IBM Maximo Renewables

Unlock the performance and value of renewable energy assets

Highlights

- Track and monitor renewable asset performance
- Identify root-causes for efficiency losses and recommend actions
- Plan and manage maintenance work

The transition to renewable energy sources is accelerating as industries and governments worldwide aim to reduce carbon emissions and combat climate change. With this shift comes the critical need to manage the growing number of renewable energy assets — wind farms, solar power plants, battery storage systems, and more. To ensure that these assets operate efficiently, safely, and sustainably, energy providers must leverage advanced technologies for asset performance and maintenance management.

Maximo Renewables is a unified solution designed to help operators of renewable energy assets improve the performance and longevity of their renewable assets and reduce operational costs to increase overall energy generation. With Maximo Renewables, users can track and monitor renewable asset performance, obtain root-cause analysis for efficiency losses, and generate actionable recommendations to optimize productivity.




6 GW

of renewable assets is managed by Param Renewables with this technology. 1

25%

reduction in controllable losses across 105,000 solar panels and 45 inverters at an India-based project.[2]

8.6%

increase in power generation within 6 months for a 5 MW project in Gujarat Solar Park, India.[3]

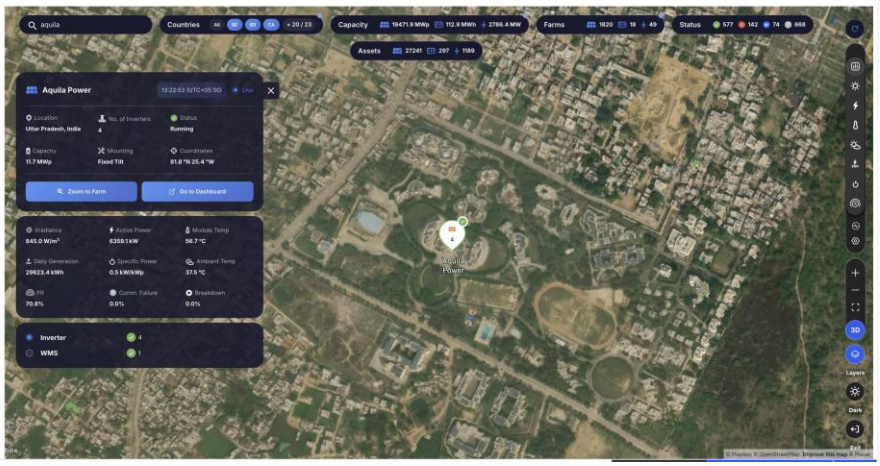
Maximo Renewables

Maximo Renewables helps organizations manage renewable energy assets across multiple sites, gain deeper insights into asset performance, and prioritize maintenance to increase renewable energy generation.

It is more than just an asset management solution — it's a comprehensive, data-driven platform designed for the unique challenges of renewable energy management, regardless of industry.

Track and monitor renewable asset performance

Extract machine and manual data using major protocols from any renewable energy asset and display it on customizable dashboards. Utilize asset-specific methods to collect and clean data, providing users with a portfolio-wide view for monitoring their unique KPIs.



Identify root-causes for efficiency losses and recommend actions

Utilize AI-powered intelligence and drone thermography to collect asset data, apply pre-trained data science models to help identify root-causes for underperformance, and suggest maintenance work for plant crews to increase power generation.

Why Asset Performance Management (APM) is needed for renewable assets like solar, wind and battery energy storage?

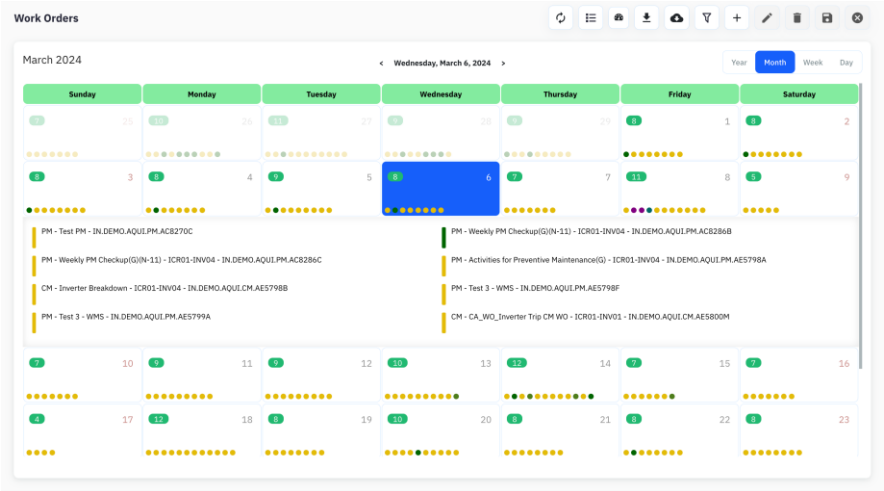
Complexity
Asset complexity for renewables makes it difficult to manage and optimize asset performance.

Environment
External factors like weather conditions and debris can negatively impact energy output, system efficiency, and uptime.

Expertise
Root-cause analysis demands asset-specific expertise for actionable insights, making real-time identification and prioritization essential.

Plan and manage maintenance work

Use insights from assets to proactively plan and oversee operations, helping to ensure smooth and efficient processes. Optimize essential tasks like work orders, maintenance scheduling, and inventory management to drive better outcomes and reduce downtime.



As the renewable energy sector continues to evolve amidst growing complexity and regulatory pressures, Maximo Renewables offers a robust solution to help organizations navigate this transition.

In an era where sustainability is paramount and the pace of change is rapid, Maximo Renewables helps renewable energy providers to not only meet today's challenges but also position themselves for future growth and innovation. Embracing purpose-built asset performance management for renewables will help accelerate the journey toward a more sustainable, efficient, and compliant energy future.

For more information, book a live demo to see it in action or contact us to talk to an IBM renewables expert.

Sources
1. - https://www.paramrenewable.com/
2,3 - https://prescinto.ai/case-studies/gujarat-solar-park-case-study/

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