



August 2022

Greetings from Washington,

The Middle East and North Africa (MENA) region is home to the largest hydrocarbon reserves in the world, with the Organization of the Petroleum Exporting Countries (OPEC) member countries possessing almost [60 percent](#) of global crude oil reserves, and [43 percent](#) of global gas reserves. This places the region as a key global player for oil and gas for the foreseeable future.

But did you also know that the MENA region has the potential to become a global player in renewable energy? In fact, MENA countries have more potential for green energy than hydrocarbons, since the region captures [22–26 percent](#) of all solar energy globally. Per year, this translates to the equivalent of [1.2 million barrels](#) of oil per square kilometer (and MENA has a lot of square kilometers of available land). Based on World Bank estimates, MENA's solar potential would be sufficient to meet the entire global demand for electricity. The MENA region is also blessed with very significant wind energy potential, with three MENA countries (Egypt, Morocco, and Tunisia) having some of the [highest average wind speeds](#) in the world.

Over the past five years, MENA governments have demonstrated a strong commitment to invest in, and promote, the green energy sector. Planned renewable projects are worth [\\$104 billion](#), with [\\$21.5 billion](#) at the tendering stage.

However, MENA countries are leading the transition to clean energy at varying speeds, as some countries seem to be progressing faster than others. For example, Saudi Arabia's planned smart city (Neom) has announced the launch of its first green hydrogen plant that will become operational by [2026](#). The plant will produce and export hydrogen (in the form of liquid ammonia) to the global market, to be used as biofuel, feeding transportation systems.

The UAE has also invested very extensively in renewable energy projects. The country has increased its renewable energy capacity by almost [20,000 percent](#) over the last decade, from only [13 MW](#) in 2011 to [2,540 MW](#) in 2020, registering the fastest growth rate over the decade in renewable energy capacity in the world. At present, the UAE has three of the largest single-site solar plants worldwide. Based on the UAE's Net Zero 2050 Strategic Initiatives, about [\\$163 billion](#) will be invested in the clean and renewable energy sector over the coming three decades.

Egypt is another potentially significant MENA player in renewable energy, as it possesses an abundance of land, sunny climate, and high wind speeds. The government's Integrated Sustainable Energy Strategy (ISES 2035) set a target for renewable energy to make up close to half of the country's electricity mix by [2035](#). Analysts believe that Egypt can significantly exceed this goal, meeting more than half of its electricity needs by 2030 with the correct mix of policies.

Finally, Morocco set an ambitious green energy plan in 2009. From 2009 to 2020, Morocco was able to expand its solar energy capacity by [16-fold](#), and wind energy capacity by 6-fold. Morocco also built the [Noor-Ouarzazate Solar Complex](#), the world's largest concentrated solar power plant, offering [580 MW](#) of energy capacity, as one of five solar plants with a combined capacity of [2 GW](#) that have been initiated under the auspices of the Moroccan Solar Energy Program (NOOR).

It is worth noting that transitioning to renewable energy in MENA countries can have other significant benefits, beyond limiting CO2 emissions, expanding investments, and boosting energy capacity. For instance, moving away from hydrocarbons can help alleviate public spending since hydrocarbon energy is one of the most heavily subsidized sectors in the region. Based on IMF estimates (2019), the total cost of energy subsidies amounts to an extremely high [13 percent](#) of the region's total GDP. Indeed, Chatham House's calculations show that energy subsidies in the MENA region account for [nearly half](#) of total global energy consumption subsidies! By investing in [cost-efficient](#) renewable energy, MENA countries can significantly reduce their extremely expensive energy subsidies, freeing funds for use in education and social welfare for the advancement of their populations.

Sincerely,

Racha Helwa
Director, empowerME
Rafik Hariri Center for the Middle East
Atlantic Council

