



Contact: Martin Wolf, EPI Principal Investigator, +1 (203) 436-9566 or epi@yale.edu

Embargoed For Release: 1 June 2022, 11:00 a.m. EDT (UTC 4)

2022 ENVIRONMENTAL PERFORMANCE INDEX FINDS WORLD NOT ON TRACK TO MEET CLIMATE COMMITMENTS

*Denmark earns #1 ranking; India falls to bottom of the scorecard;
United States ranks low among wealthy democracies*

Online release event:

Results from the 2022 Environmental Performance Index (EPI) will be released online and live from Yale and Columbia Universities on Wednesday, June 1 at 11:00 a.m. EDT. Danish Climate, Energy & Utilities Minister Dan Jørgensen will join the EPI research team to highlight key findings. Register for the online release event here: https://yale.zoom.us/webinar/register/WN_7oRbJmU7QumEWdgIm1zE2Q

NEW HAVEN, Conn. – Global progress to reduce greenhouse gas (GHG) emissions remains insufficient to meet the net-zero GHGs by mid-century target established in the 2021 Glasgow Climate Pact, according to the 2022 Environmental Performance Index (EPI) produced by researchers at Yale and Columbia Universities. Using the past 10-years’ emissions trajectory as a basis for projecting 2050 emissions, the EPI researchers forecast that the vast majority of countries will not achieve the net-zero goal. A number of nations – including the United States – are projected to fall far short of the target.

Commenting on the findings, Professor Dan Esty, who directs the Yale Center for Environmental Law & Policy that has produced the EPI biennially since 2006, said: “Major countries have much more work to do than they may have realized if the world is to avoid the potentially devastating impacts of climate change.”

Only a handful of countries – notably Denmark and the United Kingdom – are currently projected to reach GHG neutrality by 2050, according to the EPI’s analyses. The countries performing well on the *net-zero GHG in 2050* metric have enacted some of the world’s most ambitious climate policies. For example, Denmark has set a national target of reducing 2030 emissions by 70% compared to the 1990 level and has adopted a comprehensive policy agenda to deliver on this commitment including recently expanded GHG taxes.

More than 50% of emissions in 2050 are slated to come from just 4 countries: China, India, the United States, and Russia. “While U.S. emissions are declining rapidly, they are not falling fast enough to get to net zero by 2050 given the very high emissions starting point of the United States,” said EPI project director Martin Wolf. More troubling, GHGs continue to rise in China, India, Russia, and a number of other major developing countries.

Just 24 countries – the *dirty two-dozen* – will account for nearly 80% of 2050 residual GHG emissions unless climate change policies are strengthened and emissions trajectories shifted. “The 2022 EPI emissions projections should be a call to action for many nations,” declared Dr. Wolf.



Ranking 180 countries on 40 performance indicators covering climate change, environmental public health, and ecosystem vitality, the EPI constitutes the world’s leading analysis of country-level sustainability trends. The 2022 EPI offers a powerful policy tool for assessing performance at the global and national levels across an array of critical sustainability issues including air and water pollution, waste management, biodiversity and habitat protection, as well as the transition to a clean energy future. Country rankings are grounded in the best available data from international organizations and research centers around the world that have been carefully analyzed by Yale and Columbia researchers.

In highlighting leaders, calling out laggards, and spotlighting the best policy practices on an issue-by-issue basis, the EPI provides a guide to policymakers on the path to a sustainable future. It also offers opposition political leaders, the media, environmental advocates, business executives, community groups, and citizen activists a mechanism for holding governments accountable.

2022 EPI Rankings

Denmark emerges as the most sustainable country in the world according to the 2022 EPI. Retaining its #1 ranking from 2020, Denmark’s top score reflects strong performance across many of the issues tracked by the EPI with notable leadership in climate and sustainable agriculture. Dan Jørgensen, the Danish Minister for Climate, Energy, and Utilities, commented on Denmark’s achievements: “Denmark is a small country. But we want to make a big difference. That’s why we aim to set a good example. We hope that by doing so, we can inspire others to also do more to preserve our planet. And when we set ambitious targets for ourselves, we also spark innovation and the development of solutions and technology that can help the green transformation in other countries. We have come a long way. But we still have a lot of work to do. Even though Denmark comparatively is doing a lot at a fast pace, we are not satisfied. We need to do more even faster. And we will.”

Other high-scoring nations include the United Kingdom and Finland, both of which earn top rankings from their strong climate change performance driven by policies that have substantially cut GHGs in recent years. Sweden and Switzerland, also among the top countries, rise above their peers in terms of air and water quality. But as Yale Professor Jay Emerson, who leads the team doing the EPI’s statistical analyses, noted, “No country is top-tier across the board. Even Denmark has things to learn from others.”

