

Daily Energy Generation Report

Weather Conditions

Date: 2020-02-14

Sunlight Hours: 24

Average Temperature: 27.23°C

Average Wind Speed: 7.74 m/s

Most Frequent Wind Direction: 135°

Total Rainfall: 0.00 mm

Air Quality Data:

Average PM1: 2.19 µg/m³

Average PM2.5: 0.30 µg/m³

Average PM4: 0.23 µg/m³

Average PM10: 0.03 µg/m³

Average Particulate Concentration: 0.47 particle/m³

Energy Generation Data

Total Energy Generated AC: 49.44 kWh

Total Energy Generated DC: 50.15 kWh

Conversion Efficiency Rate: 98.58%

Peak hour: 23:00: 0.00 kWh

Hourly Energy Generation:

['00:00: 0.00 kWh', '01:00: 0.00 kWh', '02:00: 0.00 kWh', '03:00: 0.00 kWh', '04:00: 0.00 kWh', '05:00: 0.06 kWh', '06:00: 0.99 kWh', '07:00: 1.89 kWh', '08:00: 4.17 kWh', '09:00: 5.55 kWh', '10:00: 4.00 kWh', '11:00: 6.73 kWh', '12:00: 7.02 kWh', '13:00: 5.02 kWh', '14:00: 6.18 kWh', '15:00: 4.10 kWh', '16:00: 3.03 kWh', '17:00: 0.67 kWh', '18:00: 0.03 kWh', '19:00: 0.00 kWh', '20:00: 0.00 kWh', '21:00: 0.00 kWh', '22:00: 0.00 kWh', '23:00: 0.00 kWh']:

Environmental Impact

Environmental Impact:The high sunlight hours and favorable weather conditions contributed to significant CO2 savings by generating clean energy.