Upcoming Event

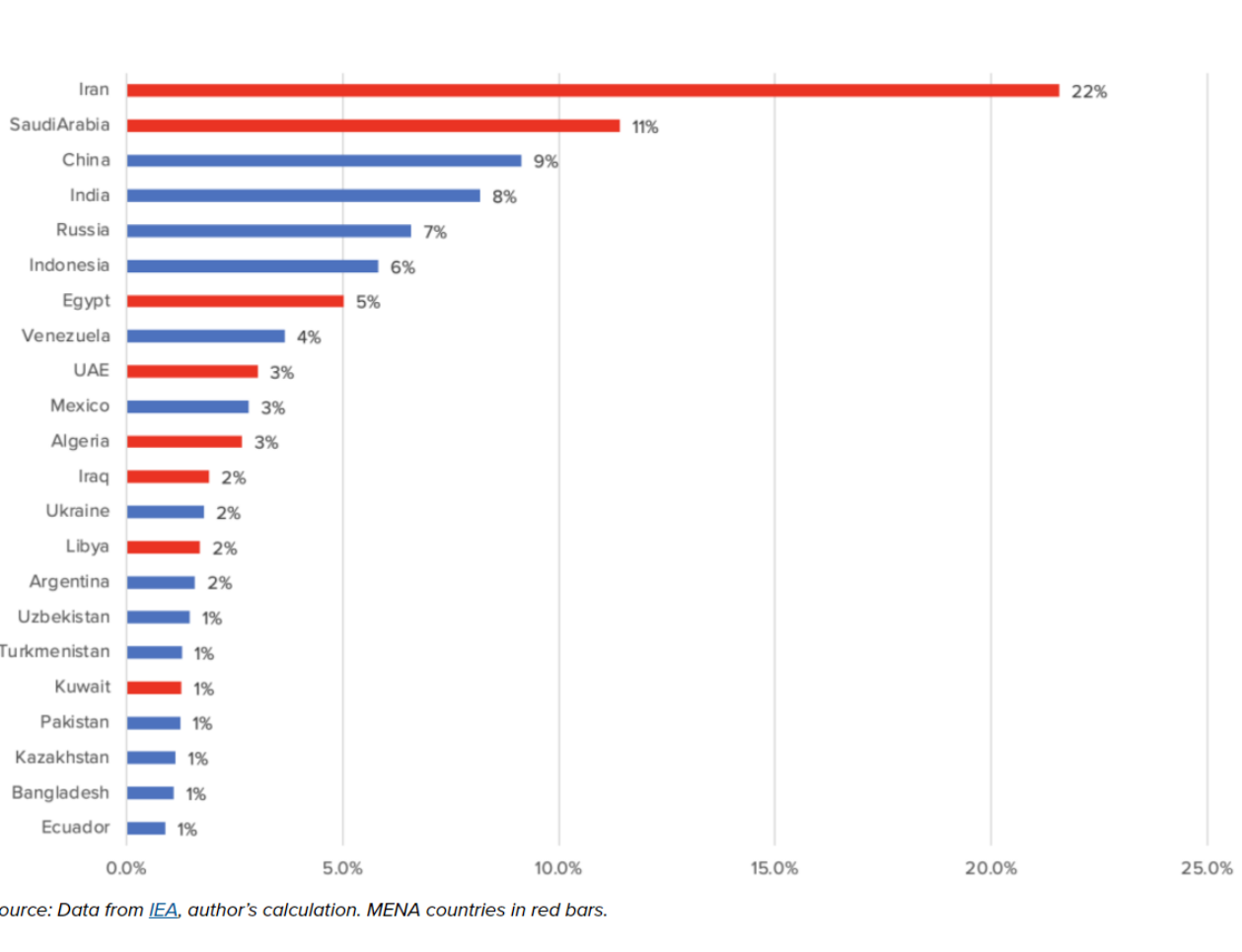


On **Wednesday, September 7th at 11:00 am ET / 5 pm Cairo / 6 pm Amman & Baghdad**, the Atlantic Council's empowerME Initiative and [Iraq Initiative](#) will host a virtual event to release a report on the Amman-Baghdad-Cairo (ABC) Agreement, which assesses the outcomes of recent summits between Egypt, Iraq, and Jordan focusing on trilateral agreements aimed at deepening economic integration. The report presents possible pitfalls and potential benefits of strengthening economic ties between the three nations, with each country's perspective represented.

[Register](#)

Big Data

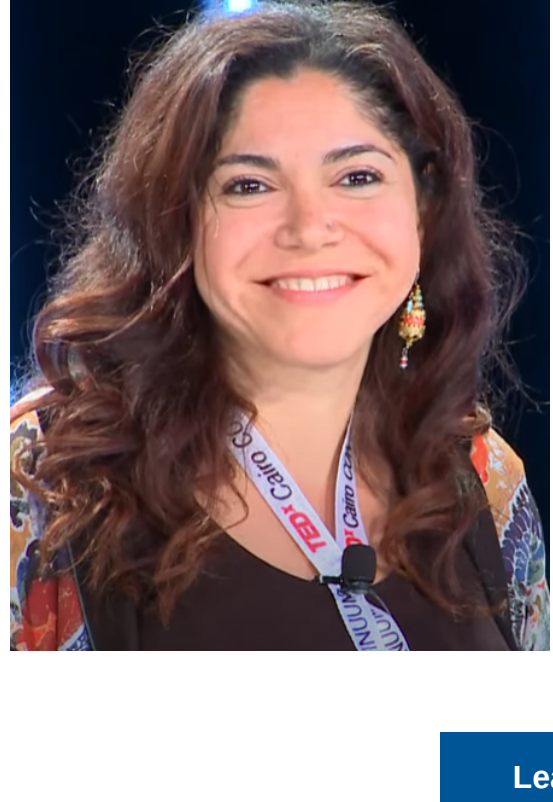
Figure 1. Share in total global explicit fossil fuel subsidies between 2010 and 2020 (Percentage)



