# Transforming the worldwide electrical grid with Platned and IFS





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## The future of the grid with Platned and IFS

### Meeting the demands of a changing energy landscape

The worldwide electrical grid is at a pivotal moment. With ageing infrastructure, evolving consumption patterns, and the accelerating transition to renewable energy, utilities face immense challenges. Maintaining reliability and efficiency while adapting to a more decentralised, digitised energy model is critical.

As a trusted partner of IFS, Platned delivers industry-leading enterprise software solutions that enable energy providers to modernise operations, optimise asset management, and enhance workforce capabilities. By leveraging advanced analytics, artificial intelligence, and cloud-based technologies, utilities can navigate the complexities of an evolving grid and drive long-term sustainability.

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#### The urgency of transformation

Energy infrastructure worldwide is struggling to meet growing demands. Europe operates the world's largest interconnected grid, serving over 600 million people, while North America's grid supports nearly 400 million consumers. However, much of this infrastructure was built decades ago and urgently needs renewal. Climate change, increasing energy consumption, and supply chain constraints further exacerbate the situation. Extreme weather events, outdated equipment, and underinvestment have led to rising failure rates and an increased risk of blackouts. To secure

the future of power distribution, utilities must embrace data-driven strategies, predictive asset management, and workforce innovation to build a more resilient and adaptive grid.

#### #Goal 1 Rebalancing supply and demand

Utilities face significant challenges in balancing supply and demand while incorporating renewable energy sources. The traditional grid model is struggling to meet fluctuating energy demands, exacerbated by the electrification of transport, Al-driven technology, and evolving consumer behaviour.

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#### Challenges

Increasing energy demand – Rising usage from electric vehicles, industrial expansion, and data centres is putting unprecedented strain on the grid.

- Unpredictable consumption patterns Heatwaves, storms, and economic changes make energy demand difficult to predict.
- Growing reliance on intermittent renewable sources Wind and solar generation depend on weather conditions, requiring intelligent distribution strategies.
- Grid failures on the rise Large-scale blackouts are increasing due to high demand, aged infrastructure, and extreme weather.





## Key solutions from IFS Cloud<sup>™</sup>

Cloud-based AI-driven energy management – AI-powered forecasting models predict fluctuations, helping utilities stabilise supply and demand.

- Automated customer communication tools Proactive engagement ensures users are informed of peak periods, encouraging responsible energy consumption.
- Flexible energy and demand response programmes Encouraging consumers to shift usage to off-peak hours through incentives and education.
- Real-time energy monitoring Grid operators can instantly track and balance load, reducing the risk of outages.





## The impact of managed energy consumption

A growing number of utilities are implementing demand response initiatives and community-driven energy models. By actively working with consumers to adjust their energy usage habits, utilities can alleviate strain on the grid while promoting sustainability.

Examples include:

- Community microgrids Decentralised, localised energy production allows small communities to generate and share power.
- Incentivised energy reduction programmes Consumers are rewarded for reducing energy consumption during peak times.
- Optimised scheduling for energy-intensive activities Encouraging off-peak use of high-demand appliances and industrial processes.

IFS Cloud<sup>™</sup> provides the digital infrastructure needed to execute these initiatives, ensuring utilities have the insights and tools necessary to transition to a more resilient and adaptive grid.



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#### #Goal 2 Strategic asset investments for a resilient grid

The reliability of the global power grid depends on strategic investments in assets and infrastructure. However, many utilities struggle with outdated equipment, funding limitations, and supply chain disruptions. To overcome these challenges, utilities must adopt advanced technology-driven approaches for asset management and performance monitoring.



#### Challenges

- Ageing infrastructure Many assets are decades old, requiring costly maintenance and replacement.
- Difficulties in sourcing replacement parts Supply chain constraints make it difficult to obtain necessary components.
- Insufficient funding Many public utilities lack the resources to invest in new infrastructure.
- Climate risks and environmental impact Extreme weather events are increasing asset failure rates





### IFS Cloud<sup>™</sup>solutions for asset management

- Real-time asset performance monitoring Predictive maintenance and Al-driven monitoring help extend asset lifespans and reduce failures.
- Data-based asset investment planning AI and analytics enable utilities to prioritise investments and ensure long-term resilience.
- Optimised capital expenditure strategies IFS Cloud<sup>™</sup> integrates asset investment planning with maintenance strategies to balance cost, risk, and performance.
- Industry collaboration and regulatory compliance Ensuring utilities meet standards while working effectively with industry partners.





## Enhancing grid resilience with data-driven insights

By leveraging IFS Cloud<sup>™</sup>, utilities can gain deep insights into asset conditions, failure risks, and maintenance needs. Al-driven decision-making ensures investments are made at the right time, maximising grid reliability while controlling costs.

- Asset performance management Continuous real-time monitoring minimises downtime and prevents unexpected failures.
- Predictive maintenance and automated scheduling Ensuring critical repairs happen before disruptions occur.
- Risk-based investment planning Utilities can allocate resources more effectively based on asset performance data.

IFS Cloud<sup>™</sup> enables utilities to transition from reactive maintenance models to proactive, predictive asset management strategies, ensuring long-term stability and efficiency.



#### #Goal 3 Strengthening workforce capabilities

The energy sector faces a growing talent shortage as experienced professionals retire and fewer young professionals enter the industry. The sector must address labour shortages, knowledge retention, and the need for digital skills to build a resilient workforce.



#### Challenges

- An ageing workforce and knowledge drain Over 50% of the utility workforce is within 10-15 years of retirement, taking with them decades of operational expertise.
- Declining interest in the industry Many young professionals view the sector as outdated compared to tech-focused industries.
- Skill shortages in emerging technologies As AI, IoT, and automation become standard in energy management, the workforce must adapt to these changes.
- Training gaps and slow onboarding New hires often lack structured training programs, impacting productivity and efficiency.





#### IFS Cloud<sup>™</sup> Workforce Solutions

- Mobile workforce management tools Providing real-time access to asset data and repair procedures in the field.
- Collaboration with educational institutions Establishing partnerships to develop industry-specific training programmes.
- Al-driven scheduling and workforce optimisation Improving efficiency through automated resource allocation and predictive job assignment.
- Digital knowledge transfer tools Capturing and sharing expertise from retiring workers to ensure a smooth transition.

IFS Cloud supports utilities in building a dynamic, skilled workforce by integrating training, digital transformation, and automation to address evolving industry needs.

#### Data-driven decision-making for the future grid

By leveraging AI, IoT, and cloud-based analytics, utilities can make data-driven decisions that optimise grid performance and support the transition to a more sustainable energy





## Key benefits of IFS Cloud<sup>™</sup> for utilities

- Enhanced operational efficiency Reducing downtime and improving asset performance.
- Improved regulatory compliance Ensuring energy providers meet industry standards and sustainability targets.
- Real-time visibility Providing utilities with up-to-date insights into grid performance and potential risks.



#### The future of the grid with Platned and IFS

The transition to a modern, resilient, and decentralised energy grid is a complex challenge that requires cutting-edge technology and strategic investments. With IFS Cloud<sup>™</sup>, Platned equips utilities with the tools they need to drive digital transformation, enhance operational efficiency, and improve service reliability.

Platned and IFS are committed to supporting the evolution of the worldwide electrical grid by enabling utilities to make datadriven decisions, optimise their workforce, and future-proof their infrastructure.

# Discover how IFS Cloud<sup>™</sup> can help transform your energy operations.

Contact Platned today to learn more info@platned.com





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