	19174585	83977	1688154
9152DDD3-FBF3-41FA-81B4-01407B25F5AA	2024-02-15T23:40:00	2024-02-15T18:20:00	93914.6	42335	41437715	1489497	1265496
BED8687F-E06F-485D-8C9B-01A09FF179FE	2024-02-15T23:40:00	2024-02-15T18:18:00	126771.6	36733	39832768	905144	1005774
A7AA74FE-A1CE-4487-A786-06DE12BA7600	2024-02-15T23:40:00	2024-02-15T18:19:00	110712.9	34726	41668080	1018590	1801186
DF54CC6B-A0FB-4336-A67D-0758ACAA4487	2024-02-16T00:00:00	2024-02-15T18:19:00	121389	37272	44859697	675388	1556141
DF54CC6B-A0FB-4336-A67D-0758ACAA4487	2024-02-16T00:10:00	2024-02-15T18:19:00	121389.2	37272	44859713	675390	1556141
442DEB69-9EA9-484E-ACBF-07C77008D35A	2024-02-15T23:40:00	2024-02-15T18:18:00	117972.1	44540	42763608	1043366	2088181
E8B1137D-FFB1-4FF9-8520-0A50D4D3A623	2024-02-15T23:40:00	2024-02-15T18:19:00	118914.2	36557	41073303	704551	2528928
BD7F49C1-5468-4C1A-9A7C-0B6C117F43E0	2024-02-15T23:40:00	2024-02-15T18:20:00	119341.5	42080	36044726	497790	928682
ADA2A224-4D77-4A99-AB87-0CA8B9D8C5AC	2024-02-15T23:40:00	2024-02-15T18:20:00	126560.9	48618	33677204	447872	1022797
10D1473B-F3A7-4B2C-B4B1-0D1D55163E86	2024-02-15T23:40:00	2024-02-15T18:20:00	130165.5	16576	39046919	751182	1041850
C9A8525B-DF11-4DF1-B309-0D60E0D4D5F0	2024-02-15T23:40:00	2024-02-15T18:24:00	25109.4	13734	3482805	102889	234738
D6CEDF93-A361-4AFB-8B0F-0DF7897DB9E9	2024-02-15T23:40:00	2024-02-15T18:19:00	77541.4	8488	35337082	886911	1224933
D4634865-0AD5-454A-93BD-113D3F574D63	2024-02-15T23:30:00	2024-02-15T18:20:00	15430.8	10060	1602266	49811	96206
2999BE94-95E4-459B-9DAD-11A738B0E9DD	2024-02-15T23:50:00	2024-02-15T18:23:00	102716	11670	17490278	490017	1002249
8D07E8C1-141B-4459-AD5A-17852E94720A	2024-02-15T23:40:00	2024-02-15T18:18:00	83012	52301	22187876	387887	594660
F5FB7400-C644-4AA2-B925-18C18F5D77E4	2024-02-16T00:00:00	2024-02-15T18:19:00	118846.6	16923	26889773	522193	2125799
F5FB7400-C644-4AA2-B925-18C18F5D77E4	2024-02-16T00:10:00	2024-02-15T18:19:00	118846.7	16923	26889792	522197	2125807

Live Status of the site AKAL

Live Status

Instant Generation
2.7 MW

Today's Generation
43.37 MWh

Turbine Status

17 Run **0** Not.Prod **0** Stop **0** No.Com

Average Wind Speed
6.18 (m/s)

