

Solving Energy challenges with IRIS Foundry

From thermal and renewable generation to storage and grid—IRIS helps teams unify OT/IT data, detect problems early, and protect output, uptime, and margin.

The problem

Energy operations struggle with:



Aging critical assets and reliability risk (turbines, compressors, rotating equipment, transmission gear) where unplanned failures hit capacity factor, grid reliability, and margin



Siloed OT/IT across sites (SCADA, historians, high-frequency sensors, asset management systems) that slows anomaly detection, troubleshooting, and decision-making



Renewable intermittency and storage degradation — shifting solar and wind output and gradual capacity loss complicate planning, dispatch, and forecasting

The answer

IRIS turns energy and grid data into action:



IRIS Foundry: unifies SCADA/historian + sensor + asset management data into one contextualized foundation across generation, storage, and grid



IRIS Forge: builds new AI apps and dashboards from a plain-language description, with governed deployment and work-order support



IRIS Flows: agentic execution for fast-moving situations — curtailment response, storage dispatch, and alarm handling, with human-in-the-loop

Outcomes at a glance

- Avoided outages: compressor surge flagged **45 days early**, avoiding a **\$2M failure**
- Ready to deploy: IRIS Foundry and Flows include **300+ prebuilt industrial agents**
- Efficiency: heat exchanger tuning cut **energy use 7%**, with models tuned to actual generation conditions

Time to value: first site live in weeks using IRIS Foundry's prebuilt asset and performance templates.

The IRIS advantage: accelerated ROI, at enterprise scale

IRIS Foundry contextualizes and organizes operational data for scalable insights and future-ready AI applications, building a foundation for continuous improvement.

How it works



Connect and contextualize:

Bring operational data into one organized view using IRIS Foundry; then automatically build a relationship map of assets and processes so AI understands your operations.



Analyze and predict:

Apply predictive and prescriptive analytics with industrial models to surface risks, root causes, and next-best actions.



Orchestrate and automate:

Use IRIS Flows' AI agent builder to compose and deploy agents, connect them into multi-step workflows with human-in-the-loop, and auto-route tasks and approvals.



Engage in the flow of work:

Expose insights and actions directly inside your collaboration tool of choice, including Teams and Microsoft 365 via MCP for secure, auditable execution.

Platform components



IRIS Foundry: Industrial DataOps platform with prebuilt asset templates for your organized view, shared terminologies, and relationship map, plus connectors into OT and enterprise systems — so you don't start from scratch.



IRIS Flows: AI agent builder for industrial operations: design agents with low-code or natural language, start fast with hundreds of prebuilt agents, and orchestrate multi-agent workflows with governance and human-in-the-loop.



IRIS Forge: Studio to build intuitive dashboards, apps, and role-based copilots quickly.



Industrial LLM: AI model tuned to manufacturing that explains, recommends, and answers in plain language.

Why SymphonyAI for industrial?

- **Proven scale:** 3PB/year of industrial automation data processed across deployments
- **Contextualized AI:** Industrial LLM and role-based copilots tuned for manufacturing personas
- **Accelerated value:** Fast onboarding, flexible deployment, and blended models for actionable insights.

What's at risk if you wait?

With first value in weeks, waiting only compounds downtime, energy waste, and emissions — while faster adopters lock in a lasting performance and margin edge.

[Learn more](#)