Data Quality and Preprocessing Report – Global Energy Trends

➢ **Purpose**

- This document details the steps taken to ensure that the dataset used in the Power BI dashboard is clean, consistent, and ready for analysis. It outlines how missing values, formatting issues, and energy type categorizations were handled.

➢ **Unit Consistency & Conversion**

- All energy-related figures were converted to Terawatt-hours (TWh).
- Removed discrepancies like kWh, GWh where they appeared.
- Rounded values to 2 decimal places for display purposes in Power BI.

➢ **Data Cleaning Steps**

Step	Action Taken
Column Renaming	Used readable names like Energy_TWh, CO2_Emissions
Date Formatting	Ensured Year column is consistent as numeric
Duplicates	None found in the final merged dataset
Irrelevant Columns	Columns like energy share %, per capita, etc. were dropped for simplicity