

2010 Environmental Performance Index



SUMMARY FOR POLICYMAKERS

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Executive Summary

Environmental sustainability has emerged as a critical policy focus across the world. 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 2010 Environmental Performance Index (EPI) ranks 163 countries on 25 performance indicators tracked across ten policy categories covering both environmental public health and ecosystem vitality. These indicators provide a gauge at a national government scale of how close countries are to established environmental policy goals. This proximity-to-target methodology facilitates cross-country comparisons as well as analysis of how the global community is doing collectively on each particular policy issue.

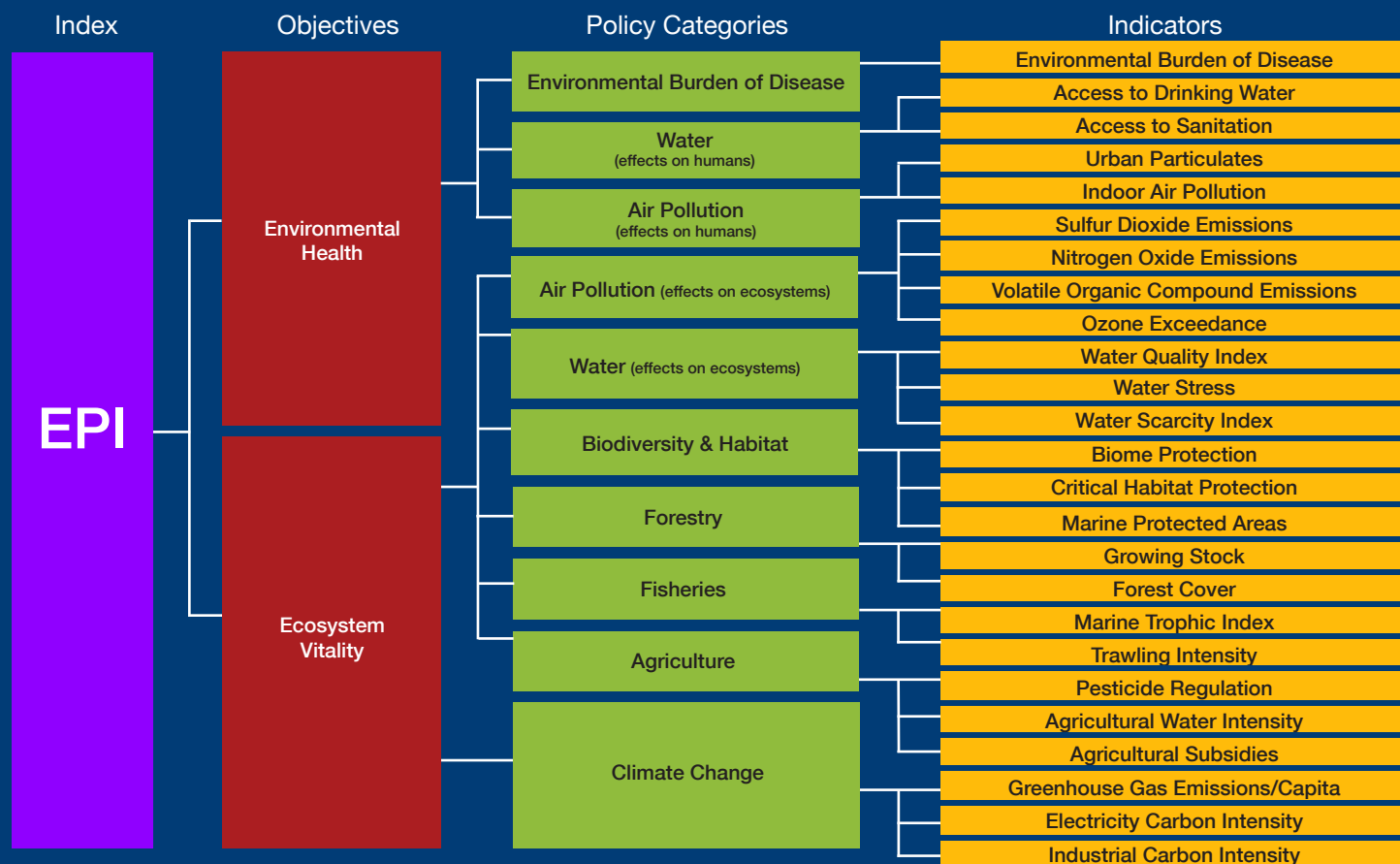
The EPI provides a framework for greater analytic rigor in the environmental domain but also reveals severe data gaps, weaknesses in methodological consistency, and the lack of a systematic process for verifying the numbers reported by governments. Likewise, the EPI makes vivid the need for better data collection, analysis, review, and verification as an essential underpinning for the trust required to make

future worldwide policy cooperation effective. It also provides a model of transparency with all of the underlying data available online.

