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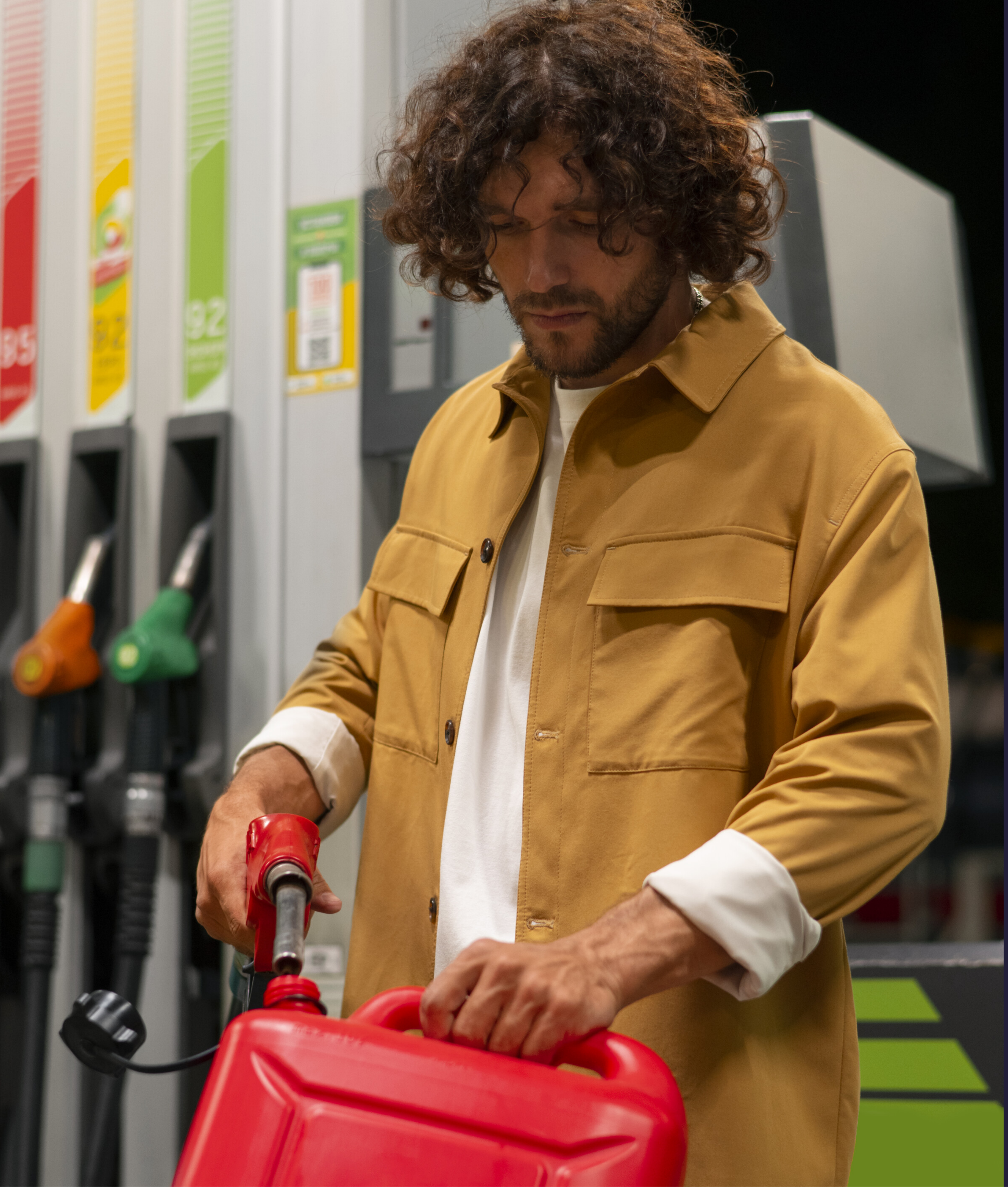
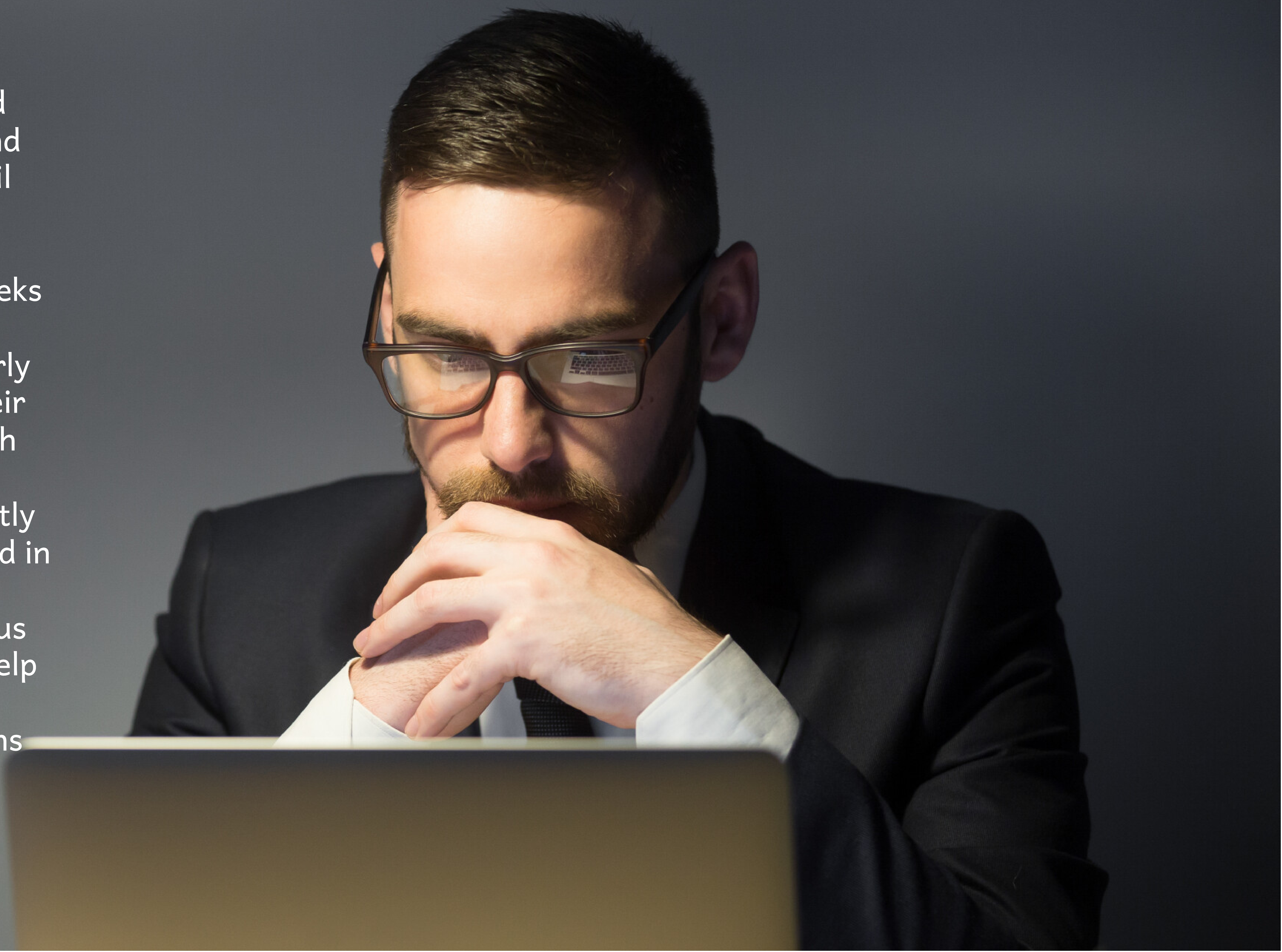


