

PHASE-OUT OF FOSSIL FUEL AND ARAB ECONOMIES

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OUTLINE

I. Introduction

- Hook
- General Statements
- Thesis Statement

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II. What is fossil fuel and Arab Economies

III. How Phase-out of fossil fuel is impacting Arab Economies

1. Arab Economies ^{are} heavily dependent on fossil fuels earnings
→ Kuwait and Iraq rely on hydrocarbons for over 90% of ^{their} export earnings
2. Risking Middle East's monopoly in fossil fuels supplies
→ Middle East holds about 48% of global oil reserves

3. Decreasing revenue of Arab economies

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→ 71% decline in budget income: Reuters

4. Millions of dollars cost stuck in fossil fuel refineries

→ Al-Zour \$16 billion in Kuwait

5. Increasing budgetary pressures in Arab economies

→ Saudi Arabia increased VAT from 5% to 15% in 2020 to stabilize its budget.

6. Risk of rising inflation in Arab economies

→ fuel price hikes up to 60% in Oman

7. Threat of mass migration in Arab economies

→ 1.2 million employed in refineries migrated in Covid' 19.

8. Diminishing strategic power of Arab economies

→ Cop 28 Agreement, transition away from fossil fuels

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9. Rising risk of unemployment.

10. Decreasing dollar influx in Arab economies causes dwindling per capita income

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→ decrease of GDP ^{per} capita of Saudi Arabia from 23000 to 19000 USD (World Bank)

III Way forwards of depleting fossil fuel reservoirs and new opportunities of investment in Arab Economics

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Fossil fuels: why Net Zero is Not Enough by Holly Jean Buck

IV Conclusion

As the world moves towards clean energy, Arab economies stand at a crossroads - between the fading comfort of oil wealth and uncertain promise of diversification. Arab countries have abundance of fossil fuel. They ~~have~~ ^{possess} approximately forty-eight percent (48%) of global oil reservoirs. There was time when Arab economies used to have dominance in the hydrocarbons. Rest of world's domestic consumption ^{and} industrial usage were ~~highly~~ ^{heavily} dependent on the export of imported fuel from Arab countries. With the advancement of cutting edge technologies and introduction of green renewable energy, Arab nations find itself in a debious ~~uncertain~~ situation. It is because, the demand of fossil fuel is ~~being~~ rapidly diminishing, as world is shifting towards green renewable energy. Clean energy is comparatively cheaper and easily available ^{which} ~~that~~ has put the Arab economies in a dilemma. ~~the~~ Arab nations' major source of revenue was fossil fuel. With that being said, in various Arab countries, the fossil fuel reservoirs are also depleting, that has further accelerated ~~the~~ ^{the} Arab leaders' concerns. Therefore, this essay ~~will~~ would discuss the co-relation between fossil fuel and Arab economies. After that, it would shed some light upon how

phase-out of fossil fuel is impacting Arab economics. Moving forward, this essay would ~~not~~ over highlight some pragmatic way forwards of depleting fossil fuel reserves and new opportunities of investment in Arab ~~economies~~ economies. Lastly, would underscore a book review on fossil fuel: Why Net Zero is not enough by Hilary Jean Buck.

To begin with, most Arab economies, especially in the gulf region, depend heavily on oil and gas as their main source of income. These hydrocarbons provide most of their government revenue, export, and job opportunities. However, highly dependence makes Arab world vulnerable. When oil prices fall, fossil fuel phase-out and depleting fossil fuel. Various Arab countries, like Saudi Arabia and the UAE are now trying to diversify their economies through projects like Vision 2030, but their growth still depends on fossil fuel. Thus, fossil fuels are the weakness of Arab economies.

The dependence of Arab countries on the earnings of fossil fuel is one of the major factors that is impacting their economies. Middle Eastern nations especially Gulf Cooperation Council (GCC) countries heavily

rely on the export of hydrocarbons. Other than fuel, mostly countries did not explore other fields through which they can ~~create~~ increase exports. Various Arab leaders think they would never run out of their vast oil and gas reserves. Holding to this perspective, remaining areas of exports remained unexplored, and this way, Arab countries' reliance kept on aggrandise. For stance, according to the stats issued by World Trade Organisation (WTO), Kuwait and Iraq, ~~remain~~ dependent on hydrocarbons for over ninety percent (90%) of export earning. This illustrates that if world nation stop purchasing fossil ~~fuel~~ fuels from Kuwait and Iraq, they exports will shrink down and ^{their} economies ~~will~~ ^{would} collapse. Therefore, reliance on oil and gas exports ~~is~~ ~~the~~ to some extent is impacting Arab economies.