One of the biggest weaknesses in the current framework is the lack of ability to track changes in performance over time. Thus, the 2010 EPI offers a pilot exercise – focused on a small handful of indicators for which time series data are available – designed to make clear the potential for highlighting which countries have gained the most ground and which are falling back, as well as the issues on which global performance is improving and those on which it is deteriorating. The 2010 EPI also identifies some of the critical drivers of good environmental results including the level of development, rule of law and good governance, and a robust regulatory regime.

The overall EPI rankings provide an indicative sense of 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. More generally, the EPI provides a powerful tool for steering individual countries and the world toward environmental sustainability.

Environmental Performance Index Framework





Geographic Regional Peer Groups by Rank, Country, and EPI Score

Sub-Saharan Africa		
1	Mauritius	80.6
2	Djibouti	60.5
3	Namibia	59.3
4	Sao Tome & Principe	57.3
5	Gabon	56.4
6	Eritrea	54.6
7	Swaziland	54.4
8	Côte d'Ivoire	54.3
9	Congo	54.0
10	Dem. Rep. Congo	51.6
11	Malawi	51.4
12	Kenya	51.4
13	Ghana	51.3
14	Mozambique	51.2
15	South Africa	50.8
16	Gambia	50.3
17	Uganda	49.8
18	Madagascar	49.2
19	Tanzania	47.9
20	Zimbabwe	47.8
21	Burkina Faso	47.3
22	Zambia	47.0
23	Guinea-Bissau	44.7
24	Cameroon	44.6
25	Rwanda	44.6
26	Guinea	44.4
27	Burundi	43.9
28	Ethiopia	43.1
29	Senegal	42.3
30	Equatorial Guinea	41.9
31	Botswana	41.3
32	Chad	40.8
33	Nigeria	40.2
34	Benin	39.6
35	Mali	39.4
36	Niger	37.6
37	Togo	36.4
38	Angola	36.3
39	Mauritania	33.7
40	Central African Rep.	33.3
41	Sierra Leone	32.1

Mid East & N. Africa		
1	Algeria	67.4
2	Morocco	65.6
3	Syria	64.6
4	Israel	62.4
5	Egypt	62.0
6	Tunisia	60.6
7	Armenia	60.4
8	Turkey	60.4
9	Iran	60.0
10	Lebanon	57.9
11	Jordan	56.1
12	Saudi Arabia	55.3
13	Kuwait	51.1
14	Libya	50.1
15	Qatar	48.9
16	Yemen	48.3
17	Sudan	47.1
18	Oman	45.9
19	Bahrain	42.0
20	Iraq	41.0
21	United Arab Emirates	40.7

Eastern Europe & Central Asia		
1	Albania	71.4
2	Serbia & Montenegro	69.4
3	Croatia	68.7
4	Belarus	65.4
5	Georgia	63.6
6	Russia	61.2
7	Macedonia	60.6
8	Kyrgyzstan	59.7
9	Azerbaijan	59.1
10	Moldova	58.8
11	Ukraine	58.2
12	Kazakhstan	57.3
13	Bosnia & Herzegovina	55.9
14	Tajikistan	51.3
15	Uzbekistan	42.3
16	Turkmenistan	38.4

Americas		
1	Costa Rica	86.4
2	Cuba	78.1
3	Colombia	76.8
4	Chile	73.3
5	Panama	71.4
6	Belize	69.9
7	Antigua & Barbuda	69.8
8	Ecuador	69.3
9	Peru	69.3
10	El Salvador	69.1
11	Dominican Republic	68.4
12	Suriname	68.2
13	Mexico	67.3
14	Canada	66.4
15	Paraguay	63.5
16	United States	63.5
17	Brazil	63.4
18	Venezuela	62.9
19	Argentina	61.0
20	Guyana	59.2
21	Uruguay	59.1
22	Jamaica	58.0
23	Nicaragua	57.1
24	Trinidad & Tobago	54.2
25	Guatemala	54.0
26	Honduras	49.9
27	Bolivia	44.3
28	Haiti	39.5