Udumalpet
Capacity: 1500 kW
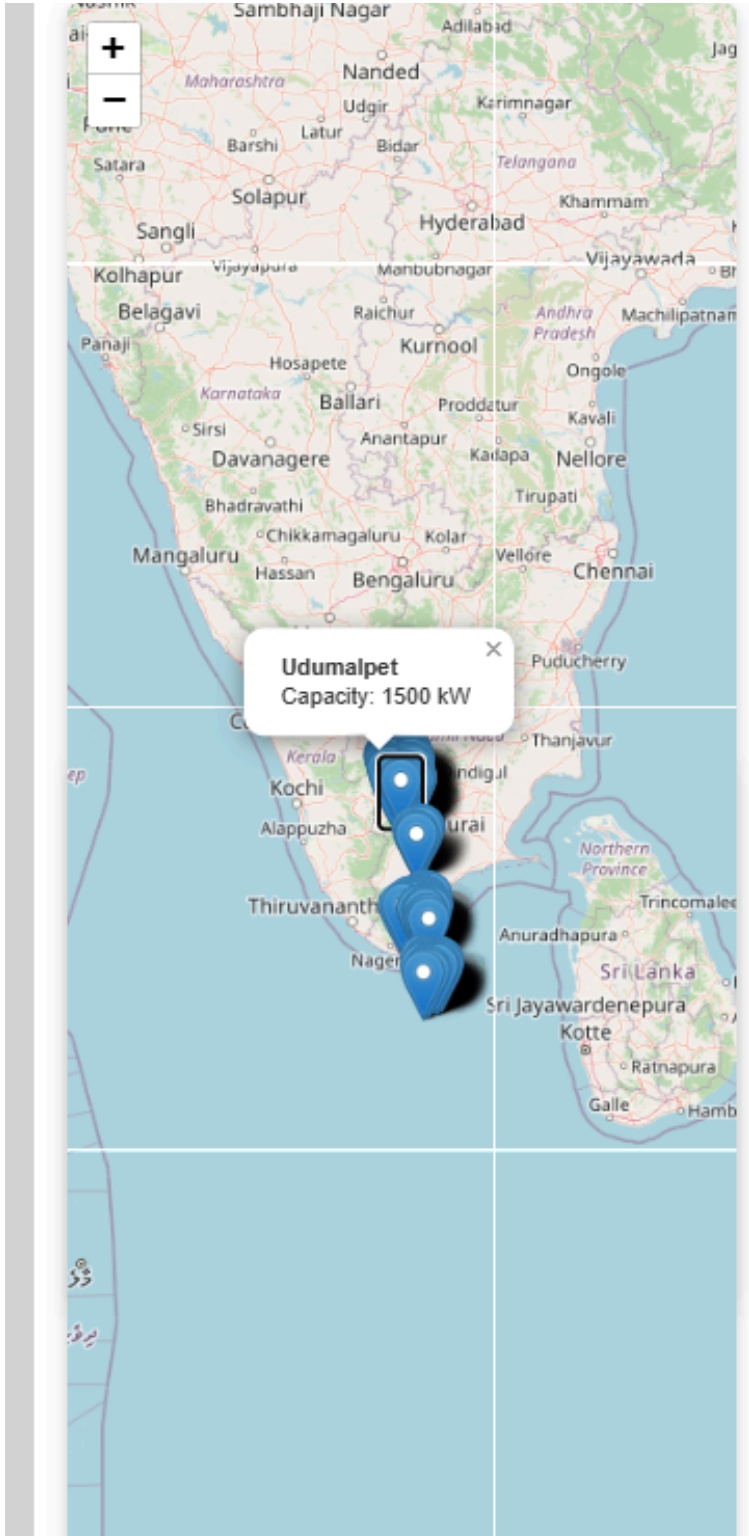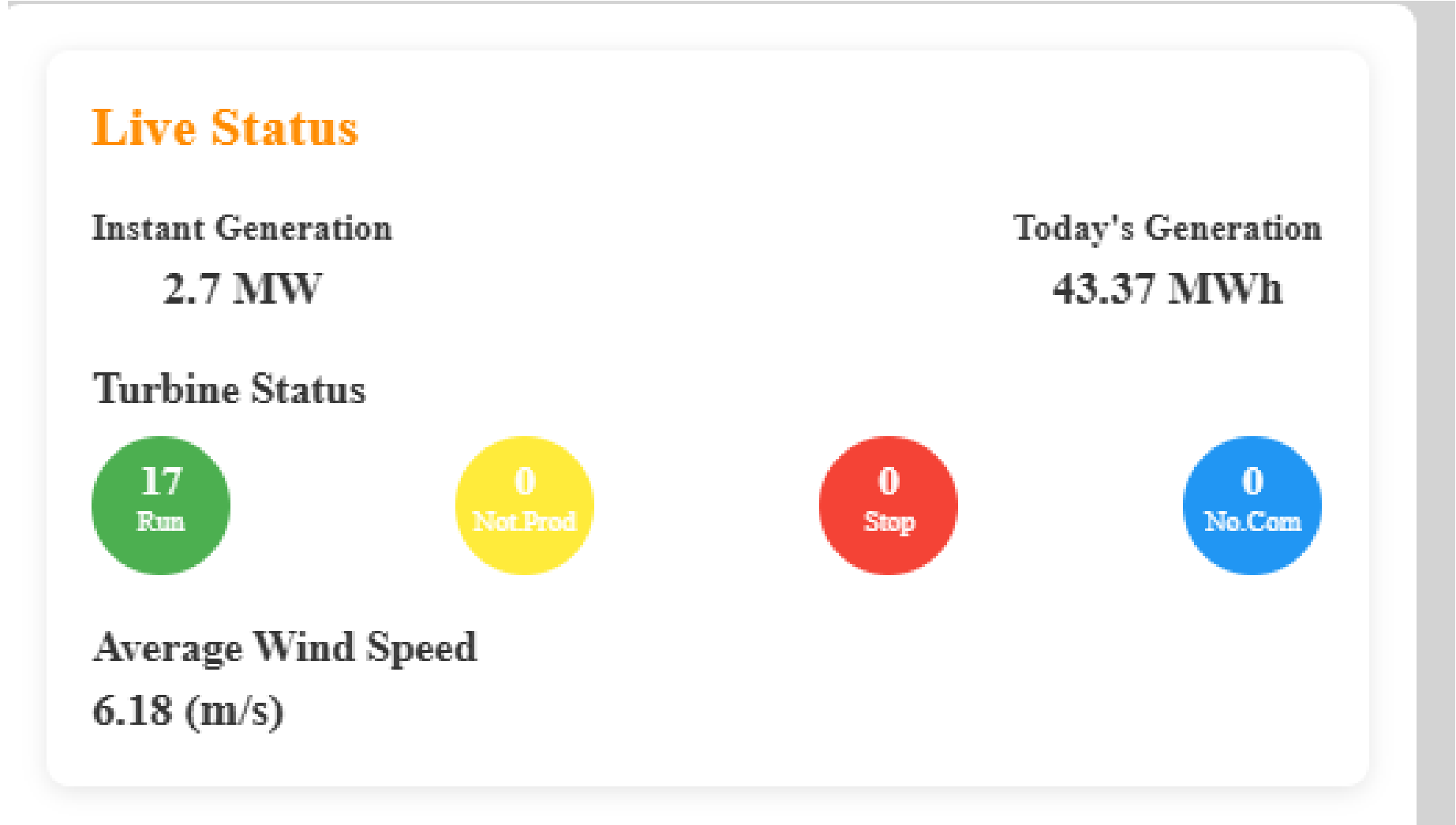
Map of all the parks

