

ENERGY / UTILITIES

Energy Operations & Digital Twin Optimization

Digital twins and analytics reduced emissions and boosted operational efficiency.

OVERVIEW: A global energy company sought to modernize operations by building digital twins to monitor assets, predict failures, and optimize maintenance schedules. Foundry enabled engineers to model complex systems in real time.

CHALLENGES:

- Aging infrastructure with inconsistent data systems.
- Costly downtime and maintenance cycles.
- High emissions and compliance pressure.
- Lack of predictive visibility across sites.

SOLUTIONS: Foundry integrated IoT sensor data, operational logs, and maintenance records to simulate plant behavior. Machine learning models identified inefficiencies and recommended optimized operational settings.

OUTCOMES



Reduced downtime and emissions



Improved asset reliability



Realized measurable cost savings through predictive optimization