

The background of the slide is a photograph of an industrial facility, likely a power plant or refinery, with several tall smokestacks emitting thick white smoke. The facility is situated behind a line of green trees, and a body of water is visible in the foreground. The entire image is overlaid with a semi-transparent teal filter.

# Building a Single Source of Truth for Sustainability Reporting

**Methodology derived from leading a global manufacturing  
engagement**

*Role: Project Lead & Business Analyst responsible for baseline integrity,  
prioritisation, and frontline coaching*

# Fragmented data and manual reporting create compliance errors that can trigger fines, legal action, and reputational harm

Data is produced by multiple operational units, consolidated manually, and validated too late.



## The Operational Problem

- Inconsistent definitions across sources reduce confidence in reported figures.
- Reporting and audit cycles are prolonged by manual reconciliation and rework.
- Review discussions prioritise data validation over corrective decision-making.



## Analyst interventions

- Establish a single reporting cadence and KPIs across all operational units.
- Introduce validation gates before results reach leadership.
- Enforce one authoritative input path per metric to remove inaccurate submissions.



## Decisions enabled

- Target cycle time < 7 days for defined KPI set, supported by near real-time dashboards.
- Enable comparisons across operational units to surface variance and prioritise action.
- Increase leadership confidence, shifting focus from data trust to performance improvement.

# GRI and CDP requirements translated into governed KPIs and controls

GRI sets coverage and ownership; CDP sets evidence, completeness, and submission readiness

Standard Requirement	BA Output	Dashboard Proof
<b>GRI:</b> Material topics, boundaries, ownership	Topic-to-KPI list; KPI definition fields (unit, grain, owner, boundary note)	Topic views; definition drill-through; published period view (locked)
<b>CDP:</b> Disclosure questions, evidence expectations, completeness	Question-to-KPI map; evidence fields per KPI; targets and assurance flags	Readiness status; evidence present or missing; exceptions queue for gaps

Example, Scope 2: invoice or meter → kWh normalised → validation gates → factor version applied → published KPI (run ID)

# A central sustainability data lake standardizes, validates, and serves all reporting

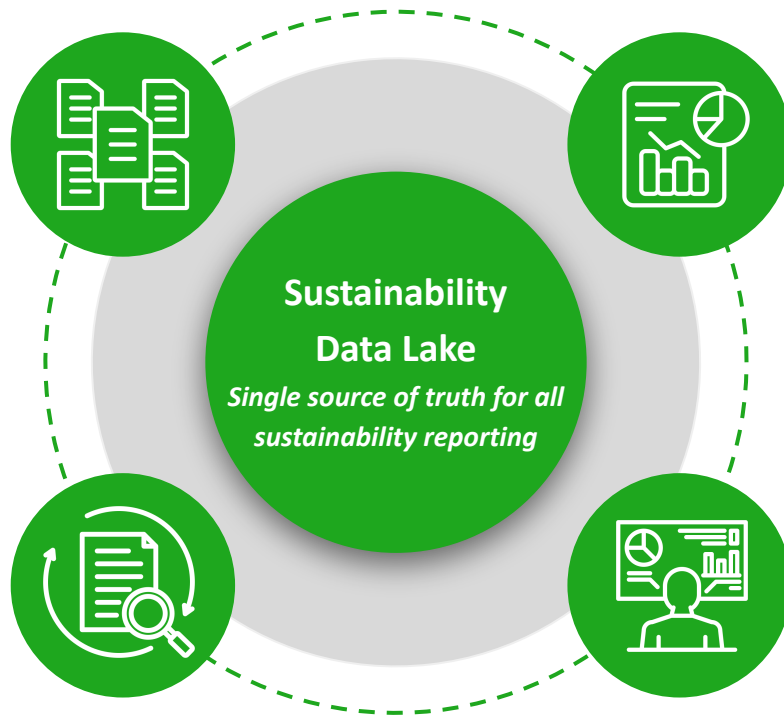
Data is ingested once, validated centrally, and reused consistently across GRI and CDP outputs

## 1. Data Sources

- Internal operational systems
- Supplier & partner submissions
- Manual files & documents
- External & public datasets

## 2. Data Handling

- Central validation & standard definitions
- Latest data active, full history retained



