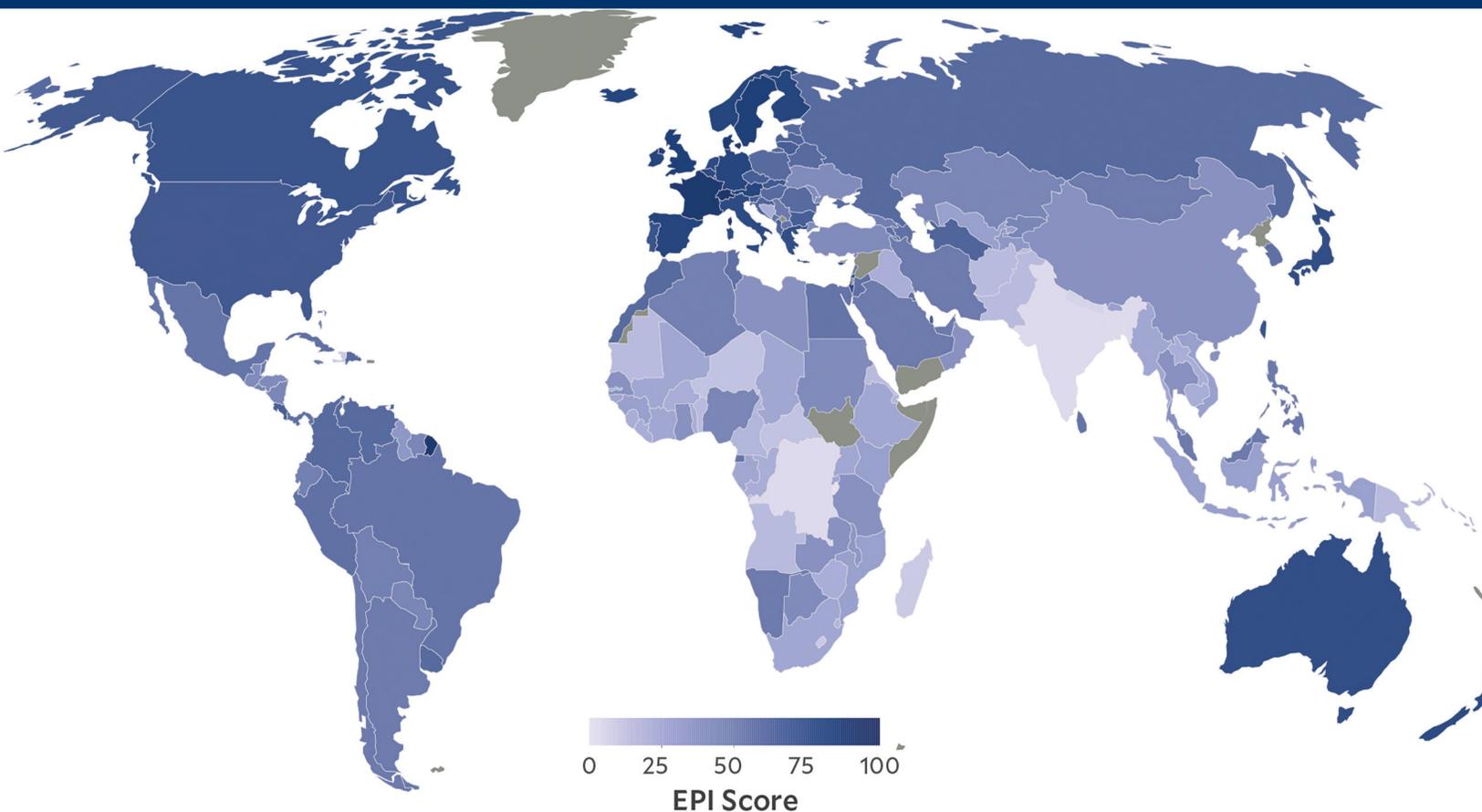


# 2018 ENVIRONMENTAL PERFORMANCE INDEX



## Global metrics for the environment: Ranking country performance on high-priority environmental issues

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# EXECUTIVE SUMMARY

Careful measurement of environmental trends and progress provides a foundation for effective policymaking. The 2018 Environmental Performance Index (EPI) ranks 180 countries on 24 performance indicators across ten issue categories covering environmental health and ecosystem vitality. These metrics provide a gauge at a national scale of how close countries are to established environmental policy goals. The EPI thus offers a scorecard that highlights leaders and laggards in environmental performance, gives insight on best practices, and provides guidance for countries that aspire to be leaders in sustainability.

