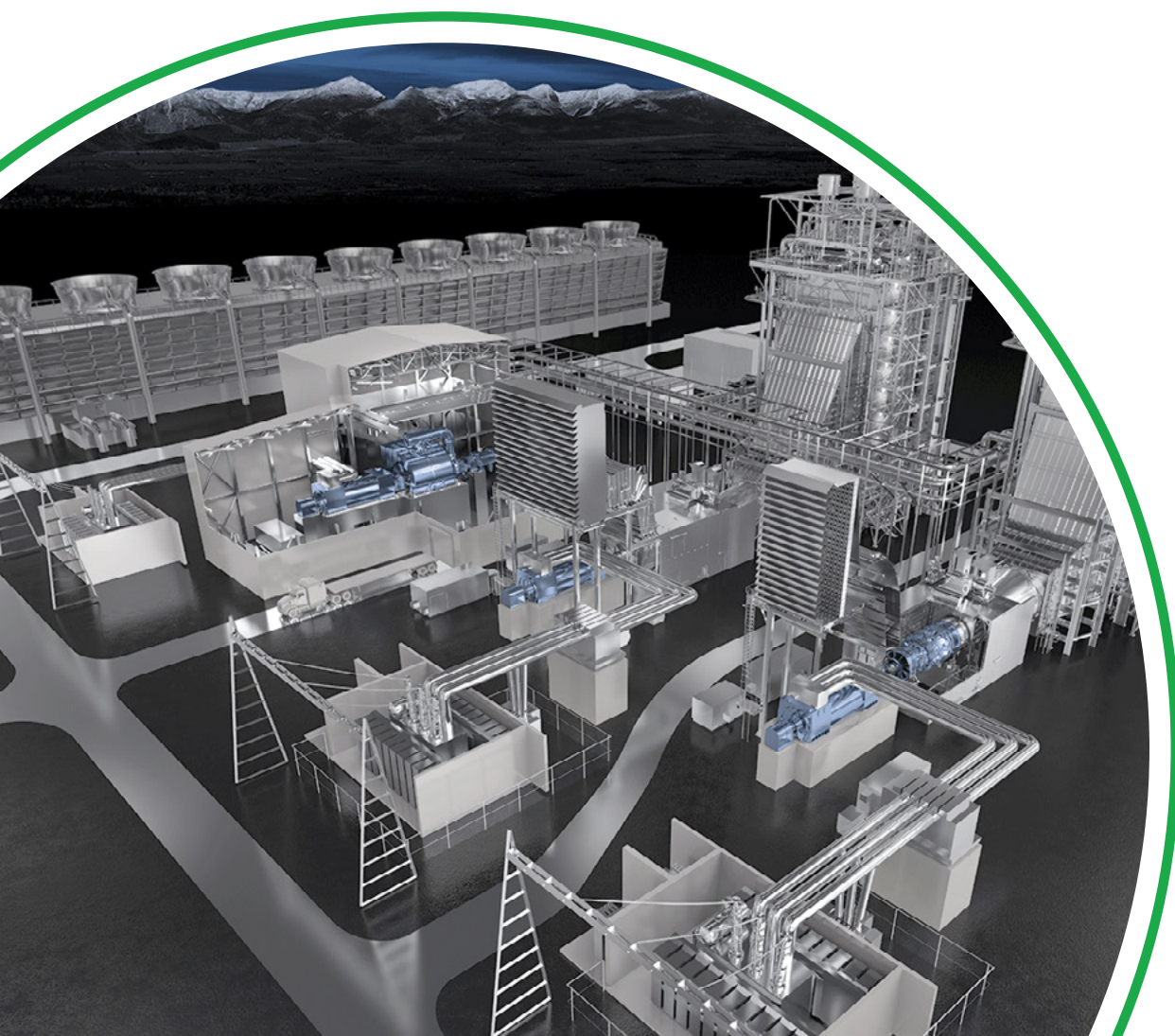# The Digital Power Plant

Bridging the intelligence gap between people and machines

The Digital Power Plant

Our mission is simple: get faster, get smarter, get ahead.

The Industrial Internet is about connecting big data, machines, and the people who operate them. With this in mind, GE is redesigning the way machines work and businesses take action as a result. The Digital Power Plant is the ideal synergy of machinery and software, combining the diverse needs of power assets with high-speed, intelligent digital infrastructure – built for the Industrial Internet. With the support of Predix™, a cloud-based platform, our comprehensive suite of customizable services and solutions makes improving your unique operations simple and impactful. We make your machines smarter, leading to better business decisions, enhanced performance, and bigger results.

Get Faster

With the Digital Power Plant, unexpected downtime is a thing of the past. Enhance and sync assets with our software, combining performance metrics, 24/7 data analytics, asset visibility, troubleshooting, and other industrial solutions into one brilliant, user-friendly platform.