## 3. Reporting Outputs

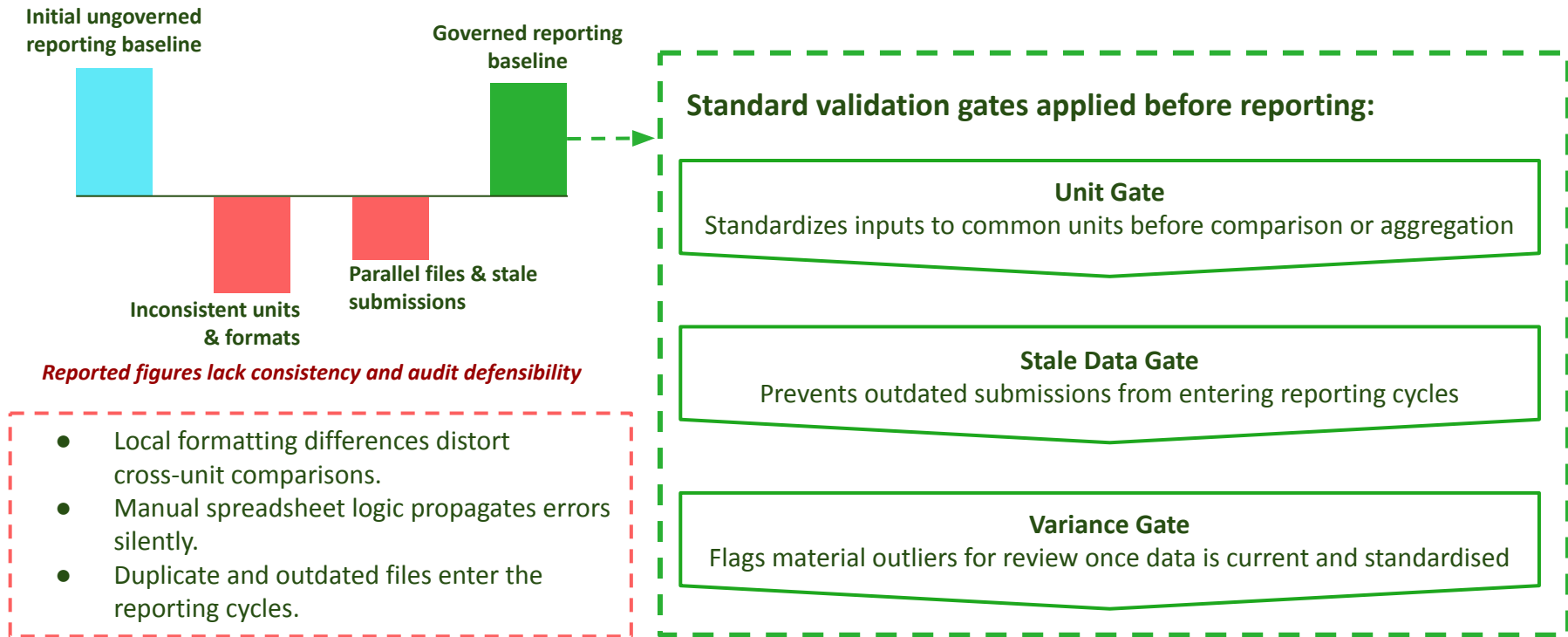
- Consolidated compliance reports
- Scope 1, 2, and 3 KPI tables
- Operational unit & period level summaries

## 4. Decision Outputs

- Executive dashboards
- Cross-unit performance views

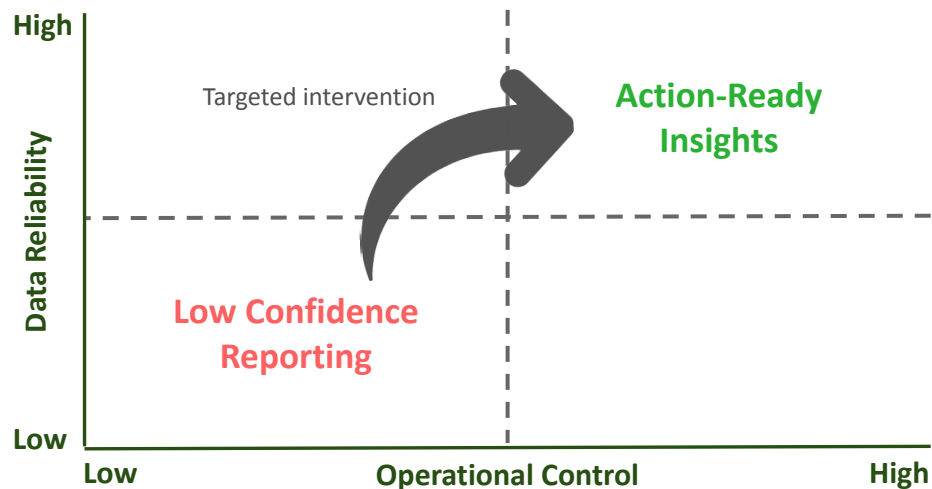
# Built-in validation and governance prevent compliance errors before submission

Errors are detected early through standard checks, controlled submissions, and full traceability



# A trusted baseline shifts compliance from reactive reporting to targeted action

Standardised data and early validation enable faster cycles and confident decisions



