

Sustainability Consulting Services – Solution Implementation

Caring for Environment by Deploying Sustainability Digital Solution at Scale

MARCH 2023



The Business Imperatives



Manufacturing & Consumer Goods Enterprise



Brand, Reputation & Business Viability

 Improve Product marketability & Long-Term Business Viability

Operational Efficiency

Energy, Water, Waste & Emission Management



Future Ready

Emerging Areas as Climate Risk
 Assessment, Life Cycle Assessment
 Value Chain

Customers

- Becoming more conscious about sustainable Products & Practices
- No Greenwashing

Regulatory

- Regulatory
 Mandates
 becoming stringent
 & complex
- High Cost of Non-Compliance & hurts brand image



Shareholders

- Becoming more Conscious about Sustainable Practices
- Zero Non-Sustainable Investments



Society

 Pressure for lower carbon footprint & amount of toxins released to environment



Partners

- Sustainable business engagement
- No ties with organizations at risk



Sustainability Offering

Services Assets 1. Assessment & Sustainability Digital Strategies **Proof of Concept** Discover Value Discovery & Insight Framework (Value) 2. Functional, Technical Consulting & Data Validations Data Model* for MFG & CPG-3. Implementation Emission, Energy, Water, & Waste (Manufacturing & Consumer Products Enterprise and Value Chain) Execute Implementing sustainability digital strategy | Configuring & Extending Data Platform Rolled up Analytics for factory, division, corporates Monitor, Predict Sustenance & Continuous Improvement & Report Intelligent Document Processing

Legend: Consulting Services – Functional/ Technical Consulting & Implementation

Note: Full stack of offering is depicted for completeness

*Standards Compliant (GRI)

Sustainability Consulting Services Catalog

	Service Type	Methodology	Key Deliverable	Typical Timeline*
2	Functional, Technical Consulting & Data Validations	 Understanding & documentation of detailed Functional need and Technology Landscape through Workshops largely onsite Validation on existing Data Quality 	Detailed Functional Requirements Specification for Emission, Energy, Water, Waste	4 – 6 Weeks
3	Implementation	 Solution Design & Build executed largely Offshore 	Production Version of Solution Solution Documentation – Architecture, Deployment	14 – 18 Weeks

*May vary on case-by-case basis depending on engagement complexity & size

Consulting Services to Enable Digitalization of Use Cases...

Functional Areas for Sustainability Data Model – Energy, Emission (Scope 1, 2 & 3), Water, Waste, Social, Supply Chain (audit/assessment/selfdeclaration – survey based)



Specific Energy Consumption Reduction Target vs. Actual



Consumption

% of Energy from Renewable Sources

Target vs. Actual

% of Grid Electricity from Renewable Sources

Target vs. Actual



% Reduction in Specific Water Consumption

Target vs. Actual



Water Consumption & Discharge

% of Total Volume of Water Recycled & Reused



% Reduction in Specific Emission
Target vs. Actual



Specific Waste Generated Target vs. Actual

Annual Specific Emissions

Absolute Annual Emissions (Tons CO₂ equivalent)

