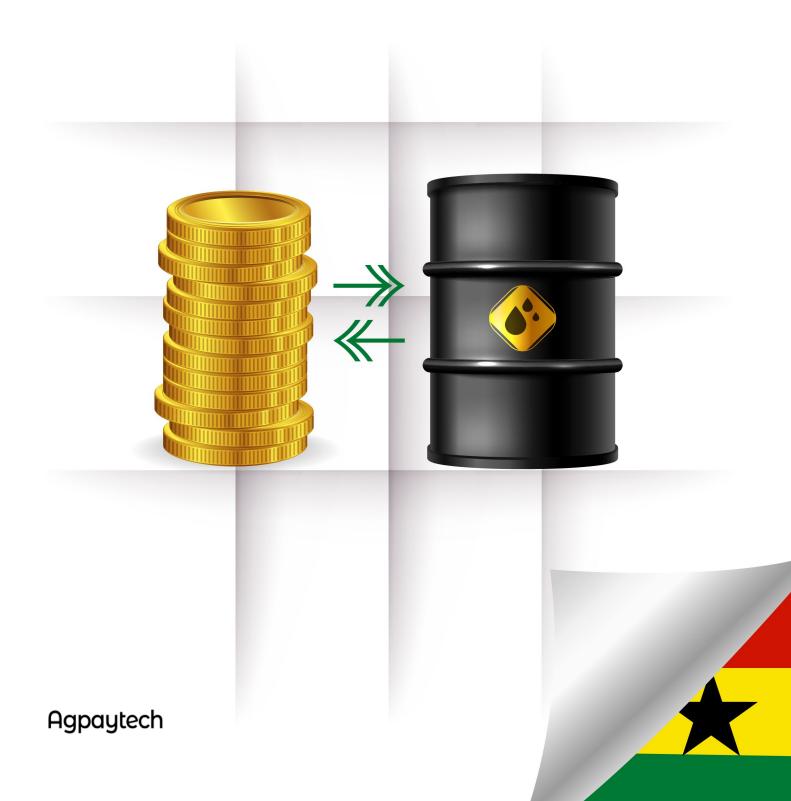
# Ghana's Gold for Oil Policy & Payment Model: A Problem in Search of a Solution



# **Executive Summary**

The global economies are facing tough financial days due to several external and internal factors such as COVID-19. the Russia-Ukraine war, the public debt crisis, the exchange rate, and high energy prices which are directly and indirectly affecting other commodities. Ghana is facing similar economic challenges. To restore the current economic challenges stabilize and price of goods and services, the government is negotiating a new policy regime where gold will be used to buy oil abroad. The Vice President of the Republic of Ghana argued that the gold for oil policy aims to stabilize the Ghanaian cedi and keep prices of petroleum products low as well as change Chana's balance of payments and significantly reduce the persistent depreciation of Ghana currency.

While the announcement was met with mixed reactions, many energy industrial experts questioned the model of exchange, sustainability, accountability, and transparency. Many international experts described the move as de-dollarization, whereas local energy experts call for stakeholder consultation since there is scanty information available to the public. This report in the authors' view, examines the correlation and payment flow of Ghana's gold for oil trade using the broker approach and direct barter trade model.

Keywords: gold, petroleum, commodities, broker, barter trade, payment



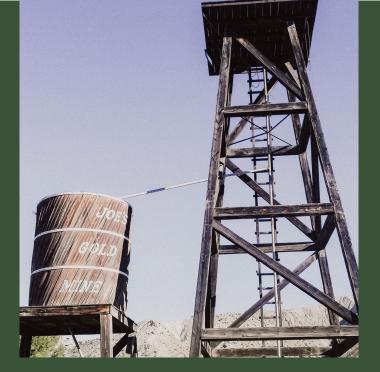
## Table of Contents

Executive summary	
Introduction	03
Overview of Ghana's Economic Growth	04
Oil and Non-oil GDP Growth	05
Background: Gold for Oil Policy	06
Gold and oil areas in Ghana	07
Does Ghana have enough Gold to trade for oil?	80
The Correlation between Exports of Gold and Import of Oil	09
Price of Oil and Gold in the International Market	10
Supply Chain and Payment Flow of the Gold for Oil	
Directly Exchange Model	13
The Broker Exchange Model	14
The Arrival of Oil from Gold Barter Trade: A Reality or Myth?	
Conclusion	16