CO2 Savings: 37.47 kg

Alerts and Notifications

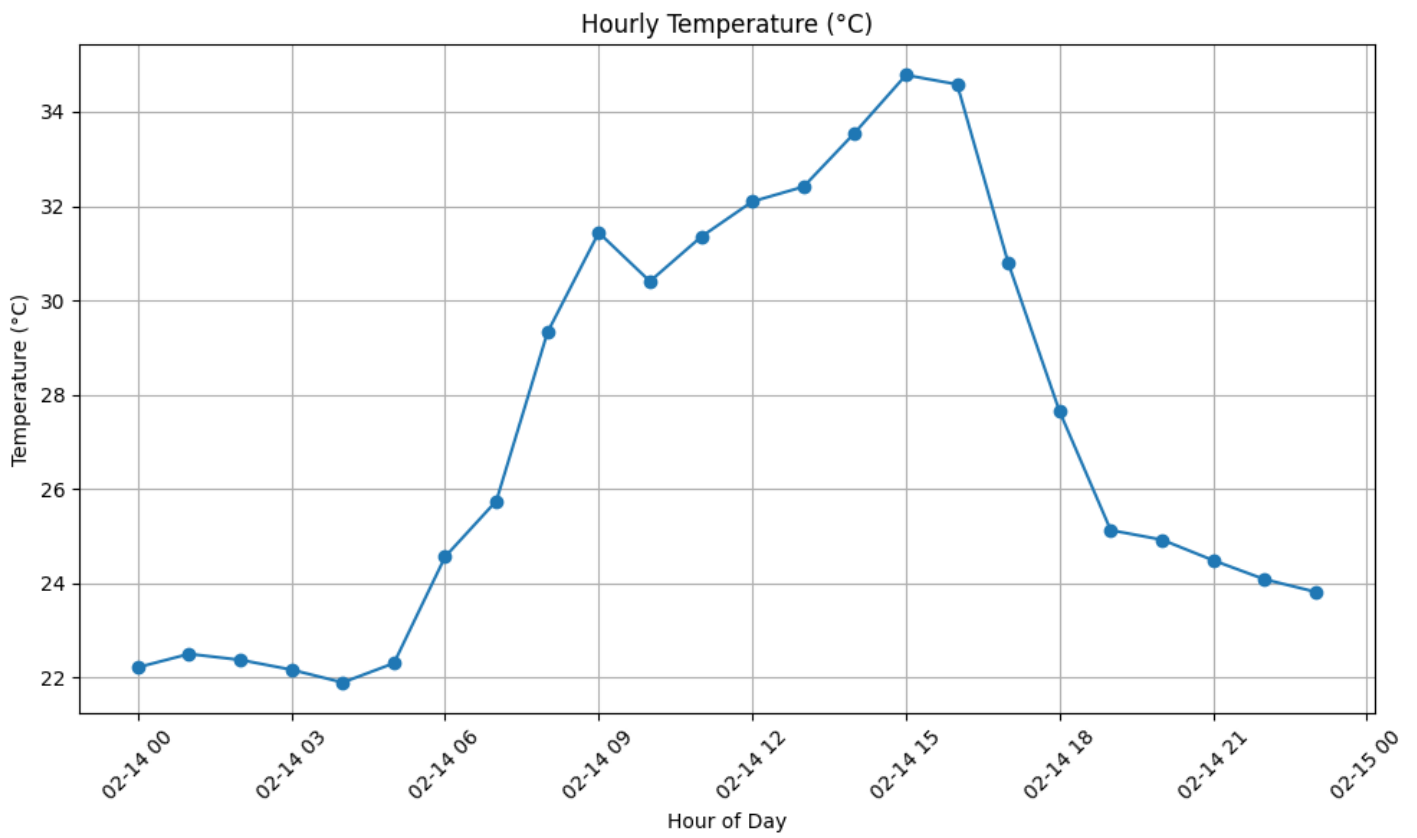