Innovations in the 2018 EPI data and methodology have generated new rankings founded on the latest advances in environmental science and analysis. Switzerland leads the world based on strong performance across most issues, especially air quality and climate protection. In general, high scorers exhibit long-standing commitments to protecting public health, preserving natural resources, and decoupling greenhouse gas (GHG) emissions from economic activity.

India and Bangladesh come in near the bottom of the rankings. Low scores on the

EPI are indicative of the need for national sustainability efforts on a number of fronts, especially cleaning up air quality, protecting biodiversity, and reducing GHG emissions. Some of the laggards face broader challenges, such as civil unrest, but others seem to be suffering the effects of weak governance. The EPI draws attention to the issues on which policymakers must take further action.

While the EPI provides a framework for greater analytic rigor in environmental policymaking, it also reveals a number of severe data gaps. 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 sustainable agriculture, water resources, waste management, and threats to biodiversity. Supporting stronger global data systems thus emerges as essential to better management of sustainable development challenges.

This Summary for Policymakers contains a snapshot of the 2018 EPI's framework and results. Complete methods, data, and results—including for individual countries—are available online at [epi.yale.edu](http://epi.yale.edu).

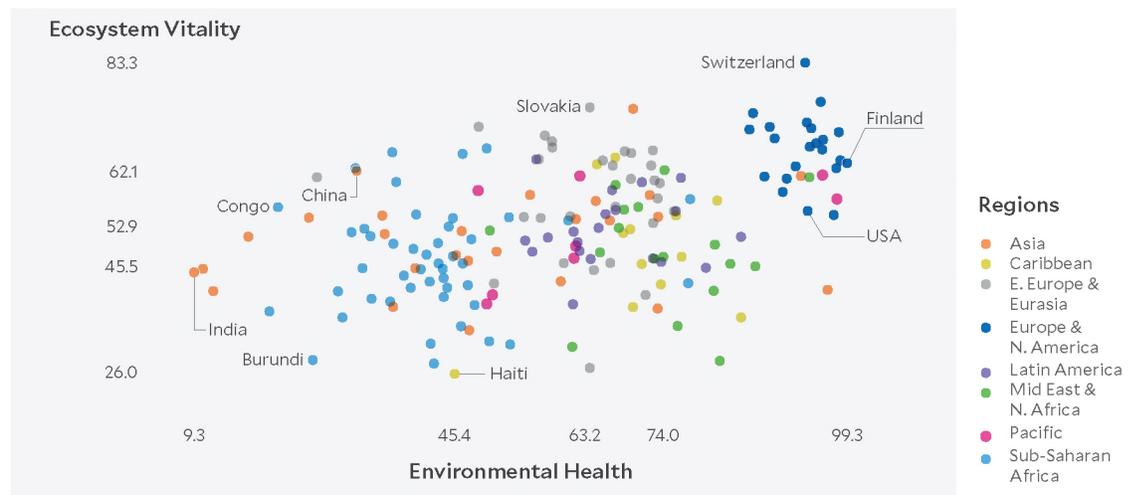
# DATA-DRIVEN METRICS

The world has entered a new era of data-driven environmental policymaking. With the UN's 2015 Sustainable Development Goals, governments are increasingly being asked to explain their performance on a range of pollution control and natural resource management challenges with reference to quantitative metrics. A more data-driven and empirical approach to environmental protection promises to make it easier to spot problems, track trends, highlight policy successes and failures, identify best practices, and optimize the gains from investments in environmental protection.

The overall EPI rankings indicate which countries are doing best against the array of environmental pressures that every nation faces. From a policy perspective, greater value derives from drilling down into the data to analyze performance by specific issue, policy category, peer group, and country. Such an analysis can assist in refining policy choices, understanding the determinants of environmental progress, and maximizing the return on governmental investments.

