Prevent Unplanned Maintenance in your Energy Organization with IFS

Energy organizations rely on KPIs to monitor and measure just about everything. Using operational data, KPIs quantifiably measure performance over time to help lower costs, improve safety and productivity, and meet clean energy objectives.

While all KPIs serve a purpose, one measurement–although often overlooked, serves energy companies particularly well: **unplanned maintenance**.

In this executive summary, we examine how successful energy companies tap into the data behind unplanned maintenance to anticipate and avoid unexpected downtime.

The high cost of downtime

No asset lasts forever. It's a given that an asset will need repair and maintenance work at certain points in its lifecycle. Ideally, these cycles are predictable and known–factored into the maintenance plan so the company can coordinate backup measures and ensure business as usual isn't disrupted.

Unplanned maintenance signifies unexpected system downtime which means production is at a standstill while an unanticipated failure is fixed.

The result? Wasted time, distracted resources, deferred production, fuel shortages or even a power shutdown.

These scenarios are not minor events. For example, in the oil and gas industry, the cost of downtime in 2022 doubled across the sector over two years to nearly $500,000 per hour.

The repercussions for utilities are even more significant, with downtime creating a ripple effect for any organization that depends on a utility to power the business. According to recent studies, power outages cost businesses around $27 billion annually in the United States alone.

Regardless of the scenario, unplanned maintenance directly reflects a company's inability to predict and pre-emptively manage asset performance.

$500,000/hr

Cost of downtime for Oil & Gas (2022)

The role of data in eliminating unplanned maintenance

Access to accurate, real-time data is a critical enabler in optimizing productivity. This information supports analytics and data-based intelligence to help direct important business decisions.

With dependable data, the organization knows with certainty how each asset is performing, whether it needs maintenance sooner than scheduled, and other insights to ensure equipment doesn't go offline unexpectedly.

The same information informs supporting activities such as field service management to plan and schedule maintenance personnel, parts management, and other logistics.

Data is also instrumental in determining KPIs for operational oversight and supporting sustainability, safety, and other essential objectives.

Industry example

Energo-Pro Georgia, the largest Georgian electricity producer, provides services to over 1.2 million customers. The company leverages IFS to access accurate asset data and information to maintain assets and implement new infrastructure investments.

"We have continuous access to up-to-date data, which translates into full control of our extensive and complex infrastructure and enables us to effectively maintain it."

Irakli Avaliani, Project Manager

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ENERGO-PRO GEORGIA

Transitioning to predictive or condition-based maintenance

To reduce and even eliminate downtime, the operation must practice predictive or condition-based maintenance whereby servicing is undertaken proactively to minimize disruptions.

The practice also increases profitability and safety. According to a recent study, offshore oil drilling companies that implemented predictive maintenance were able to reduce overall maintenance costs by 38% while improving operational safety.

This proactive approach to maintenance reduces overhead, improves efficiency, curtails supply chain disruptions, and serves as an important competitive differentiator.

Industry example

Dolphin Drilling is a leading harsh environment drilling contractor for the oil and gas industry. The company leverages IFS to accurately monitor the condition of its assets. Since implementing IFS, the company has transitioned from periodic time-based maintenance to predictive maintenance.

"Data from offshore sensors will stream to the analytics platform to then allow IFS to review machine health analytics and manage a predictive maintenance regime."

Svein Bjørnstad, Chief Information Officer

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DOLPHIN DRILLING

Managing partners that manage asset maintenance

Many energy and utility companies support infrastructure within challenging environments, such as, offshore operations. In these scenarios, it's common to enter into a joint venture with specialized partners who manage the facility's construction, maintenance, and operation.

Unfortunately, it's not uncommon for the maintenance partner to fall short, delivering inaccurate predictions around asset performance. Unable to validate the data provided by the partner, the energy company may not be aware of asset issues until a failure occurs, resulting in unplanned maintenance.

To remedy these scenarios, IFS customers have incorporated a new model where IFS Cloud Enterprise Asset Management (EAM) is deployed in tandem with the maintenance partner's system to validate reporting data.

Running in parallel, IFS EAM maintains oversight of all assets. The system provides an important safety check to avoid failures and ensure KPIs are stable and on track.

Industry example

Torresol Energy, a concentrated solar power leader, relies on IFS in part to monitor its KPIs. The technology incorporates aggregated data from Torresol's distributed control systems (DCS), including more than 70,000 tags or input/output points.

Next steps with IFS

IFS works with energy organizations globally, providing capabilities that support predictive maintenance and real-time data generation. With IFS, the business optimizes how assets are managed and maintained. KPIs are generated in the moment, maximizing productivity and reliability while reducing unplanned downtime.

IFS is recognized by industry analysts, including Gartner, Forrester, and IDC, for our leadership in asset management, field service management, planning and scheduling optimization, and ERP solutions for asset-intensive organizations.

Discover how IFS Cloud Enterprise Asset Management will help you be your best in your Moment of Service™. Contact us today.

"We need the data to monitor KPIs relevant to the plant's operation and maintenance, including systematic inspection, detection and correction of incipient failures."

Alberto Vázquez, Planning and Cost Controller

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Torresol Energy
reinventing solar power