#### Introduction

Escalation of geopolitical tensions from the Russia-Ukraine war. the COVID-19 pandemic, unstable prices of the commodity, and rising public debt has impeded world economic growth. Both advanced and emerging economies, and international and organizations startup have all been affected. Governments and policymakers implementing are tighter global financial conditions to avert the poor living conditions of citizens leading to higher inflation, lower growth, and higher stress on public finances. Ghana, like many other countries, witnessed economic difficulties which were manifested rising fuel prices, galloping inflation, exchange rate depreciation, increasing interest rates, and many more.

These challenges have caused the government to bring out remedies to bring the economy back on track. Some of these measures include implementing a 20% expenditure cut on some executive salaries, an expenditure ceiling for municipal and district assemblies, imposing a moratorium on some foreign travels by government officials, prioritization of ongoing projects, implementing



of electronic levy (e-levy) on mobile money transactions, black market clean-up, IMF loan, domestic debt exchange program (DDEP), gold for oil barter policy and many others. (Ministry of Finance Press Report 2022).

One interventional measure although with scanty details that make scholars and specialists question the feasibility and sustainability of the policy announced is the Gold for Oil Barter Trade Policy. The move is part of a government plan to use gold to buy oil. According to the Vice President of Ghana, the aim is to ease pressure on foreign currency reserves amid the demand for dollars by oil importers, which is weakening the local currency (Cedi) and increasing living costs. This report examines the harmony between the gold and oil trade deal, its payment flow, and sustainability among the participating countries.

### Overview of Ghana's Economic Growth

The economic development of Ghana has been largely represented by three sectors; agriculture, industry, and service. Since 2004, these sectors have experienced shocks and unpattern linear growth due to unstable policy initiatives, disasters, and other natural occurrences like the COVID-19 pandemic. The industry sector grew up to 15.6% of GDP in 2017 but has declined to the extent that it received a negative growth rate of -0.8% of GDP in 2021. In the era of the COVID-19 pandemic, all the sectors were affected, however, the agriculture field witnessed growth from 7.3% to 8.4% in the period of 2020 and 2021. Focusing on the industries where gold and oil exports are included, this sector reported negative growth for two consecutive years in 2020 and 2021. In the first quarter of 2022, the Ghana industry sector is beginning to see a recovery in the growth of 1.8%.

