Data Collection and Preprocessing Phase

Date	30th July 2025
Team ID	xxxxxx
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	This project explores Global Energy Trends and Sustainability by using Power BI to visualize, analyze, and interpret energy production and consumption data across different regions. The goal is to uncover key insights about renewable vs. non-renewable usage, CO_2 emissions, and global progress toward sustainable energy. By leveraging visual analytics, the project supports data-driven decisions for energy planning, policy formulation, and future infrastructure development. It also aims to highlight regional disparities and real-world applications such as smart grid systems, rural electrification, and industrial energy optimization.

Data Collection Plan	The data for this project is collected from reputable global energy databases and official open-data repositories. The focus is on ensuring the data covers a wide time frame and includes diverse metrics such as energy generation types (solar, wind, hydro, coal, gas), regional consumption, CO_2 emissions, and electricity access levels. The collection plan prioritizes sources that are updated annually or quarterly, ensuring accuracy and reliability. It also includes historical data to perform trend analysis and forecasts.
Raw Data Sources Identified	Global Energy Trends: A Comprehensive Analysis of Key Regions and Generation Modes using Power BI https://www.kaggle.com/datasets/jamesvandenberg/renewable-power-generation -Global Energy Consumption (1990-2020) & Renewable Energy Generation (1997-2017)

Raw Data Sources Template

Source Name	Description	Location/URL	Format	Size	Access Permissions
Dataset 1	Global Energy Consumption (1990-2020) & Renewable Energy Generation (1997-2017)	Global Energy Trends: A Comprehensive Analysis of Key Regions and Generation Modes using Power BI https://www.kaggle.com/datasets/jamesvandenberg/renewable-power-generation	CSV	15.22 kB	Public