

Conflicts in the Middle East and the Roadmap for Transitioning Away from Fossil Fuels

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The escalation of geopolitical tensions in the Middle East, involving the United States, Israel, and Iran, highlights the structural fragility of a global economy anchored in fossil fuels, with Brent crude oil surpassing the US\$ 100 per barrel mark and threatening to reach US\$ 150. This supply shock revives fears of stagflation similar to that of the 1970s, characterized by high inflation, low growth, and rising interest rates.

Dependence on oil, gas, and coal – responsible for 70% to 75% of global greenhouse gas (GHG) emissions – has become not only the central climate challenge, but also the main driver of contemporary macroeconomic instability.

In 2023, at the 28th Conference of the Parties of the United Nations Framework Convention on Climate Change (UNFCCC) – COP28, the Global Stocktake decision established a multilateral commitment to triple renewable energy capacity by 2030 and transition away from fossil fuels.

At COP30, the attempt to adopt a roadmap aimed at gradually reducing dependence on and phasing out fossil fuels was not achieved. Nevertheless, more than 80 countries committed to progressing toward this goal, and the COP30 Presidency proposed developing a roadmap to be presented at COP31, aiming to build minimum consensus at the multilateral level.

The conflicts in the Middle East strongly underscore the risks of oil dependence and, at first glance, overshadow the goal of a roadmap to move away from fossil fuels. Paradoxically, they reinforce the importance of further developing pathways that not only reduce GHG emissions but also foster an economy based on diverse renewable energy sources that benefit all countries.

In his book “Geography: First and Foremost, a Tool for Waging War”, Yves Lacoste argues that the geographical space is fundamentally relevant on the geopolitical chessboard, particularly in the exercise of power and the pursuit of political-military interests. The choking off of oil routes in a region that accounts for nearly 30% of global production poses a threat to the global economy.

This suggests that countries heavily dependent on oil and gas production and exports – accounting for between 30% and 55% of GDP, as it is the case for most Middle Eastern nations – hold significant geopolitical assets, especially when they control international trade routes.

Oil transportation depends on geographic chokepoints, such as the Strait of Hormuz, which accounts for approximately 20% of global oil trade (around 20 to 21 million barrels per day). Current tensions have significant repercussions not only for the oil market but are also already affecting natural gas and fertilizers. These conflicts increase the

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logistical vulnerability of industrial and consumer goods, especially on routes between Asia and Europa. The Bab el-Mandeb Strait, which connects to the Suez Canal, is also under threat and could severely impact Saudi Arabia's oil exports.

This underscores that integrating oil-producing countries into the energy transition is a necessary condition for moving forward with any strategy of energy diversification.

This is a substantial barrier to the success of any roadmap on transitioning away from fossil fuels. Naturally, countries with large oil reserves will not abandon their assets. And this is not limited to the Middle East. Along with the United Arab Emirates, Saudi Arabia, Kuwait, Iraq, and Iran, which hold the region's largest reserves, countries such as Libya, Nigeria, Kazakhstan, Azerbaijan, Norway, the United States, Brazil, and Venezuela hold some of the largest oil reserves in the world.

It is essential to stimulate the production, use, and commercialization of renewable energy sources in every corner of the world; to this end, it is crucial that these energy sources generate sufficient economic returns to make them more attractive than oil.

It is important to emphasize that the energy transition is already underway. The International Energy Agency (IEA) released a report at the end of 2025 indicating that "global renewable energy capacity is expected to double between now and 2030, increasing by 4,600 gigawatts (GW). This is roughly equivalent to adding the combined power generation capacity of China, the European Union, and Japan to the global energy mix. Solar photovoltaic energy accounts for nearly 80% of this global increase, followed by wind, hydropower, bioenergy, and geothermal energy. In more than 80% of countries worldwide, renewable energy capacity is expected to grow faster between 2025 and 2030 than in the previous five-year period".

Expanding funding sources and fostering access to innovative tools that drive innovation and energy diversification is the focus of the climate agenda. The IEA estimates that investment in renewable energy must reach at least US\$ 4.8 trillion per year by 2030, rising to more than US\$ 5 trillion per year by 2030.