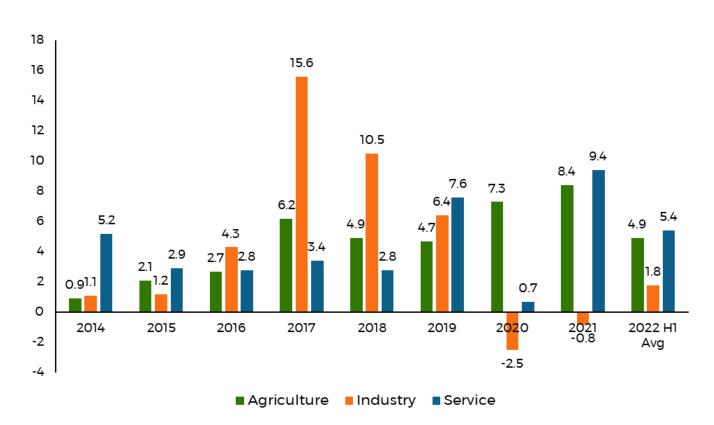


Figure 1: Ghana's sector growth 2014-2022

Data Source: Ministry of Finance, Ghana

#### Oil and Non-oil GDP Growth

The extraction and export of oil have boosted Ghana's economic development and supported many infrastructural projects. Figure 2 illustrated that oil has contributed significantly to the overall GDP growth of the economy. For instance, in 2017 oil revenue increased the overall GDP to 8.1% while the non-oil GDP growth accounted for 4.6%. In 2021, the oil and gas sector was projected to add 10.59 billion Ghanaian cedis (GHS), around 1.83 billion U.S. dollars, to the Gross Domestic Product (GDP) in Ghana. The value was measured at 13.45 billion GHS (roughly 2.33 billion U.S. dollars) in 2019. Furthermore, the industry was expected to account for 15.94 billion GHS (around 2.76 billion U.S. dollars) of the country's GDP by 2024, the highest contribution within the period observed (Statista, 2023).

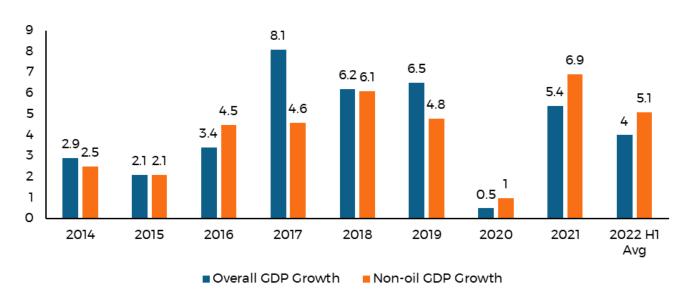


Figure 2: Real GDP Growth (Oil and Non-Oil)

Data Source: MoF

### **Background: Gold for Oil Policy**

The management of the discovered resources in Namibia, Sierra Leone, Botswana, and Ghana among other countries have been subjected to careful analysis and research as a result of the mixed historical experiences in oil-rich low-income economies (Acquah-Andoh et al., 2018). The discovery of oil and gold in Ghana is as significant as the policies and measures to ensure optimum utilization of the nation.

With the recent development of economic tussles, cedi depreciation has been the demand for forex to finance the import of oil and non-oil products into Ghana. To restore the economy and stabilize inflation, the government is negotiating a new policy regime where gold will be used to buy oil products. In July 2022, there was a notice that the Bank of Ghana (BoG) would buy Gold as a reserve currency to promote the stability of the cedi. Although the role of Gold in addressing the cedi depreciation and the attendant inflationary pressures has been hyperbolic.

In November 2022, the Vice-President of the Republic of Ghana, Dr. Mahamudu Bawumia said the Bank of Ghana and the Precious Minerals Marketing Company (PMMC) will coordinate with the large-scale mining companies to ensure compliance with this directive. Fast forwarding, the government announced it has complete discussion to operationalize the barter of gold for oil and the first consignment would arrive in January 2023. The Vice President argued that the gold for oil policy aims to stabilise the Ghanaian cedi and keep prices of petroleum products low. He further stated that the policy will fundamentally change our balance of payments and significantly reduce the persistent depreciation of Ghana's currency. However, as of now, there is little information on the structure, agreement, transaction partners, and terms of the announced policies.

#### **Gold and oil areas in Ghana**

Chana is blessed with several natural mineral resources including gold, oil, diamond, timber, cocoa, cotton, and many others. There are 11 mining companies in 14 mining locations currently operating large-scale gold extraction in Ghana. Most of these mining locations are in Southern Ghana. Besides, there are thousands of small scales mining operators popularly known as galamsey, some with or without licenses.

Ghana is set to produce a total of 57.3 million barrels of oil from the three producing fields in 2021. This translates into a daily average of 156,986 barrels of oil. The three oil-producing fields comprise Jubilee, TEN, and SGN fields. As of 2021, the Jubilee field was the leading oil field in Ghana in terms of output. That year, it produced approximately 27.3 million barrels of oil. This was followed by the Offshore Cape Three Points (OCTP) field - comprising the Sankofa and Gye Nyame fields, with a generated oil volume of around 15.7 million barrels. Overall, as of 2019 oil rents covered 4.7 percent of Ghana's GDP.