Get Smarter

From traders to field engineers, people in any department can view and analyze GE's recommendations, analysis, and forecasting to make better decisions for your business. Plus, with data-driven insight, machines learn to detect anomalies and improve their own efficiency, meaning fewer repairs, more production.

Get Ahead

Uncover business outcomes you never imagined that impact your bottom line with improved reliability, revenue, and performance. With digital optimization bringing over $200 billion of value to the industry, the opportunities are endless. What could you do with this forecasting power, extra resources, and increased production?

The Framework

Powered by Predix™

At the heart of our intelligent infrastructure is Predix, a cloud-based platform designed just for the Industrial Internet. The highly adaptable foundation supports the industry's most innovative applications, turning your operational data into customized, efficient solutions. With unlimited storage and an easy-to-use interface, Predix manages and analyzes massive volumes of diversified industrial data in real time that you can access anywhere, any time. Predix gives your operations the universal connectivity it needs, while also providing the security, accessibility, and reliability it deserves.
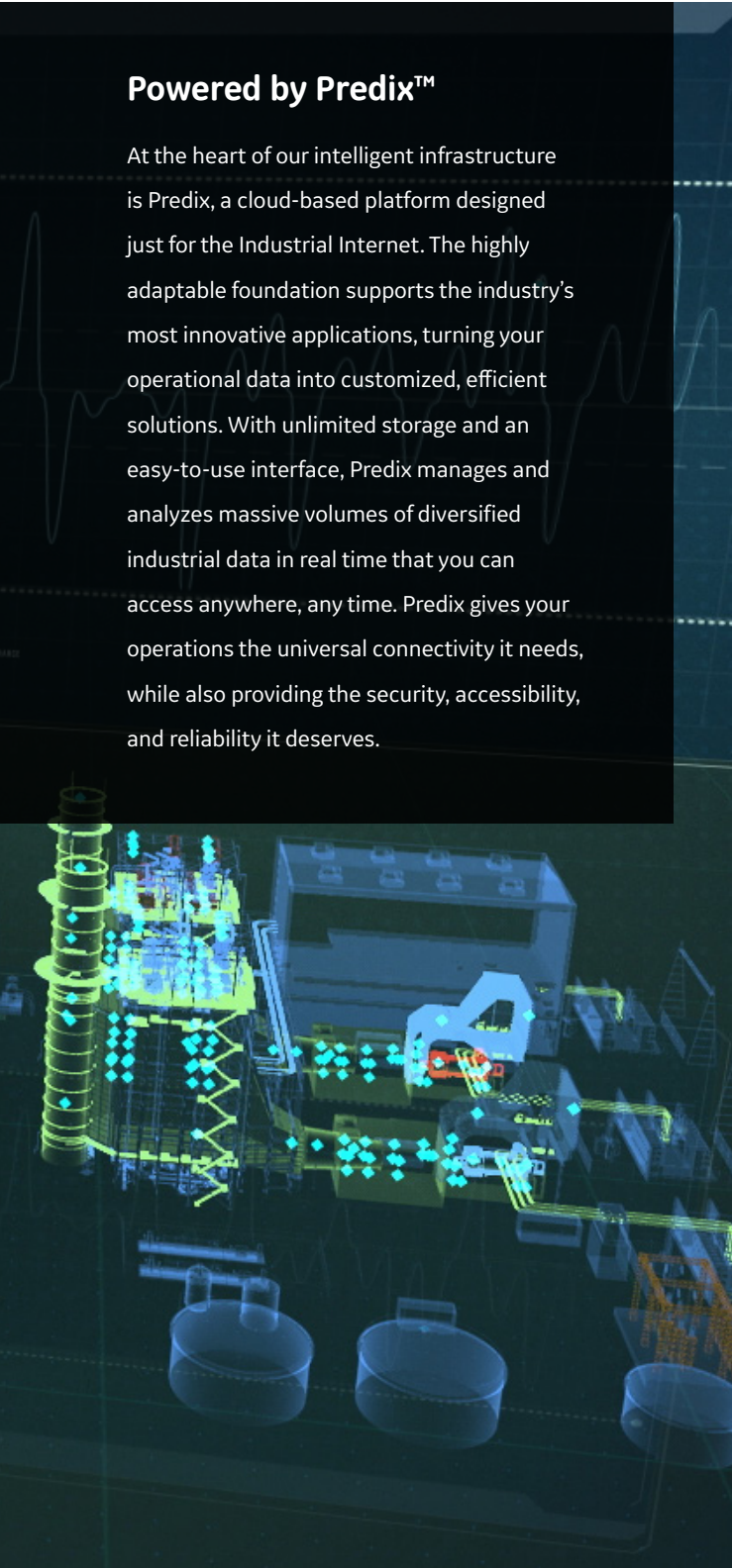
Software-Defined Flexibility

Whether you need software-defined machines or software-defined operations, GE's digital infrastructure can seamlessly blend into your business. Our machines combine the world's most reliable, efficient assets with advanced industrial applications, while our software solutions enrich existing operations for increased efficiency. We work with you – that's the power of GE's Digital Power Plant.