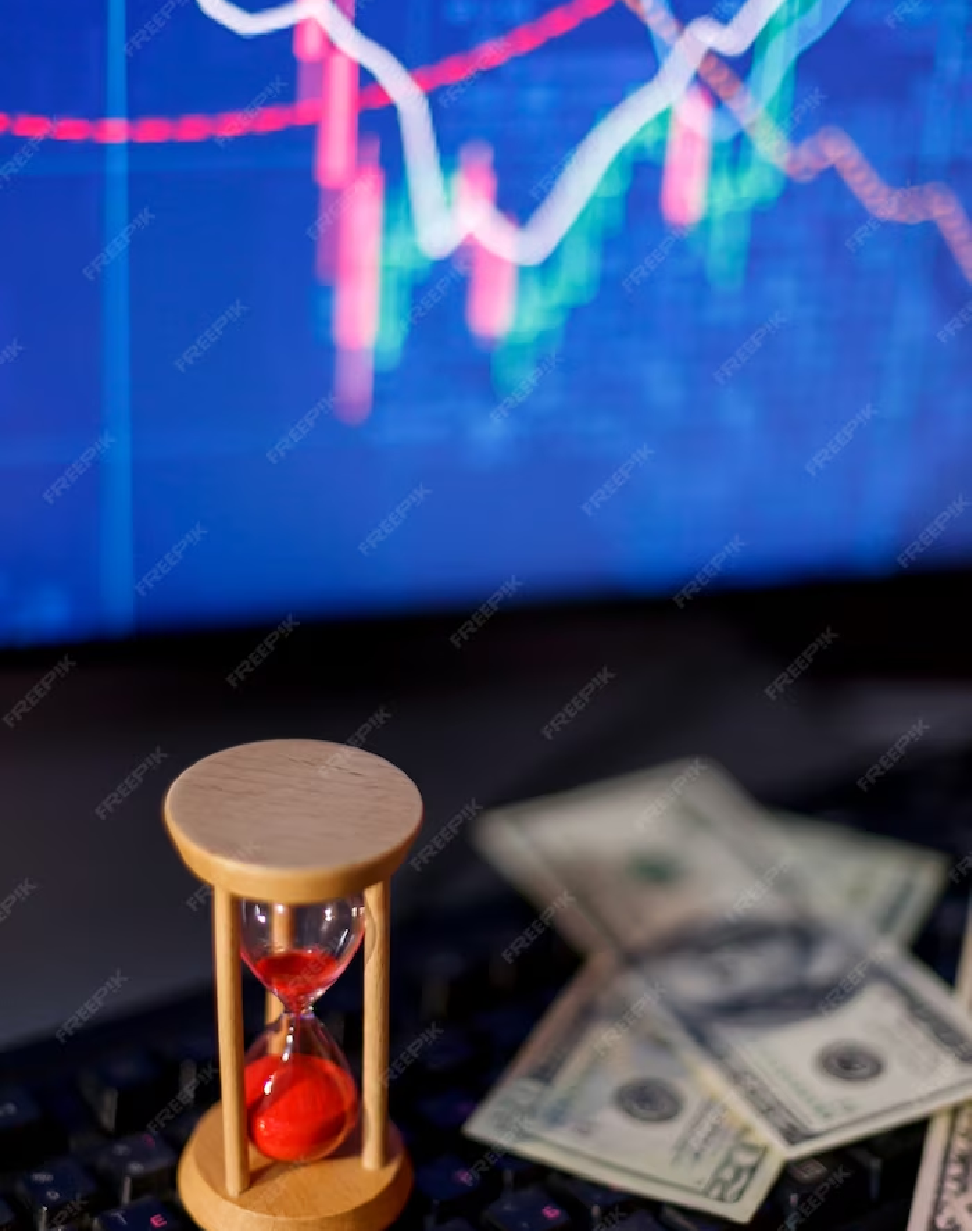
Analyzing the Dynamics of Oil Prices in Kenya and Tanzania: A Comparative Study