# TWO DIMENSIONS OF ENVIRONMENTAL PERFORMANCE

The relationship between sub-scores on the two policy objectives for all 180 countries in the 2018 EPI illustrate that Environmental Health and Ecosystem Vitality are distinct dimensions of environmental performance—which may be in some tension as economic growth creates resources to invest but adds to pollution burdens and habitat stress.

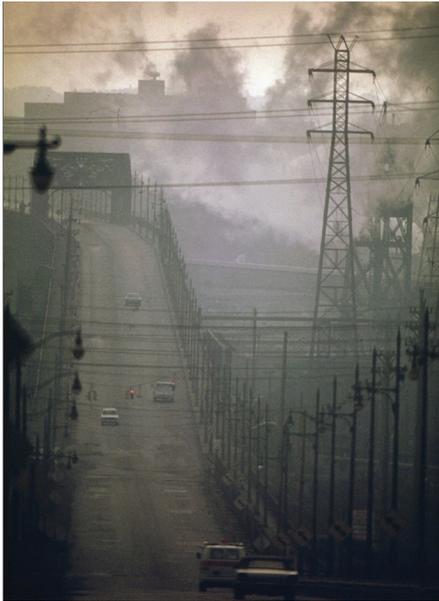


## KEY FINDINGS

Air quality remains the leading environmental threat to public health. In 2016 the Institute for Health Metrics and Evaluation estimated that diseases related to airborne pollutants contributed to two-thirds of all life-years lost to environmentally related deaths and disabilities. Air pollution issues are especially acute in rapidly urbanizing and industrializing nations such as India and China.

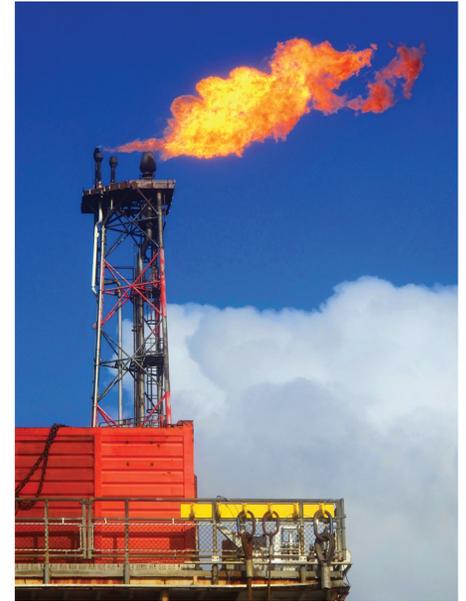


With 20 years of experience, the EPI reveals a tension between two fundamental dimensions of sustainable development: (1) environmental health, which rises with economic growth and prosperity, and (2) ecosystem vitality, which comes under strain from industrialization and urbanization. Good governance emerges as the critical factor required to balance these distinct dimensions of sustainability.