Figure 3: Key mining locations in Ghana



Source: Ghana Minerals Commission

## Does Ghana have enough Gold to trade for oil?

According to CEIC, Ghana's gold reserves were reported at 1,000.000 Metric Tons in Dec 2022. This stayed constant from the previous number of 1,000.000 Metric Tons for Dec 2021. Similarly, Statista (2023) reported gold reserves in Ghana stood at a volume of 8.74 metric tons from the first quarter of 2015 to the third quarter of 2021. Moreover, gold mine production in the country reached a volume of 150 metric tons in 2020, an increase compared to the previous year. Ghana did not suspend its production of gold in 2020

amid the coronavirus (COVID-19) pandemic. In 2020, the government of Ghana accumulated income from gold that reached approximately 7.2 billion U.S. dollars. Compared to other minerals, gold generates the highest revenue in the country. As of 2019, over 10 billion U.S. dollars' worth of gold were exported from the country, while a lesser value of the same mineral was imported. Moreover, the Director of Financial Market at the Bank of Ghana, Stephen Opata, said the country has sufficient gold in its reserves to sustain the policy.

Figure 4: Ghana gold reserves

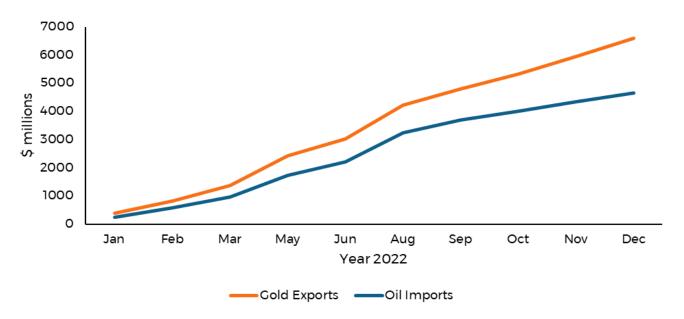


Source: Statista.com

# The Correlation between Exports of Gold and Import of Oil

The trends of exports of gold to the international market and imports of oil into Ghana show similar growth in million USD. In 2022, the value of oil imports exceeded the value of gold exports each month. Furthermore, the gap between gold exports and oil imports continues to widen.

Figure 5: Exports of gold and import of oil



Source: Agpaytech

## Price of Oil and Gold in the International Market

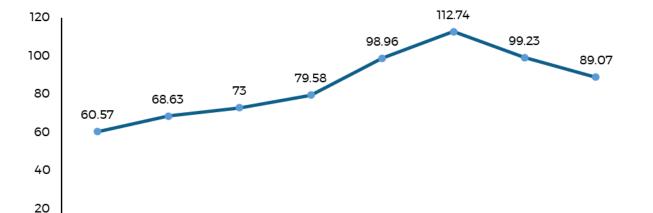
The global price of gold in the international market has witnessed a continuous increase in the price since 2017. From 2017 to 2022, there has a 29.2% increase in the price of gold per ounce. For crude oil, the global price trend has an unstable pattern with a huge increase in 2022.

Table 1: Global price of Ghana's gold export and crude oil

Year	Gold US\$/oz	Crude Oil US\$/bbl
2017	1,257.56	54.39
2018	1,269.23	71.07
2019	1,392.50	64.03
2020	1,770.25	42.3
2021	1,799.63	70.44
2022	1,775.00	100

Source: World Bank Commodity Markets Outlook, Oct-2022

After a steady increase throughout the four quarters of 2021, Brent crude oil prices soared in the first quarter of 2022 and remained elevated through the second quarter of 2022, adding to global inflationary pressures. Oil prices, however, dipped in the third quarter of 2022, and are projected to decline further in the fourth quarter and average US\$100.00/barrel in 2022 compared to US\$70.44 in 2021, an increase of 42.0 percent.



