

# Environmental Performance Index 2020



Global metrics for the environment:  
Ranking country performance on sustainability issues



EPI RANKINGS

1–36

37–72

73–108

109–144

145–180

NA

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This Summary for Policymakers contains a snapshot of the 2020 EPI's framework and results. Complete methods, data, and results—including breakout scores and rankings for individual countries—are available online at [epi.yale.edu](http://epi.yale.edu).

## Executive Summary

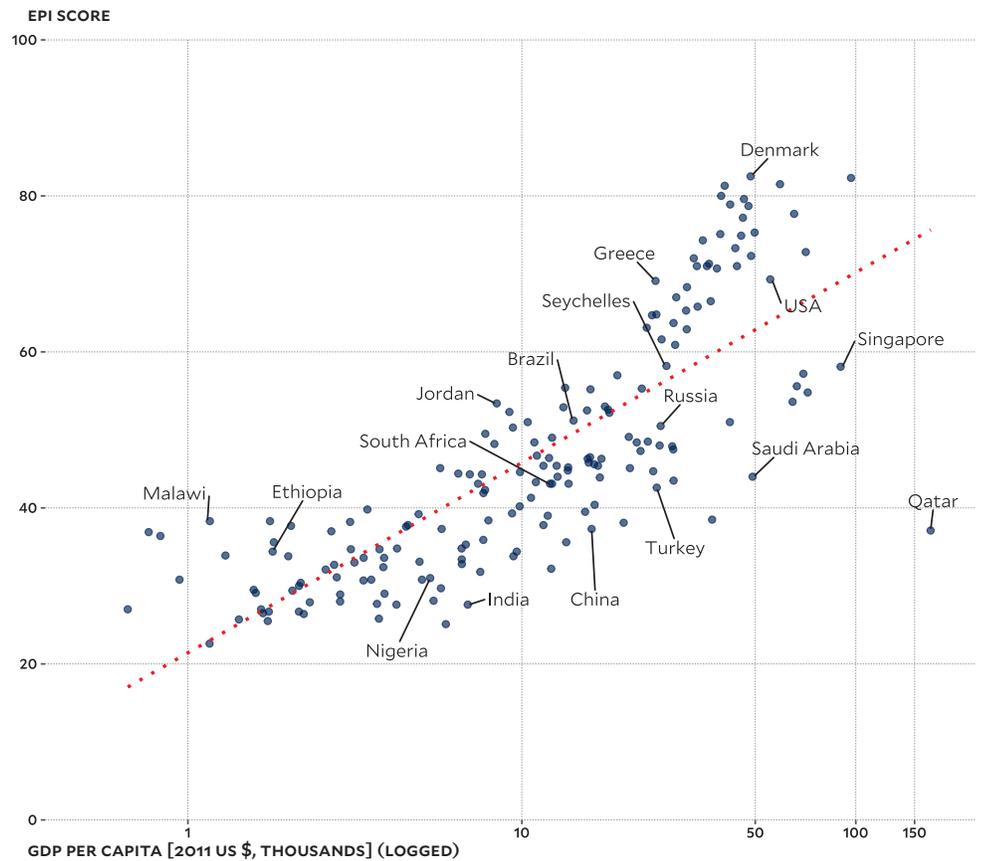
The 2020 Environmental Performance Index (EPI) provides a data-driven summary of the state of sustainability around the world. Using 32 performance indicators across 11 issue categories, the EPI ranks 180 countries on environmental health and ecosystem vitality. These indicators provide a gauge at a national scale of how close countries are to established environmental policy targets. The EPI offers a scorecard that highlights leaders and laggards in environmental performance and provides practical guidance for countries that aspire to move toward a sustainable future. The metrics on which the 2020 rankings are based come from a variety of sources and represent the most recent published data, often from 2017 or 2018. Thus the analysis does not reflect recent developments, including the dramatic drop in air pollution in 2020 in the wake of the COVID-19 pandemic or the greenhouse gas emissions from the extensive Amazonian fires in 2019.

These indicators provide a way to spot problems, set targets, track trends, understand outcomes, and identify best policy practices. Good data and fact-based analysis can also help government officials refine their policy agendas, facilitate communications with key stakeholders, and maximize the return on environmental investments. The EPI offers a powerful policy tool in support of efforts to meet the targets of the UN Sustainable Development Goals and to move society toward a sustainable future.

Overall EPI rankings indicate which countries are best addressing the environmental challenges that every nation faces. Going beyond the aggregate scores and drilling down into the data to analyze performance by issue category, policy objective, peer group, and country offers even greater value for policymakers. This granular view and comparative perspective can assist in understanding the determinants of environmental progress and in refining policy choices.