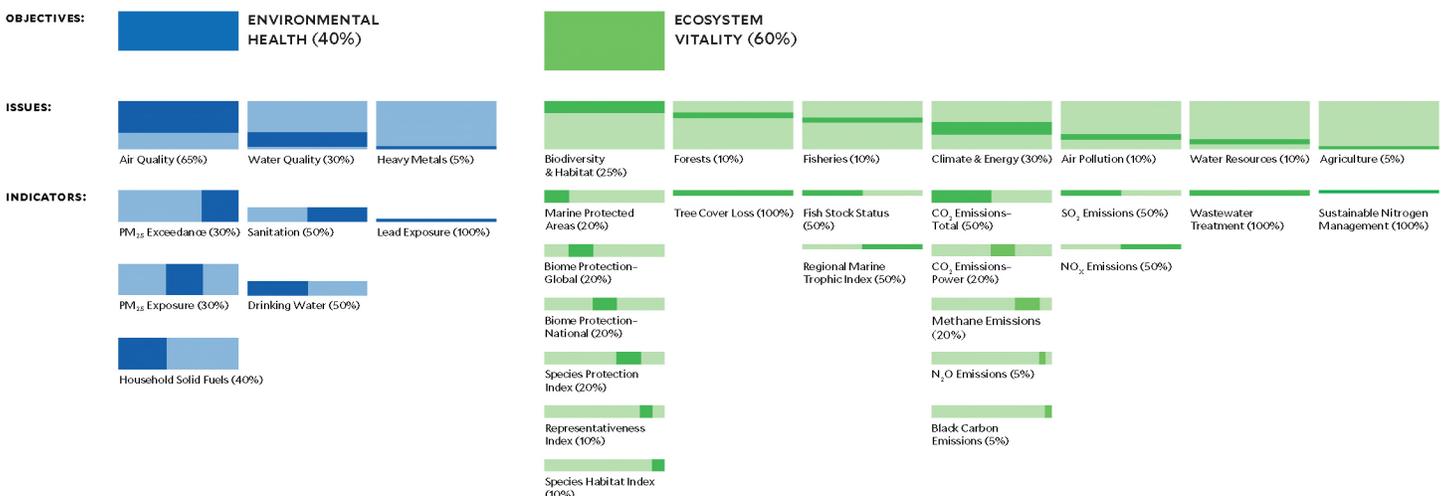


The world has made great strides in protecting marine and terrestrial habitats, exceeding the international goal for marine protection in 2014. Additional indicators measuring terrestrial protected areas suggest, however, that more work needs to be done to ensure the presence of high-quality habitat free from human pressures.

Most countries improved GHG emissions intensity over the past ten years. Three-fifths of countries in the EPI have declining CO<sub>2</sub> intensities, while 85–90% of countries have declining intensities for methane, nitrous oxide, and black carbon. These trends are promising yet must be accelerated to meet the ambitious targets of the 2015 Paris Climate Agreement.



## 2018 EPI FRAMEWORK



The 2018 EPI Framework organizes 24 indicators into ten issue categories and two policy objectives. Weights used in each level of aggregation shown in parentheses.