*Focus narrows to areas combining reliable data and high control*

## Outcomes enabled by a trusted baseline:



**Cross-unit performance:** Like-for-like comparisons surface material variance across similar operations.



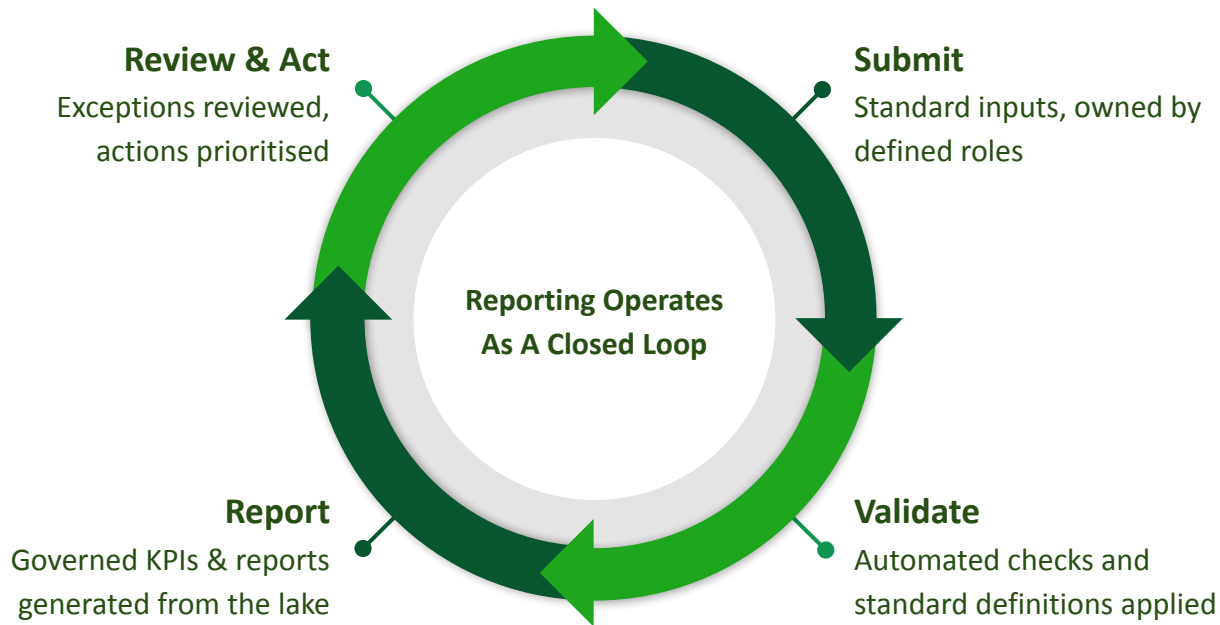
**Scope prioritisation:** Effort is focused on categories with measurable impact and clear ownership.



**Supplier visibility:** Data gaps highlight where engagement materially affects outcomes.

# Clear ownership and standard workflows sustain reporting quality over time

Defined roles, artefacts, and routines ensure continuity beyond implementation



## Ownership

- Clear owners per metric & reporting cycle
- One accountable source per submission

## Standards

- Metric definitions, GRI/CDP mapping and calculation logic
- Controlled change and version history

## Rhythm

- Fixed reporting and validation cycles
- Exception-based reviews aligned to audits

# A single source of truth makes compliance reliable, repeatable, and scalable

Addresses fragmented inputs, manual consolidation, and late-stage validation through governed definitions and pre-publish controls.



Designed to scale across sites, metrics, and future reporting requirements



# Appendix: Technical architecture that enables governed sustainability reporting

Technology enables scale and reliability, governance drives decisions

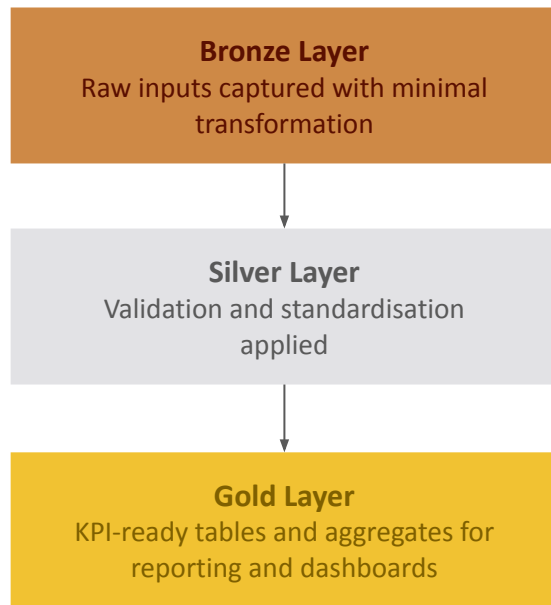
## Governance controls enabled

- Automates collection of priority inputs.
- Blocks duplicate and outdated submissions.
- Enforces consistent refresh cut-offs for reporting cycles.

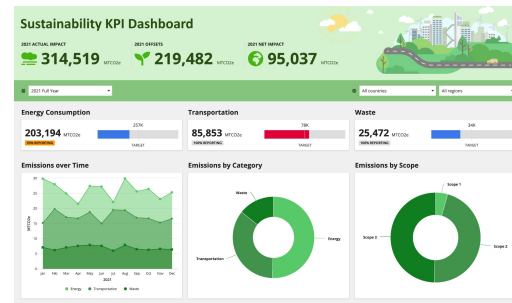
## Technology & Tools



## Medallion Processing



## Insight Interface



### Illustrative dashboard, non-client specific

- Supports consistent review and decision-making.
- Prevents use of parallel or legacy files.
- Maintains source-to-report traceability.