### EXPLAINING PERFORMANCE

A number of striking conclusions emerge from the 2020 EPI rankings and indicators. First, good policy results are associated with wealth (GDP per capita), meaning that economic prosperity makes it possible for nations to invest in policies and programs that lead to desirable



The relationship between 2020 EPI Score and GDP *per capita* shows a strong positive correlation, although many countries out- or underperform their economic peers.

outcomes. This trend is especially true for issue categories under the umbrella of environmental health, as building the necessary infrastructure to provide clean drinking water and sanitation, reduce ambient air pollution, control hazardous waste, and respond to public health crises yields large returns for human well-being.

Second, the pursuit of economic prosperity – manifested in industrialization and urbanization – often means more pollution and other strains on ecosystem vitality, especially in the developing world, where air and water emissions remain significant. But at the same time, the data suggest countries need not sacrifice sustainability for economic security or vice versa. In every issue category, we find countries that rise above their economic peers. Policymakers and other stakeholders in these leading countries demonstrate that focused attention can mobilize communities to protect natural resources and human well-being despite the strains associated with economic growth. In this regard, indicators of good governance – including commitment to the rule of law, a vibrant press, and even-handed enforcement of regulations – have strong

relationships with top-tier EPI scores.

Third, while top EPI performers pay attention to all areas of sustainability, their lagging peers tend to have uneven performance. Denmark, which ranks #1, has strong results across most issues and with leading-edge commitments and outcomes with regard to climate change mitigation. In general, high scorers exhibit long-standing policies and programs to protect public health, preserve natural resources, and decrease greenhouse gas emissions. The data further suggest that countries making concerted efforts to decarbonize their electricity sectors have made the greatest gains in combating climate change, with associated benefits for ecosystems and human health. We note, however, that every country – including those at the top of the EPI rankings – still has issues to improve upon. No country can claim to be on a fully sustainable trajectory.

Fourth, laggards must redouble national sustainability efforts along all fronts. A number of important countries in the Global South, including India and Nigeria, come out near the bottom of the rankings. Their low EPI scores indicate

the need for greater attention to the spectrum of sustainability requirements, with a high-priority focus on critical issues such as air and water quality, biodiversity, and climate change. Some of the other laggards, including Nepal and Afghanistan, face broader challenges such as civil unrest, and their low scores can almost all be attributed to weak governance.

### REFINING METRICS

Innovations in the 2020 EPI data and methodology reflect the latest advances in environmental science and indicator analysis. Notably, the 2020 rankings include for the first time a waste management metric and a pilot indicator on CO<sub>2</sub> emissions from land cover change. Other new indicators deepen the analysis of air quality, biodiversity & habitat, fisheries, ecosystem services, and climate change. Full documentation of the methodology is available online at [epi.yale.edu](http://epi.yale.edu), and the EPI team invites feedback and suggestions for strengthening future versions of the Index.

While the EPI provides a framework for greater analytic rigor in policymak-

ing, it also reveals a number of severe data gaps that limit the analytic scope of the rankings. As the EPI project has highlighted for two decades, better data collection, reporting, and verification across a range of environmental issues are urgently needed. The existing gaps are especially pronounced in the areas of agriculture, water resources, and threats to biodiversity. New investments in stronger global data systems are essential to better manage sustainability challenges and to ensure that the global community does not breach fundamental planetary boundaries.

The inability to capture transboundary environmental impacts persists as a limitation of the current EPI framework. While the current methodology reveals important insights into how countries perform within their own borders, it does not account for “exported” impacts associated with imported products. With groundbreaking models and new datasets emerging, the EPI team has been working to produce new metrics that account for the spillovers of harm associated with traded goods in an interconnected world.

