GLOBAL OIL SUPPLY AND TRADE (2015-2020)

POWER BI CASE STUDY

GROUP 1

OVERVEIW

Objective:
Provide insights into global energy production, imports, exports, consumption, and losses.

Business Problem:
Understanding global energy trade to assess energy efficiency and self-sufficiency across countries.

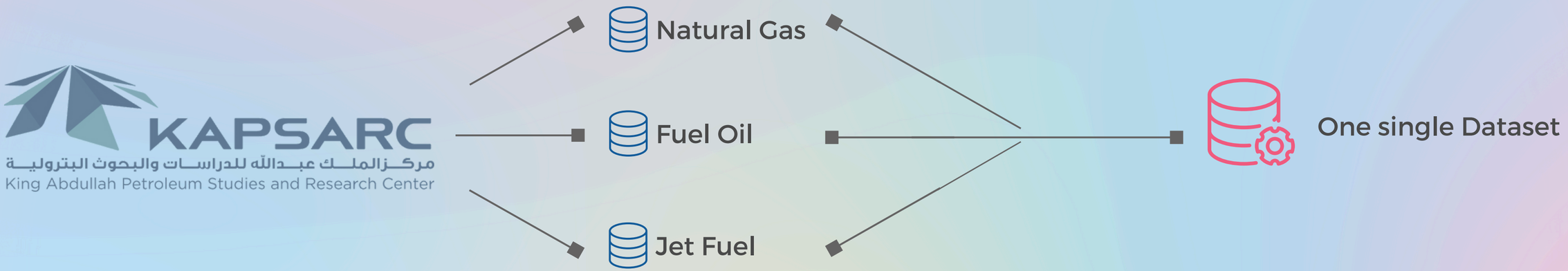
Key Focus Areas:

- Tracking energy production and consumption across countries.
- Analyzing import/export balances.
- Identifying areas of inefficiency, such as energy losses.

Stakeholders:
Governments
Energy companies
Analysts and Investors
Environmental and Sustainability agencie

DATASET

Production, Trade, and Supply Datasets



Years	Country or Area	Commodity	Tranaction
The year when the data was collected. (From: 2015 - 2020)	**The region involved in the energy transaction.** (United States, Russia, China, etc)	**The type of energy resource.** (Fuel Oil, Natural Gas, Jet Fuel)	**The type of energy activity.** (Imports, Exports, Consumption, Own Use, Losses)

DATA PREPROCESSING

Data Loading and Integration

Handling Missing Values

Splitting Combined Columns

Standardizing Text Formats

DASHBOARD


Homepage
Production & Trade
Imports & Exports
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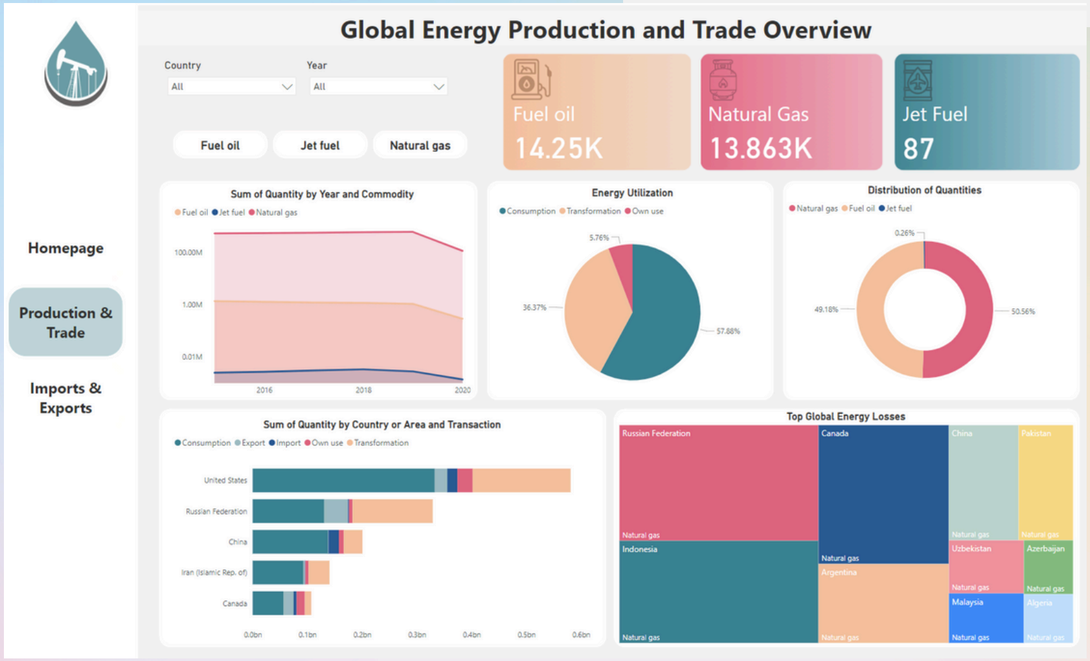
Global Energy Production and Trade Overview
Country
All
Year
All
Fuel oil
Jet fuel
Natural gas
Fuel oil
14.25K
Natural Gas
13.863K
Jet Fuel
87
Homepage
Production & Trade
Imports & Exports
Sum of Quantity by Year and Commodity
Energy Utilization
Distribution of Quantities
Sum of Quantity by Country or Area and Transaction
Top Global Energy Losses


Imports and Exports Analysis
Country
All
Year
All
Fuel oil
Jet fuel
Natural gas
Total Energy Imports
260M
Total Energy Exports
249M
Import to Export Ratio
1.04
Homepage
Production & Trade
Imports & Exports
Distribution of Energy Imports vs Exports
Comparison of Energy Producers and Consumers
Top 10 Energy Producers by Country
Top 10 Energy Consumers by Country
Quantity
Quantity

RESULTS AND KEY OUTCOMES

- **Natural Gas** and **Fuel Oil** dominate the global energy trade, with Natural Gas experiencing the most significant losses.
- The **United States** is the largest energy consumer, while **Russia** is a major exporter with minimal domestic consumption.
- The **Import to Export** Ratio shows a slight global reliance on imports, with **260M** imports vs. **249M** exports.
- Countries like **Russia**, **Canada**, and **Indonesia** face high energy losses, signaling opportunities for efficiency improvements.
- Global trends indicate a gradual decline in Fuel Oil usage, with Natural Gas maintaining steady productiona

THANK YOU

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