2020 Environmental Performance Index Finds
Decarbonization Propels Countries to Top Sustainability Rankings

Israel and the United Arab Emirates outperform neighbors;
Sudan struggles with unhealthy drinking water and low air quality

Online release event:

Results from the 2020 Environmental Performance Index will be released online and live from Yale and Columbia universities on Thursday, June 4 at 11:00 a.m. EDT. Panelists from the research team will be joined by ministers from the Danish government. View recording here.

NEW HAVEN, Conn. — Israel (1st in region, 29th globally) and the United Arab Emirates (2nd in region, 42nd globally) rank above their Middle Eastern & North African counterparts in the 2020 Environmental Performance Index (EPI), according to researchers at Yale and Columbia universities. Commenting on the global rankings, Yale professor Dan Esty, who directs the Yale Center for Environmental Law & Policy that co-produces the EPI, observed that “our analysis suggests countries with broad-based sustainability efforts and particular emphasis on decarbonizing their economies come out at the top of the pack.” This decarbonizing trend does not hold as strongly for top performers in the Middle East & North Africa. UAE receives a high EPI score relative to its neighbors but ranks below-average on climate change amongst nations in the Arab League.

Now in its 22nd year, the EPI report has become the premier metrics framework for global environmental policy analysis—a ranking 180 countries on 32 performance indicators across 11 issue categories covering environmental health and ecosystem vitality. The 2020 EPI features new metrics that gauge waste management, carbon dioxide emissions from land cover change, and emissions of fluorinated gases—all important drivers of climate change. Project director Zach Wendling noted that “the expanded issue coverage promises to deepen the global capacity for
data-driven environmental policymaking, clarifying sustainability leaders and laggards, and helping to identify best policy practices.”

Top regional rankings for Israel and UAE reflect strong environmental health and high scores on indicators like biodiversity & habitat and water resources. Other 2020 EPI leaders in the Middle East & North Africa include Kuwait, Jordan, and Bahrain. However, even leaders in the region have room to improve environmental governance. Israel places 12th in the Greater Middle East on ecosystem services performance and lags behind Bahrain, Jordan, and Tunisia on climate change. In addition to a below-average climate change score, UAE receives a score of 13.7 out of 100 for agriculture, the lowest in the region.

Beyond providing issue-by-issue and country-by-country results, the 2020 EPI offers new insights into the factors associated with success on environmental sustainability goals. As Alex de Sherbinin of Columbia’s Earth Institute, one of the lead authors of the report, explained, “good governance more than any other factor separates the nations that are moving toward a sustainable future from those which are not.” High-scoring countries generally exhibit long-standing commitments and carefully constructed programs to protect public health, conserve natural resources, and reduce greenhouse gas (GHG) emissions.

The lowest rankings in the Middle East & North Africa go to Oman (14th in region, 110th globally), Qatar (15th in region, 122nd globally), and Sudan (16th in region, 130th globally). Sudan lags most behind on air quality and sanitation & drinking water. Low EPI scores suggest a need for national sustainability efforts on a number of fronts, including air and water pollution, biodiversity protection, and the transition to a clean energy future. Low-scoring countries often also struggle with conflict or weak governance. As the 2020 EPI builds on data published in 2019 and collected earlier, the results do not capture impacts from very recent events, including deforestation of the Amazon, wildfires in Australia, and the COVID-19 pandemic.

2020 EPI Global Trends

The 2020 EPI reveals that global progress on climate change has been halting. The Index’s metrics on CO₂ emissions from land cover change and black carbon emission growth rates show
that critical aspects of the battle to address climate change are trending in the wrong direction. For instance, results show climate change scores for Iraq, Lebanon, and Algeria all declined over the last decade. Meeting the goals set out in the 2015 Paris Climate Change Agreement requires sustained cuts in emissions of all greenhouse gases, and the 2020 EPI finds that no country is decarbonizing quickly enough. Some countries in the region do excel on individual greenhouse gas reductions, notably Algeria on methane. To spread best practices around the world, policymakers must pay greater attention to how climate leaders achieve success.