Secondly, ~~rising~~ ~~market~~ Phase-out of fossil fuel is also risking Middle East's monopoly in the fossil fuels supplies that ~~is~~ ^{would} impact Arab economies adversely. ~~Currently~~, Middle East ^{was} ~~is~~ the only ~~continent~~ region that is dominating the hydrocarbon markets. There was a time when GCC region had forty-eight percent (48%) of global oil reserves in early 2000s as per GCC Reports. ~~These~~ ~~are~~ oil and gas reserves are almost depleted and there is still ever-increasing demand of

^{hydro-}carbons. In comparison to this, Unavailability of fuel to fulfil demand is risking Middle East's monopoly in the world. In comparison to this, other regions existing oil and gas resources are replacing the GCC nations.

Venezuela, a country located in South America, has almost 303 billion barrels of fossil fuel. This country has potential to replace the GCC economies and from the world largest oil exporting countries. On the other hand, Arab economies can not sustain their share in the world's ^{market,} crude oil due to phase-out of fossil fuel. Clearly, phase out of hydrocarbons in the Arab economies is risking Arab nations' monopoly share in the oil and gas supplies.

Thirdly, owing to phase-out of fossil fuel, there has been decreasing revenue of Arab ~~or~~ earned from ^{hydro}carbons, it is also impacting Arab economies. Dwindling ~~revenue~~ revenue generation has put pressure on the ~~reduced~~ budget of the Arab economies. As, countries need to fulfil their expenditure, there is no income that can be utilized for the development or investment in their country. Considering to this, Arab leaders have decided to cut the budgets significantly. According to Reuters, there has been decline of seven percent (7%) in the budget income

of the GCC countries. As, Arab leaders have not explored to other ~~see~~ industry, other than UAE and Qatar, rest of countries are facing budget pressure. The UAE and Qatar are able to encounter budgetary pressure by increasing their services in the tourism industry. Hence, depleting fossil fuel is shrinking the budget spending ^{and impact to} of the Arab economies.

Fourthly, owing to phase-out of fossil fuel, Arab countries' millions of dollars investment is stuck in the fossil fuel refineries. The GCC nations were making enormous returns from the trade and exports of oil and gas. As fossil fuel are depleting, Arab economies are not only losing the returns generated from exports, but it is also creating complications for of stocking gigantic investments and capital in the plant and equipment infrastructure. When, there is no hydrocarbons, means ~~this~~ these plants would idle thus holding big costs. Resultantly, plant ~~could~~ not be used for alternative purpose. The GCC members are confused on how to convert these plants into cash as there is no party to purchase huge plants without oil and gas. So much so, that according to Kuwait government, they have invested around \$16 billion in Al-Zubair refineries, and ~~there~~ in 2012. Now, there is

decrease in hydrocarbons percentage and ratio.

Kuwait government is worried to cash Al-Zahr ^{is} refinery. Thus, millions of dollars cost ^{is} stuck in the oil and gas plants by the Arab leaders and this is instigated by the phase-out of fossil fuel.

Increasing budgetary pressure in Arab economies is the fifth reason of how phase-out of fossil fuel is impacting the Arab world. In order to balance budget pressure, Arab governments have to increase their revenue through other means - As these nations does not export any other commodity other than hydrocarbons, they have to ultimately increase the domestic taxes to fulfil the budgetary pressure. For this purpose, one can observe that Arab leaders have started to imposed multiple taxes to their people. ^{The} ~~Amount~~ Amount collected from tax revenue is utilized in budget to reduce budgetary pressure. For stence, Kingdom of Saudi Arabia (KSA) has increased Value-added Tax (VAT) from ^{five} ~~fifteen~~ percent (5%) to fifteen percent (15%) in 2020 during covid'19 pandemic just to stabilize its budget. KSA was successfully able to generate revenue from alternative sources than export of oil. Therefore, phaseout of hydrocarbons is adversely impacting the budgetary pressure on the Arab nations.

Sixthly, phase-out of fossil fuels is ~~causing~~ the providing risk of rising inflation in Arab countries. Countries solely based on exports of hydrocarbon ^{would suffer} ~~suffer~~ a lot when economies would not have fossil fuel to export. This will reduce dollar influx in the economy. When ~~the~~ economies would not have sufficient dollars, they would not be able to import goods and other commodities such as vegetables and meats. The shortage of basic food supplies would increase inflation and reduce purchasing power of buying goods. When there is high demand in the economy, and less supply of essentials, the price of goods ~~goes~~ and that causes inflation in the economy. ~~Example~~ When fossil fuel plants were closed for a few weeks in the Oman, it caused prices of goods raised up to sixty percent (60%) due to unavailability of dollars to import food items. Clearly, ~~there are~~ when fossil fuel depletion could ^{lead} ~~test~~ to increase in inflation in the Arab economies.