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Figure 6: Brent Crude Oil Prices (US\$/barrel, quarterly)

Source: World Bank Commodity Markets Outlook, Oct-2022

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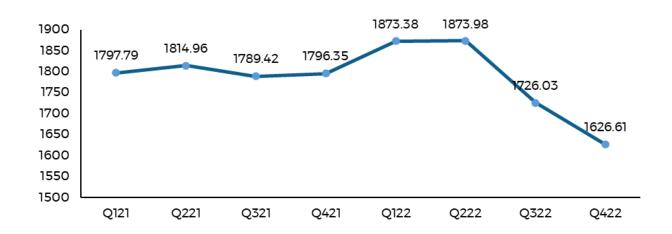


Figure 7: Gold Prices (US\$/fine oz)

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Source: World Bank Commodity Markets Outlook, Oct-2022

# Supply Chain and Payment Flow of the Gold for Oil

espite little information being known about the exchange and payment mode of gold for oil policies, two key options are available for the government to execute this policy. There are the direct barter trade system and broker-assisted model. With the direct barter trade exchange model, the Oil Company abroad must be willing to accept Ghana's gold directly in return for oil by using the international gold price and oil price indicators at the time of transaction. That's the value of gold can purchase what volume of oil with regards to the price of oil/petroleum at the time of the deal. On the contrary, the broker exchange model is where the Bank of Ghana (BoG) and Oil Companies abroad agreed and appoint a Gold Broker (a gold dealer/agent) who will take Ghana's gold, help sell and provide dollars which will then be used to pay for the petroleum products. In this process, the dollar plays a role in the exchange model, unlike the first approach.

The advantage here is that there is no direct exchange of Chana cedi for US dollars like it was before the policy thereby reducing the rush for dollars, causing inflation, cedi depreciation, and pressure on the dollar demand, creating a black market situation Figure 8 further elucidates Ghana. the potential exchange flow of gold for oil. Note, the two approaches discussed illustrated diagram. are in the same

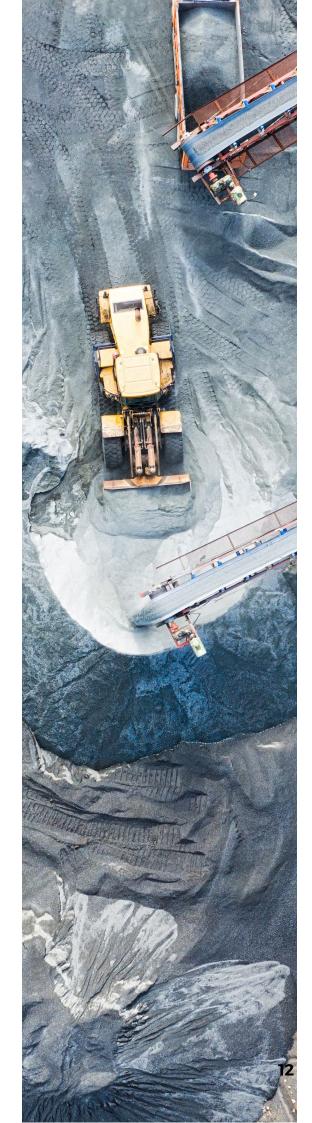
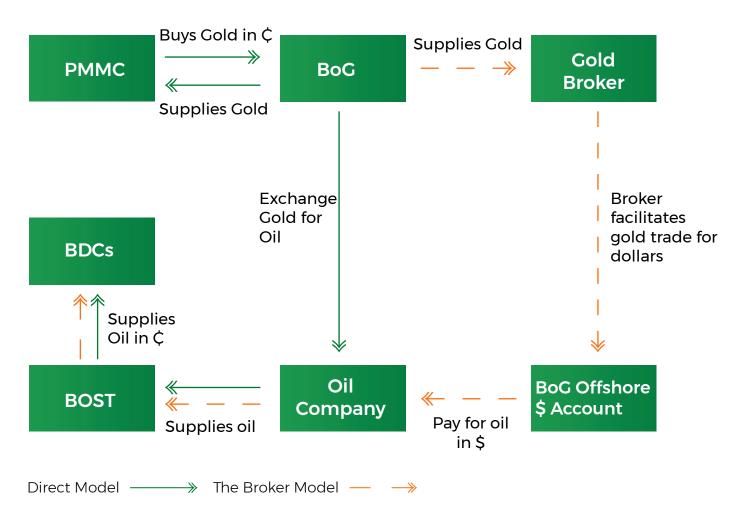