Beyond providing global and country-level results, the 2022 EPI offers insights into the drivers of good environmental performance. As senior research scientist Alex de Sherbinin of Columbia University’s Columbia Climate School and one of the lead authors of the 2022 EPI explained, “Good governance, policy commitment, and targeted environmental investments separate the nations that are moving toward a sustainable future from those which are not. High-scoring countries have well-thought-through programs to protect public health, conserve natural resources, and mitigate greenhouse gas emissions.”

Lagging its peers, the United States places 43rd out of 180 countries in the 2022 EPI. This relatively low ranking reflects a nation that has become deeply divided over how to respond to environmental challenges leading to inaction in Washington on critical issues such as climate change – and the rollback of environmental

protections during the Trump Administration. Between 2016 and 2020, the Administration repealed or weakened nearly 100 environmental regulations, reversing progress the U.S. had made in climate mitigation, air quality, and habitat conservation. In particular, the United States' withdrawal from the Paris Climate Agreement, relaxed methane emissions regulations, and weaker fuel efficiency standards meant the nation lost precious time while its peers in the developed world enacted significant policies to reduce their GHG emissions. While the data indicate the U.S. has made strides toward improving air quality and marine protected areas, the aggregate ranking puts it behind most wealthy western democracies, including France (12th), Germany (13th), Australia (17th), Italy (23rd), and Japan (25th).

The lowest scores overall go to countries that are struggling with civil unrest and other crises (such as Myanmar or Haiti), or nations that have prioritized economic growth over environmental sustainability, such as India, Vietnam, Bangladesh, and Pakistan. India, with markedly poor air quality and quickly rising GHG emissions, comes in at the very bottom of country rankings for the first time. Poor air quality and growing GHG emissions continue to impact China's EPI ranking, placing the nation 160th out of 180 countries in the 2022 scorecard.

Additional Global Insights

Worldwide trends suggest that many countries have made significant progress over the past decade on critical environmental health issues like sanitation, drinking water, and indoor air pollution. These gains demonstrate that investments in environmental infrastructure, like wastewater treatment facilities, and better household energy technologies, such as cleaner cookstoves, can translate into rapid improvements in public health. The EPI's new air quality metrics indicate, however, that residents in most countries still breathe unsafe air. More than 8 million people die prematurely each year from exposure to indoor and ambient air pollutants. Southern Asian countries, such as India, Nepal, and Pakistan, are particularly lagging in air quality.

Ecosystem trends capture both remarkable improvements and persistent challenges when it comes to preserving habitat and biodiversity around the world. Belgium, the U.A.E., Croatia, and Niger have substantially expanded protected habitat within their borders, earning top scores for biodiversity metrics in the 2022 EPI. The world has also met its marine protected areas target, successfully preserving 10% of coastlines – but with ocean ecosystems still threatened in much of the world, there remains a good bit of work to do in this issue category. On other issues, global performance continues to move away from sustainability. Fisheries are especially in decline, with nearly all countries earning scores below 50% on this vital issue.

The Drivers of Good Environmental Performance

At every level of development, some countries achieve scores that exceed their peer nations with similar economic circumstances. Cutting-edge analyses of the 2022 EPI rankings make clear that the factors explaining environmental success include good governance, country wealth, quality of life, independent media, and well-crafted regulations. The researchers found strong correlations between EPI scores and government effectiveness, rule of law, regulatory quality, happiness, and GDP per capita. Sustainable development requires financial resources, which enable investments in environmental protection. The wide divergence in scores among wealthy countries demonstrates, however, that policy choices also matter. Leaders that carefully manage pollution threats and natural resource use can drive their countries toward a more sustainable future.

A Call for Improved Environmental Monitoring and Data Reporting

Policy efforts to deliver a more sustainable future would benefit from better data collection, reporting, and verification across a range of environmental issues. The push towards more analytically-rigorous environmental policymaking has gained momentum in recent years, particularly after the adoption of the UN Sustainable Development Goals (SDGs) and the Paris Climate Agreement in 2015. Nonetheless, persistent information gaps hold the world back from a more sustainable future. Good data are particularly lacking in agriculture, freshwater quality, chemical exposure, and ecosystem protection. The EPI team continues to call for world leaders and data organizations to close these gaps with stronger investments in environmental information frameworks.

About the Yale Center for Environmental Law & Policy

The Yale Center for Environmental Law & Policy advances real-world outcomes in sustainable development through multiple initiatives. Inspiring fresh thinking with data-driven approaches to environmental decision-making, the Center engages stakeholders across disciplines, sectors, and boundaries to enhance policy and voluntary action on critical sustainability 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 aim to shape academic thinking and policymaking in the public, private, and NGO sectors.

About the Columbia University Center for International Earth Science Information Network

The Center for International Earth Science Information Network (CIESIN), a center of the Columbia Climate School at Columbia University, works at the intersection of the social, natural, and information sciences. CIESIN 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.

Contact:

Martin J. Wolf, Ph.D.

Yale Center for Environmental Law & Policy

epi@yale.edu

+1 (203) 436-9566