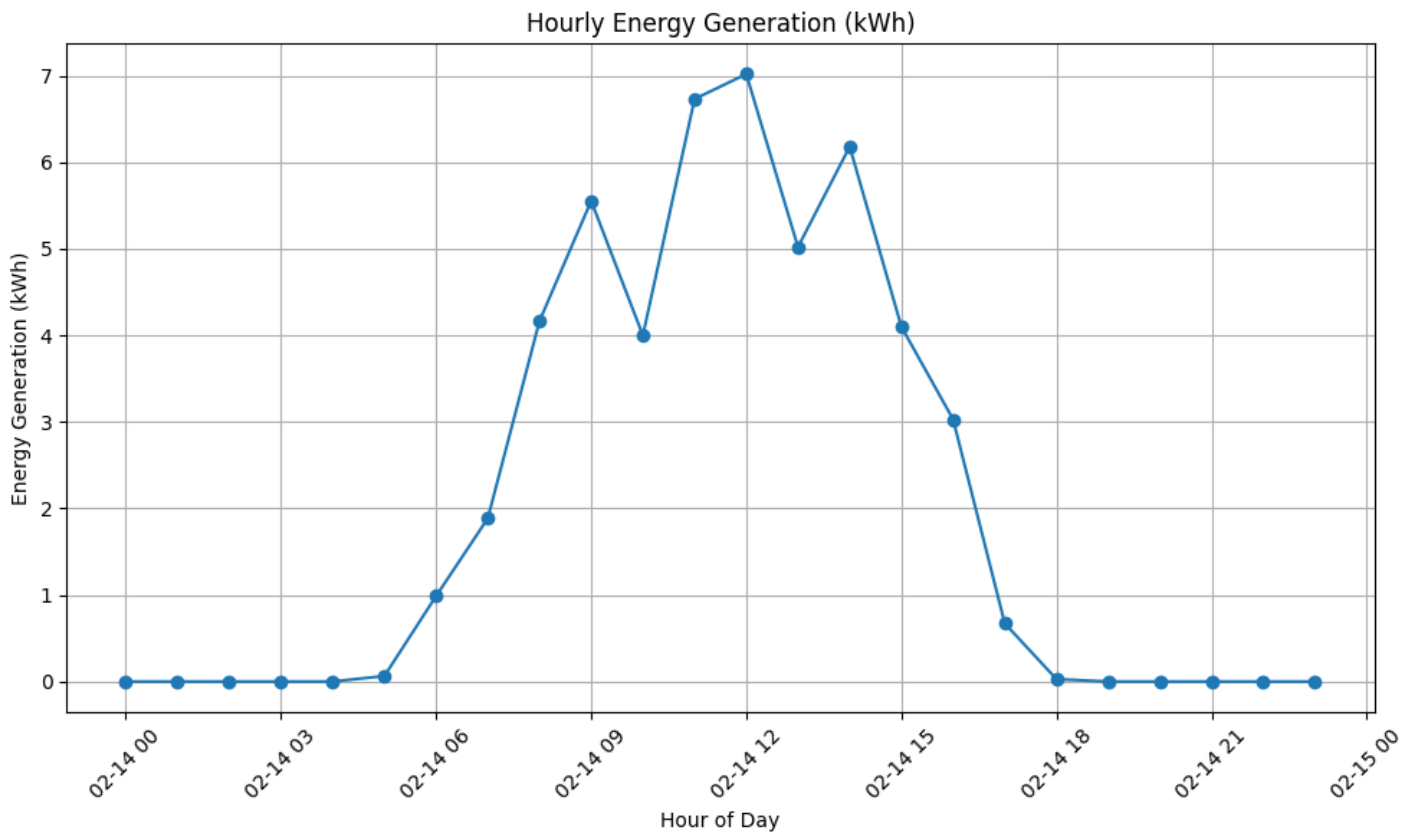
Performance Alerts: No information

