

## Data Collection Plan – Global Energy Trends

### ➤ Overview

- This document outlines the approach for collecting high-quality, relevant, and structured data needed to develop the Power BI dashboard for the “Global Energy Trends” project. The data collection strategy emphasizes sourcing from reliable and recognized global databases, ensuring that all fields needed for energy production analysis are present.

### ➤ Objectives of Data Collection

- Obtain consistent and reliable energy consumption and production data.
- Ensure energy types are granular enough for renewable vs. non-renewable categorization.
- Capture country-wise and year-wise breakdowns from 1997 to 2017.
- Include supporting fields like GDP, population, and CO<sub>2</sub> emissions for richer insights.

### ➤ Data Source Details

Field	Requirement
Country	Name of the country (e.g., India, USA, China)
Year	From 1980 to 2020
Energy Type	Coal, Oil, Gas, Nuclear, Solar, Wind, Hydro, Biofuel
Energy Consumed (TWh)	All values normalized to terawatt-hours
Emissions (CO <sub>2</sub> )	To relate energy types with environmental impact
Population	For per capita calculations
GDP	To compare economic vs. energy growth

### ➤ Primary Source

- Source Name: Our World in Data (OWID)
- Website: [<https://ourworldindata.org/energy>]
- Format Downloaded: .CSV file
- Data License: CC BY (Creative Commons)
- Download Date: June 25, 2025