The Baku-Belém Roadmap for the US\$ 1.3 trillion goal, which serves as a reference for exploring ways to mobilize resources and facilitate access, highlights that high financing costs are an obstacle that must be overcome. In developing countries, interest payments account for more than 50% of electricity costs, compared to less than 30% in Europe. It is estimated that a reduction of just 1% in financing rates would save US\$ 140 billion annually, making capital-intensive projects viable.

Closely linked to this is the substantial barrier posed by public subsidies for the production and/or consumption of fossil fuels, which provide competitive advantages for certain countries and sectors while undermining the potential of alternative sources. In 2022, subsidies for fossil fuel consumption exceeded US\$ 1 trillion. International Monetary Fund projections estimate that implicit fossil fuel subsidies, considering the underpricing of environmental externalities, amounted to US\$ 6.7 trillion in 2024.

Regulations (including subsidies) play a crucial role in catalyzing renewable energy projects. Without public policies to guide and provide security for investments, it becomes difficult to overcome bottlenecks in grid infrastructure, intermittency and storage, the creation of charging stations, system integration, the extraction of critical minerals, Bioenergy, Carbon Capture and Storage (BECCS), and Carbon Capture and Storage (CCS) projects, green hydrogen, small nuclear power plants, and other sources.

In the regulatory sphere, it is worth mentioning, for example, biofuel blending mandates for gasoline and biodiesel. More than 70 countries have adopted such mandates, which integrate renewables into the transportation sector and reduce the use of fossil fuels.

Alongside financing, carbon markets can play a central role in the roadmap, as carbon projects can act as a catalyst to enable certain type of renewable energy projects. The challenge lies in finding ways to price emissions in the sectors most dependent on fossil fuels, thereby generating demand for carbon credits from renewable projects.

Overcoming the challenge of making fossil fuel investments less attractive requires a combination of economic incentives, assertive public policies, a reduction in fossil fuel subsidies, and increased financing for clean energy. This appears to be the biggest challenge for the roadmap.

Renewable energy is becoming increasingly competitive. According to the International Renewable Energy Agency (IRENA), the cost of solar photovoltaic modules fell by 93% between December 2009 and December 2023, and the average cost on onshore wind energy projects decreased by 70% between 2010 and 2023.

The roadmap for transitioning away from fossil fuels must include oil-producing countries representing all producing regions, with the aim of discussing investment opportunities and actions that will enable the diversification of the energy mix in those countries.

Furthermore, it is necessary to consider regional oil demand and develop solutions to diversify renewable energy sources tailored to different countries and regions. Canada, Chile, Mexico, and the United States together consume 24.9 million barrels of oil per day. Belgium, France, Germany, Italy, the Netherlands, Poland, Spain, Turkey, the United Kingdom, and other European countries total 13.5 million barrels per day. Other countries, such as Australia, Japan, New Zealand, South Korea, and related regions, account for 7.2 million barrels per day. China stands out with the consumption of 16.6 million barrels per day, while India consumes 5.5 million and Latin America 6.7 million barrels per day.

There is no single solution capable of enabling all these countries to reduce their fossil fuel consumption in a uniform manner. Each context requires specific strategies aligned with regional energy profiles and socioeconomic needs.

Following the logic of “two-speed multilateralism”, as suggested by Ambassador André Aranha Corrêa do Lago, the roadmap could propose regional groups of countries to foster cooperation, technology transfer, financing, trade, and the promotion of renewable energy sources. This approach could be particularly useful in unlocking financial challenges associated with projects, including the role of Multilateral Development Banks, the financial market, and public financing policies.

The war sharply exacerbates a structural crisis linked to fossil fuels, at a time when there is a race toward energy-intensive artificial intelligence. Paradoxically, the roadmap could lay the groundwork for a new political economy in which renewable sources will be prioritized, not because they reduce GHG emissions, but because they generate significant returns for investors, in addition to socioeconomic benefits.

It is hoped that rumors of a surge in oil prices will not materialize and that multilateralism will advance, promoting effective actions to rebalance the geopolitical landscape. In this process, renewable energy sources should play a prominent role, contributing to a fairer and more sustainable energy transition.