BUSINESS PROBLEM

"How do changes in oil prices for different fuel types (Super Petrol, Diesel, and Kerosene) in Kenya and Tanzania impact inflation rates, and what is the relationship between oil price changes and inflation in both countries?"

This business problem/question seeks to understand the link between fluctuations in oil prices, particularly for different types of fuels, and their impact on the inflation rates in both Kenya and Tanzania. It explores whether changes in oil prices directly affect the cost of living, as reflected in the inflation rates, and aims to quantify this relationship for various fuel categories. The analysis can help policymakers, businesses, and economists make informed decisions regarding economic policies and strategies.

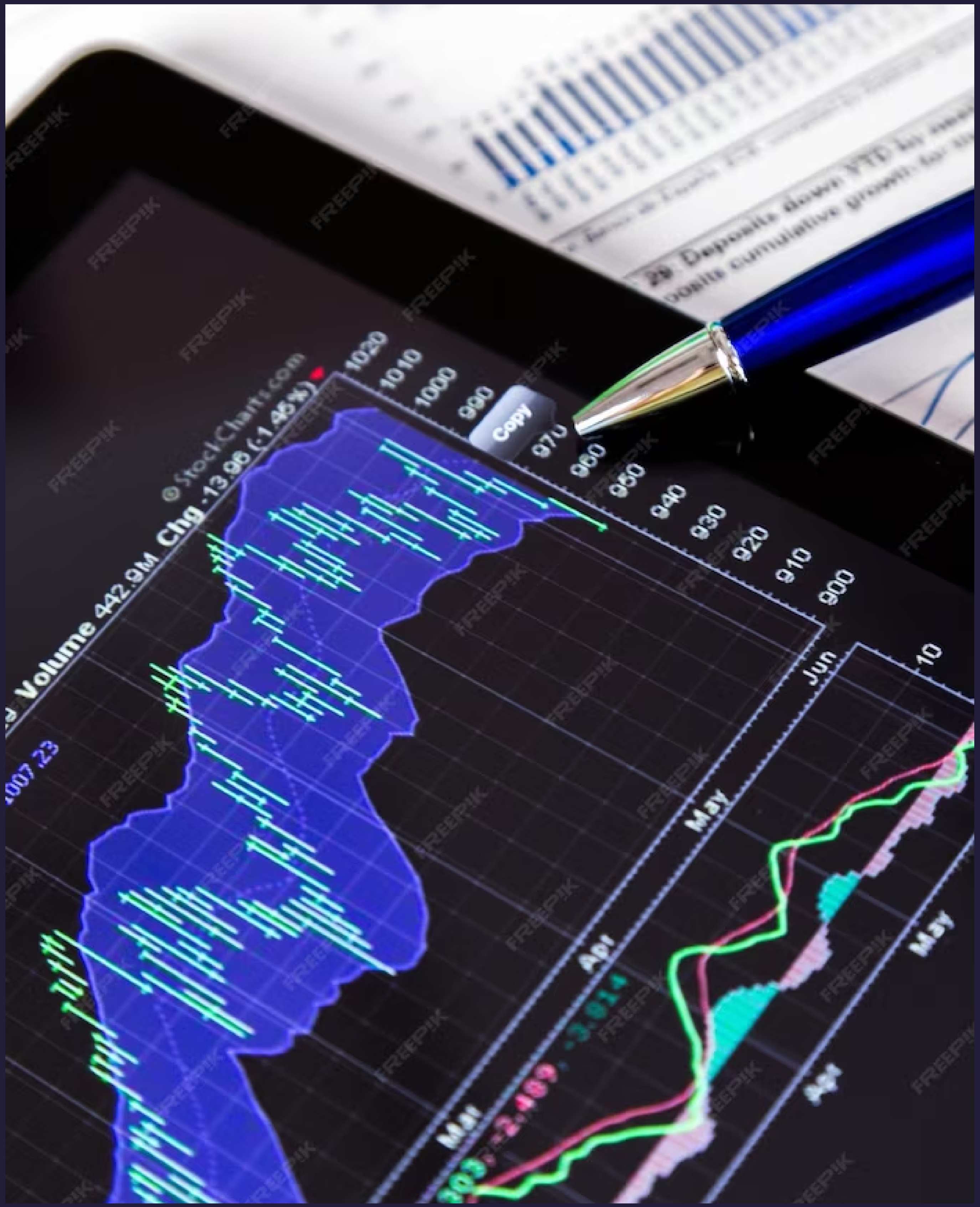




BUSINESS/PROJECT GOAL

"Optimize Economic Policies and Strategies" The primary business goal is to use the insights gained from the analysis of the relationship between oil price changes and inflation rates to optimize economic policies and strategies in both Kenya and Tanzania. This optimization can involve making informed decisions on matters such as taxation, energy policies, and