Europe		
1	Iceland	93.5
2	Switzerland	89.1
3	Sweden	86.0
4	Norway	81.1
5	France	78.2
6	Austria	78.1
7	Malta	76.3
8	Finland	74.7
9	Slovakia	74.5
10	United Kingdom	74.2
11	Germany	73.2
12	Italy	73.1
13	Portugal	73.0
14	Latvia	72.5
15	Czech Republic	71.6
16	Spain	70.6
17	Denmark	69.2
18	Hungary	69.1
19	Lithuania	68.3
20	Luxembourg	67.8
21	Ireland	67.1
22	Romania	67.0
23	Netherlands	66.4
24	Slovenia	65.0
25	Estonia	63.8
26	Poland	63.1
27	Bulgaria	62.5
28	Greece	60.9
29	Belgium	58.1
30	Cyprus	56.3

Asia and Pacific		
1	New Zealand	73.4
2	Japan	72.5
3	Singapore	69.6
4	Nepal	68.2
5	Bhutan	68.0
6	Maldives	65.9
7	Fiji	65.9
8	Philippines	65.7
9	Australia	65.7
10	Malaysia	65.0
11	Sri Lanka	63.7
12	Thailand	62.2
13	Brunei Darussalam	60.8
14	Laos	59.6
15	Vietnam	59.0
16	South Korea	57.0
17	Myanmar	51.3
18	Solomon Islands	51.1
19	China	49.0
20	India	48.3
21	Pakistan	48.0
22	Indonesia	44.6
23	Papua New Guinea	44.3
24	Bangladesh	44.0
25	Mongolia	42.8
26	North Korea	41.8
27	Cambodia	41.7

Policy Conclusions

Several policy conclusions emerge from the 2010 Environmental Performance Index and analysis of the underlying indicators:

- Environmental decisionmaking can be made more fact-based and empirical. A data-driven approach to policymaking promises to make decisionmaking more analytically rigorous and yield systematically better results.
- While the 2010 EPI demonstrates the potential for better metrics and more refined policy analysis, it also highlights the fact that significant data gaps and methodological limitations hamper movement in this direction.
- Policymakers should move to establish better data collection, methodologically consistent reporting, mechanisms for verification, and a commitment to environmental data transparency.
- Wealth correlates highly with EPI scores. In particular, wealth has a strong association with environmental health results. But at every level of development, some countries fail to keep up with their income-group peers while others achieve outstanding results. Statistical analysis suggests that in many cases good governance contributes to better environmental outcomes.
- Environmental challenges come in several forms, varying with wealth and development. Some issues arise from the resource and pollution impacts of industrialization – including greenhouse gas emissions and rising levels of waste – and largely affect developed countries. Other challenges, such as access to safe drinking water and basic sanitation, derive from poverty and under-investment in basic environmental amenities – and primarily affect developing nations. Limited endowments in water and forest resources constrain choices but need not necessarily impair performance.
- Policymakers need to set clear policy targets and shift toward more analytically rigorous environmental protection efforts at the global, regional, national, state/provincial, local, and corporate scales.
- The EPI uses the best available global datasets on environmental performance. However, the overall data quality and availability is alarmingly poor. The lack of time-series data for most countries and the absence of broadly-collected and methodologically-consistent indicators for basic concerns, such as water quality, still hamper efforts to shift environmental policy onto more empirical grounds.

The 2010 EPI represents a “work in progress.” It aims not only to inform but also to stimulate debate on defining the appropriate metrics and methodologies for evaluating environmental performance. Feedback, comments, suggestions, and criticisms are all welcome at our website, <http://epi.yale.edu>.