The threat of mass migration in the Arab economies is the seventh factor that is aroused by the phase-out of fossil fuel in the Arab nations. As per GCC reports 2023, more than seventy percent (70%) of ~~new~~ countries' employment is based on fossil fuel. When, these hydrocarbons reservoirs are depleted, the

70% of ~~emp~~ people would lose their jobs. People would shift to other countries for their better and stable career opportunities. However, ⁱⁿ the Covid 19 pandemic, 1.2 million employed people, in fossil fuel refineries and plants, were migrated due to shut down of oil-based plants. Foreign employees working in Arab region could not come back ~~due to~~ as they found better opportunities. Ergo, phase-out of fossil ~~fuel~~ in Arab world has ~~created~~ ^{created} ^{another} risk of ~~another~~ mass migration in the GCC countries.

Eightly, Arab leaders are losing their strategic power owing to depleting fossil fuel in Arab lands. At first, Arab countries had ~~big~~ influence in their international geopolitics and geo-economics. As ~~the~~ hydrocarbons are extinguishing, the power of Arab is also decreasing. ~~As~~ Maintaining the balance is becoming challenging for GCC members. Western Countries in the Conference of Parties (COP28), ~~agreed~~ Arab leaders were forced to ~~assignment~~ sign agreement ~~with~~ in the COP 28 of transition away from the fossil fuel. At it is the same ~~fuel~~ fossil fuel on which whole Arab economies is established. Henceforth, Arab countries' influence is decline in the international arena because of depletion on fossil fuel in the Arab lands.

Rising risk of unemployment is the second last factor how the phase-out of fossil fuel is impacting Arab economies. ~~When there~~ Unavailability of fossil fuel in the reserves, means plants are sooner or later ~~supposed~~ to closed. People would be unemployed that would increase the burden on the economy. Closure of hydrocarbon plants ~~would~~ led to widespread unemployment. Moreover, construction and transport sector that depend on oil-funded project would collapse. Aramco employs over 70,000 workers, fossil fuel depletion could affect tens of thousands directly and millions indirectly worked and related industries. Clearly, phase-out of hydrocarbon would increase risk of unemployment in GCC countries.

lastly, Shrinking Gross Domestic Product (GDP) per capita because of less influx of dollars in the GCC union is also ~~because~~ ^{due} to phase-out of fossil fuel in Arab economies. When oil prices or exports drop, national income falls, but population continue to rise. This causes GDP per capita to decline. For example, In 2020, when oil prices collapsed, Saudi Arabia's GDP per capita fell from USD 23,000 to USD 19,000 as per ~~World Bank~~ ^{World Bank} (WB). Moreover, lower dollar

inflows mean government earn less from oil exports and thus spend less on ~~infrastructure~~ infrastructure, subsidies and public wages. It would ultimately lead to slower economic growth. Clearly, GDP per capita of Arab nations is also being impacted by the phase-out of fossil fuel.

The various factors of phase-out of fossil fuel has brought Arab economies at the ~~very critical~~ crossroads. The gravity of the factors is very severe which can be solved by implementing pragmatic approaches on the Arab lands. The next paragraph would highlight some way forwards of depleting fossil fuel reserves and new opportunities of investment in Arab economies.

One of the way out for the Arab leaders is to invest in renewable energy. Just like world, Arab leaders need to ~~transform~~ transform from hydrocarbons to renewable energy. Which is easily available and less costly than that of fossil-fuel. Fossil-fuel would end some day, but renewable energy sources are in abundance. Kingdom of Saudi Arabia (KSA) had launched its NEOM project at the right time in 2017. ~~The~~ The main objective of this project is to create a smart, ~~and~~ shared and sustainable public transport system that

would be powered by renewable energy. Other neighbouring Arab leaders must introduce such projects ~~so~~ so that their reliance ~~on~~ fossil fuel is less. Ergo, Arab leaders have ~~opportunities~~ opportunity to invest in the unexplored projects in the renewable ~~energy~~ ^{sector}.