overall economic management to maintain stable inflation rates and promote economic growth. By understanding how changes in oil prices affect inflation, governments, businesses, and policymakers can work towards achieving more stable economic conditions, which can benefit both consumers and businesses alike. The ultimate aim is to promote economic stability, improve the quality of life for citizens, and support sustainable economic growth.

PROPOSED OBJECTIVES



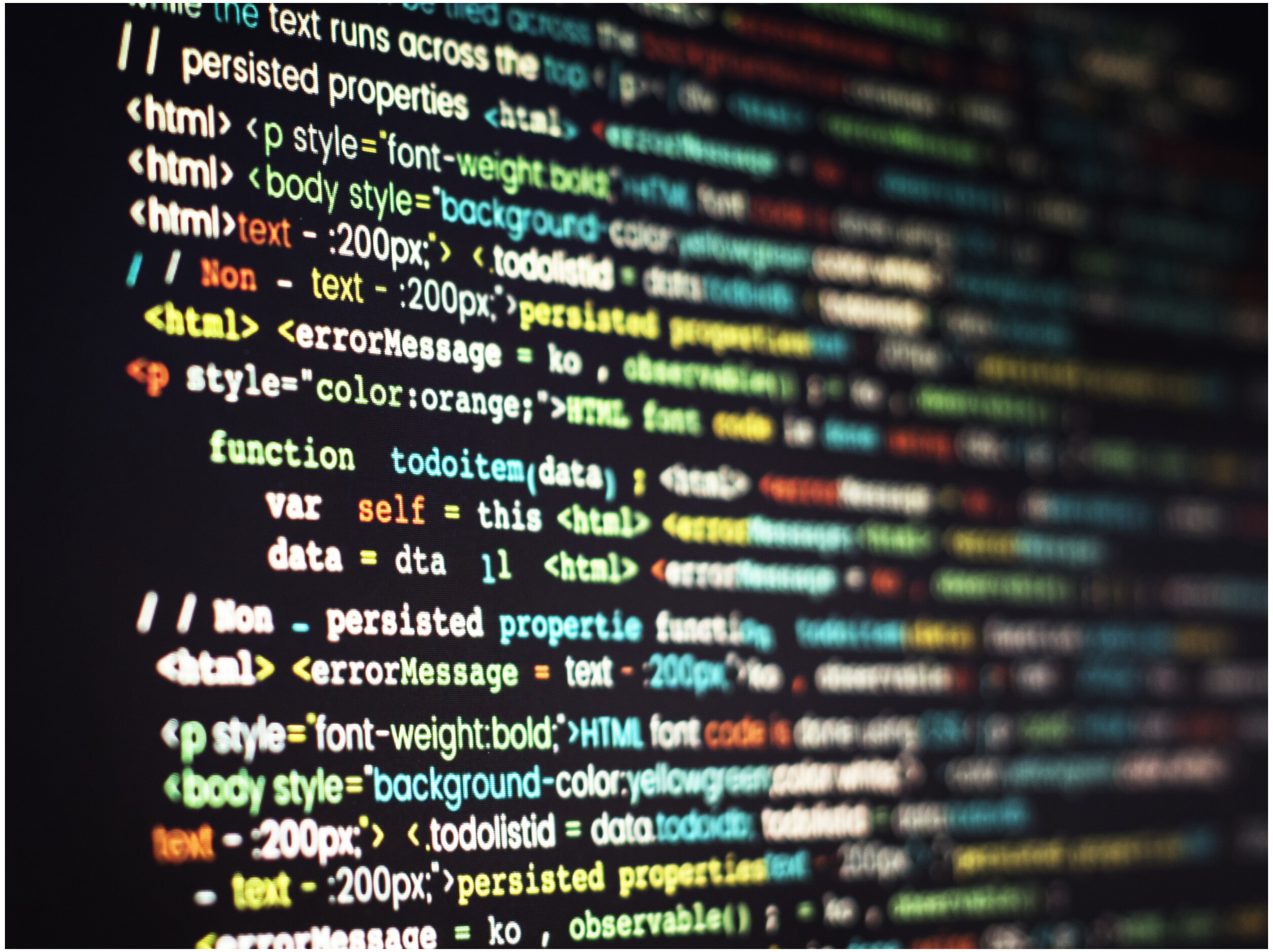
- Analyze the Impact of Oil Price Changes: To quantitatively assess how changes in oil prices for different types of fuels (Super Petrol, Diesel, and Kerosene) impact inflation rates in both Kenya and Tanzania.
- Identify the Relationship Between Oil Prices and Inflation:To determine the strength and nature of the relationship between oil price fluctuations and inflation rates, including whether they are positively or negatively correlated.
- Identify the Relationship Between Oil Prices and Inflation:To determine the strength and nature of the relationship between oil price fluctuations and inflation rates, including whether they are positively or negatively correlated.

