

Solar Energy Analysis Report

Generated on 9/19/2025

Project Location

Coordinates: 20.0165°, 73.8010°

Solar Resource: 1850 kWh/m²/year

Climate Zone: Tropical

System Configuration

System Size: 10 kW Panel Type: mono Installation: rooftop Orientation: 21° tilt, 180° azimuth

Performance Results

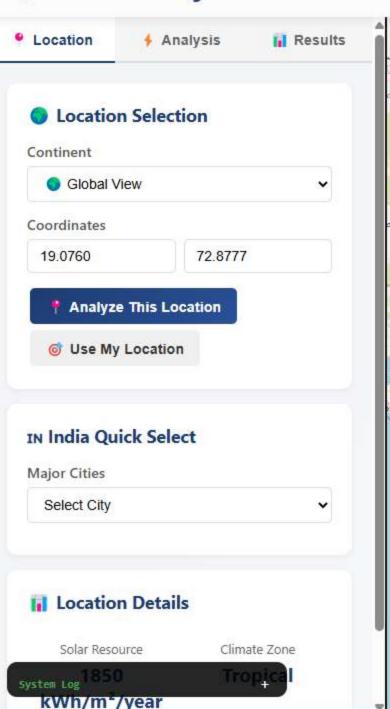
Annual Generation: 2,832 kWh Capacity Factor: 3.2% Specific Yield: 283 kWh/kW System Efficiency: 15%

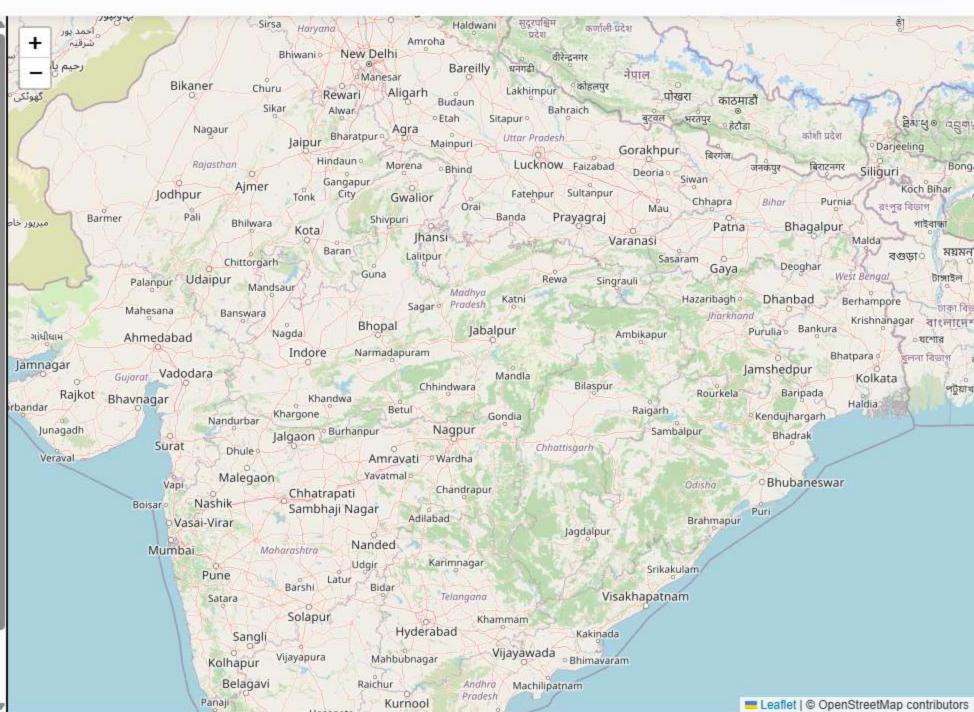
Financial Analysis

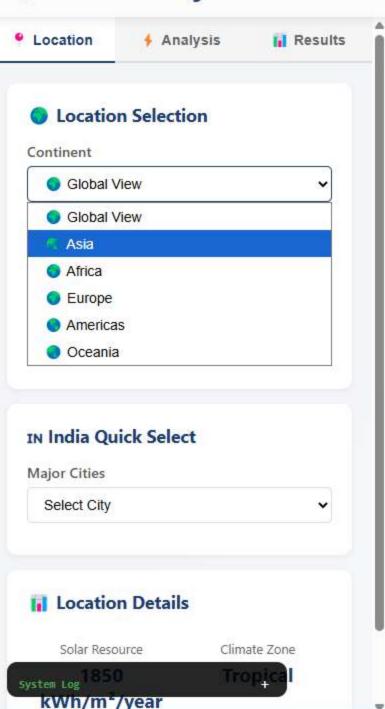
Annual Savings: ₹21,240 Payback Period: 30.6 years LCOE: ₹14.69/kWh System Cost: ₹650,000