Energy Indirect GHG Emission (Tons CO₂ equivalent) Annual Waste Generation

Waste Treatment (Recycle/ Reuse) %

Waste Generation Performance by Business

Note: KPIs depicted are representative & not exhaustive

Data Traceability/
Auditability

Eliminate Data Errors & Non-Compliances

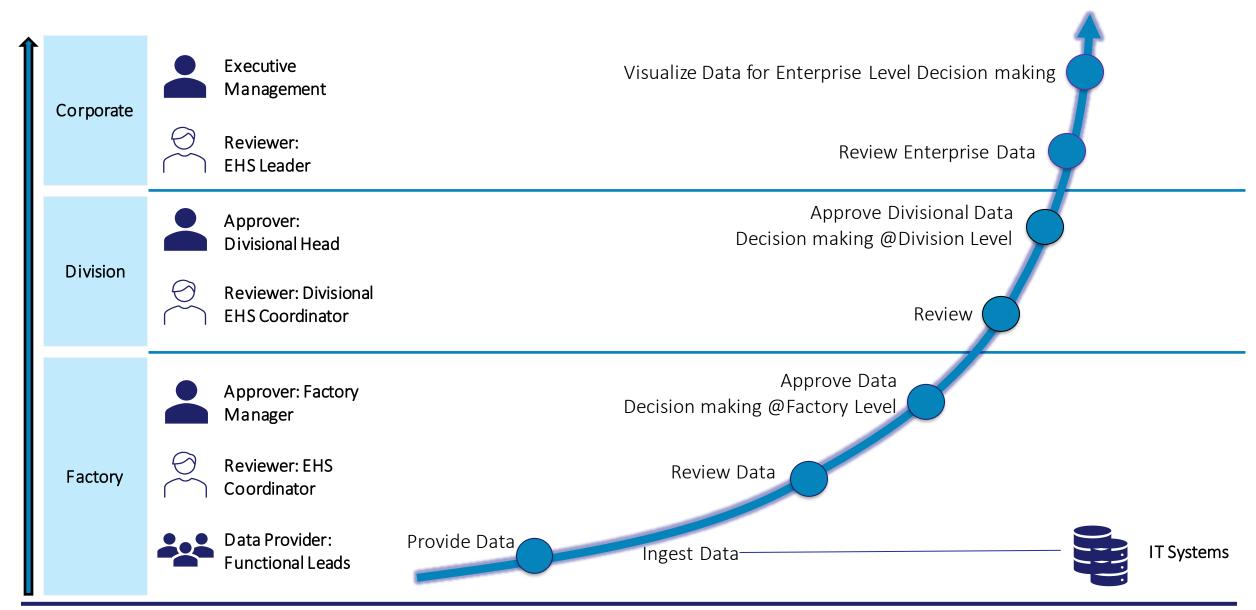
Agile Analysis & Reporting

Improve Operational Efficiency

Reference Architecture

"Sustainability Technology agnostic Data Platform" ... **Azure Services** Legend Sources **Shared Drive** Bronze Layer Future requirement, not in scope for 31-Mar-2023 Gold Layer Silver Layer In scope items Energy Data ingestion and Extraction Transformed Raw Data OneDrive SharePoint Aggregated Data approval process Dashboard validation SQL Spark CSV /XLS files Notify - IC's validation required **HAZ Water** Justification required Alert - Correction required for IC's **ERP System** NOT NOT ×= **Approved** Approved 5 **EHS Coordinator** Approval FORM Factory Manager Chemicals **Review Process** Review Process Approved **Approved** NON HAZ Waste Publish to Division and Corporate Microsoft Manual Entry **Power Platform** ارارا IC's Input Manual Pre-validation Final Data Dashboard Dashboard **Power Apps** Power Automate Power BI Power Virtual Agents level

The Overall Process



Why ITC Infotech?

Full Stack Solution

Data Ingestion from Sources

Data Management

Visualizations (Analytics) & Reporting

Feed to Destination Systems

Data Model

From source of data, transformations thru' to consumption
Include functional areas of Energy,
Emission, Water & Waste

Industry Focus

Depth of Experience

Manufacturing (e.g., Industrials,
Auto-Ancillary) & Consumer Goods
(e.g., FMCG)

Easy to roll out to multiple businesses

Extendable to multiple factories/organization units with minimal configuration changes