### GLOBAL PANDEMIC

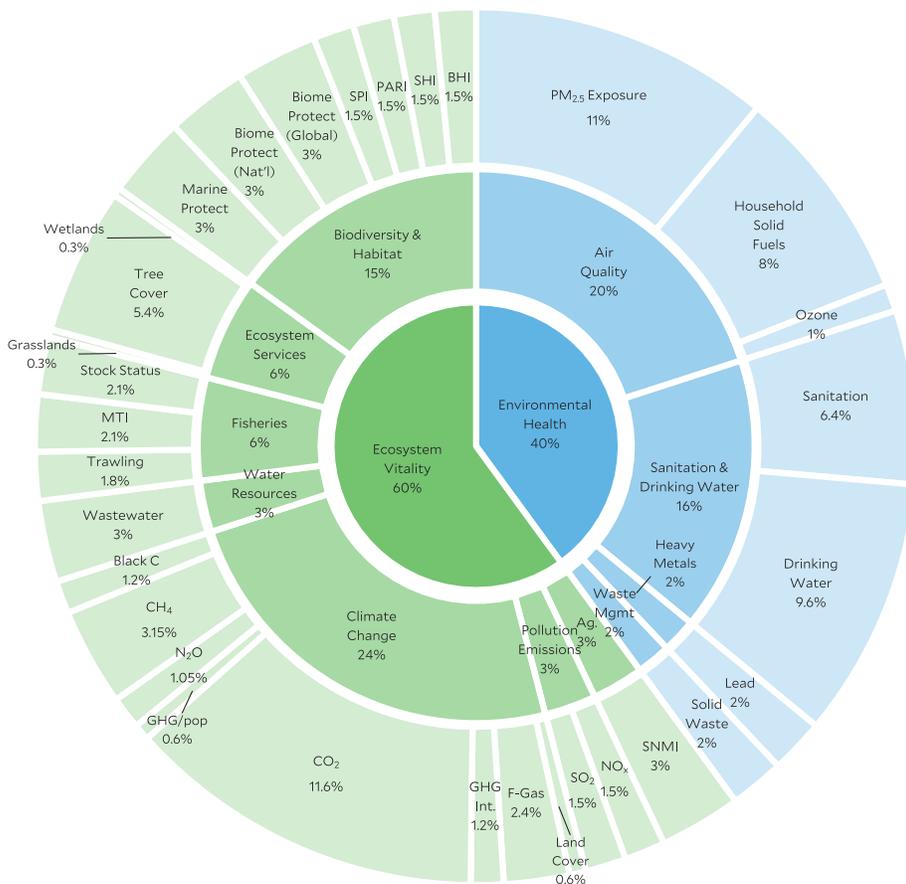
The 2020 EPI emerges in the midst of the COVID-19 crisis that has challenged public health systems and disrupted economic activity across the world. The global pandemic has made clear the profound interdependence of all nations and the importance of investing in resilience. Unintended consequences of the economic shutdown in many nations include a sharp drop in pollution levels and the return of wildlife. The EPI team hopes that this unexpected glimpse of what a sustainable planet might look like from an ecological perspective – albeit at a terrible price in terms of public health and economic damage – will inspire the policy transformation required for a sustainable future that is both economically vigorous and environmentally sound.

### CREATING A COMPOSITE INDEX

As a composite index, the Environmental Performance Index distills data on many indicators of sustainability into a single number. Advances in scientific investigation, sensing methods, and data reporting mean the world’s access to data on the state of the environment has never been richer. With every iteration of the EPI, we seek the best available data to produce useful and credible scores that address urgent questions.

For the 2020 EPI, we’ve assembled 32 indicators of environmental performance for 180 countries. The data come from trusted third-party sources like international governing bodies, nongovernmental organizations, and academic research centers. Credible datasets rely on established collection methods that have been peer-reviewed by the scientific community or endorsed by international authorities.

To give our metrics meaning to a broad audience, we take the data we receive and construct indicators on a 0–100 scale, from worst to best performance. For each country, we then weigh and aggregate the scores for indicators into issue categories, policy objectives, and then, finally, into an EPI score. Scores for all countries can be viewed or downloaded at our website, [epi.yale.edu](http://epi.yale.edu).



The 2020 EPI Framework. The framework organizes 32 indicators into 11 issue categories and two policy objectives, with weights shown at each level as a percentage of the total score.