Source: Data from IEA, author's calculation. MENA countries in red bars.

Graph: [Atlantic Council](#)
Data from: [International Energy Agency](#)

Meet our new Non-Resident Fellow: Lama El Hatow



Lama El Hatow is a nonresident fellow with the empowerME Initiative at the Atlantic Council's Rafik Hariri Center for the Middle East and has thirteen years of work experience in the environmental field, nine of which as an environmental and social specialist at the International Finance Corporation (part of the World Bank Group) working on projects in sectors including manufacturing, infrastructure, services and financial markets. She has worked on a wide range of projects across the Middle East and North Africa as well as a few projects in Sub-Saharan Africa including Mozambique and Nigeria.

[Learn more](#)

Entrepreneurs of the Month: Esam Alnahdi and Maher Loubieh HALA - Saudi Arabia

Esam Alnahdi and Maher Loubieh are transforming banking for SMEs through their Saudi-based fintech HALA! Watch our short video to learn more.

[EFN 9775333372111.jif](#)

[Watch short video](#)

In case you missed it...



Brown-to-green subsidy swaps in MENA are long overdue. Here's why.

By [Amin Mohseni-Cheraghlou](#)

[Read more](#)

Big Question

Can the MENA region become a key global producer and exporter of green energy?



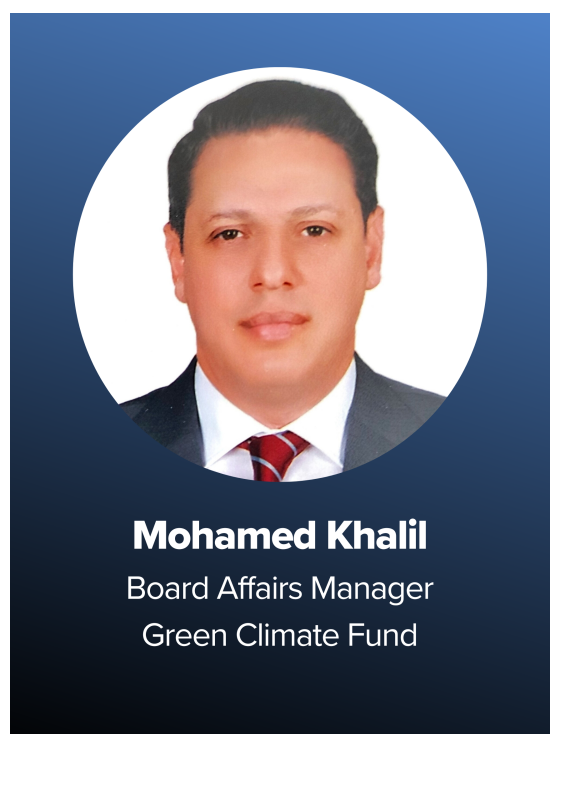
Fatih Birol
Executive Director
International Energy Agency

"The Middle East has played a crucial role in global energy markets for decades. In that time, countries in the region have developed industries, skillsets, and supply chains that we believe can also put them at the forefront of the low-carbon energy sector of the future. The IEA is working actively with countries on exactly this issue – seeking to find ways to ensure that the energy transition go hand in hand with economic diversification and development goals."

"North Africa and the Middle East (MENA) are regular and global suppliers of energy, both oil and natural gas. In addition, they have natural conditions to generate renewable energy and, probably, hydrogen in the near future. In this context of geopolitical conflict after the invasion of Ukraine, this region can play a key role in guaranteeing the supply of new energy sources, mainly to Europe, to reduce our Russian dependence. For achieving this goal, Europe and the MENA region must increase common collaboration and involvement to find the way to reach our common objectives."