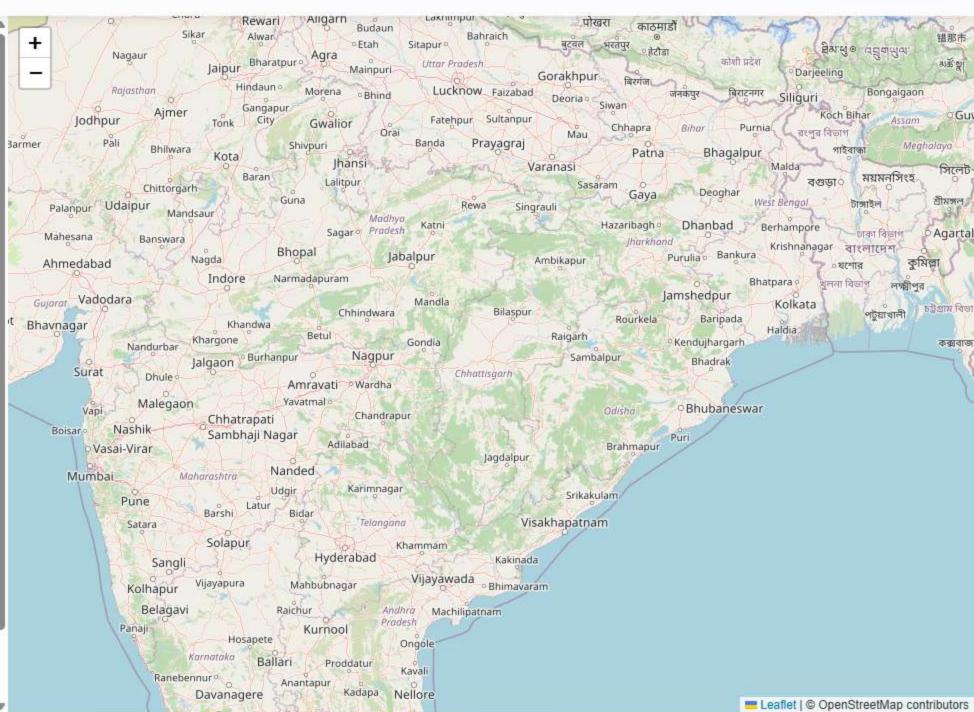
TEnvironmental Impact

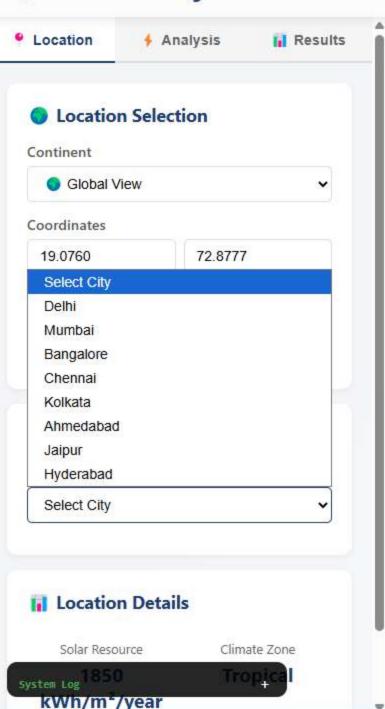
CO₂ Avoided: 2,322 kg/year 25-Year CO₂ Reduction: 58,050 kg