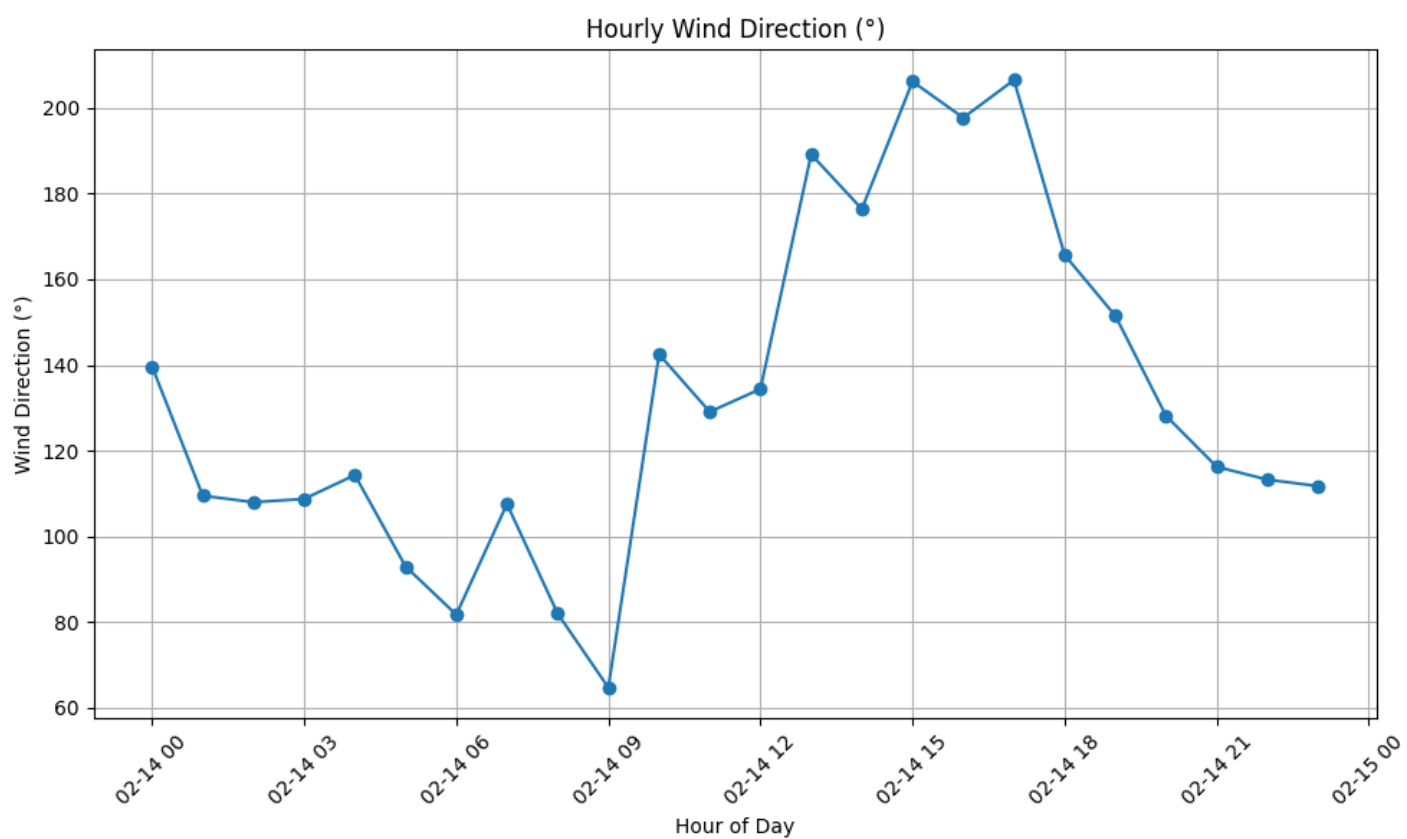
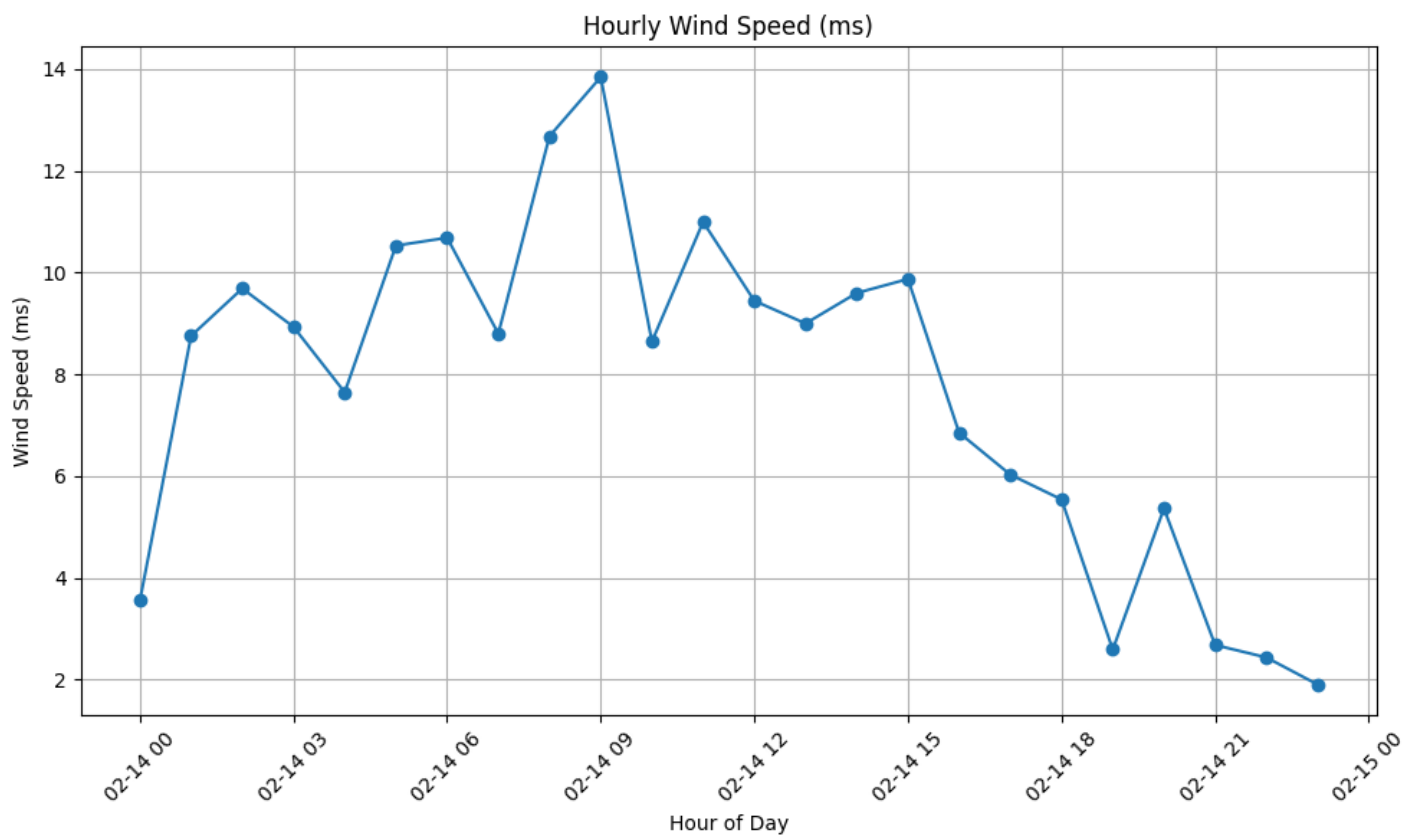
Weather Warnings: No information