Support third party audits

Configurable to extend access to external party to audit the data and reports

Reusability & Configurability

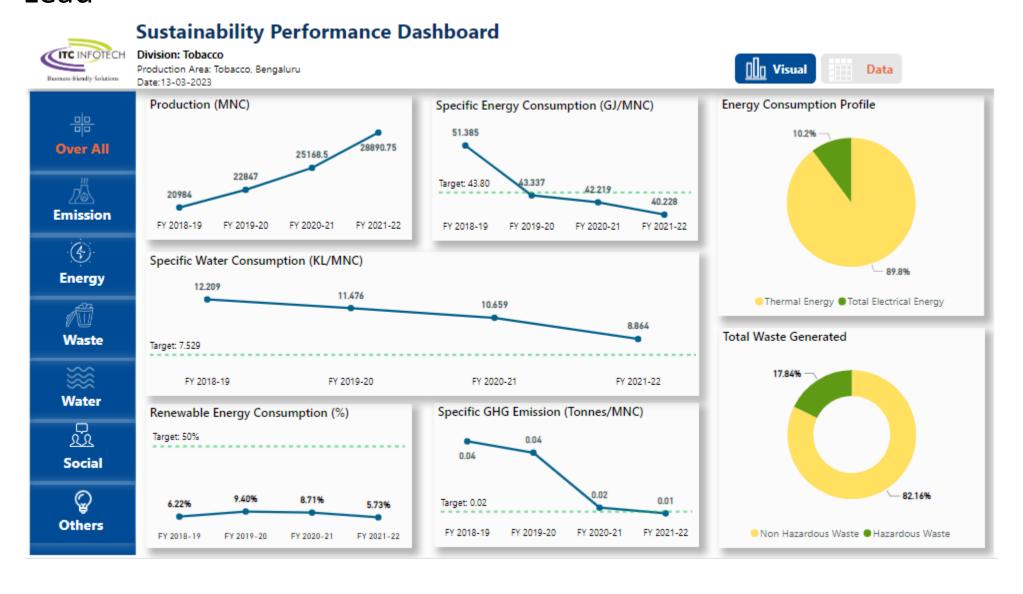
Configurable Elements & alignment with Standards



