Atlantic Council
RAFIK HARIRI CENTER FOR THE MIDDLE EAST

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MONTHLY NEWSLETTER

Empowering
Entrepreneurs
Women
Private Sector

July 2024

Greetings from Washington,

While some continue to debate the reality of climate change, the world has been grappling with extreme temperatures this summer, hitting their highest levels in over eighty years. According to the Copernicus Climate Change Service (C3S) data, July 22nd marked the warmest day in recent history. On this date, the daily global average temperature reached a new record high of 17.16°C in the ERA5 dataset, which starts from 1940. The following day, July 23rd, saw a similar temperature of 17.15°C.

The rise in temperatures has been particularly pronounced in Northern Africa, the Mediterranean, and the Middle East, where an unprecedented heatwave began in early June. During this period, over 290 million people experienced extreme heat, a phenomenon made at least five times more likely due to human-induced climate change. Average temperature anomalies ranged from 2°C to 8°C above normal across much of the region, with maximum temperatures reaching or exceeding 40°C.

For example, peak temperatures soared to unprecedented levels in July 2024, exceeding 48°C in Saudi Arabia, 47°C in Qatar and 44°C in the UAE. Similarly, Egypt also recorded exceptional temperatures, exceeding 41°C. What implications does this have for the economies of these regions?

Firstly, the immediate health implications are concerning. Currently, the annual heat-related mortality rate in MENA countries averages at 2 per 100,000 people. However, under a high emissions scenario, this rate is expected to surge to 123 heat-related deaths per 100,000 people annually by 2100. Even with lower emissions, the projected rate is still 20 heat-related deaths per 100,000 people per year. Thus, it is imperative to implement stronger climate change mitigation and adaptation policies to prevent these heat-related mortality impacts. Additionally, since much of the increase will be influenced by population dynamics, effective demographic policies and promoting healthy aging will be crucial for successful adaptation.

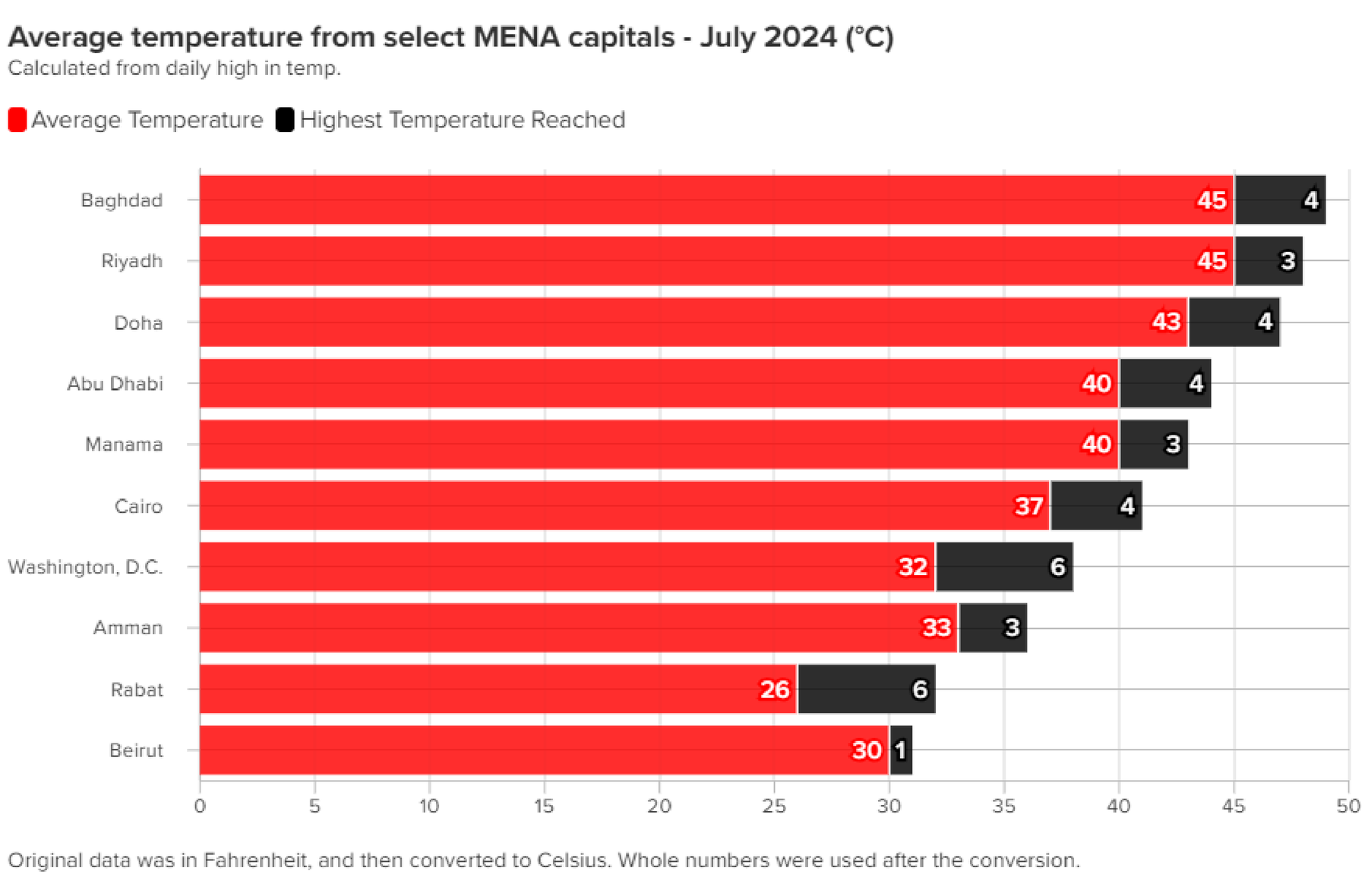
Secondly, rising temperatures have a profound impact on economic activities in the region. Research shows that industries with high climate exposure, such as agriculture, construction, and other outdoor sectors, face significant reductions in worker availability. Additionally, labor productivity declines in these climate-sensitive industries when temperatures exceed certain thresholds. This highlights a non-linear relationship between economic productivity and temperature.