Taking into account historic data on environmental performance, the 2020 Index recognizes countries that have made significant progress over the past decade. Many countries have improved health outcomes related to sanitation, drinking water, and indoor air pollution, demonstrating that investments in public health can translate into rapid advancements in human well-being. Environmental health gains can be traced to successful campaigns to reduce household use of solid fuels in a number of countries, particularly in the Middle East. Such efforts need to be expanded to all countries, especially as the world tackles persistent problems like poor air quality. The 2020 EPI makes it clear that hundreds of millions of people still suffer from dangerous levels of air pollution, most notably in Pakistan, India, and Nepal.

Performance on protecting and enhancing the vitality of ecosystems reveals both gains and stubborn challenges. Morocco, UAE, and Kuwait substantially improved their EPI scores in 2020 due to greater protection of biodiversity and habitat. On some issues, the world community is doing well, while a few countries are trending in the wrong direction. Tree cover loss in the Middle East & North Africa puts many arid nations at serious risk of desertification, from Lebanon to Morocco. Fisheries are also in global decline, with significant trouble in Qatar and Bahrain.

**Explaining EPI Results**

At every level of development, some countries achieve 2020 EPI scores that exceed peer nations with similar economic circumstances. Analysis of the factors underlying the 2020 EPI rankings reveals sustainable development requires not only wealth, but also careful management. Funds
are required to invest in public health and environmental infrastructures and good governance is necessary to mitigate pollution threats and conserve natural resources. Environmental performance is positively influenced by strong rule of law, vibrant public engagement, an independent media, and well-crafted regulations.

**EPI and Global Sustainability Data**

The EPI builds on the best available global data from international research entities, such as the Institute for Health Metrics and Evaluation, the World Resources Institute, the Potsdam Institute for Climate Impact Research, CSIRO, the Mullion Group, and the Sea Around Us Project at the University of British Columbia, as well as from international organizations like the World Bank and the UN Food and Agriculture Organization. Complete methods, data, and results are available online at [epi.yale.edu](http://epi.yale.edu). The EPI team is dedicated to transparency and constant improvement and invites critique and commentary from the global community.

The push for better data analytics as a foundation for policy choices has gained momentum in recent years, particularly after the adoption of the UN Sustainable Development Goals (SDGs) in 2015. While more environmental data have become available, the EPI research team decries the lack of methodologically rigorous and globally comprehensive indicators on a number of fundamental issues including wetlands protection, toxic waste management, and groundwater quality and availability.

**About the Yale Center for Environmental Law & Policy**

The Yale Center for Environmental Law & Policy advances fresh thinking and analytically rigorous approaches to environmental decision-making across disciplines, sectors, and boundaries. In addition to its research activities, the Center aims to serve as a locus for connection and collaboration for all members of the Yale University community who are interested in environmental law and policy issues. The Center supports a wide-ranging program of teaching, research, and outreach on local, regional, national, and global pollution control and natural resource management issues. These efforts involve faculty, staff, and student
collaboration and are aimed at shaping academic thinking and policymaking in the public, private, and NGO sectors.

**About the Columbia Center for International Earth Science Information Network**

The Center for International Earth Science Information Network (CIESIN) is part of the Earth Institute at Columbia University. CIESIN works at the intersection of the social, natural, and information sciences, and specializes in online data and information management, spatial data integration and training, and interdisciplinary research related to human interactions in the environment. Since 1989, scientists, decision-makers, and the public have relied on the information resources at CIESIN to better understand the changing relationship between human beings and the environment. From its offices at Columbia’s Lamont-Doherty Earth Observatory campus in Palisades, New York, CIESIN continues to focus on applying state-of-the-art information technology to pressing interdisciplinary data, information, and research problems related to human interactions in the environment.

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