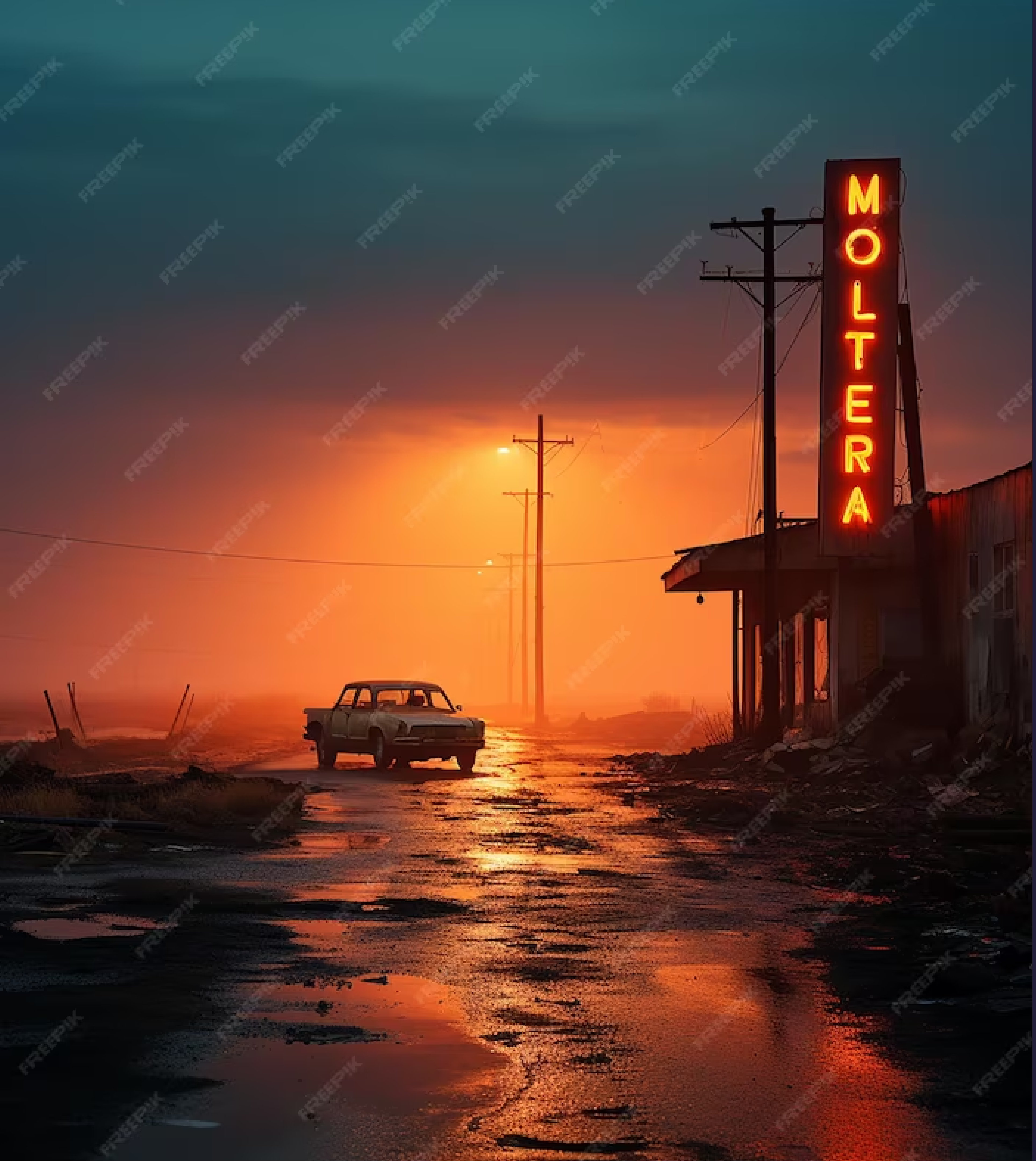
Data Cleaning

corrected data types
corrected unordered columns
fixed errors
changed the decimals to a fixed number

Creating a database