Summary and Recommendations

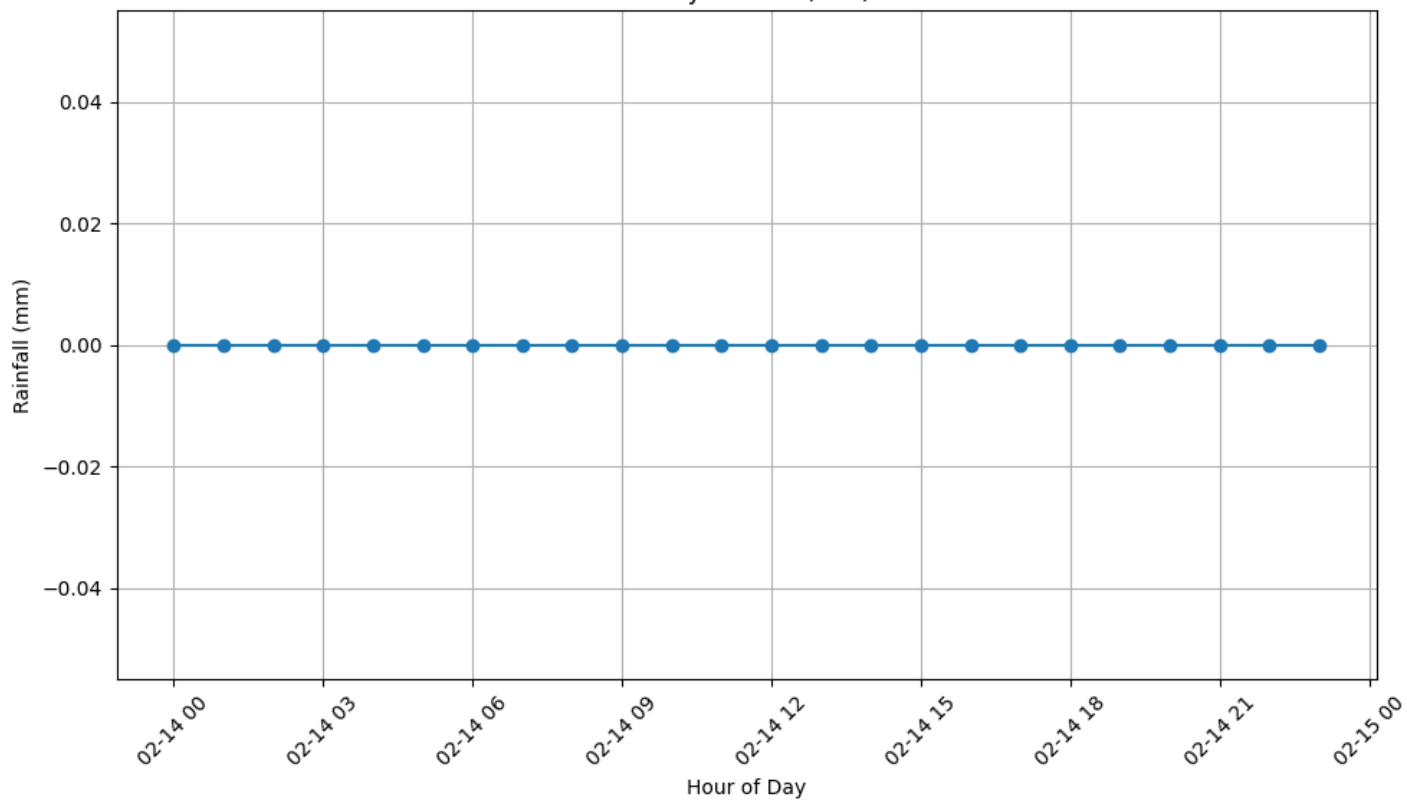
Summary: On February 14, 2020, the energy generation system produced a total of 49.44 kWh of AC energy and 50.15 kWh of DC energy, with a conversion efficiency of 98.58%. The peak generation hour was 12:00 with 7.02 kWh. The system operated under ideal weather conditions, with abundant sunlight and moderate wind speeds, resulting in strong energy output.

Recommendations: Continue monitoring system performance and weather conditions to optimize energy generation efficiency. Explore opportunities to maximize energy utilization and minimize energy consumption on-site.





Hourly Rainfall (mm)



Hourly Particulate Size (μm)