Environmental Performance Index – Rankings & Scores

Rank	Country	Score	Rank	Country	Score	Rank	Country	Score
1	Iceland	93.5	56	Syria	64.6	111	Tajikistan	51.3
2	Switzerland	89.1	57	Estonia	63.8	112	Mozambique	51.2
3	Costa Rica	86.4	58	Sri Lanka	63.7	113	Kuwait	51.1
4	Sweden	86.0	59	Georgia	63.6	114	Solomon Islands	51.1
5	Norway	81.1	60	Paraguay	63.5	115	South Africa	50.8
6	Mauritius	80.6	61	United States	63.5	116	Gambia	50.3
7	France	78.2	62	Brazil	63.4	117	Libya	50.1
8	Austria	78.1	63	Poland	63.1	118	Honduras	49.9
9	Cuba	78.1	64	Venezuela	62.9	119	Uganda	49.8
10	Colombia	76.8	65	Bulgaria	62.5	120	Madagascar	49.2
11	Malta	76.3	66	Israel	62.4	121	China	49.0
12	Finland	74.7	67	Thailand	62.2	122	Qatar	48.9
13	Slovakia	74.5	68	Egypt	62.0	123	India	48.3
14	United Kingdom	74.2	69	Russia	61.2	124	Yemen	48.3
15	New Zealand	73.4	70	Argentina	61.0	125	Pakistan	48.0
16	Chile	73.3	71	Greece	60.9	126	Tanzania	47.9
17	Germany	73.2	72	Brunei Darussalam	60.8	127	Zimbabwe	47.8
18	Italy	73.1	73	Macedonia	60.6	128	Burkina Faso	47.3
19	Portugal	73.0	74	Tunisia	60.6	129	Sudan	47.1
20	Japan	72.5	75	Djibouti	60.5	130	Zambia	47.0
21	Latvia	72.5	76	Armenia	60.4	131	Oman	45.9
22	Czech Republic	71.6	77	Turkey	60.4	132	Guinea-Bissau	44.7
23	Albania	71.4	78	Iran	60.0	133	Cameroon	44.7
24	Panama	71.4	79	Kyrgyzstan	59.7	134	Indonesia	44.6
25	Spain	70.6	80	Laos	59.6	135	Rwanda	44.6
26	Belize	69.9	81	Namibia	59.3	136	Guinea	44.4
27	Antigua & Barbuda	69.8	82	Guyana	59.2	137	Bolivia	44.3
28	Singapore	69.6	83	Uruguay	59.1	138	Papua New Guinea	44.3
29	Serbia & Montenegro	69.4	84	Azerbaijan	59.1	139	Bangladesh	44.0
30	Ecuador	69.3	85	Vietnam	59.0	140	Burundi	43.9
31	Peru	69.3	86	Moldova	58.8	141	Ethiopia	43.1
32	Denmark	69.2	87	Ukraine	58.2	142	Mongolia	42.8
33	Hungary	69.1	88	Belgium	58.1	143	Senegal	42.3
34	El Salvador	69.1	89	Jamaica	58.0	144	Uzbekistan	42.3
35	Croatia	68.7	90	Lebanon	57.9	145	Bahrain	42.0
36	Dominican Republic	68.4	91	Sao Tome & Principe	57.3	146	Equatorial Guinea	41.9
37	Lithuania	68.3	92	Kazakhstan	57.3	147	North Korea	41.8
38	Nepal	68.2	93	Nicaragua	57.1	148	Cambodia	41.7
39	Suriname	68.2	94	South Korea	57.0	149	Botswana	41.3
40	Bhutan	68.0	95	Gabon	56.4	150	Iraq	41.0
41	Luxembourg	67.8	96	Cyprus	56.3	151	Chad	40.8
42	Algeria	67.4	97	Jordan	56.1	152	United Arab Emirates	40.7
43	Mexico	67.3	98	Bosnia & Herzegovina	55.9	153	Nigeria	40.2
44	Ireland	67.1	99	Saudi Arabia	55.3	154	Benin	39.6
45	Romania	67.0	100	Eritrea	54.6	155	Haiti	39.5
46	Canada	66.4	101	Swaziland	54.4	156	Mali	39.4
47	Netherlands	66.4	102	Côte d'Ivoire	54.3	157	Turkmenistan	38.4
48	Maldives	65.9	103	Trinidad & Tobago	54.2	158	Niger	37.6
49	Fiji	65.9	104	Guatemala	54.0	159	Togo	36.4
50	Philippines	65.7	105	Congo	54.0	160	Angola	36.3
51	Australia	65.7	106	Dem. Rep. Congo	51.6	161	Mauritania	33.7
52	Morocco	65.6	107	Malawi	51.4	162	Central African Republic	33.3
53	Belarus	65.4	108	Kenya	51.4	163	Sierra Leone	32.1
54	Malaysia	65.0	109	Ghana	51.3			
55	Slovenia	65.0	110	Myanmar	51.3			

For detailed analysis of each country, visit <http://epi.yale.edu>