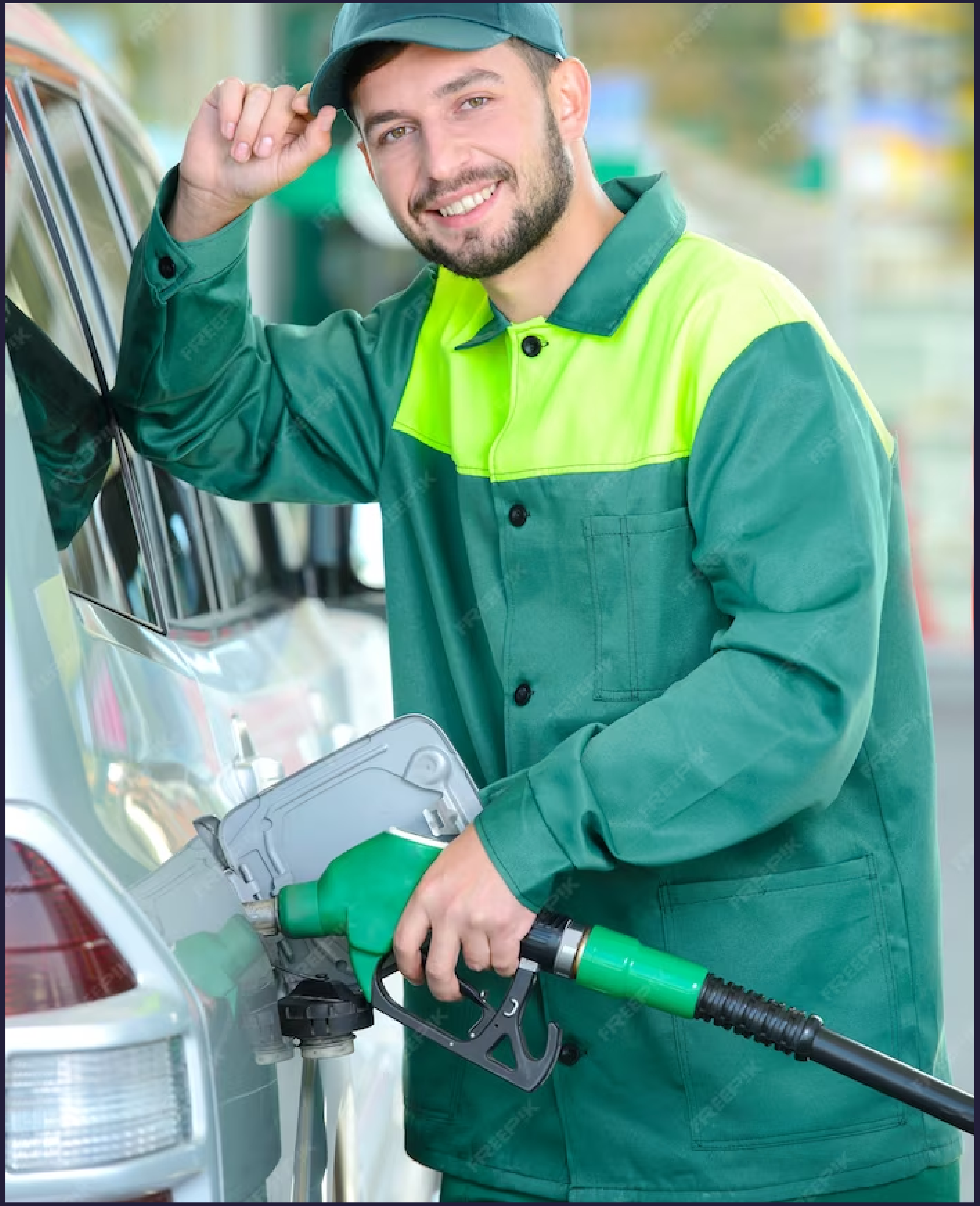
We created a database using google colab to store the data from excel, we also used pandas to read data from excel to google colab.





