

## Data Collection and Preprocessing Phase

Date	2 October 2025
Team ID	SWUID20250206509
Project Title	Global Energy Trends: A Comprehensive Analysis of Key Regions and Generation Modes using Power BI
Maximum Marks	2 Marks

### Data Collection Plan & Raw Data Sources Identification Template

Elevate your data strategy with the Data Collection plan and the Raw Data Sources report, ensuring meticulous data curation and integrity for informed decision-making in every analysis and decision-making endeavor.

### Data Collection Plan Template

Section	Description
Project Overview	The purpose of this project is to conduct a comprehensive analysis of global energy consumption and generation trends. The study aims to compare energy consumption and power generation by region, fuel type, and country, with an emphasis on the growth and contribution of renewables versus non-renewables. This analysis will inform decision-makers about regional energy dynamics and trends for sustainable development
Data Collection Plan	The data for this analysis is collected from publicly available datasets and reports, primarily in CSV format. The sources include international energy statistics, continent-wise and country-wise consumption and generation datasets, and summaries of top

	producing nations. Each dataset is curated to provide detailed, granular data points for quantitative analysis, supporting cross-regional and temporal comparison.
Raw Data Sources Identified	List the raw data sources with relevant details (as a short description).

### Raw Data Sources Template

Source Name	Description	Location/URL	Format	Size	Access Permissions
Country_Consumption_TWH.csv	Annual electricity consumption (TWH) for various countries.	Local File Attachment	CSV	~8 KB	Public

Continent_Consumption_TWH.csv	Annual electricity consumption (TWH) by continent.	Local File Attachment	CSV	~5 KB	Public
top20CountriesPowerGeneration.csv	Yearly power generation amounts for the top 20 countries globally.	Local File Attachment	CSV	~0.8 KB	Public
renewablePowerGeneration97-17.csv	Renewable energy power generation by major fuel types from 1997-2017 globally.	Local File Attachment	CSV	~0.9 KB	Public
renewablesTotalPowerGeneration.csv	Aggregated totals of renewable power generated by country each year.	Local File Attachment	CSV	~0.2 KB	Public
nonRenewablesTotalPowerGeneration.csv	Aggregated totals of non-renewable power generated by country each year.	Local File Attachment	CSV	~0.2 KB	Public