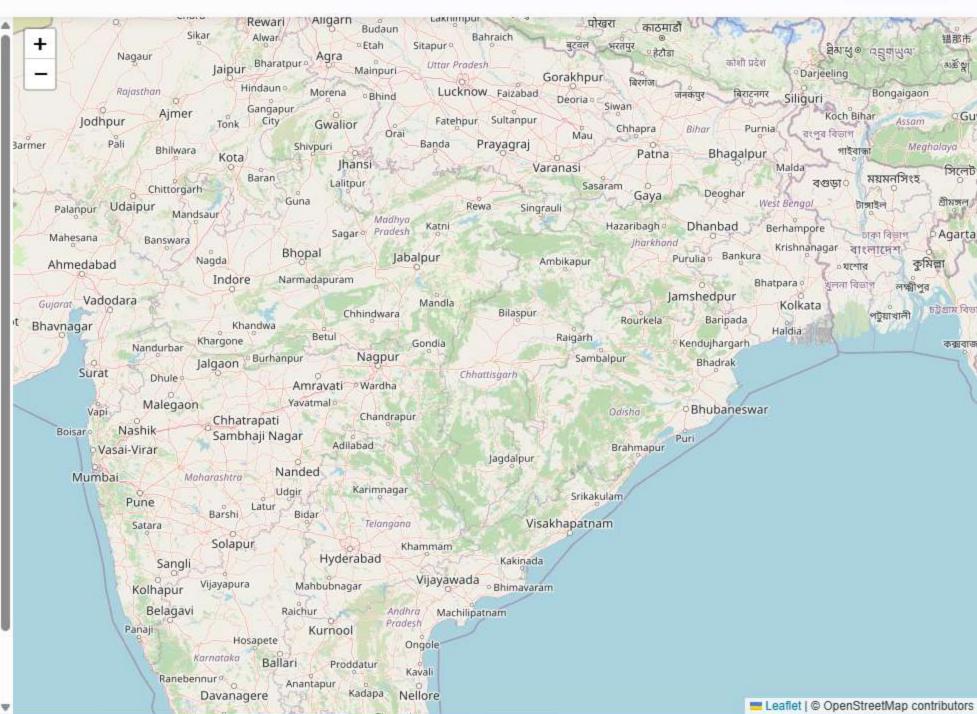


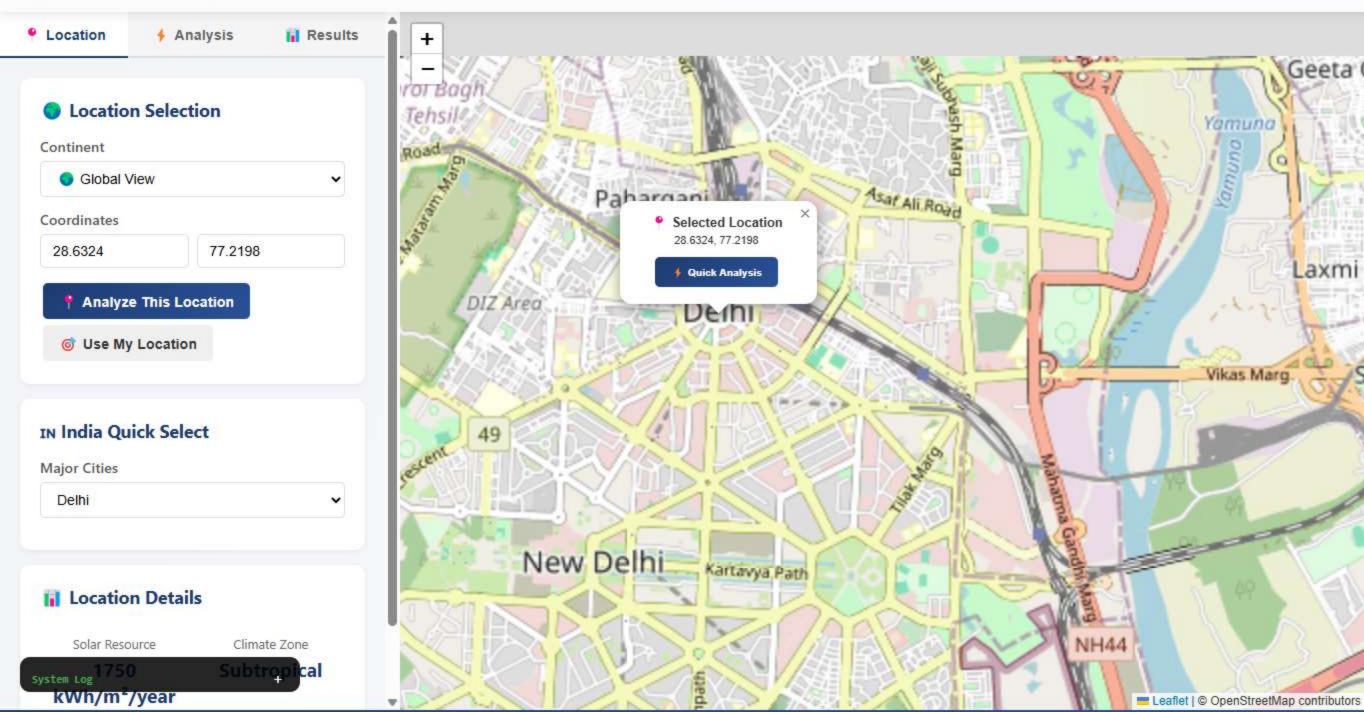


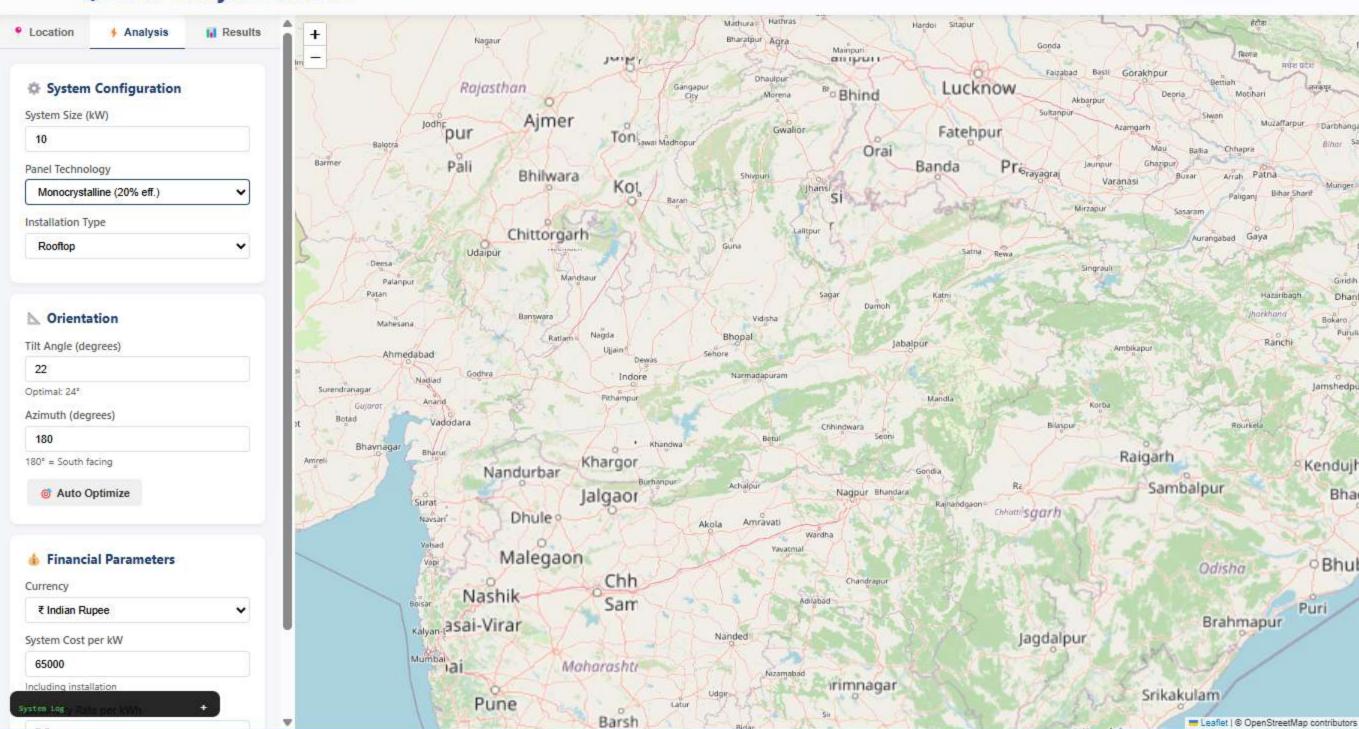


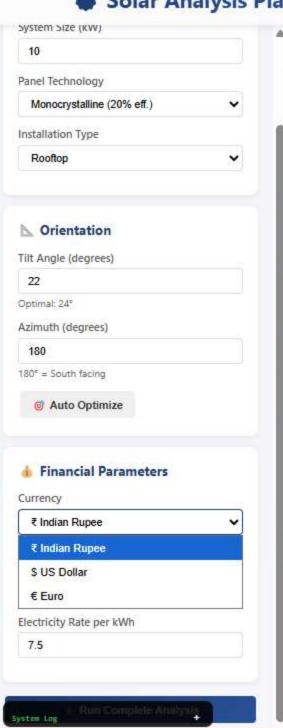


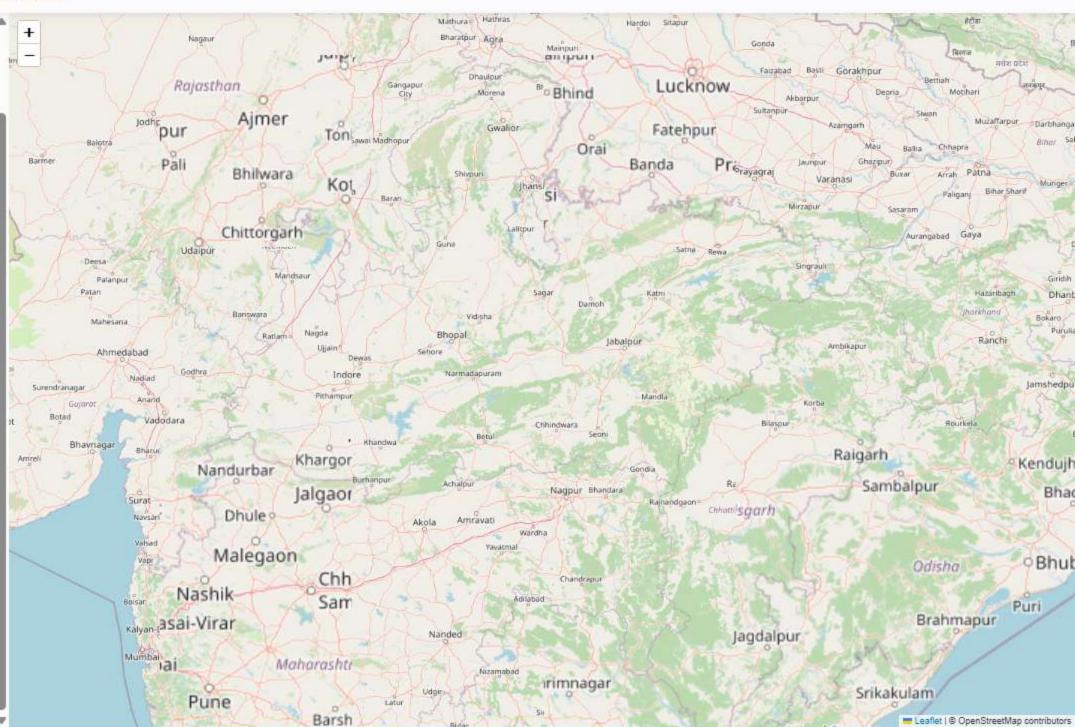


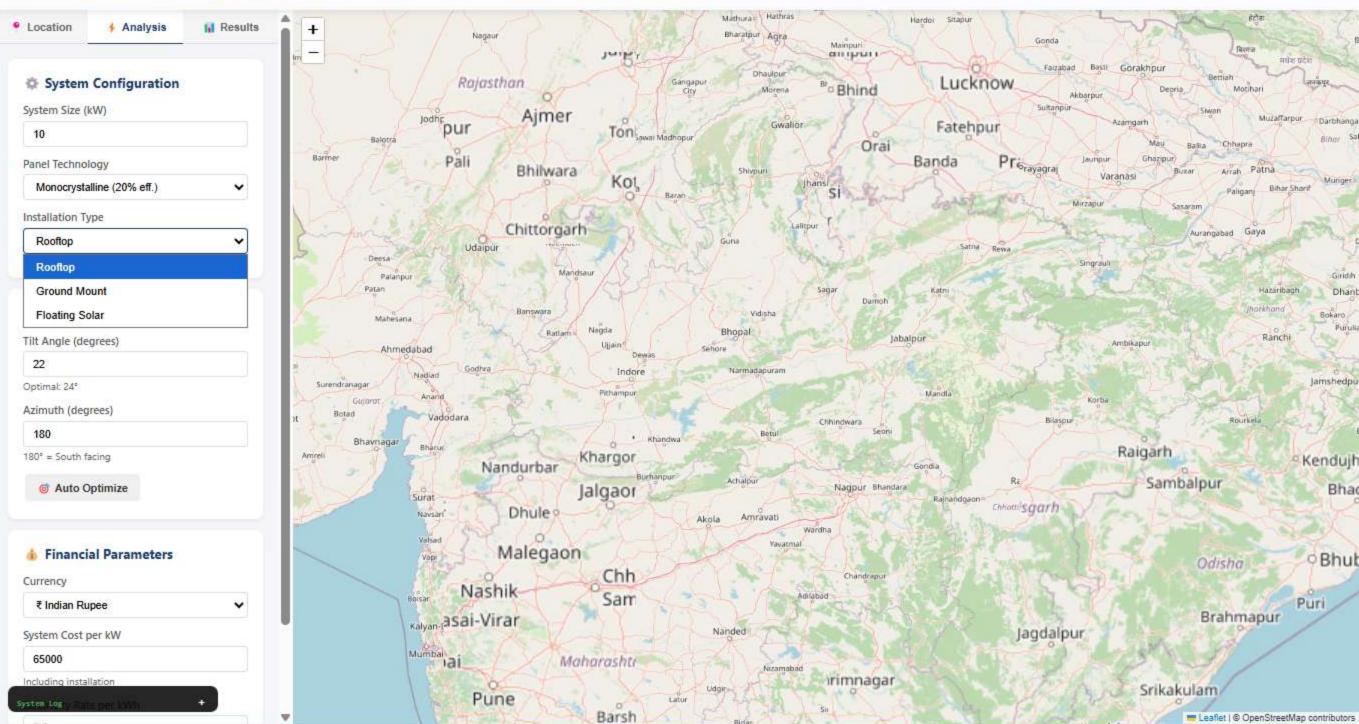