Park Performance and Alarms at a particular site

Park Performance

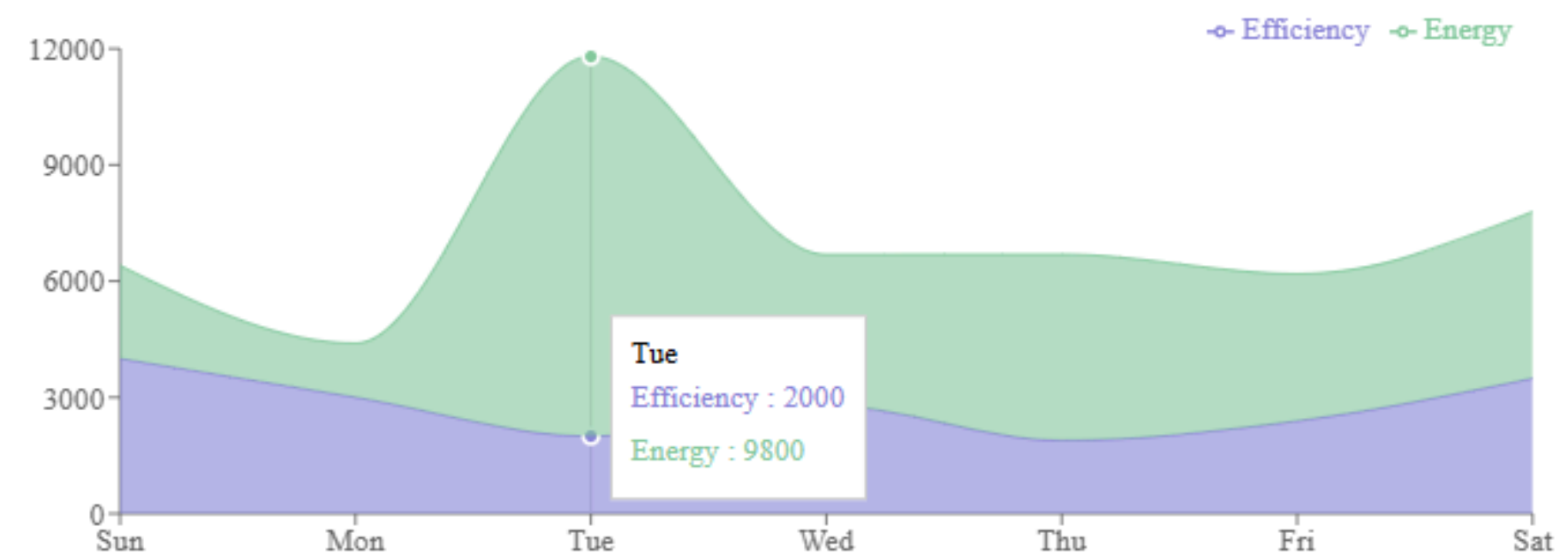| LPF (Yesterday) **8.5 %**	AVAILABILITY **100 %**	EFFICIENCY **89.8 %**

