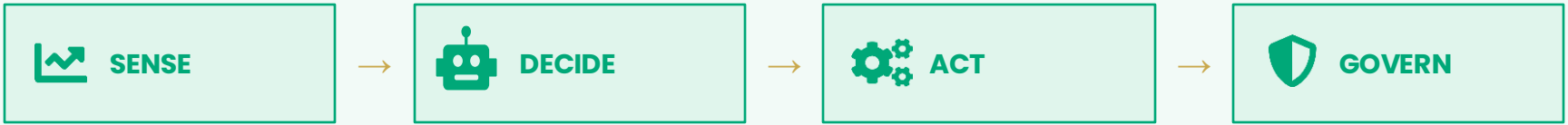
Agentic AI for Energy & Utilities

Autonomous Operations for Grid, Assets & Infrastructure

From reactive monitoring → to real-time decision systems



Energy systems are moving from monitoring → autonomous response

Detection without action creates risk — and risk creates cost

CURRENT STATE:

- Monitoring dashboards and alerts
- Manual escalation workflows
- Siloed asset and grid data

→

REQUIRED STATE:

- Real-time autonomous decisions
- Instant incident response
- Unified infrastructure intelligence

Detection without action creates risk

Minutes of delay between detection and response = millions in impact

What energy operators are dealing with

Direct from infrastructure and grid operations teams

> *Failures are detected — but response is always delayed by manual triage and escalation*

GRID OPERATIONS

> *Asset and grid data exist in silos — no unified picture until it's too late*

ASSET MANAGEMENT

> *Compliance reporting is manual, slow, and always behind regulatory deadlines*

COMPLIANCE

This is not an observability problem — this is a decision latency problem

Every minute between detection and response is a minute of avoidable loss

The cost of delayed decisions

Where every minute of latency becomes measurable financial impact

$$$$	High	Growing	Slow
Downtime Impact	**Infrastructure Risk**	**Compliance Penalties**	**Incident Response**
Unplanned outages driving direct revenue loss and penalties	Aging assets failing without predictive intervention	Manual reporting missing regulatory deadlines	Manual triage adding hours to every critical incident

Minutes of delay = millions in impact — autonomous response eliminates the gap

Why monitoring systems are not enough

Every tool in the stack sees the problem — none of them solve it

SYSTEM	PRIMARY FUNCTION	CRITICAL LIMITATION
SCADA Systems	Operational data capture and monitoring	Data capture only — no autonomous response
Monitoring Tools	Alert generation and dashboard display	Alerting only — humans still decide and act
Analytics Platforms	Historical and predictive insight generation	Insight only — no real-time action trigger
Manual Workflows	Human-driven incident coordination	Slow response — minutes become hours

> *Systems detect — but don't decide or act autonomously*

Detection is not the problem — decision latency is

From alerts → autonomous response systems

Unified detection, governed decision, and instant autonomous action

01

DETECT

Asset anomaly detected. Grid imbalance sensed. Incident threshold crossed.

→

02

DECIDE

Governed decision made with full context, lineage, and compliance rules.

→

03

ACT

Maintenance dispatched. Grid rebalanced. Incident resolved. Autonomously.

Autonomous infrastructure with governed decision intelligence

Detect → Decide → Act: from alert to resolution without manual intervention

The Reasoning Infrastructure Stack

Three integrated layers — built for governed, autonomous decisioning

ElixirData

Infrastructure Context

Real-time context: grid, assets, sensors, and IoT. Unified signal layer across SCADA, monitoring, and analytics platforms.

↓

ElixirClaw

Agentic Execution

Autonomous response: incident handling, grid optimization, maintenance dispatch. Connected to existing infrastructure systems.

↓

ElixirHub

Energy + Infra Agents

Pre-built energy and infrastructure agent packs for predictive maintenance, grid ops, and compliance automation.

The only platform that turns infrastructure signals into autonomous operational decisions

Predictive Maintenance

Real-time asset monitoring with AI-powered failure prediction

PROBLEM

- Failures detected late — after damage is done
- Reactive maintenance driving unnecessary downtime

→

SOLUTION

- Real-time asset health monitoring
- AI-powered failure prediction and prevention

→

OUTCOME

- Downtime significantly reduced
- Maintenance costs optimized

From reactive maintenance to predictive prevention — before failures happen

Grid Optimization & Forecasting

Real-time load forecasting with autonomous grid balancing

PROBLEM

- Demand variability causing grid instability
- Renewable fluctuation creating balancing challenges

→

SOLUTION

- Real-time load forecasting by zone
- Autonomous grid balancing and adjustment

→

OUTCOME

- Improved grid stability
- Reduced energy loss and waste

From reactive grid management to autonomous real-time optimization

Infrastructure Risk & Compliance

Continuous monitoring with automated compliance reporting

PROBLEM

- Manual compliance workflows missing deadlines
- Audit preparation taking weeks of team effort

→

SOLUTION

- Continuous infrastructure risk monitoring
- Automated compliance reporting and audit prep

→

OUTCOME

- Audit-ready systems at all times
- Reduced compliance risk and penalties

Compliance becomes a continuous state — not a periodic scramble

Renewable Forecasting

AI-based generation forecasting with real-time adjustment

PROBLEM

- Solar/wind unpredictability causing planning mismatches
- Imbalance costs from poor renewable forecasting

