
ENVIRONMENTAL
IMPACT
DASHBOARD
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DATASET INFORMATION

- Dataset Name: ENVIRONMENTAL IMPACT DATA
- Source: Public dataset Kaggle
- The provided dataset contains 50,000 records with the following columns:
- - ID
- - Carbon Emissions (kg)
- - Water Consumption (liters)
- - Energy Usage (kWh)
- - Waste Generated (kg)
- - Recycling Rate (%)
- - Air Quality Index (AQI)
- - Region
- - Industry
- - Product Type
- - Category
- - Subcategory
- - Compliance LevelData

FUNCTIONAL REQUIREMENTS

- **Filters:**
  - Year
  - Region
  - Industry
  - Product Type
  - Compliance Level

- **KPI indicators: Highlight key metrics for each region.**
  - Total Carbon Emissions
  - Average Recycling Rate
  - Total Energy Usage
  - Total Water Consumption

FUNCTIONAL REQUIREMENTS

Charts and Visuals:

1.Bar chart:

→Display total water consumption by region.

2.Line chart:

→Display trends of energy usage over time.

3.Heatmap:

→Show recycling rates by industry and region.

4.Pie chart:

→Display the distribution of compliance levels.

5.Scatter Plot:

→Show the relationship between carbon emissions and recycling rates & identifying areas for improvement.

DASHBOARD

Environmental Impact Dashboard

Filter

Year	Product Type	Industry	Region	Compliance Level
(All)	(All)	(All)	(All)	(All)

Total Carbon Emissions

16.2M

Average Recycling Rate

72.02

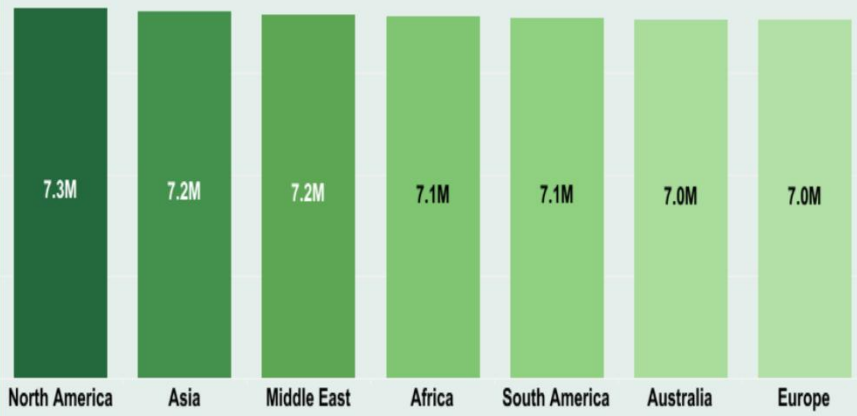
Total Energy Usage

37.5M

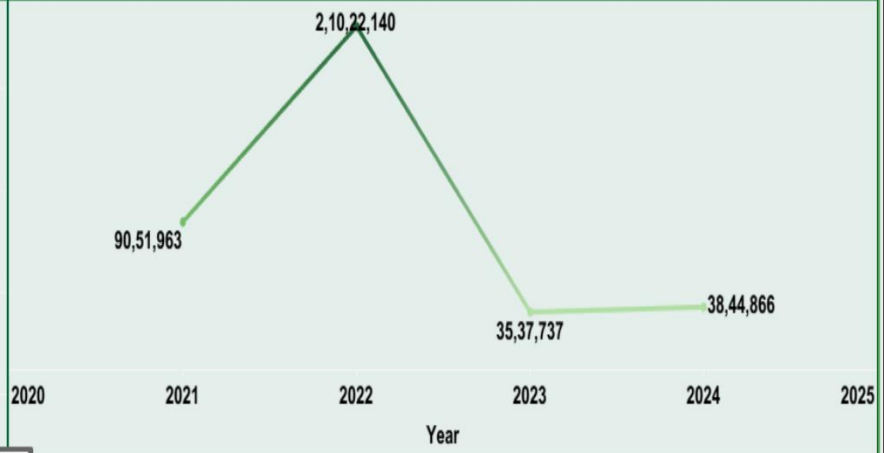
Total Water Consumption

49.9M

Display total water consumption by region



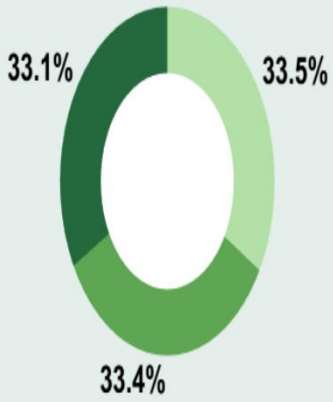
Display trends of energy usage over time



Show Recycling Rates by Region and Industry

Industry	Africa	Asia	Austra..	Europe	Middle East	North America	South America
Automotive	73.5K	75.3K	75.1K	74.0K	72.2K	79.2K	71.3K
Construction	72.2K	76.7K	71.4K	75.4K	71.4K	76.6K	75.0K
Energy	71.0K	75.0K	71.5K	72.7K	73.5K	73.4K	71.4K
Food Processing	75.8K	71.3K	71.9K	72.1K	75.0K	76.1K	71.1K
Mining	73.9K	74.2K	72.4K	71.6K	74.8K	73.0K	72.4K
Technology	73.3K	73.5K	74.1K	72.0K	75.4K	74.6K	73.1K
Textiles	69.8K	71.1K	72.4K	74.9K	73.8K	70.5K	78.9K

Display the distribution of compliance levels



Show the relationship between carbon emissions and recycling rates

INSIGHTS

- Carbon emissions, energy use, and water use are all very high.
- Water usage is similar across all regions.
- Energy usage changes a lot by year (unstable trend).
- Some industries recycle well, but some, like textiles, recycle less.
- Compliance levels are average, not strong.
- High recycling does not fully control high emissions.

CONCLUSION

- This dashboard gives a clear picture of the overall environmental situation.
- We can see that carbon emissions, water use, and energy use are very high, and some industries and regions need to improve their recycling and compliance levels.
- Overall, this dashboard can help in making better decisions to protect the environment and support sustainability.