

— DATA PLATFORM · BI · ENERGY

# Unifying *Renewable Portfolio* Intelligence for Sterlite Power

From fragmented project reporting to real-time executive visibility — *one source of truth across solar and wind portfolios in India and Brazil.*



GEOGRAPHIES  
**India - Brazil**  
unified dashboard

REPORTING  
**8-12 hrs**  
saved weekly

STACK  
**Power BI - S3**  
PostgreSQL - ETL

<p>CLIENT</p> <p>Sterlite Power</p>	<p>PRACTICE</p> <p>Data, AI &amp; Analytics · BI</p>	<p>GEOGRAPHY</p> <p>India &amp; Brazil</p>	<p>OUTCOME</p> <p>100% portfolio visibility</p>
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— THE CLIENT & THE CONTEXT

# Transmission infrastructure at continental scale — and decisions being made on data that arrived late.

Sterlite Power is a leading power transmission infrastructure company operating across India and Brazil, managing large-scale solar and wind energy projects with significant capital deployed across both geographies.

With multiple projects running concurrently — each involving land acquisition, construction milestones, procurement cycles, and financial tracking — the organization required centralized, real-time visibility across its portfolio to support faster and more informed decision-making.

Leadership was making high-stakes decisions on data that arrived late, lived in silos, and had no unified foundation to support it. The platform that came out of the engagement didn't just replace a reporting process — it reshaped how leadership operates.

ENGAGEMENT SNAPSHOT

### What the client needed

Client	<b>Sterlite Power</b>
Use case	<b>Portfolio analytics</b>
Geographies	<b>India &amp; Brazil</b>
Asset classes	<b>Solar &amp; Wind</b>
Storage	<b>Amazon S3 + PostgreSQL</b>
BI layer	<b>Microsoft Power BI</b>

## — KEY CHALLENGES

# Operating blind across a multi-geography portfolio.

01

## Fragmented data landscape

Project data distributed across spreadsheets and site-level reports. No unified or reliable source of truth for leadership — and no architecture to fix that without rebuilding from the ground up.

02

## Delayed decision-making

Manual consolidation required hours to days. Insights were often outdated by the time they reached stakeholders — which meant decisions were either delayed or made against stale numbers.

03

## Lack of real-time visibility

No centralized view across the solar and wind portfolios. Inability to track progress, risks, and performance in real time — and no single surface where land, construction, and financial data could be correlated.

04

## Operational complexity

Multi-layered workflows spanning land acquisition, procurement, and construction. Difficulty correlating financial and operational data across phases, geographies, and asset classes.

## 05 · NO FOUNDATION

### And no scalable foundation to build on if the answer kept being more spreadsheets.

There was no architecture in place to support analytics at enterprise scale — limited ability to extend into predictive or AI-led decisioning. Any short-term reporting fix would have made the long-term problem harder. A platform was the only viable answer.

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— OUR APPROACH

# A data-first platform, engineered for enterprise scale.

We approached the engagement the way we approach every transformation — by aligning to the business domain first, then engineering a foundation built to last. Six phases, each delivering working software rather than just a deliverable.

## 01

### DISCOVERY

#### Discovery & Domain Alignment

Mapped project lifecycle workflows to data models, anchored in the realities of land, construction, and procurement cycles — not generic project-management templates.

## 02

### ARCHITECT

#### Custom Data Architecture

Designed a scalable data platform on Amazon S3 and PostgreSQL, built for multi-geography, multi-project ingestion across India and Brazil simultaneously.

## 03

### PROTOTYPE

#### Iterative Prototyping & Pipelines

Delivered early working dashboards for stakeholder validation, and built structured ETL pipelines for automated ingestion — turning spec debates into decisions through visible progress.

## 04

### VISUALISE · SCALE

#### Visualization & Scalable Foundation

Developed intuitive dashboards for executive decision-making — every chart justified by a business question — and engineered extensibility for future analytics and predictive capabilities.

## — SOLUTION DELIVERED · PART 1 OF 2

# A unified command center for every project, every phase.

Five analytical surfaces, one integrated platform — each designed around a specific executive decision rather than as a generic reporting layer.

## 01 Unified Portfolio Dashboard

- Centralized Power BI workspace consolidating all project data
- Real-time visibility across solar and wind portfolios in a single executive view
- Drill-through from portfolio-level KPI to project-level detail

## 02 Plan vs Actual vs Forecast

- Dynamic variance tracking across project timelines
- Drill-down to activity-level insights — surfacing slippage before it becomes strategic risk
- Forecast lens that updates as new data lands, not as a quarterly redraw

## 03 S-Curve Progress Monitoring

- Visual tracking of planned vs actual project progress
- Early detection of schedule deviations — the classic infrastructure lens, modernized
- Curves that respond to live data rather than monthly status uploads

## — SOLUTION DELIVERED · PART 2 OF 2

# From plan-vs-actual to land parcels to a true single source of truth.

The remaining surfaces add the time-series, geo-tracked, and workflow-aware views that connect the operational and the financial — closing the loop between the project floor and the boardroom.