Josu Jon Imaz
Chief Executive Officer
Repsol



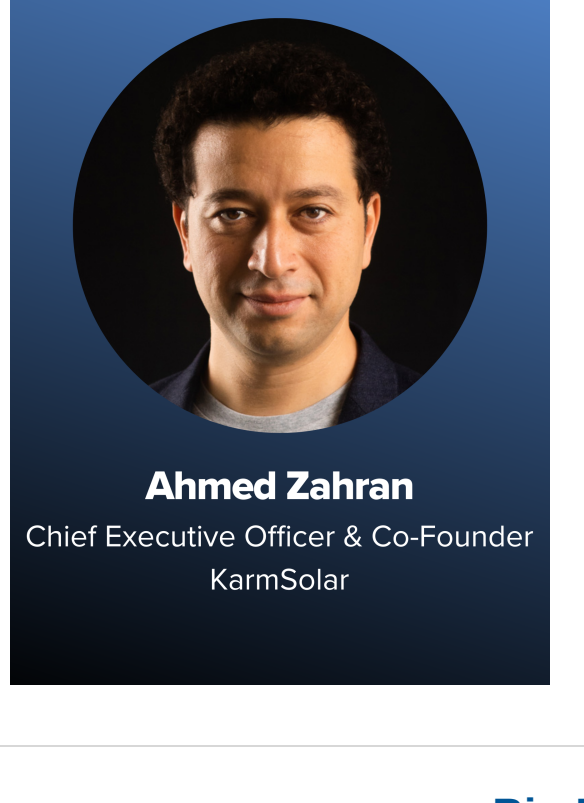
Mohamed Khalil
Board Affairs Manager
Green Climate Fund

"With appropriate policies, the MENA region can achieve long-term economic and geopolitical success as a decarbonized energy supplier to the heavily industrialized but energy resources-poor economies of Europe and Asia. To achieve this potential, cooperation among stakeholders in the government and private sectors would be necessary, to cultivate the low-carbon hydrogen production ecosystem and develop the required green energy/renewable energy infrastructure. Policy and market signals from Europe and other regions will need to be clear and coordinated to help jumpstart the MENA market."

"While facing some of the most consequential impacts of climate change (including one of the hottest recorded temperatures ever) and being home to several energy-poor countries, the MENA region has significant opportunities to generate and export green energy. In most places, there is ample sun and wind, as well as affordable technologies. The challenges to greening the region are economic, regulatory, commercial, and political - so the region will only see progress if its leaders step up. Some have already made bold commitments and capital-intensive investments. While hard work remains, so does opportunity for MENA countries to accelerate clean energy transitions in their region and beyond."



Eric Pelofsky
Deputy Chief of Staff & Vice President
The Rockefeller Foundation

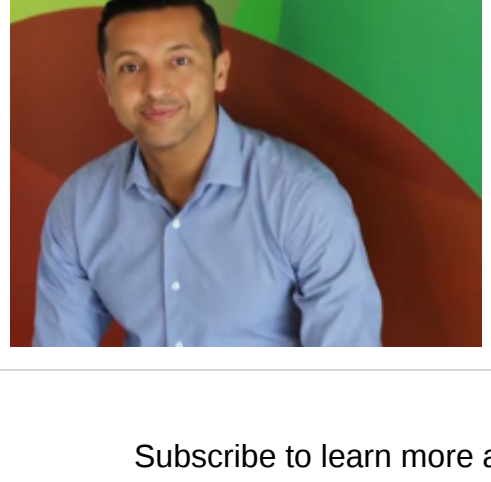


Ahmed Zahran
Chief Executive Officer & Co-Founder
KarmSolar

"The opportunity is not in becoming a key producer and exporter. We have seen how key producers and exporters of oil failed to put in a place decent and sustainable infrastructure that allows them to move beyond oil. The real opportunity for the countries of the region today is an accumulation of knowledge that would allow those countries to change the business model and the technical design of our energy infrastructure to make renewable energy the main stream. THIS is the real deal – and this is what we will be exporting: the business model."

Big Reads

- [Breaking the glass ceiling in the Middle East](#) (Financial Times)
- [The Cloud Wars: Mideast Rivalries Rise Along a New Front](#) (The New York Times)
- [The big call for investors is energy](#) (Financial Times)
- [Arab central banks are tagging along with America's rate rises](#) (The Economist)



[Learn about empowerME](#)

empowerME is changing the conversation about the Middle East by focusing on economic prosperity. Watch this video to learn more about empowerME and its unique chairman, regional venture capital pioneer Amjad Ahmad.

[WATCH VIDEO](#)

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empowerME shapes solutions to empower entrepreneurs, women, and the private sector and builds influential coalitions to drive regional economic integration, prosperity, and job creation.

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