Figure 8: The broker and direct gold for oil payment framework



Source: Agpaytech

### **Directly Exchange Model**

n the Directly Exchange Model (DEM), the sole distributor of gold to the Bank of Ghana (BoG) which is the Precious Minerals Marketing Company (PMMC) sells gold to BoG in Ghanaian Cedis (¢). BoG directly looks for oil selling company abroad (UAE as speculated) that is ready to accept gold and provide oil in return. With this model, the two parties (BoG and Oil Company) used the international price of gold at the time of the deal to value the quantity of gold and volume of oil in a fair. The oil company then ships the gold-purchased oil to Bulk Oil Storage and Transportation Co. (BOST). Upon arrival, BOST sells the oil in Ghana Cedis to Bulk Distribution Companies (BDCs). This direct barter gold for oil model therefore automatically eliminates the need for dollars which has been a major source of worry to importers in Ghana.

### The Broker Exchange Model

The Broker Exchange Model has a similar but extended approach to the DEM. With the Broker model perspective, BoG buys gold from PMMC and finds a middleman (Broker) who facilitates the selling of gold in USD Dollars. The Dollars are deposited in an offshore account in the name of BoG which is therefore used to pay the Oil Company. After payment of the oil in dollars, BOST receives products and sells them to BDCs in Ghanaian Cedis. This second approach does not eliminate the use of dollars to acquire oil but removes the burden of importers to exchange ¢ for \$ before ordering oil in the international market.

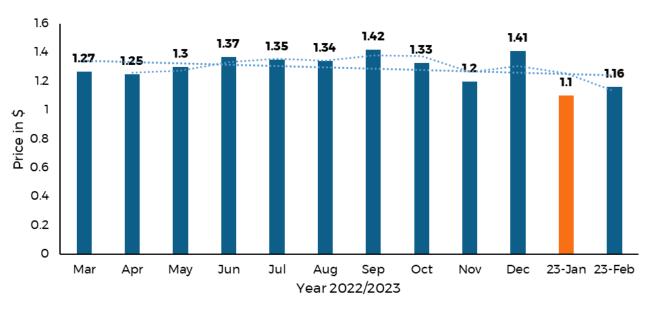
# The Arrival of Oil from Gold Barter Trade: A Reality or Myth?

hana has taken delivery of the first consignment Jof 40,000 metric tonnes of oil from the United Arab Emirates as part of the government's Gold for Oil policy. The consignment which arrived in the country on Sunday, January 15, according to Ghanaian Times sources, has been discharged into the receptacles of the Bulk Oil Storage and Transportation Company (BOST) at the Tema Port. In addition, the second consignment of petroleum products that have arrived in the country under the government's Gold for Oil program will be sold to Oil Marketing Companies (OMCs) that have not less than 45 outlets across the country according to the National Petroleum Authority (NPA). NPA said the decision would ensure that consumers felt the impact of the program in terms of reduction in prices of petrol and diesel at the pumps.

However, the arrival of gold for oil in Ghana has not been reflected in the expected decrease in

prices of petroleum products since January 15 this year. Rather there has been an insignificant increase the petroleum prices across the country.