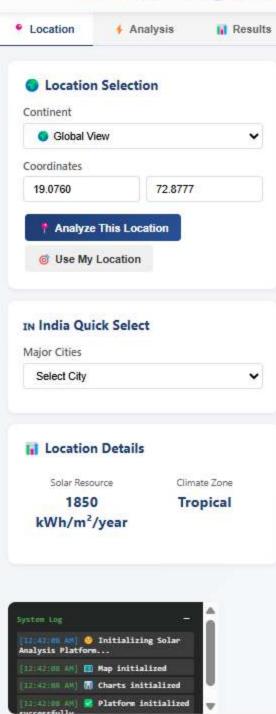


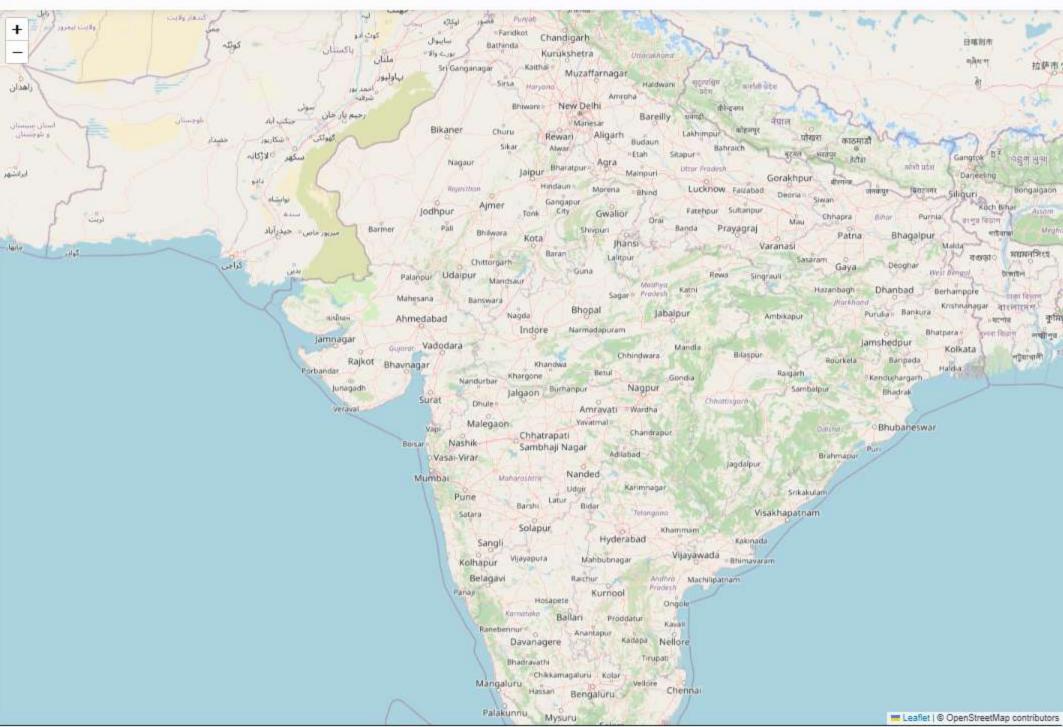












Bhagaipur

Berhamppre

= Leaflet | © OpenStreetMap contributors

Bhatpara 9

Dhanbad

Purulian Bankura

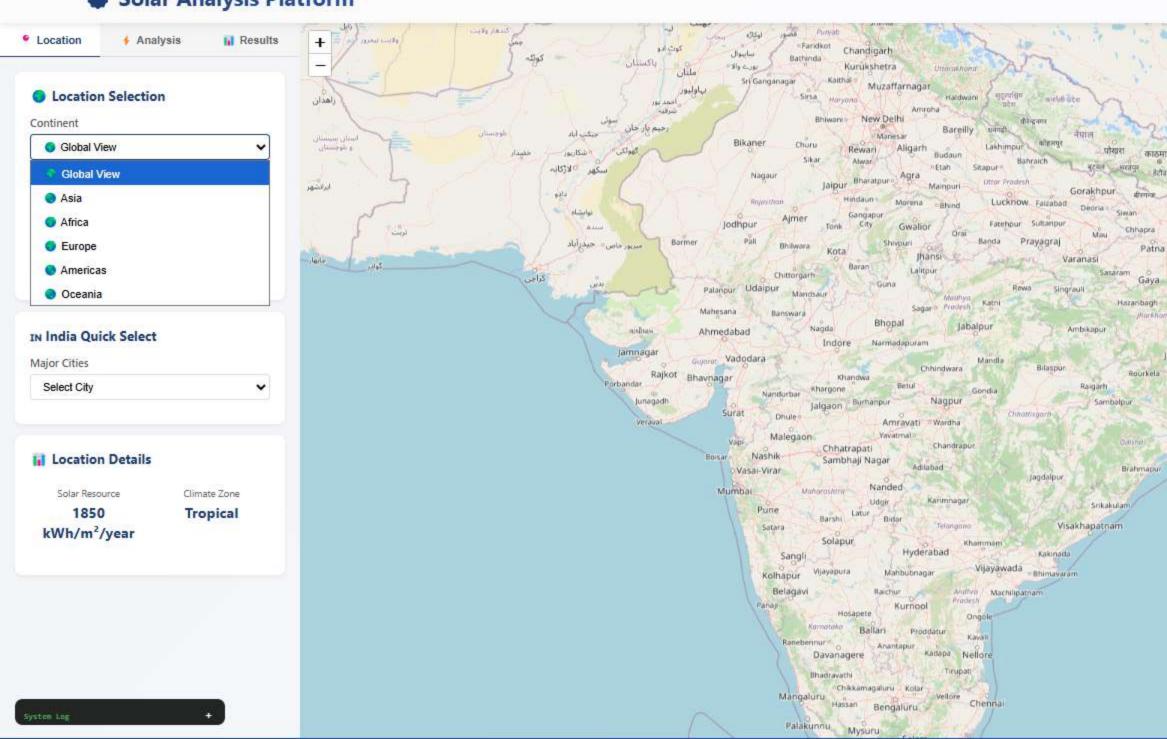
Kenduhargarh

