BROCHURE

Apollo Energy Analytics

Turn renewable asset data into performance and profit

The global energy transition demands maximum power at the lowest possible cost. Apollo Energy Analytics helps operators of solar, wind, and battery storage assets maximize output and reliability by combining deep renewable expertise with the trusted AVEVA industrial data platform. With renewable asset digital twins, real-time monitoring, predictive analytics, and AI-driven insights, Apollo helps teams improve asset availability, reduce downtime, and increase energy yield across the portfolio.

Turn scattered data into proactive decisions

Operators of multi-technology fleets often struggle with siloed systems and limited visibility. Apollo Energy Analytics unifies asset data across sites, learns each asset's unique operating signature, and detects subtle deviations before performance changes trigger alarms. By turning fragmented information into clear recommendations, Apollo enables proactive maintenance planning, extends asset life, and protects revenue streams.

Key features

Centralized monitoring and operations

- Portfolio-wide visibility through real-time dashboards, customizable displays, and centralized ROC/NOC command centers
- Automatic fault detection, incident tracking, and event timelines for inverters, strings, turbines, and batteries
- KIOSK TV enables live performance views in control rooms and field locations

Predictive and advanced analytics

- AI- and ML-powered anomaly detection, root cause analysis, and digital twin models to detect early warnings and perform loss analysis
- Patented forecasting tools to deliver accurate, grid-ready day-ahead and intra-day power forecasts
- Deviation alerts and automated reporting enable compliance and decision support

Optimized O&M and asset lifecycle management

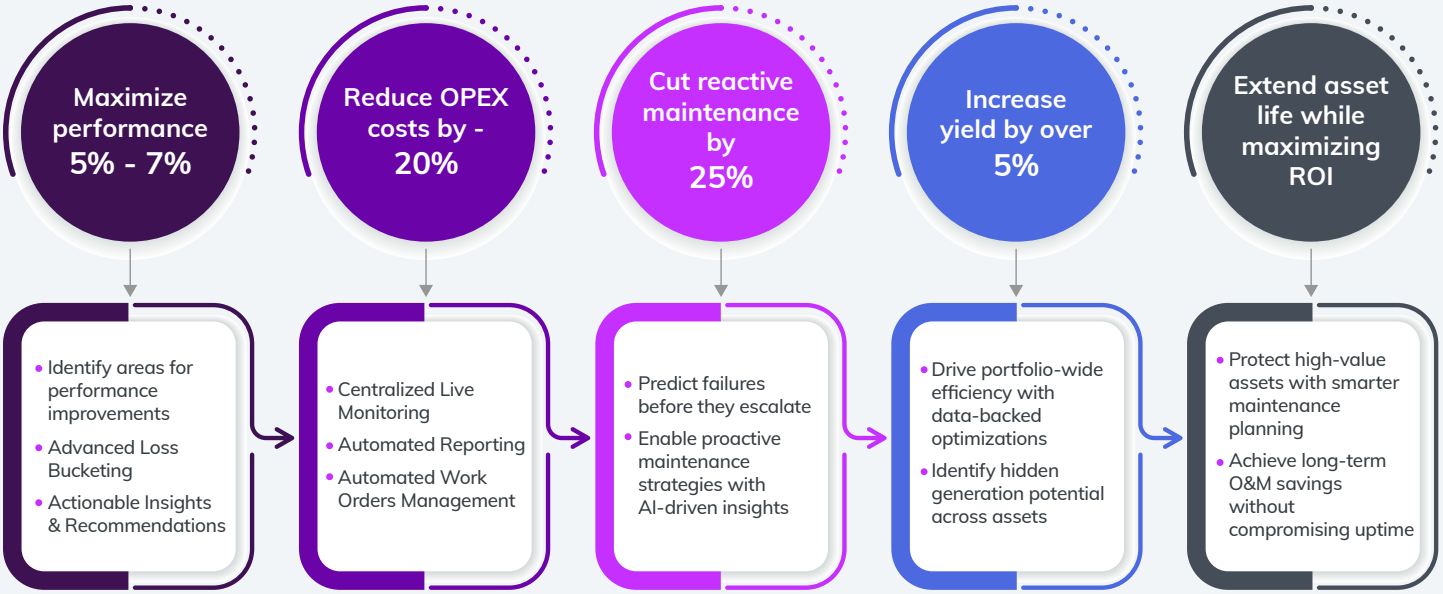
- Fully integrated CMMS with work order management, inventory tracking, vendor SLAs, and preventive maintenance scheduling
- Mobile app for field teams to receive alerts, update tasks, and sync data in real time
- Custom deployment options (cloud, on-premise, hybrid) to align with operator requirements

Core use cases driving measurable results

- **Solar:** Detect and reduce yield losses from soiling, degradation, or derating
- **Wind:** Predict gearbox, pitch, and yaw issues using vibration and performance trends
- **BESS:** Optimize charge-discharge cycles to extend battery life and improve dispatch economics
- **Unified portfolio** management with benchmarking, health scoring, and actionable diagnostics for informed decision-making

Apollo enables renewable operators to predict failures, cut reactive maintenance, and identify hidden generation potential while streamlining operations end to end.

Key outcomes



Proof points

$400,000 saved: Early fault detection prevented major inverter failures at a 50 MW solar plant, avoiding costly downtime and revenue loss.

6% more energy, zero hardware changes: A leading wind farm boosted annual energy production by optimizing curtailment strategies through an AI-powered analytics engine.

18 months longer battery life: BESS operators extended the usable life of battery assets by over a year and a half, thanks to charge-discharge cycle optimization.

Why AVEVA

Apollo Energy Analytics combines Apollo's renewable expertise with AVEVA's industrial data leadership to transform monitoring into action. Customers benefit from:

- A globally proven industrial data platform trusted by the largest energy producers
- A single, reliable source of truth across all renewable assets
- Cloud-native scalability with enterprise-grade security
- Flexible licensing and robust global support

Apollo Energy Analytics doesn't just monitor, it connects the field to the boardroom, transforming data into decisions and performance into competitive advantage.

Why Apollo