→

SOLUTION

- AI-based generation forecasting by source
- Real-time adjustment and rebalancing

→

OUTCOME

- Better energy utilization
- Reduced imbalance costs

Turn renewable unpredictability into managed, optimized generation

Autonomous Incident Response

Automated detection and autonomous remediation without manual triage

PROBLEM

- Alerts requiring manual triage and routing
- Delayed response adding hours to resolution time

→

SOLUTION

- Automated incident detection and classification
- Autonomous remediation and escalation

→

OUTCOME

- Faster resolution by hours
- Reduced downtime and impact

From manual triage to autonomous resolution — in minutes, not hours

Measurable Infrastructure Outcomes

Quantified results from live energy and utility deployments

Reduced

Downtime

Predictive maintenance eliminates unplanned outages

Faster

Incident Resolution

Autonomous response replaces manual triage workflows

Always

Compliance Ready

Continuous monitoring makes audit prep obsolete

Better

Energy Efficiency

Grid optimization and renewable forecasting reduce waste

These are production outcomes from deployed energy and utility systems

Proven Across Infrastructure & Energy

Real deployments delivering operational outcomes at scale

ENERGY ANALYTICS

Utopus Insights

Renewable energy analytics and forecasting platform at enterprise scale.

RENEWABLE OPTIMIZATION

Prescinto

AI-powered renewable energy optimization and performance monitoring.

TELECOM + INFRA

Subex

Telecom and infrastructure intelligence with autonomous anomaly detection.

Energy leaders deploy autonomous systems — they don't run dashboards

Fast Time to Value

A structured, time-boxed path from proof-of-concept to full rollout

01 **PHASE 01: PILOT**
4–6 Weeks

- Priority use case scoped
- Stack integration completed
- Agents configured
- First outcomes validated

→

02 **PHASE 02: FULL ROLLOUT**
8–12 Weeks

- All agents deployed
- Compliance layer enabled
- Audit trails live
- Team onboarded

No rip and replace — integrates with existing infrastructure in weeks

Fast deployment — works with existing SCADA and IoT systems

Structured, Predictable Investment

Three clear tiers — aligned to how value is delivered and realized

01

ONE-TIME

Implementation

Scoping, integration, configuration, and deployment of the decision intelligence platform into your environment.

02

ANNUAL

Platform License

Full access to ElixirData, ElixirClaw, and ElixirHub — including domain-specific agent packs.

03

ONGOING

Continuous Intelligence

Model tuning, compliance updates, new agent packs, and dedicated success engineering.

Transparent pricing. Predictable investment. ROI visible from pilot.

Why not traditional infrastructure tools?

Monitoring detects. Analytics analyzes. We decide and act autonomously.

PLATFORM	WHAT THEY DO	WHAT THEY MISS
SCADA Systems	Operational data capture and control	Captures — no intelligence or autonomous action
Monitoring / Alerting	Alert generation and dashboard display	Detects — humans still decide and act
Analytics Platforms	Insight and prediction generation	Analyzes — no real-time action or governance
XenonStack	**Detect → Decide → Act autonomously**	**Nothing — this is the complete loop**

> *We detect → decide → act autonomously: the only platform that closes the infrastructure loop*

Monitoring tools alert. Analytics platforms report. XenonStack acts.

Map this to your infrastructure

I can map this to your grid / asset operations in 15 minutes

I can map this to your grid and asset operations in 15 minutes — and identify exactly where autonomous decision systems will reduce downtime and compliance risk.

No slides. No pitch. Just a direct mapping of your pain to our architecture.

BOOK YOUR 15-MINUTE SESSION →

Where does decision delay impact you most?

Pick your biggest operational risk — we'll start there

01

Downtime

Unplanned outages from reactive maintenance driving direct revenue loss

02

Grid Imbalance

Renewable variability and demand fluctuation causing instability

03

Compliance

Manual reporting missing regulatory deadlines and audit preparation lag

04

Incident Response

Alert-to-resolution time measured in hours due to manual triage

Every deployment starts with the highest-risk problem — then we expand

Strategic Cloud & Technology Partnerships

Deep integrations across cloud, data, and enterprise platforms

AWS	Microsoft Azure	Snowflake	Databricks	ServiceNow

AWS ADVANCED TIER PARTNER

- 4 AWS Competencies: DevOps, ML, Cloud Ops, Data & Analytics
- AWS Managed Service Provider
- Amazon Kinesis Delivery Validation
- 50+ AWS Certifications
- 20+ Customer Launches

MULTI-CLOUD MARKETPLACE

80+ Solutions on AWS Marketplace

30+ Solutions on Azure Marketplace

Enterprise-ready · Accelerated procurement

WHAT THIS MEANS FOR CO-SELL:

- Faster enterprise deal closure
- Pre-integrated cloud ecosystems
- Drives cloud consumption
- Scalable AI transformation

Pre-integrated with cloud ecosystems — faster deals, faster deployment, proven at scale

From reactive monitoring → to autonomous infrastructure

Agentic AI for Energy & Utilities — XenonStack

Ready to map this to your operations? Let's talk.