

Project Design Phase-II

Data Flow Diagram & User Stories

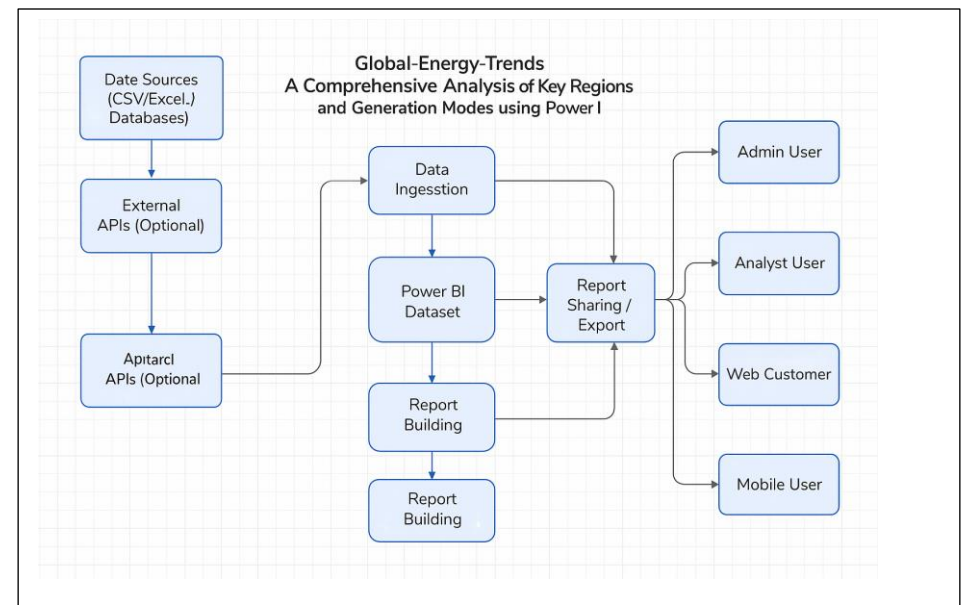
Date	16 April 2025
Team ID	PNT2025TMID07432
Project Name	Global-Energy-Trends-A-Comprehensive-Analysis-of-Key-Regions-and-Generation-Modes-using-Power-BI
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

Example: [\(Simplified\)](#)

Example: DFD Level 0 (Industry Standard)



User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Administrator	Data Upload	USN-1	As an administrator, I can upload global energy datasets (CSV/Excel) to the Power BI service for analysis.	File is uploaded successfully, and Power BI confirms data load.	High	Sprint-1
Administrator	Data Cleaning	USN-2	As an administrator, I can clean and transform raw energy data before it's used in dashboards.	All missing/null/inaccurate values are handled and structured for analytics.	High	Sprint-1
Administrator	Report Design	USN-3	As an administrator, I can design interactive dashboards showing energy trends by region, type, and time.	Dashboard shows clear insights (filters, charts, KPIs) based on uploaded data.	High	Sprint-1
Administrator	User Access Control	USN-4	As an administrator, I can manage access to reports based on user roles (viewer/editor/admin).	Only authorized users can view or edit dashboards.	Medium	Sprint-2
Administrator	Scheduled Data Refresh	USN-5	As an administrator, I can schedule automatic data refreshes to keep dashboards up to date.	Power BI dataset is refreshed daily/weekly as per configuration.	Medium	Sprint-2
Analyst (Web User)	Trend Analysis	USN-6	As a data analyst, I can analyze patterns in energy production/consumption across regions and sources (coal, solar, wind, etc.).	I can filter data by year, source, or region and extract insights from visualizations.	High	Sprint-1

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority Release
Analyst (Web User)	Export Reports	USN-7	As a data analyst, I can export Power BI visuals and insights as PDF or PowerPoint to present findings.	Exported file retains chart fidelity and selected filters.	Medium Sprint-2
Customer (Mobile User)	Mobile Dashboard Access	USN-8	As a mobile user, I can view summarized dashboards on my device with responsive visuals.	Mobile view loads charts correctly and is responsive across screen sizes.	Medium Sprint-2
Customer Care Executive	Insight Sharing	USN-9	As a customer care executive, I can share specific insights from Power BI to users through email or chat on request.	Users receive accurate and visual summaries based on their queries.	Medium Sprint-3