The Middle East accounts for nearly half of the world’s proven oil reserves and over 40% of proven gas reserves (bp 2022) and oil and gas still account for over 55% of the global primary energy consumption. The importance of the region has become even more evident as the conflict in Ukraine has brought to fore the very real prospect of Russian oil and gas supplies being disrupted either through extended sanctions or the potential of physical disruptions. Nevertheless, the region faces an uncertain future. In its latest World Energy Outlook (WEO 2021), the International Energy Agency forecasts a decline in global oil consumption after 2040 in its reference case, and even earlier in its climate constrained scenarios. BP Energy Outlook 2022 suggests that the oil demand will decline beyond 2025 in all of its scenarios (bp 2022a). Others such as the Organization of the Petroleum Exporting Countries (OPEC 2021) and the Institute of Energy Economics (IEEJ 2022) forecast a continued increase in oil consumption in their base cases, with demand rising by 0.6-0.7% p.a. until 2045/2050. This wide variation increases the uncertainty facing the region, and thus risks to the policy and commercial choices governments make in preparing for the next decades. These dynamics of the energy sector are playing out in parallel to the region’s biggest demographic transition. UNICEF forecasts a 50% increase in population in the region between 2020-50, with the proportion of working age people to working age at its highest in history (UNICEF 2019).

This paper aims to analyze the role of the middle east in the global energy transition strategies, especially in the context of current global geopolitical events. It addresses a handful of major events among which are the shale oil revolution, COVID-19 disruption and the war in Ukraine. The key research questions that the paper addresses are the following:

1. What will be the role of the middle east in meeting global energy needs in the next decade and over the longer term in a net zero scenario?
2. How would the region adapt to the rebalancing of the global oil and gas markets?
3. What domestic transformations are necessary for countries in the middle east to adapt to a climate conscious and multi-polar world?

Methods

The paper provides analyses and arguments established on the grounds of the historical, current and foreseen facts that drive the geopolitics of energy in the region. The natural resources and the geographical location that the Middle East is endowed with represent a key element of the analysis in the paper. The geological constraints of the energy production and the logistical limitations of its transport will be deliberated in terms of their implication on the sector dynamics. Besides these un-moving variables, the paper will reflect on the economic conditions in the region, which is a critical factor to be examined in light of the ongoing economic restructuring effort in the leading countries in the Middle East.

At the forefront of the economic reform agenda in the region is the energy transition by which the countries pursue reducing the reliance on fossil fuel and move to cleaner sources of energy. Such reforms are expected to redefine the education, employment and social demands in the regions. In that light, the paper will also read through and analyze the energy transition agenda in an effort to rationalize and assess their impact on the global energy sector.

Results

Oil and gas demand is continuing to rise rapidly as the world recovers from the COVID pandemic, especially in developing countries in Asia. On the other hand, investments in oil and gas in other regions have slowed down with increasing ESG pressure. Even growth in the supposedly supply elastic shale players has been tepid as price cycles have become more volatile. In addition, while investments in non-fossil fuels have grown considerably, they are not enough to meet the incremental energy demand nor technically viable to meet the baseload demand. In this context, the two of the largest oil producers in the region have already committed to increasing their production capacity over the next decade. Saudi Arabia has planned to increase its maximum sustained production capacity to 13.4 mb/d
(million barrels a day) by 2027, while the UAE is targeting a capacity of 5 mb/d by 2030. In the case of natural gas, Qatar is expanding its LNG production capacity to 126 million tonnes per annum by 2025, and likely to reclaim its position as the world’s largest LNG exporter then. Thus, the share of the region in meeting global oil and gas demand is likely to rise in every scenario until 2050.

Second, the current global crunch caused by the sanctions on Russian oil and gas is expected to lead to long-term cooperation between the major oil and gas exporters in the Middle East and the oil and gas importing countries, especially the European countries. In the medium to long term, North American and European buyers could permanently pare back purchases of Russian supply to insulate against the weaponization of Russian energy exports. In the medium term, this leaves the Middle East to play a key role in filling the remainder of the hole from lost Russian supply. Some of the largest suppliers of crude to the EU before the Russian war in Ukraine included Iraq, Saudi Arabia and Qatar. Other countries such as the UAE and Kuwait will also have an opportunity to sell meaningfully greater volumes to Europe. However, this would require a redirection of volumes currently exported elsewhere, including perhaps growth markets in Asia such as China and India. The issue of shifting market share could become important over the long term. Oil demand in Europe has declined by 17 percent between 2010 and 2020, and has likely already peaked. On the other hand, growth in developing countries in Asia, and particularly in China and India, continues to be robust. In the International Energy Agency World Energy Outlook 2021, growth in oil and gas consumption in this region far exceeds everywhere else, both today and in all scenarios (IEA 2021). In the BP Energy Outlook 2022 as well, oil demand in the emerging economies is expected to rise to be almost 80% of the global oil demand by 2050 (bp 2022a). Thus, over time the large Middle Eastern countries would want to maintain their market share in Asia, also because these producers have historically been able to charge a higher price in the Asian market compared to elsewhere.

In recognition of the two challenges, namely potential pressure on energy sector revenue, and a growing and young population, nearly all the countries in the Middle East have announced strategies for some form of economic restructuring and reform with a focus on economic diversification and a shift away from hydrocarbon dependence. Net zero commitments by the UAE and Saudi Arabia are the latest in a series of energy policy announcements in the region, following on from Vision 2030, Abu Dhabi Economic Vision, New Kuwait 2035 among many others that aim to reform the energy sector, diversify away from hydrocarbon, and increase employment opportunities including in new energies. The region is uniquely positioned to finance the development towards decarbonized economies with large sovereign wealth funds and major national companies. However, with demand for hydrocarbons slowing down and potentially peaking in the next decade, leading states in the region, including Saudi Arabia and the UAE, have decided to accelerate their transitions toward lower carbon intensive production, economic diversification, and a leadership position globally in carbon capture and sequestration as well as creating legal global roles in the production and distribution of hydrogen. At the same time, intensified efforts to ensure sustainability of hydrocarbon demand by creating consumption channels where hydrocarbon is economically and environmentally competitive remain central to national strategies. There could also be a role for private and international capital in financing this transition. Ensuring that strategies for economic diversification away from fossil fuel exports, and within the energy sector towards non-fossil fuels, is central to maintaining political and economic stability in the region. In particular, this would require a significant ramp up in educational and employment opportunities, to ensure that this trend manifests itself as a demographic dividend and not a demographic burden.

Conclusion
The Middle East will continue to be a key supplier of the global energy demand. This is driven by the production capacity expansion efforts in the leading producing countries in the Middle East, as opposed to reduced investment in hydrocarbon production in other regions owing to the ESG pressure. Also, there is likely to be a rebalancing of regional oil and gas markets as the world adapts to the crisis in Europe. In case the Russian oil stops flowing to the EU, there is a possibility for Middle Eastern producers to shift their oil export from developing economies in Asia to Europe, which has a long-term effect that needs to be considered.

Moreover, the success of a managed energy transition in the middle east would not just be necessary for the continued stability of the region, but also its ability to meet global energy demand. The leading Middle Eastern oil producing countries are committed and well positioned to offer low carbon energy to the world. This is envisioned to be achieved by accelerating the carbon capture and sequestration technologies and the production and distribution of hydrogen. The competitive advantage of the Middle East in terms of achieving these goals is manifested in the financing capabilities through sovereign wealth funds that rank among the largest worldwide, beside the low carbon intensity on the oil production process.
References