Digital Twin

With Digital Twin, real-time data aggregation builds a digital clone of your machine, so you can test scenarios, predict maintenance and anomalies, benchmark your asset performance compared to GE's global installed base, and optimize your asset to its full potential.

Cyber Security

GE's advanced defense system is designed to assess system gaps, detect vulnerabilities, and protect your critical infrastructure and controls in compliance with cyber security regulations.

Software Capabilities

Asset Performance Management

Improving power assets and reducing expenses have never been easier. With the ability to quickly analyze years of data across systems and equipment types, GE's Asset Performance Management (APM) solutions give you the power to predict and prevent operational issues, reduce downtime, and boost overall asset performance and life. Now raw data is transformed into actionable intelligence, combining robust analytics with domain expertise to transition reactive and preventative maintenance processes into predictive ones. APM becomes your single vital solution, linking your assets and people effortlessly so you can make smarter decisions, avoid costly operational risks, and develop your business for the long term.
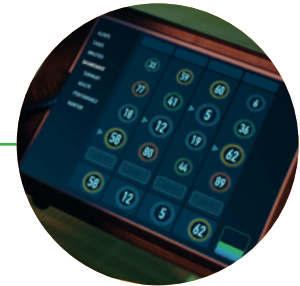

1

Machine & Equipment Health

Increase the value of your existing power generation and renewable assets with historical forensic analysis, anomaly detection, and asset condition monitoring.

2

Reliability Management

Foresee potential operational performance issues across your entire plant with predictive data analysis, case management, and 24/7 diagnostic support across all OEMs.

3

Maintenance Optimization

Increase fleet reliability and utilization with personalized, financially-beneficial recommendations that prioritize maintenance activities based on risk tolerance and asset criticality for any asset type.
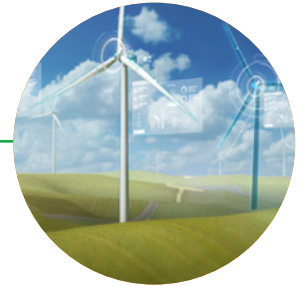
Operations Optimization

Operations Optimization puts your fleet's future back in your hands. With your portfolio's unique Key Performance Indicators (KPIs) in mind, our cloud-based suite customizes proactive recommendations that leverage overlooked resources, reduce production costs, and enhance plant reliability and efficiency. From plant managers to CEOs, every level of operations can get the advanced visibility, insight, and recommended action they need to attain daily and long-term operational excellence in compliance with standard regulations.

1

Plant/Farm Optimization

Tap into KPI-focused analytics with data-driven decision support and implement machine & operator learning to increase return-on-assets and improve operational efficiency.

2

Performance Metrics

Measure plant operations through incredibly accurate thermal models, baseline testing, sensor calibration, and other plant-specific tools that boost reliability and lower operational costs and risks.

Business Optimization

As the Industrial Internet market evolves, so do we. Ensuring your energy business achieves increased profitability is at the core of our Business Optimization solutions. With GE's intelligent forecasting, financial teams can make smart business decisions that reduce financial risk and maximize the real potential of your fleet. Transform impulsive trades into data-enhanced ones and last-resort operational costs into planned, secure investments. From power forecasting to financial planning, this diversified suite will give your energy portfolio the innovative edge it needs to thrive in a constantly developing, highly competitive market.

1

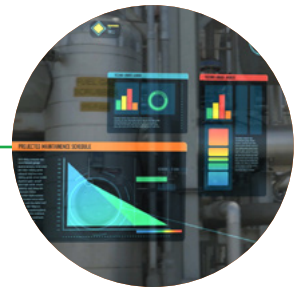## Market Intelligence & Forecasting

Provide traders with the expert advantage of visibility, projecting future fuel and other energy market prices for insightful bidding and buying against competitors.

2

Portfolio Optimization

Meet market demands while reducing total cost through analytics-based outage planning, calculated power improvement, and other portfolio-driven, operational factors.

GE's Brighter Future in Energy

New and existing power plants can benefit from a suite of industrial-grade applications designed to achieve greater predictability, productivity, and, ultimately, profitability. By leveraging a consistent view of data with configurable, results-driven insight, the opportunity for a brighter future in energy is now.

To find out how GE can enhance your business, visit www.ge.com/industries/power-and-energy/power-generation or call: 1-855-YOUR1GE