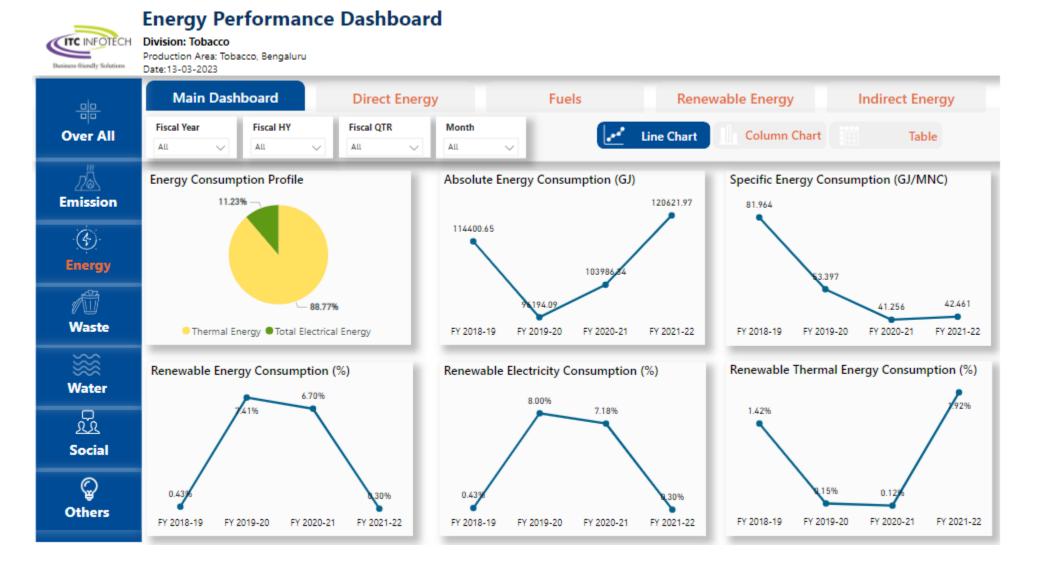
Proof Points



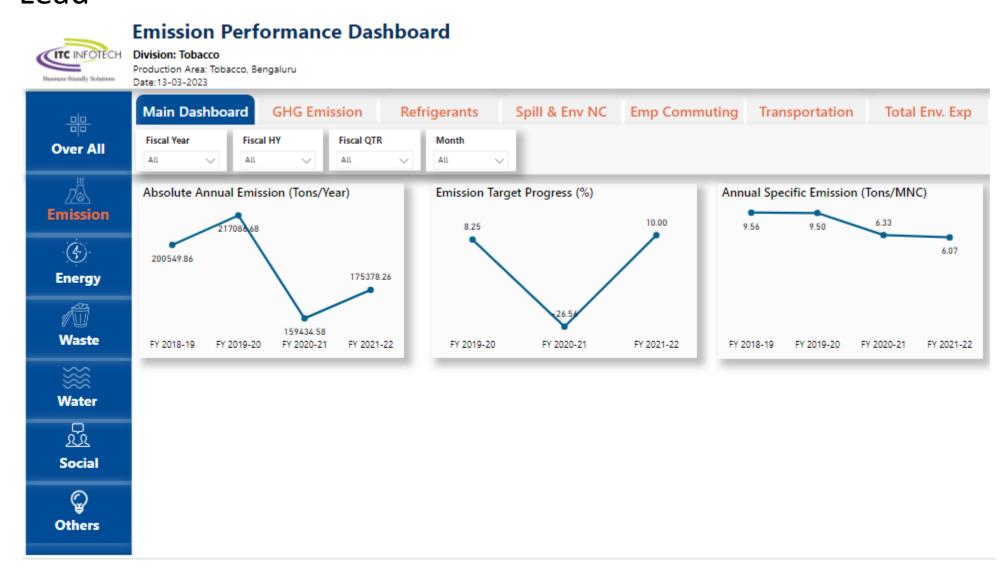
Sustainability Data Platform Snapshot – Overview Dashboard for Factory EHS Lead



Sustainability Data Platform Snapshot – Energy Dashboard for Factory EHS Lead

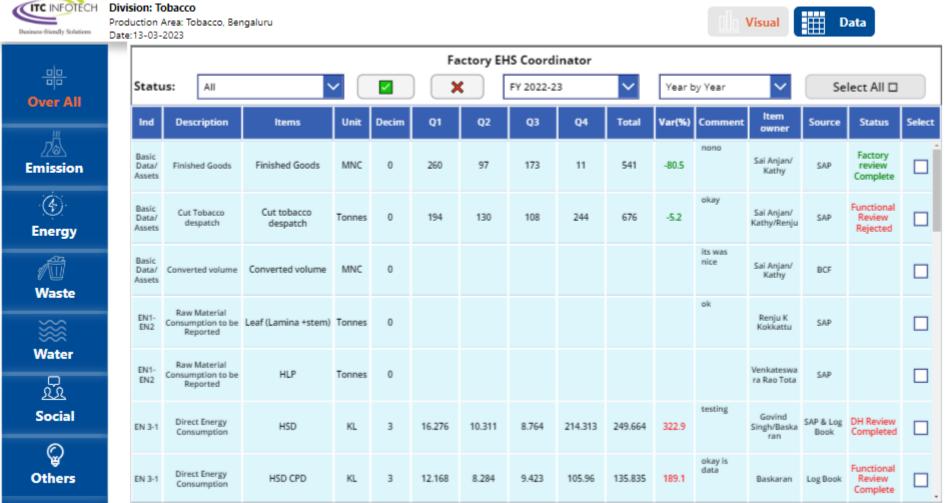


Sustainability Data Platform Snapshot – Emission Dashboard for Factory EHS Lead



Sustainability Data Platform Snapshot – Approval Dashboard for Factory Manager

Sustainability Performance Dashboard



Other Proof Points

- FMCG major as Customer Zero for Sustainability Consulting & Solution Development
 - 2 Divisions (Tobacco & Papers) currently in Scope & Under Development
- Other Engagements: ESG Consulting Services & Solution Framework: Sustainability Consulting & Reporting solution for Steel Conglomerate improved sustainability management & reporting





THANK YOU



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