Secondly, Arab economies should invest their capital in tourism industry. For that, GCC nations need to promote their tourist sites in the international arena and through social media outlets. Their embassy needs to be lenient while issuing visas to the tourists. Arab leaders need to ~~have~~ built ultra-modern architecture and luxurious shopping centers. ~~As~~ They can learn from the Dubai, United Arab Emirates (UAE). ~~Here~~ They should analyse how Dubai became tourist first place to visit in a short span of time. Currently, Dubai's tourism contributes significantly to its economy. The direct contribution ^{projected} is of \$20.9 billion to the UAE's GDP in 2026. ~~Here~~ Dubai has created its name in the most favorable place of tourist. Hence, other Arab leaders need to invest in tourism industry by building ultra-modern infrastructure.

Thirdly, Arab leaders ^{should} need also invest in advanced and cutting-edge technology to ~~reduce~~ counter balance the phase-out of

Fossil-fuel. Almost all of countries of the world is shifted toward technology. And 21st century is all about advancement technology and currently Artificial Intelligence (AI) is ruling in the world. It is being used in almost every aspect of life. Bahrain, that once used to be oil and gas exporter, ~~can~~ is successfully shifted its resource to Finance Technology (Fintech) and now Bahrain is the technology hub and ecosystem builder in the Middle East and rest of the world. Other Arab countries, such as Oman, needs to diversify its exports revenue generation. Through fintech, Oman can also earn million of dollars that would reduce reliance on hydrocarbon. Therefore, GCC members need to invest in the technology sector, to reduce dependence on ~~any~~ fossil fuel.

Fourthly, Arab region can counter-balance their phase-out of fossil fuel by increasing their investment in education sector ~~by~~ ^{and} affiliating with foreign universities. When foreign universities would open up in the Arab lands, countless students would register ~~to~~ ^{themselves} in the universities campus located in the Arab countries. It is because of ~~because~~ Arabs' luxurious life-style attract youth and also young person wants to enjoy ~~that~~ the ^{luxury} ~~luxury~~ in their life.

Dubai, UAE has done this educational formation perfectly by affiliating and integrating its domestic universities with international or university institutions like University of Birmingham, Dubai campus by this way Arab leaders would have alternative source of earnings that it would definitely ~~compensate~~ balance the phase-out of fossil fuel. Therefore, ~~Arab~~ all members need to pay attention towards education sector by affiliating with foreign university.

lastly, Owing to phase-out of petroleum liquids, in Arab regions, Arab leaders need to ^{redefine} ~~redefine~~ ^{their} alliance with the rest of the world so that all members can counter balance the strategic power after depletion of hydrocarbons. It is need of time for Gulf states to establish good relations with emerging powers like China. Saudi Arabia has good association with United States of America (USA) but KSA does not need to rely on USA. ~~as~~ It is because this 21st century is all about multipolarity and global order is still ~~being~~ in the process of transformation. KSA had signed multiple memorandum of association with China especially in energy-technology sector. KSA's Vision 2030 project is wholly ~~supported~~ assisted by the Chinese ~~as~~ engineers - likewise, other

Gulf nations should have diversified the relations with other countries as well. Henceforth, GCC representatives need to redefine their strategic alliance to balance their fossil fuel dominance.

In her book *Finding Fossil Fuels: Why Net Zero Is Not Enough*, Holly Jean Buck explains that just aiming for net-zero emissions is not enough for oil-rich Arab countries. Their economies depend heavily on oil and gas for income, jobs and development. If fossil fuels are phased out too quickly, it could cause unemployment, lower national income and economic instability. Buck emphasises the need for a planned and fair transition to clean energy, where Arab states diversify their economies and protect people's livelihoods while moving away from oil dependency.

To cap it all, phase out of hydrocarbons have ~~made~~ led Arab economies at the critical junction of life. As, their economies are heavily dependent on the fossil fuel, the Middle East's hegemony is rapidly shrinking. Moreover, introduction of green energy has forced the world to transit from the traditional energy sources. That has decreased the demand of residual petroleum liquids. Depletion of fossil fuel has not only

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threaten the strategic power and hegemony of the Arab leaders but it has also ~~also~~ risked the increase the risk of unemployment, and rising pressure on countries' budget. ~~Further~~ ^{Arab influence} ~~Furthermore~~, In order to maintain ^{balance} and contribution in the world geopolitics, GCC members ~~to~~ need to take pragmatic approaches and explore new opportunities. Investing in renewable energy, tourism industry, technology, ^{and} education. ~~and~~ Gulf states need to redefine their strategic partners ~~to~~ so that their economies can sustain in this highly competitive world. There is still ~~the~~ time for Arab leaders to maintain their name in the global arena. If actions are taken timely.