## 04 Land Acquisition Intelligence

- Geo-tagged tracking of the land acquisition lifecycle
- Parcel-level visibility across clearance stages — identified, surveyed, negotiated, cleared, possessed
- Turns the most opaque phase of an infrastructure project into a transparent one

## 05 Workflow & Performance Tracking

- Structured activity workflows aligned with critical project paths
- Month-on-month and year-to-date performance benchmarking at the portfolio level
- Activity-level correlation between operational milestones and financial outcomes

## 06 Single Source of Truth

- Unified data layer spanning project spreadsheets, site reports, and financial systems
- Replaces reconciliation debates with trusted, shared numbers
- Foundation that scales into predictive and AI-led decisioning, when leadership is ready

— TECHNOLOGY STACK

# A stack designed for reliability and reach.

Enterprise-grade components, assembled into a coherent analytics pipeline. Each layer chosen for what comes next — predictive analytics, multi-portfolio scale, and an operating model that doesn't depend on a single reporting analyst staying late on Sunday.

LAYER 01 · SOURCES

### Project spreadsheets · site reports · financial systems

Multiple formats, multiple owners, multiple cadences — the platform ingests them as-is rather than demanding upstream standardization first.

Multi-source

LAYER 02 · STORAGE

### Amazon S3

Scalable object storage for raw and processed data — sized for multi-geography ingestion and the analytics retention horizon the business actually needs.

S3

LAYER 03 · DATABASE

### PostgreSQL

Relational backbone for structured project, financial, and operational data. The trusted system of record that the dashboards read from.

PostgreSQL

LAYER 04 · DATA ENGINEERING

### Power Query Editor · ETL pipelines

Structured ETL replacing manual consolidation — reliable, repeatable, and auditable flows that turn raw inputs into trusted analytics-ready data.

ETL

LAYER 05 · BI

### Microsoft Power BI · DAX

Executive-facing dashboards built in Power BI with DAX measures — chosen for the client's enterprise context and the analyst-team skills that will own the platform long-term.

Power BI

LAYER 06 · ARCHITECTURE

### Extensible & predictive-ready

Foundation engineered for future predictive analytics and AI-led decisioning — not retrofitted as an afterthought when the next initiative arrives.

Future-ready

— MEASURED OUTCOMES

# From hours of reconciliation to real-time confidence.

METRIC	BEFORE	AFTER
<b>Portfolio visibility</b>	Fragmented across spreadsheets	100% unified through one platform
<b>Reporting effort</b>	Hours to days of manual consolidation	8–12 hours saved every week
<b>Source of truth</b>	Multiple, contested	Single, trusted
<b>Decision latency</b>	Decisions on stale numbers	Real-time, portfolio-wide
<b>Workstreams unified</b>	Siloed across teams	8+ consolidated into one system
<b>Foundation for AI/predictive</b>	None	Engineered in from day one

— BUSINESS IMPACT

- ✓ 100% portfolio visibility through a single unified platform — across solar and wind, across India and Brazil
- ✓ 8–12 hours of manual reporting effort eliminated every week — engineering and analyst time freed for execution
- ✓ 8+ project workstreams consolidated into one integrated system
- ✓ Real-time, portfolio-wide visibility for leadership — enabling faster, more confident decisions across geographies and project phases
- ✓ A data foundation engineered for predictive and AI-led decisioning — the platform grows with the business, rather than being replaced when the next initiative arrives

— WHAT CHANGED FOR THE BUSINESS

# The platform didn't just replace a process — it reshaped how leadership operates.

## Operational Efficiency

Manual reporting eliminated. Teams focus on execution, not consolidation — accelerating project delivery timelines across the portfolio.

## Strategic Decision-Making

Leadership gained real-time, portfolio-wide visibility — enabling faster, more confident decisions across geographies and project phases.

## Future-Ready Foundation

The data platform enables seamless scalability — supporting future integrations, advanced analytics, and predictive decisioning when the business is ready.

## Trusted Single Source

Reconciliation debates replaced with shared numbers everyone can build on. The meeting moves on to what to do — not what the number actually is.

— WHY KANSOFT

## Infrastructure-grade analytics, engineered to evolve.

- 01** Deep domain understanding — expertise in infrastructure and energy project lifecycles from land acquisition to commissioning.
- 02** Data engineering excellence — strong capabilities in building scalable, cloud-based data platforms that perform in production.
- 03** Business-focused BI — dashboards designed for decision-making, not as generic visualizations of data that happens to be available.
- 04** Engineered to evolve — every platform we build assumes the next initiative is already coming, and is structured accordingly.

— READY TO BUILD SOMETHING LIKE THIS?

If your *portfolio reporting* still depends on someone consolidating spreadsheets every Monday, the next call is the one worth having.

We build enterprise data platforms and analytics surfaces for infrastructure, energy, and capital-intensive businesses — engineered for real-time visibility, multi-geography scale, and the predictive and AI workloads you'll want to add next. If that's the kind of foundation you need, let's talk.

SPEAK TO OUR TEAM

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