These economic impacts necessitate a structural transformation in high-risk sectors like agriculture. Structural transformation involves shifting the economy from low-productivity, labor-intensive activities to higher productivity, skill-intensive operations. This strategy includes investing in research and development, promoting technological advancements, and increasing public investments to mitigate the effects of climate change and enhance productivity.

Furthermore, policy measures are essential to improve information on local weather conditions, adapt workwear and equipment, and enhance workplace technologies. These steps will help workers cope with higher temperatures and humidity, ensuring their safety and maintaining productivity at the desired levels.

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

Big Data



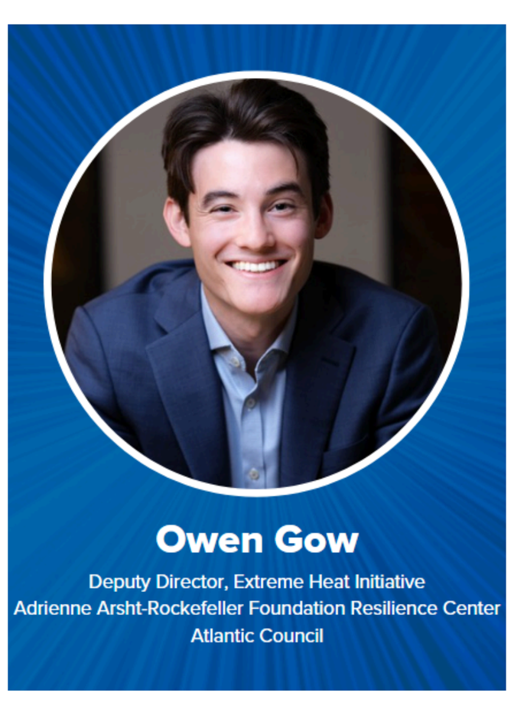
Data taken from Weather.Com
Graphic created by the Atlantic Council

Big Question

As temperatures rise in the MENA region and globally, what are your biggest concerns for the economic future? How might extreme heatwaves disrupt economic activity, especially in agriculture, construction, and other vital sectors?

"Extreme heatwaves mean reduced agricultural productivity, a decrease in water sources in regions already facing water scarcity, and an increase in diseases that could affect the health of our citizens, especially newborns and the elderly. To adapt to these changes, people need to adopt a new lifestyle based on a holistic sustainability approach."

"Rising temperatures pose a grave threat to the MENA region, with some areas warming faster than any other on earth. This augurs the multiple order effects of climate change with the potential to further exacerbate existing challenges. Energy access and security will be building blocks for effective climate action and adaptation through innovation. At the same time, bolstered by its strong and diverse resource availability, the region is poised to make critical contributions in clean energy supply and manufacturing – enabling further emissions reductions globally."