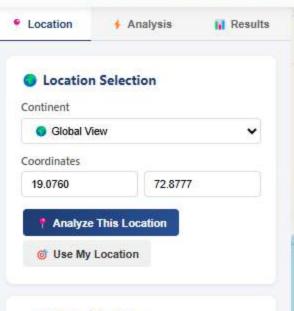
Bhadrak

Bhubaneswar

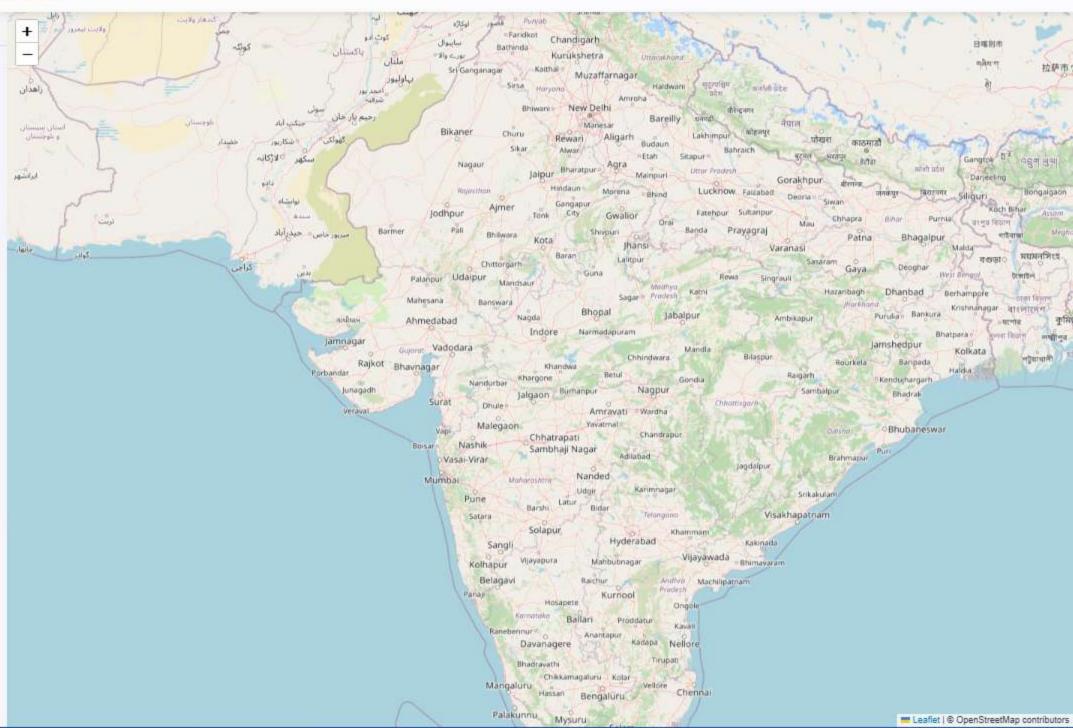
Jamshedpur

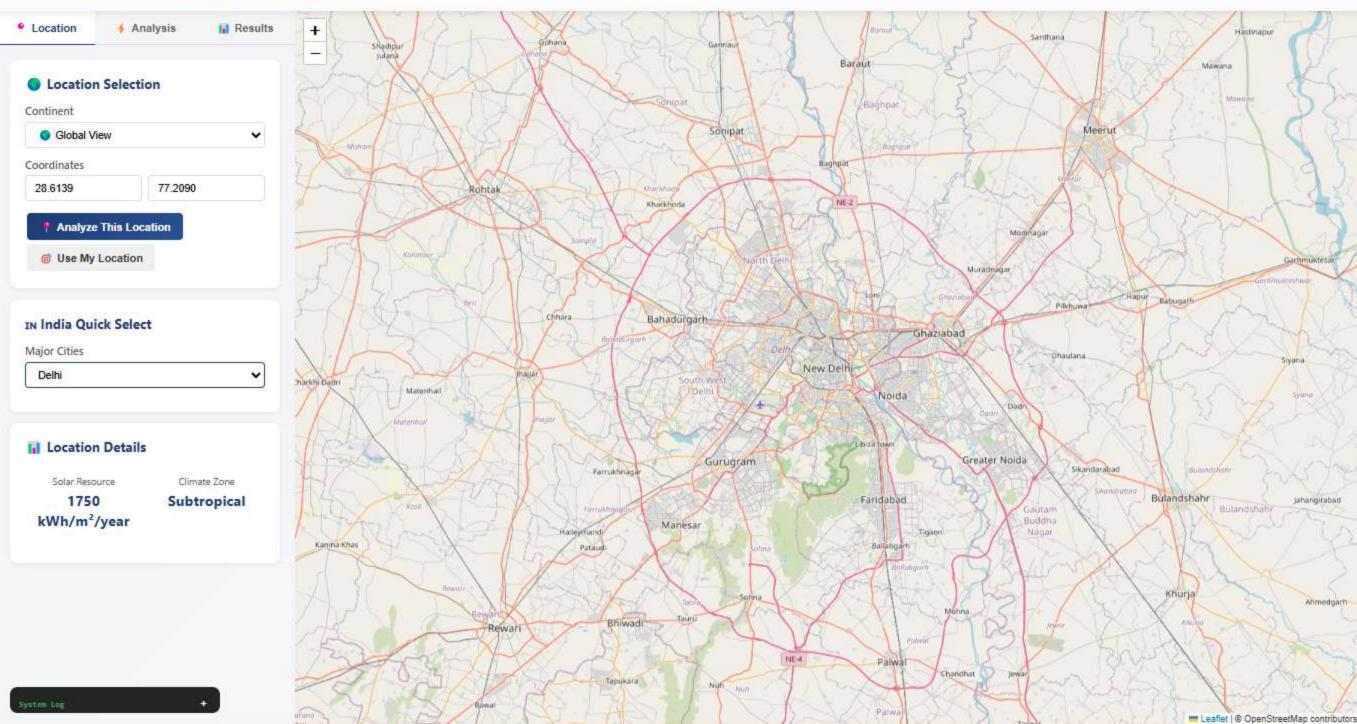
日喀利市



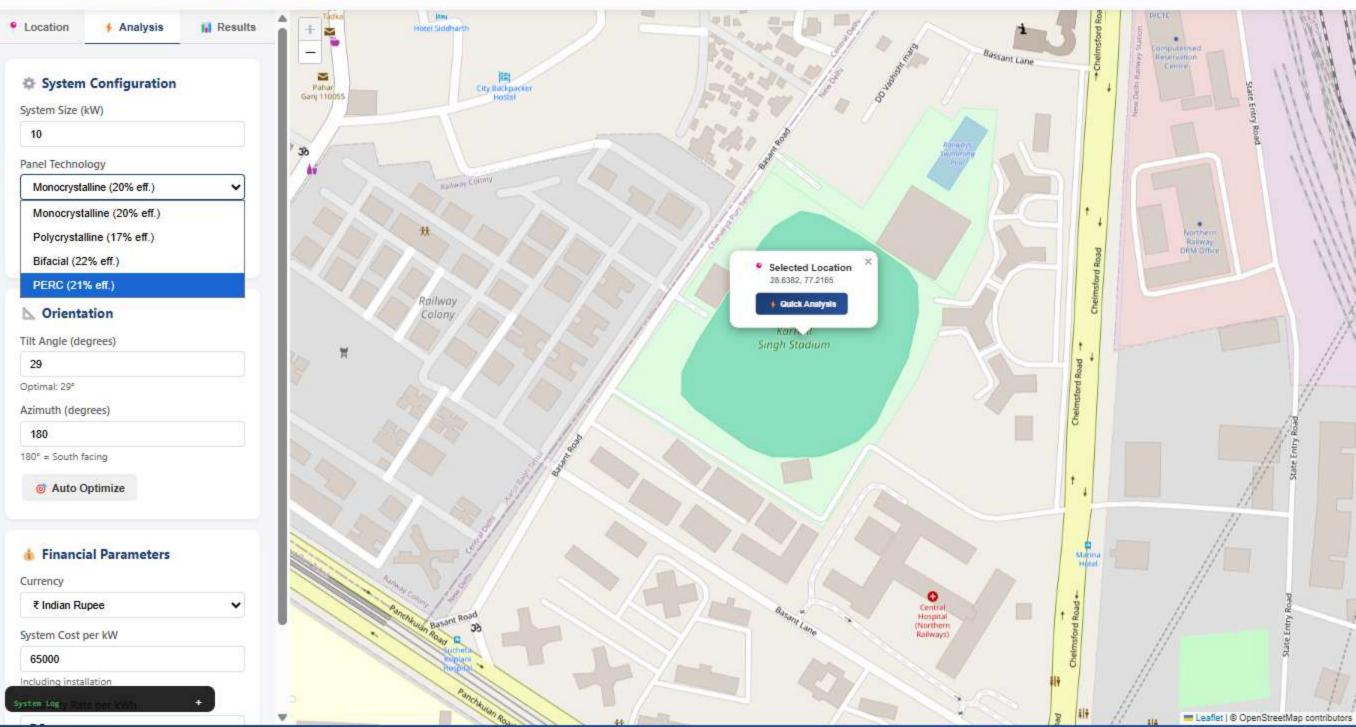




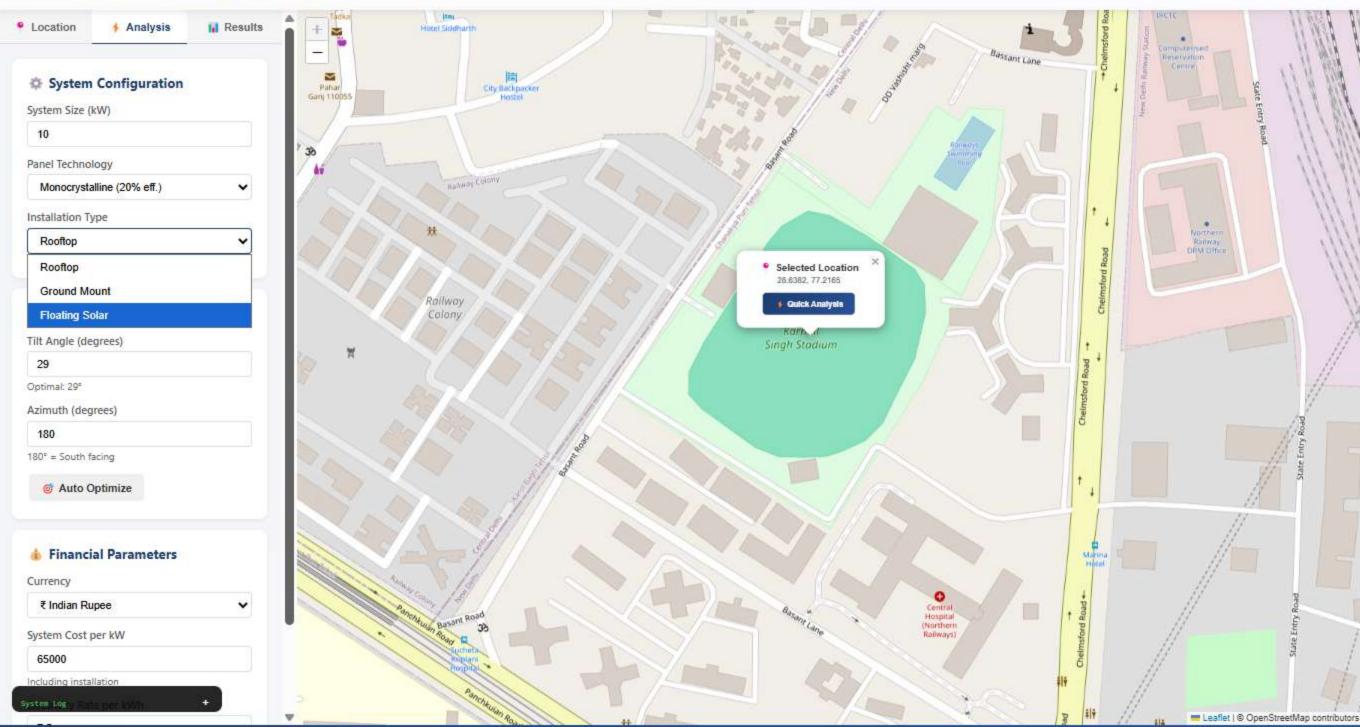