RANK	COUNTRY	SCORE	REG	RANK	COUNTRY	SCORE	REG	RANK	COUNTRY	SCORE	REG
1	Denmark	82.5	1	61	Uruguay	49.1	9	120	Samoa	37.3	12
2	Luxembourg	82.3	2	62	Albania	49.0	16	122	Qatar	37.1	15
3	Switzerland	81.5	3	63	Antigua and Barbuda	48.5	10	123	Zimbabwe	37.0	11
4	United Kingdom	81.3	4	64	Cuba	48.4	11	124	Central African Republic	36.9	12
5	France	80.0	5		St. Vincent and Grenadines	48.4	11	125	Dem. Rep. Congo	36.4	13
6	Austria	79.6	6	66	Jamaica	48.2	13	126	Guyana	35.9	30
7	Finland	78.9	7	67	Iran	48.0	6	127	Maldives	35.6	3
8	Sweden	78.7	8	68	Malaysia	47.9	6		Uganda	35.6	14
9	Norway	77.7	9	69	Trinidad and Tobago	47.5	14	129	Timor-Leste	35.3	14
10	Germany	77.2	10	70	Panama	47.3	15	130	Laos	34.8	15
11	Netherlands	75.3	11	71	Tunisia	46.7	7		Sudan	34.8	16
12	Japan	75.1	1	72	Azerbaijan	46.5	5	132	Kenya	34.7	15
13	Australia	74.9	12	73	Paraguay	46.4	16		Zambia	34.7	15
14	Spain	74.3	13	74	Dominican Republic	46.3	17	134	Ethiopia	34.4	17
15	Belgium	73.3	14		Montenegro	46.3	17		Fiji	34.4	16
16	Ireland	72.8	15	76	Gabon	45.8	2	136	Mozambique	33.9	18
17	Iceland	72.3	16	77	Barbados	45.6	18	137	Eswatini	33.8	19
18	Slovenia	72.0	1	78	Bosnia and Herzegovina	45.4	18		Rwanda	33.8	19
19	New Zealand	71.3	17		Lebanon	45.4	8	139	Cambodia	33.6	17
20	Canada	71.0	18		Thailand	45.4	7		Cameroon	33.6	21
	Czech Republic	71.0	2	81	Suriname	45.2	19	141	Viet Nam	33.4	18
	Italy	71.0	18	82	Mauritius	45.1	3	142	Pakistan	33.1	4
23	Malta	70.7	20		Tonga	45.1	8	143	Micronesia	33.0	19
24	United States of America	69.3	21	84	Algeria	44.8	9	144	Cabo Verde	32.8	22
25	Greece	69.1	3	85	Kazakhstan	44.7	6	145	Nepal	32.7	5
26	Slovakia	68.3	4	86	Dominica	44.6	20	146	Papua New Guinea	32.4	20
27	Portugal	67.0	22	87	Moldova	44.4	7	147	Mongolia	32.2	21
28	South Korea	66.5	2	88	Bolivia	44.3	21	148	Comoros	32.1	23
29	Israel	65.8	1		Uzbekistan	44.3	8	149	Guatemala	31.8	31
30	Estonia	65.3	5	90	Peru	44.0	22	150	Tanzania	31.1	24
31	Cyprus	64.8	6		Saudi Arabia	44.0	10	151	Nigeria	31.0	25
32	Romania	64.7	7	92	Turkmenistan	43.9	9	152	Marshall Islands	30.8	22
33	Hungary	63.7	8	93	Bahamas	43.5	23		Niger	30.8	26
34	Croatia	63.1	9	94	Egypt	43.3	11		Republic of Congo	30.8	26
35	Lithuania	62.9	10	95	El Salvador	43.1	24	155	Senegal	30.7	28
36	Latvia	61.6	11		Grenada	43.1	24	156	Eritrea	30.4	29
37	Poland	60.9	12		Saint Lucia	43.1	24	157	Benin	30.0	30
38	Seychelles	58.2	1		South Africa	43.1	4	158	Angola	29.7	31
39	Singapore	58.1	3	99	Turkey	42.6	19	159	Togo	29.5	32
40	Taiwan	57.2	4	100	Morocco	42.3	12	160	Mali	29.4	33
41	Bulgaria	57.0	13	101	Belize	41.9	27	161	Guinea-Bissau	29.1	34
42	United Arab Emirates	55.6	2	102	Georgia	41.3	10	162	Bangladesh	29.0	6
43	North Macedonia	55.4	14	103	Botswana	40.4	5	163	Vanuatu	28.9	23
44	Chile	55.3	1	104	Namibia	40.2	6	164	Djibouti	28.1	35
45	Serbia	55.2	15	105	Kyrgyzstan	39.8	11	165	Lesotho	28.0	36
46	Brunei Darussalam	54.8	5	106	Iraq	39.5	13	166	Gambia	27.9	37
47	Kuwait	53.6	3	107	Bhutan	39.3	1	167	Mauritania	27.7	38
48	Jordan	53.4	4	108	Nicaragua	39.2	28	168	Ghana	27.6	39
49	Belarus	53.0	1	109	Sri Lanka	39.0	2		India	27.6	7
50	Colombia	52.9	2	110	Oman	38.5	14	170	Burundi	27.0	40
51	Mexico	52.6	3	111	Philippines	38.4	9		Haiti	27.0	32
52	Costa Rica	52.5	4	112	Burkina Faso	38.3	7	172	Chad	26.7	41
53	Armenia	52.3	2		Malawi	38.3	7		Solomon Islands	26.7	24
54	Argentina	52.2	5	114	Tajikistan	38.2	12	174	Madagascar	26.5	42
55	Brazil	51.2	6	115	Equatorial Guinea	38.1	9	175	Guinea	26.4	43
56	Bahrain	51.0	5	116	Honduras	37.8	29	176	Côte d'Ivoire	25.8	44
	Ecuador	51.0	7		Indonesia	37.8	10	177	Sierra Leone	25.7	45
58	Russia	50.5	3	118	Kiribati	37.7	11	178	Afghanistan	25.5	8
59	Venezuela	50.3	8	119	São Tomé and Príncipe	37.6	10	179	Myanmar	25.1	25
60	Ukraine	49.5	4	120	China	37.3	12	180	Liberia	22.6	46

Asia-Pacific  
Eastern Europe

Former Soviet States  
Global West

Greater Middle East  
Latin America & Caribbean

Southern Asia  
Sub-Saharan Africa

Rank, EPI Score, and Regional Standing (REG, shown in color) for 180 countries.

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