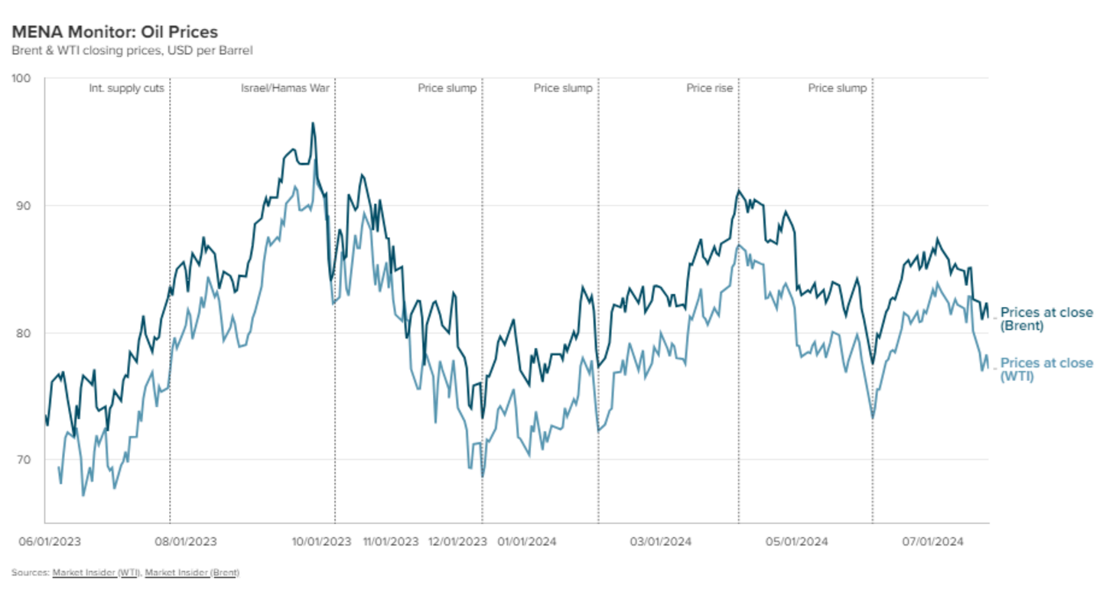


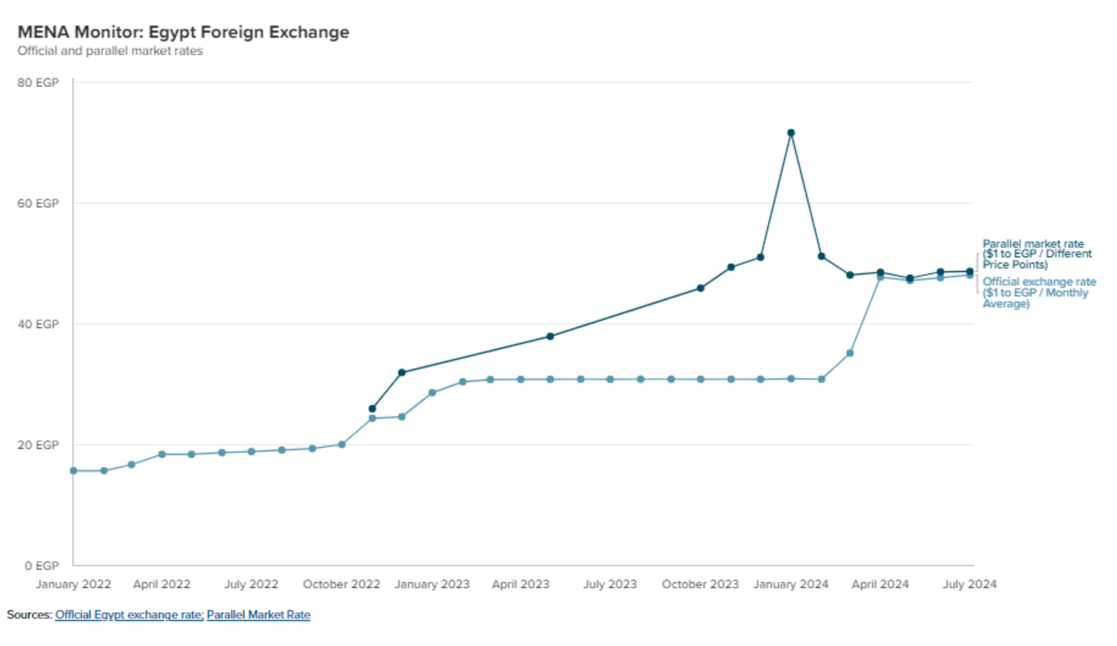
"Though the MENA region is associated with its hot summers, we know that temperature extremes will rise to new heights in coming years, threatening human health and depleting critical water sources. This will deepen existing socioeconomic and health gaps across the MENA region, with some industries largely unaffected due to their cooled, indoor workplaces, and low-income and migrant workers bearing the brunt of climate change in outdoor industries such as construction. Beyond medium- and long-term impacts on GDP, reduced incomes and health costs for workers will result in cascading effects to their families. Though some MENA countries are beginning to test policies and technologies that reduce occupational heat exposure, accelerated innovation and investment are urgently needed."

"As temperatures rise in the MENA region and globally, key economic concerns include reduced agricultural yields, increased energy consumption, and severe health risks for outdoor workers. Extreme heatwaves can devastate economic activity by causing crop failures, stalling construction projects, and increasing healthcare costs due to heat-related illnesses. These impacts result in higher operational costs, decreased workforce productivity due to more frequent heat-related work stoppages, and potential instability in crucial sectors like agriculture, construction, and energy."

MENA Monitors: Oil & Foreign Exchange

Check out our latest updates to the MENA Monitors, which tracks the fluctuations in the oil and foreign exchange markets in select MENA countries, considering the escalating geopolitical crisis in the region:





View Monitors

The MENA Economic Digest

- Egypt's Non-Oil Activity Reaches 3-Year High. Here's Why. (Business Monthly Egypt)
- New record daily global average temperature reached in July 2024 (Copernicus ECMWF)
- Middle East, Mediterranean, and North Africa experiencing climate-induced extreme heat (Climate Central)
- Policy Brief: Is It Getting Too Hot to Work in the MENA Region? (ERF)
- Middle East and African economies have most to gain if world goes green, study finds (The National News)
- The heat is on: We must rise to the challenge of rising temperatures, urges UN chief (The United Nations)

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