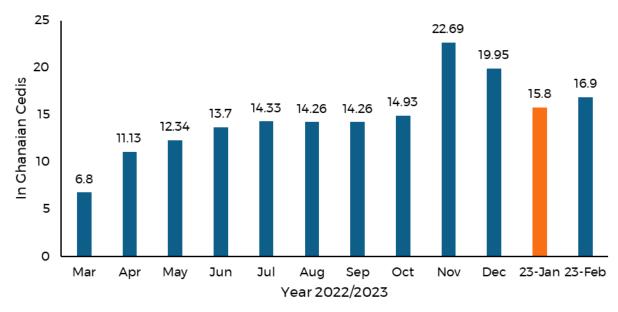
Figure 9: Monthly petroleum/gasoline



Source: Agpaytech

Generally, diesel prices in the country have risen significantly since February 28, 2022, which registered a cost of 8.11 GHS per liter. As of February 20, 2023, the price of diesel fuel in Ghana stood at 16.9 Ghanaian cedis (GHS) per liter, around 1.32 U.S. dollars. The value decreased compared to December 2022 but considerably increased from most of the previous weeks observed. On January 15, 2023, Ghana received the first consignment of gold for the oil trade model, and prices of fuel are expected to reduce significantly.

Figure 10: Monthly diesel prices in Ghana

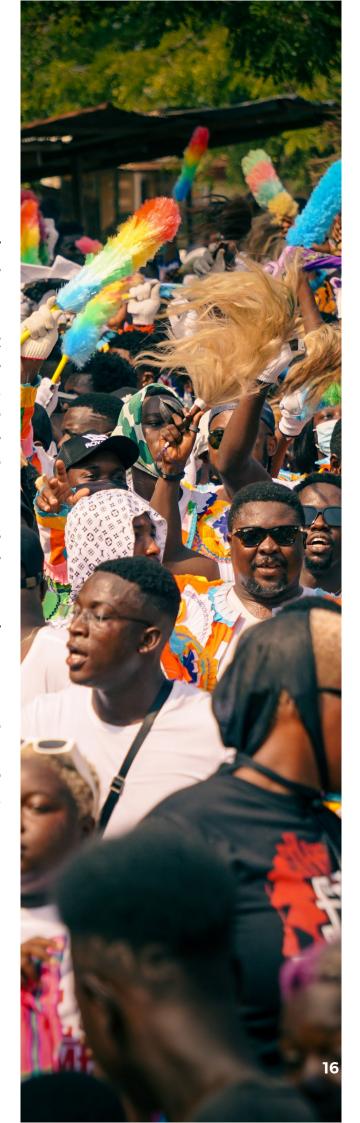


Source: Agpaytech

### Conclusion

The intervention of gold for oil as a substitute for dollars has left many people in doubt. Several experts have questioned the magnitude of good governance, transparency, transactional flow, accountability, and agreement details from the participating state institutions (BoG, NPA, BOST, MoF, PMMC, Brokers, etc.). The government is yet to provide details and justify the cost of the structure of the policy as compared to its sustainability and competitiveness.

As of now the gold for oil policy has many challenges and risks issues due to the inadequate transparency and unpublished framework of the model. The government's intention to solely allow PMMC to supply gold to BoG creates a monopoly dilemma and shrinks tax revenue from other small-scale miners or gold dealers who could have sold to BoG. Dollar demand to import oil accounts for only 20% of the forex pressure on US dollars, therefore over-emphasizing petroleum products is a worry to other sectors.



### **About Agpaytech**

Agpaytech Ltd. is a company pioneering in the Fintech Space with a focused approach to building robust technologies for eCommerce Card Processing Solutions for Payment Service Providers (PSPs). Additionally, we provide Compliance and Regulatory Umbrella, Remittance-as-a-Service White-Label Solution, Foreign Exchange, Cross Border Payments, and digital currency technology. We have partnered with multiple banks, non-banking financial institutions, and corporate organizations to create a solid service delivery model for them and their customers to ease their international remittances and payments concerns. Website: www.agpaytech.co.uk

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