Analysis of the Impact of Oil Prices on Inflation Rates:

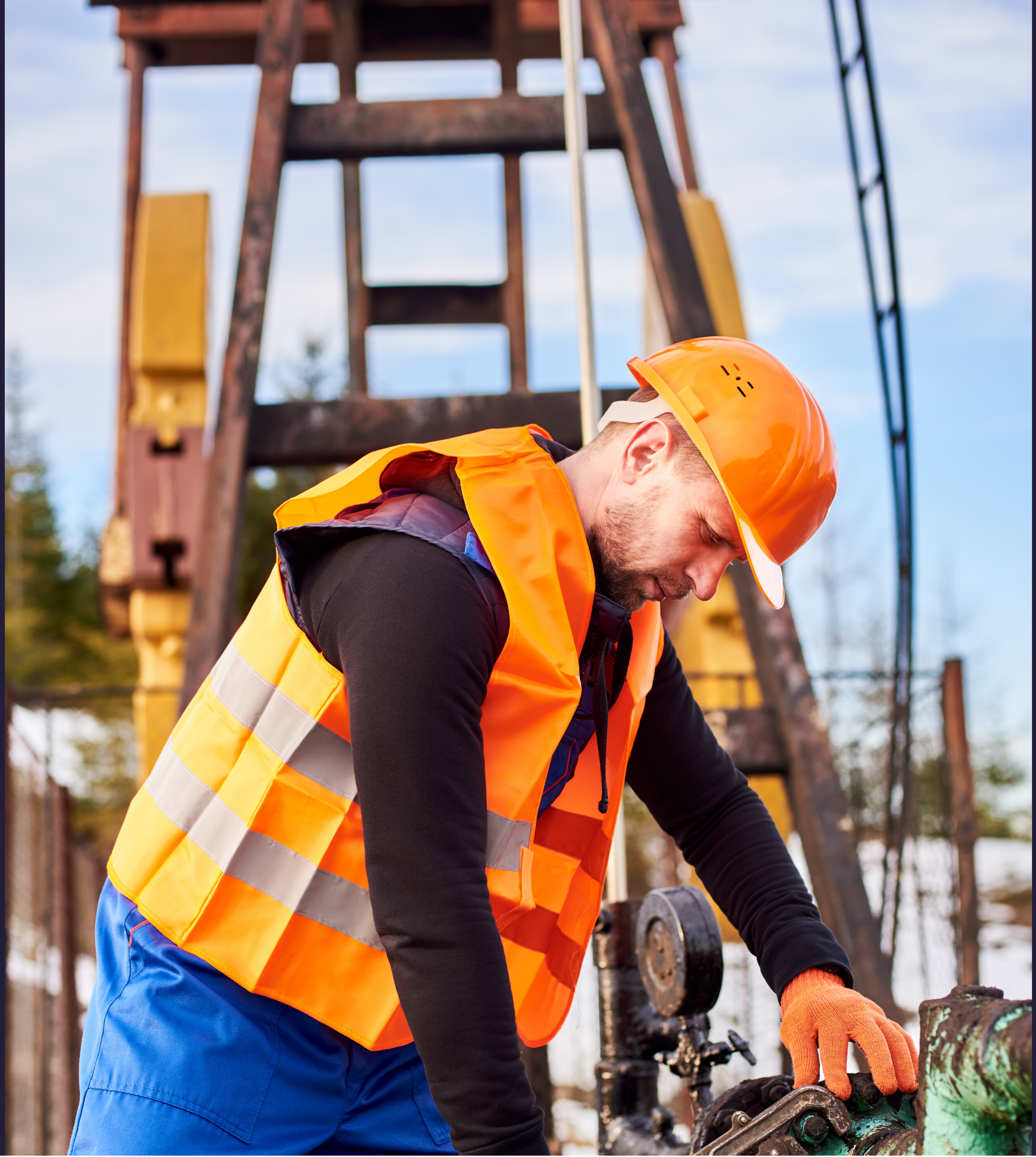
The analysis calculated the inflation rates for different types of fuel (Super Petrol, Diesel, and Kerosene) in both Kenya and Tanzania.It was found that changes in oil prices have a significant impact on inflation rates in both countries.Fluctuations in oil prices, especially for Super Petrol and Diesel, can lead to inflationary pressures.



Understanding the Relationship Between Oil Prices and Inflation:

The analysis identified a positive correlation between oil price changes and inflation rates in both Kenya and Tanzania.

This means that when oil prices increase, inflation tends to rise as well.The strength of this correlation can vary among different types of fuel, with Super Petrol and Diesel showing stronger relationships with inflation.