# 2018 EPI RANKINGS

RANK	COUNTRY	SCORE	REG	RANK	COUNTRY	SCORE	REG	RANK	COUNTRY	SCORE	REG
1	Switzerland	87.42	1	61	Kuwait	62.28	5	121	Thailand	49.88	12
2	France	83.95	2	62	Jordan	62.20	6	122	Micronesia	49.80	13
3	Denmark	81.60	3	63	Armenia	62.07	17	123	Libya	49.79	16
4	Malta	80.90	4	64	Peru	61.92	6	124	Ghana	49.66	11
5	Sweden	80.51	5	65	Montenegro	61.33	18	125	Timor-Leste	49.54	14
6	United Kingdom	79.89	6	66	Egypt	61.21	7	126	Senegal	49.52	12
7	Luxembourg	79.12	7	67	Lebanon	61.08	8	127	Malawi	49.21	13
8	Austria	78.97	8	68	Macedonia	61.06	19	128	Guyana	47.93	20
9	Ireland	78.77	9	69	Brazil	60.70	7	129	Tajikistan	47.85	27
10	Finland	78.64	10	70	Sri Lanka	60.61	6	130	Kenya	47.25	14
11	Iceland	78.57	11	71	Equatorial Guinea	60.40	2	131	Bhutan	47.22	15
12	Spain	78.39	12	72	Mexico	59.69	8	132	Viet Nam	46.96	16
13	Germany	78.37	13	73	Dominica	59.38	5	133	Indonesia	46.92	17
14	Norway	77.49	14	74	Argentina	59.30	9	134	Guinea	46.62	15
15	Belgium	77.38	15	75	Malaysia	59.22	7	135	Mozambique	46.37	16
16	Italy	76.96	16	76	Antigua and Barbuda	59.18	6	136	Uzbekistan	45.88	28
17	New Zealand	75.96	1	77	United Arab Emirates	58.90	9	137	Chad	45.34	17
18	Netherlands	75.46	17	78	Jamaica	58.58	7	138	Myanmar	45.32	18
19	Israel	75.01	1	79	Namibia	58.46	3	139	Côte d'Ivoire	45.25	18
20	Japan	74.69	1	80	Iran	58.16	10	140	Gabon	45.05	19
21	Australia	74.12	2	81	Belize	57.79	10	141	Ethiopia	44.78	20
22	Greece	73.60	18	82	Philippines	57.65	8	142	South Africa	44.73	21
23	Taiwan	72.84	2	83	Mongolia	57.51	9	143	Guinea-Bissau	44.67	22
24	Cyprus	72.60	19	84	Serbia	57.49	20	144	Vanuatu	44.55	7
25	Canada	72.18	20	84	Chile	57.49	11	145	Uganda	44.28	23
26	Portugal	71.91	21	86	Saudi Arabia	57.47	11	146	Comoros	44.24	24
27	United States of America	71.19	22	87	Ecuador	57.42	12	147	Mali	43.71	25
28	Slovakia	70.60	1	88	Algeria	57.18	12	148	Rwanda	43.68	26
29	Lithuania	69.33	2	89	Cabo Verde	56.94	4	149	Zimbabwe	43.41	27
30	Bulgaria	67.85	3	90	Mauritius	56.63	5	150	Cambodia	43.23	19
30	Costa Rica	67.85	1	91	Saint Lucia	56.18	8	151	Solomon Islands	43.22	8
32	Qatar	67.80	2	92	Bolivia	55.98	13	152	Iraq	43.20	17
33	Czech Republic	67.68	4	93	Barbados	55.76	9	153	Laos	42.94	20
34	Slovenia	67.57	5	94	Georgia	55.69	21	154	Burkina Faso	42.83	28
35	Trinidad and Tobago	67.36	1	95	Kiribati	55.26	4	155	Sierra Leone	42.54	29
36	St. Vincent & Grenadines	66.48	2	96	Bahrain	55.15	13	156	Gambia	42.42	30
37	Latvia	66.12	6	97	Nicaragua	55.04	14	157	Republic of Congo	42.39	31
38	Turkmenistan	66.10	7	98	Bahamas	54.99	10	158	Bosnia and Herzegovina	41.84	29
39	Seychelles	66.02	1	99	Kyrgyzstan	54.86	22	159	Togo	41.78	32
40	Albania	65.46	8	100	Nigeria	54.76	6	160	Liberia	41.62	33
41	Croatia	65.45	9	101	Kazakhstan	54.56	23	161	Cameroon	40.81	34
42	Colombia	65.22	2	102	Samoa	54.50	5	162	Swaziland	40.32	35
43	Hungary	65.01	10	103	Suriname	54.20	15	163	Djibouti	40.04	36
44	Belarus	64.98	11	104	São Tomé and Príncipe	54.01	7	164	Papua New Guinea	39.35	21
45	Romania	64.78	12	105	Paraguay	53.93	16	165	Eritrea	39.34	37
46	Dominican Republic	64.71	3	106	El Salvador	53.91	17	166	Mauritania	39.24	38
47	Uruguay	64.65	3	107	Fiji	53.09	6	167	Benin	38.17	39
48	Estonia	64.31	13	108	Turkey	52.96	24	168	Afghanistan	37.74	22
49	Singapore	64.23	3	109	Ukraine	52.87	25	169	Pakistan	37.50	23
50	Poland	64.11	14	110	Guatemala	52.33	18	170	Angola	37.44	40
51	Venezuela	63.89	4	111	Maldives	52.14	10	171	Central African Republic	36.42	41
52	Russia	63.79	15	112	Moldova	51.97	26	172	Niger	35.74	42
53	Brunei Darussalam	63.57	4	113	Botswana	51.70	8	173	Lesotho	33.78	43
54	Morocco	63.47	3	114	Honduras	51.51	19	174	Haiti	33.74	12
55	Cuba	63.42	4	115	Sudan	51.49	14	175	Madagascar	33.73	44
56	Panama	62.71	5	116	Oman	51.32	15	176	Nepal	31.44	24
57	Tonga	62.49	3	117	Zambia	50.97	9	177	India	30.57	25
58	Tunisia	62.35	4	118	Grenada	50.93	11	178	Dem. Rep. Congo	30.41	45
59	Azerbaijan	62.33	16	119	Tanzania	50.83	10	179	Bangladesh	29.56	26
60	South Korea	62.30	5	120	China	50.74	11	180	Burundi	27.43	46

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

■ Asia
 ■ Caribbean
 ■ E.Europe & Eurasia
 ■ Europe & N.America
 ■ Latin America
 ■ Mid East & N.Africa
 ■ Pacific
 ■ Sub-Saharan Africa