

# ESG Trends & Impact Analysis Dashboard – Project Report

## 1. Project Overview

This project focuses on analyzing Environmental, Social, and Governance (ESG) indicators across multiple countries over time.

The dashboard enables users to explore ESG trends, compare country performance, and evaluate indicator contributions using interactive visuals built in Power BI.

## 2. Objective

- Analyze ESG performance over time.
- Identify top-performing countries based on ESG values.
- Understand the contribution of various ESG indicators.
- Monitor Year-over-Year (YoY) growth.
- Enable dynamic filtering by country and indicator.

## 3. Tools & Technologies Used

- Power BI Desktop
- Power Query for data cleaning
- DAX for KPI calculations
- Data Visualization (Line charts, KPI cards, Bar charts, Donut charts)

## 4. Data Preparation

- Remove negative and invalid values.
- Handle missing values.
- Convert data types properly.
- Filter only positive ESG values for calculations.

## 5. Key KPIs & DAX Measures

Total ESG Value

Average ESG Value

Total Countries

Total Indicators

Latest Year ESG Value

Previous Year ESG Value

YoY Growth Percentage

## 6. Dashboard Components

- KPI Cards for summary metrics.
- Line chart showing ESG over time.
- Donut chart showing ESG contribution by indicator.
- Bar chart showing top ESG countries.

- Slicers for Country Name and Indicator Name.

## 7. Business Insights

- ESG values show a growth trend until recent years.
- Certain regions outperform others in ESG metrics.
- Indicators such as migration, patents, and life expectancy contribute significantly.
- YoY growth helps identify performance changes.

## 8. Challenges Faced

- Negative values affecting calculations.
- Blank YoY values due to missing previous year data.
- Data inconsistencies resolved through Power Query and DAX adjustments.

## 10. Conclusion

This dashboard provides a strong analytical foundation for ESG performance tracking and decision-making.

It demonstrates effective data modeling, visualization design, and DAX implementation.