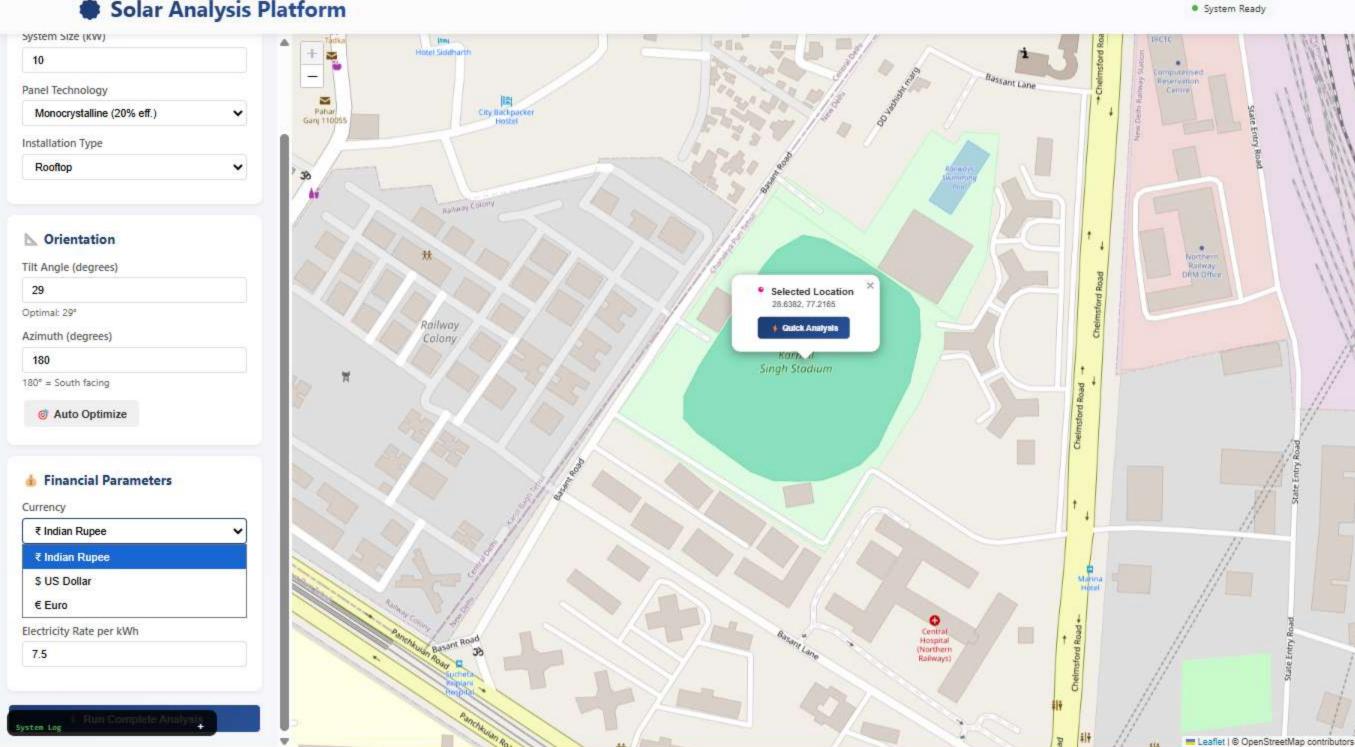


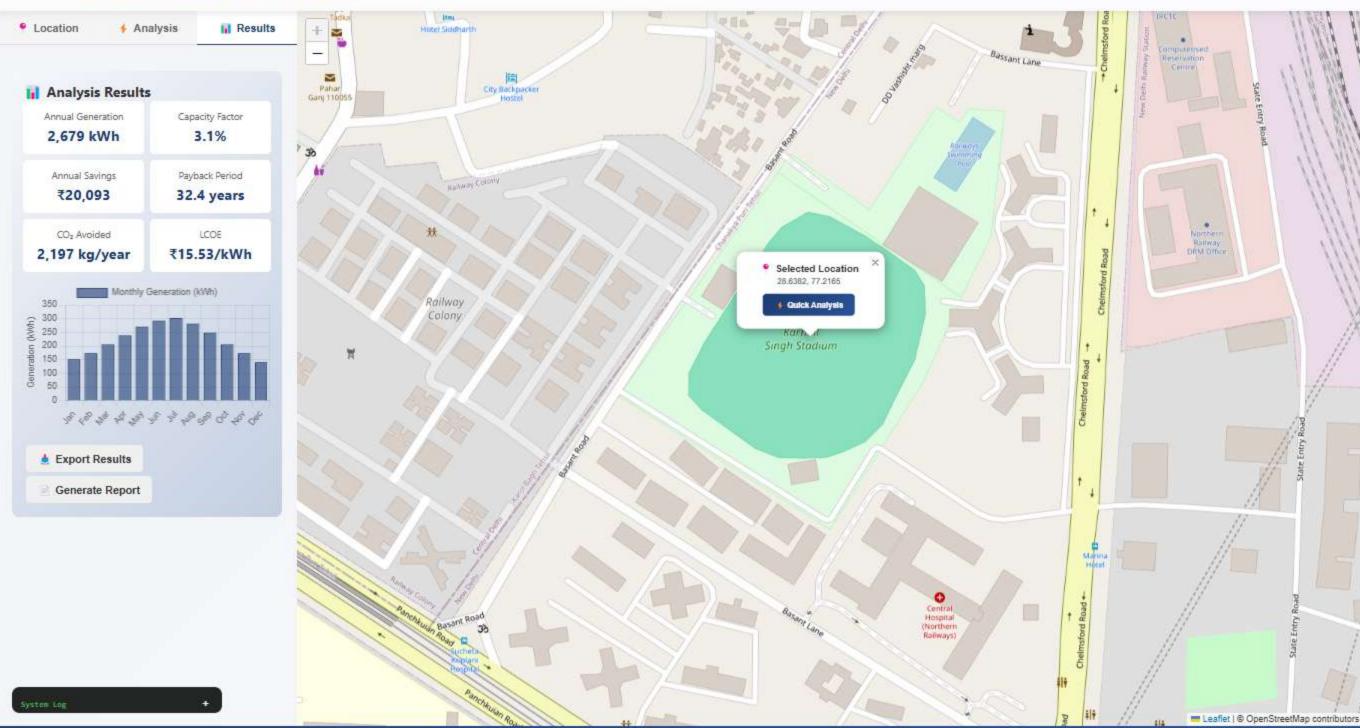














Generated on 10/2/2025

Project Location

Coordinates: 28.6382°, 77.2165°

Solar Resource: 1750 kWh/m²/year

Climate Zone: Subtropical

System Configuration

System Size: 10 kW Panel Type: mono Installation: rooftop Orientation: 29° tilt, 180° azimuth

♦ Performance Results

Annual Generation: 2,679 kWh Capacity Factor: 3.1% Specific Yield: 268 kWh/kW System Efficiency: 15%

Financial Analysis

Annual Savings: ₹20,093 Payback Period: 32.4 years LCOE: ₹15.53/kWh System Cost: ₹650,000

Tenvironmental Impact

CO₂ Avoided: 2,197 kg/year 25-Year CO₂ Reduction: 54,925 kg

Report generated by Solar Analysis Platform

Analysis based on location-specific solar resource data and industry-standard calculations