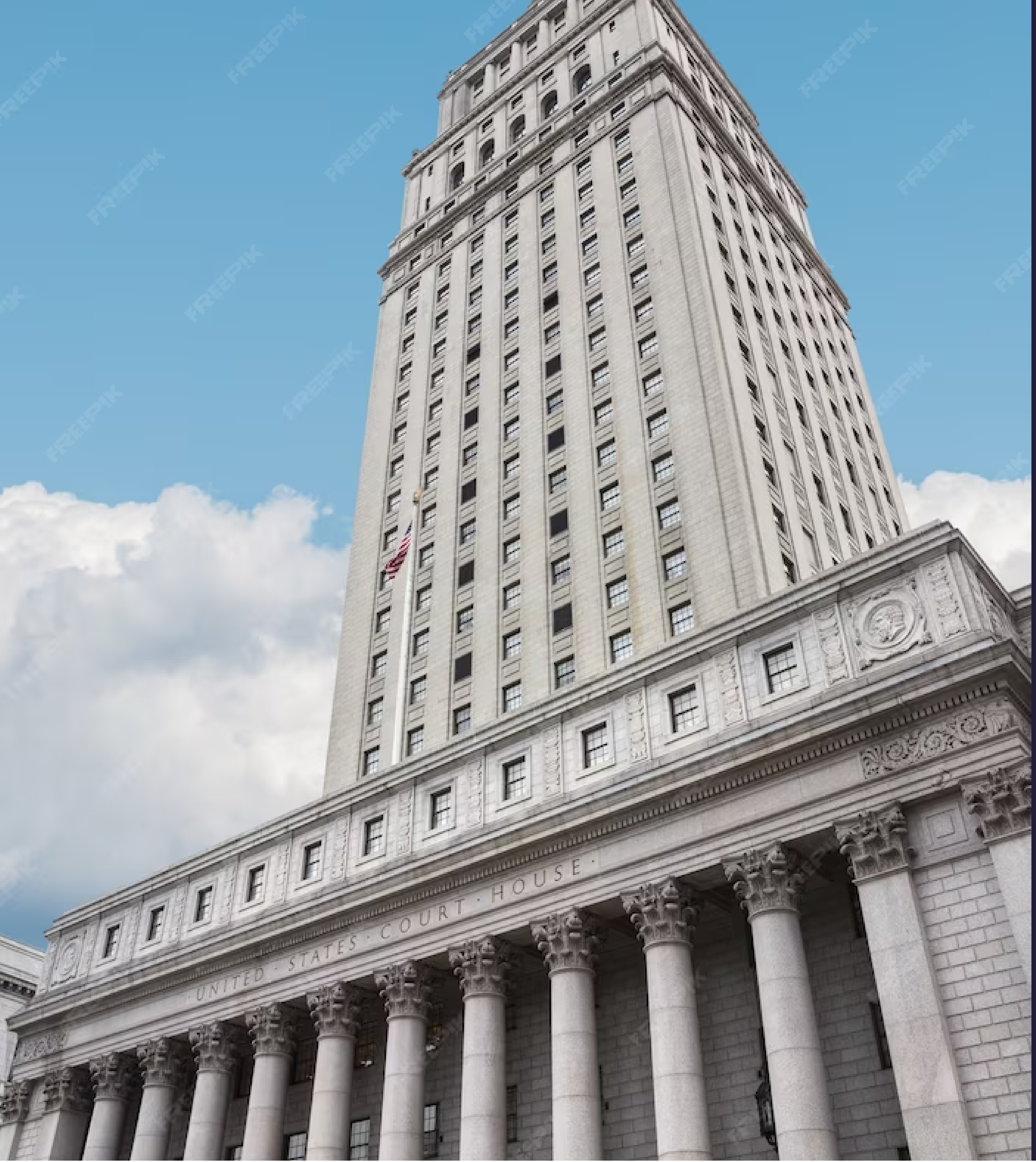
Variability Across Fuel Types:

The analysis revealed that the impact of oil price changes on inflation is not uniform across all fuel categories.

Super Petrol and Diesel have a more pronounced effect on inflation compared to Kerosene.Policymakers should consider these variations when making decisions related to energy pricing and taxation.

Data-Driven Insights for Policymakers:

The analysis provides valuable data-driven insights for policymakers in Kenya and Tanzania.Policymakers can use this information to design effective economic policies and strategies that account for the impact of oil price changes on inflation.They may consider measures such as targeted subsidies, taxation adjustments, and energy pricing policies to mitigate the inflationary effects of oil price fluctuations.



Supporting Informed Decision-Making:
Promoting Sustainable Economic Growth:

Businesses and governments can make more informed decisions regarding economic policies, taxation, and energy management.Stakeholders can use this data to anticipate the impact of oil price changes and develop strategies to maintain economic stability
, the analysis aims to contribute to the broader goal of achieving stable economic conditions and promoting sustainable economic growth in both countries.By understanding the relationship between oil prices and inflation, stakeholders can work towards more stable and resilient economies.

Conclusion

In conclusion, the dynamics of oil prices in Kenya and Tanzania are complex and influenced by various factors. However, by understanding these dynamics and implementing appropriate policies, the countries can mitigate the effects of oil price fluctuations and develop their oil industries further.