Alarms

Total Downtime **3:50 Hrs.**	Total Open Alarms **257**	Unresolved more than 24Hrs. **253**

Energy Generation

Efficiency   Energy

Tue
Efficiency : 2000
Energy : 9800

Overall Energy Generation
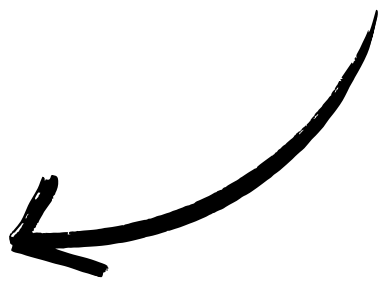
Overall Production

Production Today

Windspeed   Energy

9
Windspeed : 15
Energy : 98
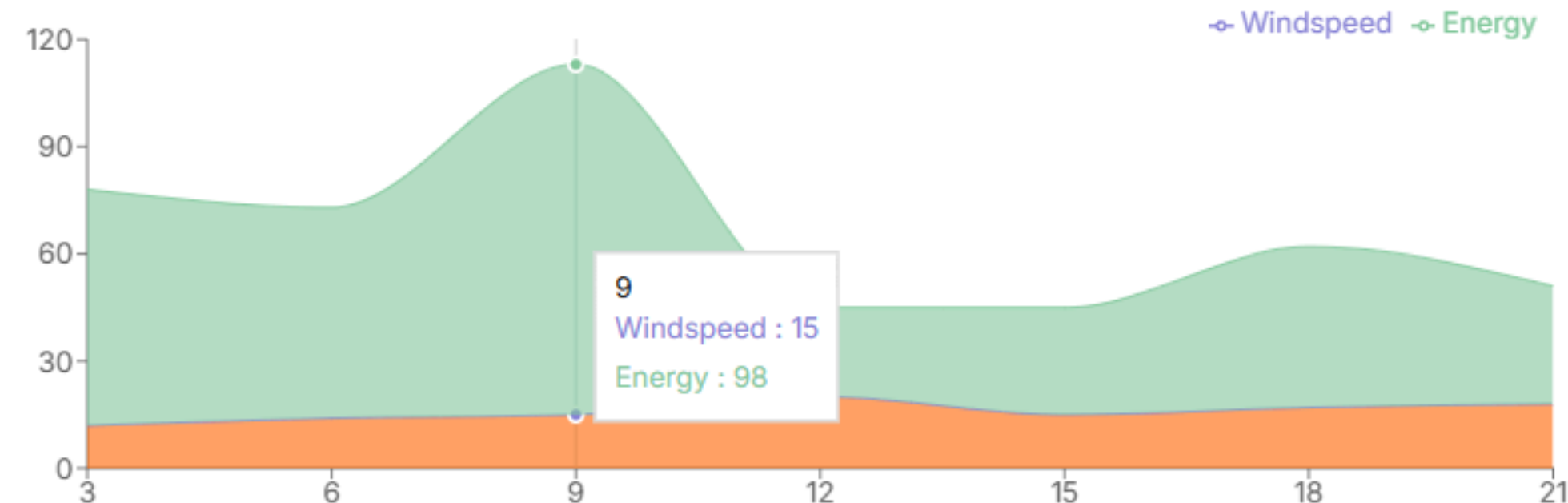
Formulae used

CO2 emission reduction (Metric Tons)= Electricity generated (MWh) * Emission Factor (Metric Tons CO2/MWh)

Emission factor = 0.8 Metric Tons/Mwh

No. of trees saved = CO2 emission reduction (Metric Tons)/ CO2/Tree absorption rate factor (Metric Tons)

Diesel savings = ((Today's generation * 0.3) * 1000000)/ 1000000